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# **Innovations and Challenges in Contemporary Human Resource Management Practices**

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**ABSTRACT:** This literature study provides a comprehensive exploration of diverse topics within the field of Human Resource Management (HRM), drawing insights from a range of research projects spanning different industries and methodologies. Covering themes such as big data analytics in HR, human errors in operational accidents, ethical leadership's impact on employee behaviour, and innovative workforce assignment frameworks, the study offers a panoramic view of contemporary HRM research. The investigation includes a critical analysis of HR practices in construction, a multilevel review of HRM literature, and considerations of context and diversity in HRM research. Employing various methodologies, including systematic literature reviews, data mining, and empirical analyses, the study sheds light on the dynamic nature of HRM. It emphasizes the need for interdisciplinary approaches and cultural awareness in interpreting research findings. The study also delves into the implications of the COVID-19 pandemic on HR practices and identifies avenues for future research.

**KEY WORDS:** Human Resource Management, Ethical Leadership, HR Practices, Employee Demographics, Performance Management, Green HRM.

## **I. INTRODUCTION**

Human Resource Management (HRM) plays a crucial role in organizational success and employee well-being. This literature study explores a diverse array of HRM topics, ranging from the transformative impact of big data analytics on HR practices to the intricate analysis of human errors in shield machine operation accidents. It also examines the association between ethical leadership and employee behaviour, proposes simulation frameworks for workforce assignment, and evaluates the challenges and strategies related to managing human resources during the COVID-19 pandemic. The study aims to provide a nuanced understanding of HRM across various industries, shedding light on the complexities and nuances associated with effective HR practices. From the intricate analysis of highly-cited articles in the Scopus database to the exploration of HR big data analytics and the intricacies of shield machine operation (SMO) accidents in the construction industry, the following summaries provide a glimpse into the multifaceted landscape of contemporary HRM research.

The evolution of HRM practices in response to technological advancements, demographic shifts, and unprecedented global challenges is evident throughout these studies. The discussions touch upon topics such as ethical leadership's impact on employee behaviour, the integration of big data analytics in human resource decision-making, and the intricate relationship between HR practices and organizational innovation. Furthermore, the collection encompasses literature reviews on crucial subjects such as productivity development, the COVID-19 pandemic's effects on human resources, and the role of HRM in project-oriented companies.

As we navigate through these summaries, it becomes evident that HRM is not a static field but one that constantly adapts to the evolving needs of organizations and their workforce. From the strategic use of big data analytics to the critical examination of the role of employee demographics and the challenges posed by the COVID-19 pandemic, these studies collectively contribute to a broader understanding of HRM's contemporary landscape. This compilation aims to offer readers a panoramic view of the diverse research endeavours that shape the trajectory of HRM and influence organizational practices across various industries.

## **II. LITERATURE SURVEY**

**Martina Huemann et al.(2006)** presents a comprehensive review of the literature on HRM in project-oriented companies, highlighting the unique characteristics of such organizations and the specific challenges they pose for HRM. The authors argue that the HRM requirements of project-oriented companies differ from those of classically managed organizations and have not been adequately addressed in the literature. They emphasize the temporary nature of work processes and the dynamic work environment in project-oriented companies, and how these characteristics impact HR



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strategies and practices. The article calls for further research to identify the HRM policies, practices, and processes adopted by project-oriented companies and to consider the implications of these policies and practices for both organizations and individuals, providing valuable insights into the core processes of HRM in project-oriented companies and how it affects the employment relationship.

**M. Napiah et al.(2012)** article focuses on the problems and methods used to improve human resource management (HRM) in the construction of a sustainable development project. The study used a pilot survey and a case study to gather information from contractors in Malaysia. The survey was conducted using questionnaires and interviews, and the case study was carried out at the project site of the Home Ministry of Malaysia Complex in Kuala Lumpur. The study found that HRM is important for the success of construction of a sustainable development project, and identified communication and teamwork as key factors. The authors suggest that involving other parties, such as consultants and clients, in future surveys would provide more reliable and applicable results. Overall, the study provides insights into the challenges and opportunities for improving HRM in construction projects.

**Eliza Byington et al.(2016)** presents a comprehensive review of the HRM field using science mapping and bibliometrics, analysing over 12,000 HRM research articles published over 23 years. It offers a bibliometric ally grounded taxonomy of HRM literatures, a searchable topic map of the field, and reviews of major topic literatures in HRM, aiming to provide the most rigorous description of the intellectual structure of the HRM field to date. Additionally, the comparative analysis between academic HRM and practitioner-oriented literature identifies 100 specific topics with the greatest discrepancy in emphasis, offering insights into potential future research themes to align HRM scholarship with the interests of practitioners. The article also provides access to the downloadable HRM Map, allowing readers to explore 1702 topics in HRM scholarship, topic relations, trends, impact, and major HRM topic clusters. Overall, the article aims to bridge the research-practice gap in HRM by offering detailed insights into potentially under-served practitioner interests at the topic level and identifying promising future research opportunities across the HRM literature.

**Fang Cooke (2017)** argues for the importance of context in understanding workplace phenomena and provides insights on how to study contextual factors. The author uses a case study of a multinational corporation in Sri Lanka to illustrate how context may be operationalized from different perspectives and examined at different levels. The paper also highlights the influence of the researcher's intellectual and social upbringing on their conceptualization and utilization of context in HRM research. The author calls for a more open-minded, inductive, and inclusive approach to indigenous research, particularly from less developed and less well-researched countries that may present very different contexts, ways of contextualizing, and knowledge paradigms from existing dominant discourses in the HRM literature.

**O. J. Ameh et al.(2017)** presents a comprehensive analysis of HR management practices and challenges within the Nigerian construction industry, focusing on recruitment, training, and labour turnover. The study, conducted in Lagos, Nigeria, highlights issues such as "god fatherism" and nepotism affecting fair recruitment, high labour turnover, and the nomadic nature of the labour force. It emphasizes the need for improved HR practices, including aligning recruitment processes with international standards, implementing effective training and development programs, and providing modern working tools and equipment. The article underscores the importance of addressing these challenges to enhance productivity and cost effectiveness in the Nigerian construction sector, offering valuable insights for industry stakeholders and researchers.

**Karen Paka et al.(2018)** presents a systematic review of quantitative studies on Human Resource Management and the ability, motivation, and opportunity to continue working, with a focus on retaining older workers. The review identifies and examines the effectiveness of HR practices directed at this goal, including accommodative, utilization, maintenance, and developmental practices. The paper finds that job demands, job resources, and HR practices all influence the ability, motivation, and opportunity to work, and provides specific recommendations for organizations to facilitate the extension of working lives. Overall, this review provides valuable insights for organizations looking to retain and support their older workforce.

**Dale Tweedie et al.(2018)** says research on the impact of performance management (PM) on workers, highlighting key gaps in the existing literature. It emphasizes the need for a more nuanced understanding of PM's effects on workers' well-being, particularly those that may not align with organizational goals. The concept of 'recognition theory' is introduced as a potential framework for addressing these gaps, offering insights into the psychological and social impacts of PM on workers. The paper also outlines the stages of its development, including the literature review process and the



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identification of relevant research, contributing to a deeper understanding of the complexities surrounding PM and its implications for workers.

**William A. Sodeman et al. (2019)** explains the opportunities and challenges of using big data analytics to strategically manage human capital resources. It discusses how big data analytics can be used to address significant strategic human capital questions, enhance overall firm performance, and identify and develop knowledge stars within the workforce. The article also highlights the regulatory and ethical challenges that must be addressed for successful implementation of big data analytics in the HR field. The authors suggest that HR big data analytics that transparently focus on how individual actions directly impact firm performance can positively alter the relationship between employer and employee. Developing small wins and building trust by storytelling meaningful conclusions gained from big data analytics can initiate change both in the organization and in the HR function itself. Overall, the article provides valuable insights for human resource management professionals looking to leverage big data analytics for strategic decision-making.

**David Steffensen et al. (2019)** Conway's "the agenda for Future Research" provides a systematic, multilevel review of the role of managers in human resource management (HRM). It examines the impact of lower-to-middle managers, human resource managers, top management teams, CEOs, and boards of directors on HRM content, process, and outcomes. The review synthesizes existing knowledge about managers' influence on HRM policies and practices, their implementation, and the resulting organizational outcomes. By employing an organizing framework, the review identifies the focus and volume of research at each manager level, offering specific avenues for future research on managers and HRM. The article also highlights the need for increased and specific exploration of the roles managers play in HRM to advance HRM research and practice

**Jing Yi Yong et al. (2019)** presents a comprehensive analysis of the growing attention towards environmental HRM. The review categorizes journal articles based on five focus areas, including the outcome of Green HRM adoption at the organizational and individual levels, concepts/models/reviews of Green HRM, and determinants of Green HRM adoption at the organizational level. The study identifies the International Journal of Human Resource Management and the Journal of Cleaner Production as the most frequent sources of publications. The review proposes areas for future research, including the need for more qualitative research, the exploration of the role of leadership in Green HRM, and the examination of the impact of Green HRM on employee well-being. Overall, the study highlights the importance of incorporating an environmental perspective in HRM practices and the growing strategic importance of Green HRM in attaining organizational and individual performance.

**Hamidreza Abbasianjahromi et al. (2019)** of research says that's article presents a comprehensive risk-cost optimization model for selecting human resources in construction projects. It identifies and prioritizes risks associated with human resource selection, determines the risk-cost rate of each candidate using the additive-veto decision-making method, and develops an optimization model based on the results. The study demonstrates the application of the zero-one non-linear programming approach to choose the best candidates, aiming to minimize the risk-cost rate. The findings highlight the effectiveness of the model in significantly reducing the risk-cost rate of human resource selection, providing valuable insights for construction companies seeking to optimize their human resource allocation and minimize potential risks.

**John Aliu et al. (2019)** expresses a comprehensive exploration of the significance of human capital in the construction industry. The authors emphasize the critical role of human capital in fostering creativity, innovation, and competitive advantage within organizations. They highlight the importance of skilled and knowledgeable employees in creating a distinct edge over competitors and enhancing customer satisfaction. The study employs a systematic literature review methodology, drawing on a wide range of scholarly articles to present a thorough analysis of the subject. Overall, the article offers valuable insights into the application of human capital theory in the construction industry and its potential implications for the future of the field.

**Mihalj BAKATOR et al. (2019)** published in the Journal of Engineering Management and Competitiveness provides a systematic review of the impact of HRM on companies' competitiveness and overall business performance. The review focuses on answering three main research questions: how does HRM affect overall business performance, what are the other metrics that may be influenced by HRM practices, and what is the synthesis of results from individual studies. The findings suggest a positive relationship between HRM practices and overall business performance, as well as employee wellbeing, productivity, and organizational climate. However, the review also acknowledges potential drawbacks and



limitations to implementing HRM practices for business performance. Overall, the article provides a concise and informative overview of the impact of HRM on business performance.

**Guan Xinlei (2019)** highlights the importance of effective human resources management in achieving strategic goals and identifies key factors that determine the effectiveness of such systems. The file also discusses the challenges and problems that arise in human resources management and provides measures that can be taken to optimize human resources management systems. These measures include strengthening human resources strategy management, implementing effective performance appraisal systems, designing scientific and reasonable salary systems, and strengthening employee training and development. Overall, this file provides valuable information for companies seeking to improve their human resources management systems.

**Hongwei Wang et al. (2020)** presents a study on human error identification and analysis for shield machine operation in tunnelling construction accidents. The authors propose an adapted TRACER method that incorporates hierarchical task analysis and a fine-grained activity level to develop error taxonomies and retrospective analysis procedures for identifying errors in various construction operational situations. The study collected accident cases from various sources and applied data mining techniques to analyse the fine-grained shield machine operation errors identified and coded in the study. The authors suggest that the adapted TRACER framework can provide more efficient and point-to-point decision-making suggestions for human error management to reduce the waste of safety resources and improve the safety management efficiency on the construction site.

**Ali Nawaz Khan et al. (2020)** investigates the impact of ethical leadership on turnover intention and antisocial behaviour in the construction industry, focusing on trust in leaders, procedural justice, and job embeddedness. Based on data from 275 employees of Hong Kong construction companies, the study reveals a negative association between ethical leadership and turnover intention. Furthermore, it demonstrates the moderating role of job embeddedness in the relationship between trust in leaders and turnover intention, as well as the link between procedural justice and turnover intention. These findings underscore the significance of ethical leadership and job embeddedness in mitigating turnover intention and antisocial behaviour, offering valuable insights for construction companies seeking to enhance employee retention and foster a positive work environment.

**Mohsen Sarihi et al. (2020)** explains the benefits and challenges of utilizing multiskilling as a strategy for workforce management across multiple projects. The document proposes a simulation framework that optimizes the allocation process while considering workers' competency status, minimizing costs, and maximizing social sustainability. The article highlights the importance of worker competency and productivity in determining the success of a multiskilled workforce strategy. The authors also discuss the need for further research to investigate whether the nature of specific projects allows a given multiskilling policy to be operationally expedient. Overall, this document provides valuable insights for contractors and workforce managers looking to optimize their human capital and improve their company's performance.

**Argaw Tarekegn Gurmu et al. (2020)** discusses the development of a logistic regression model to predict construction labour productivity based on the implementation levels of human resource management (HRM) practices. The study collected data on the relative importance of each HRM practice and computed the relative importance index (RII) to develop the model. The research found that the implementation of HRM practices has a significant positive impact on productivity, and project delay is negatively correlated with HRM practices. The study also developed a scoring tool to measure the levels of HRM practice implementation and build a logistic regression model of HRM practices and productivity. The findings suggest that the scoring tool can be used to assess the odds of achieving higher or lower productivity in construction projects.

**Katarzyna Piwowar-Sulej et al. (2021)** says an extensive review of the most cited articles in the field of sustainable HRM, focusing on its impact on various HR functions and organizational sustainability. The author identifies the key themes and trends in sustainable HRM, such as green HRM practices, psychological green climate, and socially responsible HRM, and discusses their implications for recruitment and selection, performance appraisal, compensation, training and development, and HR flow. The review also highlights the limitations of existing research and suggests avenues for future exploration, emphasizing the need for further studies to address the evolving nature of sustainable HRM and its critical role in organizational sustainability. Additionally, the article acknowledges the contributions of





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previous research while emphasizing the necessity for ongoing investigation and development in this vital area of human resource management.

**Mohammad Reza Azizi et al.(2021)** provides a comprehensive review of the challenges faced by organizations in managing human resources during the COVID-19 pandemic and offers innovative strategies to address these challenges. The researchers conducted a systematic narrative review of English language articles from international databases, focusing on sustainable organization models in human resource management to overcome the pandemic's challenges. The study emphasizes the importance of enhancing employee satisfaction, productivity, motivation, and health through better working conditions, talent management, and flexibility. Additionally, the authors highlight the need for further empirical research to understand the short-term and long-term effects of COVID-19 on human resources, emphasizing the significance of qualitative studies and empirical research to develop effective management strategies. The corrigendum in the article provides transparency regarding the methodology used in the study, ensuring accuracy and reliability in the research findings

**Matthias Bahr et al.(2021)** discusses a comprehensive review of the impact of human capital on productivity growth in the construction industry. The paper highlights the importance of management practices, employee skills, and demographic changes on productivity growth. It also discusses the challenges faced by the construction industry in attracting and retaining skilled labour, and the potential of automation to address these challenges. The review concludes that investing in human capital development and adopting innovative management practices can lead to significant improvements in productivity and competitiveness in the construction industry.

**Neha Gupta (2022)** Conway's the impact of employee demographics on human resource practices in Metro Rail service sector organizations in India. The study finds that demographic variables such as age, experience, and grade have a significant impact on employees' attitudes towards HR practices. The research highlights attitudinal differences towards the application of many HR practices, which conform to Pfeffer's finding of the crucial role that demography plays in the area of HR research. The study suggests that HR professionals can benefit from the study of employee demographics and its linkage with employee's behavior and approach towards jobs and organization. The study concludes that demographic attributes have the potential to anticipate traits for employee attitude, and in the process of designing and developing HR policies and practices, employee demographics should be considered as an integral part of HR policies and practices.

**Rizka Fauzia Amalia Ananda et al.(2022)** aims to provide insights into the optimal functioning of human resources through effective management. The review process began with a search engine, Google Scholar, to search for articles with the keyword "management human resource." The authors found that it is difficult to obtain literature related to human resource management. However, most of the results of the literature review show that human resource information systems are considered to be one of the most important elements that affect the activities of the human resource department. The article concludes that the study of human resource management is a fruitful step for the advancement of human resource information and its practices, and having such an advanced understanding will also make it possible to develop human resource apps more comprehensible.

**Zhen Zeng et al.(2023)** optimizing enterprise human resource information systems. It highlighted the qualitative improvements in various parameters of the company's human resource management information system after the introduction of "Internet + artificial intelligence." The article emphasized the role of information technology in transforming human resource management, freeing personnel from administrative tasks, and providing decision-making support. It also mentioned the shift towards electronic human resource management and the need for a new cooperative relationship between enterprises and employees. Additionally, the article discussed the challenges and opportunities associated with the modernization of enterprise management modes. However, it's important to note that this summary is based on the retracted article's content, and its reliability cannot be guaranteed due to the retraction.

**Beifan Zhang et al.(2023)** describes the meaning and development process of HRM, the impact of the macro environment on HRM, including technological developments and force majeure, and the different stages of organisational innovation activities and changes. The paper also analyses the relationship between human resource management and organisational innovation, as well as the operational processes of both. It highlights the evolving drivers of innovation, the influence of the COVID-19 pandemic on innovation strategies, and the importance of sustaining the implementation of a sustainable development strategy amidst changing demands. The article provides valuable insights into the dynamic interplay



between HRM practices and sustainable organisational innovation, offering a comprehensive overview of the current state of research in this field.

### III. CONCLUSION AND FUTURE WORK

In conclusion, this literature study offers a rich tapestry of insights into the multifaceted realm of Human Resource Management. It highlights the transformative role of big data analytics, the importance of ethical leadership, and the significance of context in HRM research. The study delves into specific industry contexts, such as construction projects, and explores the challenges and strategies faced during the COVID-19 pandemic. By synthesizing research on performance management, Green HRM practices, and workforce demographics, the study contributes to a comprehensive understanding of HRM's evolving landscape. As organizations navigate dynamic environments, the findings presented here provide valuable perspectives for shaping effective HR strategies, fostering employee well-being, and addressing contemporary challenges in the field.

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