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RESEARCH TITLE

# THE ROLE OF ARTIFICIAL INTELLIGENCE IN MANAGING THE DIVERSITY OF HUMAN RESOURCES: A PROPOSED RESEARCH MODEL

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## Abstract

The aim of this study is to examine the appropriate literature and emphasize the significance of taking into account the role of Artificial Intelligence (AI) in managing diversity in human resources. AI has the potential to revolutionize the way organizations manage diversity in their human resources. It can help identify biases in hiring, provide diversity training, monitor diversity metrics, and reduce bias in performance evaluations. The researchers reviewed various related literature and came up with propose framework/model that is predicting the role of AI in managing diversity in human resources. If the empirical validation of the model is successful, practitioners and other stakeholders will gain a valuable understanding of the crucial role played by AI, based on the findings.

**Key Words:** Artificial Intelligence (AI), Human Resources, Diversity

## Introduction

This paper presents a theoretical model/framework on the role of artificial intelligence in managing the diversity of human resources. In today's world, diversity has become a critical component of human resources management. It is essential for organizations to have a diverse workforce to reflect the diversity of their customers and clients. Managing diversity has its challenges, and it requires innovative and strategic approaches. Artificial Intelligence (AI) is a rapidly growing field, and it has the potential to revolutionize the way organizations manage diversity in their human resources. The use of AI in human resource management (HRM) is expected to have a major influence on the future of HRM, with considerable potential for its application, as suggested by studies conducted by Malik, Budhwar, Patel, & Srikanth (2020) and Malik, De Silva, Budhwar, & Srikanth (2021). Although AI systems and machines have the ability to mimic human intelligence and process various types of input data, such as text, numbers, figures/images, and sound, and generate output in the form of decisions or solutions, their potential is not fully realized by many organizations. This fact has been highlighted by several studies conducted by Akerkar (2018), Fountaine et al. (2019), Haenlein and Kaplan (2019), and Von Krogh (2018). Additionally, even among institutions that recognize the importance of AI and are implementing it into their business operations, most are only using it in a single function, process, or practice, as stated by Fountaine et al. (2019). This attract the attention of many scholars, however, previous studies on AI have either been focused on conceptual analysis or limited to investigating the application of AI in a specific business practice or function without considering its impact on diversity management within organizations (examples include Yu, 2011; Stalidis et al., 2015; Abdou et al., 2017). Thus, the lack of research on the management of diversity using AI represents a significant gap in the existing literature.

AI has emerged as a powerful tool for managing diversity in human resources. Diversity in Human Resources Management refers to the differences that exist among individuals in an organization. These differences can be based on age, gender, race, ethnicity, religion, sexual orientation, and disabilities, among others. Managing diversity means recognizing these differences and creating an inclusive workplace that values and respects them. It involves developing policies and strategies that promote equity and inclusion and eliminate discrimination (Nguyen, Yadav, Pande, Bhanot, & Hasan, 2022). The importance of diversity in the workplace Diversity in the workplace refers to the differences that exist among employees in an organization. These differences can be based on a wide range of factors, including age, gender, race, ethnicity, religion, disability, sexual orientation, and cultural background. A diverse workplace can bring a wide range of benefits to an organization, including increased creativity and innovation, improved problem-solving capabilities, better decision-making, and a broader customer base (Shen, D'Netto, & Tang, 2010). However, managing a diverse workforce can be challenging, and organizations must take steps to ensure that all employees are treated fairly and equitably (Köllen, 2021). Therefore, AI has emerged as a powerful tool for managing diversity in human resources. AI can help organizations to create a more inclusive and equitable workplace by eliminating unconscious bias and providing objective assessments of employee performance (Akerkar, 2018; Fountaine et al., 2019; Haenlein & Kaplan, 2019; & Von Krogh, 2018). It has discovered that, there is scanty of studies that investigate empirically the role of AI on specifically in managing diversity in human resources. This is another important gap in the literature. However, to fill in these important gaps, this paper proposed a framework/model to explore the role of AI in managing diversity in human resources in an organization, by employing some of the ways in which AI can be used to manage diversity in human resources which include: Recruitment and Hiring,

Performance Management, Training and Development and Employee Engagement.

## Literature Review

Artificial intelligence refers to the development of computer systems that can perform tasks that typically require human intelligence, such as language processing, decision-making, visual processing, and voice recognition (Zhang, Pee, & Cui, 2021). These systems are designed to function like humans, using techniques such as machine learning and deep learning to learn from data and make predictions (Pallathadka, Ramirez-Asis, Loli-Poma, Kaliyaperumal, Ventayen, & Naved, 2021). John McCarthy, the father of AI, defined it as the "scientific and technological expertise" of creating intelligent computer programs. This technology is widely used by individuals, businesses, and governments to improve various aspects of their operations.

It has unanimously agreed and confirmed by the previous researches that AI has several roles to play when it comes to managing diversity of human resources in an organization. Younis and Adel, (2020); Johnson, Stone and Lukaszewski, (2021); Oswal, Khaleeli and Alarmoti, (2020); Bhardwaj, Singh and Kumar, (2020); Zahidi and Imam, (2020) highlighted the following points among which AI plays a significant roles in managing diversity of human resources in an organization:

Firstly, AI algorithms can analyze vast amounts of data, including employee performance metrics, feedback, and engagement surveys. By identifying patterns and trends in this data, AI can provide valuable insights into how to manage diversity in the workplace effectively. For example, an AI algorithm could analyze performance metrics and identify if certain groups of employees are being unfairly treated or not receiving the same opportunities for career advancement.

Secondly, AI can help reduce bias in the hiring process. Traditional hiring methods can be biased, and recruiters may unconsciously favor candidates who share similar backgrounds or characteristics. AI-powered recruitment tools can help reduce this bias by analyzing candidate data without any preconceived notions or biases. This can help ensure that all candidates are evaluated fairly, based on their skills and qualifications, regardless of their background.

Thirdly, AI can help organizations create more inclusive workplace cultures. For instance, AI-powered tools can analyze employee engagement surveys and identify areas where diversity and inclusion are lacking. By identifying the root causes of these issues, organizations can take corrective measures to create more inclusive workplaces.

## Artificial Intelligence and Recruitment and Hiring

Studies reported that, AI can be used to screen job applicants and eliminate bias in the recruitment process. AI-powered recruitment tools can help organizations to identify the best candidates for a job based on their skills, qualifications, and experience, rather than their gender, race, or other factors (Votto, Valecha, Najafirad, & Rao, 2021). AI can also help to reduce the time and cost involved in the recruitment process. AI Engines are responsible for determining the most suitable source to find potential job candidates, while NLP is utilized for screening resumes and assisting with candidate selection (Mathiraj, Karthick, & Nithyakarpagam, 2022). AI bots can even conduct video interviews as part of the initial screening process, which can save time and streamline the hiring process. Johnson, Stone and Lukaszewski, (2021) conducted a study on Talent Acquisition using hotel and tourist business their study reported that AI has significant role in recruits and hires hotel and tourist business workers. In the same vain Oswal, Khaleeli and Alarmoti, (2020) found that “AI have potential to improve the reliability of the hiring experience by aligning the qualified talent to job

requirements". AI plays a significant role in the recruitment and selection process in organizations (Bhardwaj, Singh & Kumar, 2020; Pillai & Sivathanu, 2020; Zahidi & Imam, 2020; Hogg, 2019). Based on the literature mentioned above, this research puts forward the following proposal:

**Proposition 1:** AI plays a significant role on recruitment and hiring process in an organization.

### Artificial Intelligence and Training and Development

It's important to note that the HR's role extends beyond recruiting and selection and AI can be a valuable tool in other areas of employee development. However, AI can also be utilized to enhance employee empowerment beyond the hiring process. Machine learning can be used to suggest innovative training methods to help employees improve their skills and knowledge (Oswal, Khaleeli, & Alarmoti, 2020). AI can be used to provide personalized training and development opportunities for employees. AI-powered learning management systems can identify the specific learning needs of individual employees and provide them with customized training programs (Younis & Adel, 2020). This can help to ensure that all employees have access to the training and development opportunities they need to succeed in their roles. Maity, (2019) investigate into the possibility of applying AI in training programs. His study aims at promoting the use of AI among various sectors. Since, AI can provide diversity training to employees. AI-powered chatbots can be used to deliver training on diversity, equity, and inclusion (Bhardwaj, Singh & Kumar, 2020; Berhil, Benlahmar & Labani, 2020). The chatbots can answer questions and provide feedback on employee behavior. This can help create a more inclusive workplace where employees are aware of the importance of diversity and how to respect it. Based on the literature mentioned above, this research puts forward the following proposal:

**Proposition 2:** AI plays a significant role on Training and Development process in an organization.

### Artificial Intelligence and Performance Management

AI can be used to provide objective assessments of employee performance. AI-powered performance management tools can help to eliminate bias in performance evaluations and ensure that all employees are treated fairly and equitably (Younis & Adel, 2020). AI can also help to identify areas where employees need additional training and support. AI can help reduce bias in performance evaluations. AI algorithms can be trained to analyze performance data and eliminate any biases that may exist. This can help create a more objective and fair evaluation process, which can lead to better outcomes for all employees (Kaur & Kaur, 2022). Although the literature emphasizes the significance of AI in promoting knowledge sharing and performance management, there is a limited amount of empirical research investigating this association (Liebowitz, 2001). Additionally, there is a lack of studies that have directly measured the impact of AI on performance. Moreover, most discussions in the literature about the connections between AI, knowledge, and performance are either theoretical or indirectly linked through other mediating factors. It was still revealed that, there is significant influence between AI on performance management tools (Wilson & Daugherty, 2018; Haenlein & Kaplan, 2019).

A system for managing employee performance can track and monitor the performance of individuals, groups, branches, or entire organizations (Arslan, Cooper, Khan, Golgeci, & Ali, 2021; Huang, & Hayat, 2019). Artificial intelligence (AI) plays an important role in these systems. Traditional methods of evaluating employee performance can be problematic due to biases in the workplace (Hashmi & Baig, 2020; Merlin & Jayam, 2018). However, data-

driven evaluation methods that utilize AI can promote transparency and eliminate misunderstandings and concerns, as well as mitigate bias. AI-driven programs can monitor targets and team activities and facilitate the exchange of real-time feedback (Huang, & Hayat, 2019; Alam, Khan, Dhar, & Munira, 2020; Jia, Guo, Li, Li, & Chen, 2018; Cappelli, Tambe, & Yakubovich, 2018). For example, if an employee's performance exceeds expectations, AI can suggest rewards, and if an individual is falling behind, AI-based performance monitoring can alert them to areas for improvement. Based on the literature mentioned above, this research puts forward the following proposal:

**Proposition 3:** AI plays a significant role on assessments of employee performance in an organization.

**Artificial Intelligence and Employee Engagement**

AI can be used to improve employee engagement and retention. AI-powered engagement tools can help organizations to identify the specific factors that drive employee engagement and develop strategies to improve employee satisfaction and retention. AI can also help to identify and address issues that may be causing employee disengagement, such as workplace bias or discrimination. Automating employees can lead to a more personalized experience and increase their involvement in engagement processes in real-time. This approach involves keeping employees informed about the progress of their applications and maintaining relationships to decrease stress and anxiety while they wait (Ahmed, 2018). Artificial intelligence systems can assist in updating records, gathering information, and completing tasks that require minimal human interaction (Maity, 2019: Bibi, 2019). These tools, such as virtual platforms or chatbots, can also be used as a source of knowledge for employees. AI helps with internal communication, timely updates, diverse reports, and notifications, saving time and effort for HR personnel. Additionally, this approach keeps employees involved in all procedures and ensures that they do not miss any critical information (Premnath, & Chully, 2020; George, & Thomas, 2019).

Artificial Intelligence utilizes algorithms to scan the web and search various sites, including social networking websites, individual webpages, meeting communities, or technical chat forums, to gain access to potential candidates. These robots not only find suitable candidates for job positions but also predict whether a person is open to a career change, which allows employers to efficiently attract hard-to-find talent. For example, Under Armour, an American footwear, athletic, and casual apparel company, receives over 30,000 applications per month. Handling a large number of applications from potential employees is a difficult task, and the company's recruitment process was ineffective, making it challenging to assess or track candidates effectively (Iqbal, 2018).

Based on the literature mentioned above, this research puts forward the following proposal:

**Proposition 4:** AI plays a significant role on improve employee engagement.

**Proposed Research Model**

AI has the potential to transform the way organizations manage diversity in their human resources. AI can help organizations to identify areas where diversity is lacking and develop strategies to address them. This model depicted four areas or some of the ways in which AI can be used to manage diversity in human resources which include: Recruitment and Hiring, Performance Management, Training and Development and Employee Engagement.

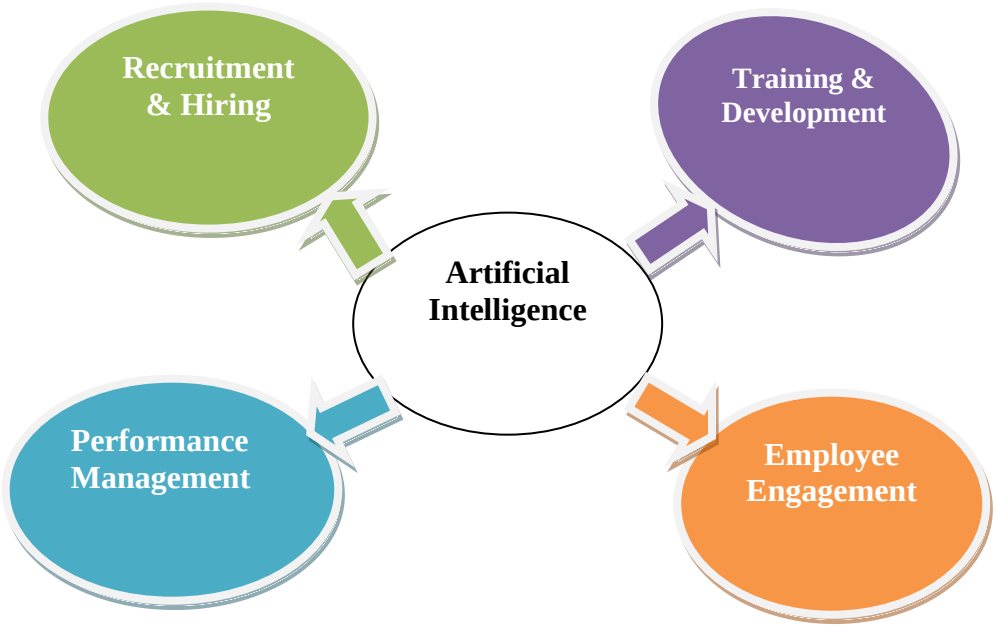


**Figure 1: A Proposed Research Model**

*The Role of AI in Managing Diversity in Human Resources*

## Research Methodology

This paper conducted to propose theoretical framework/model. The scholars examined several relevant academic sources and developed a suggested framework for anticipating how AI will impact the management of diversity within human resources. The paper gives direction for the future research to validate the model empirically.

## Conclusion

In conclusion, AI has emerged as a powerful tool for managing diversity in human resources in an organization. AI can help organizations to create a more inclusive and equitable workplace by eliminating unconscious bias, providing objective assessments of employee performance, and identifying areas where employees need additional training and support. However, it is essential to ensure that the use of AI is ethical and does not perpetuate bias or discrimination. Organizations must also ensure that AI is used in conjunction with human judgment and expertise to ensure that all employees are treated fairly and equitably. However, there are also challenges that must be addressed, including the potential for AI to reinforce biases and the lack of transparency in AI algorithms. Organizations must ensure that their AI algorithms are transparent and free of biases to ensure that they promote diversity and inclusion.

The aim of this study is to examine the pertinent literature and emphasize the importance of incorporating AI in the management of diversity within human resources, as illustrated in Figure 1. Should the model be supported by empirical evidence, it will provide valuable knowledge to professionals and other interested parties on the crucial role of AI in transforming the way companies handle diversity in their workforce. Additionally, this research will contribute to academic scholarship by introducing a model that has not been explored in previous studies. The study recommends that future research should validate the proposed framework presented in this study through empirical means.

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