

 <p>ISSN NO. 2320-5407</p>	<p>Journal Homepage: - www.journalijar.com</p> <h2>INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)</h2> <p>Article DOI: 10.21474/IJAR01/ 20738 DOI URL: http://dx.doi.org/10.21474/IJAR01/ 20738</p>	
---	--	---

RESEARCH ARTICLE

ETHICAL CHALLENGES IN REPLACING HUMAN WORKERS WITH AI IN BUSINESS: A CASE STUDY APPROACH

Yogalakshmi M and S. Maruthavijayan

Manuscript Info

Manuscript History

Received: 15 February 2025

Final Accepted: 18 March 2025

Published: April 2025

Key words:-

Artificial Intelligence (AI), Ethical Challenges, Job Displacement, Corporate Responsibility, Workforce Transition

Abstract

In the hurry of using artificial intelligence (AI) and automation to replace human jobs, businesses are facing serious ethical issues that require a thoughtful response from the mankind. Using a case study approach, this paper delves into the complexities of artificial intelligence from an ethical perspective, particularly when it comes to replacing human employees in organizations. Using ethical lenses such as utilitarianism, deontology, and virtue ethics, the study explores significant ethical implications of AI adoption such as job displacement, fairness, and sociocultural implications. The paper highlights the need for corporate responsibility in dealing with AI-induced disruptions by analysing various case studies that showcase the effects on workers and the economy as a whole. The research indicates that, while the rise of AI offers new opportunities for organizations, they must also make responsible decisions about the integration of this technology to avoid leaving behind employees and to create an ethical and inclusive transition for all involved.

"© 2025 by the Author(s). Published by IJAR under CC BY 4.0. Unrestricted use allowed with credit to the author."

Introduction:-

The recent surge in artificial intelligence (AI) and automation has drastically changed how various industries function, with AI both revolutionizing business operations and giving rise to new forms of labour. In recent years, AI technology has advanced, allowing machines to assume increasingly complex jobs previously performed by humans. Business around the world, in sectors ranging from manufacturing to service, are embracing AI as the technology can be leveraged to improve efficiency, lower costs and keep pace in a fast-changing global economy. But, the implications, especially for the replacement of human labour with machines are ethically precarious. This is not about theoretical concerns, but impact the lives of millions of workers across the world, a fundamental challenge to the workings of labour markets and a set of questions about fairness, social responsibility and the future of work.

This paper addresses the ethical dilemma organizations face with displacing human employees with AI. In particular, it delves into the issues of morality and society as they relate to the automation of paid work, and how companies walk the tightrope between a desire to innovate and ethical accountability. What are the ethical implications of replacing human workers with AI in business, and how can companies navigate these implications responsibly? To respond to this question, the paper utilizes a case study methodology, analysing instances across different industries where the adoption of AI has resulted in dramatic shifts in employment patterns.

The value of this research is that it seeks to explore the human aspect of AI integration. Although there has been considerable focus on the economic and technological advantages of AI, the ethical implications tend to take a

secondary role. This study aims to bridge this gap by gaining insight into the ethical and societal effects of human replacement by AI. Through real-life case studies, the paper aims to lay bare the complexity of this transformation, not merely focusing on its potential advantages but also on challenges that need to be overcome so that the future of work becomes a fair and equitable one.

AI's key ethical issues are visible and ethical use of AI presents challenges in depth and provide insights on how businesses can implement AI in a manner that causes the least harm to workers and encourages ethical responsibility.

1.1. Objectives of the study:

- To examine the ethical issues raised by AI taking over human jobs in corporate settings.
- To study case studies (Amazon and IBM) showcasing the practical effects of integrating AI.
- To determine the application of ethical theories in corporate decision-making concerning AI.
- To provide ethical and policy-based recommendations to balance innovation and employee well-being.

2.0. Literature Review:

- The application of artificial intelligence (AI) in business has generated strong moral debates, especially the replacement of human employees. Although AI guarantees better efficiency and cost minimization, it results in pervasive job loss, primarily in low-skilled and repetitive areas (Acemoglu, et al., 2020).
- Brynjolfsson, et al., (2014) refer to the change as the "second machine age," as machines now are able to take on jobs formerly requiring human thinking.
- Different philosophies approach the problem. Utilitarianism suggests that the development of AI as long as the overall society would be benefited does not concern us, yet more frequently fails to notice injury in those replaced by it (Mill, 1863).
- Contrastingly, deontological ethics based on Kantian theory maintain that workers need to be regarded as ends and not simply as means for generating profit (Kant, 1785/1996).
- Virtue ethics also upholds the virtue of compassion, equity, and ethical responsibility in decision-making at business (Hursthouse, 1999).
- Experts such as Floridi, et al.,(2018) prefer accountable AI stewardship with transparency, accountability and an attempt at avoiding harm like retraining the workforce and counselling laid-off employees.
- Without accountability in this aspect, as is warned by (Eubanks, 2018), AI systems risk further entrenching inequalities as well as forming new types of injustices at work.
- Frey, et al., (2017) famously estimated that 47% of total U.S. employment is at risk of computerisation. Their study raised widespread concerns about job automation disproportionately affecting low-skill workers, exacerbating economic inequality and social instability.
- Mittelstadt et al. (2016) argue that AI ethics must address not just outcomes but also accountability and transparency. Without clear guidelines on who is responsible when AI makes a decision, businesses may deflect moral and legal responsibility.
- According to a study by Gartner (2021), while AI adoption in workplaces is increasing, employee trust remains low. The lack of clarity about how AI decisions are made contributes to fear and resistance among workers.

3.0. Methodology:

- The study employs qualitative case study research, examining actual instances in manufacturing, customer service, and logistics sectors where employment has been greatly affected by AI. Information was collected from corporate reports, academic papers, and reputable media outlets.
- The cases were analysed through three ethical frameworks: utilitarianism, deontology, and virtue ethics, to determine whether business judgments about AI adoption promote ideals of justice, obligation, and human flourishing.

4.0. Case Studies:

- Ethical Implications in the Manufacturing Industry:

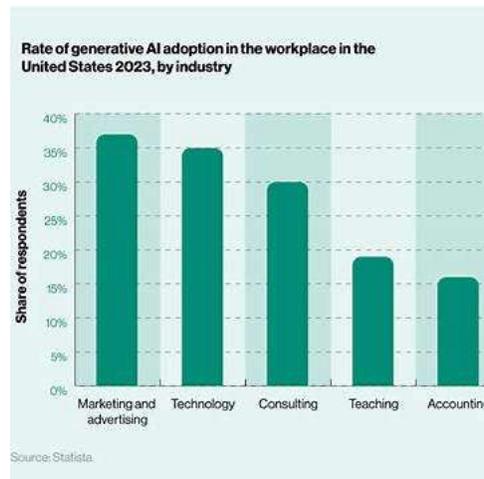
Amazon's robust use of AI and robotics in its warehousing processes, for example, with the application of Kiva robots, has made operations more efficient but raised ethical issues about the displacement of workers and pressure

work environments (Duhigg, 2019). Accounts point to employees being exposed to machine-paced productivity requirements, questioning the company's valuation of profit at the expense of human dignity (Kantor, et al., 2021). This. From a deontological viewpoint, this implies that Amazon is shortchanging ethical obligations to respect employees as ends rather than means (Moore, 2020).

- Ethical Implications in the Service Industry

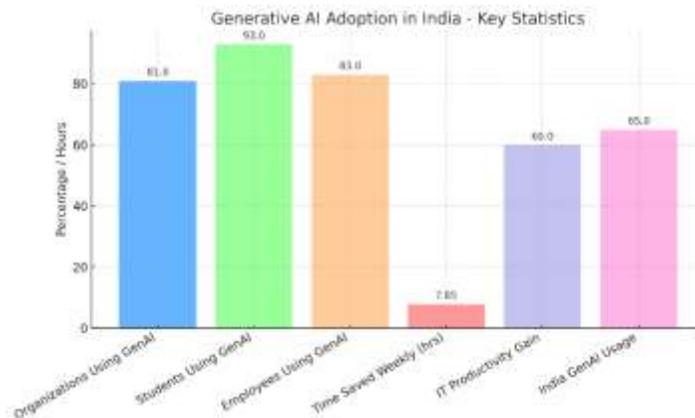
IBM's deployment of AI for recruitment and HR operations has enhanced decision-making effectiveness but at the same time introduced concerns of algorithmic bias and lack of transparency (Bogen, et al., 2018). Research indicates that AI hiring systems have the capacity to reinforce present workplace inequalities unless adequately audited (Raji, et al., 2019). IBM has made principles available calling for transparency and ethical AI use (IBM, 2020), yet virtue ethics would question if the company's practices truly evidence fairness and responsibility.

Figure.1(Rate of generative AI adoption in the workplace in the United States 2023, by industry)



As shown in the graph (Figure.1), the highest rates of generative AI adoption in 2023 were in marketing and advertising (about 38%), followed closely by the technology and consulting industries (Statista, 2023)

Figure.2 (Generative AI adoption in India – key statistics)



As shown in the graph (Figure.2), India is now a world leader in the adoption of generative AI (GenAI). Recent studies indicate that 81% of Indian organizations have integrated GenAI tools into their businesses (Indian Express, 2024). The individual user market is also robust, with 93% of students and 83% of employees using GenAI tools (News9Live, 2025).

These tools are not only widely used—they're also efficient. Indian users save an average of 7.85 hours per week using GenAI (News9Live, 2025). In the IT industry, GenAI is expected to enhance productivity by as much as 60%, especially in software development (Time, 2025). In addition, 65% of Indian respondents have utilized GenAI, more than twice the global mean of 31% (Indian Express, 2024).

5.0. Ethical Analysis:

- **Utilitarian Perspective:**

replacing human workers with AI is justified if it maximizes overall societal benefit. Increased efficiency and consumer satisfaction may outweigh individual job losses (Mill, 1863). However, ignoring the suffering of displaced workers can undermine the goal of the greatest good.

- **Deontological Perspective:**

Deontology emphasizes duties and rights, such as the right to fair treatment and meaningful work. Replacing workers with AI may violate these rights, regardless of outcomes (Kant, 1785). Ethical business practices require honouring human dignity, not merely maximizing profit.

- **Virtue Ethics:**

Virtue ethics focuses on the moral character of decision-makers, emphasizing values like fairness and compassion. Choosing AI without regard for workers shows a lack of moral integrity (Hursthouse, 1999). Ethical companies act justly, balancing innovation with humanity.

- **Corporate Social Responsibility (CSR):**

CSR demands that businesses consider the social impact of their decisions, including AI deployment. Many firms neglect this duty, accelerating inequality and job insecurity (Carroll, 1991). Ethical AI integration must involve transparency, retraining, and stakeholder inclusion.

6.0. Discussion:

The rise of AI in business is revolutionizing everything, from how companies operate to how people work and live. On one hand, it offers quicker services, smarter systems, and greater profits. But for many employees, it equates to uncertainty, job loss, and feeling left behind. Customers reap the benefits, and shareholders reap the rewards, but employees tend to bear the cost. The moral dilemma is how to balance innovation with empathy. Companies need to think beyond efficiency and consider the human toll. AI, used responsibly, can uplift society rather than divide it. The future depends on making choices that include everyone.

7.0. Recommendations:

To solve the moral dilemma of AI displacing human workers, companies need to embrace strong ethical models that value openness, equity, and accountability. Human monitoring should be kept intact to ensure traceability of responsibility in AI-powered decisions. Businesses should actively engage in reskilling and upskilling workers who have lost their jobs due to automation so that the shift into new work can be facilitated. Open communication regarding how AI systems work can help build employees' trust. Inclusive stakeholder participation such as employees and unions must be fostered in the course of AI deployment. Governments need to also create regulatory guidelines requiring ethical impact analyses. All these measures, collectively, can harmonize innovation with human dignity and social equity.

8.0. Conclusion:

The incorporation of AI into the workforce offers tremendous opportunities as well as deep ethical dilemmas. While AI boosts productivity and innovation, its unregulated use can result in job loss, inequality, and the erosion of human control. This study, through case studies such as Amazon and IBM, shows how companies need to manage these transitions responsibly. Ethical frameworks like utilitarianism, deontology, and virtue ethics give moral perspective to examining these changes. It is clear that substituting human employees with AI is not merely about economics, it's a human-driven requirement. Transparency, accountability, and employee engagement must be top-of-mind considerations for AI strategy. Organizations with ethical AI principles are likely to maintain long-term trust and social license. In addition, policy interventions and regulatory frameworks are needed to steer ethical AI adoption. Finally, the future of work needs to be shaped by technologies that respect and elevate human value.

References:

1. Acemoglu, D., & Restrepo, P. (2020). Robots and jobs: Evidence from US labor markets. *Journal of Political Economy*, 128(6), 2188–2244. <https://doi.org/10.1086/705716>
2. Bogen, M., & Rieke, A. (2018). Help wanted: An examination of hiring algorithms, equity, and bias. *Upturn*. <https://www.upturn.org/reports/2018/hiring-algorithms/>
3. Brynjolfsson, E., & McAfee, A. (2014). *The second machine age: Work, progress, and prosperity in a time of brilliant technologies*. W. W. Norton & Company.
4. Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, 34(4), 39–48. [https://doi.org/10.1016/0007-6813\(91\)90005-G](https://doi.org/10.1016/0007-6813(91)90005-G)
5. Duhigg, C. (2019, October 10). Is Amazon unstoppable? *The New Yorker*. <https://www.newyorker.com/magazine/2019/10/21/is-amazon-unstoppable>
6. Eubanks, V. (2018). *Automating inequality: How high-tech tools profile, police, and punish the poor*. St. Martin's Press.
7. Floridi, L., Cows, J., Beltrametti, M., Chatila, R., Chazerand, P., Dignum, V., ... & Vayena, E. (2018). AI4People—An ethical framework for a good AI society: Opportunities, risks, principles, and recommendations. *Minds and Machines*, 28(4), 689–707. <https://doi.org/10.1007/s11023-018-9482-5>
8. Frey, C. B., & Osborne, M. A. (2017). The future of employment: How susceptible are jobs to computerisation? *Technological Forecasting and Social Change*, 114, 254–280. <https://doi.org/10.1016/j.techfore.2016.08.019>
9. Gartner. (2021). Top trends in artificial intelligence and trust issues in automation. Gartner Research. <https://www.gartner.com>
10. Hursthouse, R. (1999). *On virtue ethics*. Oxford University Press.
11. IBM. (2020). IBM's principles for trust and transparency. IBM. <https://www.ibm.com/policy/trusted-ai/>

12. Indian Express. (2024, November 28). India leads in generative AI adoption with 81% of firms using tools: Report. The Indian Express. <https://indianexpress.com/article/technology/ai/india-generative-ai-adoption-report-9053219/>
13. Kant, I. (1996). *Groundwork of the metaphysics of morals* (M. Gregor, Trans.). Cambridge University Press. (Original work published 1785)
14. Kantor, J., & Sundaram, V. (2021, June 15). Power, panic, and despair: Amazon's warehouse workers reveal the human cost of faster delivery. The New York Times. <https://www.nytimes.com/2021/06/15/technology/amazon-warehouses-workers.html>
15. Mill, J. S. (1863). *Utilitarianism*. Parker, Son, and Bourn.
16. Moore, G. (2020). Ethics and the future of meaningful work: Examining the roles of AI and automation. *Journal of Business Ethics*, 170, 87–98. <https://doi.org/10.1007/s10551-020-04575-2>
17. Mittelstadt, B. D., Allo, P., Taddeo, M., Wachter, S., & Floridi, L. (2016). The ethics of algorithms: Mapping the debate. *Big Data & Society*, 3(2), 1–21. <https://doi.org/10.1177/2053951716679679>
18. News9Live. (2025, March 2). Indians save nearly 8 hours a week using GenAI tools: Survey. News9Live. <https://www.news9live.com/technology/indians-save-nearly-8-hours-a-week-using-genai-tools-survey-2723648>
19. Raji, I. D., & Buolamwini, J. (2019). Actionable auditing: Investigating the impact of publicly naming biased performance results of commercial AI products. In *Proceedings of the 2019 AAAI/ACM Conference on AI, Ethics, and Society* (pp. 429–435). <https://doi.org/10.1145/3306618.3314244>
20. Statista. (2023). Share of companies adopting generative AI worldwide in 2023, by industry. Statista Research Department.
21. Time. (2025, January 15). How generative AI is transforming India's tech workforce. Time.