

# Research Paper on Impact of Artificial Intelligence (AI) on Jobs

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**Abstract:** *This study looks at how artificial intelligence (AI) affects jobs by both creating and destroying them. As AI technology gets better, it changes the way workers are needed in different industries. On one hand, AI can handle repetitive tasks, making production faster. On the other hand, it can lead to job losses, especially for low-skill workers. However, AI also leads to new job opportunities, especially in tech-focused fields. The study examines how AI impacts various industries, includes real-life examples, and explores the long-term effects on jobs, policies, and workforce planning*

**Keywords:** AI, job displacement, job creation, automation, workforce development, economic inequality, reskilling, upskilling, labor market, and future of work

## I. INTRODUCTION

AI is transforming the global workforce. From industrial robots in manufacturing to intelligent virtual assistants in customer service, AI is changing the way businesses run and employment are organized. The impact of AI on occupations is a central topic in talks regarding future employment patterns, economic stability, and social well-being. This article aims to investigate the intricacies of AI's impact on jobs, taking into account both the prospects for new job creation and the risks associated with job displacement. Artificial intelligence is reshaping the job market in profound ways, offering both opportunities and challenges. Its rapid adoption has led to increased efficiency and the creation of new job roles, but it also poses risks such as job displacement and the need for skill shifts.

Artificial Intelligence (AI) is changing the job market, creating new types of jobs while automating routine tasks. With 20-50 million new jobs expected by 2030, AI is creating and enhancing jobs in healthcare, pharmaceuticals and other industries. While some industries may experience significant job displacement, the economy is expected to benefit from increased productivity and output. As AI continues to evolve, understanding its impact on employment and the economy is crucial. AI is rapidly transforming the workforce, with significant changes already apparent in the job market and employment landscape. As AI continues to develop and evolve, businesses and workers must adapt to stay competitive and efficient. In this blog, we will explore how AI is affecting the workforce, how it can help workers and businesses become more effective, and the potential benefits and drawbacks of implementing AI on a larger scale.

### Impact of AI on Job Roles:

The rise of automation and AI is altering the workplace, affecting job roles in a variety of industries, including high-technology manufacturing. Many laborious and repetitive processes can now be automated due to advances in technology, resulting in enhanced efficiency and production.

However, this transition is driving work positions to adapt, with some becoming outdated and new ones emerging. For example, manufacturing workers must learn new skills in order to operate and maintain machines and robots that are replacing manual activities. Furthermore, AI integration into high-tech industrial processes is generating new job opportunities such as data analysts, AI programmers, and machine learning professionals. These rising professional opportunities necessitate a combination of technical expertise and a thorough understanding of business procedures. To fully exploit the power of automation and AI, future occupations will demand a combination of technical abilities, creativity, and adaptability.

As AI continues to disrupt the labor market and employment landscape, individuals must adapt to remain relevant and competitive in their careers. One strategy to adjust is to focus on gaining high-demand skills like data analytics, machine learning, and programming. This may include taking courses, attending workshops, or obtaining certifications in these subjects. Another method to adapt is to seize the opportunities provided by AI, such as employing it to boost human capabilities and improve productivity. This could include learning how to use AI tools and technologies and collaborating with AI systems to get better results.

Individuals should also stay up to date on the newest advancements in AI and their impact on their respective industry. This can include reading industry journals, attending conferences, and connecting with colleagues and professionals.

Finally, individuals must stay adaptable and flexible as the labor market and work environment constantly alter in reaction to AI and other technology breakthroughs. To prosper in an AI-driven environment, humans must embrace change and continuously expand their skills and knowledge.

### **Objective**

- To examine how AI affects job creation and displacement.
- To identify the industries most impacted by AI-driven automation. To offer ways for reducing the negative employment effects of AI.

## **II. LITERATURE REVIEW**

The literature on AI's impact on occupations has expanded significantly over the previous decade. Several scholars have studied the topic from various angles, investigating both positive and negative consequences on employment.

### **AI and Job Creation**

Many studies have highlighted AI's ability to develop new job categories. According to Bessen (2019), AI creates new job opportunities, particularly in technology-related fields such as AI ethics, algorithm audits, and data science. according to Bessen, AI complements human labor by taking over monotonous jobs, freeing humans to focus on higher-value work that needs creativity and complicated problem solving. Brynjolfsson and McAfee (2014) have a similar viewpoint, arguing that in the long run, AI will generate more possibilities than it will eliminate, but workers need the necessary abilities .

### **AI and Job Displacement**

In contrast, Frey and Osborne (2017) predict that AI and machine learning will automate 47% of employment in the United States during the next two decades. They point out that sectors with repetitive jobs, such as manufacturing, retail, and transportation, are especially vulnerable. The authors emphasize that while AI eliminates mundane tasks, workers with insufficient digital abilities may struggle to transfer into new professions.

Autor (2020) examines the polarization of the job market caused by artificial intelligence. He shows how AI disproportionately affects middle-skill employment, such as administrative positions, which are subject to automation. At the same time, AI can lead to a split labor market, where high-skill occupations (requiring specialized knowledge) and low-skill jobs (requiring physical labor) are relatively

### **Ethical and social implications of artificial intelligence in employment.**

West (2018) investigates the ethical and sociological problems around AI's impact on employment. He contends that economic inequality would worsen unless appropriate initiatives are implemented to retrain and upskill those who lose their employment to technology.

### **Government Policy and Workforce Adaptation.**

The World Economic Forum (2020) emphasizes the importance of proactive government policy to address AI's impact on jobs. They advocate launching large- scale reskilling projects to prepare the workforce for AI-driven transformations.

Governments should also explore modifying labor regulations to fit the new work patterns brought about by AI, such as gig economy work and growing usage of freelance platforms.

### **III. RESEARCH METHODOLOGY**

This study examines the influence of AI on jobs through a qualitative method that includes a literature analysis and case studies from relevant industries.

Data sources include academic literature, industry reports, and case studies from industries such as manufacturing, healthcare, and retail to demonstrate the impact of artificial intelligence on employment creation and displacement.

A thematic analysis identifies trends in how AI affects employment. The case studies are focused on industries that have been substantially influenced by AI, and they provide real-world instances of job transitions induced by automation and AI adoption.

#### **AI's Impact on Job Creation**

AI generates jobs in growing disciplines such as machine learning engineering, AI ethics, and data privacy. Furthermore, as AI becomes more integrated into company operations, there is a greater demand for digitally skilled workers, offering high-tech job prospects.

#### **AI's Role in Job Displacement.**

AI-driven automation is displacing jobs, particularly in industries such as manufacturing, logistics, and customer service. Low-skilled people are particularly vulnerable, as AI can execute basic activities more efficiently, eliminating the need for human labor.

### **IV. BENEFIT**

- AI can create significant job opportunities.
- AI can automate repetitive and mundane tasks.
- AI can improve safety at workplace.
- AI can increase productivity and efficiency.
- AI-powered robots can take on dangerous tasks.
- Better decisions.
- Efficiency and productivity gains.
- Better quality and reduction of human error.
- Increased profitability.
- More innovation.

### **V. CONCLUSION**

The influence of artificial intelligence on occupations is varied. While it opens up new prospects for innovation and efficiency, it also poses substantial concerns in terms of job displacement and economic inequality. To handle the effects of AI, governments, businesses, and educational institutions must collaborate to establish regulations that facilitate workforce transition and encourage human-AI collaboration. The future of labor in an AI-driven world will be determined by society's ability to adapt and prepare for these changes.

Artificial intelligence is altering the work sector, bringing both benefits and challenges. While it eliminates jobs in certain industries, it also provides new positions in high-tech domains. The key to managing AI's impact is to implement proactive regulations, train workers, and examine ethical issues.

### **REFERENCES**

- [1]. <https://www.emerald.com>
- [2]. <https://ijrpr.com>
- [3]. <https://www.researchgate.net/publication>



[4]. <https://www.google.com>

[5]. <https://chatgpt.com>

