Chapter 18
How Human Resource Managers Can Utilize AI to Promote Employee Well-Being

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ABSTRACT

Artificial intelligence (AI) offers both opportunities and difficulties. In addition to significantly enhancing industrial efficiency, these technologies also have mixed or adverse influences on employee well-being. Understanding the influence of AI on employee well-being is essential given the increasing use of these technologies across HRM domains. This study raises a crucial question: Does artificial intelligence influence employee well-being? Job satisfaction, stress, overall health, and job security are considered essential dimensions of well-being. This study suggests that, even though AI can improve employee well-being, caution can be taken to address concerns and ensure a positive work atmosphere in organizations. Managers and leaders can utilize their agency significantly by influencing working conditions, technological adoptions, and AI in the interest of employee welfare. Organizational support and training programs can be relevant in reducing the negative effects of AI on employee well-being.

1. INTRODUCTION

Since the advent of the Internet of Things and Big data accessibility, commercial organizations have given Artificial Intelligence (AI) enabled technologies major attention. The dramatic emergence of AI has sparked a revolution that will likely continue into the future. Seventy-seven percent of consumers use AI technology, and recent estimates indicate that the entire global revenue for AI software is anticipated to increase from $9.5 billion in 2019 to as much as $ 118.6 billion in 2025, a phenomenal growth rate of more than 1,100 percent (Nazareno & Schiff, 2021; Qamar et al., 2021). The advent of the Industrial Revolution is anticipated to have a significant impact on industries all over the world (Soh & Connolly, 2021). Consequently, it will lead to integrating the digital and physical world, improving human-machine interactions, and advancing automation by incorporating smart machines and intelligent software (Xu et al., 2018; Pereira et al., 2023). According to Müller et al., (2021), AI is advancing into the 'new normal' in manufacturing and service sectors. The aim of AI is to create machines that operate better than humans while thinking like them. Additionally giving the machines the ability to autonomously receive and analyze the data to make decisions, address issues, and carry out tasks that call for human reasoning (Von Krogh, 2018). While many social, legal, ethical, and policy implications exist, related to AI, widespread labor substitution or displacement has attracted greater attention.

Several significant studies have predicted that a sizable portion of the workforce will either lose their jobs or require a significant career change in the near future owing to the adoption of AI (Peters, 2017; Korinek & Stiglitz, 2019). Around 51-52 percent of U.S. jobs are at high or moderate risk of automation, similarly Lazzerini and Pistolesi (2017) and Osborne (2017) project the risk of automation at 47 percent of U.S. employment.

Existent research also reveals that, many organizations have not realized the expected benefits of AI (Fountaine et al., 2019). According to a report by Boston Consulting Group and MIT, the percentage of companies deploying AI fell from 20 percent in 2019 to 4 percent in 2020 (The Economist: Businesses are finding AI hard to adopt., 2020). Furthermore, studies claim that organizations frequently find it challenging to integrate AI into their business processes which hinders the adoption of AI (T. H. Davenport & Ronanki, 2018). While early adopters revealed that investments in AI are not yielding economic value, recent literature has emphasized the potential for AI to enhance businesses (Ransbotham, S., Gerbert, P., Reeves, M., Kiron, D., & Spira, M., 2018)

Artificial intelligence (AI) has revolutionized several sectors in the past few years thereby enhancing production, efficiency, and consumer experiences. While, using AI has many advantages for businesses, it is crucial to consider how it will affect workers' well-being.

Diverse disciplines, organizational roles, and levels of research have been used to examine the link between artificial intelligence and workplace outcomes, leading to a range of findings concerning the effects of artificial intelligence in the workplace. It is important to have more understanding of how AI affects individuals, groups, companies, and the greater institutional landscape for those who practice attempting to incorporate intelligent machines and intelligent computerized systems at work. At the same time, by continuously charting the impact of AI at work, a roadmap for future study at the nexus of AI and workplace outcomes may be constructed. This study postulates that implementing new technologies responsibly and sustainably requires concurrent awareness of social, technical, and even biological processes (Pereira et al., 2023).

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