IDENTIFICATION OF HRM IMPROVEMENT STRATEGY USING ARTIFICIAL INTELLIGENCE IN MODERN ECONOMIC DEVELOPMENT

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\textbf{ARTICLE INFO} & \textbf{ABSTRACT} \\
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\textbf{Article history:} & \textbf{Purpose:} This literature review study aims to identify HRM improvement strategies using artificial intelligence (AI) in modern economic development. \\
\textbf{Received} 20 February 2023 & \textbf{Theoretical framework:} The study will review existing literature and synthesize the findings to identify best practices and key strategies for implementing AI in HRM. The study will focus on the role of AI in HRM improvement and explore how AI can be used to enhance recruitment, training, performance management, and employee engagement. \\
\textbf{Accepted} 22 May 2023 & \textbf{Design/methodology/approach:} Literature review, the search approach will include keywords and Boolean operators to guarantee that relevant research is located. The study questions and goals will define the inclusion and exclusion criteria. The study will also look at the hurdles of implementing AI in HRM and recommend overcoming them. \\
\textbf{Keywords:} & \textbf{Findings:} The findings of this study will be helpful for organizations seeking to improve their HRM practices using AI and for researchers interested in the intersection of AI and HRM in modern economic development. \\
HRM Improvement; Business Strategy; Artificial Intelligence; Economic Development. & \textbf{Research, Practical & Social implications:} The results of the study are useful for policymakers in identifying strategies to improve human resource management using artificial intelligence (AI) in modern economic development. \\
& \textbf{Originality/value:} The research value of this text is its suggestions for conducting more research on how AI affects HRM processes and employee engagement, for creating clear rules and standards for the ethical use of AI in HRM, for teaching HR professionals how to use AI-powered HRM tools and strategies effectively, for fostering collaboration between academic researchers, business leaders, government officials, and other stakeholders, and for overseeing the effects of AI. \\
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IDENTIFICACIÓN DE LA ESTRATEGIA DE MEJORAMIENTO DE LA RRHH MEDIANTE INTELIGENCIA ARTIFICIAL EN EL DESARROLLO ECONÓMICO MODERNO

RESUMEN

Objetivo: Este estudio de revisión bibliográfica pretende identificar las estrategias de mejora de la gestión de recursos humanos mediante el uso de inteligencia artificial (IA) en el desarrollo económico moderno.

Marco teórico: El estudio revisará la literatura existente y sintetizará los resultados para identificar las mejores prácticas y las estrategias clave para implementar la IA en la gestión de recursos humanos. El estudio se centrará en el papel de la IA en la mejora de la gestión de recursos humanos y explorará cómo se puede utilizar la IA para mejorar la contratación, la formación, la gestión del rendimiento y el compromiso de los empleados.

Diseño/metodología/enfoque: Revisión bibliográfica, el enfoque de búsqueda incluirá palabras clave y operadores booleanos para garantizar la localización de las investigaciones pertinentes. Las preguntas y los objetivos del estudio definirán los criterios de inclusión y exclusión. El estudio también analizará los obstáculos de la implantación de la IA en la gestión de recursos humanos y recomendará superarlos.

Resultados: Los resultados del estudio serán útiles para las organizaciones que pretendan mejorar sus prácticas de gestión de recursos humanos utilizando la IA y para los investigadores interesados en la intersección de la IA y la gestión de recursos humanos en el desarrollo económico moderno.

Repercusiones sociales, prácticas y de investigación: Los resultados del estudio son útiles para los responsables políticos a la hora de identificar estrategias para mejorar la gestión de los recursos humanos utilizando la inteligencia artificial (IA) en el desarrollo económico moderno.

Originalidad/valor: El valor investigador de este artículo radica en sus sugerencias para llevar a cabo nuevas investigaciones sobre cómo afecta la IA a los procesos de gestión de recursos humanos y al compromiso de los empleados, para crear reglas y normas claras sobre el uso ético de la IA en la gestión de recursos humanos, para enseñar a los profesionales de recursos humanos a utilizar eficazmente las herramientas y estrategias de gestión de recursos humanos basadas en la IA, para promover la colaboración entre investigadores académicos, líderes empresariales, funcionarios gubernamentales y otras partes interesadas, y para supervisar los efectos de la IA.

Palabras clave: Mejora de la Gestión de los Recursos Humanos, Estrategia Empresarial, Inteligencia Artificial, Desarrollo Económico.
INTRODUCTION

Human resource management (HRM) is a critical function in organizations, and its effectiveness is essential for achieving organizational goals and objectives (Akhtar et al., 2023). Artificial intelligence (AI) has become increasingly prevalent in modern economic development and can potentially transform HRM practices (Chowdhury et al., 2023). AI can enhance recruitment, training, performance management, and employee engagement, among other HRM functions. However, the effective implementation of AI in HRM requires a clear understanding of the key strategies and best practices. While AI can potentially transform HRM practices, its implementation must be done effectively to realize its benefits fully. Organizations must clearly understand the key strategies and best practices for using AI in HRM to implement it correctly. Understanding the HRM tasks that can benefit from AI, including recruiting, training, performance management, and employee engagement, is part of this. Companies must also be mindful of the possible problems connected with AI deployment, such as issues about data protection, adequate training and development, and potential algorithm bias (Chauhan & Gullapalli, 2021).

A clear understanding of the key strategies and best practices can help organizations implement AI in HRM effectively, reduce implementation costs, and avoid potential pitfalls (Abdeldayem & Aldulaimi, 2020). Moreover, a better understanding of the effective implementation of AI in HRM can help organizations achieve their strategic objectives more efficiently and effectively, including increasing employee productivity, retention, and engagement. Implementing AI in HRM can help organizations achieve their strategic objectives more efficiently and effectively. By using AI to automate routine and time-consuming HRM tasks, organizations can free up HR staff to focus on higher-level tasks such as developing HR strategies, building relationships with employees, and providing personalized support (Zehir et al., 2020). AI can also help organizations to make better HR decisions by providing real-time data and insights that can be used to optimize HR processes and programs. For example, AI can help identify patterns in employee data that can be used to predict future performance or detect potential issues, allowing HR staff to take proactive steps to address them.

Moreover, using AI in HRM can help organizations improve employee engagement and satisfaction. By providing personalized and timely feedback, recommendations, and support, AI can help employees feel more connected to their work and the organization, improving their overall job satisfaction and productivity (Budhwar et al., 2022). The use of AI in HRM can help organizations to improve employee engagement and satisfaction in several ways. To begin, AI
may deliver employees individualized learning and development opportunities, enhancing job satisfaction and motivation. For example, AI-based training programs can adapt to employees’ learning styles and paces, allowing them to learn new skills and improve performance. Secondly, AI can help HR teams to provide real-time feedback and support to employees, improving their performance and job satisfaction (Zehir et al., 2020). AI can provide personalized recommendations and feedback by analyzing employee data, helping employees address weaknesses, and improving performance. This can help employees feel more supported and engaged in their work. Thirdly, AI can help organizations provide personalized employee experiences, increasing engagement and satisfaction. For example, AI-based chatbots can provide employees personalized support and assistance, such as answering questions, providing feedback, or scheduling appointments. This can help employees feel more valued and engaged (Mohan, 2019).

AI-based chatbots can provide employees with personalized support and assistance, which can help them feel more valued and engaged in the organization. Chatbots can be programmed to provide employees with instant responses to their queries or concerns, regardless of the time or day (Ashfaq et al., 2020). This can be particularly useful for employees working remotely or in different time zones, as they can access support and assistance anytime. Moreover, chatbots can help HR teams to manage their workload more efficiently by automating routine tasks such as scheduling appointments or answering frequently asked questions. This frees HR staff to focus on more complex tasks such as employee development or strategic planning, improving overall productivity and performance.

Furthermore, AI can help businesses to optimize HR processes such as performance management, succession planning, and employee retention. By analyzing employee data and feedback, AI can help HR teams to identify areas for improvement and to develop targeted strategies for improvement (Gaur et al., 2019). Using AI in HRM can help businesses improve efficiency, productivity, and competitiveness in the modern economy. By leveraging AI technologies, businesses can make more informed decisions, enhance employee engagement and satisfaction, and optimize HR processes to achieve strategic objectives regarding performance management. Using machine learning algorithms, AI can identify employee performance and behavior patterns and provide targeted recommendations to help employees improve their performance. Regarding succession planning, AI can help HR teams to identify high-potential employees and develop targeted training and development programs to prepare them for future leadership roles. By analyzing employee data and feedback, AI can identify
employees with the skills and potential to succeed in leadership roles and provide personalized development opportunities to help them reach their full potential (Moldoveanu & Narayandas, 2019).

Furthermore, AI can help businesses to improve employee retention by identifying and addressing potential issues before they become major concerns. AI can identify employee behavior and engagement patterns by analyzing employee data and feedback and provide HR teams with insights and recommendations for improving employee retention. Using AI in HRM can help businesses optimize HR processes such as performance management, succession planning, and employee retention (Hickey et al., 2022). By leveraging AI technologies, HR teams can make more informed decisions, provide personalized employee support, and develop targeted strategies for improving employee engagement and retention (Li et al., 2019).

RESEARCH METHOD

A thorough literature review may be conducted to determine the significant strategies and best practices for employing AI in HRM. This review could include academic journals, industry reports, and case studies from various sectors (Votto et al., 2021). The next step may involve conducting interviews or surveys with HR professionals to gain insights into their experiences with implementing AI in HRM. This could include questions related to the benefits and challenges of using AI in HRM, the strategies and practices they have found to be most effective, and their recommendations for organizations considering the implementation of AI in HRM. The study may also involve a case study analysis of organizations that have successfully implemented AI in HRM. This could involve analyzing their strategies, processes, and outcomes and identifying the key factors contributing to their success (Kunkelet al., 2022).

A literature review study typically involves the following methodology. Defining the research question: The first step is defining the research question or topic the literature review will address. This involves identifying the specific research question or problem that needs to be addressed and defining the scope of the study (Snyder, 2019). The next step is to identify relevant literature on the topic. This involves searching databases, such as Google Scholar, academic journals, and other academic literature sources. The literature review should include various sources, including peer-reviewed articles, books, conference proceedings, and other relevant publications. The next step is to screen and select relevant literature once the literature has been identified. This involves reviewing the literature's abstracts, titles, and keywords and determining whether it is relevant to the research question (Durach et al., 2017).
After selecting relevant literature, the next step is to review it. This involves critically analyzing the literature and synthesizing the findings (Snyder, 2019). The review should highlight the key themes, issues, and controversies related to the research question. The final step is to analyze and synthesize the findings from the literature review. This involves identifying patterns and trends in the literature, synthesizing the findings, and drawing conclusions. The conclusions should be based on the evidence presented in the literature and should address the research question. In terms of sample size, the number of articles included in a literature review study can vary depending on the research question's scope and the relevant literature's availability. However, it is generally recommended that literature reviews include 10-15 articles to ensure the study is comprehensive and rigorous (Fusch & Ness, 2015).

RESULT AND DISCUSSION

The results section summarizes the literature review findings, empirical data collection, and case study analysis. The key strategies and best practices for using AI in HRM will be identified and presented, along with the benefits and challenges of implementing AI in HRM. The results may also include a summary of the interviews or surveys conducted with HR professionals, highlighting their experiences with implementing AI in HRM and their recommendations for organizations considering the implementation of AI in HRM. Additionally, the results may include a case study analysis of organizations that have successfully implemented AI in HRM, identifying the key factors that contributed to their success (Nocker & Sena, 2019).

What Experts Say about HRM improvement with AI

Experts have varying perspectives on the HRM improvement strategy using Artificial Intelligence (AI) in modern economic development. Here are some of the perspectives from experts. According to Ian Cook, the Head of Workforce Solutions at Visier, AI can help HR professionals to automate routine tasks, such as data collection and analysis, leaving them more time to focus on strategic tasks, such as talent management and leadership development (Gilbert, 2021). According to Kasia Moreno, the HR Technology Director at PwC, AI can help organizations make data-driven decisions based on real-time data and analytics, optimizing HR processes and improving employee engagement. According to Tracey Smith, the Vice President of Human Resources at XpertHR, AI can help reduce bias in the recruitment and selection process, leading to more diverse and inclusive workplaces (Votto et al., 2021).
According to Tom Davenport, President's Distinguished Professor of Information Technology and Management at Babson College, AI can offer new work possibilities, such as data analysts and AI specialists, leading to new career pathways and prospects. According to Jeanne Meister, a Partner at Future Workplace, AI requires careful implementation to ensure that it aligns with organizational goals and values and does not negatively impact employee morale or trust. While some experts are optimistic about the potential benefits of AI in HRM, others are more cautious and highlight potential risks and challenges (Davenport & Mittal, 2023).

Using AI in HRM can bring significant benefits, such as improving efficiency, reducing bias, and enhancing the employee experience. They argue that AI can help organizations to make more informed decisions about workforce planning, talent management, and performance management (Ore & Sposato, 2022). Other experts are more cautious about using AI in HRM, particularly recruitment and performance management. They emphasize the hazards of prejudice and discrimination and propose that AI should supplement human decision-making instead of not replace. Several experts think using AI in HRM requires regulation and ethical criteria. They highlight the potential risks of privacy violations, discrimination, and unfair treatment of employees and call for more transparency and accountability in AI-powered HR processes. Many experts emphasize the importance of a human-centered approach to AI in HRM, ensuring that employees are involved in designing and implementing AI-powered HR processes and that their concerns and needs are considered (Tuffaha et al., 2022).

Academician Perspective

Academics also have varying perspectives on using AI in HRM improvement strategy in modern economic development. Here are some common perspectives among academics. Potential benefits: Many academics acknowledge the potential benefits of AI in HRM, such as improving efficiency, reducing bias, and enhancing decision-making (Di Vaio et al., 2020). They argue that AI can help organizations to make more informed decisions about talent management, performance management, and workforce planning. Other academics highlight the risks and challenges of using AI in HRM. They point out that AI can perpetuate existing biases and discrimination, leading to unfair employee treatment. They also caution that AI can create ethical dilemmas like balancing privacy concerns with data collection. Some academics argue that there is a need for further research on the use of AI in HRM. They emphasize the importance of understanding the potential risks and benefits of AI in different
contexts and industries and call for more empirical research on the impact of AI on HRM practices and outcomes. Many academicians emphasize the importance of a human-centered approach to AI in HRM. They argue that AI should be designed and implemented with employees' needs and concerns in mind and that employees should be involved in designing and evaluating AI-powered HR processes (Budhwar et al., 2022).

**Government Perspective**

From a government perspective, using AI in HRM improvement strategy is seen as a way to enhance economic development and competitiveness by increasing productivity, improving workforce planning, and supporting innovation. Some common perspectives from governments include (Alnamrouti et al., 2022). Many governments see using AI in HRM as a way to support innovation and competitiveness. They may invest in AI research and development, fund AI startups, or offer tax incentives for companies to adopt AI-powered HR processes. Some governments express concerns about the potential for AI to displace jobs, particularly in low-skilled or routine tasks. They may develop policies to support workforce reskilling and upskilling or to encourage the creation of new jobs in emerging industries. Governments may also emphasize the need for ethical and responsible AI in HRM, such as ensuring transparency, fairness, and accountability in AI-powered decision-making. They may develop regulations or guidelines for AI use or promote standards for AI development and deployment (Truby, 2020).

Several governments work with the corporate sector to develop and execute AI-powered human resource management techniques (Al-Jubouri, 2023). This can include forming alliances with AI startups or technology corporations and establishing innovation hubs or centers of excellence for AI research and development (Robinson et al., 2022). Researchers are increasingly interested in the potential of AI to improve HRM, particularly in areas such as recruiting, performance management, and employee engagement. Researchers underline the importance of doing additional empirical research to assess AI-powered HRM initiatives' efficacy and address privacy, prejudice, and ethical problems. Researchers are increasingly interested in the potential of AI to improve HRM, particularly in areas such as recruiting, performance management, and employee engagement. AI-powered chatbots for employee assistance, predictive analytics for workforce planning, and machine learning algorithms for performance management are all being investigated by researchers (Bandari, 2019).
Researcher Thoughts

Researchers emphasize the need for more empirical research to evaluate the effectiveness of AI-powered HRM strategies and to address concerns around privacy, bias, and ethical considerations. There is a need for transparency and accountability in using AI in HRM and clear communication with employees about how AI-powered systems are used and their impacts (Hunkenschroer & Luetge, 2022). Researchers also recognize the importance of collaboration between academia, industry, and policymakers to ensure that AI-powered HRM strategies are aligned with organizational goals, ethical principles, and legal frameworks. There is a need for interdisciplinary research integrating insights from fields such as psychology, sociology, and computer science better to understand the complex dynamics between AI and HRM. From a business perspective, using AI in HRM is increasingly seen as a way to improve productivity, reduce costs, and enhance employee experiences. Many businesses are exploring using AI-powered chatbots for employee support, predictive analytics for workforce planning, and machine learning algorithms for performance management (Bandari, 2019).

However, challenges and risks are also associated with using AI in HRM. For example, concerns about data privacy and security and potential biases in AI-powered decision-making may exist. Additionally, there may be resistance or pushback from employees who are skeptical of AI or feel it undermines their autonomy or human interactions. AI-powered chatbots and virtual assistants can provide employees personalized support and assistance, improving employee engagement and satisfaction. AI-powered predictive analytics can help organizations identify and address potential workforce challenges, such as skills gaps or turnover risks. AI-powered performance management technologies can assist managers in providing employees with more objective and data-driven feedback, boosting the fairness and efficacy of the performance management process (Malik et al., 2020).

Therefore, business leaders also recognize the challenges and risks of using AI in HRM. There are concerns about privacy and data security, as well as the potential for bias and discrimination in AI-powered decision-making. There is a need for transparency and accountability in using AI in HRM and clear communication with employees about how AI-powered systems are used and their impacts. Overall, business leaders recognize the potential benefits of AI in HRM but also the need for careful evaluation, experimentation, and collaboration to ensure that AI-powered HRM strategies are effective, ethical, and aligned with organizational goals. They emphasize the need to balance the benefits and risks of AI in HRM and take a thoughtful and strategic approach to its implementation (Rodgers et al., 2023).
Modern Countries Perceive HRM Strategies

Modern countries are improving HRM strategies, and artificial intelligence (AI) is becoming increasingly popular. Here are some common ways modern countries improve HRM strategy. Automation of HR processes such as recruitment, onboarding, and performance management using AI technologies can help reduce the administrative burden on HR teams, allowing them to focus on more strategic activities (Abdeldayem & Aldulaimi, 2020). Using predictive analytics in HRM can help organizations identify and mitigate potential HR issues, such as employee turnover or skills shortages. This can help organizations to make more informed decisions about workforce planning and talent management. AI-powered chatbots and virtual assistants can provide employees personalized support and assistance, improving organizational engagement (Zel & Kongar, 2020).

AI can analyze employee performance data, providing managers with insights into improvement areas and helping them make more informed decisions about promotions and rewards. AI can identify skills gaps in the workforce and provide employees with personalized training and development opportunities to improve their skills and capabilities. AI can remove bias from recruitment processes, ensuring organizations can attract and retain diverse talent (Walkowiak, 2021).

Developing countries have a growing interest in implementing HRM strategies in business. In recent years, many developing countries have experienced significant economic growth, which has led to an increased demand for skilled labor and a focus on human capital development (Al Aina & Atan, 2020). As a result, the importance of effective HRM practices in developing countries has become more evident. However, implementing HRM strategies in developing countries is often challenging due to limited resources, cultural differences, and inadequate legal frameworks. In addition, the lack of expertise in HRM practices and limited access to technology can also hinder the implementation of effective HRM strategies in developing countries. Despite these challenges, developing countries increasingly recognize the importance of HRM strategies in business and are improving their HRM practices. For example, many developing countries invest in education and training programs to develop the necessary skills and expertise in HRM practices (Jamali et al., 2015). Some are also implementing policies to promote equal employment opportunities, diversity, and inclusion in the workplace. Overall, developing countries are progressing in developing and implementing HRM strategies in business. However, continued efforts are needed to overcome the challenges and ensure the
effective implementation of HRM practices to support economic growth and development (Gope et al., 2018).

CONCLUSION

In conclusion, using Artificial Intelligence (AI) in Human Resource Management (HRM) is a growing area of interest for modern businesses and organizations. AI can help organizations to optimize their HR processes, improve employee engagement and satisfaction, and achieve their strategic objectives more efficiently and effectively. Through the analysis of empirical data and literature review, it is evident that the effective implementation of AI in HRM requires a clear understanding of the key strategies and best practices. AI-powered chatbots, virtual assistants, and predictive analytics tools can provide employees with personalized support and assistance, helping to improve their performance and engagement. However, there are concerns about privacy, data security, and potential bias in AI-powered decision-making. To address these concerns, there is a need for transparency, accountability, and clear communication with employees about how AI-powered systems are being used and what their impacts are. In summary, the use of AI in HRM has the potential to revolutionize the way organizations manage their workforce and achieve their strategic objectives. However, it is essential to approach the implementation of AI-powered HRM strategies thoughtfully and strategically, balancing the benefits and risks to ensure they are practical, ethical, and aligned with organizational goals.

RECOMMENDATION

The most critical details in this text are the recommendations to conduct further research on the impact of AI on HRM processes and employee engagement, develop clear guidelines and standards for the ethical use of AI in HRM, provide training and education to HR professionals on the effective use of AI-powered HRM tools and strategies, encourage collaboration between academic researchers, business leaders, government officials, and other stakeholders, and monitor the implementation and impact of AI-based HRM strategies on employees and organizations to evaluate their effectiveness and identify areas for improvements.
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