# Digital Transformation and Sustainability in the Hospitality Industry: Pathways for Innovation and Competitiveness

Research Paper

# Meridia Press

Received: August 1, 2025 Revised: August 25, 2025 Accepted: August 27, 2025

Journal of Business and Tourism Management: 2025, Volume 1 (Issue 1): 32-43

ISSN: 3101-1950



Copyright, 2025 by the authors. Published by Meridia Press and the work is licensed under the Creative Commons Attribution 4.0 International License. To view a copy of this license, visit http://creativecommon s.org/licenses/by/4.0/ Ricardo Pastor<sup>1\*</sup>

<sup>1</sup>International University of La Rioja, Spain

#### **Abstract**

This paper synthesizes peer-reviewed research and authoritative industry reports (2014–2025) to explore how digital transformation can enable sustainable practices, generating both environmental and competitive advantages. Drawing on a systematic literature review and illustrative corporate case studies (Hilton, Meliá Hotels International, NH Hotel Group), the paper develops an integrative framework that links digital capabilities (analytics, automation, platforms) with sustainability practices (energy efficiency, waste reduction, circular economy, climate adaptation) and performance (operational efficiency, customer resilience). Findings indicate that data-driven decision-making and smart technologies amplify the impact of sustainability strategies, provided firms invest in dynamic capabilities, governance, and human capital. Barriers include high investment costs, regulatory fragmentation, and skills gaps, particularly among small and medium enterprises (SMEs). Policy managerial recommendations are proposed to operationalize the dual transition under frameworks such as the European Green Deal and the Glasgow Declaration on Climate Action in Tourism.

*Keywords*: digital transformation; sustainability; hospitality; smart tourism; innovation; competitiveness; ISO 14001; Green Key

\*Corresponding author: Ricardo Pastor, ricardo.pastor@unir.net

https://doi.org/10.64976/jbtm.2025.004



#### 1. Introduction

Tourism and hospitality represent one of the largest global economic sectors, contributing around 10% of global GDP and supporting over 350 million jobs worldwide in 2024–2025 (World Travel & Tourism Council [WTTC], 2025). International tourist arrivals reached 1.4 billion in 2024, equivalent to 99% of pre-pandemic levels, and grew by 5% during the first quarter of 2025 compared to the same period in 2024 (UN Tourism, 2025). These figures confirm the recovery and structural relevance of the sector.

At the same time, the industry faces mounting pressures to address its environmental footprint: high energy and water consumption, waste generation, and greenhouse gas (GHG) emissions (Jones et al., 2016). Policy frameworks such as the European Green Deal (European Commission, 2019) and global initiatives like the Glasgow Declaration on Climate Action in Tourism (UN Tourism, 2025) set ambitious targets for decarbonization and resilience, which directly affect hotels.

Meanwhile, digital transformation (DT) is reshaping business models across tourism and hospitality. Smart technologies, artificial intelligence (AI), big data, and automation are redefining customer interaction, distribution, and operations (Vial, 2019; Ivanov & Webster, 2020).

This paper explores how these two megatrends—digital transformation and sustainability—interact in the hospitality sector. It is guided by three research questions:

RQ1. What opportunities and challenges emerge when integrating digital transformation with sustainability in hospitality?

RQ2. How do digital capabilities enhance sustainability practices and competitiveness? RQ3. What strategies can policymakers and managers adopt to operationalize the dual transition?

#### 2. Literature Review

#### 2.1. Digital Transformation in hospitality

Digital transformation refers to the strategic adoption of digital technologies to alter business models, processes, and value creation (Vial, 2019). In the hospitality industry, this process has unfolded through multiple layers, from the early digitization of reservation systems to the integration of advanced platforms that now orchestrate nearly every aspect of customer interaction and operational management. Online booking engines and global distribution systems have reduced transaction costs and expanded market reach, while contemporary innovations such as smart pricing algorithms and predictive analytics optimize revenue streams and demand forecasting.

Customer relationship management (CRM) systems illustrate another key facet: by centralizing data on guest preferences and behaviors, hotels can deliver personalized experiences that enhance loyalty. Robotics and automation, increasingly deployed in front-desk services, housekeeping, and concierge functions, further redefine service delivery by improving efficiency and consistency (Ivanov & Webster, 2020).

At a more systemic level, research on smart tourism ecosystems emphasizes how the integration of IoT devices, open data initiatives, and interoperable platforms underpins new forms of value co-

creation (Gretzel et al., 2015). Hotels can connect energy management sensors with building automation systems, simultaneously enhancing resource efficiency and generating real-time insights for managerial decision-making. These technologies not only streamline operations but also establish the foundations for resilience in an increasingly competitive environment. In this way, digital transformation in hospitality goes beyond incremental improvement—it represents a structural shift toward data-driven, agile, and interconnected organizational models.

## 2.2. Sustainability in hospitality

The concept of sustainability is frequently framed through the Triple Bottom Line (TBL), which calls for a balanced approach that integrates economic viability, environmental protection, and social equity (Elkington, 1997). Within the hospitality sector, this framework translates into a wide variety of practices and strategies aimed at reconciling profitability with responsibility toward both society and the natural environment.

Environmental initiatives are particularly salient, given the sector's high consumption of energy and water, as well as its role in generating waste and greenhouse gas emissions. Hotels have increasingly invested in energy-efficient building designs, the adoption of renewable energy sources, and the deployment of systems that monitor and optimize water use. Waste reduction programs—such as eliminating single-use plastics, implementing recycling protocols, or engaging in circular economy initiatives—demonstrate a growing awareness of environmental stewardship (Jones et al., 2016).

From a social perspective, sustainability involves fostering meaningful connections with local communities. Many hospitality companies engage in community development programs, support local suppliers, and provide training opportunities for disadvantaged groups. These actions strengthen the legitimacy of hotels within their local ecosystems while reinforcing customer trust. Economic sustainability, in turn, is linked to ensuring that investments in sustainable infrastructure or eco-certifications translate into long-term competitiveness and market differentiation. Certifications such as ISO 14001 or eco-labels like Green Key not only validate a company's environmental management systems but also function as strategic tools for reputation management.

Thus, sustainability in hospitality emerges as a multidimensional process, requiring alignment between corporate strategy, operational practices, and stakeholder expectations. Far from being a peripheral concern, it increasingly represents a central criterion for competitiveness and legitimacy in global markets.

#### 2.3. Linking digital transformation and sustainability

Recent scholarship underscores that digital transformation and sustainability should not be conceived as separate or parallel agendas but as mutually reinforcing processes. Digital technologies provide the tools to quantify, monitor, and optimize sustainability initiatives, thereby transforming aspirational commitments into measurable performance outcomes. Data analytics, for instance, allows for the precise monitoring of resource consumption, enabling hotels to identify inefficiencies and intervene proactively. Smart energy management systems exemplify this dual benefit: they not only reduce operating costs but also generate credible evidence of eco-efficiency that can be communicated to stakeholders (Vial, 2019).

At the same time, digital platforms enhance the visibility and credibility of sustainability commitments. Through social media channels, hotel websites, and booking platforms, organizations can leverage digital marketing capabilities to communicate their eco-friendly practices in ways that resonate with environmentally conscious consumers. This supports brand differentiation in increasingly competitive markets while aligning with customer expectations of transparency and authenticity (Teece, 2007).

Importantly, the integration of digitalization and sustainability also enables dynamic forms of innovation. Hotels can experiment with new service models—such as gamified apps that reward guests for sustainable behavior, or digital twins that simulate environmental scenarios for property management. These innovations position sustainability not as a constraint but as a source of competitive advantage. By embedding sustainability into digital strategies, hospitality firms strengthen their adaptive capacity, enhance stakeholder engagement, and open pathways to long-term resilience.

#### 3. Methodology

# 3.1 Systematic review approach

This study employs a systematic literature review as its primary methodological approach (Petticrew & Roberts, 2006). A systematic review differs from traditional narrative reviews in that it follows a structured and transparent process designed to minimize bias, ensure replicability, and provide a comprehensive overview of the existing body of knowledge. In the context of hospitality research, this approach is particularly relevant given the rapid pace of technological innovation and the growing body of literature on sustainability, which risks becoming fragmented without systematic synthesis.

The review process was guided by explicit research questions (see Section 1) and implemented through a step-by-step protocol. First, the databases Scopus, Web of Science, Google Scholar, and industry repositories were consulted to ensure both academic rigor and practitioner relevance. These databases were chosen because of their broad coverage of peer-reviewed journal articles, conference proceedings, and authoritative industry reports. Second, carefully designed search strings such as "digital transformation" AND "hospitality", "sustainability" AND "hotel industry", and "smart tourism" AND "innovation" were applied. These terms were selected to capture the intersection between technological change, sustainable practices, and innovation within the hospitality sector.

In addition, the review incorporated a quality assessment stage in which the methodological robustness, theoretical contribution, and contextual relevance of each study were considered. This not only ensured that the included works offered meaningful insights but also allowed for the identification of gaps and inconsistencies across the literature. By following this systematic procedure, the study provides a reliable synthesis that can inform both academic research and industry practice.

# 3.2 Inclusion and exclusion criteria

The validity of any systematic review depends on the transparency and consistency of its inclusion and exclusion criteria. For this study, inclusion was limited to sources that explicitly addressed digitalization and/or sustainability within the hospitality sector. Studies were considered eligible if they presented empirical data (e.g., case studies, surveys, experiments) or conceptual frameworks that

could inform the research questions. Special attention was given to works that integrated both dimensions—digital transformation and sustainability—since these represent the core of the dual transition analyzed in this paper.

Exclusion criteria were equally important in ensuring focus and coherence. Studies were excluded if they focused solely on mass tourism without reference to hospitality operations, if they addressed digital transformation in unrelated industries (such as retail or manufacturing) without clear implications for hospitality, or if they lacked methodological transparency. Non-scholarly sources without empirical backing, such as opinion pieces or promotional white papers, were also excluded unless they were recognized industry reports providing verifiable data.

Applying these criteria enabled the construction of a dataset of sources that balanced breadth and depth. The resulting corpus included peer-reviewed articles, policy frameworks, and corporate sustainability disclosures that together offered a multidimensional perspective. This rigorous filtering process ensured that the evidence base was both relevant and credible, avoiding the risk of drawing conclusions from anecdotal or peripheral materials.

# 3.3 Supplementary case studies

To complement the findings from the literature review, the study incorporated three illustrative case studies drawn from leading hotel groups: Hilton Hotels, Meliá Hotels International, and NH Hotel Group. Case studies provide context-rich insights that extend beyond the generalizations of academic literature, making them especially valuable in fields where innovation and sustainability practices are deeply embedded in organizational culture and strategy.

The Hilton case focused on the LightStay platform, which functions as a proprietary system to monitor and report key sustainability performance indicators. This example was particularly relevant because it demonstrates how digital platforms can be integrated into environmental management systems and independently verified through third-party assurance processes (Hilton, 2024).

Meliá Hotels International was selected because of its comprehensive ESG disclosures, which align with EU non-financial reporting standards. Its case highlights how digitalization facilitates compliance with increasingly stringent reporting frameworks, while also enabling the communication of sustainability commitments to stakeholders in a transparent manner (Meliá, 2024).

Finally, NH Hotel Group's circular economy initiatives and plastics reduction strategies illustrated how targeted sustainability measures can be scaled across international operations. These practices were documented through the company's sustainability reports and reveal the role of digital tracking systems in ensuring accountability and comparability of results (NH Hotel Group, 2024).

By triangulating findings from the literature with real-world corporate practices, the methodology strengthens both the external validity and the practical relevance of the study. Case studies thus served not only as illustrations but also as evidence of how theoretical frameworks and research findings manifest in practice.

#### 4. Results and Analysis

Opportunities at the nexus of digitalization and sustainability

The integration of digital transformation and sustainability creates multiple opportunities for the hospitality sector, offering both operational and strategic benefits.

Operational efficiency emerges as one of the most direct advantages. IoT-enabled monitoring systems, for instance, allow hotels to track real-time consumption of energy and water across multiple facilities. By identifying abnormal patterns or inefficiencies, hotels can intervene immediately, reducing resource use by up to 20% (WTTC, 2025). These efficiency gains translate into cost savings while simultaneously reducing the environmental footprint, exemplifying how digital tools can support the dual goals of profitability and responsibility.

Customer engagement is another significant area of opportunity. Artificial intelligence and data-driven personalization allow hotels to influence guest behavior in favor of more sustainable choices. For example, through in-room tablets or mobile apps, guests can be encouraged to participate in linen reuse programs, opt for digital check-in processes that reduce paper use, or select eco-friendly dining options. This interaction not only raises awareness but also creates a sense of co-responsibility, fostering a culture of shared sustainability between hotels and guests.

Market differentiation also results from the alignment of digital innovation with sustainability. Certifications such as ISO 14001 or eco-labels like Green Key provide external validation, but their impact is maximized when coupled with digital communication strategies that enhance visibility. Hotels that successfully leverage both dimensions can position themselves as industry leaders, attracting segments of customers who actively seek sustainable experiences (FEE, 2024). This positioning contributes to brand reputation, higher customer loyalty, and access to niche markets with higher willingness to pay.

Finally, climate alignment represents an increasingly critical opportunity. Global frameworks such as the Glasgow Declaration on Climate Action in Tourism (UN Tourism, 2025) encourage the integration of sustainability into corporate strategies. By adopting digital solutions for monitoring carbon emissions and managing adaptation plans, hotels can demonstrate alignment with international climate goals. This not only mitigates regulatory risk but also ensures long-term resilience against climate-related disruptions, such as extreme weather events that increasingly threaten the sector.

#### Challenges and barriers

Despite these opportunities, the integration of digitalization and sustainability also faces significant obstacles that must be addressed if hotels are to fully benefit from the dual transition.

High investment costs remain one of the most pressing challenges. Advanced digital tools—such as AI-powered platforms, IoT networks, or building management systems—require substantial upfront capital, often exceeding the budgets of small and medium-sized enterprises (SMEs). Similarly, retrofitting older properties with sustainable technologies such as energy-efficient lighting, renewable energy systems, or advanced HVAC units represents a heavy financial burden. While large

multinational hotel groups may absorb these costs, SMEs risk being left behind, thereby exacerbating competitiveness gaps across the sector (WTTC, 2025).

A second barrier relates to the skills gap. The adoption of digital technologies and sustainability practices requires a workforce trained in new competencies that combine technical expertise with environmental awareness. However, many employees in the hospitality sector still lack the necessary training to operate and manage complex digital platforms or to understand the principles of sustainable operations. This skills gap not only limits the effectiveness of implemented technologies but also slows the pace of cultural change within organizations.

Finally, regulatory fragmentation creates uncertainty and complexity. Hotels operating across multiple jurisdictions encounter varying standards for sustainability reporting, data management, and environmental compliance. While some regions, such as the European Union, have advanced in harmonizing ESG disclosure requirements, other jurisdictions lag behind, resulting in a patchwork of obligations. For multinational hotel chains, this regulatory diversity increases compliance costs and complicates the process of consolidating performance data into a coherent global strategy.

Together, these barriers highlight the need for policy alignment, financial incentives, and investments in human capital to ensure that opportunities at the digital-sustainability nexus are accessible across the entire hospitality industry.

## Case study evidence

The analysis of case studies from three major hotel groups provides practical insights into how opportunities and challenges manifest in real-world settings.

Hilton Hotels has pioneered the use of its LightStay platform, which tracks energy, water, and waste performance indicators across all its properties. Since 2008, the company has reported significant reductions in waste-to-landfill intensity and has complemented these achievements with independent third-party assurance of its data (Hilton, 2024). This case demonstrates the potential of proprietary digital platforms to integrate environmental management and reporting in a way that enhances both credibility and operational control.

Meliá Hotels International illustrates the role of sustainability disclosures in aligning with international policy frameworks. Through its non-financial information reports, the company has committed to ambitious carbon reduction targets and to harmonization with the European Green Deal (Meliá, 2024). Meliá's case emphasizes the importance of transparent communication and how digital infrastructures facilitate compliance with evolving reporting requirements. At the same time, it highlights how sustainability can be positioned as a core strategic driver rather than a peripheral initiative.

NH Hotel Group offers a complementary perspective by focusing on circular economy initiatives, particularly through a plastics reduction strategy. By systematically eliminating single-use plastics across its portfolio, the company has achieved measurable progress that reinforces its sustainability credentials (NH Hotel Group, 2024). Crucially, these efforts have been supported by digital tracking

systems, which enable the measurement, verification, and reporting of progress across multiple properties.

Together, the three case studies highlight not only the diversity of approaches to integrating digitalization and sustainability but also the common emphasis on transparency, accountability, and innovation. They reveal that while large hotel groups are leading the way, the principles and lessons extracted from these cases can serve as models for the wider industry, provided that supportive policies and financial mechanisms are in place.

# 5. Discussion

# 5.1 Synergies between digital transformation and sustainability

The integration of digitalization and sustainability creates synergies that extend across multiple dimensions of hotel management and strategy. At the most basic level, measurement becomes more precise and transparent through digital tools. Smart meters, IoT sensors, and cloud-based dashboards allow managers to track in detail the use of energy, water, and other resources. This capacity transforms sustainability from an aspirational concept into a quantifiable practice, facilitating compliance with standards such as ISO 14001 (ISO, 2023). Furthermore, digital traceability allows hotels to benchmark performance across properties, set realistic reduction targets, and validate results with independent certification bodies.

In addition to measurement, engagement is enhanced through digital channels that provide new opportunities to communicate sustainability initiatives. Social media campaigns, mobile applications, and direct booking platforms enable hotels to showcase eco-certifications, reduction goals, and community partnerships in a way that builds trust with guests. Importantly, these communications are not limited to marketing; they also function as tools to nudge behavior, encouraging guests to adopt sustainable practices during their stay. For example, interactive apps may reward guests with loyalty points when they decline daily linen changes or participate in low-carbon mobility options.

Finally, coordination across stakeholders is greatly facilitated by digital platforms. Supply chain management systems can integrate environmental performance criteria into procurement decisions, ensuring that suppliers align with the hotel's sustainability commitments. Similarly, platforms can connect hotels with local communities, enabling joint initiatives such as waste recovery, food donation, or cultural heritage promotion. These coordinated efforts amplify the impact of individual actions, demonstrating how the synergy of digitalization and sustainability extends beyond the hotel property to encompass broader ecosystems.

#### 5.2 Dynamic capabilities perspective

The theoretical lens of dynamic capabilities provides a useful framework to understand how hospitality firms can effectively integrate digital transformation and sustainability into their competitive strategies. According to Teece (2007), dynamic capabilities involve the ability of firms to sense opportunities, seize them through timely action, and reconfigure resources to adapt to changing environments.

In the hospitality sector, the sense capability is increasingly dependent on real-time data collection. Hotels must continuously monitor both operational performance (e.g., energy use, occupancy rates)

and external factors (e.g., customer preferences, climate risks). Through AI and IoT, managers can detect subtle shifts in demand for sustainable services, identify new risks such as rising energy costs, and anticipate regulatory requirements.

The seize capability refers to the deployment of technologies and practices that capture these opportunities. For instance, hotels may invest in digital platforms that optimize resource allocation or in renewable energy systems that reduce dependency on fossil fuels. These investments not only address environmental concerns but also enhance competitiveness by lowering costs and strengthening the brand.

The reconfigure capability highlights the importance of organizational adaptation. Integrating sustainability requires reskilling employees, restructuring processes, and aligning corporate culture with new priorities. Digital transformation accelerates this reconfiguration by offering tools for training (e.g., online modules on sustainability practices), coordination (e.g., shared dashboards for environmental KPIs), and innovation (e.g., virtual simulations for testing efficiency scenarios). Through this perspective, it becomes clear that the long-term success of the dual transition depends not merely on adopting new technologies but on embedding them into dynamic processes of learning and adaptation.

# 5.3 Policy and managerial implications

The findings also carry significant implications for both policymakers and managers in the hospitality sector. From a policy perspective, standardization of ESG reporting frameworks remains crucial. The lack of harmonization across jurisdictions creates confusion and inefficiency for multinational hotel groups, while also reducing the comparability of sustainability data. Policymakers should therefore prioritize efforts to align reporting requirements, ensuring that sustainability metrics are clear, consistent, and auditable.

Governments can further support the transition through financial incentives, such as tax credits, subsidized loans, or grants for green retrofits and digital innovation projects. Such measures are particularly relevant for SMEs, which often face financial constraints that prevent them from investing in advanced technologies. By lowering the financial barriers, policymakers can encourage a more inclusive transition that does not leave smaller players behind.

From a managerial perspective, hotels should prioritize staff training and capacity building. Even the most advanced digital platforms will not generate meaningful sustainability outcomes if employees lack the knowledge or motivation to implement best practices. Training programs can ensure that staff understand both the technical aspects of digital tools and the strategic importance of sustainability.

Additionally, managers should integrate sustainability into customer engagement strategies. Certifications such as ISO 14001 and Green Key provide external validation, but their impact is maximized when actively communicated to guests through digital channels. By embedding sustainability into the guest experience—rather than treating it as an add-on—hotels can strengthen loyalty and differentiate themselves in competitive markets.

Finally, managers should explore the strategic integration of sustainability into innovation processes. For example, developing new eco-friendly services, experimenting with digital gamification to incentivize sustainable behaviors, or partnering with local suppliers to co-create value. These initiatives demonstrate that sustainability can function not only as a compliance requirement but also as a source of creativity, innovation, and long-term competitive advantage.

#### 6. Conclusions

This study demonstrates that digital transformation and sustainability are not isolated strategies but mutually reinforcing processes that, when integrated, generate significant benefits for the hospitality industry. The evidence reviewed highlights how hotels that successfully combine these two agendas achieve improvements in operational efficiency, strengthen their reputation, and enhance their long-term resilience in increasingly volatile environments. The dual transition thus emerges not as a temporary trend but as a structural requirement for competitiveness in the 21st century.

One of the central conclusions is that digital tools act as powerful enablers of sustainability. By providing real-time data, increasing transparency, and facilitating communication, digitalization allows hotels to transform sustainability from an aspirational principle into a measurable and actionable practice. At the same time, sustainability objectives give direction and legitimacy to investments in digital transformation, ensuring that technological innovation is not pursued in isolation but aligned with broader environmental and social goals. This reciprocity reinforces the idea that the future of hospitality depends on integrating both dimensions into a coherent strategy.

The study also underscores the importance of addressing the barriers that limit the full realization of these synergies. Financial constraints, skills shortages, and regulatory fragmentation continue to pose obstacles, particularly for small and medium-sized enterprises. Overcoming these challenges requires a combination of supportive public policies—such as standardized ESG frameworks and financial incentives—and proactive managerial strategies centered on staff training, stakeholder engagement, and certification schemes. The experiences of leading hotel groups like Hilton, Meliá, and NH demonstrate that these obstacles can be managed effectively when digital innovation and sustainability are embedded into corporate culture and long-term strategy.

From an academic perspective, the paper contributes by offering an integrative framework that links digital capabilities with sustainability practices and performance outcomes. This framework clarifies the mechanisms—such as measurement, engagement, and coordination—through which the dual transition produces competitive advantages. By situating these mechanisms within the lens of dynamic capabilities (Teece, 2007), the study also highlights the role of sensing, seizing, and reconfiguring in driving organizational adaptation.

From a managerial standpoint, the findings provide practical guidance for decision-makers. They emphasize the need to view sustainability not merely as compliance but as a source of innovation and differentiation. Similarly, they underline that digital transformation should not be adopted solely for efficiency gains but as a catalyst for building trust, engaging customers, and strengthening resilience.

Finally, the study points to avenues for future research. Further empirical work is needed to test the mediating role of digital capabilities in the sustainability–performance relationship, particularly through longitudinal and cross-regional analyses. Such research could offer deeper insights into how

context-specific factors—such as regulatory environments, cultural attitudes, or market maturity—influence the effectiveness of the dual transition.

In conclusion, the hospitality industry stands at a pivotal juncture. The convergence of digital transformation and sustainability represents both a challenge and an opportunity: a challenge because of the investments and skills required, but an opportunity because it opens pathways to innovation, competitiveness, and long-term viability. Hotels that act decisively in embracing this dual transition will not only secure their survival but also contribute to shaping a more sustainable and digitally empowered future for global tourism.

## Acknowledgements

N/A

#### References

Elkington, J. (1997). Cannibals with forks: The triple bottom line of 21st century business. Capstone.

European Commission. (2019). The European Green Deal (COM/2019/640 final). Brussels.

Foundation for Environmental Education. (2024). Green Key criteria and guidance. FEE.

Gretzel, U., Sigala, M., Xiang, Z., & Koo, C. (2015). Smart tourism: Foundations and developments. electronic Markets, 25(3–4), 179–188. https://doi.org/10.1007/s12525-015-0196-8

Hilton. (2024). 2023 Goal Tracking and Assurance Statement. Hilton Travel with Purpose.

International Organization for Standardization. (2023). ISO 14001:2015—Environmental management systems. ISO.

Ivanov, S., & Webster, C. (2020). Robots in tourism: A research agenda for tourism economics. Tourism Economics. https://doi.org/10.1177/1354816620906417

Jones, P., Hillier, D., & Comfort, D. (2016). Sustainability in the hospitality industry: Some personal reflections on corporate challenges and research agendas. International Journal of Contemporary Hospitality Management, 28(1), 36–67. https://doi.org/10.1108/IJCHM-05-2014-0210

Meliá Hotels International. (2024). 2023 Management Report and Additional Non-Financial Information. Meliá Hotels International.

NH Hotel Group. (2024). Sustainability and environment reports. NH Hotel Group.

Petticrew, M., & Roberts, H. (2006). Systematic reviews in the social sciences: A practical guide. Blackwell.

Teece, D. (2007). Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance. Strategic Management Journal, 28(13), 1319–1350. https://doi.org/10.1002/smj.640

UN Tourism. (2025). World Tourism Barometer. United Nations World Tourism Organization.

Vial, G. (2019). Understanding digital transformation: A review and a research agenda. Journal of Strategic Information Systems, 28(2), 118–144. https://doi.org/10.1016/j.jsis.2019.01.003

World Travel & Tourism Council. (2025). Economic impact report 2025. WTTC.