

# ADDRESSING TRADITIONAL HRM CHALLENGES IN THE CONSTRUCTION INDUSTRY: INSIGHTS FROM MODERN HRM LITERATURE

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## ABSTRACT

*The construction industry plays a pivotal role in the socio-economic development of any country. However, traditional Human Resource Management (HRM) practices within this sector face numerous challenges, including high labour turnover, skill shortages, and safety concerns, which adversely affect productivity and employee well-being. This study provides an extensive review of modern HRM literature designed to address these challenges towards enhancing organisational performance of the construction industry. The research methodology involved a comprehensive literature review spanning publications from 1990 to 2024, utilising search engines such as Scopus, Google Scholar, Emerald Insight, and Science Direct. The findings reveal that traditional HRM practices, characterised by their administrative focus and reactive approach, have led to significant issues in the construction sector. In contrast, modern HRM practices, which emphasise strategic alignment, employee engagement, continuous learning, and leveraging technology, offer viable solutions. Specifically, practices such as Strategic HRM (SHRM), agile HRM, and data-driven HRM are particularly effective in managing the industry's unique challenges, including workforce mobility, economic fluctuations, and the integration of new technologies. This study contributes to the existing body of knowledge by highlighting the potential of modern HRM practices to transform HRM in the construction industry. Future research should focus on empirically validating the impact of these practices on project performance and exploring innovative HRM strategies tailored to the sector's specific needs.*

**Keywords:** *Construction Industry; Human Resources Management; Modern HRM Concepts; Overcoming HRM Challenges; Traditional HRM.*

## 1. INTRODUCTION

The construction industry is a major contributor of driving social and economic development in any country (Oke et al., 2019). Marked by its dynamic, project-based, and complex nature, (Srour et al., 2017), the sector also employs a spectrum of labour, including migrant, casual, and transient workers, alongside professional staff (Wilkinson

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et al., 2012). Notably, Human Resource (HR) costs constitute a significant portion of total construction expenditure (Al-Hosani & Rashid, 2022).

Meanwhile, the industry's project-oriented complexity and tight schedules along with lengthy working hours, significantly impact employee well-being, both mentally and physically, alongside their job satisfaction, skill development, and work-life balance (Khan et al., 2022). Additionally, the construction industry continues to fall behind in HRM practices, technology adoption, and productivity growth (Kokkaew et al., 2022). However, efficient HRM is crucial for sustainable project outcomes (Othman et al., 2012).

The construction sector's dynamic, project-based structure poses challenges to traditional HRM practices, including poor productivity, skilled labour shortages, and occupational health risks (Fortune et al., 2022; Marambage & Maduwansha, 2021; Yankov & Kleiner, 2001). Moreover, aligning organisational objectives with existing HRM capabilities remains a critical challenge, necessitating innovative strategies to address evolving industry demands (Uzoamaka et al., 2021; Yankov & Kleiner, 2001). Despite these challenges, the construction industry's adaptability facilitates the integration of innovative HRM concepts, emphasising an employee-centric approach to mitigate existing challenges (Lyngnes, 2024). In recent years, there has been a growing recognition that enhancing HRM performance is essential for improving efficiency, productivity, and cost-effectiveness in the construction industry (Fortune et al., 2022).

Modern HRM in construction emphasises strategic workforce management to enhance project performance, focusing on employee welfare and organisational goals (Wilkinson et al., 2012), with research yet to fully elucidate the precise impact of modern HRM practices on project performance (Chapano et al., 2018). Moreover, HRM aligns with most of the key success factors in construction, including efficiency enhancement, professionalism elevation, and procurement strategy improvement (Al-Hosani & Rashid, 2022). Hence, an effective HRM framework would elevate employee involvement and dedication towards an intended output, by addressing their concerns such as work-life balance, while focusing on the organisational reputation and resource utilisation (Al-Hosani & Rashid, 2022).

Despite the critical role of HRM in the construction industry, there is limited understanding of how modern HRM practices can effectively address the challenges posed by traditional HRM approaches. This gap in knowledge highlights the need for a deeper exploration of contemporary HRM strategies to enhance their application in this sector. In this context, this paper aims to explore the application of modern HRM practices in overcoming the challenges associated with traditional HRM practices in the construction industry. By conducting a comprehensive literature review and synthesising existing research and insights, this study seeks to offer valuable recommendations for practitioners, researchers, and policymakers to improve HRM practices within the construction sector.

## **2. RESEARCH METHODOLOGY**

An extensive body of literature delves into the historical development of a subject and studies the key themes to deepen the significance of the study (Saunders et al., 2023). Snyder (2019) further elaborates on this, stating that a comprehensive literature synthesis aids in establishing the theoretical roots of a study. Hence, to obtain a thorough grasp of

the challenges of traditional HRM in the construction industry and the modern HRM strategies to address them, the findings of a literature analysis served as the foundation for this paper.

A comprehensive literature review was conducted by referring to books, reports, theses, journals, and conference proceedings to identify the concept of traditional HRM, the issues of traditional HRM in the construction industry, and the applicable modern HRM strategies to overcome them. The literature review included publications from 1990 to 2023 to ensure a broad and historical perspective on HRM practices in the construction industry. To compile a comprehensive literature synthesis, search terms such as ‘Traditional Human Resources Management Practices in Construction Industry’, and ‘Challenges of Traditional Human Resources Management in Construction’, ‘Modern Human Resource Management Practices’, ‘Trends of Human Resource Management in Construction Industry’ were filtered using the available search engines including ‘Scopus’, ‘Google Scholar’, ‘Emerald Insight’, and ‘Science Direct’.

### **3. FINDINGS AND DISCUSSION**

#### **3.1 TRADITIONAL HRM IN THE CONSTRUCTION INDUSTRY**

Traditional HRM, often referred to as personnel management, has been the foundation of HR operations for decades (Torrington et al., 2017). Traditional HRM practices are typically characterised by, (i) their administrative focus dealing with day-to-day operations rather than long-term strategic goals (Torrington et al., 2017), (ii) reactive approach to managing people (Kramar, 2014), (iii) hierarchical organisational structure with a strong emphasis on adherence to policies and procedures (Storey, 2006), and (iv) limited employee development focusing on job-specific skills and mandatory safety training rather than broader professional development hindering long-term career growth and employee satisfaction (Tharenou et al., 2007).

Similarly in the construction industry, these practices often emphasise administrative functions, focusing on compliance and labour relations, with minimal strategic alignment (Bukhari et al., 2021). These practices typically involve ‘hard’ HRM models that prioritise control, cost efficiency, and task-oriented management, particularly for manual workers (Druker et al., 1996). Traditional approaches are characterised by reactive and opportunistic pragmatism, showing little strategic integration with corporate objectives (Duberley & Walley, 1995).

However, traditional HRM challenges exert both beneficial and detrimental effects on the global construction industry (Akomah et al., 2020). Renowned for its complexity (Fortune et al., 2022) and project-based structure, the construction sector demands workforce flexibility and extensive subcontracting, posing numerous challenges for HRM and employment relations (Wilkinson et al., 2012). Thus, HRM activities encounter significant obstacles, including high labour costs, lack of permanent staff, skill shortages, reliance on ad hoc labourers, funding inconsistencies, and inadequate management policy frameworks (Fortune et al., 2022). Table 2 further demonstrates the literature findings on challenges and issues of traditional HRM in the construction industry.

### 3.2 MODERN HRM CONCEPTS

The construction industry has traditionally relied on conventional HRM practices; however, there is increasing recognition of the need to adopt modern HRM approaches to address contemporary challenges (Stone et al., 2015). The transition involves a cultural shift towards recognising the strategic value of HR, investing in employee development, and leveraging technology to enhance HRM functions (Wright & Nishii, 2007).

Modern HRM practices integrate strategic elements to enhance organisational performance and employee development (Boselie et al., 2005). These practices are often derived from ‘soft’ HRM models that emphasise employee motivation, development, and well-being (Druker et al., 1996). This paradigm shift reflects the growing recognition of employees as key assets and a source of competitive advantage (Guest, 2011). Thus, modern HRM is characterised by; (i) the strategic alignment of HRM with organisational objectives (Boselie et al., 2005), (ii) proactive and transformational approach that fosters innovation and adaptability (Guest, 2011), (iii) recognition of employee engagement and empowerment (Alfes et al., 2013), (iv) commitment to continuous learning and development including leadership development, cross-functional training, and personal development opportunities (Noe, 2010), and (v) leveraging technology and analytics to optimise HRM processes and improve decision-making (Marler & Fisher, 2013). Table 1 sets forth a summary of literature findings on several modern HRM concepts identified.

Table 1: Modern HRM concepts

No.	Modern HRM Concept	Reference
01.	Strategic HRM (SHRM)	[1], [2], [3]
02.	Employee engagement and well-being	[4], [5], [6], [7], [8]
03.	Talent management	[9], [10], [11]
04.	Diversity and inclusion	[12], [13]
05.	Agile HRM	[14], [15]
06.	Performance management	[16], [17], [18]
07.	Learning and development (L&D)	[19], [20], [21]
08.	HR analytics and data-driven HRM	[22], [23], [24], [25], [26]
09.	Employer branding	[27], [28], [29]
10.	Change management	[30], [31]
11.	Corporate social responsibility (CSR)	[32], [33]
12.	Technology and HRM (HR tech)	[34], [35], [36], [37], [38]
13.	Workforce planning and succession planning	[24], [25], [39]
14.	Employee empowerment and participation	[40], [41], [42],
15.	Smart HRM	[23], [43]
16.	Sustainable HRM	[44], [45], [46], [47]
17.	Psychological safety	[5], [48]

[1] (Wright & McMahan, 1992), [2] (Boxall & Purcell, 2003), [3] (Delery & Doty, 1996), [4] (Schaufeli & Bakker, 2004), [5] (Kahn, 1990), [6] (Harter et al., 2002), [7] (Morgan, 2017), [8] (Leblebici, 2012), [9] (Collings & Mellahi, 2009), [10] (Lewis & Heckman, 2006), [11] (Cappelli, 2009), [12] (Cox, 1993), [13] (Roberson, 2006), [14] (Dikert et al., 2016), [15] (Denning, 2016), [16] (Aguinis, 2019), [17] (Denisi & Pritchard, 2006), [18] (Armstrong, 2014), [19] (Noe, 2010), [20] (Aguinis & Kraiger, 2009), [21] (Swanson & Holton, 2009), [22] (Bassi, 2011), [23] (Marler & Boudreau, 2017), [24] (Kavanagh et al., 2012), [25] (Hendrickson, 2003), [26] (Bondarouk & Ruël, 2013), [27] (Backhaus & Tikoo, 2004),

[28] (Berthon et al., 2005), [29] (Ambler & Barrow, 1996), [30] (Kotter, 2009), [31] (Burnes, 2004), [32] (Carroll, 1999), [33] (McWilliams & Siegel, 2001), [34] (Parry & Tyson, 2011), [35] (Bondarouk & Ruël, 2009), [36] (Strohmeier, 2009), [37] (Stone et al., 2015), [38] (Marler & Fisher, 2013), [39] (Rothwell, 2010), [40] (Huselid, 1995), [41] (Spreitzer, 1995), [42] (Becker & Huselid, 2006), [43] (Tambe et al., 2019), [44] (Ehnert & Harry, 2012), [45] (Jabbour & Santos, 2008), [46] (Renwick et al., 2013), [47] (Jackson et al., 2011), [48] (Edmondson, 1999)

Correspondingly, modern HRM in construction aims to address the industry's specific challenges, such as project-based work environments and the need for flexibility in managing multiple forms of employment (Raja et al., 2013). Recent studies indicate that modern HRM practices focus on comprehensive frameworks that include leadership development, employee engagement, and strategic alignment of HR policies with business goals (Bukhari et al., 2021). These practices improve employee satisfaction and enhance organisational competitiveness and project performance (Ling et al., 2018). They help construction firms attract and retain high-potential talent, ensuring balanced growth and long-term success (Rajhans & Bhavsar, 2023).

### 3.3 CHALLENGES OF TRADITIONAL HRM IN THE CONSTRUCTION INDUSTRY

In response to the myriad challenges faced by the construction industry concerning traditional HRM practices, Duke II and Udono (2012) argue that effective HRM now requires new attitudes, perspectives, and competencies geared towards fostering creativity and innovation within organisations. Table 2 presents a summary of literature findings on the challenges encountered by traditional HRM practices in the construction industry and the strategies provided by modern HRM practices to address them.

Table 2: Modern HRM strategies to address traditional HRM challenges in the construction industry

No.	Challenge of Traditional HRM Practices	References	Modern HRM Solution	References
01.	High labour turnover and workforce mobility	[1], [2]	SHRM	[1], [2]
02.	Skill shortages and workforce ageing	[3]	L & D HR analytics and data-driven HRM	[3], [7] [21], [22]
03.	Safety and health concerns	[4]	Agile HRM Psychological safety	[4] [23]
04.	Seasonal and economic fluctuations	[5]	SHRM	[5], [6]
05.	A diverse and transient workforce	[2]	Diversity and inclusion	[2], [24]
06.	Lack of training and development	[6]	L&D	[6], [25], [26]
07.	Inadequate workforce planning	[7]	HR analytics and data-driven HRM	[7], [21]
08.	Resistance to change	[8]	Change management	[8], [27], [28]
09.	Compliance with labour laws and regulations	[9]	SHRM	[1], [9]
10.	Communication barriers	[10]	Employee engagement and well-being	[10], [29]
11.	Project-based nature of work	[11]	Agile HRM	[3], [11]

No.	Challenge of Traditional HRM Practices	Modern HRM Solution
12.	Financial constraints [12]	CSR [12], [30]
13.	Integration of new technologies [13]	HR tech [13], [31], [32]
14.	Reliance on subcontractors and temporary labour [14]	Employee empowerment and participation [14], [33]
15.	Talent retention [15], [16], [17], [18], [19], [20]	Talent management [15], [34], [35]

[1] (Raja et al., 2013), [2] (Bukhari et al., 2021), [3] (Raiden et al., 2004), [4] (Harvey et al., 2019), [5] (Srivastava & Agarwal, 2012), [6] (Pató et al., 2022), [7] (Abanda et al., 2017), [8] (Demirkesen & Tezel, 2021), [9] (Olawumi et al., 2018), [10] (Porwal & Hewage, 2013), [11] (Söderlund & Bredin, 2006), [12] (Shah & Sankar, 2013), [13] (Evans & Farrell, 2020), [14] (Vass & Gustavsson, 2017), [15] (Rajhans & Bhavsar, 2023), [16] (Phua, 2012), [17] (Kokkaew et al., 2022), [18] (Srouf et al., 2017), [19] (Hongmin & Yanbing, 2011), [20] (Thompson, 2011), [21] (Kavanagh et al., 2012), [22] (Bassi, 2011), [23] (Edmondson, 1999), [24] (Cox, 1993), [25] (Noe, 2010), [26] (Aguinis & Kraiger, 2009), [27] (Kotter, 2009), [28] (Burnes, 2004), [29] (Schaufeli & Bakker, 2004), [30] (Carroll, 1999), [31] (Parry & Tyson, 2011), [32] (Bondarouk & Ruël, 2009), [33] (Huselid, 1995), [34] (Collings & Mellahi, 2009), [35] (Lewis & Heckman, 2006)

As illustrated by Table 2, the construction industry faces numerous challenges stemming from traditional HRM practices, which often lead to high labour turnover, workforce mobility, and skill shortages. High labour turnover and workforce mobility cause instability and increased recruitment costs (Bukhari et al., 2021; Raja et al., 2013). SHRM can address these challenges by aligning HRM practices with organisational goals, thereby enhancing employee retention and stability (Bukhari et al., 2021; Raja et al., 2013). Simultaneously, skill shortages and an ageing workforce complicate the landscape, causing delays and increased costs (Raiden et al., 2004). Implementing L&D programmes can mitigate these issues by continuously upgrading the skills of the workforce, while HR analytics can provide data-driven insights to identify and fill skill gaps (Abanda et al., 2017; Bassi, 2011; Kavanagh et al., 2012; Raiden et al., 2004). Additionally, compliance with labour laws and regulations requires significant administrative effort and can lead to legal challenges if not managed properly (Olawumi et al., 2018). SHRM can streamline compliance by integrating legal requirements into strategic HR planning, thereby reducing the risk of non-compliance (Olawumi et al., 2018; Raja et al., 2013).

Safety and health concerns due to the hazardous nature of construction work result in project delays and legal liabilities (Harvey et al., 2019). Agile HRM and fostering a culture of psychological safety can improve workplace safety by promoting adaptive, responsive HR practices and ensuring that employees feel safe to report hazards (Edmondson, 1999; Harvey et al., 2019). In addition, the project-based nature of construction work necessitates the rapid formation and disbanding of teams, which can disrupt team cohesion and knowledge transfer (Söderlund & Bredin, 2006). Agile HRM practices can address this by promoting flexibility and adaptability in team management (Raiden et al., 2004; Söderlund & Bredin, 2006). Furthermore, seasonal and economic fluctuations present another challenge, leading to unstable employment and workforce planning difficulties (Srivastava & Agarwal, 2012). SHRM can help organisations better navigate these fluctuations by integrating long-term strategic planning with HRM practices (Pató et al., 2022; Srivastava & Agarwal, 2012). Moreover, financial constraints often limit investment in employee development and retention strategies (Shah & Sankar, 2013). CSR initiatives can provide a framework for investing in employee well-being and

sustainable practices, thereby enhancing organisational reputation and employee loyalty (Carroll, 1999; Shah & Sankar, 2013).

Managing a diverse and transient workforce requires effective communication and coordination (Bukhari et al., 2021). Emphasising diversity and inclusion can create a more cohesive and collaborative work environment, improving team dynamics and productivity (Bukhari et al., 2021; Cox, 1993). Moreover, communication barriers among various stakeholders can lead to misunderstandings, errors, and project delays (Porwal & Hewage, 2013). Fostering employee engagement and well-being can enhance communication and collaboration, ensuring that all team members are aligned with project goals (Porwal & Hewage, 2013; Schaufeli & Bakker, 2004). Alongside this, lack of training and development affects productivity and innovation (Pató et al., 2022). Implementing robust L&D programmes can ensure continuous skill development and career growth opportunities for employees, leading to higher engagement and retention (Aguinis & Kraiger, 2009; Noe, 2010; Pató et al., 2022). Moreover, resistance to change is a pervasive issue in the construction industry, hindering the adoption of modern HRM practices and technologies (Demirkesen & Tezel, 2021). However, effective change management strategies, such as those proposed by Kotter (2009) and Burnes (2004), can facilitate smoother transitions by involving all stakeholders in the change process and addressing resistance proactively.

The integration of new technologies such as BIM and lean construction is another challenge due to the traditional practices prevalent in the industry (Evans & Farrell, 2020). Embracing Technology and HRM can facilitate the adoption of these technologies, improving efficiency and project outcomes (Bondarouk & Ruël, 2009; Evans & Farrell, 2020; Parry & Tyson, 2011). In addition, reliance on subcontractors and temporary labour forces complicates the enforcement of consistent HRM practices (Vass & Gustavsson, 2017). Empowering employees and promoting participation can enhance commitment and consistency across the workforce (Huselid, 1995; Vass & Gustavsson, 2017). Lastly, talent retention is a significant challenge due to the competitive and transient nature of the construction industry (Rajhans & Bhavsar, 2023). Effective talent management strategies can help attract, develop, and retain skilled workers, ensuring that the organisation remains competitive and capable of meeting its project demands (Collings & Mellahi, 2009; Lewis & Heckman, 2006; Rajhans & Bhavsar, 2023).

#### **4. CONCLUSIONS AND WAY FORWARD**

This comprehensive literature review has explored the challenges associated with traditional HRM practices in the construction industry and the potential solutions offered by modern HRM strategies. The findings indicate that traditional HRM practices, characterised by administrative focus, reactive approaches, and limited employee development, have resulted in significant issues such as high labour turnover, skill shortages, safety concerns, lack of training and development, and talent retention. These challenges have hindered productivity and employee well-being in the construction sector. Modern HRM practices, which emphasise strategic alignment, employee engagement, continuous learning, and leveraging technology, offer viable solutions to these challenges. SHRM, agile HRM, and data-driven HRM are particularly effective in addressing the industry's specific needs, such as managing a transient workforce, ensuring safety, and navigating economic fluctuations. By integrating such modern HRM

practices, construction firms can enhance organisational performance, improve employee satisfaction, and achieve better project outcomes.

Thus, this study has provided a comprehensive overview of the application of modern HRM practices within the construction industry to address the challenges of traditional HRM. Future research should focus on empirically validating the impact of these practices on construction project performance and exploring innovative HRM strategies tailored to the industry's unique challenges, which would further benefit the sector.

## 5. REFERENCES

- Abanda, F. H., Tah, J. H. M., & Cheung, F. K. T. (2017). BIM in off-site manufacturing for buildings. *Journal of Building Engineering*, 14, 89–102. doi:10.1016/j.jobe.2017.10.002
- Aguinis, H. (2019). *Performance management* (3<sup>rd</sup> ed.). John Wiley & Sons, Inc. Retrieved from <https://vulms.vu.edu.pk/Courses/HRM713/Downloads/Performance%20Management%203rd%20Edition%20by%20Aguinis.pdf>.
- Aguinis, H., & Kraiger, K. (2009). Benefits of training and development for individuals and teams, organizations, and society. *Annual Review of Psychology*, 60(1), 451–474. doi:10.1146/annurev.psych.60.110707.163505
- Akomah, B. B., Ahinaquah, L. K., & Mustapha, Z. (2020). Skilled labour shortage in the building construction industry within the central region. *Baltic Journal of Real Estate Economics and Construction Management*, 8(1), 83–92. doi:10.2478/bjreecm-2020-0006
- Alfes, K., Truss, C., Soane, E. C., Rees, C., & Gatenby, M. (2013). The relationship between line manager behavior, perceived HRM practices, and individual performance: Examining the mediating role of engagement. *Human Resource Management*, 52(6), 839–859. doi:10.1002/hrm.21512
- Al-Hosani, A. E. Y., & Rashid, N. B. A. (2022). Conceptual framework of sustainable green human resource management (SGHRM) and its effect on sustainability in green building. *Journal of Tianjin University Science and Technology*, 55(4), 562-575. doi:10.17605/OSF.IO/5DRXF
- Ambler, T., & Barrow, S. (1996). The employer brand. *Journal of Brand Management*, 4(3), 185–206. doi:10.1057/bm.1996.42
- Armstrong, M. (2014). *Armstrong's handbook of performance management: An evidence-based guide to delivering high performance* (13th ed.). Ashford Colour Press Ltd. Retrieved from <https://nibmehub.com/opac-service/pdf/read/Armstrong's%20Handbook%20of%20Human%20Resource%20Management%20Practice.pdf>
- Backhaus, K., & Tikoo, S. (2004). Conceptualizing and researching employer branding. *Career Development International*, 9(5), 501–517. doi:10.1108/13620430410550754
- Bassi, L. (2011). Raging debates in HR analytics. *People and Strategy*, 34(2), 14–18. Retrieved from <https://mcbassi.com/wp/wp-content/uploads/2018/06/RagingDebatesInHRAnalytics.pdf>
- Becker, B. E., & Huselid, M. A. (2006). Strategic human resources management: Where do we go from here? *Journal of Management*, 32(6), 898–925. doi:10.1177/0149206306293668
- Berthon, P., Ewing, M., & Hah, L. L. (2005). Captivating company: Dimensions of attractiveness in employer branding. *International Journal of Advertising*, 24(2), 151–172. doi:10.1080/02650487.2005.11072912
- Bondarouk, T., & Brewster, C. (2016). Conceptualising the future of HRM and technology research. *The International Journal of Human Resource Management*, 27(21), 2652–2671. doi:10.1080/09585192.2016.1232296
- Bondarouk, T., & Ruël, H. (2013). The strategic value of e-HRM: Results from an exploratory study in a governmental organization. *The International Journal of Human Resource Management*, 24(2), 391–414. doi:10.1080/09585192.2012.675142
- Bondarouk, T. V., & 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. doi:10.1080/09585190802707235



- Boselie, P., Dietz, G., & Boon, C. (2005). Commonalities and contradictions in research on human resource management and performance. *Human Resource Management Journal*, 15(3), 67–94. doi:10.1111/j.1748-8583.2005.tb00154.x
- Boxall, P., & Purcell, J. (2003). Strategy and human resource management. *Management Decision*, 57(1), 523–524. doi:10.1108/00251740310479368
- Bukhari, H., Musarat, M. A., Alaloul, W., & Altaf, M. (2021). Human resource management (HRM) practices in construction organizations: A review. *International Review of Civil Engineering (IRECE)*, 12(4), 255–263. doi:10.15866/irece.v12i4.18848
- Burnes, B. (2004). Kurt Lewin and the planned approach to change: A re-appraisal. *Journal of Management Studies*, 41(6), 977–1002. doi:10.1111/j.1467-6486.2004.00463.x
- Cappelli, P. (2009). Talent on demand – Managing talent in an age of uncertainty. *Strategic Direction*, 25(3). doi:10.1108/sd.2009.05625cae.001
- Carroll, A. B. (1999). Corporate social responsibility: Evolution of a definitional construct. *Business & Society*, 38(3), 268–295. doi:10.1177/000765039903800303
- Chapano, M., Iwu, C. G., & Twum-Darko, M. (2018). The impact of high performance work practices on project performance. A case study of construction companies in South Africa. *Æconomica*, 14(1), 45–59. Retrieved from <http://digitalknowledge.cput.ac.za/handle/11189/6526>
- Collings, D. G., & Mellahi, K. (2009). Strategic talent management: A review and research agenda. *Human Resource Management Review*, 19(4), 304–313. doi:10.1016/j.hrmr.2009.04.001
- Cox, T. (1993). *Cultural diversity in organizations: Theory, research & practice*. Berrett-Koehler publ.
- Delery, J. E., & Doty, D. H. (1996). Modes of theorizing in strategic human resource management: Tests of universalistic, contingency, and configurations performance predictions. *Academy of Management Journal*, 39(4), 802–835. Retrieved from <https://arwana007.wordpress.com/wp-content/uploads/2012/02/modes-of-theorizing-in-shrm.pdf>
- Demirkesen, S., & Tezel, A. (2021). Investigating major challenges for industry 4.0 adoption among construction companies. *Engineering, Construction and Architectural Management*, 29(3), 1470–1503. doi:10.1108/ECAM-12-2020-1059
- Denisi, A. S., & Pritchard, R. D. (2006). Performance appraisal, performance management and improving individual performance: A motivational framework. *Management and Organization Review*, 2(2), 253–277. doi:10.1111/j.1740-8784.2006.00042.x
- Denning, S. (2016). Agile’s ten implementation challenges. *Strategy & Leadership*, 44(5), 15–20. doi:10.1108/SL-08-2016-0065
- Dikert, K., Paasivaara, M., & Lassenius, C. (2016). Challenges and success factors for large-scale agile transformations: A systematic literature review. *Journal of Systems and Software*, 119, 87–108. doi:10.1016/j.jss.2016.06.013
- Druker, J., White, G., Hegewisch, A., & Mayne, L. (1996). Between hard and soft HRM: Human resource management in the construction industry. *Construction Management and Economics*, 14(5), 405–416. doi:10.1080/014461996373278
- Duberley, J. P., & Walley, P. (1995). Assessing the adoption of HRM by small and medium-sized manufacturing organizations. *The International Journal of Human Resource Management*, 6(4), 891–909. doi:10.1080/09585199500000052
- Duke II, J. E., & Udono, E. N. (2012). A new paradigm in traditional human resource management practices. *Journal of Management and Sustainability*, 2(2), 158–162. doi:10.5539/jms.v2n2p158
- Edmondson, A. (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly*, 44(2), 350–383. doi:10.2307/2666999
- Ehnert, I., & Harry, W. (2012). Recent developments and future prospects on sustainable human resource management: Introduction to the special issue. *Management Review*, 23(3), 221–238. doi:10.5771/0935-9915-2012-3-221
- Evans, M., & Farrell, P. (2020). Barriers to integrating building information modelling (BIM) and lean construction practices on construction mega-projects: A Delphi study. *Benchmarking: An International Journal*, 28(2), 652–669. doi:10.1108/BIJ-04-2020-0169

- Fortune, N. C., Udobi, D. A. N., & Chisom, N. C. (2022). Evaluation of the challenges of human resource management practices in construction companies in Awka South, Anambra State. *IRE Journals*, 5(8), 209-220. Retrieved from <https://www.irejournals.com/formatedpaper/1703210.pdf>
- Guest, D. E. (2011). Human resource management and performance: Still searching for some answers: Human resource management and performance. *Human Resource Management Journal*, 21(1), 3–13. doi:10.1111/j.1748-8583.2010.00164.x
- Harter, J. K., Schmidt, F. L., & Hayes, T. L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *Journal of Applied Psychology*, 87(2), 268–279. doi:10.1037/0021-9010.87.2.268
- Harvey, E. J., Waterson, P., & Dainty, A. R. J. (2019). Applying HRO and resilience engineering to construction: Barriers and opportunities. *Safety Science*, 117, 523–533. doi:10.1016/j.ssci.2016.08.019
- Hendrickson, A. R. (2003). Human resource information systems: Backbone technology of contemporary human resources. *Journal of Labor Research*, 24(3), 381–394. doi:10.1007/s12122-003-1002-5
- Hongmin, L. & Yanbing, D. (2011). Research in HRM of small and medium-sized construction enterprises. In *International conference on business management and electronic information (BMEI)*, The United States, 13-15 May 2011. (pp.190–193). doi:10.1109/ICBMEI.2011.5920426
- Huselid, M. A. (1995). The impact of human resource management practices on turnover, productivity, and corporate financial performance. *Academy of Management Journal*, 38(3), 635–672. doi:10.2307/256741
- Jabbour, C. J. C., & Santos, F. C. A. (2008). Relationships between human resource dimensions and environmental management in companies: Proposal of a model. *Journal of Cleaner Production*, 16(1), 51–58. doi:10.1016/j.jclepro.2006.07.025
- Jackson, S. E., Renwick, D. W. S., Jabbour, C. J. C., & Muller-Camen, M. (2011). State-of-the-art and future directions for green human resource management: Introduction to the special issue. *German Journal of Human Resource Management*, 25(2), 99–116. doi:10.1177/239700221102500203
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), 692–724. doi:10.2307/256287
- Kavanagh, M. J., Thite, M., & Johnson, R. D. (Eds.). (2012). *Human resource information systems: Basics, applications, and future directions* (2<sup>nd</sup> ed.). Sage. Retrieved from [https://www.researchgate.net/publication/277249737\\_Thite\\_M\\_Kavanagh\\_MJ\\_Johnson\\_R\\_D\\_2012\\_Evolution\\_of\\_human\\_resource\\_management\\_human\\_resource\\_information\\_systems\\_The\\_role\\_of\\_information\\_technology\\_In\\_Kavanagh\\_MJ\\_Thite\\_M\\_Johnson\\_R\\_D\\_Eds\\_Human\\_Resource\\_](https://www.researchgate.net/publication/277249737_Thite_M_Kavanagh_MJ_Johnson_R_D_2012_Evolution_of_human_resource_management_human_resource_information_systems_The_role_of_information_technology_In_Kavanagh_MJ_Thite_M_Johnson_R_D_Eds_Human_Resource_)
- Khan, A. N., Khan, N. A., & Soomro, M. A. (2022). The impact of moral leadership on construction employees' psychological behaviors. *IEEE Transactions on Engineering Management*, 69(6), 2817–2825. doi:10.1109/TEM.2020.3020371
- Kokkaew, N., Peansupap, V., & Jekkaw, N. (2022). An empirical examination of knowledge management and organizational learning as mediating variables between HRM and sustainable organizational performance. *Sustainability*, 14(20), 13351. doi:10.3390/su142013351
- Kotter, J. P. (2009, September). Leading change: Why transformation efforts fail. *IEEE Engineering Management Review*, 37(3), pp. 42-48. Retrieved from <https://typeset.io/papers/leading-change-why-transformation-efforts-fail-53ve8fhftey>
- Kramar, R. (2014). Beyond strategic human resource management: Is sustainable human resource management the next approach? *The International Journal of Human Resource Management*, 25(8), 1069–1089. doi:10.1080/09585192.2013.816863
- Leblebici, D. (2012). Impact of workplace quality on employee's productivity: Case study of a bank in Turkey. *Journal of Business, Economics, & Finance*, 1(1), 38-49. Retrieved from <https://dergipark.org.tr/tr/download/article-file/374627>
- Lewis, R. E., & Heckman, R. J. (2006). Talent management: A critical review. *Human Resource Management Review*, 16(2), 139–154. doi:10.1016/j.hrmr.2006.03.001

- Ling, F. Y. Y., Ning, Y., Chang, Y. H., & Zhang, Z. (2018). Human resource management practices to improve project managers' job satisfaction. *Engineering, Construction and Architectural Management*, 25(5), 654–669. doi:10.1108/ECAM-02-2017-0030
- Lyngnes, A. M. (2024). *Building and Construction: Understanding the Employee-centric Organization*. Retrieved from chrome-extension://efaidnbmninnibpcjpcglclefindmkaj/https://landfcg.com/wp-content/uploads/Building-and-Construction.pdf
- Marambage, H. M. B. P., & Maduwansa, N. A. N. J. (2021). Factors affecting work-life balance of construction industries' site workers in Colombo District, Sri Lanka (with special reference to Acces Engineering plc.) *International Journal of Arts and Commerce*, 10(6), 29–40. Retrieved from [https://www.academia.edu/66194344/Factors\\_Affecting\\_Work\\_Life\\_Balance\\_of\\_Construction\\_Industries\\_Site\\_workers\\_in\\_Colombo\\_District\\_Sri\\_Lanka\\_With\\_Special\\_Reference\\_to\\_Acces\\_Engineering\\_plc\\_](https://www.academia.edu/66194344/Factors_Affecting_Work_Life_Balance_of_Construction_Industries_Site_workers_in_Colombo_District_Sri_Lanka_With_Special_Reference_to_Acces_Engineering_plc_)
- Marler, J. H., & Boudreau, J. W. (2017). An evidence-based review of HR analytics. *The International Journal of Human Resource Management*, 28(1), 3–26. doi:10.1080/09585192.2016.1244699
- Marler, J. H., & Fisher, S. L. (2013). An evidence-based review of e-HRM and strategic human resource management. *Human Resource Management Review*, 23(1), 18–36. doi:10.1016/j.hrmr.2012.06.002
- McWilliams, A., & Siegel, D. (2001). Corporate social responsibility: A theory of the firm perspective. *The Academy of Management Review*, 26(1), 117. doi:10.2307/259398
- Morgan, J. (2017). *The employee experience advantage: How to win the war for talent by giving employees the workspaces they want, the tools they need, and a culture they can celebrate*. Wiley. Retrieved from <https://www.perlego.com/book/992031/the-employee-experience-advantage-how-to-win-the-war-for-talent-by-giving-employees-the-workspaces-they-want-the-tools-they-need-and-a-culture-they-can-celebrate>
- Noe, R. A. (2010). *Employee training and development* (5<sup>th</sup> ed.). McGraw-Hill Education. Retrieved from <https://dedi1968blog.wordpress.com/wp-content/uploads/2018/04/employee-training-and-development.pdf>
- Oke, A., Aghimien, D., Aigbavboa, C., & Musenga, C. (2019). Drivers of sustainable construction practices in the Zambian construction industry. *Energy Procedia*, 158, 3246-3252. doi:10.1016/j.egypro.2019.01.995
- Olawumi, T. O., Chan, D. W. M., Wong, J. K. W., & Chan, A. P. C. (2018). Barriers to the integration of BIM and sustainability practices in construction projects: A Delphi survey of international experts. *Journal of Building Engineering*, 20, 60–71. doi:10.1016/j.jobe.2018.06.017
- Othman, I., Idrus, A., & Napiah, M. (2012). Human resource management in the construction of a sustainable development project: Towards successful completion. *Environmental Impact*, 162, 169-180. doi:10.2495/EID120161
- Parry, E., & Tyson, S. (2011). Desired goals and actual outcomes of e-HRM: E-HRM goals and outcomes. *Human Resource Management Journal*, 21(3), 335–354. doi:10.1111/j.1748-8583.2010.00149.x
- Pató, B. Sz. G., Kovács, K., & Abonyi, J. (2022). Challenges of the fourth industrial revolution in HRM: *International Journal of Human Capital and Information Technology Professionals*, 13(1), 1–14. doi:10.4018/IJHCITP.300308
- Phua, F. T. T. (2012). Do national cultural differences affect the nature and characteristics of HRM practices? Evidence from Australian and Hong Kong construction firms on remuneration and job autonomy. *Construction Management and Economics*, 30(7), 545–556. doi:10.1080/01446193.2012.682074
- Porwal, A., & Hewage, K. N. (2013). Building information modeling (BIM) partnering framework for public construction projects. *Automation in Construction*, 31, 204–214. doi:10.1016/j.autcon.2012.12.004
- Raiden, A. B., Dainty, A. R. J., & Neale, R. H. (2004). Current barriers and possible solutions to effective project team formation and deployment within a large construction organisation. *International Journal of Project Management*, 22(4), 309–316. doi:10.1016/j.ijproman.2003.08.002

- Raja, J. Z., Green, S. D., Leiringer, R., Dainty, A., & Johnstone, S. (2013). Managing multiple forms of employment in the construction sector: Implications for HRM. *Human Resource Management Journal*, 23(3), 313–328. doi:10.1111/j.1748-8583.2012.00202.x
- Rajhans, K., & Bhavsar, V. (2023). Impending need of sustainable human resource management practices in construction industry: Evidence from India. *International Journal of Construction Management*, 23(13), 2249–2259. doi:10.1080/15623599.2022.2050569
- Renwick, D. W. S., Redman, T., & Maguire, S. (2013). Green human resource management: A review and research agenda. *International Journal of Management Reviews*, 15(1), 1–14. doi:10.1111/j.1468-2370.2011.00328.x
- Roberson, Q. M. (2006). Disentangling the meanings of diversity and inclusion in organizations. *Group & Organization Management*, 31(2), 212–236. doi:10.1177/1059601104273064
- Rothwell, W. J. (2010). *Effective succession planning: Ensuring leadership continuity and building talent from within* (4<sup>th</sup> ed.). Amacom: American Management Association. Retrieved from <https://hcmindonesia.wordpress.com/wp-content/uploads/2012/12/9b-successionplanhandbook.pdf>
- Saunders, M. N. K., Lewis, P., & Thornhill, A. (2023). *Research methods for business students* (9th Edition). Pearson. Retrieved from [https://www.pearson.com/en-au/media/gnqjwj0v/9781292402727\\_sample.pdf](https://www.pearson.com/en-au/media/gnqjwj0v/9781292402727_sample.pdf)
- Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, 25(3), 293–315. doi:10.1002/job.248
- Shah, S., & Sankar, R. N. A. (2013). Human resource management in the changing business environment of the Indian construction industry: A case study. *Emerald Emerging Markets Case Studies*, 3(6), 1–17. doi:10.1108/EEMCS-05-2012-0095
- Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, 104, 333–339. doi:10.1016/j.jbusres.2019.07.039
- Söderlund, J., & Bredin, K. (2006). HRM in project-intensive firms: Changes and challenges. *Human Resource Management*, 45(2), 249–265. doi:10.1002/hrm.20107
- Spreitzer, G. M. (1995). Psychological, empowerment in the workplace: Dimensions, measurement and validation. *Academy of Management Journal*, 38(5), 1442–1465. doi:10.2307/256865
- Srivastava, E., & Agarwal, N. (2012). The emerging challenges in HRM. *International Journal of Scientific & Technology Research* 1(6), 46–48. Retrieved from <https://www.slideshare.net/slideshow/theemergingchallengesinhrm/52981750>
- Srouf, F. J., Srouf, I., & Lattouf, M. G. (2017). A survey of absenteeism on construction sites. *International Journal of Manpower*, 38(4), 533–547. doi:10.1108/IJM-08-2015-0135
- Stone, D. L., Deadrick, D. L., Lukaszewski, K. M., & Johnson, R. (2015). The influence of technology on the future of human resource management. *Human Resource Management Review*, 25(2), 216–231. doi:10.1016/j.hrmr.2015.01.002
- Storey, J. (Ed.). (2006). *Human resource management: A critical text* (2<sup>nd</sup> ed.). Thomson Learning.
- Strohmeier, S. (2009). Concepts of e-HRM consequences: A categorisation, review and suggestion. *The International Journal of Human Resource Management*, 20(3), 528–543. doi:10.1080/09585190802707292
- Swanson, R. A., & Holton, E. F. (2009). *Foundations of human resource development*. Berrett-Kohler Publishers. Retrieved from <https://lsms.ac/wp-content/uploads/2023/02/18.pdf>
- Tambe, P., Cappelli, P., & Yakubovich, V. (2019). Artificial intelligence in human resources management: Challenges and a path forward. *California Management Review*, 61(4), 15–42. doi:10.1177/0008125619867910
- Tharenou, P., Saks, A. M., & Moore, C. (2007). A review and critique of research on training and organizational-level outcomes. *Human Resource Management Review*, 17(3), 251–273. doi:10.1016/j.hrmr.2007.07.004
- Thompson, P. (2011). The trouble with HRM. *Human Resource Management Journal*, 21(4), 355–367. doi:10.1111/j.1748-8583.2011.00180.x

- Torrington, D., Hall, L., & Taylor, S. (2017). *Human resource management* (10th ed). Financial Times Prentice Hall. Retrieved from <https://dokumen.pub/human-resource-management-9781292129099-9781292129112-9781292191522-5005025235-2662672692-1292129093.html>
- Uzoamaka, O. E., Chisom, N. C., & Chinemenma, O. A. (2021). Analysis of human resources management practices and challenges in construction companies in Nigeria. *European Modern Studies Journal*, 5(3), 209–218. Retrieved from <https://www.researchgate.net/publication/352296752>
- Vass, S., & Gustavsson, T. K. (2017). Challenges when implementing BIM for industry change. *Construction Management and Economics*, 35(10), 597–610. doi:10.1080/01446193.2017.1314519
- Wilkinson, A., Johnstone, S., & Townsend, K. (2012). Changing patterns of human resource management in construction. *Construction Management and Economics*, 30(7), 507–512. doi:10.1080/01446193.2012.711562
- Wright, P.M. & Nishii, L.H. (2007, August). *Strategic HRM and organizational behavior: Integrating multiple levels of analysis*. (CAHRS Working Paper No. 07 - 03). Retrieved from <https://ecommons.cornell.edu/server/api/core/bitstreams/8318d2bf-0b5a-4685-9e2d-bc3cf9703964/content>
- Wright, P. M., & McMahan, G. C. (1992). Theoretical Perspectives for Strategic Human Resource Management. *Journal of Management*, 18(2), 295–320. doi:10.1177/014920639201800205
- Yankov, L., & Kleiner, B. H. (2001). Human resources issues in the construction industry. *Management Research News*, 24(3/4), 101–105. doi:10.1108/01409170110782711