

AI Collaboration in Workforce Management

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This paper focuses on workforce management and the usage of AI into team coordination. Workforce management functions can include hiring, training, workforce planning, and coordination. These elements are now being heavily affected by AI tools so exploring how both AI resources and human resources function effectively in a startup company can be essential to be aware of in order to have the knowledge and capabilities to maximize growth potential, especially for businesses leaders.

Historical Definition

Historically, workforce management focused on optimizing Human Resources (HR) by scheduling, training, assigning duties, and ensuring labor efficiency. The HR function has undergone significant changes over the past few decades. Technological advancements, particularly the rise of AI, have played a crucial role in helping HR reinvent itself to bring added value to organizations. (Spell, C. et al., 2023). When we were asked to reflect on the value and contributions of management history, after quickly considering several topics and themes, it occurred to us that it may be interesting to look to the present to show us the value of the past (Spell, C. et al., 2023). Over the last twenty years, the number of scientific publications dealing with human resources management information technologies has grown considerably. Widely studied topics include web-based Human Resource Management, HRM cloud computing, and HR analytics. However, access to new generations of HR databases now makes it possible to take the digitization of human resources even further by introducing information systems based on artificial intelligence (AI) techniques (Revillod, G. et al., 2024).



Current Research, Organizational Impact & Workforce Importance

AI technologies are present in almost all HR activities, including recruitment and selection, training and development, performance management, talent management, compensation management and work design (Registre, J. et. al., 2024). Using AI into HR systems can streamline hiring automation, analysis for employee engagement, and predictive workforce planning. Hence, making it important in the workplace to have effective planning so that employees have clear goals set and clear expectations so that they are aware of what they need to do without being micromanaged.

Rapid advances in AI have arguably radically transformed the nature of HR work. HR managers will increasingly be called upon to collaborate with AI tools, integrate the results generated by these tools into their decision-making processes, and determine the extent to which they delegate responsibilities to them (Registre, J. et. al., 2024). With the proper amount of human interaction delegating and managing tasks with AI tools, an organization can reduce its risks in over reliance in AI as long as there remains proper guidelines for HR professionals to take accountability for the amount of work they delegate to AI. HR AI is still considered an emerging technology, so it is still at an early stage of development in both private and public organizations (Revillod, G., 2024) Since AI is still relatively new and still has its faults in providing accurate unbiased information, HR team member will need to manually revise the work that AI has done and review the applications the system has denied as unfit potential candidate. This is because AI might not move forward with a candidates resume and cover letter based on preset algorithmic data on what is perceived to be a qualifying candidate. This can put the company in a position where

they might be vulnerable to a possible lawsuit for unfair employment practices or discriminating against the disabled, protected Veterans, or minority groups.

AI systems can introduce biases from training data, potentially leading to unfair treatment of employees. Addressing bias and ensuring fair decision-making is a persistent challenge. As HR processes become data-driven, protecting employee information is crucial (Zhang, H., 2024). Since AI needs information to respond, HR team members need to be aware that the sensitive information they input into the AI system can be stored and or hacked. Hence, cyber security training programs should also be implemented alongside AI training so they team members can be more prepared in the digital savvy world.

Organizational Impact

By strategic using AI, HR employees can increase their efficiency by automating routine tasks. This can allow for more time for creative innovation. Organizations must ensure the responsible use of AI in HR tasks to maximize its positive effects. This entails considering the risks associated with the adoption of these technologies, particularly issues related to transparency, fairness and accountability (Registre, J. et. Al., 2024).

Businesses need to accept and make the shift to implementing AI into their HR practices but still be aware of the risks involved such as employee information protection, and biased pre-selection for hiring candidates. As business make a shift to a more streamlined automated world, there still needs to be human supervision to ensure that small errors such as a highly qualified candidate for a position does not go unnoticed do to a set algorithm. The new role of HRs in the era of AI is to automate operational tasks. Even when considering traditional HR processes, AI is taking part in the human role. Talent acquisition, from sourcing future candidates to automatically selecting profiles has been influenced by AI (Li, P. et. al., 2023).

Workforce Management & Development

HR's new role will be to build a competitive advantage by acquiring AI and utilizing it to increase companies' capabilities in aspects such as speed and responsiveness. The new strategic role of HR will move into reviewing companies' structure to best integrate AI (Li, P. et. al., 2023). Furthermore, there will need to be more upskilling and reskilling of HR team members in order to combine digital literacy with human judgment for an effective collaboration.

Additionally, employee well being well need to be managed and further developed with such new stress factors. Anxiety may increase in employees as they might be fearful about their jobs be displaced. HR managers' beliefs about AI and AI anxiety had a significant influence on their change readiness for AI adoption. Specifically, individuals with positive beliefs were more likely to accept the change to adopt AI,

while individuals who experienced higher anxiety over AI were less ready to adopt AI (Suseno, Y. et. Al., 2021).

The younger workforce generation might have an easier time adopting AI compared to the older workforce generation. Some employees that have been with a company for over 15 years might have a set way of organizational activity and might show resistance to a drastic new change.

Future Trends

Companies that integrate AI into their HR functions create an environment that meets employee expectations and increases job satisfaction (Zhang, H. 2024). By meeting the expectations of employees a company can reduce its turnover rate and we might see a future where employees stay longer with their employers as they feel more satisfied with their jobs with proper AI job placements and targeted customized employee incentives. Additional future trends may include; HR integrating AI directly in workflows without the need of IT support, rise in dedicated teams such as legal, and supervisory teams to oversee ethical and effective use of AI, and an increased use of algorithmic fairness frameworks to counter bias and maintain trust.

Future Questions & Literature Gaps

Future research should focus on creating fair and transparent AI systems, ensuring unbiased decision-making and building trust among employees (Zhang, H. 2024). Future questions about optimizing human AI collaboration in workforce management should cover; communication, ethics, and employee skills. Some future questions to improve literature include the following:

1. What expectations and incentives should employers set for a seamless AI integration?
2. What can organizations do to ensure accountability for AI decisions in hiring, promotions, and bonuses? Justice theory offers a mapping across fairness types, but empirical studies are still needed.
3. Which programs effectively develop merger skills? Research on AI use in workforce development is rising, but startup-specific frameworks are still under explored.

Conclusion

This paper situates workforce management in AI-innovative businesses at the intersection of human resource management and innovation management. The paper confirms the drastic impact that AI has on productivity, and workforce development but also shows the risk in ethical challenges, communication breakdowns, and the the friction between some employees that may not be ready to adopt AI. Hence, The future of research is in discovering, fairness, employee

well-being, effective upskilling, and organizational design in order to easily adopt a human-centered AI integration.

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