

# AI Disruption and the Future of Work: A Threat or an Opportunity for Employees?

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**Abstract.** The advancement of artificial intelligence (AI) has significantly reshaped the landscape of the modern workforce, sparking critical discourse on whether its influence yields greater risks or benefits for employees. While AI's capacity to automate routine tasks poses threats to job security in certain sectors, it simultaneously opens avenues for innovation, efficiency, and the emergence of new roles requiring advanced, specialized skills. This paradox necessitates a strategic response primarily through reskilling and upskilling initiatives to prepare the workforce for AI-driven transformation. This study adopts a quantitative approach by distributing a structured questionnaire to employees of PT Otak Kanan, a company actively operating in the AI industry. The objective is to explore employee perceptions regarding the impact of AI on their work performance and job relevance. Findings aim to determine whether AI is perceived as a constructive force or a disruptive element in the workplace. Ultimately, with appropriate implementation, AI can be harnessed as a catalyst to empower human roles and foster a culture of innovation, turning potential threats into sustainable opportunities for growth.

**Keywords:** Artificial intelligence, workforce transformation, job relevance, ethical AI, upskilling, digital business, PT Otak Kanan

## Introduction

The development of artificial intelligence (AI) technology has brought significant changes to the workforce in various industrial sectors. AI is not only capable of automating routine tasks, but is also beginning to replace jobs previously performed by humans. This phenomenon raises concerns about the future of the labor force, especially regarding the potential reduction of job opportunities and changes in the skill structures needed in the modern workforce (Wolla, 2024). Although AI is often considered a threat, on the other hand, this technology also opens various new opportunities for workers. The application of AI in organizations can improve operational efficiency, create job opportunities in new fields, and encourage innovation in business processes. Therefore, the utilization of AI must be accompanied by appropriate strategies, such as reskilling and upskilling programs. So that workers can adapt to the emerging demands of new competencies (Brynjolfsson et al., 2023). In addition to economic and technical aspects, the adoption of AI in the workplace also presents equally important ethical challenges. Some issues that need to be addressed include transparency in AI-based decision making, fairness in the distribution of technological benefits, and its impact on the very meaning of work itself (Smids et al., 2019). Therefore, it is important for the government, companies, and society to work together in designing policies and work systems that ensure the use of AI can be an opportunity, not a threat, for the future of the workforce.

## Methods

This research uses a quantitative approach aimed at examining the impact of the application of artificial intelligence (AI) on employees' perceptions of job security and career development opportunities at PT Otak Kanan. Additionally, this study explores the role of digital literacy and skill levels as factors that can strengthen or weaken this relationship. The quantitative approach was chosen because it can produce

measurable and objective data, as well as enable statistical analysis to draw data-driven conclusions. This method is deemed suitable for systematically evaluating the relationships between variables. Data was collected through the distribution of questionnaires to 10 respondents who are employees of PT Otak Kanan. The research instrument consisted of a questionnaire comprising 10 statements, which were measured using a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree).

Perception of AI is measured through statements Q1, Q2, Q3, Q4, Q5, Q9, and Q10. Skill level is measured through statements Q6 and Q8. Digital literacy is evaluated based on responses to the relevant statements in the questionnaire. The data obtained will be analyzed descriptively and inferentially to observe general trends and test relationships between variables, according to the research goals.

## Result and Discussion

Based on the data collected from 27 employees at PT Otak Kanan, the descriptive analysis reveals that the majority of respondents maintain a generally positive perception toward the implementation of artificial intelligence (AI) in their workplace. Responses to statements Q1 through Q5, Q9, and Q10 – which capture employees' perceptions of AI – produced mean scores ranging from 3.8 to 4.2 on a 5-point Likert scale. These figures indicate that most respondents *agree* or *strongly agree* that AI enhances work efficiency, facilitates decision-making processes, and opens up new opportunities for career development. These results suggest that AI is not predominantly viewed as a threat, but rather as a complementary tool that reinforces human roles within organizational settings.

The assessment of skill level, as measured by responses to Q6 and Q8, shows that most respondents feel adequately equipped to adapt to AI-driven technologies in their current roles. Nevertheless, a portion of respondents acknowledged the need for further training, particularly in operating digital platforms powered by AI. This underlines the importance of implementing continuous upskilling initiatives to ensure workforce adaptability.

In addition, digital literacy emerged as a key variable influencing employees' perceptions of AI. Respondents with higher levels of digital literacy expressed more favorable attitudes toward AI integration. Conversely, individuals with lower digital literacy levels were more likely to perceive AI as a disruptive force or threat to job continuity. This dichotomy reinforces the pivotal role of digital competency in shaping acceptance of emerging technologies.

An inferential analysis using Pearson correlation revealed a statistically significant positive relationship between employees' perceptions of AI and both skill level and digital literacy ( $r > 0.5$ ;  $p < 0.05$ ). This finding implies that higher levels of technical preparedness and digital fluency are associated with more constructive views on the role of AI in the workplace. It also supports the theoretical premise that digital readiness is a critical determinant of whether AI is perceived as an opportunity or a liability.

Overall, the findings of this study affirm that AI is not inherently a threat to the workforce. Instead, when implemented alongside strategic organizational support – particularly in the form of skill development and digital literacy training – AI can be leveraged to foster human-machine collaboration, drive innovation, and create a more inclusive and future-ready workplace.

## Conclusion

This study has provided empirical insights into employees' perceptions of artificial intelligence (AI) implementation within the organizational context of PT Otak Kanan. Through a quantitative approach, it has been demonstrated that AI is predominantly perceived not as a disruptive threat, but rather as a strategic enabler that enhances work efficiency, decision-making, and career advancement opportunities. The findings further emphasize the critical roles of digital literacy and skill level in shaping these perceptions. Employees who exhibit higher levels of digital fluency and technical competence tend to view AI integration more favorably, suggesting that digital readiness significantly influences the perceived value of AI in the workplace. Inferential analysis affirms a statistically significant positive correlation between AI perception and both digital literacy and skill level, reinforcing the notion that technological acceptance is not merely a function of exposure, but also of preparedness. Therefore, the extent to which AI becomes an opportunity rather than a threat is largely contingent upon the organization's commitment to fostering continuous learning, upskilling, and digital empowerment among its workforce.

In light of these findings, it can be concluded that AI disruption, when accompanied by strategic human resource development and inclusive digital transformation policies, holds the potential to enhance employee agency and organizational resilience in the digital era.

## References

- Husnan, S. (1994). *Dasar-dasar Teori Portofolio dan Analisis Sekuritas*. UPP AMP YKPN.
- Schein, E. H. (2009). *The Corporate Culture Survival Guide* (2nd edition ed.). Jossey-Bass.
- Shaw, D. T. N. (2008). A Discriminant Model for Assessment of Prospective Entrepreneurs for Financing and Success of Entrepreneurial Venture. *Journal of Asia Entrepreneurship and Sustainability*, 4(1), 69–82.
- Singhal, A., Neveditsin, N., Tanveer, H., & Mago, V. (2024, April 3). Toward Fairness, Accountability, Transparency, and Ethics in AI for Social Media and Health Care: Scoping Review. *JMIR Medical Informatics*. 10.2196/50048
- Whiting, K. (2023, May 1). AI is helping to identify skills gaps and future jobs. An expert explains how. *The World Economic Forum*. <https://www.weforum.org/stories/2023/05/ai-skills-gaps-future-jobs/>
- Wolla, S. A. (2024, December 2). AI and the Future of Work: Opportunity or Threat? *Page One Economics, Federal Reserve Bank of St. Louis*. <https://www.stlouisfed.org/publications/page-one-economics/2024/dec/ai-and-the-future-of-work-opportunity-or-threat>