

# AI and Human Intelligence: Exploring Impacts on Human Activities

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## Abstract

*Artificial intelligence (AI) has become the important force that is shaping human activities across different domains. This article delves into the complex relationship between AI and human intelligence, scrutinizing its interplay, and also examining the consequential impacts on diversified human activities. Through the extensive literature review, this paper also investigates the current landscape of AI technologies and their implications, which showcases the multifaceted roles AI plays in augmenting, challenging, and reshaping human intelligence. The methods include a careful examination of academic books, articles, and research studies that look at how AI affects human thinking, working, making decisions, and social issues. The results show that AI makes people better at what they do while also raising moral, social, and economic questions. The commentary talks about the study's limits and offers ways to study these results in the future, while also critically evaluating them in light of the research question.*

**Keywords:** Artificial intelligence (AI), human activities, AI collaboration, AI development, human intelligence

## INTRODUCTION

The integration of artificial intelligence (AI) within the different sectors marks the proper significant milestone in technological advancements, profoundly impacting the lives of humans. Inside the contemporary context, AI's emergence is increasing the important questions related to its implications for the intelligence of humans. This report seeks to explore the intricating relationship between AI and human intelligence across diversified domains and analyzes how AI influences and shapes the activities of humans. The primary thesis of this kind of research analysis revolves around examining the multifaceted impacts of AI on human intelligence, which emphasizes its significance within the redefining the societal paradigms. The scope would also focus on elucidating the effects of AI on cognition, proper decision making, proper productivity, and societal implications in healthcare, education, finance, and other fields related to human activities.

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## LITERATURE REVIEW

The larger array of research delves within AI's implications for the activities of humans, which showcase its main potential towards increasing human capabilities while simultaneously underlining the concerns related to ethical dilemmas, biases, and the proper potential job displacement. Whereas some viewpoints hail AI as the main tool for amplifying human potential, some others caution against its unbridled integration due to the ethical, social, and economic repercussions. Despite the substantial research gap, it persists within the comprehension of the long-term societal impacts and also the ethical quandaries posed through AI across the various sectors.

### Artificial Intelligence Advancements Within Healthcare

AI within healthcare holds immense potential across the different domains, which includes proper diagnosis proper treatment recommendations, the engagement of patients, and the administrative tasks. AI's capacity to accurately diagnose diseases surpasses the abilities of humans, mainly in interpreting the radiology images for various conditions like tumors. This also aids in the tailoring of the personalized treatment plans which depends upon the patient's attributes, mainly impacting precision medicine. Also, AI increases patient engagement through customized interventions and the nudging the behavior changes to improve the health outcomes properly [1].

### Artificial Intelligence in Education

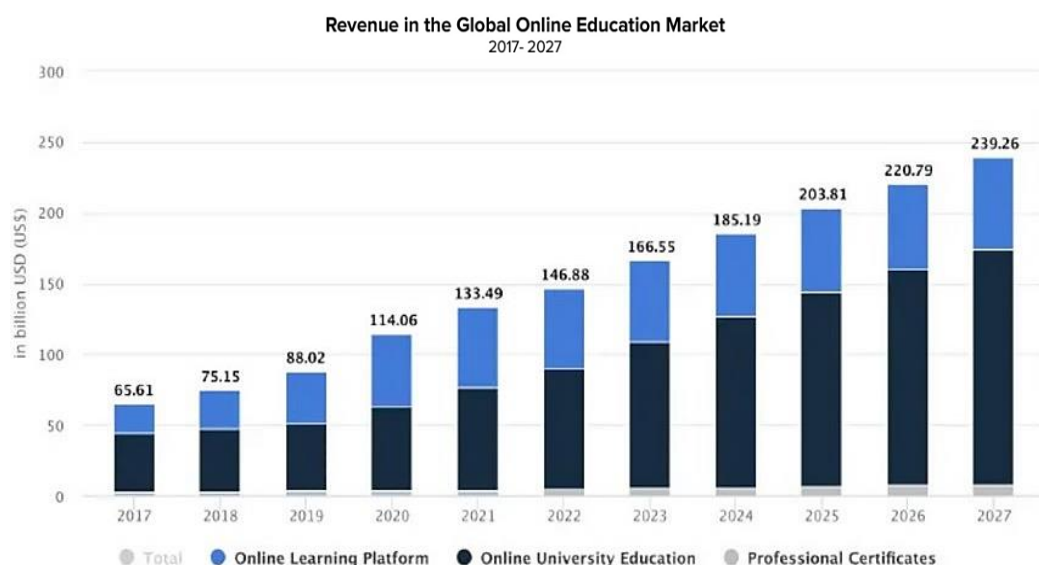
The applications of AI within education showcase the opportunities for personalized learning experiences [2]. This also indicates the AI's effectiveness within the adaptive learning platforms which tailor the education content towards the individual student requirements, increasing the engagement and the comprehension as shown in Figure 1. Yet, the debates are emerging related to the proper potential of AI to replace human educators and also the proper impacts on the social and emotional development of the learners. Also, the ethical considerations are increased related to the privacy of the data, the proper algorithm biases, and also equitable access to AI- driven educational tools [3].

### Artificial Intelligence's Role Within the Financial Sector

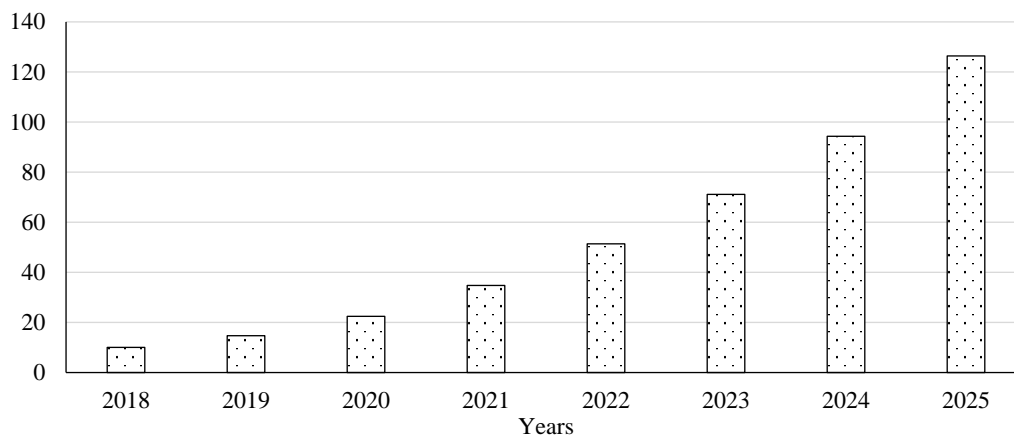
In the financial industry, AI is frequently used for algorithmic trading, risk assessment, and misbehavior detection. Studies have indicated the beneficial effects of AI-driven algorithms on decision-making processes, resulting in increased levels of accuracy and efficiency [4]. But worries about possible algorithmic biases, algorithmic trading's impact on market volatility, and automation's replacement of human labor pose ethical and socioeconomic questions. The regulation of AI in financial institutions to ensure accountability, transparency, and impartiality remains a critical topic [5].

### Ethical Considerations in Artificial Intelligence Development

The growth of AI-based software is increasing day by day as shown in Figure 2. Many aspects of AI raise ethical problems, including the societal implications of AI-powered automation, liability for AI-generated outcomes, openness in AI systems, and ancestral biases in algorithms and decision making [6]. The study emphasizes how crucial is the need to create robust ethical frameworks and legal rules to overcome prejudices, protect privacy, and encourage the appropriate application of AI in a variety of businesses. To avoid perpetuating social injustices, biases must be addressed, and the objectivity of AI systems must be guaranteed [7].



**Figure 1.** Impact of artificial intelligence in education.



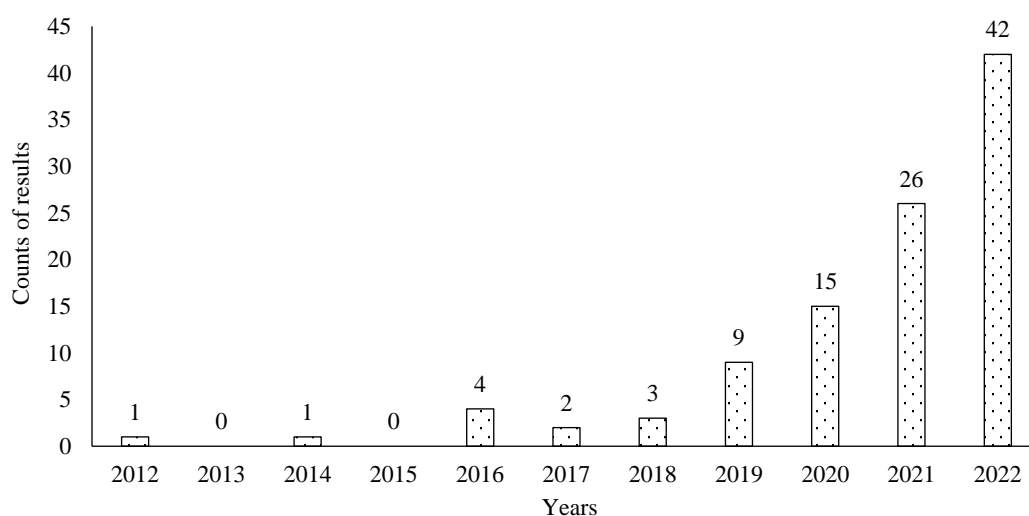
**Figure 2.** Global artificial intelligence software market revenue.

### Societal Implications and Human–Artificial Intelligence Collaboration

The evolving relationship between humans and AI prompts discussions related to the societal implications and the proper future of the work as shown in Figure 3. The studies are also exploring the various areas of AI that augment human capabilities, which also emphasizes the potential for proper collaborative partnerships [8]. Also, concerns related to job displacement, skill retaining, and the equitable distribution of the benefits from AI-driven productivity gain important proactive policy interventions and investment within the human capital in various manners [9].

### DISCUSSION

Interpreting the proper findings unravels the complex landscape where AI is operating as both an enabler of innovation and the proper source of apprehension. The implications of AI's impacts on human activities were multifaceted, which prompted critical reflections on the responsibility, the proper regulations, and the requirements for ethical frameworks. Also, acknowledging the limitation of this research, it is important to recognize the scope of the constraints that might impede the comprehensive analysis of each facet of the AI's influences on the intelligence of humans [1]. The potential of healthcare AI to enhance diagnostics and personalized therapy is substantial; however, ethical considerations regarding data privacy and the precision of AI-generated diagnoses necessitate stringent regulation. Although AI in education facilitates personalized learning, concerns persist regarding its capacity to replace human educators and its impact on students' holistic growth. Therefore, it is imperative to uphold a nuanced balance between human interaction and technological progress [2].



**Figure 3.** Human–artificial intelligence collaboration.

Although the financial sectors stand to gain from the effectiveness of AI in decision making, apprehensions regarding job displacement, market instability, and biases require prudent regulation and equitable adaptation measures. In order to promote the responsible implementation of artificial intelligence and address social inequality, ethical considerations include algorithmic biases, accountability, transparency, and fairness [5].

## CONCLUSION

Finally, it is concluded that the, as per to the most current analysis, the study demonstrates how AI has a significant influence on human activities and what conditions are required for a fair approach that maximizes AI's advantages while reducing its hazards. Concerns about data security, moral issues, and job loss are addressed, but the emphasis is on how AI is revolutionizing healthcare, education, and finance. For the social aspects of artificial intelligence, which need biases and openness, strong regulations and collaboration between diverse domains are required. As a result, additional study is required to investigate moral quandaries, the effects on society, and strategies to enhance the way AI and humans interact and collaborate. Setting explicit ethical criteria, including individuals from all professions in the creation and usage of AI, regularly monitoring, collaborating across fields, and launching training initiatives are some proposals. These proposed activities are intended to ensure that AI is utilized correctly while also preparing people for how swiftly technology changes things.

## Future Recommendations

- *Ethical frameworks:* The creation of thorough moral standards and legal frameworks to guarantee the ethical advancement, use, and appropriate management of AI technology in all industries. This also involved verifying openness, removing prejudices, and appropriately protecting each person's right to privacy.
- *Interdisciplinary research:* There is a need to promote multidisciplinary cooperation between engineers, ethicists, appropriate politicians, and social scientists in order to fully comprehend and reduce the effects of AI on society. In order to appropriately promote the balanced integration of artificial intelligence and human intelligence, this partnership must concentrate on resolving the ethical, legal, and social ramifications.
- *Continuous monitoring and adaptation:* For addressing the novel issues and also the opportunities presented through the benefits within AI, mechanism for the ongoing the observations and also the adjustment must be put in the place. To do this, policies need to be reviewed, reexamined, and adjusted often to keep up with the quick speed at which technology is developing and the shifting needs of society.
- *Educational and skills development:* Invest in vocational as well as educational development initiatives that will assist individuals in preparing for the changing nature of work that artificial intelligence will bring about. Programs for upgrading and reskilling should concentrate on providing the workforce with adaptable skills appropriate for industries where AI is used as a complement.
- *Public engagement and inclusivity:* Promote inclusion, public discourse, and involvement in the creation and actualization of AI. It is critical to guarantee broad engagement and involvement in AI technologies to address problems, promote transparency, and inspire confidence.

## REFERENCES

1. Davenport T, Kalakota R. The potential for artificial intelligence in healthcare. *Future Healthc J*. 2019; 6 (2): 94–98. doi: 10.7861/futurehosp.6-2-94.
2. Zhang K, Aslan AB. AI technologies for education: recent research and future directions. *Computers Educ: Artif Intell*. 2021; 2: 100025. doi: 10.1016/j.caeai.2021.100025.
3. Desai MA. What the finance industry tells us about the future of AI. *Harvard Business Rev*. August 9, 2023. Available at <https://hbr.org/2023/08/what-the-finance-industry-tells-us-about-the-future-of-ai>

4. Naik N, Hameed BMZ, Shetty DK, Swain D, Shah M, Paul R, Aggarwal K, Ibrahim S, Patil V, Smriti K, Shetty S, Rai BP, Chlosta P, Somani BK. Legal and ethical consideration in artificial intelligence in healthcare: Who takes responsibility? *Front Surg.* 2022; 9: 862322. doi: 10.3389/fsurg.2022.862322.
5. Järvelä S, Nguyen A, Hadwin A. Human and artificial intelligence collaboration for socially shared regulation in learning. *Br J Educ Technol.* 2023; 54 (5): 1057–1076. doi: 10.1111/bjet.13325.
6. Korteling JH, van de Boer-Visschedijk GC, Blankendaal RA, Boonekamp RC, Eikelboom AR. Human versus artificial intelligence. *Front Artif Intell.* 2021; 4: 622364.
7. Kamar E. Directions in hybrid intelligence: complementing AI systems with human intelligence. In: *IJCAI'16: Proceedings of the Twenty-Fifth International Joint Conference on Artificial Intelligence*, New York, NY, USA, July 9–15, 2016. pp. 4070–4073.
8. Pomerol JC. Artificial intelligence and human decision making. *Eur J Oper Res.* 1997; 99 (1): 3–25.
9. McCarthy J. From here to human-level AI. *Artif Intell.* 2007; 171 (18): 1174–1182.