



THE IMPACT OF ARTIFICIAL INTELLIGENCE AND AUTOMATION ON YOUTH EMPLOYMENT

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ABSTRACT

This article examines the impact of artificial intelligence (AI) and automation on youth employment in the modern labor market. The study explores both the opportunities and challenges that emerging technologies create for young people entering the workforce. Special attention is given to the transformation of job structures, the emergence of new professions, and the decline of routine-based occupations. The research also analyzes how education systems and government policies can adapt to these technological changes. The findings suggest that while AI and automation may reduce certain traditional jobs, they simultaneously generate new employment opportunities requiring advanced digital and cognitive skills. The study highlights the importance of reskilling, digital literacy, and innovation-driven policies in ensuring sustainable youth employment.

Introduction

In the era of rapid technological advancement, artificial intelligence and automation have become key drivers of economic transformation, significantly influencing labor markets worldwide. These technologies are reshaping the nature of work by replacing routine tasks, increasing efficiency, and creating new types of employment. For young people, who are often at the beginning of their careers, these changes present both opportunities and uncertainties. On the one hand, AI-driven industries offer innovative career paths and flexible work environments; on the other hand, automation threatens low-skilled and entry-level jobs traditionally occupied by youth. As a result, understanding the impact of AI and automation on youth employment has become a critical issue for policymakers, educators, and researchers. This study aims to analyze these impacts and identify strategies to prepare young people for the evolving labor market.

Methods

This research employs a mixed-methods approach combining qualitative and quantitative analysis. Data were collected from international reports, academic publications, and labor market statistics related to AI and automation. Comparative analysis was used to examine global trends and identify patterns in youth employment across different economies. Additionally, analytical and synthesis methods were applied to evaluate the relationship between technological advancement and employment outcomes. The study also reviews

policy frameworks and educational strategies aimed at adapting the workforce to technological change. This methodological approach ensures a comprehensive understanding of the topic from both theoretical and practical perspectives.

Results

The findings indicate that artificial intelligence and automation are significantly transforming the structure of youth employment. Many routine and repetitive jobs, particularly in manufacturing, retail, and administrative sectors, are increasingly being automated, leading to a decline in demand for low-skilled labor. However, at the same time, new job opportunities are emerging in fields such as data analysis, software development, cybersecurity, and digital marketing. The results also show that young people with strong digital skills and adaptability are more likely to benefit from these changes. Furthermore, the rise of the gig economy and remote work has expanded employment options for youth, allowing them to access global job markets. Despite these opportunities, a skills gap remains a major challenge, as many education systems are not fully aligned with the demands of the digital economy.

Discussion

The impact of AI and automation on youth employment is complex and multifaceted, requiring a balanced perspective that considers both risks and opportunities. While automation may displace certain jobs, it does not necessarily lead to overall unemployment but rather to a shift in the types of skills required in the labor market. This shift emphasizes the growing importance of digital literacy, critical thinking, creativity, and problem-solving abilities. Education systems must therefore undergo significant transformation to prepare young people for these new demands, integrating technology-based learning, coding, and interdisciplinary approaches into curricula. Moreover, governments play a crucial role in supporting youth through active labor market policies, including reskilling programs, vocational training, and entrepreneurship support.

Another important aspect is the unequal impact of automation across regions and social groups. Youth in developing countries or rural areas may face greater challenges due to limited access to technology and quality education, which can widen existing inequalities. Therefore, inclusive policies are essential to ensure that all young people benefit from technological progress. Additionally, ethical considerations related to AI, such as job displacement and data privacy, must be addressed to create a sustainable and fair labor market. Ultimately, collaboration between governments, educational institutions, and the private sector is necessary to build a resilient workforce capable of adapting to ongoing technological change.

Conclusion

In conclusion, artificial intelligence and automation are reshaping youth employment by both eliminating traditional jobs and creating new opportunities in emerging sectors. The key challenge lies in preparing young people to adapt to these changes through education, skill development, and policy support. By investing in digital skills, promoting innovation, and ensuring inclusive access to opportunities, societies can harness the potential of AI to enhance youth employment rather than hinder it. Future strategies should focus on building a flexible and future-ready workforce that can thrive in an increasingly automated world.

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