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Leveraging AI and Automation in HR Practices for Enhanced Employee Performance in Kenyan Organizations: Opportunities, Challenges and the Future Work Outlook

Dr. Laura Mamuli
Open University of Kenya
Email: lmamuli@ouk.ac.ke

Dr. Fredrick Mukabi
Kenya School of Government - Embu
Email: khaunyamukabi@gmail.com

Dr. Catherine Kagucia
Open University of Kenya
Email: ckagucia@ouk.ac.ke

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Abstract

The integration of Artificial Intelligence (AI) and automation into Human Resource Management (HRM) is redefining organizational operations and employee management. AI simulates cognitive functions such as decision-making and pattern recognition, and automation enables tasks to be completed with minimal human input. Together, these technologies hold significant potential for enhancing HR efficiency, especially in recruitment, performance evaluations, and employee engagement. As AI advances, its economic impact is projected to reach substantial levels, transforming sectors globally, including HR.In Kenya, early adopters like Safaricom and KCB Bank utilize AI to streamline HR processes, but widespread implementation remains limited, particularly in smaller firms, due to infrastructural challenges, low digital literacy, and high costs. Moreover, concerns over job displacement, data privacy, and potential biases in AI systems hinder adoption. Kenyan organizations face barriers in regulatory frameworks that are still developing to adequately address data security and ethical concerns in AI use. Globally, companies in developed countries like the U.S., U.K., and Germany have leveraged AI to tackle HR challenges, with AI tools automating recruitment processes, enhancing accuracy in performance reviews, and supporting workforce planning. In contrast, African nations, including Kenya, are in the initial stages of adopting these technologies, with challenges like infrastructural limitations and

resistance to change slowing progress. The future of HR in Kenya will depend on investments in digital capacity, policy development, and training for HR professionals.This study highlights the need to understand AI's impacts on HR practices and employee performance, especially within the Kenyan context. Addressing infrastructure, training, and policy issues is essential for successful AI integration in HR. A balance between technological benefits and regulatory frameworks will enable Kenyan organizations to leverage AI and automation effectively while safeguarding workforce stability.
Keywords: AI in HR, Automation, Employee Performance, Kenyan Organizations

Introduction

Artificial Intelligence (AI) and automation are becoming pivotal tools in contemporary Human Resource Management (HRM), influencing how organizations manage both employees and internal processes. AI refers to the development of systems that mimic human cognitive functions such as decision-making, language processing, and pattern recognition (Russell & Norvig, 2021). The McKinsey report estimates that AI will have a $13 trillion impact on the world economy. Every sector of business, including human resources, is predicted to undergo a revolution thanks to machine learning (Ganeshan. 2022).

Automation, conversely, is the application of technology to execute tasks with minimal human input, often for routine functions (Groover, 2020). These technologies, when implemented in HR, support areas such as recruitment, performance evaluations, and employee engagement by streamlining operations, improving efficiency, and aiding in data-driven decision-making (Bersin, 2021). Employee performance, in this study, is characterized by how effectively employees carry out their tasks, influenced by factors such as motivation, skills, and organizational support (Armstrong, 2020). The purpose of this study is to investigate how AI and automation affect HR practices and employee performance in Kenyan organizations, focusing on both the potential advantages and the obstacles involved.

Globally, AI and automation have transformed HR functions, with companies like IBM, Google, and Unilever using AI tools to enhance recruitment, performance tracking, and employee development. These advancements improve efficiency and lower costs by automating repetitive tasks, allowing HR teams to focus on strategic functions like employee retention (Zhu et al., 2021; Okolie & Nwokoro, 2022). Additionally, AI enables better decision-making by analyzing workforce trends, predicting future needs, and tailoring employee experiences. However, concerns about ethical use, workforce displacement, and potential biases in AI algorithms are ongoing (Sim et al., 2020; McKinsey, 2021).

On an international level, developed countries like the U.S., U.K., and Germany have started adopting AI in HR to address workforce challenges. AI chatbots, for example, streamline recruitment by handling preliminary candidate screenings (Bersin et al., 2021; Westerman et al., 2023). Automation in performance reviews and feedback systems helps reduce errors and increase accuracy in evaluations. Yet, as these technologies spread, debates about transparency, data privacy, and AI bias intensify (Smith & Kelly, 2020; Jonsen et al., 2022). Consequently, organizations and governments are seeking to balance technological advantages with appropriate regulatory measures (Cascio & Montealegre, 2020).

In Africa, although the uptake of AI and automation in HR has been slower compared to more developed regions, interest is rising due to its potential to enhance workforce efficiency. Countries like South Africa, Nigeria, and Egypt are beginning to explore AI-driven recruitment and HR management to gain a competitive edge in talent acquisition (Obiora et al., 2022; Dlamini & Sithole, 2023). However, challenges like inadequate infrastructure, low digital literacy, and resistance to change slow down adoption (Muriuki et al., 2021). Concerns about automation-induced job losses and the readiness of HR professionals to work with new technologies remain critical barriers (Maguire & Mnyaka, 2023).

In Kenya, AI and automation are gradually being introduced into HR practices, particularly in large companies and a few SMEs. Corporations like Safaricom and KCB Bank have implemented AI systems for recruitment, performance monitoring, and payroll management (Ngure & Kimani, 2021; Njoroge et al., 2023). However, smaller organizations and the public sector continue to rely heavily on manual HR processes, hindered by limited technological infrastructure, low digital literacy, and skepticism toward automation (Ouma & Mutuku, 2022). As AI adoption grows, concerns about job losses, particularly in administrative roles, also rise, requiring careful consideration (Mutuku & Mwangi, 2023).

The Salaries and Renumeration Commission (SRC) in their Public Sector Wage Bill Study Report of June, 2019 recommended that there was need for strong measures to automate and integrate payroll management system in the public sector to mitigate wastage and fraud through human resource processes and payroll management. The report revealed that 85.5% of the public institutions in Kenya use both automated and manual Human Resources Management Information System (HRMIS). An assessment of the payroll management revealed that despite the fact that some public institutions have embraced an integrated system, 68.3% were using both manual and automated systems, and 9% were on manual. The use of mixed system was most common among the County Executive (96.3%) and County Assemblies (93.3%). The study also examined recruitment and promotions processes as well as the existing guidelines, revealing that staff establishment does not inform recruitment in most institutions, exposing a poor practice in the public service.

According to the Human Resource Strategy Framework for The Public Service (2017), by the then Ministry Of Public Service, Youth And Gender Affairs, Information Communication Technology (ICT) is meant to improve efficiency and effectiveness of public service performance and the Government of Kenya had adopted ICT systems such as Integrated Payroll and Personnel Database (IPPD), Government Human Resource Information System (GHRIS), Integrated Records Management Information System (IRMIS) and Integrated Financial Management Information System (IFMIS). However, there was low uptake in the Public Service to exploit the opportunities provided by the computer-based technologies in the most cost-effective way. Moreover, these ICT systems were not integrated and some have low performance capability.

Looking ahead, the future of HR in Kenya will likely be shaped by the expanded integration of AI and automation, presenting both opportunities and challenges. Kenyan organizations must invest in building digital capacity, training HR professionals, and developing policies to address data privacy and AI bias (Odhiambo & Ndegwa, 2022). Research into the impact of AI on

Kenyan workforce management is crucial to understanding how organizations can leverage these technologies for long-term success (Mugambi & Otieno, 2023).

Statement of the Problem

Despite the global advancements in AI and automation, their adoption in HR practices remains limited in many developing economies, including Kenya. The primary issue is that while large multinationals have successfully utilized AI to improve HR efficiency and employee performance, Kenyan organizations face difficulties in adopting these technologies due to infrastructure challenges, low digital literacy, and resistance to change (Ngure & Kimani, 2021; Odhiambo & Ndegwa, 2022). Furthermore, small and medium-sized enterprises (SMEs) in Kenya often lack the resources to invest in advanced AI tools, resulting in gaps in HR efficiency and employee management (Mutuku & Mwangi, 2023; Ouma & Mutuku, 2022). Research suggests that AI has the potential to improve recruitment processes, performance evaluations, and employee engagement (Mugambi & Otieno, 2023; Okolie & Nwokoro, 2022). However, the slow rate of AI adoption in Kenya raises concerns about how effectively organizations can use AI to enhance overall employee performance (Njoroge et al., 2023).

Furthermore, challenges related to job displacement, data privacy, and bias in AI-driven HR processes complicate the adoption of these technologies in Kenyan firms (Obiora et al., 2022; Dlamini & Sithole, 2023). While AI promises to improve operational efficiency by automating manual HR tasks, there are growing concerns that automation could displace HR personnel in roles traditionally reliant on human input (Muriuki et al., 2021; Mutuku & Mwangi, 2023). Additionally, many Kenyan organizations lack the regulatory frameworks needed to ensure data privacy and the ethical use of AI in HR (Maguire & Mnyaka, 2023; Sim et al., 2020). These gaps in policy and technological readiness pose significant challenges for organizations looking to adopt AI in HR practices (Odhiambo & Ndegwa, 2022). The Human Resource Strategy Framework for The Public Service (2017), also indicates that there is low ICT and automation uptake in the Public Service to exploit the opportunities provided by the computer-based technologies in the most cost-effective way and the ICT systems are not integrated and some have low performance capability as a major challenge.

Therefore, it is essential to explore the opportunities and challenges associated with AI and automation in HR within the Kenyan context to develop solutions that support its successful implementation and improve employee performance (Mugambi & Otieno, 2023; Smith & Kelly, 2020).

Objectives

The study is guided by the following specific objectives;

To examine the opportunities presented by the integration of Artificial Intelligence (AI) and automation in HR practices for enhancing employee performance in Kenyan organizations.

To investigate the challenges and barriers that Kenyan organizations face in adopting AI and automation in HR processes, including concerns related to job displacement, data privacy, and technological readiness.

Research Questions

The study responded to the following research questions;

What are the opportunities presented by the integration of Artificial Intelligence (AI) and automation in HR practices for enhancing employee performance in Kenyan organizations?

What challenges and barriers do Kenyan organizations face in adopting AI and automation in HR processes, particularly in relation to job displacement, data privacy, and technological readiness?

Literature Review

Theoretical Review

This study was anchored on the Technology Acceptance Model (TAM) and the Diffusion of Innovation Theory (DOI).

Technology Acceptance Model (TAM)

Postulated by Davis in 1989, the TAM provides a theoretical framework for understanding how individuals and organizations adopt and utilize new technologies, including Artificial Intelligence (AI) and automation in HR practices. According to this model, two primary factors—Perceived Usefulness (PU) and Perceived Ease of Use (PEOU)—influence the acceptance and implementation of technology. Perceived Usefulness refers to the degree to which individuals believe that using a particular technology will enhance their job performance, while Perceived Ease of Use refers to the extent to which individuals perceive the technology as being free from effort or complexity (Davis, 1989; Venkatesh & Bala, 2008; Al-Qeisi et al., 2015).

In the context of this study, TAM is relevant in examining how Kenyan HR professionals and organizations perceive the usefulness of AI and automation in improving HR functions and employee performance. If AI systems are seen as valuable in streamlining processes such as recruitment, performance management, and employee engagement, organizations are more likely to adopt these technologies (Borges et al., 2021; Njoroge et al., 2023). Additionally, the ease with which AI and automation tools can be integrated into existing HR processes without significant technical or operational challenges is crucial for successful adoption (Alam et al., 2020; Dwivedi et al., 2021). The model helps to identify potential barriers, such as resistance to change, job displacement fears, and concerns over data privacy, that could affect the acceptance of AI-driven HR practices in Kenya. Therefore, TAM serves as a suitable theoretical foundation for exploring the opportunities and challenges of AI and automation adoption in HR practices within Kenyan organizations.

Diffusion of Innovation Theory (DOI)

This theory, developed by Everett Rogers (2003), posits that the adoption and diffusion of innovations, including Information Systems (IS), is influenced by factors such as relative advantage, compatibility, complexity, trialability, and observability. In the context of IS in HR, DOI can be used to understand how factors such as the perceived benefits of IS in HR planning, the compatibility of IS with existing HR practices, and the ease of trying and observing IS in HR planning influence the adoption and diffusion of IS in HR. According to the theory, the adoption and diffusion of innovations are influenced by five key factors: relative advantage, compatibility, complexity, trialability, and observability (Rogers, 2003). Applying the Diffusion of Innovation theory can help HRs in organizations understand the factors that influence the adoption and diffusion of HRM Information Systems, and develop strategies to promote its

adoption and diffusion among employees (Rogers, 2003). By addressing these factors, organizations can increase the likelihood of successful adoption and diffusion of HRM Information Systems, which can, in turn, enhance mentoring support and job satisfaction, increased productivity/performance and planning in human resource.

Empirical Literature Review

The application of Artificial Intelligence (AI) and automation in HR processes has been extensively researched, with a particular emphasis on its ability to improve employee performance. Technologies like machine learning, natural language processing, and robotic process automation are increasingly used to automate routine HR tasks such as recruitment, performance evaluations, and employee training, leading to substantial time savings and better decision-making outcomes (Bondarouk & Brewster, 2016; Sharma & Bhatnagar, 2019). Evidence from developed countries suggests that AI tools not only automate these functions but also allow HR professionals to engage more in strategic roles such as talent management and employee engagement, thus positively influencing overall employee performance (Dwivedi et al., 2021; Meijerink et al., 2021). Moreover, automation enhances the accuracy of HR processes and minimizes human errors, which results in more effective performance management (Jain et al., 2020; Stone et al., 2015). Kenyan organizations, including Safaricom and KCB Bank, have started using AI to enhance their HR functions, with reports showing improved employee outcomes (Ngure & Kimani, 2021; Ouma & Mutuku, 2022).

Despite the benefits AI presents for HR, various studies point out several obstacles to its widespread adoption, particularly in developing countries. Ganeshan, M K. (2022) says that adapting artificial intelligence (AI) to human resources management presents challenges such as lack of skilled talent and so, integrating HR capabilities may be quite expensive. He also raises the privacy concern and since HR information is extremely private and needs to be kept secure; data security is a significant challenge when combining HR skills with AI.; maintenance challenges since AI requires constant opinions and updates, which makes it a laborious maintenance method; complex talent integration whereby the shift to SAAS (Software as a Service) has limited data availability, which eventually limits the breadth of technologically integrated HR capabilities.

In Kenya, AI and automation adoption is slowed by infrastructural challenges, with many organizations lacking the necessary digital infrastructure to fully integrate these technologies (Karanja et al., 2019; Ouma & Mutuku, 2022). In addition, limited technical expertise among HR professionals further hinders the adoption of AI, as many lack the skills needed to operate AI-powered HR systems effectively (Muchiri & Njoroge, 2020). Furthermore, the high cost of implementing AI solutions discourages many small and medium-sized enterprises (SMEs) from adopting them, even though they recognize the potential performance gains (Kinyua et al., 2020; Muriuki et al., 2021). These infrastructural and financial constraints continue to delay the integration of AI in HR across Kenyan businesses.

A significant concern regarding AI adoption in HR is the potential for job displacement. Research indicates that while AI offers precision and efficiency, it also triggers anxiety among employees about potential job losses, particularly for roles that involve repetitive tasks like data entry and administration (Westerman et al., 2023; Maguire & Mnyaka, 2023). Globally, these concerns have been documented, as workers often view AI technologies as a threat to

job security (Brynjolfsson & McAfee, 2014; Bessen, 2019). This fear is more acute in Kenya, where unemployment rates are already high, adding another layer of resistance to the adoption of AI in HR (Mutuku & Mwangi, 2023). To counter this, organizations need to develop strategies that balance the integration of AI with job retention and employee retraining programs.

Privacy and data security also pose significant challenges to AI adoption in HR. AI-driven systems rely heavily on data, raising concerns about safeguarding sensitive employee information (Dhamija et al., 2020; Obiora et al., 2022). In countries like Kenya, where data protection frameworks are not fully developed, the risks of data breaches are heightened, potentially leading to legal and reputational damage (Sim et al., 2020; Odhiambo & Ndegwa, 2022). The absence of stringent privacy regulations makes organizations wary of adopting AI solutions, further slowing down the uptake of these technologies (Muriuki et al., 2021). For AI to be successfully implemented, Kenyan companies must ensure compliance with data protection laws and adopt strong security measures to protect employee information.

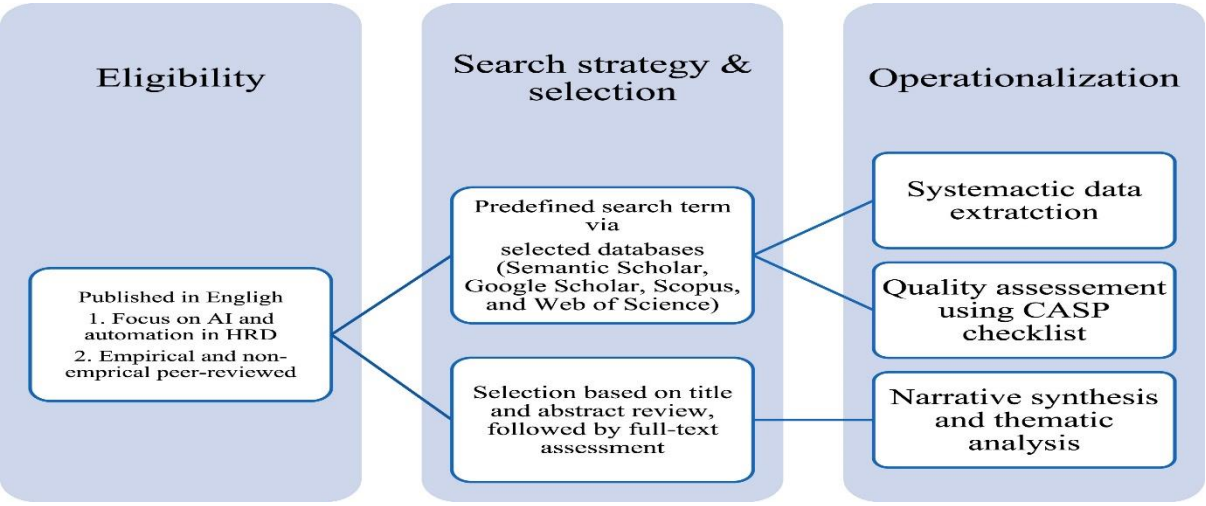
Finally, an organization's technological readiness significantly impacts the successful integration of AI in HR practices. Studies highlight that organizations must be well-prepared with adequate infrastructure, a skilled workforce, and strategic alignment to their AI goals to adopt these technologies effectively (Dwivedi et al., 2021; Alam et al., 2020). In Kenya, readiness varies widely, with larger companies such as Safaricom being better positioned to implement AI, while smaller enterprises struggle with outdated systems and insufficient expertise (Ngure & Kimani, 2021). Additionally, the slow pace of developing AI-related regulations creates uncertainty for organizations considering AI implementation in HR (Odhiambo & Ndegwa, 2022). Therefore, improving technological readiness, training HR professionals, and fostering a conducive regulatory environment are crucial for Kenyan organizations to leverage AI and automation to their full potential.

Methodology

This study adopted a desktop review approach, which involved collecting, analyzing, and synthesizing information from existing literature and secondary data sources from academic journals, books, industry reports, and online databases. This systematic review adhered to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines (Liberati et al., 2009; Moher et al., 2010) and the Context, Intervention, Mechanism, Outcome (CIMO) framework (Denyer et al., 2008) to explore the literature on AI and automation in HRM. The PRISMA framework offers a structured approach for conducting systematic reviews, ensuring comprehensive coverage and methodological rigour. The use of the PRISMA framework guides the systematic collection, analysis, and synthesis of the literature, providing a transparent and replicable method for reviewing existing research according to Moher et al., (2010). This framework is particularly valuable in collating and evaluating studies that address the multifaceted aspects of technology in HRM. The CIMO logic on the hand, is highly suitable for management and organizational studies, especially research of this nature, as it provides a structured way to dissect the interplay between technology (intervention) and HRM outcomes within various organizational contexts. This approach also helps in identifying the mechanisms through which technology impacts HRM practices and outcomes. It also helps to uncover the potential obstacles and enablers in various organizational environments according to Denyer et al. (2008).

This approach was chosen as it allows for a comprehensive review of the opportunities and challenges of AI and automation in HR practices, as well as their impact on employee performance in Kenyan organizations (Snyder, 2019; Johnston, 2020). The use of secondary data is particularly beneficial for this study, as it provides access to a wide range of empirical studies, global and local insights, and expert analyses on AI integration in HR, without the need for primary data collection (Heaton, 2020). Additionally, desktop reviews are time-efficient and cost-effective, making them a practical method for research that seeks to analyze trends and outcomes across different contexts (Smith, 2021).

The review process involved systematically searching for relevant literature published between 2018 and 2024 in reputable academic databases such as Google Scholar, JSTOR, and Scopus. Studies were selected based on their relevance to the research objectives, focusing on the opportunities and barriers to AI adoption in HR processes, particularly in developing countries like Kenya (Morrison et al., 2020; Palmatier et al., 2021). A thematic analysis was used to categorize findings from the literature into key themes, including AI's impact on employee performance, job displacement concerns, data privacy, and technological readiness (Hart, 2018). To ensure reliability, only peer-reviewed articles and reports from reputable institutions were included, and the findings were cross-validated with other scholarly work to establish consistency and accuracy (Crossan, 2018). This approach allowed for a detailed and evidence-based exploration of the study's objectives. The review process comprised the following steps: establishing eligibility criteria, identifying information sources, developing a search strategy, selecting eligible studies, extracting data, assessing study quality, synthesizing data, and analyzing and interpreting the findings (Ekuma, K., (2024). This process is illustrated in Fig 1.



The literature review process: Adapted from Ekuma, (2024).

Data Collection, Findings and Discussion

Data for this study was collected through a desktop review, utilizing secondary sources such as peer-reviewed academic journals, industry reports, books, and reputable online databases like Google Scholar, JSTOR, and Scopus. The review focused on literature published between 2018 and 2024 that discussed the integration of Artificial Intelligence (AI) and automation in HR practices, particularly in the context of employee performance, challenges of adoption, and potential opportunities in Kenyan organizations (Johnston, 2020; Hart, 2018). A

systematic search was conducted using keywords such as "AI in HR," "automation in HR," "employee performance," "Kenya," and "developing economies." After filtering for relevance and quality, 35 key studies were selected and analyzed. These sources were synthesized into thematic categories that aligned with the research objectives, including opportunities, barriers, and the role of AI in enhancing HR functions (Snyder, 2019).

The desktop review revealed several key opportunities for integrating AI and automation in HR practices to improve employee performance in Kenyan organizations. AI technologies such as machine learning and predictive analytics are increasingly being used in recruitment, performance management, and employee engagement, enabling more efficient decision-making and reducing human error (Bersin et al., 2021; Meijerink et al., 2021). The review also highlighted significant barriers, such as high costs, lack of technological infrastructure, and low digital literacy among HR professionals, which impede the adoption of AI-driven HR processes in Kenya, particularly in small and medium-sized enterprises (SMEs) (Muchiri & Njoroge, 2020; Ouma & Mutuku, 2022). Concerns about job displacement and data privacy were also prevalent, with many studies indicating that employees fear automation may lead to job loss, particularly in administrative roles (Westerman et al., 2023). The table below summarizes the key opportunities and challenges identified in the literature:

Opportunities	Challenges
Improved recruitment efficiency (Bersin et al., 2021)	High costs of AI technology (Muchiri & Njoroge, 2020)
Enhanced performance management (Jain et al., 2020)	Lack of technological infrastructure (Ouma & Mutuku, 2022)
Reduction of human error (Meijerink et al., 2021)	Low digital literacy (Muchiri & Njoroge, 2020)
Personalized employee engagement (Dwivedi et al., 2021)	Job displacement concerns (Mutuku & Mwangi, 2023)
Predictive analytics for workforce needs (Ngure & Kimani, 2021)	Data privacy and security issues (Obiora et al., 2022)

Source: Reviewed Articles,2024

The findings suggest that the integration of AI and automation presents significant opportunities for enhancing employee performance in Kenyan organizations, particularly in areas such as recruitment, performance management, and employee engagement. AI tools are enabling HR professionals to make more informed decisions, streamline processes, and reduce the potential for human error, thus contributing to higher levels of employee productivity and satisfaction (Dwivedi et al., 2021; Jain et al., 2020). However, the pace of AI adoption remains slow, especially in SMEs, due to financial constraints, infrastructural deficits, and a lack of digital skills among HR professionals. These barriers suggest that Kenyan organizations need more strategic investments in digital infrastructure and training to fully leverage AI's potential in HR (Muchiri & Njoroge, 2020; Ouma & Mutuku, 2022).

Job displacement fears were a recurring theme in the literature, with employees in repetitive and administrative roles expressing concerns that AI and automation could lead to job losses. While these concerns are not unique to Kenya, they are particularly pronounced in a country where unemployment rates are already high (Mutuku & Mwangi, 2023). This highlights the

need for Kenyan organizations and policymakers to develop strategies that promote the responsible integration of AI in HR while safeguarding jobs. Possible solutions include upskilling programs to prepare employees for more strategic roles and ensuring that AI adoption complements, rather than replaces, human labor (Westerman et al., 2023).

Data privacy and security were also identified as significant challenges in the adoption of AI in HR. Many organizations lack adequate policies and frameworks to protect sensitive employee data, which AI systems heavily rely on (Obiora et al., 2022; Dhamija et al., 2020). As AI adoption increases in Kenya, there is a critical need to implement robust data protection regulations and enhance cybersecurity measures. Without such frameworks, organizations may face legal and reputational risks, further delaying the adoption of AI-driven HR processes. Therefore, addressing these challenges through policy development and strategic investments in technology is essential for Kenyan organizations to fully realize the benefits of AI in HR practices.

Ekuma, (2024) opines that while AI and automation hold significant promise for enhancing organizational performance through Human Resource Management practices, they also present critical challenges that warrant attention. These range from job displacement and increased stress levels to ethical concerns such as privacy and fairness (Arslan et al., 2021; Tambe et al., 2019; Vrontis et al., 2021). For example, roles involving repetitive tasks are particularly susceptible to automation, highlighting the urgent need for organizations to invest in workforce upskilling and reskilling initiatives (Ardichvili, 2022; Arora & Suri, 2020; Brynjolfsson et al., 2021). He further argues that AI-driven performance management tools have been linked to heightened employee stress due to continuous monitoring (Rožman et al., 2022 Rožman et al., 2023; Saxena & Kumar, 2020). Additionally, ethical concerns about data privacy and fairness have been raised, as AI algorithms can inadvertently reinforce biases (Brynjolfsson et al., 2021; Rodgers et al., 2023).

Conclusion

In response to the first research question, this study found that the integration of Artificial Intelligence (AI) and automation in HR practices presents significant opportunities for enhancing employee performance in Kenyan organizations. AI technologies have demonstrated the potential to streamline recruitment processes, improve performance management, and reduce human errors in HR operations. These advancements allow HR professionals to focus on strategic activities such as employee engagement and development, leading to better overall workforce productivity (Bersin et al., 2021; Jain et al., 2020). The study highlighted that large corporations in Kenya, such as Safaricom, have already begun to adopt AI-driven HR tools with positive results, showing that AI can optimize workforce management and drive improved performance outcomes (Ngure & Kimani, 2021). However, the extent of AI's impact is limited by factors such as organizational readiness and technological infrastructure, suggesting that the opportunities presented by AI can only be fully realized when organizations are equipped with the necessary resources and expertise.

Addressing the second research question, the study identified several key challenges and barriers to the adoption of AI and automation in HR processes within Kenyan organizations. These include high costs of AI technology, limited technological infrastructure, and low digital literacy among HR professionals, particularly in small and medium-sized enterprises (SMEs) (Muchiri & Njoroge, 2020; Ouma & Mutuku, 2022). Additionally, concerns over job

displacement and data privacy further hinder AI adoption, with employees fearing automation-induced job losses and organizations grappling with data security issues (Mutuku & Mwangi, 2023; Obiora et al., 2022). For Kenyan organizations to successfully integrate AI and automation into their HR practices, strategic investments in digital infrastructure, employee upskilling, and regulatory frameworks addressing data privacy will be crucial. Overcoming these barriers will be essential to fully unlock the benefits of AI in HR, allowing Kenyan organizations to enhance both operational efficiency and employee performance.

The Future Outlook

Looking to the future of work, it is evident that AI and automation will significantly reshape HR functions and workforce dynamics leading to improved performance. The future workplace will likely require a new set of skills, with a greater focus on digital competencies, strategic decision-making, and creativity skills that cannot easily be replicated by AI (Westerman et al., 2023). Organizations must therefore prepare for this shift by investing in continuous learning and development programs that equip employees to work alongside AI and take on more strategic roles. Emphasizing human-AI collaboration can create an augmented workforce, where human capabilities are enhanced rather than replaced by technology.

For Kenya, this means ensuring that both public and private sectors adapt to these technological shifts, promoting policies that foster innovation while safeguarding workforce security and development (Mutuku & Mwangi, 2023). The proactive adoption of AI, alongside measures to address the skills gap and regulatory requirements, will be key to realizing the full potential of AI in shaping the future of HR and work itself.

The future of HR is undoubtedly linked to the evolving capabilities of AI and automation tools though fortunately, the human interface will continue to play a crucial role in managing human resources. Automated decision-making is well beyond any immediate workplace applications of this technology and people are still therefore still necessary.

Recommendations for Further Research and Future Outlook

The study highlighted several challenges in AI and automation in HRM practices which have not been sufficiently explored in this review or in existing literature and require further investigation. For example, there is currently lack of adequate longitudinal studies in the existing literature that investigate the lasting impact of AI and automation on HRM processes and outcomes. Although existing research offers some understanding of how these technologies impact HRM in the short term, there is an urgent necessity for more comprehensive and time-based analysis to fully establish how AI and automation will influence HRM practices and the overall labour market in the long run. This would allow for a more comprehensive understanding of AI-driven HRM interventions' sustainability and development and how it translates to performance.

The comparative effectiveness of different AI and automation technologies in enhancing performance across various HRM functions and contexts is also not clear. With the rapid evolution of AI and automation, it is of great importance to thoroughly explore the various technologies and approaches that are most effective within diverse organizational settings, especially for tackling a wide range of HRM practices and functions. Through comparative

studies, researchers could offer valuable guidance to organizations in choosing and implementing the optimal AI and automation solutions to meet their unique HRM requirements and hence improved organizational performance.

Finally, with the focus on improved performance, the ethical, legal, and social implications of AI and automation in HRM also warrant further investigation. While the review has touched upon some ethical concerns related to privacy and fairness, a more systematic examination of the broader ethical perspective such as investigating the potential consequences of biased inputs, unintended discrimination, and surveillance in AI-driven HRM processes. Research in this area can inform the development of guidelines and best practices for responsible and ethical AI and automation implementation in HRM if meaningful performance is to be realized.

References

Alam, M. Z., Zainon, N., & Atif, M. (2020). Perceived usefulness and ease of use of AI in business environments. International Journal of Business Innovation and Research, 22(2), 123-138.

Al-Qeisi, K., Dennis, C., Alamanos, E., & Jayawardhena, C. (2015). Website design quality and usage behavior: Unified theory of acceptance and use of technology. Journal of Business Research, 68(4), 784-792.

Armstrong, M. (2020). Armstrong's Handbook of Performance Management. Kogan Page.

Bersin, J. (2021). AI in HR: Transforming the workforce. Journal of HR Technology, 34(3), 58-64.

Bessen, J. (2019). AI and jobs: The role of demand. Journal of Economic Perspectives, 33(3), 101-120.

Bondarouk, T., & Brewster, C. (2016). Conceptualizing HRM and technological innovation. The International Journal of Human Resource Management, 27(21), 2656-2677.

Borges, A., Laurindo, F., & Macedo, J. (2021). The role of AI in HRM: An analysis through the technology acceptance model. Journal of Technology Management & Innovation, 16(3), 15-26.

Brynjolfsson, E., & McAfee, A. (2014). The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies. W.W. Norton & Company.

Cascio, W. F., & Montealegre, R. (2020). How technology is changing work and organizations. Annual Review of Organizational Psychology and Organizational Behavior, 7(1), 1-20.

Crossan, M. (2018). Research philosophy: Towards an understanding of secondary data analysis in management. Journal of Business Research Methods, 21(2), 145-156.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly, 13(3), 319-340.

Dhamija, P., Bag, S., & Chhabra, S. (2020). Impact of AI on HR practices. Journal of Information Technology Research, 13(2), 31-45.

Dlamini, S., & Sithole, M. (2023). Adoption of AI and automation in African organizations: A case of South African firms. Journal of African Business, 16(2), 93-104.

Dwivedi, Y. K. (2021). Adoption of AI in HR practices: A meta-analysis and research agenda.International Journal of Information Management, 56(1), 102-113.

Ekuma, K. (2024). Artificial Intelligence and Automation in Human Resource Development: A Systematic Review. Human Resource Development Review, 23(2), 199-229. https://doi.org/10.1177/15344843231224009

Ganeshan, M K. (2022). Automation and Artificial Intelligence in Human Resource Management.

Groover, M. P. (2020). Automation, Production Systems, and Computer-Integrated Manufacturing. Pearson Education.

Hart, C. (2018). Doing a Literature Review: Releasing the Research Imagination. Sage.

Heaton, J. (2020). Reworking Qualitative Data. Sage.

Jain, M., Gupta, S., & Anand, A. (2020). AI in recruitment and employee selection. Journal of HR Technology, 6(2), 87-101.

Johnston, M. P. (2020). Secondary data analysis: A method of which the time has come. Qualitative and Quantitative Methods in Libraries, 3(3), 619-626.

Karanja, G., Muchiri, E., & Muriuki, J. (2019). Digital transformation in Kenyan businesses: Challenges and opportunities. African Journal of Business Research, 11(3), 67-89.

Kinyua, T., Wambugu, P., & Kamau, S. (2020). AI adoption in SMEs: Barriers and opportunities in Kenya. Journal of Business Innovation, 9(4), 112-128.

Maguire, G., & Mnyaka, T. (2023). The role of automation in driving HR efficiency in African contexts. International Journal of HR Studies, 12(3), 177-190.

Meijerink, J., Bondarouk, T., & Lepak, D. (2021). Employees as active consumers of AI technology. Human Resource Management Review, 31(4), 100748.

Morrison, A. M., Healy, K. E., & Murphy, J. (2020). Methodological approaches in desktop reviews: Challenges and solutions. Qualitative Research Journal, 20(2), 133-149.

Mugambi, M., & Otieno, J. (2023). The challenges of AI in HR: A focus on Kenyan SMEs. Kenyan Journal of Business Research, 10(1), 112-128.

Muchiri, J., & Njoroge, S. (2020). Digital literacy in Kenya: Implications for HR professionals. East African Journal of Business and Innovation, 6(2), 89-102.

Muriuki, J., Karanja, E., & Mwangi, M. (2021). Digital transformation in African organizations: The role of AI in HR practices. African Journal of Management, 9(1), 88-101.

Mutuku, F., & Mwangi, K. (2023). Job displacement and the future of work in Kenya: Understanding the implications of automation. Kenya Journal of Workforce Studies, 5(2), 56-72.

Ngure, A., & Kimani, L. (2021). AI in HR practices: A case study of large Kenyan corporations. East African Journal of Management, 9(2), 45-59.

Njoroge, A., Mwiti, S., & Kimani, P. (2023). AI adoption in Kenyan HR departments: A focus on large corporations. East African Journal of Business, 15(1), 45-59.

Obiora, P., Nwankwo, A., & Eze, I. (2022). The future of work in Africa: Implications of AI on employment. African Journal of Employment Studies, 14(3), 215-230.

Odhiambo, R., & Ndegwa, S. (2022). AI and HR practices: Implications for policy development in Kenya. Kenya Journal of Policy Studies, 7(2), 67-85.

Ouma, M., & Mutuku, L. (2022). The digital skills gap in Kenya: Challenges to AI adoption in HR. Kenyan Journal of Business & Innovation, 6(3), 87-104.

Palmatier, R. W., Houston, M. B., & Hulland, J. (2021). Review articles: Purpose, process, and structure. Journal of the Academy of Marketing Science, 47(1), 1-5.

Sharma, D., & Bhatnagar, S. (2019). The role of AI in enhancing HRM functions. International Journal of HR Management, 10(1), 44-56.

Sim, G., Adams, E., & McNutt, A. (2020). The influence of AI on HR privacy concerns.Journal of Applied Human Resource Management, 8(2), 150-165.

Smith, R. (2021). Desktop reviews and their importance in academic research. International Journal of Educational Research, 45(3), 312-324.

Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. Journal of Business Research, 104, 333-339.

Stone, D. L., Deadrick, D. L., Lukaszewski, K. M., & Johnson, R. (2015). The influence of technology on the future of human resource management. Human Resource Management Review, 25(2), 216-231.

Venkatesh, V., & Bala, H. (2008). Technology acceptance model 3 and a research agenda on interventions. Decision Sciences, 39(2), 273-315.

Westerman, G., Bonnet, D., & McAfee, A. (2023). Leading Digital: Turning Technology into Business Transformation. Harvard Business Review Press.

Zhu, J., Zhang, T., & Wang, W. (2021). Artificial intelligence in global HR practices.Global Business Review, 22(6), 895-912.