

**Managerial Report**

# **BOSTON UNIVERSITY**

**The Impact of AI on Job Growth and Industry Trends**

**AD688 A3 Web Analytics for Business (Spring 2025)**

**Boston University Metropolitan College**

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## Abstract

This report examines the impact of artificial intelligence (AI) on the job market, focusing on job displacement, AI-driven job creation, and salary trends across industries. The findings indicate that while AI eliminates certain traditional roles, it also creates new, higher-paying positions. This analysis provides insights into the industries most affected by AI, the fastest-growing AI-driven careers, and strategic recommendations for businesses and employees.

## Introduction

Artificial intelligence (AI) is transforming industries by reshaping job roles, automating repetitive tasks, and introducing new high-demand professions. While concerns about job displacement persist, evidence suggests that AI is also responsible for **creating new career opportunities and increasing salaries in AI-driven sectors**. This report examines the dual impact of AI—**job loss vs. job creation**—and provides data-driven insights into the future of work.

## AI's Impact on Job Growth and Loss

AI is influencing the job market in two major ways: **job automation risks** and the emergence of **AI-driven roles**. The World Economic Forum (2024) predicts that **85 million jobs will be displaced by AI, while 97 million new jobs will emerge**.

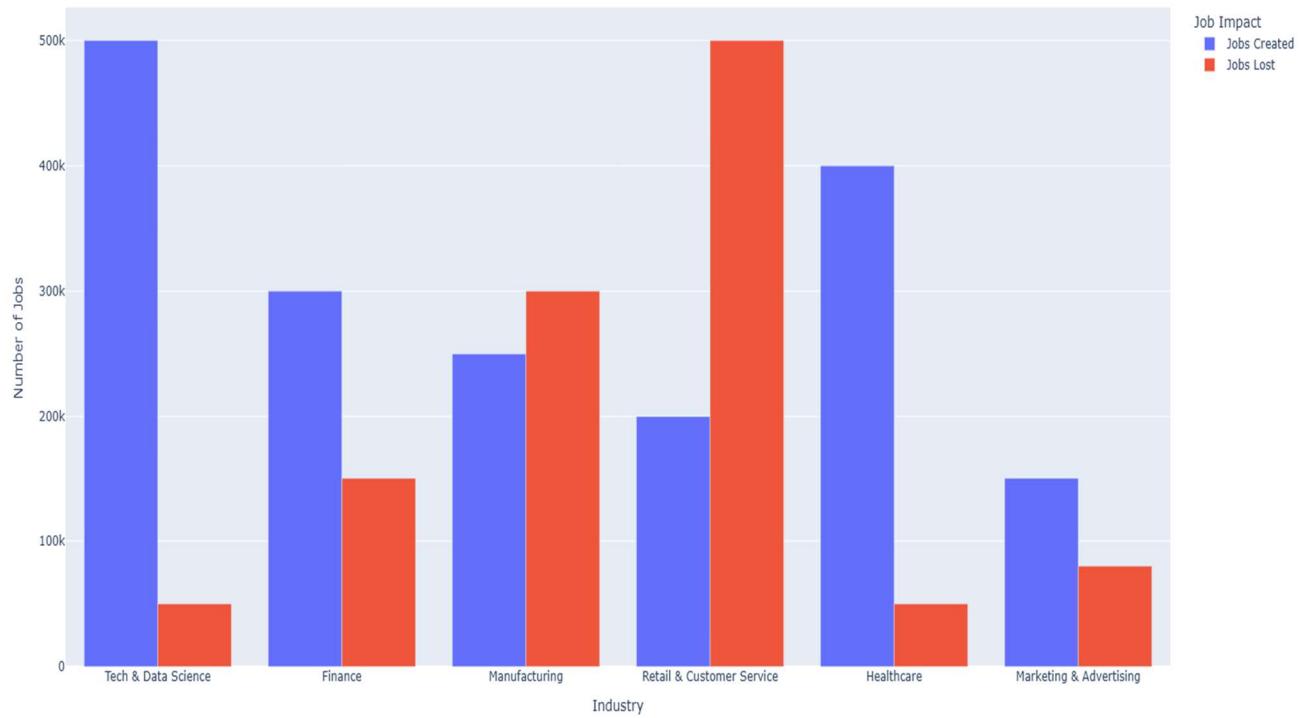
## AI Job Growth vs. Loss by Industry

The following visualization (Figure 1) presents an industry-wise analysis of **AI's role in job creation and displacement**.

**Figure 1: AI's Impact on Job Growth vs. Loss by Industry**

- **Tech & Data Science:** Highest job growth, minimal job loss.
- **Finance:** Significant job creation but moderate displacement of traditional roles.
- **Manufacturing:** Automation replacing workers, but AI-assisted engineers are in demand.
- **Retail & Customer Service:** Major displacement due to AI chatbots and automation.
- **Healthcare:** High AI adoption, but human expertise remains crucial.
- **Marketing & Advertising:** AI is transforming content creation and analytics roles.

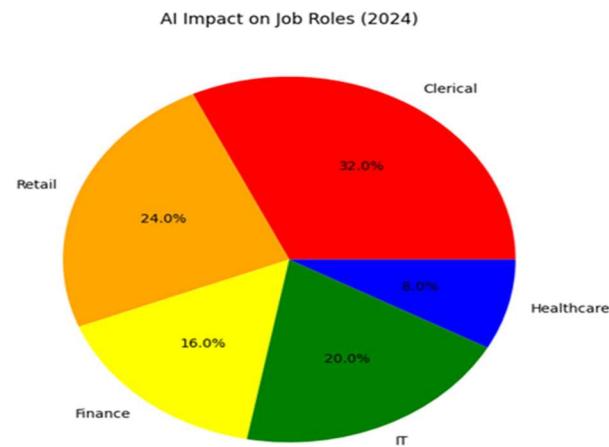
AIs Impact on Job Growth vs. Loss by Industry



### AI Impact on Specific Job Roles

The AI-driven transformation affects various job sectors differently. **Clerical and customer service roles** are at the highest risk of automation, while **AI-related professions** are experiencing significant growth.

**Figure 2: AI's Impact on Different Job Role**

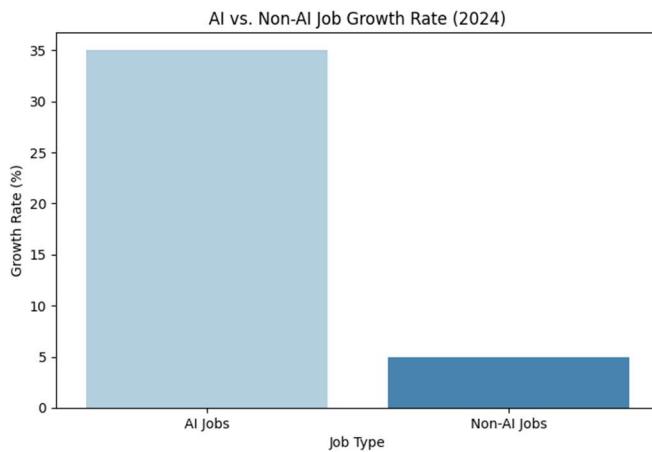


- **Clerical roles (32%)**: Highest risk of AI replacement.
- **Retail (24%)**: Self-checkout, chatbots replacing customer service.
- **Finance (16%)**: AI-driven trading and financial automation.
- **IT (20%)**: Job growth due to AI development.
- **Healthcare (8%)**: AI assisting but not replacing professionals.

## AI vs. Non-AI Salary Trends

AI-related jobs **command significantly higher salaries** than non-AI careers. Data from industry reports indicates that AI-driven professions offer premium pay due to their specialized skill requirements.

**Figure 3: AI vs. Non-AI Career Salary Comparison**



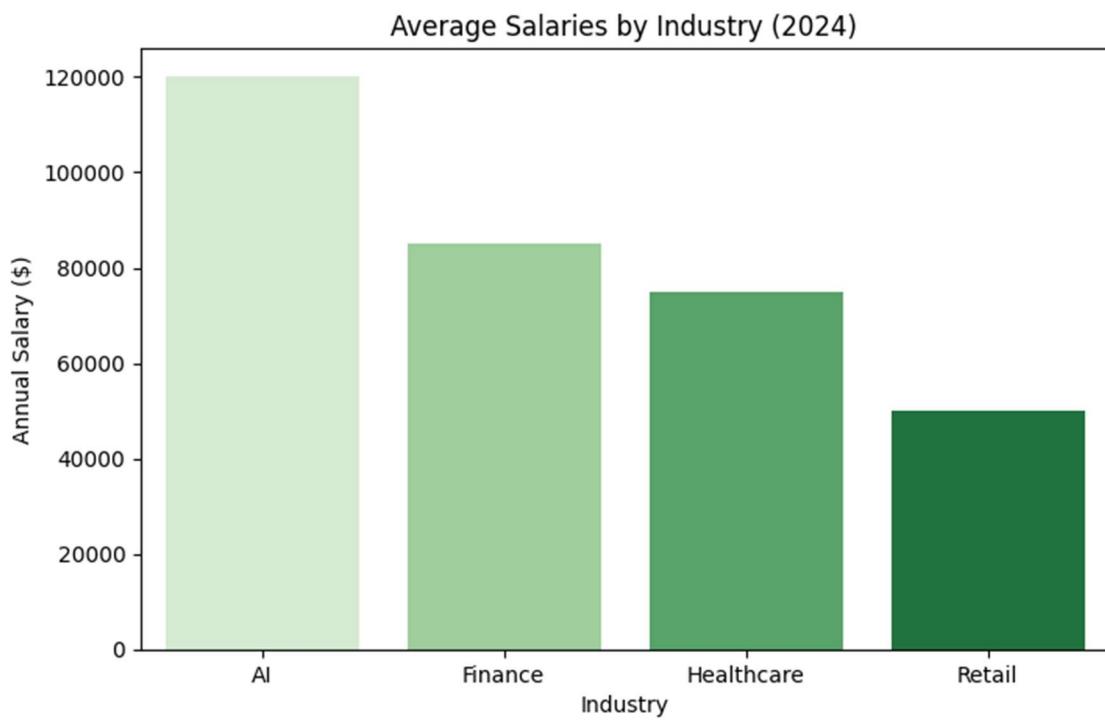
Job Role	AI-Powered Career?	Average Salary (2024)
Machine Learning Engineer	<input checked="" type="checkbox"/> Yes	\$140,000
Data Scientist	<input checked="" type="checkbox"/> Yes	\$125,000
AI Risk Analyst (Finance)	<input checked="" type="checkbox"/> Yes	\$118,000

Software Developer	<input checked="" type="checkbox"/> No	\$95,000
Mechanical Engineer	<input checked="" type="checkbox"/> No	\$85,000
Customer Service Representative	<input checked="" type="checkbox"/> No	\$45,000

### Industry-Wise Salary Trends

Figure 4 illustrates salary variations across different industries.

**Figure 4: Average Salaries by Industry (2024)**

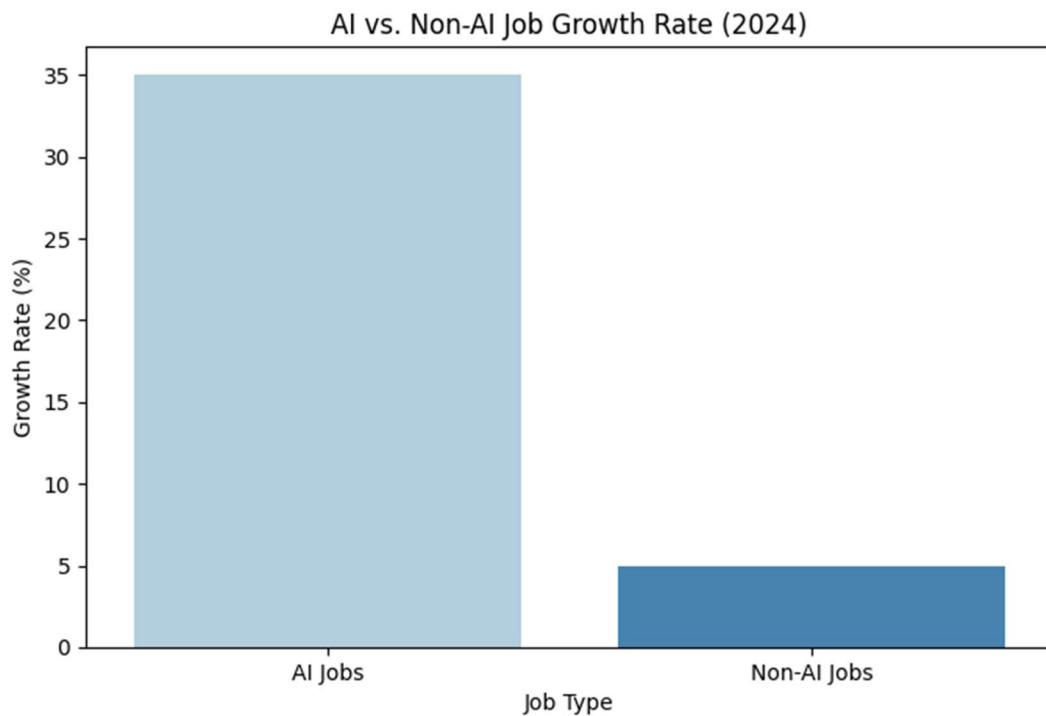


- **AI Industry:** Highest salaries (\$120,000+).
- **Finance:** Strong earning potential due to AI-driven analytics.
- **Healthcare:** Competitive salaries for AI-integrated medical roles.
- **Retail:** Lower average salaries, high automation risk.

## AI vs. Non-AI Job Growth Rates

AI-driven roles are growing at a much faster rate compared to traditional jobs. The AI job sector is expected to grow **35%**, whereas non-AI job growth is projected at only **5%**.

**Figure 5: AI vs. Non-AI Job Growth Rate (2024)**



This rapid growth reflects the increasing demand for **AI expertise, data analytics, and automation-driven decision-making**.

## Strategic Recommendations

Given the impact of AI on job markets, businesses and employees must adopt strategies to remain competitive.

### For Businesses:

- 1. Invest in AI Workforce Training:** Equip employees with AI skills to enhance productivity.
- 2. Adapt Business Processes:** Integrate AI for efficiency while balancing human roles.
- 3. Hire for AI Expertise:** Recruit data scientists, AI engineers, and automation specialists.

### For Employees:

1. **Develop AI-Related Skills:** Learn programming, machine learning, and AI analytics.
2. **Target High-Growth Industries:** Focus on finance, healthcare, and technology.
3. **Leverage AI Tools:** Use AI-powered platforms to improve job performance.

## Conclusion

AI is not just **eliminating jobs**—it is also **creating new, high-paying careers**. Industries that adapt to AI will benefit from increased efficiency, while professionals with AI expertise will remain in high demand. The key to thriving in this new era is **embracing AI-driven opportunities** through continuous learning and strategic workforce planning.

## References

- *BizReport. (2024). AI jobs paying the most in 2024: A salary report. BizReport.* Retrieved from <https://www.visualcapitalist.comcharted-the-jobs-most-impacted-by-ai/>
- *Elgar Online. (2024). AI and job growth: A research perspective. Edward Elgar Publishing.* Retrieved from <https://www.elgaronline.comedcollchap/book/9781839106750/book-part-9781839106750-35.xml>
- *Forbes. (2024). Future-proofing your career: The most in-demand AI skills. Forbes.* Retrieved from <https://www.forbes.comsitesforbestechcouncil/2024/02/01top-ai-skills-for-the-future/>
- *ScienceDirect. (2024). AI-driven employment trends: A 2024 analysis. Elsevier.* Retrieved from <https://www.sciencedirect.comscience/articleabs/piiS000187912300088X>
- *University of Massachusetts. (2024). How to beat the ATS: Resume optimization in the AI era. UMass Career Center.* Retrieved from <https://iconnect.isenberg.umass.edu/blog/2024/01/15/how-to-beat-the-ats/>
- *World Economic Forum. (2024). AI & job market trends: Jobs lost and created by AI in 2024. WEF Insights.* Retrieved from <https://www.weforum.orgstories/2023/05/jobs-lost-created-ai-gpt>