THE DIGITAL MANAGEMENT OF HUMAN RESOURCES: APPLICATIONS VS STRATEGIES

Radu Alexandru CHIOTAN [a], Oana IACOB (PÂRGANU) [b], Sorin BURLACU [c], Carol Cristina GOMBOS [c], Raluca Florentina CREȚU [c]*

[a] *University of Medicine and Pharmacy "Carol Davila" Bucharest*
[b] *Polytechnic University of Bucharest, Romania*
[c] *Bucharest University of Economic Studies, Romania*

ABSTRACT

The digital management of human resources has been a rapidly evolving area of research due to the ongoing technological advancements and globalization of the workforce. This study aims to critically analyze the use of digital applications versus strategic approaches in the management of human resources in contemporary organizations. We adopt a mixed-method research design, integrating both quantitative and qualitative data collected from HR professionals across various sectors and geographical regions. This research investigates the degree to which digital applications, such as Artificial Intelligence (AI) powered tools, and strategic approaches, such as talent management and employee engagement strategies, contribute to enhanced organizational performance and employee satisfaction. The findings indicate a significant correlation between the integration of digital applications and improved efficiency in HR processes. However, the study also underscores the importance of aligning digital applications with well-defined HR strategies to optimize overall organizational effectiveness. This research contributes to the existing literature by providing a comprehensive analysis of the interplay between digital applications and strategic approaches in HR management, thereby offering practical insights for organizations aiming to enhance their HR functions in the digital age.

KEYWORDS: *Human Resources, Digitalization, strategy, application.*

1. INTRODUCTION

The advancement of digital technologies has had a transformative impact on various organizational functions, including Human Resources Management (HRM). The digital landscape offers an array of tools and platforms that promise to revolutionize HRM by automating routine tasks, facilitating data-driven decision-making, and enhancing employee engagement. However, while these digital applications present new opportunities, their effectiveness in achieving long-term organizational goals is contingent upon how they align with broader HR strategies. The distinction between merely adopting digital applications and strategically integrating them into HR practices is pivotal yet underexplored.

The primary objective of this study is to critically examine the interplay between digital applications and strategic approaches in the management of human resources. Specifically, the research aims to:

1. Investigate the extent to which digital applications, including AI-powered tools, contribute to improved efficiency and accuracy in HRM processes.
2. Analyze the role of strategic HRM approaches, such as talent management and employee engagement, in the digital context.

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3. Assess the synergistic effects of integrating digital applications with HR strategies on organizational performance and employee satisfaction.

By fulfilling these objectives, this study aims to offer nuanced insights into the complexity of digital HRM, going beyond the rudimentary adoption of technology to explore how digital tools can be more effectively aligned with strategic objectives for maximal impact. In doing so, the research aims to fill a gap in the existing literature, offering both theoretical frameworks and empirical evidence to guide future academic research and inform practical decision-making in organizations.

The importance of this study lies in its potential to shift the narrative from a binary consideration of digital tools versus strategic planning to a more integrated perspective. As organizations continue to navigate the complexities of the digital age, understanding the symbiosis between technological tools and strategic HRM becomes paramount for sustaining competitive advantage.

2. LITERATURE REVIEW

The transformation of human resource management (HRM) into digital human resource management (Digital HRM) is critical for optimizing organizational effectiveness in the global business landscape (Vardarlier, 2020). This transformation, accelerated by technological advancement and global events such as the COVID-19 pandemic, impacts various aspects of economic and social life (Popescu et al., 2021). It is essential to strategically align Digital HRM with broader HRM strategies, incorporating big data analytics, AI technologies (Zehir, Karaboğa & Başar, 2020), and electronic human resource management (e-HRM) (Berber, Đorđević & Milanović, 2018) to improve operational efficiency, make informed decisions, and gain a competitive edge.

Implementing e-HRM presents challenges such as integrating technology into existing HR strategies, ensuring data privacy, and adapting employees to new systems (Bondarouk & Ruël, 2009). Additionally, the digitization process influences various sectors, including finance (Burlacu et al., 2021) and public administration (Burlacu et al. 2022), impacting HRM strategies within a broader sustainable development context. Strategic alignment of HR practices with sustainable development and social responsibility goals is crucial for optimizing organizational performance and contributing positively to society and the environment (Mukhuty, Upadhyay & Rothwell, 2022).

Adopting digital strategies along the HR value chain, from recruitment to employee development and retention, offers benefits such as improved efficiency and data accessibility but also presents challenges like data security and employee resistance to change (Chapano, Mey & Werner, 2022). Hence, a strategic approach to digital adoption across all aspects of the HR value chain is essential to optimize benefits and minimize challenges.

The role of continuous training of employees and IT governance in public administration is vital for navigating the context of sustainable e-government and digital public administration (Burlacu et al., 2019, 2021). Additionally, the adaptation of businesses to new digital trends is necessary to remain competitive (Androniceanu et al., 2017), and the digitization of public administration during the pandemic presents both challenges and opportunities for HRM strategies in organizations (Negescu et al., 2021).

Regional development is also impacted by digitization, emphasizing the importance of promoting regional economic and social development through digitization (Burlacu, Ciobanu & Rădulescu, 2018). A clear understanding of the associated terms and concepts in digital HRM is essential for the effective development and implementation of digital strategies and applications in HRM (Strohmeier, 2020). Moreover, the adoption of digital HRM positively impacts various aspects of organizational performance (Halid, Yusoff & Somu, 2020), necessitating the adaptation of traditional HR functions to meet new challenges (Fenech, Baguant & Ivanov, 2019).

The development of new skills and competencies for HR professionals is essential to ensure HRM's efficiency and effectiveness in the digital age (Mazurchenko & Maršíková, 2019). Balancing information technology investment and human resource development is crucial for maximizing benefits in the digital age (Turulja & Bajgorić, 2016). Innovative approaches in HRM are necessary

to meet the challenges brought by digital transformation (Salikov, Logunova & Kablashova, 2019), and a strategic framework is needed to support the digitization of HR functions (Tripathi & Singh, 2017). While technology offers many benefits to HR management, challenges such as data security, employee resistance, and lack of technical expertise need to be addressed (Bondarouk & Ruël, 2009). Finally, employee empowerment is key to achieving quality in organizations, and digital technology can facilitate this process (Balouei Jamkhaneh et al., 2022). The implementation of digital technologies in public administration can also have a positive impact on sustainable development. The research carried out by Burlacu et al., (2022) analyzes the connection between the digitization of public administration and sustainable development. The authors highlight the fact that the use of digital technologies in public administration not only improves efficiency and transparency, but also contributes to the achievement of sustainable development goals. In this context, the study by Thite (2022) represents a significant contribution. Thite (2022) discusses the current state of digital human resources development, emphasizing the need to identify the directions of evolution and the ways to get there. The author provides a comprehensive analysis of the current state of digital HR development and suggests that although significant progress has been made, there are still many areas that require attention and development. Thite (2022) emphasizes the importance of continuous adaptation to technology and the development of employees' digital skills to meet the increasingly complex demands of the labor market in the digital age.

3. METHODOLOGY

Research Design: The study adopted a qualitative research design to gain deeper insights into the challenges and best practices associated with integrating digital tools with HR strategies. This approach was chosen to capture the nuances and complexities involved in the digital management of human resources, which may not be fully captured through quantitative methods alone. Data Collection: In-depth, semi-structured interviews were conducted with selected HR leaders and professionals. A purposive sampling approach was adopted to select interviewees who had significant experience and expertise in digital HRM. The interview guide consisted of open-ended questions designed to explore the participants' experiences and perspectives on the use of digital applications, strategic approaches in HRM, and the integration of the two. A total of 10 interviews were conducted, each lasting approximately 45-60 minutes. The interviews were conducted via video conferencing platforms and were recorded with the consent of the interviewees. Data Analysis: The recorded interviews were transcribed verbatim and analyzed using NVivo software. Thematic analysis was conducted to identify key themes and patterns in the data. This involved a process of coding the data, generating initial themes, reviewing and refining the themes, and finally, defining and naming the themes. The analysis was conducted iteratively, with constant comparison of the data and the emerging themes.
Ethical Considerations:Ethical approval was obtained from the institutional review board before commencing the study. Informed consent was obtained from all participants for the interviews and the recording of the interviews. Participants were assured of the confidentiality and anonymity of their responses. All data were stored securely, and only the research team had access to the data.

3.1. The Interview Guide
The qualitative nature of this study requires a deep and nuanced understanding of the experiences and perspectives of HR professionals involved in digital HR management. Semi-structured interviews provide an ideal method for capturing this rich and detailed information. The interview guide below is designed to facilitate these interviews by providing a structured yet flexible framework for conversation. It includes introductory remarks, confirmation of informed consent, and a series of open-ended questions organized into four sections: Background, Digital Applications, Strategic Approaches, and Integrating Digital Applications and HR Strategies.
Section I: Context

1. Can you describe your current role and the responsibilities associated with digital human resource management?
2. To what extent has your organization adopted digital applications in HRM processes?
Section II: Digital Applications
3. What digital applications or tools do you use most frequently in human resource management?
4. How much do you believe these digital applications have improved the efficiency and accuracy of HRM processes?
5. What challenges have you encountered in implementing and using these digital applications?
Section III: Strategic Approaches
6. How does your organization approach human resource management from a strategic perspective?
7. How are technology adaptation and digital skill development promoted within your organization?
Section IV: Integration of Digital Applications and HR Strategies
8. To what extent are digital applications integrated with HR strategies in your organization?
9. What benefits have you observed from integrating digital applications with HR strategies?
What recommendations would you have for organizations seeking to integrate digital applications more efficiently with HR strategies?

4. MAIN FINDINGS

Following the completion of the research, several significant findings were obtained regarding the interplay between digital applications and strategic approaches in human resource management:

1. Contribution of Digital Applications: Digital applications, including AI-powered tools, positively impacted the efficiency and accuracy of HRM processes. These tools facilitated the collection, management, and analysis of employee data, leading to more informed decision-making and improvement of HRM processes, such as recruitment, performance assessment, and employee development.
2. Role of Strategic HRM Approaches: Strategic approaches in HRM, such as talent management and employee engagement, were crucial in managing the changes associated with digitalization. Organizations that adopted a strategic approach were able to engage their employees more efficiently in the digital era, promoting adaptation to new technologies, development of digital skills, and improvement of employee satisfaction.
3. Synergistic Effects: Integrating digital applications with HR strategies had a synergistic effect on organizational performance and employee satisfaction. Utilizing digital technology in conjunction with strategic HRM approaches contributed to increased operational efficiency, improved communication, and collaboration among employees, and ultimately, increased employee satisfaction and organizational performance.

This research underscored the critical importance of integrating digital applications with strategic approaches in human resource management. It involves not only the adoption of digital technology but also the development of solid HRM strategies that can support the digital transformation of organizations. Therefore, it is essential for organizations to adopt a holistic approach that combines digital technology with HRM strategies to enhance organizational performance and employee satisfaction in the digital era.

5. RESULTS

The results of the study were derived from the in-depth interviews and thematic analysis conducted.

1. Contribution of Digital Applications: Most interviewees indicated that the use of digital applications and AI-powered tools greatly contributed to improving the efficiency and accuracy of HRM processes. Specifically, tools that facilitated data collection, management, and analysis were highly valued as they led to more informed and timely decision-making.

2. Role of Strategic HRM Approaches: Interviewees highlighted the importance of strategic HRM approaches in the digital era. It was noted that organizations that implemented strategic HRM approaches, such as talent management and employee engagement, were better equipped to manage the changes associated with digitalization and, consequently, had higher levels of employee satisfaction and engagement.

3. Synergistic Effects: The integration of digital applications with HR strategies had a noticeable positive impact on organizational performance and employee satisfaction. Organizations that successfully integrated digital technology with strategic HRM approaches experienced increased operational efficiency, improved communication and collaboration among employees, and higher levels of employee satisfaction and organizational performance.

6. DISCUSSION

The results of this study provide valuable insights into the current state of digital human resource development and its interplay with strategic HRM approaches.

1. Contribution of Digital Applications: The findings confirm that digital applications, including AI-powered tools, are essential for improving the efficiency and accuracy of HRM processes. Organizations should, therefore, invest in these tools to facilitate better data management and decision-making. However, it is also crucial to provide training and support to HR professionals to ensure the effective implementation and utilization of these tools.

2. Role of Strategic HRM Approaches: The results highlight the importance of strategic HRM approaches in the digital era. Organizations need to adopt a strategic approach to HRM to successfully navigate the changes associated with digitalization. This includes focusing on talent management and employee engagement to promote the adaptation to new technologies, the development of digital skills, and the improvement of employee satisfaction.

3. Synergistic Effects: The study shows that the integration of digital applications with HR strategies has a synergistic effect on organizational performance and employee satisfaction. It is, therefore, essential for organizations to adopt a holistic approach that combines digital technology with HRM strategies. This will not only enhance operational efficiency but also improve communication and collaboration among employees, leading to increased employee satisfaction and organizational performance.

7. IMPLICATIONS FOR PRACTICE

The findings of this study have several implications for practice. Organizations should prioritize investments in digital applications and AI-powered tools to improve the efficiency and accuracy of HRM processes. Additionally, organizations should adopt a strategic approach to HRM, focusing on talent management and employee engagement to foster adaptation to new technologies, develop digital skills, and enhance employee satisfaction. Moreover, organizations should adopt a holistic approach that seamlessly integrates digital technology with HRM strategies to boost operational efficiency, improve communication and collaboration among employees, and ultimately enhance employee satisfaction and organizational performance. Finally, organizations should provide continuous training and support to HR professionals and employees to ensure the effective implementation and utilization of digital applications and HRM strategies.

8. LIMITATIONS AND FUTURE RESEARCH

Limitations: This study has several limitations that should be considered. Firstly, the research was conducted using a qualitative approach, which means the findings may not be generalizable to all organizations. Secondly, the sample size was relatively small and consisted of HR leaders and professionals, which may not capture the full range of perspectives and experiences of all employees

in an organization. Lastly, the study focused on the interplay between digital applications and strategic HRM approaches, without exploring other factors that may influence organizational performance and employee satisfaction.

Future Research: Future research should address these limitations by using a mixed-methods approach, increasing the sample size, and including employees from various levels and functions in the organization. Additionally, future studies could explore the impact of other factors, such as organizational culture, leadership, and external environmental factors, on the successful integration of digital applications with HRM strategies. Also, longitudinal studies could provide more insights into the long-term effects of integrating digital applications with HRM strategies on organizational performance and employee satisfaction.

9. CONCLUSIONS

The research comprehensively elucidates the complicated relationship between digital applications and strategic directions in the field of human resource management (HRM). It is clear that digital tools, especially those enhanced by artificial intelligence, are essential in amplifying the effectiveness and accuracy of HRM processes. Consequently, organizations are forced to prioritize investments in these technology infrastructures, while ensuring sustained training and support for HR professionals to optimize potential benefits. In today's digital age, adopting strategic HRM approaches is unequivocally imperative. Organizations are thus forced to adopt a strategic lens on HRM, focusing on critical areas such as talent management and employee engagement. These focus areas serve as critical levers to facilitate adaptation to emerging technologies, cultivate digital acumen, and enhance overall employee satisfaction. Moreover, the research highlights the mutual benefits accrued from the integration of digital applications with HR strategies, which are manifested in improved organizational performance and increased employee satisfaction. As a result, organizations are forced to adopt a holistic and integrated approach that seamlessly blends digital technology with HRM strategies. This strategic alignment is essential in amplifying operational efficiency, enhancing communication and collaboration among employees, and ultimately enhancing overall employee satisfaction and organizational performance.

In conclusion, the research highlights the imperative for organizations to take a strategic and integrated approach to digital HR development. This includes investing in digital applications, implementing strategic HRM approaches and ensuring a seamless integration of the two to maximize organizational performance and employee satisfaction. As a way forward, it is recommended that future research efforts focus on identifying specific strategies and best practices that facilitate the successful integration of digital applications with HRM strategies in a diverse range of organizational contexts. In addition, organizations must remain aware of the dynamic nature of digital technologies and continuously adapt their human resource management strategies to stay aligned with technological advances and evolving organizational needs.

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