Mapping Sustainability Performance in the Hospitality Industry: A Systematic Literature Review and Future Research Agenda

Ni Luh Putu Mita Miati[1*], Dodik Ariyanto[2], Anak Agung Gde Putu Widanaputra[3], I Gusti Ayu Made Asri Dwija Putri[4]
Warmadewa University, Bali, Indonesia[1]
Udayana University, Bali, Indonesia[2,3,4]
mitamiati91@gmail.com[1]

Abstract
Purpose: This study aims to identify the main indicators, influencing variables, analytical techniques, and regional trends of sustainability performance in the hospitality industry.

Methodology: This study adopts a Systematic Literature Review (SLR) method using the Scopus database as the primary source. Articles were searched through Boolean keyword techniques, screened with PRISMA guidelines, and analysed using descriptive synthesis to map indicators, variables, and methods applied in prior studies.

Results/Findings: The review shows that environmental, economic, and social performance remain the most dominant indicators, whereas cultural sustainability is rarely addressed. Green Human Resource Management (GHRM), Corporate Social Responsibility (CSR), and environmental management are the most studied variables. In contrast, green intellectual capital and spiritual capital have not been examined in the hospitality sector, although they show potential relevance. SEM-PLS is identified as the most frequently applied analytical tool, and most studies are concentrated in developing countries.

Conclusions: The findings emphasize the need for further research into cultural sustainability and the inclusion of intellectual and spiritual capital in hospitality sustainability practices. The dominance of environmental, economic, and social factors suggests that a broader, more integrated approach is necessary.

Limitations: This review is limited to English-language articles indexed in Scopus and excludes non-English or unpublished studies.

Contributions: This study makes both theoretical and practical contributions. Theoretically, it expands sustainability research in hospitality by integrating knowledge-based and value-based resources. Practically, it guides hotel managers and policymakers, especially in culturally rich destinations, to incorporate cultural heritage, intellectual capital, and spiritual values into sustainability practices.

Keywords: *Cultural Sustainability, Green Intellectual Capital, Hospitality Industry, Spiritual Capital, Sustainability Performance*

How to Cite: Miati, N. L. P. M., Ariyanto, D., Widanaputra, A. A. G. P., & Putri, I. G. A. M. A. D. P. (2026). Mapping Sustainability Performance in the Hospitality Industry: A Systematic Literature Review and Future Research Agenda. *Annals of Human Resource Management Research,* 6(1), 1-19.

1. Introduction

Sustainability performance has become a key focus in the hospitality industry, driven by increasing attention to corporate social responsibility and the adoption of sustainable practices. Research indicates that sustainable environmental practices, such as waste management and community empowerment, significantly contribute to improved hotel performance (Langgat, Ramdani, Pavic, & Tok, 2023). Furthermore, environmental, economic, and social sustainability dimensions interact and collectively influence the overall performance of hotels (López-Gamero, Molina-Azorín, Tarí, & Pertusa-Ortega, 2024). This underscores the importance of a holistic approach to integrating sustainability practices to achieve optimal sustainability performance in the hospitality industry, especially when facing global challenges such as climate change, resource scarcity, and growing consumer awareness of sustainability.

The hospitality industry across different countries demonstrates significant variations in the implementation and measurement of sustainability performance. Some hotels have successfully integrated sustainability principles into their operations through efficient energy, water, and waste management, as well as the use of eco-friendly materials. For instance, ecohotels, as part of ecotourism, have implemented measures to reduce carbon footprints, water consumption, and waste production. They also promote the use of recycled materials and biodegradable products, aligning with green management principles (Pavolová, Bakalár, Tokarčík, & Cimboláková, 2024). However, a major challenge lies in the lack of uniform standards and relevant indicators to comprehensively measure sustainability performance, creating gaps in the literature regarding the factors influencing sustainability performance.

Despite growing attention to sustainability, research on sustainability performance in the hospitality industry remains fragmented. Previous reviews, such as Kim, Barber, and Kim (2019), have provided an overview of sustainability practices in the hotel industry, yet they focused primarily on environmental initiatives and managerial practices without systematically mapping the indicators, variables, and analytical techniques applied across studies. Moreover, dimensions such as cultural sustainability, green intellectual capital, and spiritual capital have been overlooked, despite their theoretical relevance and practical importance in culturally rich destinations, such as Bali and other developing countries.

The hospitality industry presents a unique and urgent locus of study because it operates at the intersection of global sustainability challenges and local cultural contexts. Hotels are highly resource-intensive and face pressure from international sustainability standards while being embedded in community traditions and socio-cultural values. This duality underscores the need for a systematic review that synthesizes existing evidence and identifies underexplored dimensions that can enrich both theory and practice.

Therefore, this study contributes by (1) mapping the dominant sustainability indicators, influencing variables, and methodologies used in hospitality research; (2) highlighting neglected dimensions, such as cultural sustainability and spiritual capital; and (3) proposing a future research agenda that extends the Natural Resource-Based View (NRBV) framework to incorporate knowledge-based and value-based resources. This strengthens the theoretical foundation of sustainability performance research in hospitality while offering practical insights for managers and policymakers. In advancing these contributions, this review differs from prior work by explicitly addressing three critical gaps.

First, it highlights the neglected dimension of cultural sustainability, thereby extending the triple bottom line into a Quadruple Bottom Line (QBL) framework for hospitality research. Second, it provides a critical methodological reflection by identifying the over-reliance on SEM-PLS and recommending greater methodological diversity. Third, it emphasizes the regional imbalance of existing studies, which are predominantly concentrated in developing countries, and calls for comparative research across developed and developing contexts

This study is designed to address several key questions central to a systematic literature review on sustainability performance in the hospitality industry. These questions aim to identify key indicators, explore influencing factors, understand the data analysis techniques employed, and compare sustainability performance across countries. The research questions are as follows:

RQ_1: Which indicators are used to measure sustainability performance in the hospitality industry?

RQ_2: What variables influence sustainability performance in the hospitality sector?

RQ_3: What data analysis techniques are employed in sustainability performance research in the hospitality industry?

RQ_4: What are the regional research trends related to sustainability performance in the hospitality industry?

2. Literature Review and Hypothesis Development

Hospitality industry's sustainability performance has received growing attention in recent years because of increasing environmental, social, and cultural challenges. According to Kim et al. (2019), most sustainability studies in hotels emphasize environmental initiatives and managerial practices; however, they lack a systematic mapping of indicators, variables, and analytical techniques. This highlights the need for more integrated and theory-driven approaches.

2.1. Theoretical Lenses

The Natural Resource-Based View (NRBV) emphasizes that firms achieve sustained competitive advantage through environmentally oriented resources and capabilities (Hart, 1995). In the hospitality industry, this extends to knowledge-based resources, namely, Green Intellectual Capital (GIC) and spiritual capital, which remain underexplored. Stakeholder theory highlights that firms must satisfy diverse stakeholders, including employees, guests, communities, and regulators, to maintain legitimacy and long-term success (Freeman, 2010). The Triple Bottom Line (TBL) approach, which considers economic, social, and environmental factors, has been widely adopted since its introduction by Elkington (1998); however, scholars have suggested extending it into a Quadruple Bottom Line (QBL) by adding cultural sustainability (Saputra, Subroto, Rahman, & Saraswati, 2023).

2.2. Key Antecedents and Drivers

Recent studies have shown that Green Human Resource Management (GHRM) practices, such as green recruitment, training, and incentives, positively influence environmental and social performance (Abbas, Smaliukienė, Zámečník, Kalsoom, & Cera, 2023; Nisar et al., 2022). Similarly, CSR initiatives enhance legitimacy and improve social and financial sustainability (Siyal, Ahmad, Riaz, Xin, & Fangcheng, 2022; Tanveer, Yusliza, Ngah, & Khan, 2023). Environmental management practices, such as energy efficiency, waste reduction, and green investments, also contribute significantly to sustainable performance in hotels across the Maldives, Indonesia, and Saudi Arabia (Abdou, Hassan, Salem, Elsaied, & Elsaed, 2022; Moosa & He, 2023; Saputra, Subroto, Rahman, & Saraswati, 2022). In parallel, green and technological innovation, including artificial intelligence (AI), Internet of Things (IoT), and blockchain, have been shown to enhance operational efficiency and transparency (Asadi et al., 2020; Chaudhuri, Chatterjee, & Vrontis, 2024; Gajić, Petrović, Pešić, Conić, & Gligorijević, 2024).

2.3. Research Gaps

Despite these advances, there are several gaps in the literature.

1) Most studies have focused only on TBL indicators, with cultural sustainability largely neglected (Saputra et al., 2023).
2) Although linked to sustainability in other sectors, Green Intellectual Capital (GIC) has not been systematically applied to the hospitality industry (Shah, Ahmed, Ismail, & Mozammel, 2021).
3) Spiritual capital, with its potential to influence ethical and pro-environmental behavior, is yet to be addressed in hospitality research.

Methodologically, studies rely heavily on Structural Equation Modeling–Partial Least Squares (SEM-PLS), with limited adoption of advanced techniques such as text mining or machine learning (Chaudhuri et al., 2024).

2.4. Conceptual Propositions and Future Research Agenda

In line with the requirement to extend beyond the research questions, this study advances several conceptual propositions that serve as a foundation for future empirical investigations in the hospitality industry. These propositions reflect the research gaps identified in the literature and highlight new directions for strengthening both theoretical and practical contributions.

1) Proposition 1: Integrating cultural sustainability into the measurement of sustainability performance provides a more holistic framework under the QBL.
2) Proposition 2: Green Intellectual Capital (GIC) and spiritual capital function as strategic resources within the Natural-Resource-Based View (NRBV), positively influencing sustainability outcomes in hospitality.
3) Proposition 3: Environmental Management Accounting (EMA) and pro-environmental behavior (PEB) act as mediating mechanisms through which antecedents such as GHRM, CSR, and innovation translate into enhanced sustainability performance.
4) Proposition 4: Digital transformation and institutional pressures moderate the relationships between antecedents and sustainability performance, thereby amplifying their effects under favorable conditions.
5) Proposition 5: Future studies should apply advanced analytical methods (e.g., text mining, AI-based approaches) to complement SEM-PLS, thereby enriching the methodological diversity in sustainability performance research.

2.5. Conceptual Framework

Building on NRBV, stakeholder theory, and QBL, this study proposes a conceptual framework (Figure 1). It links antecedents (GHRM, CSR, environmental management, and innovation) and strategic resources (GIC and spiritual capital) to sustainability performance outcomes (environmental, economic, social, and cultural), mediated by EMA and PEB, and moderated by digital transformation and institutional pressures.
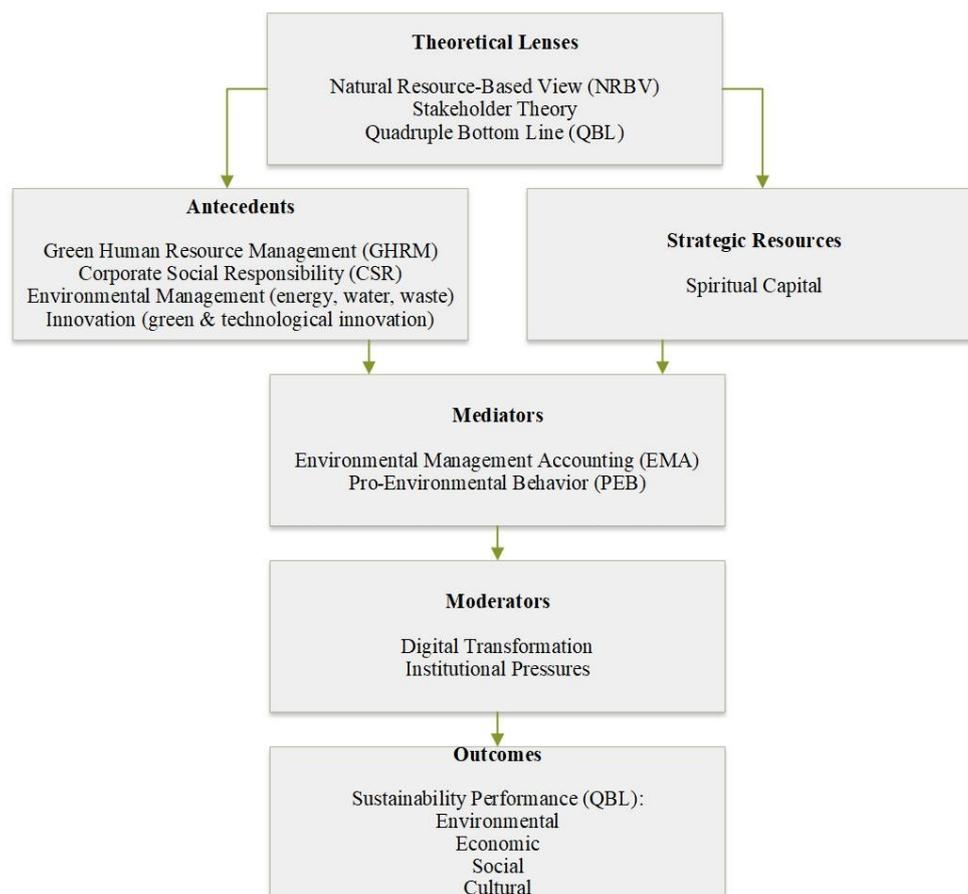
Figure 1. Conceptual framework of sustainability performance in the hospitality industry

3. Research Methodology

3.1. Systematic Literature Review Protocol

The SLR follows a predefined protocol, often guided by frameworks such as PRISMA, to ensure a systematic search and selection of relevant literature (Hu & Raman, 2024). The process involves identifying research questions, selecting databases, defining inclusion and exclusion criteria, and conducting a comprehensive search for relevant studies (Alrezq & Van Aken, 2025). In this study, the review process included defining inclusion and exclusion criteria, conducting a comprehensive search in the Scopus database, and systematically analyzing the selected studies. This methodology ensures the reliability and validity of the findings, providing a robust foundation for understanding sustainability performance in the hospitality industry.

3.2. PRISMA Framework

The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (i.e., PRISMA) methodology is a widely recognized framework designed to enhance the transparency and quality of reporting in systematic reviews and meta-analyses. It offers a structured approach to ensure comprehensive and reproducible reporting of research findings. The PRISMA methodology has also been applied in clinical trials to ensure consistent and transparent reporting of results and methodologies (García-Azorin et al., 2018).

3.3. Time Frame of Reviewed Publications

The literature search was limited to studies published between 2017 and 2024 to ensure that the review captured recent developments in sustainability performance research in the hospitality sector. Foundational studies published earlier were considered only when relevant for theoretical grounding, but the primary synthesis focused on this six-year period.

3.4. Search Strategy

In this study, data collection utilized keyword searches with Boolean techniques. Boolean techniques are search methods that employ logical operators (AND, OR, and NOT) to combine keywords in databases or search engines, resulting in more relevant and specific search results. The keywords used in this study are as follows:

(("Social Performance" OR "Environmental Performance" OR "Financial performance" OR "Corporate Sustainability" OR "Business Sustainability" OR "sustainability performance" AND "HOTEL INDUSTRY" OR "HOTEL" OR "HOTELS" OR "Hospitality"))

3.5. Inclusion and Exclusion Criteria

The inclusion criteria were as follows:
1) Peer-reviewed journal articles.
2) Written in English.
3) Focused on sustainability performance in the hospitality industry

The exclusion criteria were as follows:
1) Conference proceedings, reviews, book chapters, and editorials
2) Non-English Publications.
3) Articles with missing full text.

3.6. Quality Appraisal

To ensure methodological rigor, this study applied the Mixed Methods Appraisal Tool (MMAT, 2018 version). Each article was evaluated based on the clarity of its research objectives, appropriateness of methodology, adequacy of data collection, and consistency between findings and conclusions (Hong, Gonzalez-Reyes, & Pluye, 2018). Articles that did not meet the minimum quality threshold were excluded to ensure that only high-quality studies were included in the synthesis.

3.7. Data Extraction and Synthesis

After applying the inclusion criteria and quality appraisal, 46 articles published between 2017 and 2024 were retained for analysis. Data regarding indicators of sustainability performance, influencing variables, analytical techniques, and research contexts were extracted for each article. A descriptive synthesis approach was employed to identify recurring themes, theoretical underpinnings, methodological approaches, and research gaps.

4. Results and Discussion

4.1. Overview of Reviewed Studies

A search of the Scopus database using these keywords yielded 867 results. This study applied several criteria for article selection. The document type was limited to articles, resulting in the exclusion of 166 non-article documents. Next, the selection examined whether the articles were final or were in press; 22 in-press articles were excluded from the dataset. Additionally, articles were filtered based on language and availability, excluding 10 non-English articles and 531 articles that were unavailable for download. After applying these criteria, 141 articles remained, and 46 articles published between 2017 and 2024 were identified as relevant to the topic. The summarized data are presented in Table 1 and Figure 2, with a PRISM diagram.

Table 1. Search by keyword group

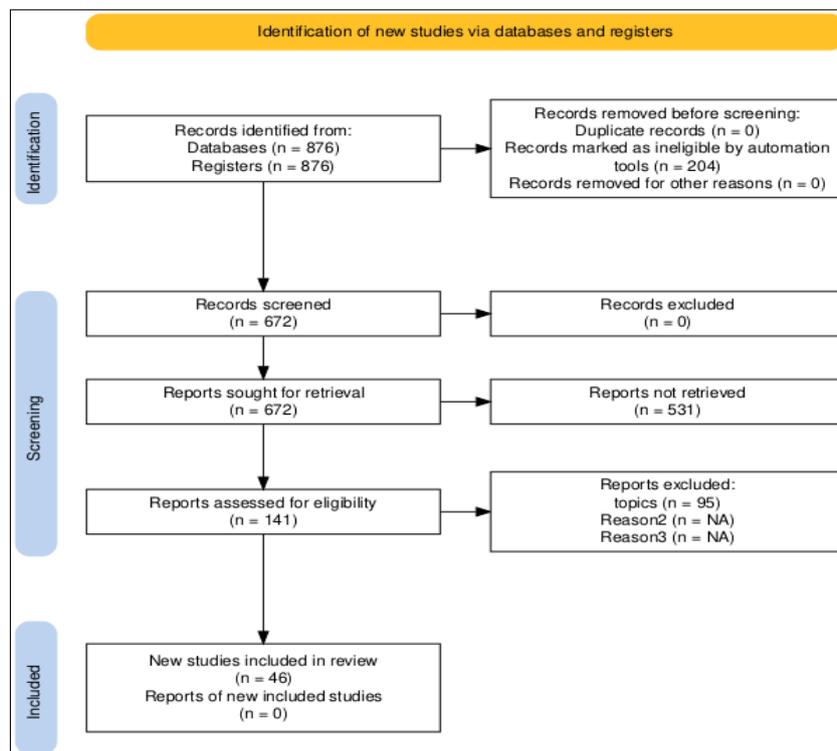| Filter	Categories	Number of Articles	Removed
Database	Scopus.com	876	
Document type	Article	710	166
Publication stage	Final	688	22
Source type	Journal	682	6
Language	English	672	10
Download	Available	141	531
Topic suitability	appropriate	46	94

Figure 2. Article selection process with prism diagram

Based on the analysis of 46 articles selected using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (i.e., PRISMA) method, this systematic literature review provides a comprehensive

overview of the theories, data analysis techniques, research variables, findings, and sustainability performance indicators in the hospitality industry. The findings reveal a diversity of sustainability performance indicators, reflecting the complexity of the concept and the varying approaches utilized in previous studies. This highlights that no single universal approach is applicable; rather, each study offers contextual and relevant perspectives on the sustainability challenges being addressed. To facilitate readers in tracing the data sources, a list of article titles used in this review is presented in Table 2.

Tabel 2. Title of the article used

No	Researchers	Research Title
1	D. N. S. Werastuti, Sukoharsono, Saraswati, and Prihatiningtias (2018)	Do competitive strategies and strategic alliances play a role in improving sustainability performance?
2	Acquah, Agyabeng-Mensah, and Afum (2021)	Examining the link among green human resource management practices, green supply chain management practices and performance
3	Fatoki (2019a)	Green entrepreneurial orientation and firm performance in South Africa
4	Nisar et al. (2022)	Green HRM and sustainable performance in hotels, Malaysia
5	Sobaih, Gharbi, Hasanein, and Elnasr (2022)	The mediating effects of green innovation and corporate social responsibility on the link between transformational leadership and performance: an examination using SEM analysis
6	Moosa and He (2023)	Impact of environmental management practices on corporate sustainability: evidence from the Maldives hospitality industry
7	Asadi et al. (2020)	Investigating influence of green innovation on sustainability performance: A case on Malaysian hotel industry
8	Shi and Tsai (2020)	Linking stakeholder integration to sustainability performance in the hotel context
9	Tanveer et al. (2023)	Mapping the link between CSR and sustainability performance through GHRM practices in hotel industry
10	Pereira-Moliner et al. (2021)	Sustainability, competitive advantages and performance in the hotel industry: a synergistic relationship
11	J. Sun, Sarfraz, Ivascu, and Ozturk (2023)	Unveiling green synergies: sustainable performance through human resource management, CSR, and corporate image under a mediated moderation framework
12	Abdou et al. (2022)	Determinants and consequences of green investment in the Saudi Arabian hotel industry
13	Saputra et al. (2022)	Eco-efficiency and energy audit to improve environmental performance: an empirical study of hotels in Bali-Indonesia
14	Yousaf, Radulescu, Nassani, Aldakhil, and Jianu (2021)	Environmental management system towards environmental performance of the hotel industry: does corporate social responsibility authenticity really matter?
15	Nassani, Yousaf, Radulescu, and Haffar (2022)	Environmental performance through environmental resource conservation efforts: does corporate social responsibility authenticity act as a mediator?
16	Shah et al. (2021)	Going intellectually green: exploring the nexus between green intellectual capital, environmental responsibility, and environmental concern towards environmental performance
17	Nisar et al. (2022)	Greening the workforce: a strategic way to spur the environmental performance in the hotel industry
18	Ibrahim A Elshaer, Azazz, and Fayyad (2023)	Green management and sustainable performance of small-and medium-sized hospitality businesses: moderating the role of an employee's pro-environmental behaviour

19	Fatoki (2019b)	Green marketing orientation and environmental and social performance of hospitality firms in South Africa
20	Abedelrahim, Qassim, and Alatawi (2024)	Green practices in action: examining HRM'S role in fostering environmental performance in Egypt's hospitality sector
21	Abbas et al. (2023)	How does green HRM influence hotels' environmental and social sustainability?
22	Sobaih, Hasanein, and Elshaer (2020)	Influences of green human resources management on environmental performance in small lodging enterprises: the role of green innovation
23	Ibrahim Abdelhamid Elshaer et al. (2024)	Internal green marketing orientation and business performance: The role of employee environmental commitment and green organizational identity
24	Yusoff (2019)	Linking green human resource management bundle to environmental performance in Malaysia's hotel industry: The mediating role of organizational citizenship behaviour towards environment
25	D. Werastuti, Sitawati, Rinandiyana, and Badriatin (2024)	Management accounting system as mediator on sustainability performance
26	Saputra et al. (2023)	Mediation role of environmental management accounting on the effect of green competitive advantage on sustainable performance
27	Basana, Ubud, Malelak, and Tarigan (2022)	The effect of key user capability on supply chain digital and flexibility in improving financial performance
28	Fernández-Gámez, Gutiérrez-Ruiz, Becerra-Vicario, and Ruiz-Palomo (2019)	The effects of creating shared value on the hotel performance
29	Siyal et al. (2022)	The impact of corporate culture on corporate social responsibility: Role of reputation and corporate sustainability
30	Serafim and Veríssimo (2021)	The relationship between strategic orientation, service innovation, and performance in hotels in Angola
31	Kazemian, Djajadikerta, Mat Roni, Trireksani, and Mohd-Sanusi (2021)	Accountability via social and financial performance of the hospitality sector: the role of market orientation
32	Amoah, Belás, Khan, and Metzker (2021)	Antecedents of sustainable SMEs in the social media space: A Partial Least Square-Structural Equation Modelling (PLS-SEM) Approach
33	Demydyuk and Carlbäck (2024)	Balancing short-term gains and long-term success in lodging: The role of customer satisfaction and price in hotel profitability model
34	Carneiro, Picoto, and Pinto (2023)	Big data analytics and firm performance in the hotel sector
35	Chaudhuri et al. (2024)	Adoption of blockchain technology in hospitality and tourism industry and sustainability performance: impact of technological turbulence and senior leadership support
36	Aljoghaiman, Hasanein, Elshaer, and Sobaih (2024)	Does environmental performance moderate the relationship between green supply chain management and hotel competitiveness?
37	Abdelwahed, Al Doghan, and Soomro (2024)	Green human resource management and environmental performance among hotels
38	Al-Sabi, Al-Ababneh, Al Qsssem, Afaneh, and Elshaer (2024)	Green human resource management practices and environmental performance: The mediating role of job satisfaction and pro-environmental behavior

39	R. Sun and Zainal (2024)	Sustainability reporting and stakeholder engagement of Malaysian hotels in social media: The moderating role of media types
40	Lucas, Moreno-Luna, Roets, and Al-Jaberi (2024)	Technological, organisational and environmental drivers of sustainability in hotels
41	Skordoulis, Stavropoulos, Papagrigoriou, and Kalantonis (2024)	The strategic impact of service quality and environmental sustainability on financial performance: A case study of 5-star hotels in Athens
42	Surya, Kot, Astawa, Rihayana, and Arsha (2024)	Unlocking sustainability through innovation: A green HR approach for the hospitality industry
43	Gajić et al. (2024)	Innovative approaches in hotel management: Integrating Artificial Intelligence (AI) and the Internet of Things (IoT) to enhance operational efficiency and sustainability
44	Baquero (2024)	Examining the role of ambidextrous green innovation and green competitive advantage in stimulating sustainable performance: The moderating role of green absorptive capacity

4.2. Sustainability Performance Indicators

The results of the Systematic Literature Review (SLR) analysis indicate that the sustainability performance indicators used in research on the hospitality industry are highly diverse. Table 3 summarizes the findings based on the number of studies employing each indicator.

Table 3. Sustainability performance indicators

Indicator	Reference	Count
Environmental performance, Economic performance, Social performance	(Abbas et al., 2023; Abdou et al., 2022; Acquah et al., 2021; Asadi et al., 2020; Baquero, 2024; Chaudhuri et al., 2024; Ibrahim A Elshaer et al., 2023; Ibrahim Abdelhamid Elshaer et al., 2024; Fatoki, 2019a; Lucas et al., 2024; Moosa & He, 2023; Nassani et al., 2022; Nisar et al., 2022; Pereira-Moliner et al., 2021; Siyal et al., 2022; Tanveer et al., 2023; D. Werastuti et al., 2024; D. N. S. Werastuti et al., 2018; Yousaf et al., 2021)	19
Environmental Performance	(Abdelwahed et al., 2024; Abedelrahim et al., 2024; Al-Sabi et al., 2024; Aljoghaiman et al., 2024; Nisar et al., 2022; Saputra et al., 2022; Shah et al., 2021; Skordoulis et al., 2024; Sobaih et al., 2022; Sobaih et al., 2020; Surya et al., 2024; Yusoff, 2019)	12
Financial Performance	(Amoah et al., 2021; Basana et al., 2022; Demydyuk & Carlbäck, 2024; Fernández-Gámez et al., 2019; Kazemian et al., 2021)	5
Corporate Sustainability Performance	(J. Sun et al., 2023)	1
Finance, Customer, Internal Business Process, Learning & Growth, Social & Environment	(D. Werastuti et al., 2024)	1
Technology Sustainability (TS), Organizational Sustainability (OS), Environmental Sustainability (ES)	(Lucas et al., 2024)	1
Economic Performance	(Serafim & Veríssimo, 2021)	1
Financial Performance, Social Performance	(Kazemian et al., 2021)	1

Environmental and Social Performance	(Fatoki, 2019b)	1
Sustainable management, social and economic aspects, cultural preservation, and eco-friendly services	(Saputra et al., 2023)	1
Corporate Sustainability Practices (CSP), Environmental Performance (EP), Social Performance (SP),	(Shi & Tsai, 2020)	1
Sustainable hotel business	(Gajić et al., 2024)	1
Cultural Sustainability	-	0

The findings reveal that most studies on sustainability performance in the hospitality industry focus on the triple bottom line (environmental, economic, and social performance), with 19 studies explicitly integrating these three dimensions. This highlights the importance of a holistic approach in evaluating sustainability performance, given the operational complexity of hotels, which involves multiple dimensions of sustainability. However, the results also show that certain performance dimensions, such as cultural sustainability, have not received sufficient attention in the literature. This presents a potential research gap, particularly in the context of hospitality in regions with rich cultural heritage, such as Bali. Moreover, more comprehensive approaches, such as the balanced scorecard and technology-based models, have only been applied in a few studies. This indicates that, while there is potential to expand the performance evaluation framework, its usage is not yet widespread among researchers.

Meanwhile, financial performance was identified as a key indicator in five studies, highlighting that economic sustainability remains a primary focus in evaluating hotel sustainability. However, it is important to note that an overemphasis on financial aspects may overlook the essential environmental and social dimensions of sustainability. Furthermore, combinations of indicators, such as environmental and social performance, as well as sustainable management-based approaches, offer a richer multidimensional perspective, although they are rarely used. This approach provides opportunities to broaden the research scope in the future, especially in an increasingly complex and dynamic global context.

Finally, emerging indicators such as technology sustainability reflect a shift toward innovation-based sustainability. This mirrors the growing need to integrate technology into hotel operations to achieve sustainability goals. These findings contribute to the literature on sustainability performance by providing a comprehensive analysis of the various indicators used. Future research is encouraged to further explore less-explored dimensions, such as cultural sustainability, and evaluate the effectiveness of multidimensional approaches, such as the balanced scorecard and technology sustainability, in enhancing sustainability performance in the hospitality sector.

4.3. Variables Influencing Sustainability Performance in the Hospitality Sector
Based on the literature analysis, several variables influencing sustainability performance in the hospitality industry were identified. These findings are summarized in Table 4.

Table 4. Variables influencing sustainability performance in the hospitality sector

Variable	Sub-variable	Researchers	Number of Researchers
Green Human Resource Management (GHRM)	Green training and development	(Abbas et al., 2023; Abedelrahim et al., 2024; Acquah et al., 2021; Ibrahim A Elshaer et al., 2023; Fatoki, 2019b; Nisar	9
	Green recruitment and selection		
	Green performance management		
	Green empowerment		
	Green compensation		

Variable	Sub-variable	Researchers	Number of Researchers
	Green abilities, motivation, and opportunities	et al., 2022; Sobaih et al., 2022; J. Sun et al., 2023; Yusoff, 2019)	
Green Innovation	Ambidextrous green innovation	(Baquero, 2024; Saputra et al., 2023; Sobaih et al., 2022)	3
	Green absorptive capacity		
	Green competitive advantage		
Strategic Management	Competitive strategy	(D. Werastuti et al., 2024)	1
	Strategic alliance		
Environmental Management	Energy management	(Abedelrahim et al., 2024; Moosa & He, 2023; Nassani et al., 2022; Saputra et al., 2022)	4
	Water management		
	Waste management		
	Hazardous substance management		
Corporate Social Responsibility (CSR)	CSR authenticity	(Abedelrahim et al., 2024; Nassani et al., 2022; Shi & Tsai, 2020; Siyal et al., 2022; Sobaih et al., 2022; Tanveer et al., 2023)	6
	Green CSR		
Technological Innovation	Adoption of blockchain	(Aljoghaiman et al., 2024; Chaudhuri et al., 2024)	3
	Artificial Intelligence (AI)		
	Internet of Things (IoT)		
Sustainability Strategy	Strategic management accounting	(D. N. S. Werastuti et al., 2018)	1
	Management accounting information system		
Green Marketing	Green Marketing Orientation (GMO)	(Ibrahim Abdelhamid Elshaer et al., 2024; Fatoki, 2019b)	2
	Internal Green Marketing Orientation (IGMO)		
Intelectual Capital	Green intelectual capital	-	0
	Spiritual capital	-	0

Influence of Variables on Sustainability Performance in the Hospitality Sector. This analysis reveals that Green Human Resource Management (GHRM) is the most frequently identified variable affecting sustainability performance. GHRM includes practices such as sustainability training, green recruitment, and environment-based incentives, which have proven to enhance environmental awareness at the organizational level. This aligns with the literature, which suggests that greater employee involvement in green practices can significantly improve the achievement of corporate sustainability goals.

Additionally, Corporate Social Responsibility (CSR) emerges as another critical variable. This underscores that social initiatives, such as engaging with and empowering local communities, contribute not only to social sustainability but also to a company's positive image, ultimately supporting economic sustainability. Environmental management, which includes practices such as waste management, energy efficiency, and resource conservation, was also found to be a key factor. Studies have shown that hotels committed to environmental management not only reduce their operational negative impact but also gain economic benefits through cost efficiency. Green innovation and technological innovation each contribute to creating new solutions to support sustainability. Green innovation involves the development of environmentally friendly products or services, while technological innovation includes the adoption of new technologies to enhance efficiency and reduce environmental impact.

However, variables that have been less frequently studied, such as green marketing, strategic management, and sustainability strategy, highlight the need to integrate sustainability strategies holistically into a company's strategic planning. Intellectual Capital (IC), encompassing Green IC (GIC) and spiritual capital, has not been an explicit focus in the reviewed research. Based on the Natural Resource-Based View (NRBV) theory, IC holds significant potential in influencing sustainability performance, particularly in managing knowledge-based resources that can support innovation and environmental efficiency. Previous studies in other sectors have shown a positive relationship between GIC and Sustainability Performance (SP). However, the lack of studies in the hospitality sector presents a great opportunity for further exploration. The absence of research on IC in the hospitality sector may also indicate that hotels have not yet fully recognized the importance of strategically managing IC. In contrast, in-depth research in this area could provide new insights into how IC can be leveraged to support better sustainability practices in hotels.

4.4. Methodological Patterns and Critical Reflections
The review reveals a heavy reliance on SEM-PLS, which is the dominant analytical technique across studies. While SEM-PLS is valuable for hypothesis testing and establishing causal relationships, its overuse suggests methodological homogeneity that may limit theoretical advancement. The absence of methodological diversity also raises concerns about oversimplifying the complex and context-specific dynamics of sustainability performance. Only a few studies have applied alternative approaches, such as bibliometric mapping, text mining, or machine learning (Chaudhuri et al., 2024). Future research should diversify methodological approaches to produce richer and more generalizable insights. Table 5 and Figure 3 summarize the data analysis techniques used in sustainability performance research in the hospitality industry based on the results of the literature analysis.

Table 5. Data analysis techniques

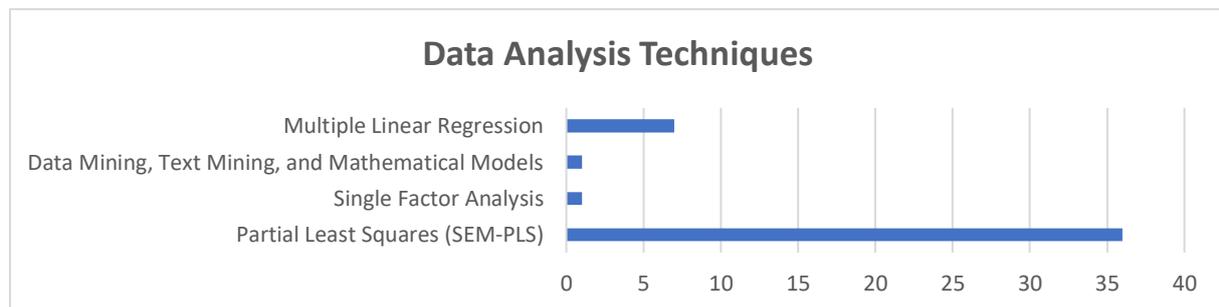| Data Analysis Techniques	Number of Researchers
Partial Least Squares (SEM-PLS)	36
Single Factor Analysis	1
Data Mining, Text Mining, and Mathematical Models	1
Multiple Linear Regression	7

Figure 3. Data analysis techniques

The use of partial least squares structural equation modelling (SEM-PLS) has been predominant in research related to sustainability performance in the hospitality industry. This trend reflects a preference for analyzing complex relationships between variables. SEM-PLS is particularly suitable for theoretical models involving latent variables, such as sustainability performance, which are difficult to measure directly. Its advantages include the ability to handle small-to-medium sample sizes and resilience to non-normally distributed data. This technique facilitates a deeper causal analysis, making it the preferred choice in this field.

Multiple Linear Regression (MLR) is also widely used, particularly in studies focusing on direct relationships between independent and dependent variables, without involving latent variables. It provides simple yet powerful results, especially when the data are well-distributed and the sample size is adequate. Single-factor analysis and data mining/text mining are less commonly used approaches in

this area of research. Single-factor analysis helps simplify the dimensionality of variables; however, its limitations in handling complex relational models make it less popular in sustainability performance research, which typically requires a deeper analysis.

The use of data mining, text mining, and mathematical models indicates the exploration of more innovative and advanced methodologies, particularly in big data-based research. These techniques enable researchers to uncover hidden patterns from unstructured data, such as customer reviews or sustainability reports. However, these techniques have not yet been widely adopted, possibly because of limitations in access to large datasets or the analytical expertise required. The dominance of SEM-PLS usage highlights the need to understand the complex causal relationships between various factors influencing sustainability performance. However, heavy reliance on a single analytical technique could create methodological gaps. Future research could better integrate alternative methods, such as machine learning, to explore patterns that may not be visible in larger, more heterogeneous datasets.

Additionally, although MLR provides reliable results, it cannot handle nonlinear relationships that may exist within sustainability performance data. Therefore, developing nonlinear models, such as artificial neural networks (Kumar et al.), could be an important next step. Modern data analysis technologies, such as text and data mining, also hold great potential for providing new insights in this research. Hotel customer reviews, social media reports, and sustainability reports are sources of unstructured data that can be processed to offer a richer perspective on sustainability performance.

Recommendations for Future Research: Introduction
1. Combining SEM–PLS with modern techniques, such as data mining, to uncover hidden patterns in big data.
2. Adopt AI-based methods and machine learning to model nonlinear relationships between variables.
3. Integrate text mining to extract insights from customer reviews or sustainability reports as complementary data for quantitative research.

4.5. The Number of Studies Conducted Based on Developing and Developed Countries
Based on the literature analysis, the number of studies related to sustainability performance in the hospitality industry conducted in developing and developed countries is as shown in Table 6 and Figure 4.

Table 6. Studies in developing and developed countries

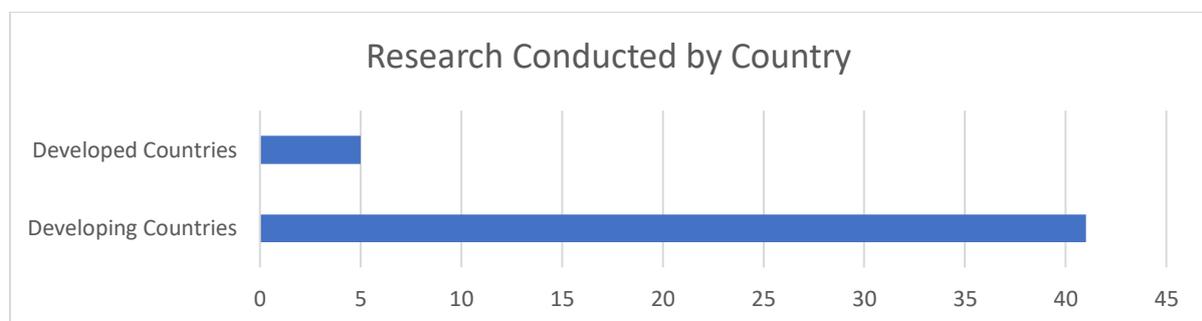| Category	Total
Developing Countries	41
Developed Countries	5

Figure 4. Research conducted by country

The significant difference in the number of studies conducted in developing and developed countries reflects several factors that can influence the focus and attention given to sustainability in the hospitality sector.

4.6. Dominance of Developing Countries

Studies on sustainability performance in developing countries have been more frequent, with 41 studies reported. Several potential reasons for this higher research activity in developing countries include the following:

1. Resource and environmental challenges: Developing countries often face greater challenges in managing natural resources, such as water, energy, and the environment. Sustainability research can help identify solutions and best practices to improve resource efficiency and reduce environmental impacts in the hospitality sector.
2. Infrastructure Development and Environmental Policies: Some developing countries are in the process of developing sustainability policies or building more eco-friendly infrastructure. Research in the hospitality sector provides insights into how to integrate sustainability policies into industry practices.
3. Tourism industry growth: Developing countries, especially in regions such as Asia, Africa, and Latin America, often experience rapid growth in the tourism and hospitality industries. In this context, sustainability research becomes increasingly relevant, as hotels must address challenges related to the ecological and social impacts of tourism.

4.7. Limited Research in Developed Countries

In contrast, only five studies have been conducted in developed countries regarding sustainability performance in the hospitality industry. Several factors may explain this low number of studies.

1. Established sustainability practices: In many developed countries, the hospitality industry has been implementing sustainability practices for a longer time. For instance, many hotels in developed countries are already certified with environmentally friendly standards, such as LEED or Green Key. Therefore, research focus may have shifted from exploring sustainability to developing new innovations in areas such as customer experience or social and cultural sustainability.
2. Focus on Other Social and Economic Issues: Developed countries may prioritize research on other aspects of social and economic sustainability, such as workplace diversity or the broader impacts of climate change. Consequently, the focus on sustainability performance in the hospitality sector may be limited.
3. Mature industry experience: The hospitality industry in developed countries has already matured in terms of implementing sustainability principles. Many hotels in developed countries have adopted sustainable management systems and reduced their environmental impact. Consequently, research may be conducted in other sectors or aimed at evaluating the long-term impacts of sustainability practices.

4.8. Thematic Synthesis and Implications

Synthesizing the reviewed literature, three thematic patterns emerged:

1. A narrow focus on TBL indicators with cultural sustainability is largely overlooked.
2. An overemphasis on certain antecedents (GHRM, CSR, and environmental management) while neglecting emerging variables such as GIC and spiritual capital.
3. Clear methodological and regional imbalances, particularly the overuse of SEM-PLS and concentration of studies in developing country contexts.

Theoretically, these findings call for extending NRBV by incorporating intellectual and spiritual resources and operationalizing QBL within hospitality research. Practically, managers are advised to integrate cultural heritage into sustainability practices, adopt innovative methods for performance evaluation, and embrace digital transformation to enhance efficiency. Policymakers should also design frameworks that balance international sustainability standards with local cultural and institutional contexts.

5. Conclusions

5.1. Conclusion

This study systematically reviewed 46 articles on sustainability performance in the hospitality industry published between 2017 and 2024. The findings highlight three key trends: (1) sustainability performance is predominantly assessed using triple bottom line indicators, while cultural sustainability

remains underexplored, pointing to the need for a more holistic Quadruple Bottom Line (QBL); (2) antecedents such as Green Human Resource Management (GHRM), Corporate Social Responsibility (CSR), and environmental management practices are well-documented, while spiritual capital and pro-environmental behavior are rarely examined despite their relevance in hospitality; and (3) methodological and regional imbalances persist, with a heavy reliance on Structural Equation Modelling–Partial Least Squares (SEM-PLS) and a concentration of studies in developing-country contexts. These results provide a foundation for extending both theory and practice in sustainability performance research.

5.2. Research Limitations
This review is limited to articles published between 2017 and 2024 and indexed in Scopus, which may exclude relevant studies from other databases. In addition, the synthesis relied on descriptive and thematic analyses without applying quantitative meta-analysis techniques, which may constrain the statistical generalizability of the findings.

5.3. Suggestions and Direction for Future Research
Future research should broaden the measurement of sustainability performance by incorporating cultural sustainability and examining the roles of spiritual capital and pro-environmental behavior. From a practical perspective, hotel managers are advised to adopt CHSE standards, strengthen GHRM practices, and integrate digital technologies, such as monitoring systems, blockchain, and artificial intelligence, to enhance sustainability outcomes. Policymakers are recommended to promote the standardization of sustainability practices, provide incentives for sustainable investments, and integrate local cultural values into sustainability regulations. Capacity-building initiatives for small and medium-sized hotels are also needed to reduce capability gaps and ensure the wider adoption of sustainable practices.

Author Contributions
NLPMM conceptualized the study, performed the systematic literature review, and drafted the manuscript. DA contributed to the analysis, provided insights into the findings, and reviewed the manuscript. AAGPW assisted with data collection and analysis and helped interpret the results. IGAMADP contributed to the literature review, revised the manuscript, and provided critical feedback for improvement.

References
Abbas, Z., Smaliukienė, R., Zámečník, R., Kalsoom, G., & Cera, E. (2023). How does Green HRM Influence Environmental and Social Sustainability in Hotels? *Problems and Perspectives in Management, 21*(1), 253-263. doi:https://doi.org/10.21511/ppm.21(1).2023.22

Abdelwahed, N. A. A., Al Doghan, M. A., & Soomro, B. A. (2024). Green Human Resource Management and Environmental Performance Among Hotels. *Corporate and Business Strategy Review, 5*(1), 241-253. doi:https://doi.org/10.22495/cbsrv5i1art22

Abdou, A. H., Hassan, T. H., Salem, A. E., Elsaied, M. A., & Elsaed, A. A. (2022). Determinants and Consequences of Green Investment in the Saudi Arabian Hotel Industry. *Sustainability, 14*(24), 1-21. doi:https://doi.org/10.3390/su142416905

Abedelrahim, S., Qassim, A. A., & Alatawi, F. M. H. (2024). Green Practices in Action: Examining HRM's Role in Fostering Environmental Performance in Egypt's Hospitality Sector. *Sustainability, 16*(8), 1-20. doi:https://doi.org/10.3390/su16083314

Acquah, I. S. K., Agyabeng-Mensah, Y., & Afum, E. (2021). Examining the link among Green Human Resource Management Practices, Green Supply Chain Management Practices and Performance. *Benchmarking: An International Journal, 28*(1), 267-290. doi:https://doi.org/10.1108/BIJ-05-2020-0205

Al-Sabi, S. M., Al-Ababneh, M. M., Al Qsssem, A. H., Afaneh, J. A. A., & Elshaer, I. A. (2024). Green Human Resource Management Practices and Environmental Performance: The Mediating Role of Job Satisfaction and Pro-Environmental Behavior. *Cogent Business & Management, 11*(1), 1-23. doi:https://doi.org/10.1080/23311975.2024.2328316

Aljoghaiman, A., Hasanein, A. M., Elshaer, I. A., & Sobaih, A. E. E. (2024). Does Environmental Performance Make Any Difference in the Relationship between Green Supply Chain Management and Hotel Competitiveness?. *Logistics, 8*(3), 1-13. doi:https://doi.org/10.3390/logistics8030070

Alrezq, M., & Van Aken, E. M. (2025). Systematic Literature Review of Lean Management in Local Government Organizations. *International Journal of Lean Six Sigma, 16*(1), 1-24. doi:https://doi.org/10.1108/IJLSS-02-2022-0037

Amoah, J., Belás, J., Khan, K. A., & Metzker, Z. (2021). Antecedents of sustainable SMEs in the social media space: A Partial Least Square-Structural Equation Modeling (PLS-SEM) approach. *Management & Marketing-Challenges for the Knowledge Society, 16*(1), 26-46. doi:https://doi.org/10.2478/mmcks-2021-0003

Asadi, S., Pourhashemi, S. O., Nilashi, M., Abdullah, R., Samad, S., Yadegaridehkordi, E., Razali, N. S. (2020). Investigating Influence of Green Innovation on Sustainability Performance: A Case on Malaysian Hotel Industry. *Journal of Cleaner Production, 258*(4). doi:https://doi.org/10.1016/j.jclepro.2020.120860

Baquero, A. (2024). Examining the Role of Ambidextrous Green Innovation and Green Competitive Advantage In Stimulating Sustainable Performance: The Moderating Role of Green Absorptive Capacity. *Sage Open, 14*(4), 1-22. doi:https://doi.org/10.1177/21582440241294160

Basana, S. R., Ubud, S., Malelak, M. I., & Tarigan, Z. J. H. (2022). The Effect of Key User Capability on Supply Chain Digital and Flexibility in Improving Financial Performance. *Uncertain Supply Chain Management, 11*(1), 267-276. doi:https://doi.org/10.5267/j.uscm.2022.9.016

Carneiro, T., Picoto, W. N., & Pinto, I. (2023). Big Data Analytics and Firm Performance in the Hotel Sector. *Tourism and Hospitality, 4*(2), 244-256. doi:https://doi.org/10.3390/tourhosp4020015

Chaudhuri, R., Chatterjee, S., & Vrontis, D. (2024). Adoption of Blockchain Technology in Hospitality and Tourism Industry and Sustainability Performance: Impact of Technological Turbulence and Senior Leadership Support. *EuroMed Journal of Business, 19*(1), 62-83. doi:https://doi.org/10.1108/EMJB-04-2023-0128

Demydyuk, G. V., & Carlbäck, M. (2024). Balancing Short-Term Gains and Long-Term Success in Lodging: The Role of Customer Satisfaction and Price In Hotel Profitability Model. *Tourism Economics, 30*(4), 844-875. doi:https://doi.org/10.1177/13548166231199156

Elkington, J. (1998). Partnerships from Cannibals With Forks: The Triple Bottom Line of 21st-Century Business. *Environmental Quality Management, 8*(1), 37-51. doi:https://doi.org/10.1002/tqem.3310080106

Elshaer, I. A., Azazz, A. M., & Fayyad, S. (2023). Green Management and Sustainable Performance of Small- and Medium-Sized Hospitality Businesses: Moderating the Role of an Employee's Pro-Environmental Behaviour. *International Journal of Environmental Research and Public Health, 20*(3), 1-17. doi:https://doi.org/10.3390/ijerph20032244

Elshaer, I. A., Azazz, A. M. S., Alshebami, A. S., Abdulaziz, T., Mansour, M., & Fayyad, S. (2024). Internal Green Marketing Orientation and Business Performance: The Role of Employee Environmental Commitment and Green Organizational Identity. *International Journal of Innovative Research and Scientific Studies, 7*(1), 211-225. doi:https://doi.org/10.53894/ijirss.v7i1.2603

Fatoki, O. (2019a). Green Entrepreneurial Orientation and Firm Performance in South Africa. *Entrepreneurship and Sustainability Issues, 7*(1), 247-262. doi:https://doi.org/10.9770/jesi.2019.7.1(19)

Fatoki, O. (2019b). Green Marketing Orientation and Environmental and Social Performance of Hospitality Firms in South Africa. *Foundations of Management, 11*(1), 277-290. doi:https://doi.org/10.2478/fman-2019-0023

Fernández-Gámez, M. Á., Gutiérrez-Ruiz, A. M., Becerra-Vicario, R., & Ruiz-Palomo, D. (2019). The Effects of Creating Shared Value on the Hotel Performance. *Sustainability, 11*(6), 1-16. doi:https://doi.org/10.3390/su11061784

Freeman, R. E. (2010). *Strategic Management: A Stakeholder Approach*. Cambridge Cambridge University Press.

Gajić, T., Petrović, M. D., Pešić, A. M., Conić, M., & Gligorijević, N. (2024). Innovative Approaches in Hotel Management: Integrating Artificial Intelligence (AI) and the Internet of Things (IoT) to Enhance Operational Efficiency and Sustainability. *Sustainability, 16*(17), 1-24. doi:https://doi.org/10.3390/su16177279

García-Azorin, D., Yamani, N., Messina, L., Peeters, I., Ferrili, M., Ovchinnikov, D., Benemei, S. (2018). A PRISMA-Compliant Systematic Review of the Endpoints Employed to Evaluate Symptomatic Treatments for Primary Headaches. *The Journal of Headache and Pain, 19*(1), 1-11. doi:https://doi.org/10.1186/s10194-018-0920-9

Hart, S. L. (1995). A Natural-Resource-Based View of the Firm. *Academy of Management Review, 20*(4), 986-1014. doi:https://doi.org/10.5465/amr.1995.9512280033

Hong, Q. N., Gonzalez-Reyes, A., & Pluye, P. (2018). Improving the Usefulness of a Tool for Appraising the Quality of Qualitative, Quantitative and Mixed Methods Studies, the Mixed Methods Appraisal Tool (MMAT). *Journal of Evaluation in Clinical Practice, 24*(3), 459-467. doi:https://doi.org/10.1111/jep.12884

Hu, K., & Raman, A. (2024). Systematic Literature Review on the Holistic Integration of E-Learning in Universities: Policy, Human, Financial, and Technical Perspectives. *Contemporary Educational Technology, 16*(2), 1-23. doi:https://doi.org/10.30935/cedtech/14287

Kazemian, S., Djajadikerta, H. G., Mat Roni, S., Trireksani, T., & Mohd-Sanusi, Z. (2021). Accountability Via Social and Financial Performance of the Hospitality Sector: The Role of Market Orientation. *Society and Business Review, 16*(2), 238-254. doi:https://doi.org/10.1108/SBR-04-2020-0061

Kim, Y. H., Barber, N., & Kim, D.-K. (2019). Sustainability Research in the Hotel Industry: Past, Present, and Future. *Journal of Hospitality Marketing & Management, 28*(5), 576-620. doi:https://doi.org/10.1080/19368623.2019.1533907

Kumar, V., Aksoy, L., Donkers, B., Venkatesan, R., Wiesel, T., & Tillmanns, S. (2010). Undervalued or Overvalued Customers: Capturing Total Customer Engagement Value. *Journal of Service Research, 13*(3), 297-310. doi:https://doi.org/10.1177/1094670510375602

Langgat, J., Ramdani, B., Pavic, S., & Tok, E. (2023). Environmentally Sustainable Practices and Hotel Performance: Evidence from Malaysia. *Sustainability, 15*(6), 1-15. doi:https://doi.org/10.3390/su15065289

López-Gamero, M. D., Molina-Azorín, J. F., Tarí, J. J., & Pertusa-Ortega, E. M. (2024). Interaction between Sustainability Practices and the Mediating Role of Hotel Performance. *Journal of Sustainable Tourism, 32*(5), 1027-1052. doi:https://doi.org/10.1080/09669582.2023.2198165

Lucas, M. M., Moreno-Luna, L., Roets, A. O., & Al-Jaberi, S. (2024). Technological, Organisational and Environmental Drivers of Sustainability in Hotels. *South African Journal of Business Management, 55*(1), 1-11. doi:https://doi.org/10.4102/sajbm.v55i1.4815

Moosa, A., & He, F. (2023). Impact of Environmental Management Practices on Corporate Sustainability: Evidence from the Maldives Hospitality Industry. *International Journal of Emerging Markets, 18*(9), 2869-2889. doi:https://doi.org/10.1108/IJOEM-06-2020-0700

Nassani, A. A., Yousaf, Z., Radulescu, M., & Haffar, M. (2022). Environmental Performance through Environmental Resources Conservation Efforts: Does Corporate Social Responsibility Authenticity Act as Mediator?. *Sustainability, 14*(4), 1-16. doi:https://doi.org/10.3390/su14042330

Nisar, Q. A., Akbar, A., Naz, S., Haider, S. A., Poulova, P., & Hai, M. A. (2022). Greening the Workforce: A Strategic Way to Spur the Environmental Performance in the Hotel Industry. *Frontiers in Environmental Science, 10*, 1-14. doi:https://doi.org/10.3389/fenvs.2022.841205

Pavolová, H., Bakalár, T., Tokarčík, A., & Cimboláková, I. (2024). The Sustainable Management of Ecohotels for the Support of Ecotourism—A Case Study. *Sustainability, 16*(20), 1-15. doi:https://doi.org/10.3390/su16208863

Pereira-Moliner, J., López-Gamero, M. D., Font, X., Molina-Azorín, J. F., Tarí, J. J., & Pertusa-Ortega, E. M. (2021). Sustainability, Competitive Advantages and Performance in the Hotel Industry: A Synergistic Relationship. *Journal of Tourism and Services, 12*(23), 132-149. doi:https://doi.org/10.29036/jots.v12i23.282

Saputra, K. A. K., Subroto, B., Rahman, A. F., & Saraswati, E. (2022). Eco-Efficiency and Energy Audit to Improve Environmental Performance: An Empirical Study of Hotels in Bali-Indonesia. *International Journal of Energy Economics and Policy, 12*(6), 175-182. doi:https://doi.org/10.32479/ijeep.13565

Saputra, K. A. K., Subroto, B., Rahman, A. F., & Saraswati, E. (2023). Mediation Role of Environmental Management Accounting on the Effect of Green Competitive Advantage on Sustainable Performance. *Journal of Sustainability Science and Management, 18*(2), 103-115. doi:https://doi.org/10.46754/jssm.2023.02.008

Serafim, G. H., & Veríssimo, J. M. C. (2021). The Relationship between Strategic Orientation, Service Innovation, and Performance in Hotels in Angola. *Sustainability, 13*(11), 1-14. doi:https://doi.org/10.3390/su13116256

Shah, S. M. M., Ahmed, U., Ismail, A. I., & Mozammel, S. (2021). Going Intellectually Green: Exploring the Nexus between Green Intellectual Capital, Environmental Responsibility, and Environmental Concern towards Environmental Performance. *Sustainability, 13*(11), 1-22. doi:https://doi.org/10.3390/su13116257

Shi, Y., & Tsai, K. H. (2020). Linking Stakeholder Integration to Sustainability Performance in the Hotel Context. *International Journal of Tourism Research, 22*(5), 677-691. doi:https://doi.org/10.1002/jtr.2365

Siyal, S., Ahmad, R., Riaz, S., Xin, C., & Fangcheng, T. (2022). The Impact of Corporate Culture on Corporate Social Responsibility: Role of Reputation and Corporate Sustainability. *Sustainability, 14*(16), 1-21. doi:https://doi.org/10.3390/su141610105

Skordoulis, M., Stavropoulos, A.-S., Papagrigoriou, A., & Kalantonis, P. (2024). The Strategic Impact of Service Quality and Environmental Sustainability on Financial Performance: A Case Study of 5-Star Hotels in Athens. *Journal of Risk and Financial Management, 17*(10), 1-15. doi:https://doi.org/10.3390/jrfm17100473

Sobaih, A. E. E., Gharbi, H., Hasanein, A. M., & Elnasr, A. E. A. (2022). The Mediating Effects of Green Innovation and Corporate Social Responsibility on the Link between Transformational Leadership and Performance: An Examination Using SEM Analysis. *Mathematics, 10*(15), 1-19. doi:https://doi.org/10.3390/math10152685

Sobaih, A. E. E., Hasanein, A., & Elshaer, I. (2020). Influences of Green Human Resources Management on Environmental Performance in Small Lodging Enterprises: The Role of Green Innovation. *Sustainability, 12*(24), 1-19. doi:https://doi.org/10.3390/su122410371

Sun, J., Sarfraz, M., Ivascu, L., & Ozturk, I. (2023). Unveiling Green Synergies: Sustainable Performance Through Human Resource Management, CSR, and Corporate Image Under a Mediated Moderation Framework. *Environmental Science and Pollution Research, 30*(45), 101392-101409. doi:https://doi.org/10.1007/s11356-023-29468-8

Sun, R., & Zainal, D. (2024). Sustainability Reporting and Stakeholder Engagement of Malaysian Hotels in Social Media: The Moderating Role of Media Types. *Cogent Business & Management, 11*(1), 1-17. doi:https://doi.org/10.1080/23311975.2024.2400616

Surya, I. B. K., Kot, S., Astawa, I. P., Rihayana, I. G., & Arsha, I. M. R. M. (2024). Unlocking Sustainability through Innovation: A Green HR Approach for Hospitality Industry. *Virtual Economics, 7*(2), 50-62. doi:https://doi.org/10.34021/ve.2024.07.02(3)

Tanveer, M. I., Yusliza, M. Y., Ngah, A. H., & Khan, M. A. K. (2023). Mapping the Link between CSR and Sustainability Performance through GHRM Practices in Hotel Industry. *Journal of Cleaner Production, 429*(12), 1-40. doi:https://doi.org/10.1016/j.jclepro.2023.139258

Werastuti, D., Sitawati, R., Rinandiyana, L., & Badriatin, T. (2024). Management Accounting System as Mediator on Sustainability Performance. *Journal of Infrastructure, Policy and Development, 8*(1), 1-16. doi:https://doi.org/10.24294/jipd.v8i1.2833

Werastuti, D. N. S., Sukoharsono, E. G., Saraswati, E., & Prihatiningtias, Y. W. (2018). Are Competitive Strategies and Strategic Alliances Role in Improving Sustainability Performance?. *Journal of Environmental Management & Tourism, 9*(7), 1498-1511. doi:https://doi.org/10.14505//jemt.9.7(31).14

Yousaf, Z., Radulescu, M., Nassani, A., Aldakhil, A. M., & Jianu, E. (2021). Environmental Management System towards Environmental Performance of Hotel Industry: Does Corporate Social Responsibility Authenticity Really Matter?. *Engineering Economics, 32*(5), 484-498. doi:https://doi.org/10.5755/j01.ee.32.5.28619

Yusoff, Y. (2019). Linking Green Human Resource Management Bundle to Environmental Performance in Malaysia's Hotel Industry:The Mediating Role of Organizational Citizenship Behaviour Towards Environment. *International Journal of Innovative Technology and Exploring Engineering, 8*(9), 1625-1630. doi:https://doi.org/10.35940/ijitee.i3340.0789s319