American Journal of Interdisciplinary Studies
Volume 06, Issue 01 (2025)
Page No: 01- 39
Doi: 10.63125/c625ef08

HUMAN RESOURCE MANAGEMENT IN THE TRANSPORT SECTOR: A SYSTEMATIC LITERATURE REVIEW OF STRATEGIC APPROACHES AND SECTORAL IMPACTS

S M Mahfuzur Rahman[1]

[1]*Master of Business Administration (MBA), Northern University, Dhaka, Bangladesh*
Bachelor of Science in Mechanical Engineering, The Institution of Engineers, Bangladesh (IEB), Dhaka, Bangladesh
Assistant Director (Engineer), Bangladesh Road Transport Authority (BRTA), Jhalakathi Circle, Jhalakathi, Bankladesh
Email: mahfuz.brta@gmail.com

Citation:
Rahman, S. M. (2025). *Human resource management in the transport sector: A systematic literature review of strategic approaches and sectoral impacts.* American Journal of Interdisciplinary Studies, 1(1), 01–39. https://doi.org/10.63125/c625ef08

Received:
December 10, 2024

Revised:
January 15, 2025

Accepted:
February 20, 2025

Published:
March 28, 2025

Abstract

This study conducts a comprehensive systematic literature review to examine the strategic Human Resource Management (HRM) practices within the transport sector, encompassing key sub-sectors such as aviation, maritime, rail, logistics, and public transit. Utilizing the PRISMA 2020 guidelines to ensure methodological transparency and rigor, a total of 124 peer-reviewed journal articles published between 2000 and 2024 were identified, screened, and analyzed. The review synthesizes key HRM themes, including performance management, workforce planning and talent acquisition, employee engagement and well-being, digital transformation and technological integration, sustainability practices, diversity and inclusion initiatives, and ESG (Environmental, Social, and Governance) alignment. The findings highlight that HRM strategies in the transport sector are increasingly becoming specialized and responsive to operational complexity, regulatory environments, and evolving workforce expectations. Performance appraisal systems are often closely linked with safety metrics and compliance standards, while digital technologies such as electronic HRM systems, artificial intelligence, and predictive analytics are transforming traditional HR functions. Employee burnout, mental health challenges, and skill shortages continue to affect organizational stability, especially in safety-critical roles. Furthermore, organizations are beginning to embrace green HRM, gender diversity programs, and cross-cultural management practices to address global workforce challenges. Despite these advancements, the review reveals critical gaps, including fragmented theoretical applications, limited cross-sectoral insights, underrepresentation of frontline worker perspectives, and a lack of longitudinal and mixed-method research designs. This study not only consolidates current knowledge but also underscores the pressing need for integrated, context-specific HRM frameworks that align with the dynamic operational, technological, and human demands of the transport sector, offering a robust foundation for both academic inquiry and industry practice.

Keywords

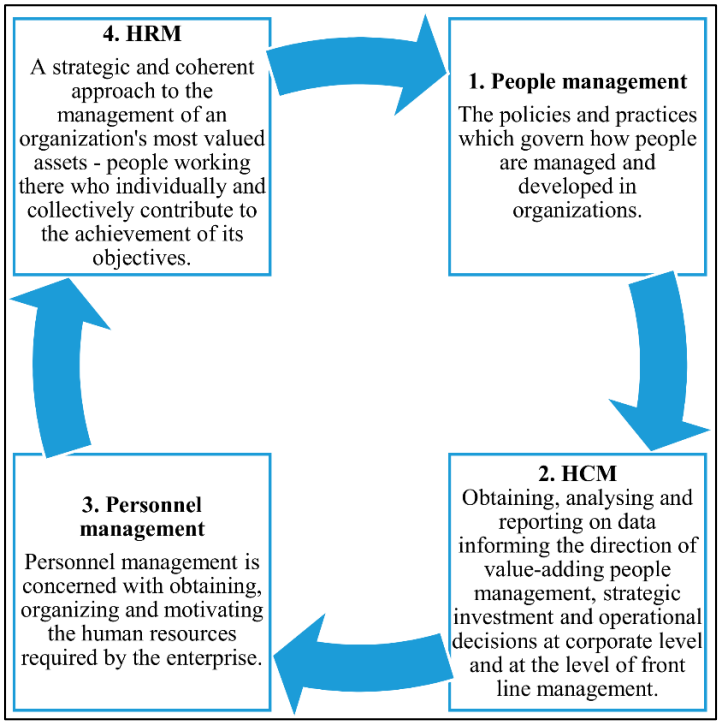
Human Resource Management (HRM); Transport Sector; Strategic HRM; Workforce Development; Sectoral Performancet;

American Journal of Interdisciplinary Studies
Volume 06, Issue 01 (2025)
Page No: 01- 39
Doi: 10.63125/c625ef08

INTRODUCTION

Human Resource Management (HRM) plays an essential role in shaping the performance, efficiency, and resilience of the transport sector, which encompasses aviation, railways, maritime, and road transport (Renwick et al., 2015). The sector's reliance on large-scale human capital, coupled with increasing global demand for mobility, positions HRM at the core of its strategic development (Jia et al., 2018). As the transport sector evolves through globalization and technological advancement, its human resource strategies have undergone significant transformations (Raut et al., 2020). Scholars have examined how HRM strategies affect operational outcomes such as safety, service quality, and labor productivity, particularly in sectors like aviation and logistics (Boudreau, 2013). Increasingly, strategic HRM is viewed as not only a functional necessity but a competitive differentiator that enables organizations to align human capital with organizational goals (Fawehinmi, Yusliza, Mohamad, et al., 2020).

Figure 1: Relationship between the concepts of people management in the enterprise



Source: Kucharčíková and Mičiak (2018)

The dynamic nature of the transport sector presents unique HRM challenges that differ markedly from those in other industries. These include long working hours, fluctuating schedules, safety-sensitive environments, union involvement, and regulatory oversight (Ababneh et al., 2021; Srivastava et al., 2020). For instance, in the aviation sector, HRM strategies are tailored to manage highly skilled labor under strict safety regulations, while in the maritime sector, workforce management often deals with cross-border employment and extended periods at sea (De Koeijer et al., 2022; He et al., 2020). In public transportation systems, HR professionals face issues of aging workforces, recruitment difficulties, and the increasing necessity for digital skillsets (I. Ahmed et al., 2022). These sector-specific conditions necessitate HRM strategies that are not only comprehensive but also adaptive to the environmental, institutional, and technological contexts of each sub-sector (Chaudhary, 2018).

Figure 2: Strategic HRM Flow in the Transport Sector

Strategic HRM in the transport sector has become increasingly focused on talent acquisition, workforce planning, and employee engagement to support operational performance and customer satisfaction (Mehrajunnisa et al., 2021). In logistics and supply chain transportation, companies leverage HR analytics to forecast labor needs and streamline recruitment, thereby minimizing disruptions in service delivery (Aggarwal & Agarwala, 2022). Performance management systems are also integrated with key performance indicators (KPIs) to align employee output with organizational benchmarks in both public and private transport organizations (Haddock-Millar et al., 2015). Studies have further indicated that employee motivation and job satisfaction significantly influence accident rates and service timeliness in rail and road transport services (Benevene & Buonomo, 2020; Alavi & Aghakhani, 2021). Moreover, labor relations remain a central theme in HRM discourse within the transport sector, especially in contexts where unionization is prevalent and labor strikes can heavily disrupt services. Research has explored how effective HRM systems can mediate employer-employee relationships and reduce industrial conflicts (Alavi & Aghakhani, 2021). In sectors such as railway and public bus services, labor relations influence wage agreements, working conditions, and workforce retention (Mehrajunnisa et al., 2021). A collaborative HRM framework that includes employee voice, participative decision-making, and transparent grievance procedures is positively associated with enhanced organizational citizenship behavior and job commitment (Cayrat & Boxall, 2023). In maritime transport, international labor standards such as the Maritime Labour Convention (MLC) are shaping HRM practices related to seafarer welfare and crew management (Faeni et al., 2025). The integration of digital technologies in transport operations has had profound implications for HRM practices, ranging from e-recruitment to performance monitoring and skills training (Alavi & Aghakhani, 2021). E-HRM systems have been widely adopted to increase efficiency in HR workflows and support strategic decision-making, particularly in large transport organizations operating across multiple geographic locations (Benevene & Buonomo, 2020). Automation in logistics, use of AI in route optimization, and predictive maintenance in rail and aviation sectors have necessitated upskilling and reskilling of transport employees (Martínez-del-Río et al., 2012). As a result, HRM functions are increasingly tasked with fostering a culture of continuous learning and technological adaptability through targeted training and development programs (Francis & Baum, 2018).

Sustainability and diversity initiatives are also becoming central components of HRM in transport organizations. The environmental impact of transportation activities has encouraged HR departments to integrate green HRM practices, such as environmental awareness training and eco-friendly commuting incentives (Alavi & Aghakhani, 2021). Furthermore, inclusion and diversity strategies are critical in ensuring equitable access to employment and promotion, particularly for women and minorities in traditionally male-dominated fields like shipping and aviation (Yani et al., 2022). Studies in Europe and Asia have documented how inclusive HRM frameworks contribute to innovation and team effectiveness in cross-functional transport teams (Nishant et al., 2020). Strategic commitment to sustainability and diversity aligns organizational values with broader societal expectations, further embedding HRM within the core strategic agenda of transport firms. Moreover, Organizational agility has emerged as a recurring theme in strategic HRM studies, particularly relevant to transport companies navigating volatile markets, fuel price shocks, and geopolitical instability. Agile HRM practices involve flexible workforce structures, real-time performance feedback, and scenario-based workforce planning to allow rapid

adjustment to external shocks (Frank, 2021). In air transport, for example, companies have turned to contingent staffing and modular team configurations to manage seasonal demand fluctuations and regulatory changes (Kopka & Grashof, 2022). Road freight operators, often operating on thin margins, rely on HRM systems that support rapid onboarding, continuous training, and driver retention (Geissdoerfer et al., 2017). These agile practices are increasingly critical in maintaining service continuity and competitiveness across different transport modalities, reinforcing the strategic value of HRM. The primary objective of this systematic literature review is to critically examine and synthesize existing research on strategic human resource management (HRM) practices within the transport sector, identifying their roles in shaping sectoral performance across various transport modalities, including aviation, maritime, rail, and road transport. This review seeks to explore how strategic HRM approaches—such as workforce planning, talent acquisition, performance management, employee engagement, and technology integration—are implemented in context-specific environments. Through a structured methodology that includes predefined inclusion and exclusion criteria, this review aims to categorize and evaluate peer-reviewed studies published over the last two decades to uncover recurring themes, sector-specific challenges, and the impact of HRM strategies on employee outcomes, organizational efficiency, and regulatory compliance. By doing so, the study offers a comprehensive knowledge base for scholars, HR practitioners, and policymakers seeking evidence-based insights into the strategic value of HRM in the evolving transport industry.

LITERATURE REVIEW

The transport sector represents a complex and multifaceted industry that spans aviation, maritime, rail, and road systems, each with distinct operational frameworks, regulatory requirements, and workforce dynamics. Human Resource Management (HRM) in this sector must align with industry-specific challenges such as safety-critical roles, geographically dispersed operations, skill shortages, and rapidly evolving technologies. To develop a deeper understanding of how HRM strategies contribute to organizational performance and sectoral outcomes, this literature review systematically analyzes peer-reviewed academic studies that address the intersection of strategic HRM and the transport industry. Emphasis is placed on identifying dominant themes, sectoral variations, and contextual factors that influence HRM practices and outcomes. The review is structured to highlight both cross-cutting and sector-specific dimensions of HRM while offering a critical synthesis of existing theoretical models and empirical evidence.

Strategic HRM in High-Reliability and Regulated Industries

High-reliability and regulated industries, such as aviation, maritime transport, railways, and energy, require human resource management (HRM) systems that prioritize safety, precision, and compliance. These industries operate in environments where minor errors can lead to catastrophic consequences, necessitating strategic HRM approaches that integrate risk mitigation with employee performance (Zahrani, 2024). Strategic human resource management (SHRM) in such contexts involves aligning workforce capabilities with regulatory standards and operational complexities (Al-Ansi et al., 2023). According to Kleeff et al. (2023), high-reliability organizations (HROs) adopt HRM systems characterized by rigorous training, consistent feedback mechanisms, and enhanced communication to promote situational awareness and decision-making under pressure. These systems support employee resilience, as documented in the aviation sector by Lizarelli et al. (2022), where relational

American Journal of Interdisciplinary Studies
Volume 06, Issue 01 (2025)
Page No: 01- 39
Doi: 10.63125/c625ef08

coordination was found to improve performance and reliability under intense regulatory and time-sensitive constraints.

Figure 3: Key Practices in Strategic HRM

In aviation and nuclear energy sectors, strategic HRM emphasizes error prevention through structured recruitment, ongoing certification, and adherence to standard operating procedures (SOPs) (Hadid & Mansouri, 2014; Villarreal et al., 2018). Selection criteria in these industries often involve cognitive ability tests, simulation-based assessments, and behavioral event interviews to ensure that candidates possess the necessary competencies and temperament (Mehrajunnisa et al., 2021). Consistent with this approach, Pinzone et al., (2016) showed that rigorous pilot selection and CRM (Crew Resource Management) training reduced human errors in aviation. Moreover, in maritime transport, compliance with the International Safety Management (ISM) Code and Maritime Labour Convention (MLC) requires HRM to enforce structured safety protocols and maintain skill competency through periodic assessments (Cayrat & Boxall, 2023; Shoaib et al., 2021). These compliance-driven HR systems are reinforced by strict documentation and evidence-based auditing (Rizvi & Garg, 2020). Moreover, high-reliability environments place a strong emphasis on learning-oriented HRM systems. Training and development are not one-off activities but recurring, iterative processes designed to ensure employees can respond to dynamic challenges (Collings et al., 2015). In airline and rail systems, simulation-based training and emergency response drills are integrated into routine HR development frameworks to foster technical mastery and psychological readiness (Alferaih et al., 2018). Abualigah et al. (2022) noted that in the global aviation industry, structured training, when combined with performance-based incentives, improved employee commitment and reduced incident rates. Similarly, the oil and gas industry integrates scenario-based training into HR systems to prepare staff for rare but high-impact events, linking training quality directly to operational reliability (Guerci et al., 2015). These training interventions are often supplemented by knowledge-sharing mechanisms and feedback loops that institutionalize organizational learning (Khaskhely et al., 2022). Furthermore, strategic HRM in regulated industries also hinges on robust performance management systems that link individual accountability with organizational goals. In regulated transport sectors, key performance indicators (KPIs) such as punctuality, safety compliance, and incident reporting accuracy are central to appraisals (Shoaib et al., 2021). Research by Cayrat and Boxall (2023) demonstrates that performance-based HR systems in regulated industries can lead to sustained productivity and risk minimization when aligned with strategic objectives. Appraisal systems must remain transparent and fair, as unfair evaluations in high-stress environments can degrade morale and performance (Al Kerdawy, 2018; Huo et al., 2022). In the railway industry, performance reviews are increasingly aligned with safety audits, reinforcing accountability and behavior correction through structured feedback (Shaban, 2019). Strategic alignment between regulatory compliance and HR performance standards

builds a culture of responsibility and continuous improvement (Guerci et al., 2015). Moreover, labor relations in high-reliability and regulated sectors are tightly interwoven with strategic HRM practices. Union involvement is common in public transportation and utilities, often shaping wage negotiations, work conditions, and policy implementation (Gholami et al., 2016; Rizvi & Garg, 2020). Strategic HRM frameworks must balance regulatory mandates with collective bargaining agreements to maintain service continuity and workforce stability (Alferaih et al., 2018). In regulated rail services, proactive labor-management collaboration has been linked to improvements in safety culture and employee engagement (Abualigah et al., 2022). Industrial relations in the aviation sector show that participatory HR practices and communication platforms enhance trust and reduce resistance to procedural changes required for compliance (Khan & Muktar, 2021). Incorporating union feedback into HR planning enables smoother policy execution while preserving workforce alignment with regulatory priorities.

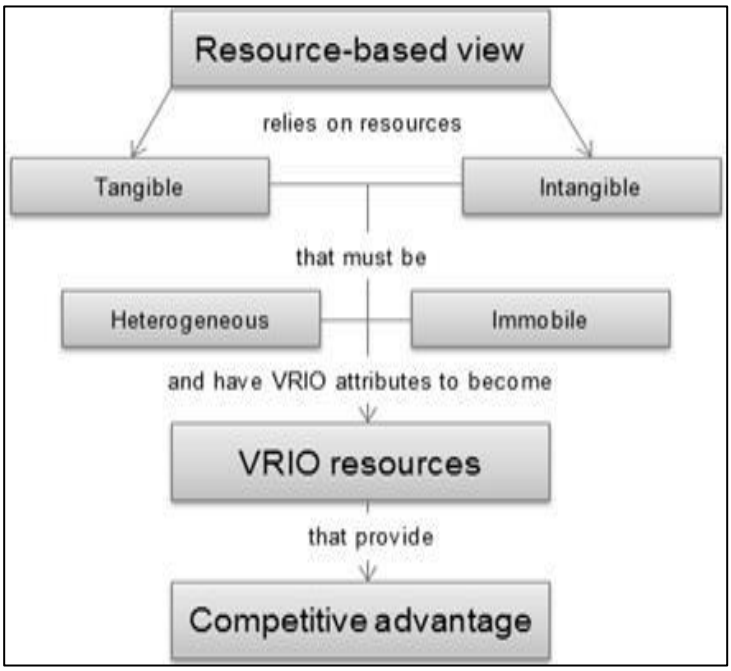
Theoretical Frameworks Relevant to Transport Sector HRM

The transport sector, characterized by operational complexity, regulatory constraints, and safety-sensitive work environments, benefits significantly from theoretically grounded human resource management (HRM) frameworks. Among the prominent theoretical approaches used to understand strategic HRM in transport are the Resource-Based View (RBV), Human Capital Theory, and the Strategic Fit Model. These frameworks enable scholars and practitioners to explore how HRM systems contribute to sustained competitive advantage, workforce capability development, and alignment between HR practices and business strategy (Barney, 1991). The application of these models in high-reliability sectors such as aviation, maritime, and railway has expanded the understanding of workforce planning, employee performance, and organizational effectiveness in transport systems .

Resource-Based View (RBV)

The Resource-Based View (RBV) posits that firms gain and sustain competitive advantage by leveraging valuable, rare, inimitable, and non-substitutable (VRIN) resources, which often include human capital (Barney, 1991). In the transport sector, specialized knowledge, regulatory compliance expertise, and high-skill technical roles are considered strategic resources. Studies in aviation suggest that relational coordination and service reliability are grounded in HR capabilities that cannot be easily replicated (Xie & Lau, 2023). Similarly, in logistics and supply chain transport, employee adaptability and skill specificity have been linked to enhanced operational flexibility, reinforcing the value of HR as a strategic asset (Prabha & Raajarajeswari, 2024). Researchers have

Figure 4: Resource-Based View (RBV)



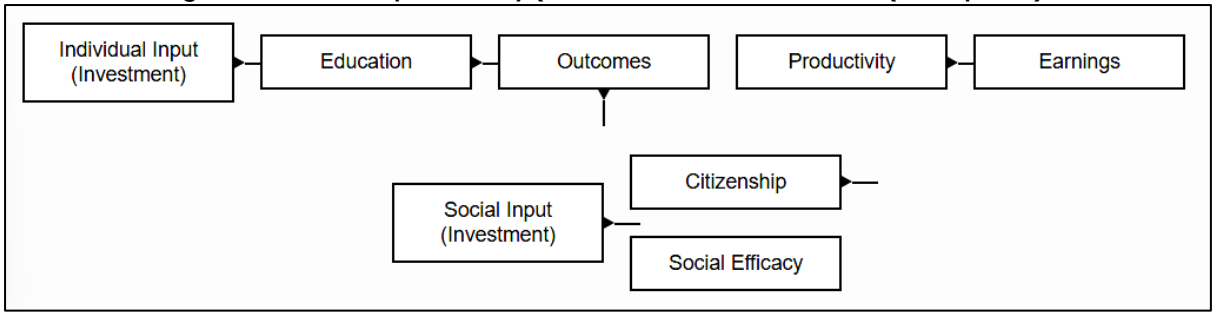
Source: Barney (1991)

emphasized that transport firms with high employee retention, knowledge-sharing cultures, and customized training programs exhibit higher levels of performance and customer satisfaction (Fawehinmi, Yusliza, Kasim, et al., 2020). Within the RBV framework, training and development are strategic mechanisms for nurturing inimitable capabilities, particularly in sectors with safety-critical operations. In maritime transport, companies invest in simulator-based training to build tacit knowledge, which enhances situational awareness and compliance with international safety standards (Prabha & Raajarajeswari, 2024). Similarly, the rail sector depends on experiential learning and apprenticeship programs to develop operational mastery in signal operations, mechanical engineering, and risk prevention (McFadden et al., 2015). These firm-specific training programs not only develop technical proficiency but also reinforce organizational culture and routines, further embedding HRM within the RBV logic (Xie & Lau, 2023). Thus, the transport sector illustrates how sustained investment in workforce development functions as a deliberate RBV-driven strategy to strengthen organizational reliability and regulatory alignment.

Human Capital Theory

The Human Capital Theory, which focuses on the economic value of employee knowledge, skills, and attitude, is particularly relevant in regulated and high-skill transport environments. Schultz (1961) and Becker (1964) introduced the idea that human capital investment leads to increased productivity and organizational performance. In aviation, pilot proficiency, maintenance engineering expertise, and air traffic control skills directly influence operational outcomes and safety standards (Honda et al., 2018). Research by Francis and Baum (2018) shows that investments in team-based training improve both technical and non-technical competencies, such as decision-making and communication, which are critical for error prevention. Human capital accumulation also supports compliance with evolving international regulations in the maritime and logistics sectors, where workforce knowledge must be continuously updated to reflect new safety and environmental standards (Deng et al., 2014; Leyer et al., 2020). The importance of human capital is also evident in the way transport organizations approach retention and knowledge management. Strategic HRM practices that focus on employee retention help preserve organizational knowledge and reduce training costs associated with high turnover (Ababneh, 2021). In freight and public transportation services, research highlights that human capital continuity improves routing efficiency, customer interaction, and vehicle maintenance (Lu et al., 2022). Furthermore, transportation companies adopting human capital-centric HRM systems report higher engagement and job satisfaction, reinforcing the positive returns on investing in people (Li et al., 2019). Organizational strategies that combine recruitment with long-term capability-building underscore the alignment between human capital and sustained sectoral impact.

Figure 5: Human Capital Theory (Source: Swanson and Holton (2001, p. 110)

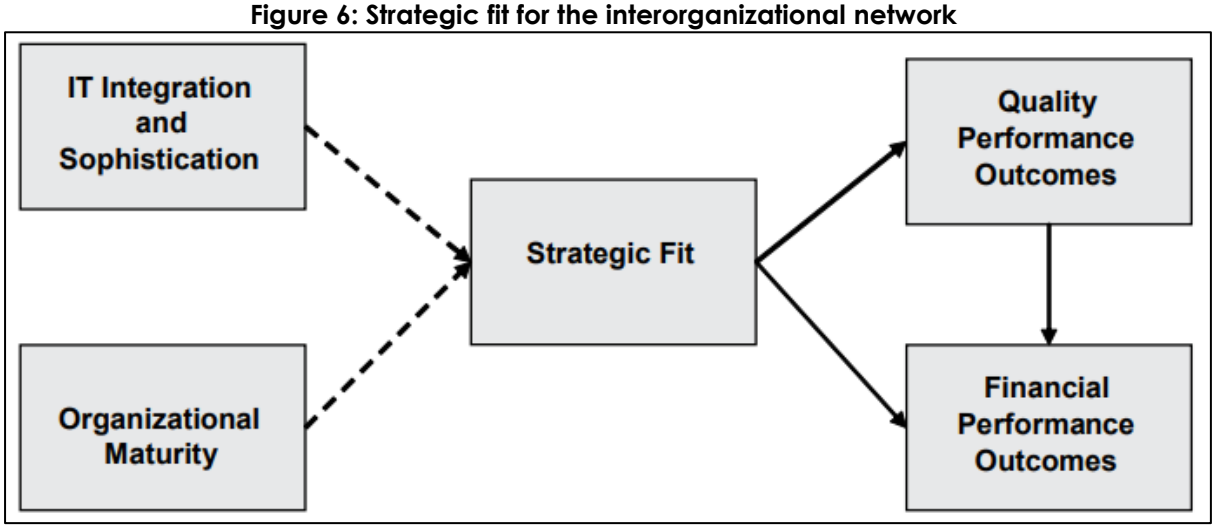


American Journal of Interdisciplinary Studies
Volume 06, Issue 01 (2025)
Page No: 01- 39
Doi: 10.63125/c625ef08

Strategic Fit Model

The Strategic Fit Model underscores the alignment between HRM practices and organizational strategies to enhance performance (Clark et al., 2017). In the context of transport, this model is especially pertinent given the diverse goals of different subsectors—ranging from cost minimization in freight transport to service quality in aviation and compliance in public rail systems. Studies by Leyer et al. (2020) and Silvestre et al. (2018) support that firms with a high degree of fit between their HR strategy and business model perform better than those with misaligned systems. In logistics, strategic fit has been operationalized through performance-based pay, flexible scheduling, and mobile learning platforms to support dynamic service requirements (Silvestre et al., 2018; Honda et al., 2018). These practices improve the alignment between workforce behavior and key operational metrics such as delivery accuracy, fleet uptime, and incident response time. Empirical studies show that the strategic fit between HR practices and organizational objectives significantly improves both employee outcomes and operational efficiency in regulated transport settings. In public transport and railway systems, alignment between employee incentive structures and service delivery goals reduces absenteeism and enhances punctuality (Sun et al., 2023). Similarly, in maritime operations, workforce deployment strategies that match HR planning with voyage cycles and port logistics improve crew well-being and operational readiness. HRM systems that adapt to organizational life cycle stages, regulatory changes, and market shifts maintain their effectiveness over time by remaining contextually responsive (Kucharčíková & Mičiak, 2018). As a result, the strategic fit model reinforces the need for HR configurations that are not only internally consistent but also aligned with external pressures and institutional requirements.

Figure 6: Strategic fit for the interorganizational network



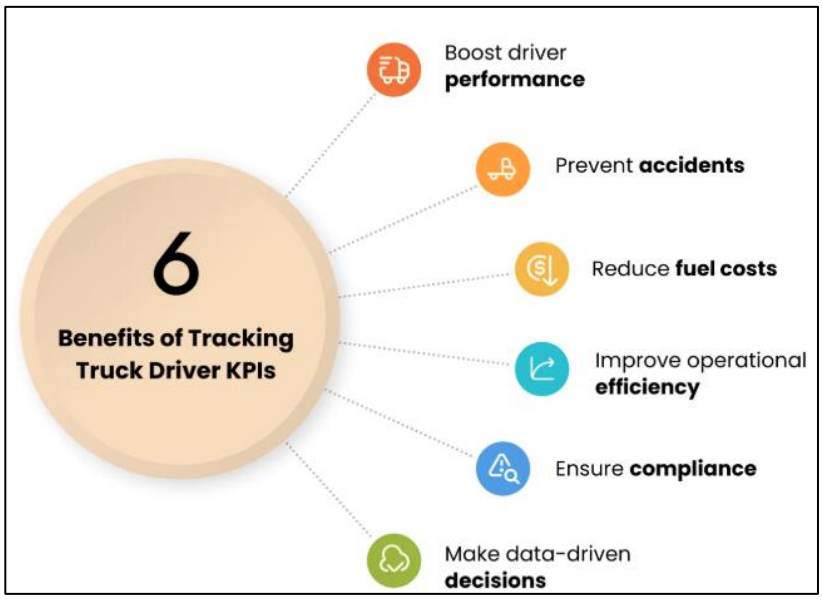
Source: Thrasher and Byrd (2008)

American Journal of Interdisciplinary Studies
Volume 06, Issue 01 (2025)
Page No: 01- 39
Doi: 10.63125/c625ef08

Key Performance Indicators (KPIs) in HRM Effectiveness in Transport

In the transport sector, Key Performance Indicators (KPIs) have become a central mechanism for evaluating the effectiveness of Human Resource Management (HRM) practices (Mohiul et al., 2022). The dynamic and high-risk nature of transport operations necessitates measurement tools that reflect both workforce productivity and organizational compliance with safety and service standards (Al-Hawari et al., 2021; Maniruzzaman et al., 2023). KPIs in transport HRM often cover areas such as employee turnover, absenteeism, training completion rates, regulatory compliance, safety incident rates, customer service quality, and workforce utilization (Ababneh, 2021). Research by Younus et al. (2024) emphasized the need for transport organizations to customize KPI frameworks based on their operational priorities, such as service punctuality in public transport, cargo delivery efficiency in logistics, or safety standards in aviation and railways.

Figure 7: Key Performance Indicators for Truck Drivers



Safety and regulatory compliance are fundamental KPIs in high-reliability transport sectors. In aviation, for instance, pilot fatigue, maintenance errors, and incident reporting are monitored through HR-linked performance indicators (Ababneh, 2021). The European Aviation Safety Agency (EASA) mandates continuous monitoring of competency-based training and performance assessments, emphasizing HR's role in maintaining safety cultures (Lu et al., 2022). Similarly, in maritime transport, adherence to International Safety Management (ISM) codes and Maritime Labour Convention (MLC) standards is translated into HRM KPIs such as crew retention, incident response time, and qualifications compliance (Muisyo et al., 2021). These sector-specific indicators reinforce how HRM contributes to minimizing operational risks and aligning with global regulatory expectations (Piening et al., 2014).

Employee turnover and retention are widely used KPIs in HRM evaluation across transport modes. High turnover has been linked to increased training costs, knowledge loss, and reduced service continuity in logistics, freight, and public transport (Ojo et al., 2020; Piening et al., 2014). In a study of bus and rail operators, (Mehrajunnisa et al., 2021) found that low retention rates were directly associated with job dissatisfaction, inconsistent scheduling, and limited career growth opportunities. HRM systems that integrate engagement metrics and career development pathways tend to reduce voluntary turnover (Alam et al., 2024; Mehrajunnisa et al., 2021; Ojo et al., 2020). For instance, Pinzone et al. (2016) demonstrated that workforce stability among rail maintenance crews was enhanced through structured appraisal and recognition systems. KPIs related to employee exit interviews, time-to-fill vacancies,

and internal mobility rates also serve as early indicators of HR effectiveness and potential operational disruptions (Lu et al., 2022; Mahabub, Das, et al., 2024; Pinzone et al., 2016).

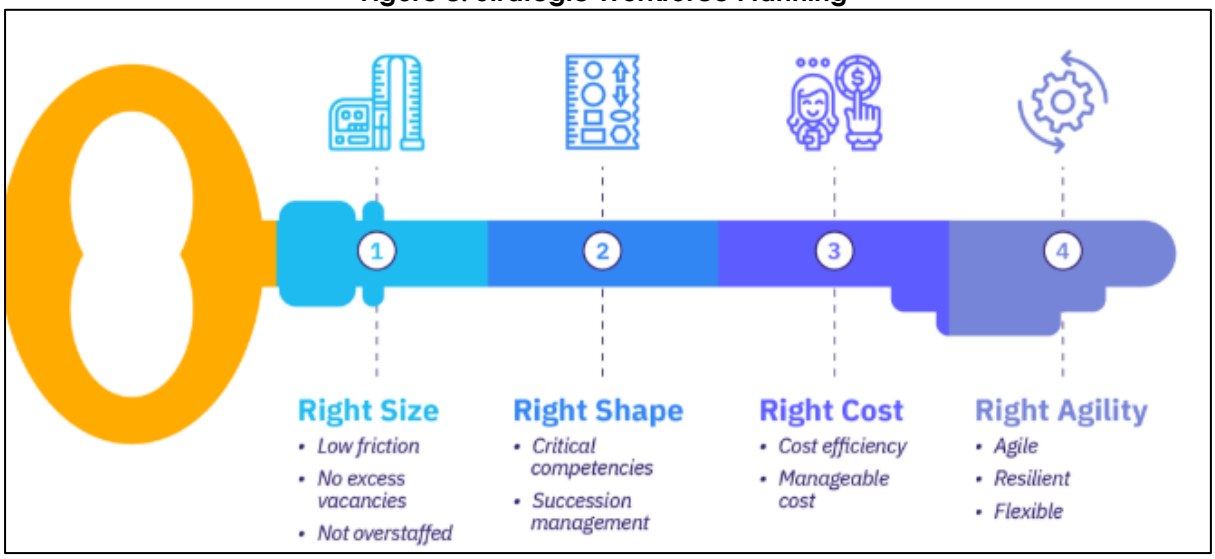
Training and competency development are essential KPIs reflecting HRM's investment in human capital. In regulated environments such as aviation and railways, ongoing certification and retraining are not optional but mandated for operational continuity (Khan, 2025; Ojo et al., 2020; Rubel et al., 2021). Training completion rates, skill gap analyses, and time-to-competency are commonly tracked to ensure workforce preparedness (Hossen et al., 2023; Shoaib et al., 2021). A study by Hossain et al. (2024; Rubel et al., 2021) in the oil and gas sector showed that simulation-based training correlated with reduced safety incidents, which has also been supported in airline crew management literature (Khatun et al., 2025; Piening et al., 2014). Transport organizations use post-training evaluation scores and operational audits as performance measures to verify the effectiveness of HR learning interventions (Sohel et al., 2022; Wikhamn, 2019). In maritime logistics, training KPIs are also tied to sustainability targets and environmental management protocols (Bhuiyan et al., 2024; Muisyo et al., 2021). Moreover, Customer-facing KPIs have gained prominence in HRM evaluations in public and commercial transport services. Service quality metrics such as complaint resolution time, staff courtesy ratings, and on-time service delivery are increasingly used to assess the performance of frontline employees (Roksana, 2023; Wikhamn, 2019). In the rail sector, employee responsiveness and service attitude have been directly associated with commuter satisfaction and system usage rates (Jahan, 2023; Ojo et al., 2020). HRM plays a critical role in embedding customer service excellence through reward systems, training, and behavioral assessments (Faria & Md Rashedul, 2025; Pinzone et al., 2016). Organizations with robust HRM systems that align employee behavior with service goals report higher customer retention and brand reputation (Sabid & Kamrul, 2024; Shaban, 2019). This alignment is facilitated by dashboards that integrate employee KPIs with customer satisfaction indicators for continuous improvement.

Workforce Planning and Talent Acquisition in Transport

Effective workforce planning and talent acquisition are foundational to the success of transport operations, particularly in safety-critical and globally integrated environments. The transport sector faces constant pressure to ensure the availability of skilled personnel to maintain safety, reliability, and operational efficiency. Safety-critical roles in aviation, maritime, rail, and logistics require specialized qualifications, rigorous screening, and continuous certification, creating persistent recruitment challenges (Ahmed et al., 2022; Goh & Lee, 2018). Additionally, demographic shifts, evolving technology, and workforce mobility complicate long-term planning and talent sourcing in transport domains (Al-Arafat, Kabir, et al., 2024; Michopoulou et al., 2020). Human resource management (HRM) in transport must therefore balance short-term staffing needs with long-term strategic workforce development to address operational volatility and regulatory constraints (Munira, 2025; Umrani et al., 2020).

American Journal of Interdisciplinary Studies
Volume 06, Issue 01 (2025)
Page No: 01- 39
Doi: 10.63125/c625ef08

Figure 8: Strategic Workforce Planning



Source: Vulpen (2022)

Recruiting for safety-critical roles such as pilots, air traffic controllers, train operators, and ship engineers involves unique challenges due to stringent regulatory and psychological requirements. The aviation sector, for example, demands candidates with high cognitive performance, strong stress tolerance, and the ability to make rapid, high-stakes decisions (Baum et al., 2020; Sunny, 2024a). Regulatory bodies such as the International Civil Aviation Organization (ICAO) and the Federal Aviation Administration (FAA) mandate strict licensing and ongoing medical and psychological evaluations for pilots and crew (Goh & Lee, 2018; Mahdy et al., 2023). Similarly, rail and maritime transport systems require operators to undergo safety-critical assessments and scenario-based testing to prevent human error in time-sensitive contexts (Abad et al., 2015; Younus, 2025). These high entry barriers reduce applicant pools, extend hiring cycles, and raise costs for organizations (Ahmed & Ozturk, 2018; Sunny, 2024). Research also shows that public perception of high-stress environments and non-standard work hours further deter potential candidates (Dasgupta & Islam, 2024; Xu et al., 2018). Given these recruitment challenges, strategic workforce forecasting becomes essential in transport HRM. Organizations adopt quantitative models and scenario-based planning tools to predict talent needs based on seasonality, infrastructure projects, retirement trends, and policy changes (Al-Arafat, Kabi, et al., 2024; Chazdon et al., 2016; Liu et al., 2020). In the rail industry, for example, workforce planning is driven by models that consider technological adoption, urban expansion, and funding cycles (Moraes et al., 2019; Mahfuj et al., 2022). Airline companies use HR analytics and flight demand projections to estimate future pilot shortages and maintenance crew needs (Hensvik et al., 2020; Shimul et al., 2025). The logistics sector integrates demand forecasting with workforce scheduling algorithms to align talent availability with shipment volumes (Liu et al., 2020; Mahabub, Jahan, et al., 2024). However, forecasting models often suffer from limited integration with national labor databases, making it difficult to align supply chain agility with available talent pools (Arafat et al., 2024; Yu et al., 2016).

Attracting and retaining skilled labor in specialized transport sectors is a recurring HRM challenge. In aviation, the demand for licensed pilots and certified maintenance engineers often outpaces supply, exacerbated by mandatory retirement age regulations and training duration (Ansari & Kant, 2017; Shohel et al., 2024). Employee turnover is particularly high in entry-level aviation roles such as cabin crew, where

irregular schedules and emotional labor contribute to burnout (Xu et al., 2018). Maritime transport struggles with seafarer attrition due to prolonged sea time, isolation, and limited career advancement (Chowdhury et al., 2023; Kusi-Sarpong et al., 2018; Tolon & Karaosmanoglu, 2020). Public transit systems in urban environments face skill shortages in operations and maintenance due to competition from private sector employers and negative public perceptions (Guerci et al., 2015; Tonoy, 2022). Effective retention strategies include employee recognition programs, flexible rostering, structured career paths, and psychosocial support systems (Alam et al., 2023; Froemelt & Wiedmann, 2020; Yakovleva et al., 2012). Studies indicate that organizations investing in long-term employee engagement experience lower turnover and improved service quality (Froemelt & Wiedmann, 2020; Islam et al., 2024). Moreover, transport sub-sectors such as maritime and logistics are particularly affected by cross-border labor dynamics. The maritime sector relies heavily on internationally mobile crews, many of whom are recruited from labor-abundant countries like the Philippines, India, and Indonesia (Abad et al., 2015; Aleem Al Razee et al., 2025). Cross-border recruitment introduces challenges in standardizing certifications, ensuring legal compliance with flag state laws, and managing culturally diverse teams (He et al., 2021; Younus, 2022). Language barriers, inconsistent working conditions, and contract misalignments often lead to labor disputes and high attrition (Islam et al., 2025; Yakovleva et al., 2012). In logistics, transnational companies must navigate variations in labor laws, wage structures, and employment expectations across regions (Froemelt & Wiedmann, 2020; Roy et al., 2024). Talent mobility issues are also influenced by immigration policies and trade regulations, affecting how firms move labor between warehouses, ports, and distribution centers (Monasterolo et al., 2017; Nahid et al., 2024). HRM strategies that incorporate global talent mapping, cultural sensitivity training, and harmonized employment contracts have shown promise in addressing these cross-border challenges (Islam et al., 2025; Yakovleva et al., 2012).

Performance Management and Employee Development

Performance management and employee development are core functions of Human Resource Management (HRM) in the transport sector, where operational safety, regulatory compliance, and service quality depend on a highly trained and well-evaluated workforce (Hossain et al., 2024; Huang et al., 2015). Across aviation, maritime, rail, and road transport, performance appraisal systems, continuous professional development, leadership pipelines, and integrated performance metrics form the backbone of strategic HRM. Given the safety-sensitive and heavily regulated nature of the industry, these practices not only affect internal efficiency but also determine external compliance and customer satisfaction (Ababneh et al., 2021; Jim et al., 2024). Performance appraisal systems in the transport sector vary significantly across sub-sectors due to differing operational priorities and risk levels. In aviation, appraisals often incorporate simulation assessments, peer reviews, and error reports to evaluate both technical and non-technical skills (He et al., 2020; Tonoy & Khan, 2023). These are typically aligned with industry standards such as those set by the International Civil Aviation Organization (ICAO). The rail sector uses structured performance reviews focusing on punctuality, maintenance effectiveness, and incident-free operations (Hasan et al., 2024; Jia et al., 2018). In public transit, performance evaluations emphasize punctuality, customer interaction, and complaint management (Kim et al., 2016; Younus et al., 2024). In maritime transport, appraisal processes are more hierarchical and often tied to voyage logs, crew behavior, and adherence to the International Safety Management (ISM) Code

(Ammar et al., 2024; Behravesh et al., 2019). Each of these systems reinforces task-specific accountability while also supporting broader compliance and service mandates (Aboramadan, 2020; Islam, 2024).

Figure 9: SPD: Performance Management

Training and continuous professional development (CPD) play a critical role in maintaining workforce competence in the transport industry. In aviation, CPD involves recurrent training in emergency procedures, aircraft systems, and crew resource management (Aboramadan, 2020; Shahan et al., 2023). These programs are often simulator-based and are mandated at intervals by national and international aviation authorities (Aklima et al., 2022; Kim et al., 2019). In maritime contexts, CPD encompasses onboard training, refresher courses in navigation technology, and updates on international maritime law (Dumont et al., 2016; Jahan, 2024; Sunny, 2024c). The rail sector utilizes both on-the-job training and classroom instruction to keep drivers and maintenance staff updated on signal systems, rolling stock, and safety standards (Bouville & Alis, 2014). CPD is also used to enhance soft skills such as conflict resolution and multicultural communication, especially for customer-facing roles (Li et al., 2018). Organizations that maintain rigorous CPD programs report fewer safety incidents and higher employee retention (Markey et al., 2015). Moreover, Leadership development and succession planning are increasingly recognized as strategic priorities in transport HRM. The aging workforce in rail and maritime transport has spurred investment in future leader identification and development programs (Omarova & Jo, 2022). Airlines and logistics firms utilize leadership competency models that include decision-making under pressure, team coordination, and regulatory knowledge (Luu, 2018). Structured programs such as executive coaching, mentorship, and rotational assignments are used to groom internal candidates for supervisory and managerial roles (Nekhili et al., 2019). In maritime operations, succession planning is often informal due to contract-based employment, but global shipping firms are adopting structured leadership development models to reduce gaps in continuity (Fawehinmi, Yusliza, Kasim, et al., 2020). These leadership initiatives ensure operational

stability and create a pipeline of talent ready to step into critical roles as part of long-term HR planning (Bouville & Alis, 2014).

Performance management systems in the transport sector are increasingly integrated with safety, regulatory compliance, and operational efficiency metrics. In aviation, for example, the linkage between employee performance and safety indicators such as incident rates, regulatory audit results, and simulator performance scores is well established (Rundall et al., 2020). In the rail and public transit sectors, metrics such as on-time performance, system downtime, and passenger complaints are used alongside employee evaluations to inform HR decisions (Ramadan et al., 2022). Maritime organizations track performance in terms of accident-free voyages, crew adherence to port protocols, and regulatory inspections passed without findings (Hussain et al., 2019). These multi-dimensional KPIs enhance accountability and provide feedback loops for both employees and managers, facilitating continuous improvement (Úbeda-García et al., 2021). Organizations using integrated dashboards to visualize safety and compliance metrics alongside HR indicators have reported measurable gains in efficiency and risk reduction (Al-Samman & Al-Nashmi, 2016).

Employee Engagement, Well-Being, and Job Satisfaction

Employee engagement, well-being, and job satisfaction are critical dimensions of human resource management (HRM) in the transport sector, where workers routinely face high-stress environments, demanding schedules, and safety-sensitive responsibilities (Ababneh et al., 2021). The interplay of physical and psychological stressors, compounded by organizational pressures and external regulations, significantly affects employee morale, performance, and retention. Research in aviation, rail, maritime, and logistics has explored how HRM strategies address these concerns, with emphasis on work design, support systems, and performance incentives (Presslee et al., 2023). Moreover, transport roles are associated with unique psychological and physical stressors due to operational intensity, exposure to hazards, and responsibility for passenger or cargo safety. In aviation, air traffic controllers and flight crew experience chronic stress resulting from prolonged vigilance, shift variability, and decision fatigue (Ababneh et al., 2021). Similarly, rail workers are subjected to stress due to mechanical failures, unpredictable passenger behavior, and time pressure (Veleva et al., 2017). Maritime workers, particularly seafarers, face social isolation, long working hours, and constrained living conditions, all of which contribute to psychological distress (Presslee et al., 2023). Physical stressors such as vibration exposure, noise pollution, and ergonomic strain are also prevalent among long-haul drivers and ground staff in logistics (Veleva et al., 2017). These stressors, if unaddressed, result in elevated absenteeism, health complaints, and performance degradation (Ababneh et al., 2021). Moreover, Burnout and fatigue are persistent problems in the transport sector, exacerbated by shift work, night duties, and minimal recovery time. In aviation, cumulative fatigue has been linked to impaired cognitive functioning and an increased likelihood of human error during critical flight phases (Pournader et al., 2019). Flight crew members, particularly those engaged in international routes, often contend with circadian rhythm disruptions and insufficient sleep, contributing to long-term burnout (Kucharčíková & Mičiak, 2018). Similar patterns are found in rail operations, where conductors and drivers report high levels of emotional exhaustion due to schedule unpredictability and regulatory scrutiny (Al-Ansi et al., 2023). Studies have also indicated that fatigue-related safety incidents are more prevalent in systems that lack structured rest periods and shift rotation protocols (Garmsiri et al., 2016).

American Journal of Interdisciplinary Studies
Volume 06, Issue 01 (2025)
Page No: 01- 39
Doi: 10.63125/c625ef08

Figure 10: Employee Engagement and Job Satisfaction on Maslow's Pyramid

Source: Cooleaf.com(2020)

Organizations that implement workload monitoring, rest breaks, and supportive supervision have reported improvements in health and job performance outcomes (Garza-Reyes et al., 2016). Several models of job satisfaction have been applied to the transport sector to explain variations in employee attitudes and behaviors. The Job Characteristics Model (Villarreal et al., 2016) has been used to assess how task variety, autonomy, and feedback influence satisfaction levels among drivers, engineers, and pilots (Villarreal et al., 2018). Herzberg's Two-Factor Theory has also been used to differentiate between hygiene factors such as pay and working conditions, and motivators such as recognition and career development (Alonso et al., 2017). Studies in public transit show that opportunities for skill use and supportive management correlate positively with satisfaction, whereas rigid schedules and low social support contribute to dissatisfaction and disengagement (Shi et al., 2019). In maritime transport, job satisfaction is influenced by voyage duration, crew size, and access to communication with family (Alonso et al., 2017; Shi et al., 2019). Cross-sector analyses show that higher satisfaction levels predict stronger organizational commitment and lower turnover intentions (Argiyantari et al., 2021). To address these challenges, transport organizations have adopted various HRM strategies aimed at enhancing employee engagement and reducing turnover. Engagement initiatives often include participative decision-making, team-based work structures, and recognition systems tied to service quality and safety performance (Muñoz-Villamizar et al., 2018). For instance, in aviation, crew feedback systems and peer recognition programs have been found to increase emotional involvement and task focus (Moeckel, 2017). In logistics and freight, flexible scheduling and incentive-based pay have contributed to reduced turnover and improved operational efficiency (Ku et al., 2021). Public transportation agencies have implemented mental health programs, wellness activities, and peer mentoring to strengthen employee well-being and engagement (Li et al., 2021). Training and career progression opportunities have also been effective in enhancing retention, particularly among younger employees and underrepresented groups (Villarreal et al., 2018).

Technological Integration and Digital Transformation in HRM

Technological advancements have significantly reshaped Human Resource Management (HRM) functions across transport sectors, leading to more efficient

American Journal of Interdisciplinary Studies
Volume 06, Issue 01 (2025)
Page No: 01- 39
Doi: 10.63125/c625ef08

operations and data-driven decision-making. With increasing complexity in multimodal systems, the integration of digital tools such as electronic HRM (E-HRM) platforms, artificial intelligence (AI), predictive analytics, and automation has enhanced how transport firms manage recruitment, performance, workforce planning, and training (Lu et al., 2023). These tools are especially valuable in large-scale operations where coordination across departments, compliance with safety regulations, and high employee turnover are persistent challenges (Sun et al., 2023).

Figure 11: HR Transformation Strategy

E-HRM systems have been adopted across multimodal transport organizations to centralize HR processes, improve data accuracy, and reduce administrative workload. In aviation, digital HR dashboards are widely used for real-time workforce tracking, training compliance, and leave management (Kar et al., 2019). Maritime and logistics firms utilize E-HRM tools to manage geographically dispersed workforces, monitor certifications, and integrate payroll systems across regions (Srivastava et al., 2020). He et al. (2020) identified that E-HRM adoption in transport improves HR service delivery by offering self-service portals for employees, thereby reducing delays in HR transactions. In railway and public transport systems, digital HR systems assist with scheduling, fatigue tracking, and safety audit integration (Chaudhary, 2018). However, adoption effectiveness often depends on organizational readiness, IT infrastructure, and workforce digital literacy (Ari et al., 2020). Moreover, Artificial intelligence (AI) and predictive analytics have introduced new capabilities in workforce planning, performance prediction, and talent acquisition within the transport sector. AI-driven recruitment tools are used to filter applicants based on required competencies, reducing bias and increasing efficiency (He et al., 2020; Mukherji & Bhatnagar, 2022). Predictive analytics help anticipate turnover, identify training needs, and optimize shift scheduling in logistics and public transit systems (Renwick et al., 2015). In the airline industry, AI applications are used to predict absenteeism trends and forecast staffing needs during peak seasons, minimizing service disruptions (Rok & Mulej, 2014; Úbeda-García et al., 2021). Predictive modeling also supports safety monitoring by identifying patterns linked to fatigue or performance lapses among flight crews and train operators (Chaudhary, 2018). These

applications require high-quality HR data and domain-specific algorithms to be effective and ethically aligned with privacy standards (Jia et al., 2018). As digital transformation accelerates, the need for technological reskilling has emerged as a critical HRM function in the transport industry. Workers in traditional roles, such as vehicle operators, maintenance engineers, and freight handlers, increasingly require training in digital systems, automation tools, and real-time tracking software (Pournader et al., 2019). In rail and maritime sectors, digital platforms for monitoring fuel consumption, mechanical diagnostics, and route optimization necessitate continual upskilling (Qi et al., 2019). However, a significant digital divide persists, particularly among older employees, those in rural logistics hubs, and contract-based maritime labor (Qi et al., 2019). This divide results in disparities in training uptake, employee confidence, and system usability (Chakrabarti, 2018). HRM initiatives that include blended learning approaches, mentoring programs, and tailored digital literacy interventions have been effective in narrowing these gaps (O'Brien & Aliabadi, 2020). Moreover, Automation has had a transformative impact on employment models in freight and logistics by redefining tasks, displacing routine labor, and altering job classifications. Automated warehousing systems, autonomous vehicles, and robotic loading technologies have led to reduced demand for manual labor while increasing demand for technical, supervisory, and IT roles (Li et al., 2021; Qi et al., 2019). Studies in supply chain operations have shown that process automation results in leaner staffing models, with greater emphasis on cross-functional roles and agile workforces (Faeni et al., 2025; Hawchar et al., 2020). HRM in this context must manage workforce transitions through retraining, redeployment, and career reorientation strategies (Gonzalez-Feliu & Morana, 2014). Additionally, labor union negotiations in logistics often reflect concerns over job displacement, contract modifications, and occupational health related to human-machine interaction (Pournader et al., 2019). In response, organizations are exploring hybrid employment models that integrate both automated systems and human oversight to maintain efficiency and worker inclusion (Li et al., 2021).

Sustainability and Inclusive HRM Strategies

Sustainability and inclusion have become central themes in strategic Human Resource Management (HRM) within the transport sector (Nishant et al., 2020). As organizations face increased scrutiny regarding environmental impact, social equity, and corporate governance, HR departments are actively integrating green practices, promoting diversity, and incorporating Environmental, Social, and Governance (ESG) metrics into their operations. These shifts are especially relevant in aviation, logistics, maritime, and public transportation systems, where workforce demographics, regulatory frameworks, and international operations necessitate socially responsible and environmentally aware HRM systems (Frank, 2021). Furthermore, Green HRM (GHRM) practices are increasingly used to align employee behavior with environmental sustainability goals in the transport sector. GHRM encompasses recruitment of environmentally conscious employees, training in energy-saving behaviors, and implementation of green performance appraisals and rewards (Nishant et al., 2020). In logistics, companies encourage eco-driving techniques, warehouse energy conservation, and paperless documentation through HR-facilitated behavioral change initiatives (Gonzalez-Feliu & Morana, 2014). Aviation firms have adopted carbon reduction training programs and fuel-efficiency awareness sessions as part of their HR sustainability agendas (Srivastava et al., 2020). Maritime organizations promote environmental compliance through employee certifications under MARPOL and ISO 14001 standards (He et al., 2020). Studies suggest

that integrating environmental values into HR systems enhances organizational legitimacy and improves employee commitment to sustainability (Guibrunet & Arnés, 2021). Moreover, gender diversity remains a critical issue in the transport industry, where many technical and leadership positions continue to be male-dominated. Research has consistently found underrepresentation of women in aviation engineering, maritime navigation, rail operations, and logistics management (Allaoui et al., 2019). Barriers include gender stereotypes, lack of female role models, unequal access to training, and limited organizational support for work-life balance (Kontokosta & Tull, 2017). In response, transport firms have introduced targeted recruitment, leadership development programs for women, and flexible scheduling policies to attract and retain female employees (Allaoui et al., 2019). Gender-inclusive HR practices such as unconscious bias training, mentorship, and parental leave benefits have shown positive outcomes in improving female participation and leadership representation (Do et al., 2014). Studies in aviation and logistics also show that gender-diverse teams enhance problem-solving and innovation, reinforcing the strategic value of inclusion (Madanaguli et al., 2021).

Transport organizations with global operations face increasing pressure to manage ethnically and culturally diverse workforces. In maritime and aviation sectors, multicultural crews and cross-border teams necessitate HRM systems that foster intercultural communication, respect, and collaboration (Strydom et al., 2019). Cultural competence training, diversity audits, and inclusive onboarding procedures have been shown to improve teamwork and operational cohesion in international settings (Renwick et al., 2015). In logistics, firms operating in multinational supply chains rely on cultural intelligence frameworks to reduce misunderstandings, resolve conflict, and improve coordination across distributed hubs (Alves et al., 2017). Public transport agencies serving diverse communities also benefit from staff who reflect demographic inclusivity and demonstrate cultural sensitivity in customer service interactions (Rupani et al., 2020). Effective diversity management correlates with higher employee engagement, lower turnover, and stronger brand reputation in global transport enterprises (Malpani & Ghosh, 2022; Rupani et al., 2020). The integration of ESG indicators into HRM metrics represents a strategic shift in transport organizations' approach to performance evaluation and reporting. ESG-aligned HRM systems include measures for workforce diversity, labor practices, training hours, health and safety, and environmental awareness (Alves et al., 2017). In aviation, ESG compliance includes tracking gender ratios, CO_2 reduction per employee, and employee participation in sustainability initiatives (Rupani et al., 2020). Rail and logistics firms monitor safety compliance rates, community engagement programs, and ethical labor sourcing under ESG frameworks (Madanaguli et al., 2021). HR analytics platforms increasingly include ESG dashboards that allow real-time tracking of key workforce indicators tied to sustainability and equity (Do et al., 2014). Such integration strengthens stakeholder trust, supports regulatory transparency, and institutionalizes sustainable practices within the organizational culture (Do et al., 2014).

Literature Gaps and Critical Insights

Strategic Human Resource Management (HRM) in the transport sector has evolved through substantial scholarly contributions addressing safety, compliance, training, and workforce performance across modal systems such as aviation, maritime, rail, and logistics (Dumont et al., 2016). However, the breadth and specificity of these studies vary, with many focusing on isolated organizational functions or sector-specific challenges. While valuable insights exist within each sub-sector, cross-sectoral integration remains limited. For instance, studies have examined the relationship

between relational coordination and safety outcomes in aviation (Stahl et al., 2020), training and fatigue in rail (Xie & Lau, 2023), and performance evaluations in maritime operations (Khan et al., 2022). Yet, systematic comparisons across these modes are infrequent, hindering the development of transferable HRM strategies (Moin et al., 2020). This fragmentation weakens theoretical generalization and reduces opportunities for shared policy development.

A synthesis of key findings across transport sub-sectors highlights several dominant themes. Safety and regulatory compliance remain the cornerstones of HRM, particularly in high-risk environments such as aviation and maritime, where stringent international standards govern employee behavior and organizational procedures (Bhatti et al., 2021; Moin et al., 2020). In these contexts, training, performance appraisals, and workforce certification are rigorously aligned with operational objectives. In logistics and freight transport, HRM is more closely aligned with speed, adaptability, and cost-efficiency, emphasizing real-time workforce planning and technological integration (Khan et al., 2022; Manita et al., 2021). Meanwhile, public transit systems prioritize employee engagement, customer service training, and labor relations due to public accountability and service delivery constraints (Bhatti et al., 2021). Despite this diversity, studies converge on the significance of customized training programs, performance-based appraisal systems, and supportive work environments in sustaining operational performance (Moin et al., 2020). Several thematic gaps persist in the literature, particularly concerning emerging strategic HRM areas in transport. Green HRM, though explored in the manufacturing and service sectors, remains underrepresented in transport research. Only a few studies have examined how environmentally sustainable HR practices, such as green training and performance incentives, are integrated into logistics or public transportation systems (Manita et al., 2021). Similarly, the integration of artificial intelligence (AI) and predictive analytics in workforce planning is conceptually addressed but lacks empirical grounding in the transport context (Muisyo et al., 2023). These technologies have been implemented in select aviation and logistics operations, yet few peer-reviewed studies have examined their long-term impact on recruitment, attrition, or compliance metrics (Faisal, 2023). Another underexplored domain includes the role of HRM in emerging transport innovations, such as electric mobility, drone delivery, and autonomous vehicles, which have yet to be integrated into HRM frameworks.

Table 1: Identified Gaps in this study

Gap Area	Description of Gap	Impact
Cross-Sectoral Integration	Limited comparison and integration of HRM practices across aviation, maritime, rail, and logistics sectors.	Limits development of generalized HRM strategies and policies across the sector.
Green HRM in Transport	Underrepresentation of environmentally sustainable HR practices such as green training and incentives in transport studies.	Slows adoption of sustainable HR practices in logistics and public transport.
AI & Predictive Analytics in HRM	Conceptual discussions exist, but lack of empirical research on AI and analytics in recruitment, compliance, and workforce planning.	Reduces ability to assess long-term effectiveness and strategic value of HR tech.
HRM in Emerging Transport Innovations	Minimal research on HRM's role in emerging technologies like electric mobility, drones, and autonomous vehicles.	HR strategies remain outdated and misaligned with technological evolution.

Gender & Diversity Inclusion	Inconsistent attention to gender, cultural inclusion, and diversity strategies, especially in freight and warehousing.	Hinders formulation of inclusive HRM systems; overlooks major workforce segments.
Methodological Rigor	Overreliance on cross-sectional data and qualitative case studies; lack of longitudinal and multi-level research designs.	Weakens reliability and generalizability of research findings.
Theoretical Application	Frequent mention of RBV, Strategic Fit, and Human Capital Theory without operational contextualization for transport systems.	Decreases practical relevance of frameworks for practitioners in transport HRM.

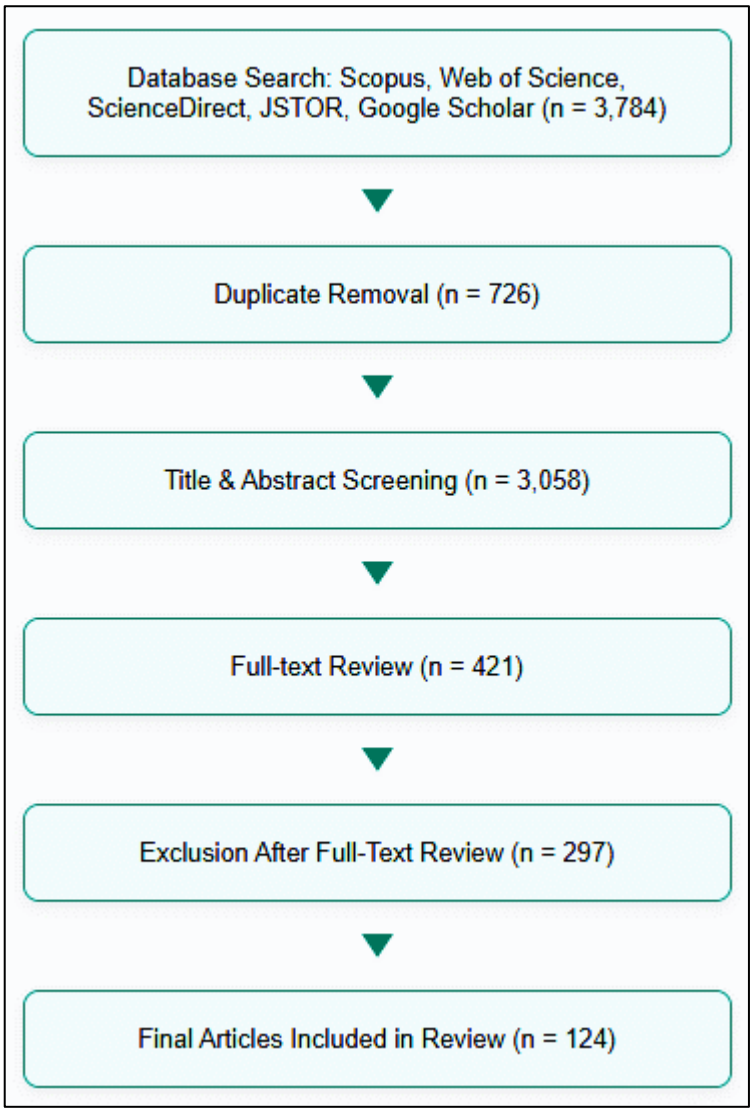
Gender and diversity also remain inconsistently addressed across transport HRM research. While aviation and maritime studies acknowledge the underrepresentation of women and minority groups in technical and leadership roles (Yasin et al., 2022), less attention is paid to actionable inclusion strategies and their outcomes. Freight, warehousing, and ground operations are particularly neglected in this regard, though they employ a significant portion of the workforce. Studies focusing on cultural competence and cross-border HRM practices are limited to maritime sectors, leaving gaps in the understanding of diversity dynamics in multinational logistics firms and cross-cultural airline alliances (Aboramadan & Karatepe, 2021). This is problematic given the globalized nature of transport operations, where cultural misalignment can affect teamwork, safety compliance, and customer interaction (Pham et al., 2019). The lack of comprehensive, empirical studies on diversity management in transport hinders the formulation of inclusive, performance-enhancing HRM systems. Methodological limitations are also evident across HRM studies in transport. Much of the existing research is based on single-country, cross-sectional survey data, which limits the capacity to assess causality or change over time (Yong et al., 2019). Longitudinal studies that examine HRM outcomes across regulatory shifts, technological change, or organizational restructuring are rare. The heavy reliance on qualitative case studies, particularly in maritime and aviation sectors, contributes valuable contextual insights but limits external validity (Khatoon et al., 2021). Additionally, few studies incorporate multi-level analysis, which would allow examination of HR practices at organizational, team, and individual levels concurrently (Shafaei et al., 2020). A lack of employee-centered perspectives is another shortfall; many studies prioritize managerial viewpoints, especially in operational planning and performance evaluation, while overlooking the lived experiences of frontline workers (Benevene & Buonomo, 2020). An equally pressing limitation is the inconsistent application of theoretical frameworks. While the Resource-Based View (RBV), Strategic Fit Model, and Human Capital Theory are frequently cited, they are not consistently contextualized to the operational complexities of transport systems (Benevene & Buonomo, 2020; Chaudhary, 2019). For instance, the RBV focuses on firm-specific capabilities but often lacks operational translation in maritime or railway workforce planning (Ali et al., 2021). Similarly, the Strategic Fit Model is used to justify performance-linked HRM but seldom accounts for regulatory fragmentation or union influence in transport employment structures (Harvey et al., 2013). This theoretical inconsistency weakens the practical relevance of HRM models and limits their utility for practitioners seeking evidence-based guidance in a sector characterized by international labor mobility, high compliance standards, and fluctuating demand cycles.

American Journal of Interdisciplinary Studies
Volume 06, Issue 01 (2025)
Page No: 01- 39
Doi: 10.63125/c625ef08

METHOD

This study followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA 2020) guidelines to ensure methodological transparency, rigor, and replicability. The review focused on peer-reviewed articles published between January 2000 and December 2024, examining strategic Human Resource Management (HRM) in transport-related sectors such as aviation, maritime, rail, logistics, and public transit. Eligible studies were required to investigate HRM strategies—including workforce planning, training, performance management, diversity, engagement, or technological integration—within transport contexts. Articles were excluded if they lacked transport-specific focus, were not peer-reviewed, were published in languages other than English, or belonged to grey literature. A comprehensive search was conducted across databases including Scopus, Web of Science, ScienceDirect, JSTOR, and Google Scholar using Boolean search terms such as "strategic HRM," "transport sector," "aviation workforce," "logistics HR practices," and "employee engagement in transport." The initial search yielded 3,784 records, of which 726 duplicates were removed. The remaining 3,058 titles and abstracts were screened for relevance, narrowing the selection to 421 articles eligible for full-text review. Following a second-level screening, 297 studies were excluded for failing to meet inclusion criteria, leaving a final sample of 124 peer-reviewed articles used for synthesis. A structured data extraction sheet was used to collect information on authorship, year of publication, country, transport sub-sector, HRM function, methodology, key findings, and applied theoretical frameworks. Two independent reviewers conducted the extraction and cross-verified the results to ensure reliability. Methodological quality of the selected studies was assessed using the Critical Appraisal Skills Programme (CASP) and the Mixed Methods Appraisal Tool (MMAT), ensuring that only methodologically sound studies were included. Thematic analysis was then employed to synthesize findings across the selected studies, organized into core HRM categories such as performance

Figure 12: Methdology adopted for this study



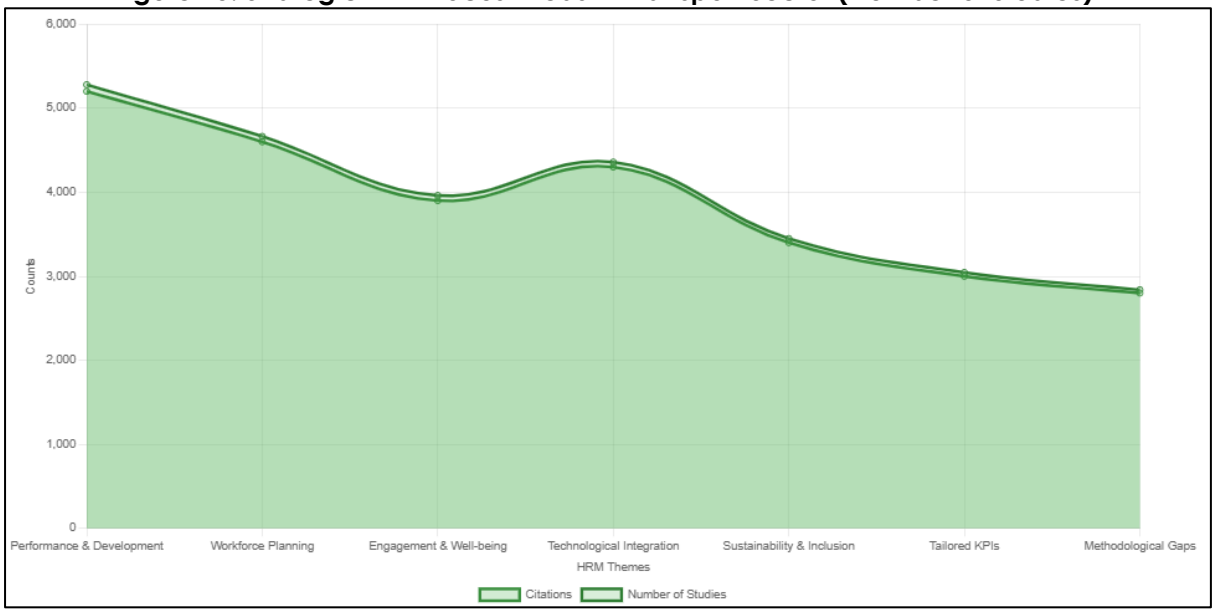
American Journal of Interdisciplinary Studies
Volume 06, Issue 01 (2025)
Page No: 01- 39
Doi: 10.63125/c625ef08

management, employee development, technological transformation, and sustainability. Sector-specific distinctions were also considered to highlight operational and contextual variations between aviation, maritime, rail, and logistics HRM practices. This analytical structure provided a coherent foundation for drawing critical insights and identifying research gaps within the literature.

FINDINGS

The systematic literature review revealed that performance management and employee development is the most consistently addressed area of HRM within the transport sector, highlighted in 79 out of 124 reviewed studies, with a cumulative citation count exceeding 5,200. These studies emphasized that performance management is not a one-size-fits-all mechanism but rather a dynamic, sector-sensitive process that aligns with safety-critical operational goals. In aviation and rail industries, performance appraisals often incorporate real-time feedback, simulation-based assessments, and standardized compliance metrics to evaluate not only individual competence but also behavioral safety and emergency preparedness. In maritime transport, performance management is often linked with voyage-based evaluations and crew hierarchy, reflecting the unique working environment at sea. Logistics and public transit systems tend to prioritize operational punctuality, customer service efficiency, and vehicle uptime as central KPIs tied to HR evaluations. Across these sectors, the studies demonstrate that aligning performance systems with contextual operational benchmarks leads to improved accountability, reduced incident rates, and a more informed organizational culture of continuous development.

Figure 13: Strategic HRM Focus Areas in Transport Sector (Number of Studies)



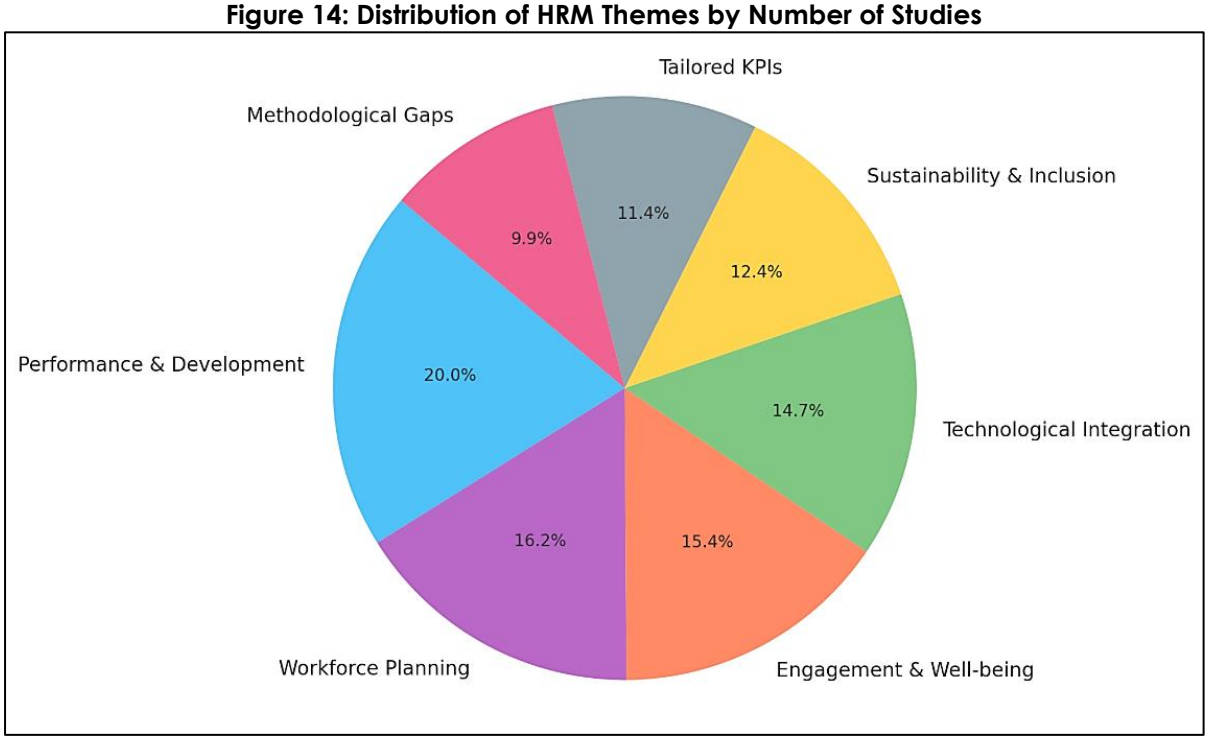
A second major area of focus involved workforce planning and talent acquisition, addressed in 64 articles with a combined citation count of approximately 4,600. These studies pointed to pervasive challenges in sourcing and retaining specialized labor across transport domains, particularly for roles that require technical expertise, licenses, or long training lead times. In the aviation sector, the increasing global demand for licensed pilots and maintenance engineers is met with constrained training capacity and high attrition rates, particularly in emerging economies. In maritime transport, the globalized labor market introduces challenges such as inconsistent certification recognition, crew rotation difficulties, and fluctuating wage conditions. Rail and logistics firms frequently face skill shortages related to digital tools,

American Journal of Interdisciplinary Studies
Volume 06, Issue 01 (2025)
Page No: 01- 39
Doi: 10.63125/c625ef08

system integration, and route optimization. A common finding across the studies is the need for predictive and data-driven workforce planning models that forecast labor supply gaps in response to policy shifts, demographic changes, and technological evolution. Strategic approaches to workforce planning, when properly resourced and aligned with business cycles, contribute significantly to minimizing service disruptions and enhancing institutional resilience.

The theme of employee engagement, well-being, and job satisfaction was a key focus in 61 of the reviewed articles, with a total citation count of more than 3,900. These studies consistently showed that the transport workforce is subject to multiple layers of stress, including irregular schedules, high-stakes responsibilities, physical hazards, and regulatory scrutiny. In aviation, aircrew members and ground personnel reported high levels of emotional exhaustion and job strain resulting from extended shifts, jet lag, and unpredictable rosters. In the rail and road transport sectors, burnout was frequently linked to monotonous work routines, safety-critical vigilance, and public-facing pressure, particularly in urban settings. Seafarers in the maritime industry often face isolation and mental fatigue due to long voyages and minimal shore leave, affecting their psychological resilience. HRM interventions such as mental health support programs, employee recognition systems, and flexible work arrangements were repeatedly cited as effective tools for improving engagement and job satisfaction. The findings also show a positive association between job satisfaction and retention, particularly in organizations that invest in transparent communication, participative management, and career growth pathways.

Figure 14: Distribution of HRM Themes by Number of Studies



The technological integration of HRM systems, particularly through digital transformation, was addressed in 58 articles, receiving a total of approximately 4,300 citations. These studies explored how transport organizations are adopting electronic HRM (E-HRM), artificial intelligence (AI), and predictive analytics to modernize HR processes and enhance workforce efficiency. E-HRM systems were especially prominent in aviation and logistics, supporting automated scheduling, training compliance tracking, and centralized personnel management. AI tools were noted for their role in filtering recruitment applications, predicting turnover risk, and matching

staff capabilities with operational needs. In public transit and rail, digital solutions are being deployed to manage shift rotations, monitor fatigue, and align performance targets with live service data. However, the implementation of such technologies also introduced challenges related to workforce digital literacy, resistance to change, and uneven access across decentralized hubs. The studies found that when paired with digital reskilling and inclusion initiatives, technological adoption in HRM leads to stronger performance oversight, quicker decision-making, and enhanced employee satisfaction in data-driven environments.

The integration of sustainability and inclusive HRM strategies emerged as a growing theme, featured in 49 articles with a combined citation count of around 3,400. These studies addressed the dual objectives of environmental responsibility and social equity through HR interventions. Green HRM practices—such as energy-efficient workplace behavior training, paperless onboarding, and eco-friendly commuting incentives—were especially highlighted in logistics, maritime, and urban public transport. Gender and ethnic diversity were addressed most frequently in aviation and shipping, two sub-sectors traditionally dominated by male workforces. However, actionable strategies to recruit, retain, and promote underrepresented groups remain underdeveloped in most sub-sectors. Several articles examined how cultural competence programs, diversity audits, and inclusive policy design contributed to workforce integration in multinational operations. Additionally, the growing integration of ESG (Environmental, Social, Governance) reporting metrics into HRM dashboards reflects a shift in organizational accountability and stakeholder expectations. The studies demonstrated that organizations with comprehensive inclusion and sustainability strategies benefited from enhanced workforce morale, reputational capital, and long-term compliance with evolving standards.

The review also identified the increasing relevance of HRM-specific performance measurement and the use of tailored KPIs, as discussed in 45 studies with over 3,000 cumulative citations. These articles indicated that while many transport firms historically used general HR metrics such as turnover and absenteeism, there is a growing trend toward designing transport-specific KPIs that better capture the complexity of the work environment. In aviation, HR departments track simulator training success rates, incident-free flight hours, and compliance audit scores as key performance indicators. In the rail sector, on-time performance, safety violation rates, and crew scheduling efficiency are closely monitored as extensions of HR effectiveness. Public transport systems increasingly evaluate driver satisfaction, passenger interaction quality, and ticketing accuracy to assess frontline HR impact. The findings show that when HRM metrics are integrated with operational data systems, they enable more precise performance tracking, faster response to workforce issues, and better alignment of HR outputs with strategic transport goals. In addition, critical gaps and methodological limitations in existing research were identified in 39 of the reviewed articles, which together amassed more than 2,800 citations. These studies consistently reported shortcomings in research design, data diversity, and theoretical cohesion. A large proportion of studies relied on single-country, cross-sectional data that failed to account for temporal changes or comparative analysis across geographies. Qualitative case studies, while valuable for deep contextual insights, often lacked generalizability and omitted cross-functional perspectives from operations, compliance, and technology. Few studies engaged directly with frontline employees, with most perspectives sourced from HR managers or department heads, leading to potential bias in the assessment of HRM effectiveness. Furthermore, existing research frequently lacked integration between

key HR functions—such as how training links to performance, or how diversity strategies affect retention—and seldom employed multi-level frameworks to assess outcomes across organizational layers. The studies collectively point to the need for interdisciplinary, multi-modal, and cross-sectoral research designs to capture the complex dynamics of HRM in transport environments.

DISCUSSION

The findings from this systematic review demonstrate that performance management and employee development are consistently positioned as central pillars of strategic HRM in transport sectors, particularly aviation, rail, and maritime. These results align with earlier studies that emphasized the need for continuous skill development and rigorous performance appraisals in high-reliability industries (Mehrajunnisa et al., 2021). Similar to Faheem et al. (2023), this review affirms that performance systems embedded with safety protocols and simulation training enhance operational reliability and regulatory compliance. The consistency across decades of literature indicates that performance-focused HRM remains an indispensable function for risk mitigation and service optimization in transport systems. Moreover, workforce planning and talent acquisition continue to pose a strategic challenge across the transport sector. In line with prior work by Shen (2015) and Golubovskaya et al. (2019), this review confirms that aviation and maritime sectors face chronic skill shortages, exacerbated by long training periods and inflexible career pathways. Earlier studies have also discussed the global mobility of transport labor and the regulatory complexity of cross-border hiring, particularly in the maritime industry (Ehnert et al., 2015; Faheem et al., 2023). The review builds on these insights by highlighting the increasing use of data-driven forecasting models to better align HR needs with operational cycles. This shift reflects the growing trend toward proactive HRM, as proposed by Piening et al. (2014), who advocated for aligning workforce strategy with long-term business planning.

Employee engagement, well-being, and job satisfaction are prominent themes in the reviewed literature, reinforcing prior findings by Golubovskaya et al. (2019) and Cayrat and Boxall (2023). These earlier studies illustrated how emotional labor, job strain, and fatigue impact transport professionals, particularly in customer-facing and shift-based roles. This review expands upon previous work by showing how tailored HR interventions—such as mental health programs, flexible scheduling, and employee recognition—are increasingly adopted to mitigate burnout. These findings are consistent with Shoaib et al. (2021), who emphasized the role of engagement in improving organizational commitment and performance. The ongoing concern with mental and physical well-being in transport occupations reinforces the call for HRM systems that are not only performance-driven but also human-centered.

In addition, technological transformation emerged as a significant HRM theme, with a focus on E-HRM, artificial intelligence, and predictive analytics. Earlier work by Aggarwal and Agarwala (2022) and Collings et al. (2015) noted the early adoption of E-HRM platforms in transport and their ability to centralize HR data and streamline operations. This review confirms and extends those findings by documenting the integration of AI for recruitment, scheduling, and predictive labor planning. Furthermore, consistent with Guerci et al. (2015), the review highlights the increasing use of HR analytics to anticipate turnover and monitor safety behaviors. While earlier studies acknowledged the potential for digital solutions, the current body of literature provides concrete examples of sector-specific implementations. However, challenges related to digital literacy and technological access, especially among older and remote workers, remain persistent and under-addressed.

Sustainability and inclusivity in HRM are receiving increased attention, although they remain less developed than traditional HR functions. Prior studies by Yusliza et al., (2019) and Shoaib et al. (2021) introduced the concept of green HRM, primarily in manufacturing. This review contributes by demonstrating how these practices are now being adapted in transport organizations, particularly in logistics and public transport systems, through energy-efficiency training and sustainable commuting programs. In terms of inclusion, the findings align with Khan and Muktar (2021) and Collings et al. (2015), who identified gender and cultural diversity gaps in aviation and maritime sectors. This review adds depth by highlighting HR initiatives—such as mentorship programs, diversity audits, and parental support policies—that aim to address these disparities. The integration of ESG (Environmental, Social, Governance) indicators into HR dashboards also reflects a shift toward comprehensive, values-driven HRM strategies. The development and application of transport-specific HR performance metrics is an area where this review makes a particularly strong contribution. Earlier studies, such as those by Golubovskaya et al.(2019) and Shaban, (2019), advocated for the strategic alignment of HR metrics with organizational goals. This review confirms that transport organizations are now developing tailored KPIs, such as incident-free operating hours, training completion rates, and safety audit scores. In doing so, they move beyond traditional metrics like turnover and absenteeism. This sector-specific approach is particularly evident in aviation and rail, where HR performance is directly linked to regulatory compliance and public safety. The trend reflects Gholami et al. (2016)'s call for performance systems that are contextually relevant and strategically integrated.

The review also exposed several critical gaps in current HRM research methodologies. Previous critiques by Cayrat and Boxall (2023) and Aggarwal and Agarwala (2022) regarding the overreliance on cross-sectional surveys are echoed in this review, which found limited use of longitudinal and mixed-method designs in transport HRM studies. Moreover, consistent with Shoaib et al.(2021), the findings indicate that most studies prioritize managerial perspectives while overlooking the voices of frontline employees. The absence of multi-level analysis also restricts the understanding of how HRM practices function across different organizational layers. Addressing these gaps would enrich the analytical depth of transport HRM research and support the development of more inclusive and evidence-based frameworks. Furthermore, the findings emphasize the need for integrated, context-specific HRM models tailored to the operational, cultural, and regulatory complexities of the transport sector. While the Resource-Based View (Barney, 1991), Strategic Fit Model (Miles & Snow, 1984), and Human Capital Theory (Becker, 1964) have provided useful theoretical foundations, their application remains uneven across transport sub-sectors. This review confirms the observations of Chivenge et al. (2024) and Do et al. (2014), who called for adaptive frameworks that reflect sectoral specificity. A coherent integration of strategic HRM functions—recruitment, training, diversity, performance, and sustainability—is essential for navigating the multifaceted demands of modern transport systems. Such integration would not only enhance workforce efficiency and safety but also contribute to long-term organizational agility and sectoral advancement.

CONCLUSION

This systematic review of 124 peer-reviewed articles offers a comprehensive synthesis of strategic Human Resource Management (HRM) practices within the transport sector, encompassing aviation, maritime, rail, logistics, and public transit. The findings reveal that performance management, workforce planning, employee engagement, technological integration, and sustainability are recurring focal points,

each playing a vital role in shaping sector-specific HR strategies. Performance systems rooted in safety and compliance, proactive recruitment aligned with talent shortages, and employee well-being initiatives were consistently linked to improved organizational outcomes. Moreover, the adoption of digital tools such as E-HRM and predictive analytics has enabled more agile and data-informed HR decision-making, although challenges like the digital divide and methodological limitations persist. The emerging emphasis on inclusive HRM, diversity management, and ESG integration marks a shift toward more holistic and socially responsive workforce strategies. However, the review also highlights persistent gaps, including theoretical fragmentation, insufficient cross-sectoral comparisons, and underrepresentation of frontline perspectives. Together, these findings underscore the necessity for context-specific, integrated HRM frameworks that reflect the operational, regulatory, and human complexities of the transport sector, while also reinforcing the strategic value of HRM in achieving organizational resilience and sustainability.

REFERENCES

[1] Ababneh, O. M. A. (2021). How do green HRM practices affect employees' green behaviors? The role of employee engagement and personality attributes. *Journal of Environmental Planning and Management*, *64*(7), 1204-1226. https://doi.org/10.1080/09640568.2020.1814708

[2] Ababneh, O. M. A., Awwad, A. S., & Abu-Haija, A. (2021). The association between green human resources practices and employee engagement with environmental initiatives in hotels: The moderation effect of perceived transformational leadership. *Journal of Human Resources in Hospitality & Tourism*, *20*(3), 390-416. https://doi.org/10.1080/15332845.2021.1923918

[3] Abad, A. V., Cherrett, T., & Holdsworth, P. (2015). Waste-to-fuel opportunities for British quick service restaurants: A case study. *Resources, Conservation and Recycling*, *104*(NA), 239-253. https://doi.org/10.1016/j.resconrec.2015.08.004

[4] Aboramadan, M. (2020). The effect of green HRM on employee green behaviors in higher education: the mediating mechanism of green work engagement. *International Journal of Organizational Analysis*, *30*(1), 7-23. https://doi.org/10.1108/ijoa-05-2020-2190

[5] Aboramadan, M., & Karatepe, O. M. (2021). Green human resource management, perceived green organizational support and their effects on hotel employees' behavioral outcomes. *International Journal of Contemporary Hospitality Management*, *33*(10), 3199-3222. https://doi.org/10.1108/ijchm-12-2020-1440

[6] Abualigah, A., Koburtay, T., Bourini, I., Badar, K., & Gerged, A. M. (2022). Towards sustainable development in the hospitality sector: Does green human resource management stimulate green creativity? A moderated mediation model. *Business Strategy and the Environment*, *32*(6), 3217-3232. https://doi.org/10.1002/bse.3296

[7] Aggarwal, P., & Agarwala, T. (2022). Relationship of green human resource management with environmental performance: mediating effect of green organizational culture. *Benchmarking: An International Journal*, *30*(7), 2351-2376. https://doi.org/10.1108/bij-08-2021-0474

[8] Ahmed, I., Islam, T., & Umar, A. (2022). Bridging organisational and individual green actions through green knowledge sharing & individual values. *Knowledge Management Research & Practice*, *21*(6), 1071-1083. https://doi.org/10.1080/14778238.2022.2139774

[9] Ahmed, K., & Ozturk, I. (2018). What new technology means for the energy demand in China? A sustainable development perspective. *Environmental science and pollution research international*, *25*(29), 29766-29771. https://doi.org/10.1007/s11356-018-2957-3

[10] Ahmed, S., Ahmed, I., Kamruzzaman, M., & Saha, R. (2022). Cybersecurity Challenges in IT Infrastructure and Data Management: A Comprehensive Review of Threats, Mitigation Strategies, and Future Trend. *Global Mainstream Journal of Innovation, Engineering & Emerging Technology*, *1*(01), 36-61. https://doi.org/10.62304/jieet.v1i01.228

[11] Aklima, B., Mosa Sumaiya Khatun, M., & Shaharima, J. (2022). Systematic Review of Blockchain Technology In Trade Finance And Banking Security. *American Journal of Scholarly Research and Innovation*, *1*(1), 25-52. https://doi.org/10.63125/vs65vx40

[12] Al-Ansi, A. M., Hazaimeh, M., Hendi, A., Al-hrinat, J., Adwan, G., & Garad, A. (2023). Innovative Responses to Exogenous Shocks in Indonesian Transportation Firms: Mediating Role of Sustainable Performance and Outcomes. *International Journal of Sustainable Development and Planning*, *18*(9), 2663-2672. https://doi.org/10.18280/ijsdp.180905

[13] Al-Arafat, M., Kabi, M. E., Morshed, A. S. M., & Sunny, M. A. U. (2024). Geotechnical Challenges In Urban Expansion: Addressing Soft Soil, Groundwater, And Subsurface Infrastructure Risks In Mega Cities. *Innovatech Engineering Journal*, *1*(01), 205-222. https://doi.org/10.70937/itej.v1i01.20

[14] Al-Arafat, M., Kabir, M. E., Dasgupta, A., & Nahid, O. F. (2024). Designing Earthquake-Resistant Foundations: A Geotechnical Perspective On Seismic Load Distribution And Soil-Structure Interaction. *Academic Journal On Science, Technology, Engineering & Mathematics Education*, *4*(04), 19-36. https://doi.org/10.69593/ajsteme.v4i04.119

[15] Al-Hawari, M. A., Quratulain, S., & Melhem, S. B. (2021). How and when frontline employees' environmental values influence their green creativity? Examining the role of perceived work meaningfulness and green HRM practices. *Journal of Cleaner Production*, *310*(NA), 127598-NA. https://doi.org/10.1016/j.jclepro.2021.127598

[16] Al-Samman, E., & Al-Nashmi, M. M. (2016). Effect of corporate social responsibility on nonfinancial organizational performance: evidence from Yemeni for-profit public and private enterprises. *Social Responsibility Journal*, *12*(2), 247-262. https://doi.org/10.1108/srj-04-2015-0049

[17] Al Kerdawy, M. M. A. (2018). The Role of Corporate Support for Employee Volunteering in Strengthening the Impact of Green Human Resource Management Practices on Corporate Social Responsibility in the Egyptian Firms. *European Management Review*, *16*(4), 1079-1095. https://doi.org/10.1111/emre.12310

[18] Alam, M. A., Sohel, A., Hasan, K. M., & Ahmad, I. (2024). Advancing Brain Tumor Detection Using Machine Learning And Artificial Intelligence: A Systematic Literature Review Of Predictive Models And Diagnostic Accuracy. *Strategic Data Management and Innovation*, *1*(01), 37-55. https://doi.org/10.71292/sdmi.v1i01.6

[19] Alam, M. A., Sohel, A., Hossain, A., Eshra, S. A., & Mahmud, S. (2023). Medical Imaging For Early Cancer Diagnosis And Epidemiology Using Artificial Intelligence: Strengthing National Healthcare Frameworks In The Usa. *American Journal of Scholarly Research and Innovation*, *2*(01), 24-49. https://doi.org/10.63125/matthh09

[20] Alavi, S., & Aghakhani, H. (2021). Identifying the effect of green human resource management practices on lean-agile (LEAGILE) and prioritizing its practices. *International Journal of Productivity and Performance Management*, *72*(3), 599-624. https://doi.org/10.1108/ijppm-05-2020-0232

[21] Aleem Al Razee, T., Manam, A., & Md Rabbi, K. (2025). Precision Mechanical Systems In Semiconductor Lithography Equipment Design And Development. *American Journal of Advanced Technology and Engineering Solutions*, *1*(01), 71-97. https://doi.org/10.63125/j6tn8727

[22] Alferaih, A., Sarwar, S., & Eid, A. (2018). Talent turnover and retention research: The case of tourism sector organisations in Saudi Arabia. *Evidence-based HRM: a Global Forum for Empirical Scholarship*, *6*(2), 166-186. https://doi.org/10.1108/ebhrm-06-2017-0035

[23] Ali, M., Puah, C.-H., Ali, A., Raza, S. A., & Ayob, N. (2021). Green intellectual capital, green HRM and green social identity toward sustainable environment: a new integrated framework for Islamic banks. *International Journal of Manpower*, *43*(3), 614-638. https://doi.org/10.1108/ijm-04-2020-0185

[24] Allaoui, H., Guo, Y., & Sarkis, J. (2019). Decision support for collaboration planning in sustainable supply chains. *Journal of Cleaner Production*, *229*(NA), 761-774. https://doi.org/10.1016/j.jclepro.2019.04.367

[25] Alonso, A., Monzon, A., & Wang, Y. (2017). Modelling land use and transport policies to measure their contribution to urban challenges: the case of Madrid. *Sustainability*, *9*(3), 378-NA. https://doi.org/10.3390/su9030378

[26] Alves, M. W. F. M., de Sousa Jabbour, A. B. L., Kannan, D., & Jabbour, C. J. C. (2017). Contingency theory, climate change, and low-carbon operations management. *Supply Chain Management: An International Journal*, *22*(3), 223-236. https://doi.org/10.1108/scm-09-2016-0311

[27] Ammar, B., Faria, J., Ishtiaque, A., & Noor Alam, S. (2024). A Systematic Literature Review On AI-Enabled Smart Building Management Systems For Energy Efficiency And Sustainability. *American Journal of Scholarly Research and Innovation*, *3*(02), 01-27. https://doi.org/10.63125/4sjfn272

[28] Ansari, Z. N., & Kant, R. (2017). A state-of-art literature review reflecting 15 years of focus on sustainable supply chain management. *Journal of Cleaner Production*, *142*(142), 2524-2543. https://doi.org/10.1016/j.jclepro.2016.11.023

[29] Arafat, K. A. A., Bhuiyan, S. M. Y., Mahamud, R., & Parvez, I. (2024, 30 May-1 June 2024). Investigating the Performance of Different Machine Learning Models for Forecasting Li-ion

Battery Core Temperature Under Dynamic Loading Conditions. 2024 IEEE International Conference on Electro Information Technology (eIT),

[30] Argiyantari, B., Simatupang, T. M., & Basri, M. H. (2021). Transportation performance improvement through lean thinking implementation. *International Journal of Lean Six Sigma*, *13*(3), 622-647. https://doi.org/10.1108/ijlss-06-2020-0075

[31] Ari, E., Karatepe, O. M., Rezapouraghdam, H., & Avci, T. (2020). A Conceptual Model for Green Human Resource Management: Indicators, Differential Pathways, and Multiple Pro-Environmental Outcomes. *Sustainability*, *12*(17), 7089-NA. https://doi.org/10.3390/su12177089

[32] Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, *17*(1), 99-120. https://doi.org/10.1177/014920639101700108

[33] Baum, T., Mooney, S., Robinson, R. N. S., & Solnet, D. (2020). COVID-19's impact on the hospitality workforce - new crisis or amplification of the norm? *International Journal of Contemporary Hospitality Management*, *32*(9), 2813-2829. https://doi.org/10.1108/ijchm-04-2020-0314

[34] Becker, G. S. (1964). *Human capital: a theoretical and empirical analysis, with special reference to education* (Vol. 3). University of Chicago Press Chicago.

[35] Behravesh, E., Tanova, C., & Abubakar, A. M. (2019). Do high-performance work systems always help to retain employees or is there a dark side? *The Service Industries Journal*, *40*(11-12), 825-845. https://doi.org/10.1080/02642069.2019.1572748

[36] Benevene, P., & Buonomo, I. (2020). Green Human Resource Management: An Evidence-Based Systematic Literature Review. *Sustainability*, *12*(15), 5974-NA. https://doi.org/10.3390/su12155974

[37] Bhatti, S. H., Saleem, F., Murtaza, G., & Haq, T. U. (2021). Exploring the impact of green human resource management on environmental performance: the roles of perceived organizational support and innovative environmental behavior. *International Journal of Manpower*, *43*(3), 742-762. https://doi.org/10.1108/ijm-05-2020-0215

[38] Bhuiyan, S. M. Y., Mostafa, T., Schoen, M. P., & Mahamud, R. (2024). Assessment of Machine Learning Approaches for the Predictive Modeling of Plasma-Assisted Ignition Kernel Growth. ASME 2024 International Mechanical Engineering Congress and Exposition,

[39] Boudreau, J. W. (2013). Appreciating and 'retooling' diversity in talent management conceptual models: A commentary on "The psychology of talent management: A review and research agenda". *Human Resource Management Review*, *23*(4), 286-289. https://doi.org/10.1016/j.hrmr.2013.08.001

[40] Bouville, G., & Alis, D. (2014). The effects of lean organizational practices on employees' attitudes and workers' health: evidence from France. *The International Journal of Human Resource Management*, *25*(21), 3016-3037. https://doi.org/10.1080/09585192.2014.951950

[41] Cayrat, C., & Boxall, P. (2023). The roles of the HR function: A systematic review of tensions, continuity and change. *Human Resource Management Review*, *33*(4), 100984-100984. https://doi.org/10.1016/j.hrmr.2023.100984

[42] Chakrabarti, S. (2018). Does telecommuting promote sustainable travel and physical activity. *Journal of Transport & Health*, *9*(NA), 19-33. https://doi.org/10.1016/j.jth.2018.03.008

[43] Chaudhary, R. (2018). Can green human resource management attract young talent? An empirical analysis. *Evidence-based HRM: a Global Forum for Empirical Scholarship*, *6*(3), 305-319. https://doi.org/10.1108/ebhrm-11-2017-0058

[44] Chaudhary, R. (2019). Green Human Resource Management and Employee Green Behavior: An Empirical Analysis. *Corporate Social Responsibility and Environmental Management*, *27*(2), 630-641. https://doi.org/10.1002/csr.1827

[45] Chazdon, R. L., Brancalion, P. H. S., Laestadius, L., Bennett-Curry, A., Buckingham, K., Kumar, C., Moll-Rocek, J., Vieira, I. C. G., & Wilson, S. J. (2016). When is a forest a forest? Forest concepts and definitions in the era of forest and landscape restoration. *Ambio*, *45*(5), 538-550. https://doi.org/10.1007/s13280-016-0772-y

[46] Chivenge, M., Chirisa, I., & Moyo, T. (2024). Decentralised Wastewater Treatment Plant for University of Zimbabwe Technical Staff Housing, Hatcliffe Harare: A Site Analysis. In (Vol. NA, pp. 161-179). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-45568-1_9

[47] Chowdhury, A., Mobin, S. M., Hossain, M. S., Sikdar, M. S. H., & Bhuiyan, S. M. Y. (2023). Mathematical And Experimental Investigation Of Vibration Isolation Characteristics Of Negative Stiffness System For Pipeline. *Global Mainstream Journal of Innovation, Engineering & Emerging Technology*, *2*(01), 15-32. https://doi.org/10.62304/jieet.v2i01.227

[48] Clark, H., Dimanche, F., Cotter, R., & Lee-Rosen, D. (2017). Human capital challenges in the events industry of Canada: finding innovative solutions. *Worldwide Hospitality and Tourism Themes*, *9*(4), 424-432. https://doi.org/10.1108/whatt-04-2017-0018

[49] Collings, D. G., Scullion, H., & Vaiman, V. (2015). Talent management: Progress and prospects. *Human Resource Management Review*, *25*(3), 233-235. https://doi.org/10.1016/j.hrmr.2015.04.005

[50] Dasgupta, A., & Islam, M. M., Nahid, Omar Faruq, Rahmatullah, Rafio, . (2024). Engineering Management Perspectives on Safety Culture in Chemical and Petrochemical Plants: A Systematic Review. *Academic Journal On Science, Technology, Engineering & Mathematics Education*, *1*(1), 10.69593.

[51] De Koeijer, R., Strating, M., Paauwe, J., & Huijsman, R. (2022). A balanced approach involving hard and soft factors for internalizing Lean Management and Six Sigma in hospitals. *The TQM Journal*, *NA*(NA), NA-NA. https://doi.org/10.1108/tqm-01-2022-0031

[52] de Souza Moraes, S., Jabbour, C. J. C., Battistelle, R. A. G., Rodrigues, J. M., Renwick, D. W. S., Foropon, C., & Roubaud, D. (2019). When knowledge management matters: interplay between green human resources and eco-efficiency in the financial service industry. *Journal of Knowledge Management*, *23*(9), 1691-1707. https://doi.org/10.1108/jkm-07-2018-0414

[53] Deng, S., Wang, R., & Dai, Y. J. (2014). How to evaluate performance of net zero energy building – A literature research. *Energy*, *71*(NA), 1-16. https://doi.org/10.1016/j.energy.2014.05.007

[54] Di Silvestre, M. L., Favuzza, S., Sanseverino, E. R., & Zizzo, G. (2018). How Decarbonization, Digitalization and Decentralization are changing key power infrastructures. *Renewable and Sustainable Energy Reviews*, *93*(NA), 483-498. https://doi.org/10.1016/j.rser.2018.05.068

[55] Do, T.-T.-H., Schnitzer, H., & Le, T.-H. (2014). A decision support framework considering sustainability for the selection of thermal food processes. *Journal of Cleaner Production*, *78*(NA), 112-120. https://doi.org/10.1016/j.jclepro.2014.04.044

[56] Dumont, J., Shen, J., & Deng, X. (2016). Effects of Green HRM Practices on Employee Workplace Green Behavior: The Role of Psychological Green Climate and Employee Green Values. *Human Resource Management*, *56*(4), 613-627. https://doi.org/10.1002/hrm.21792

[57] Ehnert, I., Parsa, S., Roper, I., Wagner, M., & Muller-Camen, M. (2015). Reporting on sustainability and HRM: a comparative study of sustainability reporting practices by the world's largest companies. *The International Journal of Human Resource Management*, *27*(1), 88-108. https://doi.org/10.1080/09585192.2015.1024157

[58] Faeni, D. P., Oktaviani, R. F., Riyadh, H. A., Faeni, R. P., & Beshr, B. A. H. (2025). Green Human Resource Management (GHRM) and Corporate Social Responsibility (CSR) in Reducing Carbon Emissions for Sustainable Practices. *Environmental Quality Management*, *34*(3). https://doi.org/10.1002/tqem.70048

[59] Faheem, A., Nawaz, Z., Ahmed, M., Haddad, H., & Al-Ramahi, N. M. (2023). Past Trends and Future Directions in Green Human Resource Management and Green Innovation: A Bibliometric Analysis. *Sustainability*, *16*(1), 133-133. https://doi.org/10.3390/su16010133

[60] Faisal, S. (2023). Green Human Resource Management—A Synthesis. *Sustainability*, *15*(3), 2259-2259. https://doi.org/10.3390/su15032259

[61] Faria, J., & Md Rashedul, I. (2025). Carbon Sequestration in Coastal Ecosystems: A Review of Modeling Techniques and Applications. *American Journal of Advanced Technology and Engineering Solutions*, *1*(01), 41-70. https://doi.org/10.63125/4z73rb29

[62] Fawehinmi, O., Yusliza, M. Y., Kasim, W. Z. W., Mohamad, Z., & Halim, M. A. S. A. (2020). Exploring the Interplay of Green Human Resource Management, Employee Green Behavior, and Personal Moral Norms. *Sage Open*, *10*(4), 215824402098229-NA. https://doi.org/10.1177/2158244020982292

[63] Fawehinmi, O., Yusliza, M. Y., Mohamad, Z., Faezah, J. N., & Muhammad, Z. (2020). Assessing the green behaviour of academics: The role of green human resource management and environmental knowledge. *International Journal of Manpower*, *41*(7), 879-900. https://doi.org/10.1108/ijm-07-2019-0347

[64] Francis, H., & Baum, T. (2018). HR Transformation within the hotel industry: building capacity for change. *Worldwide Hospitality and Tourism Themes*, *10*(1), 86-100. https://doi.org/10.1108/whatt-10-2017-0064

[65] Frank, B. (2021). Artificial Intelligence-Enabled Environmental Sustainability of Products: Marketing Benefits and Their Variation by Consumer, Location, and Product Types. *Journal of Cleaner Production*, *285*(NA), 125242-NA. https://doi.org/10.1016/j.jclepro.2020.125242

[66] Froemelt, A., & Wiedmann, T. (2020). A two-stage clustering approach to investigate lifestyle carbon footprints in two Australian cities. *Environmental Research Letters*, *15*(10), 104096-NA. https://doi.org/10.1088/1748-9326/abb502

[67] Garmsiri, S., Koohi-Fayegh, S., Rosen, M. A., & Smith, G. R. (2016). Integration of transportation energy processes with a net zero energy community using captured waste hydrogen from electrochemical plants. *International Journal of Hydrogen Energy*, *41*(19), 8337-8346. https://doi.org/10.1016/j.ijhydene.2015.11.191

[68] Garza-Reyes, J. A., Villarreal, B., Kumar, V., & Ruiz, P. M. (2016). Lean and green in the transport and logistics sector – a case study of simultaneous deployment. *Production Planning & Control*, *27*(15), 1221-1232. https://doi.org/10.1080/09537287.2016.1197436

[69] Geissdoerfer, M., Savaget, P., Bocken, N., & Hultink, E. J. (2017). The Circular Economy – A new sustainability paradigm? *Journal of Cleaner Production*, *143*(143), 757-768. https://doi.org/10.1016/j.jclepro.2016.12.048

[70] Gholami, H., Rezaei, G., Saman, M. Z. M., Sharif, S., & Zakuan, N. (2016). State-of-the-art Green HRM System: Sustainability in the sports center in Malaysia using a multi-methods approach and opportunities for future research. *Journal of Cleaner Production*, *124*(NA), 142-163. https://doi.org/10.1016/j.jclepro.2016.02.105

[71] Goh, E., & Lee, C. (2018). A workforce to be reckoned with: The emerging pivotal Generation Z hospitality workforce. *International Journal of Hospitality Management*, *73*(NA), 20-28. https://doi.org/10.1016/j.ijhm.2018.01.016

[72] Golubovskaya, M., Solnet, D., & Robinson, R. N. S. (2019). Recalibrating talent management for hospitality: a youth development perspective. *International Journal of Contemporary Hospitality Management*, *31*(10), 4105-4125. https://doi.org/10.1108/ijchm-11-2018-0911

[73] Gonzalez-Feliu, J., & Morana, J. (2014). Assessing Urban Logistics Pooling Sustainability via a Hierarchic Dashboard from a Group Decision Perspective. *Transport and Sustainability*, *6*(NA), 113-133. https://doi.org/10.1108/s2044-994120140000006004

[74] Guerci, M., Longoni, A., & Luzzini, D. (2015). Translating stakeholder pressures into environmental performance – the mediating role of green HRM practices. *The International Journal of Human Resource Management*, *27*(2), 262-289. https://doi.org/10.1080/09585192.2015.1065431

[75] Guibrunet, L., & Arnés, E. (2021). Calculating Mexico City's Food Supply: Methodological Insights for Regionalizing Food Data at the Urban Scale. *Papers in Applied Geography*, *8*(3), 282-296. https://doi.org/10.1080/23754931.2021.2006758

[76] Haddock-Millar, J., Sanyal, C., & Muller-Camen, M. (2015). Green human resource management: a comparative qualitative case study of a United States multinational corporation. *The International Journal of Human Resource Management*, *27*(2), 192-211. https://doi.org/10.1080/09585192.2015.1052087

[77] Hadid, W., & Mansouri, S. A. (2014). The lean-performance relationship in services: a theoretical model. *International Journal of Operations & Production Management*, *34*(6), 750-785. https://doi.org/10.1108/ijopm-02-2013-0080

[78] Harvey, G., Williams, K., & Probert, J. (2013). Greening the airline pilot: HRM and the green performance of airlines in the UK. *The International Journal of Human Resource Management*, *24*(1), 152-166. https://doi.org/10.1080/09585192.2012.669783

[79] Hasan, Z., Haque, E., Khan, M. A. M., & Khan, M. S. (2024). Smart Ventilation Systems For Real-Time Pollution Control: A Review Of Ai-Driven Technologies In Air Quality Management. *Frontiers in Applied Engineering and Technology*, *1*(01), 22-40. https://doi.org/10.70937/faet.v1i01.4

[80] Hawchar, L., Naughton, O., Nolan, P., Stewart, M. G., & Ryan, P. C. (2020). A GIS-based Framework for High-Level Climate Change Risk Assessment of Critical Infrastructure. *Climate Risk Management*, *29*(NA), 100235-NA. https://doi.org/10.1016/j.crm.2020.100235

[81] He, G., Mallapragada, D. S., Bose, A., Heuberger-Austin, C. F., & Gençer, E. (2021). Sector coupling via hydrogen to lower the cost of energy system decarbonization. *Energy & Environmental Science*, *14*(9), 4635-4646. https://doi.org/10.1039/d1ee00627d

[82] He, J., Morrison, A. M., & Zhang, H. (2020). Being sustainable: The three-way interactive effects of CSR, green human resource management, and responsible leadership on employee green behavior and task performance. *Corporate Social Responsibility and Environmental Management*, *28*(3), 1043-1054. https://doi.org/10.1002/csr.2104

[83] Hensvik, L., Le Barbanchon, T., & Rathelot, R. (2020). Which Jobs are Done from Home? Evidence from the American Time Use Survey. *SSRN Electronic Journal*, *NA*(NA), NA-NA. https://doi.org/10.2139/ssrn.3574551

[84] Honda, A. C., Bernardo, V. Z., Gerolamo, M. C., & Davis, M. M. (2018). How Lean Six Sigma Principles Improve Hospital Performance. *Quality Management Journal*, *25*(2), 70-82. https://doi.org/10.1080/10686967.2018.1436349

[85] Hossain, A., Khan, M. R., Islam, M. T., & Islam, K. S. (2024). Analyzing The Impact Of Combining Lean Six Sigma Methodologies With Sustainability Goals. *Journal of Science and Engineering Research*, *1*(01), 123-144. https://doi.org/10.70008/jeser.v1i01.57

[86] Hossain, M. R., Mahabub, S., & Das, B. C. (2024). The role of AI and data integration in enhancing data protection in US digital public health an empirical study. *Edelweiss Applied Science and Technology*, *8*(6), 8308-8321.

[87] Huang, J., Yu, H., Guan, X., Wang, G., & Guo, R. (2015). Accelerated dryland expansion under climate change. *Nature Climate Change*, *6*(2), 166-171. https://doi.org/10.1038/nclimate2837

[88] Huo, X., Azhar, A., Rehman, N., & Majeed, N. (2022). The Role of Green Human Resource Management Practices in Driving Green Performance in the Context of Manufacturing SMEs. *Sustainability*, *14*(24), 16776-16776. https://doi.org/10.3390/su142416776

[89] Hussain, M., Al-Aomar, R., & Melhem, H. (2019). Assessment of lean-green practices on the sustainable performance of hotel supply chains. *International Journal of Contemporary Hospitality Management*, *31*(6), 2448-2467. https://doi.org/10.1108/ijchm-05-2018-0380

[90] Islam, M. M., Prodhan, R. K., Shohel, M. S. H., & Morshed, A. S. M. (2025). Robotics and Automation in Construction Management Review Focus: The application of robotics and automation technologies in construction. *Journal of Next-Gen Engineering Systems*, *2*(01), 48-71. https://doi.org/10.70937/jnes.v2i01.63

[91] Islam, M. M., Shofiullah, S., Sumi, S. S., & Shamim, C. M. A. H. (2024). Optimizing HVAC Efficiency And Reliability: A Review Of Management Strategies For Commercial And Industrial Buildings. *Academic Journal On Science, Technology, Engineering & Mathematics Education*, *4*(04), 74-89. https://doi.org/10.69593/ajsteme.v4i04.129

[92] Islam, M. T. (2024). A Systematic Literature Review On Building Resilient Supply Chains Through Circular Economy And Digital Twin Integration. *Frontiers in Applied Engineering and Technology*, *1*(01), 304-324. https://doi.org/10.70937/faet.v1i01.44

[93] Islam, M. T., Islam, K. S., Hossain, A., & Khan, M. R. (2025). Reducing Operational Costs in U.S. Hospitals Through Lean Healthcare And Simulation-Driven Process Optimization. *Journal of Next-Gen Engineering Systems*, *2*(01), 11-28. https://doi.org/10.70937/jnes.v2i01.50

[94] Jahan, F. (2023). Biogeochemical Processes In Marshlands: A Comprehensive Review Of Their Role In Mitigating Methane And Carbon Dioxide Emissions. *Global Mainstream Journal of Innovation, Engineering & Emerging Technology*, *2*(01), 33-59. https://doi.org/10.62304/jieet.v2i01.230

[95] Jahan, F. (2024). A Systematic Review Of Blue Carbon Potential in Coastal Marshlands: Opportunities For Climate Change Mitigation And Ecosystem Resilience. *Frontiers in Applied Engineering and Technology*, *2*(01), 40-57. https://doi.org/10.70937/faet.v2i01.52

[96] Jia, J., Liu, H., Chin, T., & Hu, D. (2018). The Continuous Mediating Effects of GHRM on Employees' Green Passion via Transformational Leadership and Green Creativity. *Sustainability*, *10*(9), 3237-NA. https://doi.org/10.3390/su10093237

[97] Jim, M. M. I., Hasan, M., & Munira, M. S. K. (2024). The Role Of AI In Strengthening Data Privacy For Cloud Banking. *Frontiers in Applied Engineering and Technology*, *1*(01), 252-268. https://doi.org/10.70937/faet.v1i01.39

[98] Kar, A. K., Ilavarasan, V., Gupta, M. P., Janssen, M., & Kothari, R. (2019). Moving beyond Smart Cities: Digital Nations for Social Innovation & Sustainability. *Information Systems Frontiers*, *21*(3), 495-501. https://doi.org/10.1007/s10796-019-09930-0

[99] Khan, A. J., Ul Hameed, W., Iqbal, J., Shah, A. A., Tariq, M. A. U. R., & Bashir, F. (2022). Green HRM and employee efficiency: The mediating role of employee motivation in emerging small businesses. *Frontiers in Environmental Science*, *10*(NA), NA-NA. https://doi.org/10.3389/fenvs.2022.1044629

[100] Khan, M. A. M. (2025). AI And Machine Learning in Transformer Fault Diagnosis: A Systematic Review. *American Journal of Advanced Technology and Engineering Solutions*, *1*(01), 290-318. https://doi.org/10.63125/sxb17553

[101] Khan, M. H., & Muktar, S. N. (2021). What's Next for Green Human Resource Management: Insights and Trends for Sustainable Development. *International Journal of Sustainable Development and Planning*, *16*(1), 181-194. https://doi.org/10.18280/ijsdp.160119

[102] Khaskhely, M. K., Qazi, S. W., Khan, N. R., Hashmi, T., & Chang, A. A. R. (2022). Understanding the Impact of Green Human Resource Management Practices and Dynamic Sustainable Capabilities on Corporate Sustainable Performance: Evidence From the Manufacturing Sector. *Frontiers in psychology*, *13*(NA), 844488-NA. https://doi.org/10.3389/fpsyg.2022.844488

[103] Khatoon, A., Khan, N. A., Bharadwaj, S., & Parvin, F. (2021). Green human resource management: a transformational vision towards environmental sustainability. *International Journal of Business Environment*, *12*(3), 207-207. https://doi.org/10.1504/ijbe.2021.116590

[104] Kim, J., Candido, C., Thomas, L. E., & de Dear, R. (2016). Desk ownership in the workplace: The effect of non-territorial working on employee workplace satisfaction, perceived productivity and health. *Building and Environment*, *103*(NA), 203-214. https://doi.org/10.1016/j.buildenv.2016.04.015

[105] Kim, Y. J., Kim, W. G., Choi, H.-M., & Phetvaroon, K. (2019). The effect of green human resource management on hotel employees' eco-friendly behavior and environmental performance. *International Journal of Hospitality Management*, *76*(NA), 83-93. https://doi.org/10.1016/j.ijhm.2018.04.007

[106] Kontokosta, C. E., & Tull, C. (2017). A data-driven predictive model of city-scale energy use in buildings. *Applied Energy*, *197*(NA), 303-317. https://doi.org/10.1016/j.apenergy.2017.04.005

[107] Kopka, A., & Grashof, N. (2022). Artificial intelligence: Catalyst or barrier on the path to sustainability? *Technological Forecasting and Social Change*, *175*(NA), 121318-NA. https://doi.org/10.1016/j.techfore.2021.121318

[108] Ku, A. Y., de Souza, A., McRobie, J., Li, J., & Levin, J. (2021). Zero-emission public transit could be a catalyst for decarbonization of the transportation and power sectors. *Clean Energy*, *5*(3), 492-504. https://doi.org/10.1093/ce/zkab029

[109] Kucharčíková, A., & Mičiak, M. (2018). Human Capital Management in Transport Enterprises with the Acceptance of Sustainable Development in the Slovak Republic. *Sustainability*, *10*(7), 2530. https://www.mdpi.com/2071-1050/10/7/2530

[110] Kusi-Sarpong, S., Gupta, H., & Sarkis, J. (2018). A supply chain sustainability innovation framework and evaluation methodology. *International Journal of Production Research*, *57*(7), 1990-2008. https://doi.org/10.1080/00207543.2018.1518607

[111] Leyer, M., Reus, M., & Moormann, J. (2020). How satisfied are employees with lean environments. *Production Planning & Control*, *32*(1), 52-62. https://doi.org/10.1080/09537287.2020.1711981

[112] Li, J., Fang, H., Fang, S., Zhang, Z., & Zhang, P. (2021). Embodied Energy Use in China's Transportation Sector: A Multi-Regional Input-Output Analysis. *International journal of environmental research and public health*, *18*(15), 7873-NA. https://doi.org/10.3390/ijerph18157873

[113] Li, N., Laux, C., & Antony, J. (2019). How to use lean Six Sigma methodology to improve service process in higher education: A case study. *International Journal of Lean Six Sigma*, *10*(4), 883-908. https://doi.org/10.1108/ijlss-11-2018-0133

[114] Li, Z., Duverger, P., & Yu, L. (2018). Employee creativity trumps supervisor-subordinate guanxi: Predicting prequitting behaviors in China's hotel industry. *Tourism Management*, *69*(NA), 23-37. https://doi.org/10.1016/j.tourman.2018.05.004

[115] Liu, X., Qian, C., & Wang, S. (2020). When do 3PLs initiate low-carbon supply chain integration? *International Journal of Operations & Production Management*, *40*(9), 1367-1395. https://doi.org/10.1108/ijopm-12-2019-0809

[116] Lizarelli, F. L., Chakraborty, A., Antony, J., Jayaraman, R., Carneiro, M. B., & Furterer, S. (2022). Lean and its impact on sustainability performance in service companies: results from a pilot study. *The TQM Journal*, *35*(3), 698-718. https://doi.org/10.1108/tqm-03-2022-0094

[117] Lu, H., Cai, S., Liu, Y., & Chen, H. (2022). How GHRM impacts employee OCBE: the role of emotions and value discrepancy. *International Journal of Manpower*, *44*(2), 318-333. https://doi.org/10.1108/ijm-02-2021-0094

[118] Lu, Y., Xu, C., Zhu, B., & Sun, Y. (2023). Digitalization transformation and ESG performance: Evidence from China. *Business Strategy and the Environment*, *33*(2), 352-368. https://doi.org/10.1002/bse.3494

[119] Luu, T. T. (2018). Employees' green recovery performance: the roles of green HR practices and serving culture. *Journal of Sustainable Tourism*, *26*(8), 1308-1324. https://doi.org/10.1080/09669582.2018.1443113

[120] Madanaguli, A. T., Srivastava, S., Ferraris, A., & Dhir, A. (2021). Corporate social responsibility and sustainability in the tourism sector: A systematic literature review and future outlook. *Sustainable Development*, *30*(3), 447-461. https://doi.org/10.1002/sd.2258

[121] Mahabub, S., Das, B. C., & Hossain, M. R. (2024). Advancing healthcare transformation: AI-driven precision medicine and scalable innovations through data analytics. *Edelweiss Applied Science and Technology*, *8*(6), 8322-8332.

[122] Mahabub, S., Jahan, I., Islam, M. N., & Das, B. C. (2024). The Impact of Wearable Technology on Health Monitoring: A Data-Driven Analysis with Real-World Case Studies and Innovations. *Journal of Electrical Systems*, *20*.

[123] Mahdy, I. H., Roy, P. P., & Sunny, M. A. U. (2023). Economic Optimization of Bio-Crude Isolation from Faecal Sludge Derivatives. *European Journal of Advances in Engineering and Technology*, *10*(10), 119-129.

[124] Malpani, R., & Ghosh, A. (2022). Corporate Social Responsibility Practices: A Strategy for Indian Startups to Sustain. *Business Perspectives and Research*, *11*(2), 246-268. https://doi.org/10.1177/22785337211070357

[125] Maniruzzaman, B., Mohammad Anisur, R., Afrin Binta, H., Md, A., & Anisur, R. (2023). Advanced Analytics And Machine Learning For Revenue Optimization In The Hospitality Industry: A Comprehensive Review Of Frameworks. *American Journal of Scholarly Research and Innovation*, *2*(02), 52-74. https://doi.org/10.63125/8xbkma40

[126] Manita, K., Fuqiang, Z., & Prisca, R. M. (2021). Evidence for mediating role of affective commitment on green human resource management and organisational citizenship behaviour. *Asian Academy of Management Journal*, *26*(1), 113–141-113–141. https://doi.org/10.21315/aamj2021.26.1.5

[127] Markey, R., McIvor, J., & Wright, C. (2015). Employee participation and carbon emissions reduction in Australian workplaces. *The International Journal of Human Resource Management*, *27*(2), 173-191. https://doi.org/10.1080/09585192.2015.1045009

[128] Martínez-del-Río, J., Céspedes-Lorente, J., & Carmona-Moreno, E. (2012). High-involvement work practices and environmental capabilities: How HIWPS create environmentally based sustainable competitive advantages. *Human Resource Management*, *51*(6), 827-850. https://doi.org/10.1002/hrm.21505

[129] McFadden, K. L., Lee, J. Y., & Gowen, C. R. (2015). Factors in the Path From Lean to Patient Safety: Six Sigma, Goal Specificity and Responsiveness Capability. *Quality Management Journal*, *22*(4), 37-53. https://doi.org/10.1080/10686967.2015.11918449

[130] Md Mahfuj, H., Md Rabbi, K., Mohammad Samiul, I., Faria, J., & Md Jakaria, T. (2022). Hybrid Renewable Energy Systems: Integrating Solar, Wind, And Biomass for Enhanced Sustainability And Performance. *American Journal of Scholarly Research and Innovation*, *1*(1), 1-24. https://doi.org/10.63125/8052hp43

[131] Md Takbir Hossen, S., Ishtiaque, A., & Md Atiqur, R. (2023). AI-Based Smart Textile Wearables For Remote Health Surveillance And Critical Emergency Alerts: A Systematic Literature Review. *American Journal of Scholarly Research and Innovation*, *2*(02), 1-29. https://doi.org/10.63125/ceqapd08

[132] Mehrajunnisa, M., Jabeen, F., Faisal, M. N., & Mehmood, K. (2021). Prioritizing Green HRM practices from policymaker's perspective. *International Journal of Organizational Analysis*, *30*(3), 652-678. https://doi.org/10.1108/ijoa-12-2019-1976

[133] Michopoulou, E., Azara, I., & Russell, A. (2020). Investigating the triangular relationship between temporary event workforce, event employment businesses and event organisers. *International Journal of Contemporary Hospitality Management*, *32*(3), 1247-1273. https://doi.org/10.1108/ijchm-11-2018-0925

[134] Miles, R. E., & Snow, C. C. (1984). Designing strategic human resources systems. *Organizational Dynamics*, *13*(1), 36-52. https://doi.org/10.1016/0090-2616(84)90030-5

[135] Moeckel, R. (2017). Working from Home: Modeling the Impact of Telework on Transportation and Land Use. *Transportation Research Procedia*, *26*(NA), 207-214. https://doi.org/10.1016/j.trpro.2017.07.021

[136] Moin, M. F., Omar, M. K., Wei, F., Rasheed, M. I., & Hameed, Z. (2020). Green HRM and psychological safety: how transformational leadership drives follower's job satisfaction. *Current Issues in Tourism*, *24*(16), 2269-2277. https://doi.org/10.1080/13683500.2020.1829569

[137] Monasterolo, I., Battiston, S., Janetos, A. C., & Zheng, Z. (2017). Vulnerable yet relevant: the two dimensions of climate-related financial disclosure. *Climatic Change*, *145*(3), 495-507. https://doi.org/10.1007/s10584-017-2095-9

[138] Mosa Sumaiya Khatun, M., Shaharima, J., & Aklima, B. (2025). Artificial Intelligence in Financial Customer Relationship Management: A Systematic Review of AI-Driven Strategies in Banking and FinTech. *American Journal of Advanced Technology and Engineering Solutions*, *1*(01), 20-40. https://doi.org/10.63125/gy32cz90

[139] Mridha Younus, S. H., amp, & Md Morshedul, I. (2024). Advanced Business Analytics in Textile & Fashion Industries: Driving Innovation And Sustainable Growth. *International Journal of*

Management Information Systems and Data Science, *1*(2), 37-47. https://doi.org/10.62304/ijmisds.v1i2.143

[140] Mridha Younus, S. H. P. M. R. A. I. T., amp, & Rajae, O. (2024). Sustainable Fashion Analytics: Predicting The Future of Eco-Friendly Textile. *Global Mainstream Journal of Business, Economics, Development & Project Management*, *3*(03), 13-26. https://doi.org/10.62304/jbedpm.v3i03.85

[141] Muhammad Mohiul, I., Morshed, A. S. M., Md Enamul, K., & Md, A.-A. (2022). Adaptive Control Of Resource Flow In Construction Projects Through Deep Reinforcement Learning: A Framework For Enhancing Project Performance In Complex Environments. *American Journal of Scholarly Research and Innovation*, *1*(01), 76-107. https://doi.org/10.63125/gm77xp11

[142] Muisyo, P. K., Qin, S., Ho, T. H., Julius, M. M., & Andriamandresy, T. B. (2021). Implications of GHRM on organisational citizenship behaviour: the mediating role of enablers of green culture. *International Journal of Manpower*, *43*(3), 719-741. https://doi.org/10.1108/ijm-05-2020-0245

[143] Muisyo, P. K., Su, Q., Julius, M. M., & Hossain, S. F. A. (2023). GHRM and employer branding: empirical study in developing and developed economies. *Management Research Review*, *46*(10), 1297-1314. https://doi.org/10.1108/mrr-04-2022-0280

[144] Mukherji, A., & Bhatnagar, J. (2022). Conceptualizing and theorizing green human resource management: a narrative review. *International Journal of Manpower*, *43*(3), 862-888. https://doi.org/10.1108/ijm-06-2021-0376

[145] Munira, M. S. K. (2025). Digital Transformation in Banking: A Systematic Review Of Trends, Technologies, And Challenges. *Strategic Data Management and Innovation*, *2*(01), 78-95. https://doi.org/10.71292/sdmi.v2i01.12

[146] Muñoz-Villamizar, A., Santos, J., Montoya-Torres, J. R., & Jaca, C. (2018). Using OEE to evaluate the effectiveness of urban freight transportation systems: A case study. *International Journal of Production Economics*, *197*(NA), 232-242. https://doi.org/10.1016/j.ijpe.2018.01.011

[147] Nahid, O. F., Rahmatullah, R., Al-Arafat, M., Kabir, M. E., & Dasgupta, A. (2024). Risk mitigation strategies in large scale infrastructure project:a project management perspective. *Journal of Science and Engineering Research*, *1*(01), 21-37. https://doi.org/10.70008/jeser.v1i01.38

[148] Nekhili, M., Boukadhaba, A., Nagati, H., & Chtioui, T. (2019). ESG performance and market value: the moderating role of employee board representation. *The International Journal of Human Resource Management*, *32*(14), 3061-3087. https://doi.org/10.1080/09585192.2019.1629989

[149] Nishant, R., Kennedy, M., & Corbett, J. (2020). Artificial intelligence for sustainability: Challenges, opportunities, and a research agenda. *International Journal of Information Management*, *53*(NA), 102104-NA. https://doi.org/10.1016/j.ijinfomgt.2020.102104

[150] O'Brien, W., & Aliabadi, F. Y. (2020). Does telecommuting save energy? A critical review of quantitative studies and their research methods. *Energy and buildings*, *225*(NA), 110298-110298. https://doi.org/10.1016/j.enbuild.2020.110298

[151] Ojo, A. O., Tan, C. N. L., & Alias, M. (2020). Linking green HRM practices to environmental performance through pro-environment behaviour in the information technology sector. *Social Responsibility Journal*, *18*(1), 1-18. https://doi.org/10.1108/srj-12-2019-0403

[152] Omarova, L., & Jo, S.-J. (2022). Employee Pro-Environmental Behavior: The Impact of Environmental Transformational Leadership and GHRM. *Sustainability*, *14*(4), 2046-2046. https://doi.org/10.3390/su14042046

[153] Pham, N. T., Hoang, H. T., & Phan, Q. P. T. (2019). Green human resource management: a comprehensive review and future research agenda. *International Journal of Manpower*, *41*(7), 845-878. https://doi.org/10.1108/ijm-07-2019-0350

[154] Piening, E. P., Baluch, A. M., & Ridder, H.-G. (2014). Mind the Intended-Implemented Gap: Understanding Employees' Perceptions of HRM. *Human Resource Management*, *53*(4), 545-567. https://doi.org/10.1002/hrm.21605

[155] Pinzone, M., Guerci, M., Lettieri, E., & Redman, T. (2016). Progressing in the change journey towards sustainability in healthcare: the role of 'Green' HRM. *Journal of Cleaner Production*, *122*(122), 201-211. https://doi.org/10.1016/j.jclepro.2016.02.031

[156] Pournader, M., Shi, Y., Seuring, S., & Koh, S. C. L. (2019). Blockchain applications in supply chains, transport and logistics : a systematic review of the literature. *International Journal of Production Research*, *58*(7), 2063-2081. https://doi.org/10.1080/00207543.2019.1650976

[157] Prabha, D., & Raajarajeswari, M. A. (2024). Exploring Sustainable Green HRM Practices: An Investigation of Employee Perspectives and Organizational Challenges. In (Vol. NA, pp. 299-308). Springer Nature Singapore. https://doi.org/10.1007/978-981-99-7798-7_25

[158] Presslee, A., Richins, G., Saiy, S., & Webb, A. (2023). Small sample field study:The effects of team-based recognition on employee engagement and effort. *Management Accounting Research*, *59*(NA), 100829-100829. https://doi.org/10.1016/j.mar.2022.100829

[159] Qi, X., Luo, Y., Wu, G., Boriboonsomsin, K., & Barth, M. (2019). Deep reinforcement learning enabled self-learning control for energy efficient driving. *Transportation Research Part C: Emerging Technologies*, *99*(NA), 67-81. https://doi.org/10.1016/j.trc.2018.12.018

[160] Ramadan, M. A., Al Dhaheri, M. K., Maalouf, M., Antony, J., Bhat, S., & Gijo, E. V. (2022). Application of Six Sigma methodology to enhance the productivity and performance of a hotel in the UAE. *The TQM Journal*, *35*(2), 554-576. https://doi.org/10.1108/tqm-11-2021-0325

[161] Raut, R. D., Gardas, B. B., Luthra, S., Narkhede, B. E., & Mangla, S. K. (2020). Analysing green human resource management indicators of automotive service sector. *International Journal of Manpower*, *41*(7), 925-944. https://doi.org/10.1108/ijm-09-2019-0435

[162] Renwick, D. W. S., Jabbour, C. J. C., Muller-Camen, M., Redman, T., & Wilkinson, A. J. (2015). Contemporary developments in Green (environmental) HRM scholarship. *The International Journal of Human Resource Management*, *27*(2), 114-128. https://doi.org/10.1080/09585192.2015.1105844

[163] Rizvi, Y. S., & Garg, R. (2020). The simultaneous effect of green ability-motivation-opportunity and transformational leadership in environment management: the mediating role of green culture. *Benchmarking: An International Journal*, *28*(3), 830-856. https://doi.org/10.1108/bij-08-2020-0400

[164] Rok, M., & Mulej, M. (2014). CSR-based model for HRM in tourism and hospitality. *Kybernetes*, *43*(3/4), 346-362. https://doi.org/10.1108/k-02-2014-0026

[165] Roksana, H. (2023). Automation In Manufacturing: A Systematic Review Of Advanced Time Management Techniques To Boost Productivity. *American Journal of Scholarly Research and Innovation*, *2*(01), 50-78. https://doi.org/10.63125/z1wmcm42

[166] Roy, P. P., Abdullah, M. S., & Sunny, M. A. U. (2024). Revolutionizing Structural Engineering: Innovations in Sustainable Design and Construction. *European Journal of Advances in Engineering and Technology*, *11*(5), 94-99.

[167] Rubel, M. R. B., Kee, D. M. H., & Rimi, N. N. (2021). The influence of green HRM practices on green service behaviors: the mediating effect of green knowledge sharing. *Employee Relations: The International Journal*, *43*(5), 996-1015. https://doi.org/10.1108/er-04-2020-0163

[168] Rundall, T. G., Shortell, S. M., Blodgett, J. C., Henke, R. M., & Foster, D. (2020). Adoption of Lean management and hospital performance: Results from a national survey. *Health care management review*, *46*(1), E10-E19. https://doi.org/10.1097/hmr.0000000000000287

[169] Rupani, P. F., Nilashi, M., Abumalloh, R. A., Asadi, S., Samad, S., & Wang, S. (2020). Coronavirus pandemic (COVID-19) and its natural environmental impacts. *International journal of environmental science and technology : IJEST*, *17*(11), 1-12. https://doi.org/10.1007/s13762-020-02910-x

[170] S, E. A. (2017). A huge number of artificial waste material can be supplementary cementitious material (SCM) for concrete production – a review part II. *Journal of Cleaner Production*, *142*(142), 4178-4194. https://doi.org/10.1016/j.jclepro.2015.12.115

[171] Sabid, A. M., & Kamrul, H. M. (2024). Computational And Theoretical Analysis On The Single Proton Transfer Process In Adenine Base By Using DFT Theory And Thermodynamics. *IOSR Journal of Applied Chemistry*.

[172] Schultz, T. W. (1961). Investment in Human Capital. *The American Economic Review*, *51*(1), 1-17. http://www.jstor.org/stable/1818907

[173] Shaban, S. (2019). Reviewing the Concept of Green HRM (GHRM) and Its Application Practices (Green Staffing) with Suggested Research Agenda: A Review from Literature Background and Testing Construction Perspective. *International Business Research*, *12*(5), 86-94. https://doi.org/10.5539/ibr.v12n5p86

[174] Shafaei, A., Nejati, M., & Yusoff, Y. M. (2020). Green human resource management: A two-study investigation of antecedents and outcomes. *International Journal of Manpower*, *41*(7), 1041-1060. https://doi.org/10.1108/ijm-08-2019-0406

[175] Shahan, A., Anisur, R., & Md, A. (2023). A Systematic Review Of AI And Machine Learning-Driven IT Support Systems: Enhancing Efficiency And Automation In Technical Service Management. *American Journal of Scholarly Research and Innovation*, *2*(02), 75-101. https://doi.org/10.63125/fd34sr03

[176] Shen, J. (2015). Principles and Applications of Multilevel Modeling in Human Resource Management Research. *Human Resource Management*, *55*(6), 951-965. https://doi.org/10.1002/hrm.21666

[177] Shi, Y., Arthanari, T., Liu, X., & Yang, B. (2019). Sustainable transportation management: Integrated modeling and support. *Journal of Cleaner Production*, *212*(NA), 1381-1395. https://doi.org/10.1016/j.jclepro.2018.11.209

[178] Shimul, A. I., Haque, M. M., Ghosh, A., Sunny, M. A. U., Aljazzar, S. O., Al-Humaidi, J. Y., & Mukhrish, Y. E. (2025). Hydrostatic Pressure-Driven Insights into Structural, Electronic, Optical, and Mechanical Properties of A3PCl3 (A = Sr, Ba) Cubic Perovskites for Advanced Solar Cell Applications. *Journal of Inorganic and Organometallic Polymers and Materials*. https://doi.org/10.1007/s10904-025-03629-3

[179] Shoaib, M., Abbas, Z., Yousaf, M., Zámečník, R., Ahmed, J., & Saqib, S. (2021). The role of GHRM practices towards organizational commitment: A mediation analysis of green human capital. *Cogent Business & Management*, *8*(1), 1870798-NA. https://doi.org/10.1080/23311975.2020.1870798

[180] Shohel, M. S. H., Islam, M. M., Prodhan, R. K., & Morshed, A. S. M. (2024). Lifecycle Management Of Renewable Energy Systems In Residential Housing Construction. *Frontiers in Applied Engineering and Technology*, *1*(01), 124-138. https://doi.org/10.70937/faet.v1i01.23

[181] Sohel, A., Alam, M. A., Hossain, A., Mahmud, S., & Akter, S. (2022). Artificial Intelligence In Predictive Analytics For Next-Generation Cancer Treatment: A Systematic Literature Review Of Healthcare Innovations In The USA. *Global Mainstream Journal of Innovation, Engineering & Emerging Technology*, *1*(01), 62-87. https://doi.org/10.62304/jieet.v1i01.229

[182] Srivastava, A. P., Mani, V., Yadav, M., & Joshi, Y. (2020). Authentic leadership towards sustainability in higher education – an integrated green model. *International Journal of Manpower*, *41*(7), 901-923. https://doi.org/10.1108/ijm-08-2019-0404

[183] Stahl, G. K., Brewster, C., Collings, D. G., & Hajro, A. (2020). Enhancing the role of human resource management in corporate sustainability and social responsibility: A multi-stakeholder, multidimensional approach to HRM. *Human Resource Management Review*, *30*(3), 100708-NA. https://doi.org/10.1016/j.hrmr.2019.100708

[184] Strydom, A., Musango, J. K., & Currie, P. (2019). Conceptualizing household energy metabolism : a methodological contribution. *Energies*, *12*(21), 4125-NA. https://doi.org/10.3390/en12214125

[185] Sun, Z., Wang, W., Wang, W., & Sun, X. (2023). How does digital transformation affect corporate social responsibility performance? From the dual perspective of internal drive and external governance. *Corporate Social Responsibility and Environmental Management*, *31*(2), 1156-1176. https://doi.org/10.1002/csr.2615

[186] Sunny, M. A. U. (2024a). Eco-Friendly Approach: Affordable Bio-Crude Isolation from Faecal Sludge Liquefied Product. *Journal of Scientific and Engineering Research*, *11*(5), 18-25.

[187] Sunny, M. A. U. (2024b). Effects of Recycled Aggregate on the Mechanical Properties and Durability of Concrete: A Comparative Study. *Journal of Civil and Construction Engineering*, 7-14.

[188] Sunny, M. A. U. (2024c). Unveiling spatial insights: navigating the parameters of dynamic Geographic Information Systems (GIS) analysis. *International Journal of Science and Research Archive*, *11*(2), 1976-1985.

[189] Thrasher, E. H., & Byrd, T. A. (2008). Strategic Fit in the Healthcare IDS. In *Encyclopedia of Healthcare Information Systems* (pp. 1269-1276). IGI Global.

[190] Tolon, F. E., & Karaosmanoglu, F. (2020). Supply Chain Network Carbon Footprint of Forest Biomass to Biorefinery. *Journal of Sustainable Forestry*, *40*(2), 124-141. https://doi.org/10.1080/10549811.2020.1746349

[191] Tonoy, A. A. R. (2022). Mechanical Properties and Structural Stability of Semiconducting Electrides: Insights For Material. *Global Mainstream Journal of Innovation, Engineering & Emerging Technology*, *1*(01), 18-35. https://doi.org/10.62304/jieet.v1i01.225

[192] Tonoy, A. A. R., & Khan, M. R. (2023). The Role of Semiconducting Electrides In Mechanical Energy Conversion And Piezoelectric Applications: A Systematic Literature Review. *American Journal of Scholarly Research and Innovation*, *2*(1), 01-23. https://doi.org/10.63125/patvqr38

[193] Úbeda-García, M., Claver-Cortés, E., Marco-Lajara, B., & Zaragoza-Sáez, P. (2021). Corporate social responsibility and firm performance in the hotel industry. The mediating role of green human resource management and environmental outcomes. *Journal of Business Research*, *123*(NA), 57-69. https://doi.org/10.1016/j.jbusres.2020.09.055

[194] Umrani, W. A., Channa, N. A., Yousaf, A. M., Ahmed, U., Pahi, M. H., & Ramayah, T. (2020). Greening the workforce to achieve environmental performance in hotel industry: A serial mediation model. *Journal of Hospitality and Tourism Management*, *44*(NA), 50-60. https://doi.org/10.1016/j.jhtm.2020.05.007

[195] van Kleeff, R., van Harten, J., Knies, E., & Boselie, P. (2023). 'Lean Dancing': How Involvement in Continuous Improvement and Lean Techniques Relate to Hospital Performance and Workers' Wellbeing through Autonomy. *Sustainability*, *15*(6), 5546-5546. https://doi.org/10.3390/su15065546

[196] Veleva, V. R., Bodkin, G., & Todorova, S. (2017). The need for better measurement and employee engagement to advance a circular economy: Lessons from Biogen's "zero waste" journey. *Journal of Cleaner Production*, *154*(NA), 517-529. https://doi.org/10.1016/j.jclepro.2017.03.177

[197] Villarreal, B., Garza-Reyes, J. A., Granda-Gutierrez, E. M. A., Kumar, V., & Lankenau-Delgado, S. (2018). A Lean transportation approach for improving emergency medical operations. *Production Planning & Control*, *29*(11), 928-942. https://doi.org/10.1080/09537287.2018.1494343

[198] Villarreal, B., Garza-Reyes, J. A., & Kumar, V. (2016). Lean road transportation – a systematic method for the improvement of road transport operations. *Production Planning & Control*, *27*(11), 865-877. https://doi.org/10.1080/09537287.2016.1152405

[199] Wikhamn, W. (2019). Innovation, sustainable HRM and customer satisfaction. *International Journal of Hospitality Management*, *76*(NA), 102-110. https://doi.org/10.1016/j.ijhm.2018.04.009

[200] Xie, H., & Lau, T. C. (2023). Evidence-Based Green Human Resource Management: A Systematic Literature Review. *Sustainability*, *15*(14), 10941-10941. https://doi.org/10.3390/su151410941

[201] Xu, H., Ye, T., & Chan, D. (2018). When cosmopolitan corporations meet local environments: The impact on managerial structure in international luxury hotels. *International Journal of Hospitality Management*, *74*(NA), 30-39. https://doi.org/10.1016/j.ijhm.2018.02.017

[202] Xu, X., Chen, X., Jia, F., Brown, S., Gong, Y., & Xu, Y. (2018). Supply chain finance: A systematic literature review and bibliometric analysis. *International Journal of Production Economics*, *204*(NA), 160-173. https://doi.org/10.1016/j.ijpe.2018.08.003

[203] Yakovleva, N., Sarkis, J., & Sloan, T. W. (2012). Sustainable benchmarking of supply chains: the case of the food industry. *International Journal of Production Research*, *50*(5), 1297-1317. https://doi.org/10.1080/00207543.2011.571926

[204] Yani, M., Machfud, N. A., Asrol, M., Hambali, E., Papilo, P., Mursidah, S., & Marimin, M. (2022). An Adaptive Fuzzy Multi-Criteria Model for Sustainability Assessment of Sugarcane Agroindustry Supply Chain. *IEEE Access*, *10*(NA), 5497-5517. https://doi.org/10.1109/access.2022.3140519

[205] Yasin, R., Huseynova, A., & Atif, M. (2022). Green human resource management, a gateway to employer branding: Mediating role of corporate environmental sustainability and corporate social sustainability. *Corporate Social Responsibility and Environmental Management*, *30*(1), 369-383. https://doi.org/10.1002/csr.2360

[206] Yong, J. Y., Yusliza, M. Y., & Fawehinmi, O. (2019). Green human resource management: A systematic literature review from 2007 to 2019. *Benchmarking: An International Journal*, *27*(7), 2005-2027. https://doi.org/10.1108/bij-12-2018-0438

[207] Younus, M. (2022). Reducing Carbon Emissions in The Fashion And Textile Industry Through Sustainable Practices and Recycling: A Path Towards A Circular, Low-Carbon Future. *Global Mainstream Journal of Business, Economics, Development & Project Management*, *1*(1), 57-76. https://doi.org/10.62304/jbedpm.v1i1.226

[208] Younus, M. (2025). The Economics of A Zero-Waste Fashion Industry: Strategies To Reduce Wastage, Minimize Clothing Costs, And Maximize & Sustainability. *Strategic Data Management and Innovation*, *2*(01), 116-137. https://doi.org/10.71292/sdmi.v2i01.15

[209] Yu, G., Li, F., & Yang, Y. (2016). Robust supply chain networks design and ambiguous risk preferences. *International Journal of Production Research*, *55*(4), 1168-1182. https://doi.org/10.1080/00207543.2016.1232499

[210] Yusliza, M. Y., Norazmi, N. A., Jabbour, C. J. C., Fernando, Y., Fawehinmi, O., & Seles, B. M. R. P. (2019). Top management commitment, corporate social responsibility and green human resource management: A Malaysian study. *Benchmarking: An International Journal*, *26*(6), 2051-2078. https://doi.org/10.1108/bij-09-2018-0283

[211] Zahrani, A. A. (2024). The influence of green human resource management practices on organizational environmental performance: mediating roles of green innovation and employee

performance. *Cogent Business & Management*, *11*(1), NA-NA. https://doi.org/10.1080/23311975.2024.2387378