

# Challenges of Performance Management in the Era of Digital HRM

**Dr. Shashank Mehrotra**

Assistant Professor, Department of Management (MBA)  
Accurate Institute of Management & Technology (AIMT), Greater Noida.

*shashankmehrotra10@gmail.com*

## ABSTRACT

The advent of digital technology has significantly transformed Human Resource Management (HRM), particularly in performance management. Digital HRM systems leverage artificial intelligence, data analytics, and cloud computing to improve efficiency, decision-making, and employee management. These tools allow for real-time feedback, continuous performance monitoring, and data-driven insights, offering a dynamic shift from traditional manual methods. However, while digital HRM offers numerous advantages, it introduces challenges such as data overload, algorithmic bias, and loss of personal interaction. Additionally, employee resistance to digital tools and concerns about data privacy further complicate the transition. To address these issues, organizations must balance technological advancements with maintaining the human elements of HRM, ensuring fairness, transparency, and trust in the digital age.

**Key Words:** *Digital HRM, Performance Management, Artificial Intelligence, Data Analytics, Employee Management.*

## 1. Introduction

The advent of digital technology has transformed every facet of organizational operations, with Human Resource Management (HRM) being no exception. As businesses increasingly adopt digital tools to streamline their HR processes, the management of employee performance has also undergone significant changes (*Bondarouk & Brewster, 2016*). Digital HRM systems leverage advanced technologies like artificial intelligence (AI), data analytics, and cloud computing to enhance the efficiency and effectiveness of traditional HR functions (*Fenech, Baguant, & Ivanov, 2019*). This shift has led to the emergence of what is often referred to as "Digital HRM," where technology plays a central role in recruitment, employee engagement, training, and performance management (*Nazemi, Teymournejad, & Daneshfard, 2021*). While the transition to digital HRM offers numerous benefits such as improved decision-making, real-time feedback, and data-driven insights, it also brings a unique set of challenges, particularly in the realm of performance management (Sareen & Subramanian, 2012). Performance management, a critical HR function, involves setting employee performance standards, evaluating achievements, and providing feedback to align individual goals with organizational objectives. Traditionally, performance management

relied heavily on manual processes, including annual appraisals, face-to-face meetings, and subjective evaluations (*Chopra, 2017*). However, the rise of digital tools has introduced a more dynamic and continuous approach to performance management. Digital performance management systems provide real-time feedback, continuous performance monitoring, and data analytics to track employee productivity. These tools are designed to improve the accuracy and objectivity of performance assessments, offering managers a comprehensive view of employee contributions (*Halid, Yusoff, & Somu, 2020*). Yet, despite these advantages, the digitalization of performance management presents several challenges that organizations must navigate.

One of the most prominent challenges in digital HRM is managing data overload. Digital systems generate vast amounts of data from various sources such as employee feedback platforms, project management tools, and productivity trackers. While this data can provide valuable insights into employee performance, sifting through it to extract actionable information can be overwhelming (*Hauptmann & Steger, 2013*). Organizations may struggle to integrate data from different platforms, leading to fragmented or incomplete performance evaluations. Furthermore, the sheer volume of data can lead to information overload, making it difficult for managers to focus on the most relevant performance metrics. This challenge is compounded by the need to protect sensitive employee data from breaches and ensure compliance with data privacy regulations. Another critical challenge is ensuring fairness and transparency in performance evaluations conducted through digital tools. Many organizations rely on algorithm-driven assessments, which use data points to make decisions regarding promotions, bonuses, and career development. However, these algorithms may unintentionally reinforce existing biases if they are not carefully designed and monitored. For example, performance management systems that prioritize quantitative metrics such as task completion may undervalue other important aspects of performance, such as creativity, leadership, or teamwork. Additionally, the lack of transparency in how algorithms assess performance can lead to employee distrust and dissatisfaction, especially if they feel that their efforts are not being fairly evaluated.

The shift to digital HRM also raises concerns about the loss of the human touch in performance management. While digital tools enable efficiency and accuracy, they often fail to capture the nuances of employee behaviour and interpersonal dynamics (*Fındıklı & Bayarçelik, 2015*). Traditional performance management methods allowed for in-depth discussions between managers and employees, fostering personal connections and mentorship. In contrast, digital systems may focus too heavily on data-driven evaluations, overlooking the importance of personalized feedback and emotional intelligence in managing employee performance. This lack of human interaction can result in employees feeling disconnected or undervalued, which may ultimately affect their motivation and engagement. Additionally, employee resistance to digital tools presents a significant hurdle in the effective implementation of digital performance management systems. Employees who are accustomed to traditional methods may be skeptical about the new tools and may find it challenging to adapt to real-time feedback or continuous monitoring (*Al-kharabsheh, Attiany, Alshawabkeh, Hamadneh, & Alshurideh, 2022*). Resistance can stem from a variety of factors, including concerns about privacy, anxiety over constant monitoring, or a lack of digital literacy.

Without adequate training and support, employees may misuse the tools or fail to engage with them fully, rendering the digital performance management system ineffective.



**Figure 1: Visual Compares Traditional HR And Digital HR**

Source: Traditional to Digital (pinterest.com)

The above figure 1 demonstrated Traditional HR and Digital HR through a split circular design. Traditional HR is characterized by being costly, prone to human errors, time-consuming, requiring more manpower, and generating significant paperwork. Icons represent these inefficiencies, like a clock for time consumption and stacks of paper for documentation. In contrast, Digital HR is shown as cost-effective, efficient, requiring less manpower, and being paperless. Key features include quick processing, transparency, and remote accessibility. The visual emphasizes the shift from manual, administrative-heavy tasks to streamlined, tech-driven solutions for HR management. The contrast highlights efficiency and modernization in HR processes (*Pinterest*).

## 2. Related Review

**Laumer, et.al., (2010).** aimed to examine the opportunities and challenges of recruiting and developing a workforce in a digital world marked by talent scarcity and evolving candidate behaviours. A quantitative survey involving 144 HR managers from Germany's top 1,000 enterprises and a Delphi study with senior HR executives from 25 major global organizations were utilized to identify significant trends and challenges faced by contemporary HR executives. The findings revealed that demographic issues and the competition for talent emerged as critical trends, highlighting employee retention and company branding as the most pressing challenges for HR managers. Overall, the study underscored the need for an efficient and effective electronic human resource management (E-HRM) system to optimize resource utilization in filling open positions. The special issue included two selected papers out of nine submitted, with a 22% acceptance rate. Stefan

Strohmeier's article explored how electronic portfolios could enhance electronic personnel management and recruitment, while the second article by Sharna Wiblen, David Grant, and Kristine Dery utilized a case study to investigate the impact of transitioning from traditional HR to E-HRM on talent management and organizational dynamics. This study is relevant as it addresses the pressing need for modern HR practices amid evolving digital landscapes.

**Heikkilä, J. P., & Smale, A. (2011).** The objective of this study was to evaluate the impact of language standardization on the adoption and utilization of electronic human resource management (e-HRM) systems in multinational subsidiaries. The methodology involved conducting 18 in-depth interviews with human resource managers from two multinational corporations based in Europe. The findings revealed that language differences significantly affected the adoption and effective use of e-HRM systems. Managers expressed that language barriers hindered effective communication and understanding of the e-HRM tools, leading to challenges in implementation. Additionally, the study highlighted that successful e-HRM adoption required addressing cultural and regulatory variations, particularly in language. This research is relevant as it contributes to the limited empirical literature on international human resource management and information technology, particularly emphasizing the role of language in e-HRM systems. Understanding these dynamics is crucial for multinational corporations aiming to optimize their HR functions and improve efficiency across diverse cultural landscapes. The findings underscore the need for tailored e-HRM solutions that consider language and cultural differences, thereby enhancing the effectiveness of HR practices in global operations.

**Sareen, P., & Subramanian, K. V. (2012).** aimed to provide a comprehensive overview of electronic human resource management (e-HRM) and its implications for HR practitioners. A systematic review of existing literature on e-HRM was conducted, focusing on its framework, advantages, and drawbacks. Researchers analyzed various information technology systems, including human resources information systems (HRIS) and corporate intranets, to understand how they support HR activities. The findings revealed that e-HRM significantly enhances HR service delivery and enables organizations to manage their workforce more effectively in a competitive environment. It was also noted that e-HRM transforms HR managers into architects of competitive organizational social systems, aligning HR practices with strategic objectives. However, challenges such as technological dependency and implementation costs were identified as potential drawbacks. This study is relevant as it underscores the growing importance of integrating advanced information technology into HR functions, which can lead to more strategic HR practices and improved organizational performance. The insights gained serve as a foundation for future research, highlighting the need for further exploration into the evolving role of e-HRM in human resource management.

**Furtmueller, E. (2012).** The primary objective of this research was to enhance understanding of designing and developing innovative technologies for electronic recruiting (e-Recruiting) while contributing to existing research on electronic human resource management (e-HRM). The methodology involved investigating the requirements of various end-users, including applicants and recruiters, through a service engineering approach. Findings indicated that many organizations had

reverted to traditional recruiting methods due to challenges like ineffective resume storage and poor communication between HR and information systems researchers. The research revealed that poorly designed e-Recruiting systems deterred job seekers from engaging and highlighted the reliance of recruiters on outdated digital resume databases. Additionally, the study emphasized the importance of aligning technological investments with organizational skills to improve productivity. The relevance of this research lies in its potential to inform organizations aiming to optimize their recruitment processes, enhance user experiences, and foster social interactions in e-Recruiting systems. By integrating insights from empirical studies conducted in Austria, the Netherlands, and New Zealand, this dissertation serves as a valuable resource for scholars, practitioners, and designers seeking to advance e-HRM strategies globally.

**Hauptmann, S., & Steger, T. (2013).** The objective of the study was to investigate the dual potential and challenges posed by social media in organizations, particularly concerning Human Resource Management (HRM). The methodology involved analysing two case examples, supported by theories related to the replication of rules and norms and social structural studies on digital natives and Generation Y. Findings revealed that the evolving behavioral patterns within organizations stemmed from both the technological characteristics of the virtual environment and specific social structural changes. The study highlighted the emergence of a "parallel world," which underscored the complexities of managing social media platforms in HRM contexts. This relevance is significant as it demonstrates how organizations must adapt to the changing dynamics brought about by social media, balancing opportunities for engagement and communication with potential obstacles related to organizational culture, employee behaviour, and policy enforcement. By understanding these factors, HR professionals can better navigate the complexities of social media management and leverage its potential to enhance organizational effectiveness.

**Sinha, B. C., & Mishra, M. (2014).** The objective of the study was to assess the extent of electronic human resource management (e-HRM) tool utilization across various Indian organizations and to identify differences between sectors. The methodology involved administering a standardized questionnaire to employees, collecting demographic data and insights regarding e-HRM systems. The researcher employed statistical techniques such as one-sample t-tests, paired sample t-tests, and one-way analysis of variance (ANOVA) to analyse the data. The findings indicated that the utilization of e-HRM solutions was suboptimal in many organizations, with private sector entities outperforming public ones. Additionally, the services sector demonstrated greater adoption of e-HRM tools compared to the manufacturing and mining sectors. Among the studied organizations, Coal India Ltd. was found to be the least advanced in the implementation of e-HRM systems. This study is relevant as it highlights the gaps in the adoption of e-HRM tools in India, emphasizing the need for strategic enhancements to leverage technology for improved human resource functions, thereby promoting organizational efficiency and responsiveness in a dynamic business environment.

**Findikli, et.al., (2015).** In this descriptive research, the objective was to investigate the opinions of HR managers in successful firms in Turkey regarding electronic human resource management (e-HRM), particularly their views on software selection and observed organizational results. The

methodology involved conducting in-depth interviews with HR specialists in the service sector to gather qualitative insights. The findings indicated that key motivators for adopting e-HRM included improved time management, easier access to personal data, and reduced administrative expenses. Moreover, e-HRM was found to lower organizational costs, enhance the quality and speed of communication between managers and employees, and decrease the time required for processing e-HR tasks. However, the interviews also revealed that e-learning and e-training were not perceived as highly successful within these organizations. This study is relevant as it highlights the critical role of e-HRM in modernizing HR practices and improving organizational efficiency, while also addressing the challenges faced in implementing e-learning and e-training initiatives. By understanding these dynamics, organizations can make informed decisions about their HR strategies and technology investments, ultimately enhancing their competitive advantage in the rapidly evolving business landscape.

**Bondarouk, T., & Brewster, C. (2016).** The study aimed to investigate the influence of information technology (IT) on human resource management (HRM) in the twenty-first century. It utilized the Harvard model of HRM, which offers a contextualized view of HRM, emphasizes stakeholder engagement, and adopts a comprehensive approach to problem-solving. Through a review of the existing literature on HRM and IT, the researchers sought to understand the benefits and challenges that arise from the intersection of these two fields for various stakeholders. The findings revealed that rapid technological advancements have created a digital environment that enhances the quality of HRM data, allowing all stakeholders to take greater ownership of HRM processes. However, a conflict emerged regarding the shared HRM responsibilities between HRM professionals and employees who, while not directly engaged in HRM tasks, are impacted by these activities. The study concluded with recommendations for future research to address these complexities and improve the integration of IT in HRM practices. This research is relevant as it sheds light on the evolving role of technology in HRM and the implications for stakeholder engagement, offering insights for organizations navigating these changes.

**Chopra, R. (2017).** The research aimed to analyse the evolving challenges associated with digital human resource management (e-HRM) in the context of significant transformations in the digital environment, impacting enterprises in India and globally. The methodology involved a comprehensive literature review of existing studies, including insights from Bondarouk and Ruël (2009) and Strohmeier (2007), focusing on the implications of electronic HRM practices. Findings indicated that organizations face critical issues in effectively recruiting, retaining, and developing talent within the digital landscape. It was emphasized that HR management must adapt to these changes by implementing innovative strategies such as performance evaluations and training initiatives to equip the workforce with essential skills and competencies. The relevance of this study lies in its contribution to understanding how e-HRM can enhance organizational effectiveness and employee management in the face of rapid digital advancements. The insights gained serve as a vital framework for HR professionals seeking to navigate the complexities of digital transformation while fostering a capable and resilient workforce.

**Tabassum, F., & Ghosh, N. (2018).** The study aimed to explore the relevance of performance management systems in the context of globalization, emphasizing talent as a key asset for high-performance businesses. Utilizing a constructive research methodology, the investigation assessed how advancements in technology, particularly artificial intelligence and big data analytics, influenced performance evaluations. Findings indicated that traditional annual performance reviews were becoming inadequate due to the evolving landscape of employee assessment. Organizations recognized AI's vital role in enhancing performance management, leveraging predictive analytics to boost employee productivity and engagement. The integration of machine learning improved leadership trust, management support, and reduced employee turnover and absenteeism. The study underscored the necessity of digital performance management systems for increasing transparency and efficiency in employee evaluations, ultimately enhancing organizational performance. This research is relevant as it provides insights into modern performance management practices, highlighting how AI can transform traditional approaches and drive better outcomes in today's collaborative and technology-driven business environments. It proposes a conceptual model that facilitates understanding and improvement in performance appraisal, offering valuable implications for organizations navigating the complexities of contemporary performance management systems.

**Fenech, et.al., (2019).** The objective of this research was to investigate how the function of Human Resource Management (HRM) is shifting in the context of digital transformation. This transformation involved modifying organizational processes to leverage emerging technologies, with an increasing recognition of the importance of human and intellectual capital in gaining a competitive advantage. A qualitative methodology was employed, utilizing semi-structured interviews with five HR experts from the United Arab Emirates. The interviews covered various topics, including HR planning, reward management, performance management, training and development, health and safety, and employee relations, particularly in relation to their changes during the digital transformation era. Thematic analysis was applied to explore the primary themes and sub-themes arising from the interviews. Findings indicated that while digitalization significantly affected day-to-day HR practices, particularly through human resource information systems, the role of HR in contributing to digitalization strategy was found to be less emphasized. This study's relevance lies in its contribution to understanding the evolving role of HRM in digital transformation, highlighting both the challenges and opportunities for HR professionals in adapting to the rapidly changing technological landscape.

**Halid, et.al., (2020, May).** The study aimed to enhance the effectiveness of human resource management (HRM) through the digital transformation of HR practices via electronic media, mobile technologies, analytics, and information technology (IT). The methodology involved a comprehensive review of previous studies, primarily relying on secondary data to explore the concept of digital HRM and its various dimensions. Findings revealed that organizations must embrace digital transformation to improve efficiency and remain competitive in the market. The research highlighted that those who delay digitization risk falling behind their competitors. The results indicated that implementing digital HRM could significantly boost organizational performance. Furthermore, the study provided valuable insights for researchers, establishing a

foundation for understanding the impact of digital HRM on organizational performance. This research is relevant as it emphasizes the necessity of adopting digital HRM strategies for enhancing operational efficiency and competitiveness, ultimately guiding organizations in their transition to digital practices. By highlighting the importance of this transformation, the study underscored the critical role of digital HRM in shaping the future of workforce management.

**Nazemi, et.al., (2021).** The study focused on utilizing advanced technologies in urban administration, particularly examining the impact of digital human resource management on performance management within the Tehran Municipality. Its objective was to delineate a model for human resource performance management aligned with digital city criteria. An applied research design was employed, targeting all senior, middle, and operational managers within the municipality as the statistical population, from which 210 individuals were selected through simple random sampling. A researcher-developed questionnaire, comprising sixteen questions, served as the primary data collection instrument. The data were analyzed using both descriptive and inferential statistical methods. The findings articulated a human resource performance management model that included five dimensions and sixteen components, successfully confirming the hypothetical relationships within the model across the extensive community. Ultimately, the study concluded that effectively managing human resources through digital frameworks significantly enhances urban administration, advocating for the ongoing evaluation and modernization of human resource management practices in light of the Fourth Industrial Revolution. This research holds substantial relevance as it contributes to the evolving landscape of municipal services by integrating technology and human resource strategies for improved governance.

**Al-kharabsheh, et.al., (2022).** The objective of this research was to investigate the mediating role of employee motivation between digital human resource management (HRM) practices and employee work performance. To achieve this, two digital HRM strategies—digital training and digital performance appraisal—were utilized. Data were collected from employees in industrial companies using a valid and reliable questionnaire. The findings revealed that digital training significantly impacted both employee motivation and job performance, while digital performance appraisal also positively influenced employee motivation and performance. Moreover, employee motivation was found to exert a substantial effect on job performance. Ultimately, it was concluded that the influence of digital HRM strategies on work performance was partly mediated by employee motivation. This indicated that competent workers aware of their performance levels were more likely to exhibit higher job performance. The study highlighted the necessity for further research into the role of various HRM techniques in influencing work performance through employee motivation. In practice, it urged organizations to implement training sessions and utilize digital methods for performance evaluation to enhance employee motivation and overall job performance. The relevance of this study lies in its contribution to understanding how digital HRM practices effectively foster employee motivation can and improve work outcomes.



**Husen, et.al., (2024).** The objective of this research was to explore the development of human resource management (HRM) strategies in the digital era, focusing on technology integration, data-driven decision-making, employee experience, and organizational culture. A qualitative research approach was employed, involving semi-structured interviews and focus groups with HR experts, managers, and employees across various industries. Thematic analysis was conducted to identify patterns and insights related to digital HRM practices. The findings revealed that e-HRM systems and artificial intelligence significantly enhanced HR efficiency and strategic capabilities. Implementing personalized development programs and flexible work arrangements, facilitated by digital technologies, led to improved employee experience, engagement, and retention. Furthermore, effective leadership was identified as crucial for fostering a culture that values flexibility and continuous learning in successful digital transformation efforts. The results underscored the importance of data-driven decision-making in contemporary HRM practices, aligning with transformational leadership theories. This study not only contributes to academic understanding but also offers practical implications, suggesting that organizations can enhance their HRM strategies by investing in digital technologies and promoting a flexible work environment. Future research should focus on longitudinal studies across diverse organizations to further investigate the long-term impacts and challenges associated with digital HRM methods. This research is relevant as it provides a comprehensive framework for implementing digital innovations in HRM, aiming for optimal outcomes in employee satisfaction and organizational success.

### **3. Data Overload and Information Management**

a. **Volume and Complexity of Data:** Digital HRM tools generate vast amounts of data from multiple sources such as employee feedback platforms, project management systems, and productivity tracking tools. While this data provides valuable insights, its sheer volume can become overwhelming, leading to **data overload**. HR managers and team leaders often struggle to sift through the vast arrays of information to identify actionable insights that contribute to employee performance evaluation. The data is often scattered across different platforms, making it difficult to integrate and analyse holistically. Disconnected or fragmented data can result in incomplete performance assessments, where critical aspects of an employee's contributions might be overlooked. Moreover, differentiating between key performance indicators (KPIs) and less relevant metrics can be difficult when there is an abundance of information, leading to inefficiency in performance management processes (*Berber, 2018*).

b. **Challenges in Data Privacy and Compliance:** Along with managing the large volume of data, organizations face the critical challenge of protecting sensitive employee information. With the proliferation of digital HRM systems, personal and performance-related data is more accessible than ever, increasing the risk of data breaches. Ensuring **data privacy** and complying with data protection regulations, such as the General Data Protection Regulation (GDPR), has become paramount. Mishandling or unauthorized access to personal information can damage employee trust and result in legal consequences. Organizations must invest in robust data security measures, such as encryption and secure storage protocols, to mitigate these risks. Furthermore, they must ensure that only

authorized personnel have access to sensitive data and that it is used ethically, balancing the need for performance insights with employee privacy rights (*Manroop, 2024*).

#### **4. Bias and Fairness in Algorithmic Decision-Making**

As organizations increasingly rely on algorithm-driven performance evaluations, ensuring fairness and transparency has become another critical challenge in digital HRM. Many digital systems use algorithms to assess employee performance, make decisions about promotions, and allocate bonuses. While these systems can bring efficiency and reduce human error, they may also reinforce existing biases or introduce new ones if not carefully monitored. Algorithms designed to prioritize quantitative metrics—such as task completion rates, sales numbers, or attendance—often undervalue more qualitative aspects of an employee’s role, such as creativity, teamwork, and leadership. Moreover, the lack of transparency in how these algorithms operate can cause distrust among employees. If employees feel that their efforts are not being fairly assessed, especially in areas where human intuition and judgment play a role, it can lead to dissatisfaction and disengagement. This is particularly important in jobs that require emotional intelligence, innovation, and collaboration, where an over-reliance on data points may not capture the full extent of an employee's contribution. For instance, a manager who excels in mentoring and team-building but does not produce high output in terms of direct deliverables might be unfairly evaluated by an algorithm prioritizing hard data. Therefore, addressing **algorithmic bias** and creating **transparent assessment mechanisms** are critical to fostering a fairer digital performance management environment (*Khademi, 2019*).

#### **5. Loss of Human Touch and Personal Connection**

a. **Loss of Human Touch in Digital Performance Management:** The rise of digital HRM tools has brought about a significant reduction in the personal interaction that traditionally characterized performance management. Face-to-face meetings and one-on-one discussions between managers and employees were once central to the performance evaluation process, allowing for in-depth conversations about an employee's strengths, challenges, and career development goals. These interactions not only helped build trust but also provided managers with valuable insights into the employee's motivations, work environment, and interpersonal dynamics. However, the shift to digital tools, which often prioritize metrics and data-driven evaluations, has led to a loss of this human touch. Automated systems may fail to capture the nuanced aspects of performance, such as emotional intelligence, creativity, or leadership qualities, which are critical to an employee's overall contribution to the organization. The absence of personal connection can result in employees feeling undervalued and disengaged, ultimately impacting their motivation and productivity.

b. **Reduced Personal Connection and Employee Engagement:** The lack of human connection in digital performance management can also erode employee engagement and well-being. Traditional performance reviews fostered personal relationships between managers and employees, creating opportunities for mentorship, coaching, and personalized feedback. In contrast, digital systems often deliver feedback through impersonal platforms, lacking the empathy and understanding that come with face-to-face conversations. This can make employees feel that their contributions are reduced to

mere numbers and metrics, leading to dissatisfaction with the process. Furthermore, the absence of real-time dialogue and personalized recognition can weaken the bond between managers and their teams, making it harder for organizations to maintain a positive work culture. Ultimately, organizations that rely solely on digital systems risk losing the human element that fosters employee development and long-term engagement. (*Bolton, 2018*).

## **6. Employee Resistance and Digital Literacy**

a. **Employee Resistance:** One of the primary challenges in adopting digital performance management systems is **employee resistance**. Employees who are accustomed to traditional performance evaluations, such as annual reviews or face-to-face meetings, may find it difficult to embrace digital tools that focus on real-time feedback and continuous monitoring. This resistance often stems from a fear of being constantly watched, as many digital systems track employee activity in minute detail. Such surveillance can create anxiety, as employees may feel that every minor action is scrutinized, leading to a sense of micromanagement. Additionally, concerns about **privacy** and how personal data is used may cause further reluctance. Workers may fear that the data collected could be used unfairly, penalizing them for short breaks or minor inefficiencies, thus creating distrust in the system. Moreover, employees may perceive the shift to digital tools as a threat to their work-life balance, where the focus is heavily on performance metrics rather than individual growth. Without proper communication from the organization about the purpose and benefits of digital performance management, such as improved feedback and professional development opportunities, employees may resist the change, viewing it only as a mechanism for increased control and oversight.

b. **Digital Literacy:** The effective implementation of digital performance management also hinges on employees' **digital literacy**—their ability to understand and use new digital platforms. A lack of familiarity with these tools can lead to confusion, frustration, and disengagement. Employees who are not comfortable navigating digital systems may struggle with real-time feedback platforms, missing out on valuable performance insights. Without adequate training and ongoing support, employees may not fully engage with the system, rendering it ineffective. To overcome this challenge, organizations need to invest in **comprehensive training programs** that equip employees with the necessary skills to utilize digital tools efficiently, fostering greater acceptance and smoother transitions. (*Zhao, 2023*).

## **7. Balancing Real-Time Feedback with Over-Surveillance**

One of the touted benefits of digital HRM tools is the ability to provide **real-time feedback**, enabling employees to receive continuous insights into their performance. However, there is a fine line between offering constructive real-time feedback and engaging in over-surveillance. Continuous performance monitoring can sometimes lead to a sense of micromanagement, where employees feel as though they are constantly being watched. This can create a high-pressure work environment, ultimately diminishing employee well-being and increasing burnout. Furthermore, the reliance on real-time data may shift the focus of performance management from long-term development goals to

short-term metrics. In some cases, employees may focus on “gaming the system” by optimizing their performance based on easily trackable metrics rather than genuinely improving their skills or contributing to broader organizational objectives. Balancing the benefits of real-time feedback with the risks of **over-surveillance** and short-term thinking is crucial for ensuring that digital performance management systems are both effective and sustainable (*Henderson, 2024*).

## 8. Conclusion

The advent of digital technology has undeniably transformed HRM, particularly in performance management, where advanced systems offer real-time feedback and data-driven insights. These innovations promise to enhance objectivity and efficiency, yet they come with notable challenges. Data overload, privacy concerns, and algorithmic biases pose risks that must be carefully managed to prevent incomplete or unfair evaluations. Additionally, the loss of human interaction in performance reviews and employee resistance to new digital tools highlight the need for a more balanced approach. Organizations must ensure transparency in algorithmic decisions, safeguard employee privacy, and invest in digital literacy programs to ease the transition. With combining the advantages of technology with personalized support and communication, businesses can navigate these challenges and create a more effective and inclusive digital HRM environment.

## References

1. Al-kharabsheh, S. A., Attiany, M. S., Alshawabkeh, R. O. K., Hamadneh, S., & Alshurideh, M. T. (2022). The impact of digital HRM on employee performance through employee motivation. *International Journal of Data and Network Science*, 7(1), 275-282.
2. Berber, N., Đorđević, B., & Milanović, S. (2018). Electronic human resource management (e-HRM): A new concept for digital age. *Strategic Management-International Journal of Strategic Management and Decision Support Systems in Strategic Management*, 23(2)...apa citation
3. Bolton, R. N., McColl-Kennedy, J. R., Cheung, L., Gallan, A., Orsingher, C., Witell, L., & Zaki, M. (2018). Customer experience challenges: bringing together digital, physical and social realms. *Journal of service management*, 29(5), 776-808.
4. Bondarouk, T., & Brewster, C. (2016). Conceptualising the future of HRM and technology research. *The International Journal of Human Resource Management*, 27(21), 2652-2671.
5. Chopra, R. (2017). NAVIGATING THE SHIFT: CHALLENGES IN TRANSITIONING FROM HRM TO E-HRM. *Innovative Research Thoughts*, 3(2), 133-138.
6. Fenech, R., Baguant, P., & Ivanov, D. (2019). The changing role of human resource management in an era of digital transformation. *International Journal of Entrepreneurship*, 22(2), 166-175.
7. Findıklı, M. A., & beyza Bayarçelik, E. (2015). Exploring the outcomes of electronic human resource management (E-HRM)?. *Procedia-Social and Behavioral Sciences*, 207, 424-431.
8. Furtmueller, E. (2012). Using technology for global recruitment: why HR/OB scholars need US knowledge?.

9. Halid, H., Yusoff, Y. M., & Somu, H. (2020, May). The relationship between digital human resource management and organizational performance. In First ASEAN Business, Environment, and Technology Symposium (ABEATS 2019) (pp. 96-99). Atlantis Press.
10. Hauptmann, S., & Steger, T. (2013). "A brave new (digital) world"? Effects of In-house Social Media on HRM. *German Journal of Human Resource Management*, 27(1), 26-46.
11. Heikkilä, J. P., & Smale, A. (2011). The effects of 'language standardization' on the acceptance and use of e-HRM systems in foreign subsidiaries. *Journal of World Business*, 46(3), 305-313.
12. Henderson, M. (2024). *One World Under Surveillance: A guide to personal privacy in a digital world*. Self-Published.
13. Husen, S., Wahidah, R. N., & Mustajab, D. (2024). Evolution of HRM Strategies in the Digital Age: A Comprehensive Review. *Amkop Management Accounting Review (AMAR)*, 4(1), 42-58.
14. Khademi, A., Lee, S., Foley, D., & Honavar, V. (2019, May). Fairness in algorithmic decision making: An excursion through the lens of causality. In *The World Wide Web Conference* (pp. 2907-2914).
15. Laumer, S., Eckhardt, A., & Weitzel, T. (2010). Electronic human resources management in an e-business environment. *Journal of Electronic Commerce Research*, 11(4), 240.
16. Manroop, L., Malik, A., & Milner, M. (2024). The ethical implications of big data in human resource management. *Human Resource Management Review*, 34(2), 101012.
17. Nazemi, Y., Teymournejad, K., & Daneshfard, K. (2021). Explaining the human resource performance management model with the digital age approach. *Quarterly Journals of Urban and Regional Development Planning*, 6(18), 165-191.
18. Sareen, P., & Subramanian, K. V. (2012). e-HRM: A strategic review. *International Journal of Human Resource Studies*, 2(3), 119.
19. Sinha, B. C., & Mishra, M. (2014). E-HRM tools: an empirical study in select Indian organisations. *International Journal of Business and Management Invention*, 3(9), 71-83.
20. Tabassum, F., & Ghosh, N. (2018). Future of performance management in artificial intelligence ERA. *International Journal of Arts, Science and Humanities*, 6, 7-14.
21. Zhao, L., He, Q., Guo, L., & Sarpong, D. (2023). Organizational digital literacy and enterprise digital transformation: Evidence from Chinese listed companies. *IEEE Transactions on Engineering Management*.