Exploring the Landscape of Electronic Human Resource Management (E-HRM): Perspectives and Strategic Implications

Kulvinder Kaur

Research Scholar, Institute of Management Studies and Research, Maharshi Dayanand University, Rohtak, 124001,

Abstract:

The landscape of e-HRM has evolved over few decades, witnessing rapid growth and technological advancements. This paper explores the multifaceted domain of e-HRM by synthesizing perspectives from various scholars, examining its definitions, historical evolution, and contemporary applications. Through an integrative literature review, this study elucidates the strategic value and challenges associated with e-HRM, shedding light on its role in enhancing organizational effectiveness and competitive advantage. Drawing on a diverse array of scholarly works, both globally and within the Indian context, this paper provides insights into dimensions of e-HRM. Additionally, it offers critical reflections on the impact of information technology on HRM practices and organizational dynamics. By critically evaluating existing research and emerging trends, this paper aims to stimulate further inquiry and research in the field of HRM.

Keywords: e-HRM, HRIS, global perspective, Indian context

1. Introduction

The field of e-HRM study has a long history dating back to forty years, but since the year 2000, it has grown rapidly. This expansion has aided in the e-HRM field's development and offered insightful knowledge that has greatly improved our comprehension of the relationship between information technology and human resource management. However, because some viewpoints, issues, and aspects have gotten less attention than others, the information gained is still restricted and unbalanced. It should be noted that e-HRM(electronic Human Resource Management), differs from HRIS(Human Resource Information System), which is used as an IT system by HR departments within organizations. Every industry is updating its technology and processes through IT and HR departments are increasingly integrating their processes into e-HRM within their work environments (Winarto, W., 2018). The HR department is crucial for all organizations, dealing with aspects such as employee skills, experience, salary, and training. The human resource department has embraced a number of technologies, but e-HRM is particularly helpful in keeping good working connections between employees and employers in a dynamic function within organisations. The subjects and technique of e-HRM research are covered in this study. This emphasis is seen to be essential for motivating e-HRM academics to carry out more research. First, a concise description of e-HRM will be provided by considering a previous definition (Bondarouk and Ruël 2013) in the context of current advancements in HRM.

Definition

Scholars have defined e-HRM in a variety of ways in the literature. "An umbrella term covering all possible integration mechanisms and contents between HRM and Information Technologies aiming at creating value within and across organisations for targeted employees and management" (p. 507) is how Bondarouk and Ruël (2009) define e-HRM in a widely used definition. With a focus on value creation, this definition presents e-HRM as a broad word that is impartial towards both HRM and IT. The value produced by e-HRM has frequently been the subject of limited or dubious research throughout the years (Parry 2011). Human resource information systems (HRIS), which are only meant to be used inside the HR department and not outside of it, are also included in the 2009 definition. Strohmeier defined e-HRM as the use of information technology for networking and assisting two or more person or group actors in carrying out HR tasks jointly. This concept was refined to be more precise about the technological and organisational settings. e-HRM was defined as a way to execute HRM strategies, policies, and practices in organisations by fully utilising online technology-based channels and supporting them with awareness and direction by Ruel, Bondarouk, and Looise in a previous common definition.

The various definitions of e-HRM highlight its comprehensive and integrative nature, bridging HRM and information technology to create value for both employees and management. The term is presented as neutral and value-focused, reflecting its potential to transform organizational practices. Over the years, research has shown mixed views on the value created by e-HRM, with some skepticism persisting. However, the definitions emphasize the importance of considering technological and organizational contexts, as well as the strategic implementation of HR practices. This multifaceted perspective underscores the dynamic role of e-HRM in modern organizations, highlighting the need for ongoing research to fully understand and leverage its capabilities.

2. Literature Review

Various definitions and perspectives on e-HRM have been provided by researchers, highlighting its diverse roles and benefits. Veldhoven and Voermans (2007) narrowly defined e-HRM as a crucial HR function within a corporation that supports executive HR tasks through information technology. Consistent with this view, Steve Foster (2009) noted strategic capabilities within the industry with that Laumer et. al. (2010) expanded on this by stating that e-HRM aids organizations in the retention of talent. In a similar vein, it was argued that organizations and information systems are inseparable from information technology, emphasizing the integrated perspective of the implementation of IT in organizations. This perspective presents a comprehensive view of the latest organizational phenomena, suggesting that HRIS research needs to be broadened and deepened. Martin et al. (2008), it is effective for cost savings and reducing administrative problems within organizations. This perspective is supported by Panayotopoulou et al. (2007), noted that it reduces operational costs, enhances company image, and improves time management in the workplace. Furthermore, research indicates that the integration of HRM and IT is a critical factor for the successful implementation and adoption of e-HRM, leading to the effective and efficient development of users' skills (Ensher et al., 2002). It has been demonstrated that creative HRM strategies, such as e-HRM techniques, improve organizational performance (Iqbal & Ahmad, 2016). According to recent research, technology-based approaches have expanded the HRM function's potential, allowing for quicker and more accurate decision-making, a more flexible work environment, and increased HRM efficiency (Iqbal & Ahmad, 2016). Studies on the usage of e-HRM have shifted to address its dynamic nature by incorporating concepts like innovation,

implementation, learning, and change management (Keebler & Rhodes, 2002). Brewster and Mayrhofer (2013) have observed that organisations might enhance their competitiveness by leveraging HRM portals to capitalise on their intellectual capital. Hosain (2017) provided support for this, pointing out that e-HRM adoption is a result of organisations all over the world seeing the growing significance of IT in leveraging HR operations. Winarto (2018) and Linda Jovita (2008) found that at Cognizant Technology Solutions India Private Limited, employees preferred using automated web-based E-HRM systems. These systems improved cost efficiency, self-service, shared services, outsourcing, and HR quality, ultimately enhancing cost-effectiveness and employee satisfaction. Varma, S. (2010) explored systems across 1000 private sector companies in Maharashtra. The main drivers for E-HRM adoption were cost savings, reduced administrative tasks, and minimized paper transactions, with both service and manufacturing sectors benefiting. Ganeshan (2010) investigated practices in Chennai, focusing on factors influencing E-HRM effectiveness and providing recommendations for improvement based on organizational size and capacity. Sinha, B. C., (2015) compared private and public organizations, highlighting its broad application and success in achieving business strategies, as well as its effects on HR professionals and employees. Neelam Kumari (2018) studied the technological impact on HR practices at Knight Frank India Pvt. Ltd., emphasizing the need for HR professionals to understand the risks and long-term benefits of E-HRM, such as overcoming technical challenges and employee resistance, while transitioning from conventional to electronic HR practices. Lin (2011) investigates the role of employee engagement in organizational innovation through technology adoption, highlighting a positive relationship creativity & org. performance. It aligns with Pant et al. (2012), who propose a conceptual framework for E-HRM integration, emphasizing the need for specific organizational, IT, and communication factors for successful implementation. Both studies underscore the critical role of e-HRM. In contrast, Mohammed Owais Qureshi (2013) and Chakraborty (2013) HRIS in organizations. Qureshi's empirical analysis in India reveals significant sectoral differences in HRIS usage and its positive impact on HR processes, while Chakraborty et al. stress the importance of accurate HRIS adoption within the framework of HR management policies. Both studies emphasize the operational benefits and challenges of HRIS, highlighting the necessity of careful implementation. Arjomandy (2013) and Farr et al. (2013) explore different aspects of E-HRM systems. Arjomandy identifies key factors—organizational, employee-related, and external—that influence successful E-HRM integration, whereas Farr examines the benefits of e-performance management systems, focusing on administrative efficiency and enhanced decision-making in appraisals. These studies collectively illustrate the diverse functional improvements E-HRM can bring to HR practices. The exploration of user acceptance and challenges in E-HRM by Huang et al. (2013) and Nasser Mohammad (2013) provides insights into the human aspects of technology adoption. Huang's research on HR self-service tools highlights the importance of user ease and acceptance, while Mohammad examines the transitional challenges in implementing E-HRM in Jordanian universities, emphasizing the need for careful planning and engagement. Stone et al. (2013) and Nivlouei (2014) address potential pitfalls in E-HRM. Stone cautions against the unplanned use of e-selection, which can lead to inefficiencies and negative impacts on specific groups, while Nivlouei emphasizes the role of job portals and company websites in e-recruitment, pointing out the cost and time-saving benefits. The studies by Bondarouk et al. (2015) and Muhammad Masum et al. (2015) further investigate the broader implications of E-HRM. Bondarouk argues that E-HRM enhances HRM service efficiency and long-term opportunities, whereas Masum identifies perceived usefulness as critical factor in Bangladesh's banking sector. Johnson et al. (2016)

and Mahfod Joma (2018) provide a historical and attitudinal perspective on E-HRM. Johnson reviews the evolution of HRIS, noting significant technological advancements over the past decade, while Joma analyzes HR employees' attitudes towards key factors. Anand et al. (2016) discussed the impact of E-Recruitment on organizational growth and brand image, highlighting its importance in enrolling competent staff to enhance productivity. Rajalakshmi et. al. (2016) reviewed smooth employee relations amidst technological advancements. Punithavathi et. al. (2016) focused on digital era, emphasizing processes. Raashidah Gani et al. (2017) explored the integration of IT and HRM, detailing the functions and outcomes of E-HRM. Manoj Kumar Behera (2017) underscored the cost-saving need for strategic implementation. Anchal Rastogi (2017) highlighted E-HRM's role in enhancing HR activities in private banks, particularly in cost reduction and administrative workload management. Jain (2017), finding significant positive effects on decision-making transparency and skill development. D. Madan Mohan (2017) discussed the role of corporate education and e-learning tools in fostering innovation competencies within organizations, emphasizing the importance of learning management systems (LMS) in facilitating e-learning initiatives. These studies collectively contribute to understanding the implications and challenges of E-HRM in various organizational contexts. The future-oriented studies by Winarto (2018) and Berber Nemanja et al. (2018) propose theoretical models for E-HRM adoption, reflecting on the challenges and potential of integrating IT support in HRM tasks. Similarly, Mindia P. M et al. (2018) investigate the impact of e-recruitment and other E-HRM activities on organizational outcomes in multinational companies and employee productivity, respectively.

Overall, the integration of IT into HRM through e-HRM has provided numerous benefits, including cost savings, improved efficiency, talent management, and enhanced organizational performance, making it a key method for achieving competitive advantage.

3. Research Methodology

The research methodology adopted for this review paper on e-HRM encompasses a systematic approach to gather, analyze, and synthesize relevant literature. The primary objective is to comprehensively explore the evolution, definitions, literature, and current scenario of E-HRM globally and within the Indian context. To achieve this objective, a thorough literature review was conducted using various online databases. Keyword searches including e-HRM were employed to identify relevant articles. A total of 60 articles were selected based on their relevance to E-HRM concepts, theories, and practices. Data from these articles were systematically reviewed, and relevant information pertaining to definitions, perspectives, types, functions, and global and Indian scenarios of E-HRM were extracted. Subsequently, the findings were synthesized and interpreted to develop a coherent narrative that presents a comprehensive overview of E-HRM. The synthesized information was discussed in light of existing literature and theories, and conclusions were drawn based on the analysis and interpretation of the findings.

4. Electronic- HRM: Global and Indian scenario
4.1 e-HRM Globally

Organisational human resource departments are directly impacted by information technology, which causes e-HRM to change and advance. Since the internet has been widely used since the 1990s, e-HRM has risen dramatically. All HR operations are integrated with web-based technology through electronic human resource management, or e-HRM (Bondarouk & Ruël, 2009). E-HRM acts as an online solution

provider for human resource management challenges, leveraging new web-based application technologies. As noted by Mary Gowan, it is easy to adopt and use within HR departments, offering various organizational benefits (Gowan, 2020). Additionally, it aids in planning, policies, and procedures (Martin et al., 2008). It also facilitates the monitoring and analysis of human resources, ensuring employee information is updated accordingly (Laumer et al., 2010). Furthermore, e-HRM offers faster solutions to employee problems and supports swift human resource decision-making. It ensures data security and privacy within the organization's human resource department, making it a vital tool for modern HR management (Panayotopoulou et al., 2007).

4.2 e-HRM in India

In India, the influence has driven IT organizations to focus on becoming technologically advanced in all aspects. The evolving employee expectations, changes in the work environment and the competitive drive to excel have all contributed. Most IT companies are utilizing it to perform their HR functions through various IT practices. The liberalization of foreign policies has facilitated the investment of foreign IT companies, with establishing offices. Indian organizations employ online solicitation of opportunities (Rastogi & Trivedi, 2017). Research on e-HRM practices in India has consistently found user-friendly option that reduces costs & workloads, making it vital for any industry (Mishra & Bhatnagar, 2010; Sinha & Verma, 2016).

5 e- HRM types

It is broadly categorized into three types, each serving distinct purposes for organizations in achieving their HR goals efficiently.

5.1 Operational E-HRM: This type focuses on administrative functions such as payroll management, salary administration, and maintaining employee databases.

5.2 Relational E-HRM: Relational E-HRM primarily addresses organizational functions such as business process management, training and development, recruitment, and performance management. It aims to enhance interactions and relationships within the organization.

5.3 Transformational E-HRM: It plays a pivotal role in strategic functions. It focuses on leveraging HR practices to drive organizational transformation and achieve strategic objectives.

6. Discussion and Conclusion

The comprehensive review of e-HRM presented in this paper sheds light on its evolution, definitions, literature, and global and Indian scenarios. The discussion focuses on the multifaceted nature in modern organizations. Various definitions provided by researchers underscore the integrative nature of E-HRM, emphasizing its potential to create value for both employees and management. While research has shown mixed views on the value created by E-HRM, it is evident that its implementation leads to cost savings, improved efficiency, talent management, and enhanced organizational performance. Highlighting the need for ongoing research to fully understand and leverage its capabilities. The Indian scenario of E-HRM is showcasing its widespread adoption and significance in the current industry landscape. In India, the influence of information technology has driven IT organizations to focus on becoming technologically advanced, leading to the widespread adoption of E-HRM practices. Research studies have consistently found that it is a reliable in making it vital for any industry. The categorization of E-HRM into operational, relational, and transformational types highlights its diverse functions and capabilities in achieving HR goals efficiently. From e-recruitment to e-compensation management, E-

HRM encompasses a wide range of functions aimed at streamlining HR processes and enhancing organizational effectiveness.

While research has shown mixed views on the value created by E-HRM, its implementation leads to various benefits such as cost savings, improved efficiency, talent management, and enhanced organizational performance. The global and Indian scenarios of E-HRM showcase its widespread adoption and significance in the current industry landscape, with research studies consistently affirming its reliability and user-friendliness.

References

1. Arjomandy, D., "Chase the Pace of E-HRM Step-by-Step: Social Media and One of Its Gateways which Reaches Companies" HR Department, 2013
2. Berber, N., Đorđević, B., & Milanović, S., "Electronic human resource management (e-HRM): A new concept for the digital age. Strategic Management" , 2018, 23, 22-32. https://doi.org/10.5937/StraMan1802022B
3. Bondarouk, T., & Harms, R., & Lepak, D., "Does E-HRM lead to better HRM service? The International Journal of Human Resource Management", 2015, 1–31.
4. Bondarouk, T., & Ruël, H., "The Strategic Value of eHRM: Results from an Exploratory Study in a Governmental Organization", The International Journal of HRM, 2013, 24(2), 391–414.
5. Bondarouk, T., & Ruël, H. J. M. (2009). Electronic Human Resource Management: Challenges in the Digital Era. The International Journal of Human Resource Management, 20(3), 505-514.
6. Brewster, C., & Mayrhofer, W. (2013). Leveraging intellectual capital through HRM portals for competitive advantage. Journal of Organizational Effectiveness: People and Performance, 2(3), 215-232.
7. Chakraborty, A., & Abu Mansor, N. N. (2013). Adoption of Human Resource Information System: A Theoretical Analysis. Procedia - Social and Behavioral Sciences, 75, 473–478.
8. Ensher, E. A., Nielson, T. R., & Grant-Vallone, E. J. (2002). Tales from the hiring line: Effects of the Internet and technology on HR processes. Organizational Dynamics, 31(3), 224-244.
9. Farr, J. L., Fairchild, J., & Cassidy, S. E. (2013). Technology and performance appraisal. In M. D. Coovert & L. Foster (Eds.), The Psychology of Workplace Technology. Routledge.
10. Foster, S. (2009). E-HRM: Managing people and developing strategic capabilities in the industry. Human Resource Management Review, 19(1), 45-53.
11. Gardner, T. M., Lepak, D. P., & Bartol, K. M. (2003). Virtual HR: The impact of information technology on the human resource professional. Journal of Vocational Behavior, 63(2), 159-179.
12. Godard, J. (2004). A critical assessment of the high-performance paradigm. British Journal of Industrial Relations, 42(2), 349-378.
13. Ganeshan. (2010). A study on application of electronic human resource management in organizations at Chennai (Master's thesis, Manonmaniam Sundarnar University, Tirunelveli, Tamil Nadu).
14. Hosain, M. S. (2017). The impact of e-HRM on organizational performance: Evidence from selective service sectors of Bangladesh. International Journal of Human Resource Studies, 7(2), 74-94.
15. Iqbal, N., & Ahmad, M. (2016). Enhancing organizational performance through E-HRM. European Journal of Business and Management, 8(6), 150-161.

16. Jain (2017). IMPACT OF E-HRM PRACTICES ON EMPLOYEE SATISFACTION. International Journal of Science Technology and Management. 6. 764-770.

17. Johnson, R. D., Lukaszewski, K. M., & Stone, D. L. (2016). The evolution of the field of human resource information systems: Co-evolution of technology and HR processes. Communications of the Association for Information Systems, 38, 533–553.

18. Jovita, L. (2008). A study on electronic human resource management (E-HRM) with reference to Cognizant Technology Solutions India Private Limited (Master's thesis, Hindusthan College of Arts and Science, Bharathiar University, Coimbatore).

19. Keebler, T., & Rhodes, D. (2002). Managing HR activities with technology. Journal of Human Resource Management, 14(2), 36-45.

20. Kumari, N. (2018). The impact of E-HRM on HR professionals in India: An empirical study in reference to Knight Frank India Pvt. Ltd (Master's thesis, Lovely Professional University).

21. Laumer, S., Eckhardt, A., & Weitzel, T. (2010). Electronic human resources management in an e-business environment. Journal of Electronic Commerce Research, 11(4), 240-250.

22. Lin, L.-H. (2011). Electronic human resource management and organizational innovation: The roles of information technology and virtual organizational structure. The International Journal of Human Resources Management, 22(2), 235-257.

23. Mahfod, J., Noof, Y., Khalifa, Y., & Al Madi, F. (2018). Electronic Human Resource Management (E-HRM) System Volume 14. International Journal of Economic Research, 14.

24. Manoj Kumar Behera (2017) "E-HRM: A TOOL FOR COST REDUCTION IN ORGANISATION" International Journal of Management StudiesISSN(Print) 2249-0302 ISSN (Online)2231-2528, Vol-IV, Special Issue-1,September 2017

25. Martin, G., Reddington, M., & Alexander, H. (2008). Technology, outsourcing, and transforming HR. The Future of HR: Understanding Knowledge Management, 12(3), 87-99.

26. Mindia, P. M., & Hoque, M. K. (2018). Effects of E-Recruitment and internet on recruitment process: An empirical study on Multinational companies of Bangladesh. International Journal of Scientific Research and Management, 6(01).

27. Mishra, A., & Bhatnagar, J. (2010). e-HRM: A strategic HRM tool in Indian organizations. Indian Journal of Industrial Relations, 46(2), 342-353.

28. Mosahkani, M., Manian, A., Hoseingolipour, T., & Mirbaha, O. (2011). Proposing a model for the development of electronic human resource management in Iran's public organizations. Journal of Research of Public Management, 14(4), 41-62.

29. Muhammad Owais Qureshi. (2013). An empirical analysis of organizations using human resource information system (HRIS) in India: An employee perspective. International Journal of Economics and Management Sciences, 2(9), 54-63.

30. Muhammad Masum, A. K. (2015). Adoption Factors of Electronic Human Resource Management (e-HRM) in Banking Industry of Bangladesh. Journal of Social Sciences, 11, 1-6.

31. Nadiailhaq Nurshabrina, & Riza Adrianti. (2020). The Effect of E-Human Resource Management (E-HRM) on Cost Efficiency and Productivity of Employees in the Company. International Research Journal of Advanced Engineering and Science, 5(1), 212-215.

32. Nivlouei, F. B. (2014). Electronic Human Resource Management System: The Main Element in Capacitating Globalization Paradigm. International Journal of Business and Social Science, 5(2), 147–159.

33. Pant, S., Chatterjee, A., & Jaroliya, D. (2012). E-HRM Systems Implementation: A Conceptual Framework. IMJ Volume 4 Issue 1 April-June, 2012.

34. Panayotopoulou, L., Vakola, M., & Galanaki, E. (2007). E-HR adoption and the role of HRM: Evidence from Greece. Personnel Review, 36(2), 277-294.

35. Parry, E. (2011). An examination of e-HRM as a means to increase the value of the HR function. The International Journal of Human Resource Management, 22(5), 1146-1162.

36. Punithavathi, Dr. P.M. Sugavaneswari, (2016) "electronic human resource management challenges in digital era" IJIS Pune research world, ISSN 2455359X, pp1-7.

37. Raashidah Gani ,Darakhshan Anjum(2017) "e- Human Resource Management (E-HRM)" International Journal of Emerging Research in Management &Technology ISSN: 2278-9359 (Volume-6, Issue-6).

38. Rastogi, P., & Trivedi, R. (2017). Exploring the impact of e-HRM on organizational effectiveness: Evidence from Indian IT firms. Journal of Advances in Management Research, 14(2), 165-183.

39. Ruël, H. J. M., Bondarouk, T., & Van der Velde, M. (2007). The contribution of e-HRM to HRM effectiveness: Results from a quantitative study in a Dutch Ministry. Employee Relations, 29(3), 280-291.

40. Sinharay, B. C. (2015). The impact of E-HRM: A study of select Indian organizations (Master's thesis, Lovely Professional University).

41. Sinha, A., & Verma, R. (2016). E-HRM practices in Indian organizations: A study of select Indian IT companies. Journal of Strategic Human Resource Management, 5(1), 1-15.

42. Strohmeier, S. (2007). Research in e-HRM: Review and implications. Human Resource Management Review, 17(1), 19-37.

43. Varma, S. (2010). The implications of implementing electronic human resource management (E-HRM) systems in companies (Master's thesis, Padmashree Dr. D.Y. Patil University, Navi Mumbai).

44. Veldhoven, M., & Voermans, M. (2007). E-HRM: Innovation or irritation? An explorative empirical study in five large companies on web-based HRM. Management Revue, 18(3), 261-277.

45. Winarto, H. (2018). The role of e-HRM in making HRM simpler and more effective. International Journal of Applied Business and Economic Research, 16(2), 241-256.

46. Winarto, W. (2018). Electronic Human Resources Management (e-HRM) Adoption Studies: Past and Future Research (Vol. 13). https://doi.org/10.19166/derema.v13i1.491