

Double Materiality Assessment as a Catalyst for Business Model Innovation in Hospitality

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Abstract

Double materiality assessments (DMA) can catalyze sustainable business model innovation (BMI) by embedding multiple forms of value into organizational strategy. This paper examines how DMA informs the reconfiguration of a hospitality firm's value proposition, value creation, and value capture through the integration of inside-out and outside-in materiality. We ground the analysis in stakeholder theory, stewardship theory, levers of control, and materiality principles, linking these to the six capitals and ESG dimensions of value. We also discuss how different sustainability maturity levels influence the effectiveness of DMA and its capacity to drive organizational transformation. Brief case illustrations from Hilton and Scandic and field observations show how stakeholder input can challenge legacy "sacred cow" brand standards. Overall, we demonstrate that double materiality is not only about compliance with emerging reporting norms but can serve as a catalyst for innovative, sustainable business models that deliver financial, social, and environmental value in tandem.

Keywords: Double Materiality; Business Model Innovation; Hospitality; Stakeholder Engagement; Sustainability Maturity

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Introduction

The hospitality industry faces mounting pressure to innovate business models for sustainability, aligning with global social and environmental goals while remaining profitable. One emerging approach in this context is the Double Materiality Assessment (DMA), which identifies issues material from both financial and environmental/social perspectives. As Fiandrino et al. (2022) emphasize, firms must "consistently plan their core activities together with ESG activities" to achieve sustainability goals, indicating that sustainability maturity influences how DMA outcomes are implemented into new business models. Industry practitioners likewise note that a double materiality assessment can reveal new market opportunities and drive strategic innovation when integrated into core business planning (BlueSky, 2023). Unlike traditional single-materiality (investor-focused) analyses, DMA considers inside-out impacts (how the company affects society and the environment) and outside-in impacts (how external sustainability issues affect the company's value). By systematically incorporating stakeholder perspectives on both dimensions, DMA provides a holistic view of

risks and opportunities. This comprehensive lens is particularly relevant for hospitality firms, which operate at the intersection of global supply chains, local communities, and guest experiences.

Business Model Innovation (BMI) aimed at multiple value creation has become a strategic imperative in sustainable hospitality and tourism (Presenza et al., 2019). “Multiple value” denotes delivering economic, social, and environmental value in tandem, often framed by the six capitals (financial, manufactured, intellectual, human, social & relationship, natural) and ESG (Environmental, Social, Governance) performance. Embedding these dimensions into a firm’s value proposition, value creation processes, and value capture mechanisms marks a shift from the traditional profit-centric model to an integrated triple-bottom-line model of success. Realizing this transformation requires guidance from robust frameworks and tools. DMA is posited as one such tool: by pinpointing what “matters” most to both stakeholders and the firm, it highlights where innovation can create shared value.

This paper explores how DMA enables hospitality organizations to reconfigure their business models. We draw on stakeholder theory, stewardship theory, levers of control, and materiality principles, and consider how sustainability maturity levels shape DMA’s strategic utility. Brief case insights from Hilton and Scandic illustrate these concepts, and field observations show how DMA—especially with guest engagement—can challenge entrenched brand standards. Our contribution is to demonstrate, with evidence and examples, that DMA can underpin business model changes that create financial, social, and environmental value.

Theoretical Foundations

From Stakeholder Theory to Multiple Value Creation

Stakeholder theory holds that firms must consider a broad set of stakeholders, not only shareholders (Mitchell et al., 1997). DMA operationalizes this principle by identifying which issues stakeholders deem salient (power, legitimacy, urgency) and ensuring those issues inform strategy. Stewardship theory (Davis et al., 1997) likewise aligns with DMA’s emphasis on social and environmental obligations alongside financial ones. By highlighting social and environmental obligations alongside financial ones, DMA encourages this stewardship mindset, prompting managers to pursue decisions that safeguard multiple forms of value, not just short-term profits.

The multiple-value perspective is grounded in the six capitals model of integrated reporting (IIRC, 2021). Sustainable business models balance and replenish financial, manufactured, intellectual, human, social & relationship, and natural capital. In practice, a hospitality firm’s value proposition should combine quality service (financial value) with positive social and environmental outcomes. This aligns with the concept of creating shared value for both the firm and its stakeholders. DMA informs this process by revealing which areas of performance are most material to stakeholders and long-term enterprise value.

Double Materiality: Concept and Strategic Role

Emerging European reporting initiatives formalized double materiality, requiring companies to assess topics through two lenses: financial materiality (outside-in) and impact materiality (inside-out) (European Commission, 2019; Adams et al., 2021; EFRAG, 2023). For hospitality, this can mean reporting both how climate change affects the business (e.g., physical risks to properties) and how operations affect climate (e.g., emissions). This dual view improves transparency and can uncover strategic opportunities that a single-materiality focus misses (Oll et al., 2025).

Sustainability Maturity and Organizational Readiness

The impact of a double materiality approach on business-model change depends on a firm’s sustainability maturity. The literature describes a progression from compliance-oriented, ad-hoc efforts to fully integrated, purpose-driven strategies (Mischke, 2023; Rasche, 2025). Dyllick and Muff (2016) describe stages from BS 1.0 (profit-first with limited Corporate Social Responsibility (CSR)) to BS 3.0, where sustainability is embedded to create net-positive value. At low maturity, sustainability is peripheral, and DMA risks becoming a checkbox. Regulators acknowledge these differences: Europe’s reporting standards indicate that the scope and depth of a DMA should be proportional to a company’s size, sector, and sustainability maturity (EFRAG, 2023).

In contrast, higher-maturity organizations embed sustainability into their core values, governance, and decision-making processes. These companies are well-positioned to leverage DMA findings for innovation,

since they likely have cross-functional sustainability teams, structured stakeholder engagement, and leadership buy-in on ESG goals. They can act on material issues (retool processes, forge partnerships, and invest in cleaner technologies) so DMA findings drive innovation.

In short, maturity is the enabler: early-stage firms should first build capacity (awareness, data systems, skills, and board-level oversight) to use DMA as a strategic compass for substantive, sustainability-aligned business-model innovation (Michie, 2022; van Tulder, 2013).

Reconfiguring the Business Model through Double Materiality

DMA can actively support the reconfiguration of a firm's value proposition, value creation, and value capture toward sustainability-oriented innovation. As Chesbrough (2010) argues, innovating the business model itself—not just products—is a key strategic lever. This idea underpins our view that DMA-driven insights can spur deeper, systemic innovation. Below, we discuss each of these core business model elements and how double materiality insights drive changes within them.

Value Proposition: The value proposition defines what a company offers and how it differentiates itself. Traditionally, a hotel's value proposition emphasized comfort, service quality, and convenience for guests. Double materiality pushes firms to broaden this definition by asking, "Value for whom, and in what dimensions?" Inside-out materiality (the company's impact on society and environment) suggests the value proposition should address societal or environmental needs, while outside-in materiality (stakeholder impacts on the firm) implies it must align with stakeholder expectations to drive success. This leads to shared value propositions that embrace both profit and purpose. Sustainable BMI literature (e.g., Bocken et al., 2014) provides archetypes (such as product-as-a-service, circular supplies, social enterprises) that illustrate how companies can fundamentally redesign value propositions in line with sustainability goals. For example, Accor has promoted a "Positive Hospitality" vision promising guests a sustainable, locally enriching experience—appealing to eco-conscious customers while committing to community and environmental benefit (Accor Group, 2024). Likewise, many hospitality brands now incorporate explicit sustainability commitments (e.g., carbon-neutral stays or community initiatives) into their core promise to meet growing stakeholder demand for responsible business. A well-crafted sustainability-enhanced value proposition can differentiate a company and strengthen loyalty among stakeholders who share those values.

Value Creation and Delivery: This element covers how the firm creates and delivers value through its key activities, resources, partnerships, and operational processes. DMA often reveals where operations or supply chains need innovation to address material issues. For instance, if "carbon emissions" and "community employment" are identified as material, a hotel chain might invest in solar panels and efficient systems to cut carbon (and costs), while launching local hiring and training programs to boost community employment. Such initiatives are business model innovations in operations and procurement. In many cases, tackling material issues requires new partnerships (e.g., sourcing from local sustainable suppliers or adopting technology from clean-tech firms to reduce waste). Importantly, aligning operations with material ESG priorities can yield financial co-benefits—lower energy and water bills, higher staff engagement, and an enhanced brand reputation—showing that sustainable practices often go hand in hand with operational efficiency.

Value Capture: This refers to how the firm monetizes its offerings and benefits from its innovations (revenue streams, cost structure, and intangible gains). Insights from a DMA can prompt rethinking value capture beyond short-term profits. For example, investing in employee well-being or diversity (material social issues) can reduce turnover costs and improve service quality, while eliminating single-use plastics (a material environmental issue) can strengthen brand loyalty and avoid future regulatory expenses. Investors are increasingly rewarding companies that excel on material ESG factors, and strong sustainability performance on material issues often corresponds with better financial results. Empirical evidence supports this: a large meta-study (Whelan, Atz, Van Holt, & Clark, C., 2021) found a positive link between ESG and financial performance in 58% of over 1,000 studies (versus only 8% showing a negative link). Mainstream shareholders now actively seek proof that companies are focused on material ESG issues that drive long-term value (Eccles & Klimenko, 2019; Maiden, 2021). Some hotel companies have even unlocked new revenue by offering sustainability-focused products (such as carbon-neutral room packages) to meet emerging customer demand. To support such shifts, firms may also integrate material ESG targets into their key performance indicators and incentive systems (Simons, 1995), ensuring that multi-dimensional value creation is monitored and rewarded. In sum, broadening the metrics of success to include material stakeholder and environmental outcomes helps secure long-term profitability and resilience.

By reconfiguring value propositions, value creation processes, and value capture mechanisms in response to materiality insights, hospitality companies move closer to truly sustainable business models. Moreover, this reconfiguration is an iterative journey. As DMAs are conducted periodically, they can detect shifting stakeholder expectations or emerging issues (“dynamic materiality”) and prompt further adjustments to the business model. In an industry intimately tied to global trends and local impacts, this agility is crucial. Leading companies show that when done thoughtfully, DMAs do not constrain the business; instead, they unlock innovation by spotlighting the most meaningful areas for growth and improvement.

Case Insights: Hilton and Scandic

Hilton Worldwide: Hilton integrated the principles of double materiality into its sustainability strategy (“Travel with Purpose”), using a 2018 materiality assessment to set its 2030 goals (Hilton, 2018). Note that although the term “double materiality” was formalized in EU regulations in 2019, Hilton’s 2018 analysis exemplified comprehensive materiality thinking by considering both business and societal impacts. The assessment identified key environmental and social issues for the company’s long-term success. In response, Hilton established ambitious targets (e.g., to halve its environmental footprint and double its social impact investment by 2030) and embedded these priorities into its business model and brand. It introduced new operational practices (such as global energy management systems and waste reduction programs) and sustainable guest offerings. Hilton also tied progress on material ESG goals to executive oversight and incentives. As a result, the company significantly improved its sustainability performance, earned external recognition, and mitigated future risks—illustrating how DMA-driven insights can spur innovation and enhance business resilience. Hilton reports a 44% reduction in carbon emissions intensity across its global portfolio since launching its Travel with Purpose strategy in 2009, along with over \$1 billion in utility cost savings through efficiency initiatives. The company’s sustainability efforts have also garnered top accolades: Hilton remains the only hospitality company included on the Dow Jones Sustainability World Index for seven consecutive years, and it achieved a Gold Medal sustainability rating from EcoVadis in 2022 (placing it in the top 5% of over 100,000 rated companies). Moreover, external industry analysis highlights Hilton’s continued progress toward its 2030 “Travel with Purpose” goals and the role of the Hilton Global Foundation in reinforcing these priorities (Legrand, 2024). Collectively, these recognitions provide third-party substantiation of Hilton’s reported progress and are consistent with the strategic relevance of its materiality-informed initiatives.

Scandic Hotels: Scandic, a major Nordic hotel chain, has a high sustainability maturity after decades of proactive efforts (Scandic, 2024). Scandic has been engaged in sustainability initiatives since the early 1990s, with all its hotels certified by the Nordic Swan Ecolabel, which indicates its deeply embedded sustainability culture and clear focus on significant issues for the industry. Through ongoing stakeholder engagement, Scandic has zeroed in on material issues like energy efficiency, waste reduction, and inclusive hospitality. These priorities are deeply integrated into its operations: many Scandic hotels are eco-certified, and practices such as recycling, resource conservation, and accessible design have been standardized. These initiatives reduce costs and attract eco-conscious and diverse customer segments, demonstrating that sustainability can expand market opportunities. For example, improving energy and water efficiency directly lowers Scandic’s operating expenses, while its reputation for sustainability draws environmentally minded guests. This trend is mirrored across the industry – Hilton, for instance, enabled all its properties to track resource usage via its LightStay platform and saved over \$1 billion in utilities since 2009, while also boosting guest satisfaction and loyalty by meeting demand for greener operations. Surveys likewise find that a large majority of travelers prefer hotels that prioritize sustainable practices (Bennett, 2023; Booking.com, 2025; Booking.com, 2024). Because sustainability is embedded in Scandic’s culture, the company can respond quickly to emerging issues and often leads the industry in new initiatives. Scandic’s experience shows that long-term commitment to material issues yields a strong brand, loyal customers, and continuous business model evolution aligned with sustainability.

Implications: Challenging “Sacred Cows” and Aligning with Stakeholders

Our field research—combining observations while shadowing staff across multiple hotel departments and interviews with department-level and corporate managers—indicates that a double materiality assessment (DMA) functions as a practical lens to scrutinize long-standing brand standards. In hospitality, such standards often persist for reasons of tradition and perceived quality; however, DMA’s inside-out and outside-in perspectives, when coupled with systematic stakeholder input (including guests), can identify “sacred cows” that no longer create contemporary value.

Specifically, materiality exercises that incorporate guest preferences and operational realities surfaced practices (e.g., daily linen changes, single-use amenities) whose assumed contribution to the guest experience was weaker than expected, while their environmental and cost implications were salient. In several studied hotels, this evidence supported experimentation (e.g., opt-out housekeeping, bulk dispensers) that maintained or improved guest satisfaction while reducing resource use. The implication for managers is not merely to retire traditions, but to re-validate them against materiality: which standards still anchor the value proposition, and which represent inertia?

Managerially, DMA therefore complements governance and capability building. Cross-functional teams can translate material topics into targeted changes in operations, procurement, and service design; stakeholder engagement processes provide ongoing feedback (“dynamic materiality”) to prevent drift back to legacy assumptions; and incentive systems can be aligned so that brand consistency is pursued in tandem with material environmental and social outcomes. In short, DMA helps firms distinguish between standards that are central to brand equity and those that are “sacred cows,” enabling a more deliberate calibration of the business model to current stakeholder expectations.

Conclusion

This paper examined double materiality assessment as a catalyst for business model innovation in hospitality. Framed by stakeholder theory and sustainability maturity, we argued that DMA’s dual perspective (impact materiality and financial materiality) can inform the reconfiguration of value proposition, value creation, and value capture. Case illustrations and field observations showed how, when embedded in governance and supported by cross-functional capabilities, DMA can prompt concrete adaptations to offerings and operations rather than remain a reporting exercise.

The analysis also underscores a boundary condition: the extent to which DMA catalyzes innovation depends on organizational maturity. Higher-maturity firms are better positioned to integrate materiality findings into routines and incentives; early-stage firms may first need to invest in data systems, skills, and oversight to translate DMA insights into action. Across both contexts, incorporating stakeholder input—particularly guest perspectives—helps identify where legacy practices misalign with current expectations and where innovation can create financial, social, and environmental value.

Overall, positioning DMA as a strategic, evidence-informed input to business-model design aligns with the paper’s title: it is not the sole driver of innovation, but a structured catalyst that helps hospitality organizations prioritize what matters and adjust their models accordingly. Future research could quantify the performance effects of DMA-informed changes across hotel types and geographies, and examine how maturity trajectories mediate the translation of material topics into sustained competitive advantage.

References

- Accor Group. (2024). Accor Impact Report 2023. Retrieved from <https://group.accor.com/> (accessed April 2025)
- Adams, C. A., Alhamood, A., He, X., Tian, J., Wang, L., & Wang, Y. (2021). The double-materiality concept: Application and issues. Amsterdam: Global Reporting Initiative (White Paper). Retrieved from <https://www.globalreporting.org/media/jrbntbyv/griwhitepaper-publications.pdf> (accessed April 2025)
- Bennett, P. (2023). Survey of travellers finds 76% want more sustainable options. EcoWatch/World Economic Forum. Retrieved from <https://www.weforum.org/stories/2023/04/survey-of-travelers-finds-76-want-more-sustainable-options/> (accessed July 2025)

- BlueSky. (2023). Climbing the Sustainability Ladder: 5 Levels of Maturity Every Business Should Know. BlueSky CSR Blog. (Accessed April 2025).
- Bocken, N. M. P., Short, S. W., Rana, P., & Evans, S. (2014). A literature and practice review to develop sustainable business model archetypes. *Journal of Cleaner Production*, 65, 42–56.
- Booking.com. (2025). 2025 Travel & Sustainability Report: 10 years of research [PDF]. Booking.com Newsroom. Retrieved from <https://news.booking.com/download/487ae9ae-97ef-4f66-b368-3b71787677b6/2025travelampsustainabilityreport-booking.com2.pdf> (accessed July 2025)
- Booking.com. (2024). Sustainable travel report 2024 [Presentation deck]. Booking.com Newsroom. <https://news.booking.com/sustainable-travel-report-2024/> (accessed July 2025)
- Chesbrough, H. (2010). Business model innovation: opportunities and barriers. *Long Range Planning*, 43(2–3), 354–363.
- Davis, J. H., Schoorman, F. D., & Donaldson, L. (1997). Toward a stewardship theory of management. *Academy of Management Review*, 22(1), 20–47.
- Dyllick, T., & Muff, K. (2016). Clarifying the meaning of sustainable business: Introducing a typology of business sustainability. *Journal of Cleaner Production*, 142, 658–668.
- Eccles, R. G., & Klimentko, S. (2019). The investor revolution: Shareholders are getting serious about sustainability. *Harvard Business Review*, 97(3), 106–116. <https://hbr.org/2019/05/the-investor-revolution>
- EFRAG. (2023). ESRS Implementation Guidance 1: Materiality Assessment. European Financial Reporting Advisory Group, Brussels.
- European Commission. (2019). Guidelines on Non-Financial Reporting: Supplement on Reporting Climate-Related Information. Brussels: European Commission.
- Fiandrino, S., Tonelli, A., & Devalle, A. (2022). Sustainability materiality research: A systematic literature review of methods, theories, and academic themes. *Qualitative Research in Accounting & Management*, 19(5), 665–695.
- Hilton. (2018). Travel with Purpose: 2030 Goals and Materiality Assessment. Hilton Corporate Responsibility Report.
- Hilton. (2020). 2019 Corporate Responsibility Report: Travel with Purpose. Hilton Worldwide. Retrieved from <https://cr.hilton.com> (April 2025).
- Hilton. (2022, December 12). Hilton Recognized for Sustainability Leadership by Dow Jones Sustainability Indices and EcoVadis. Hilton Press Release. Retrieved from Hilton Recognized for Sustainability Leadership by Dow Jones Sustainability Indices and EcoVadis (accessed April 2025).
- Hilton. (2023, December 13). Hilton Celebrates Strong Year of Positive Environmental and Social Impact, Recognized for Seventh Consecutive Year on DJSI. Hilton Press Release. Retrieved from Hilton Celebrates Strong Year of Positive Environmental and Social Impact, Recognized for Seventh Consecutive Year on Dow Jones Sustainability Indices (accessed April 2025).
- International Integrated Reporting Council (IIRC). (2021). International Framework (January 2021). IIRC: London.
- Legrand, W. (2024). Behind the Quote: Hilton and the Hilton Global Foundation Announce Notable Year of Progress Towards 2030 Travel with Purpose Goals. Hospitality Net (Interview with K. Lugar).
- Maiden, B. (2021). Meta-study underlines ties between ESG and corporate success. Governance Intelligence. Retrieved from <https://www.governance-intelligence.com/esg/meta-study-underlines-ties-between-esg-and-corporate-success> (accessed April 2025).
- Michie, C. (2022). Maturity pathway for ESG & sustainability. NAEM Blog. Retrieved from <https://www.naem.org/blog/> (accessed April 2025).
- Mischke, J. (2023). Double materiality: Double the trouble or double the benefit? Simply Sustainable Insights. Retrieved from <https://simplysustainable.com/> (accessed April 2025).
- Mitchell, R. K., Agle, B. R., & Wood, D. J. (1997). Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts. *Academy of Management Review*, 22(4), 853–886.
- Oll, J., Spandel, T., Schiemann, F., & Akkermann, J. (2025). The concept of materiality in sustainability reporting: From essential contestation to research opportunities. *Sustainability Accounting, Management and Policy Journal*, 16(2), 321–350.
- Presenza, A., Messeni Petruzzelli, A., & Natalicchio, A. (2019). Business model innovation for sustainability: Highlights from the tourism and hospitality industry. *Sustainability*, 11(1), 212.

- Rasche, A. (2025). Bringing Sustainability Into the Boardroom: Structure, Mindset, Competencies. In Bestyrelsesbogen (pp. 281–303). Copenhagen: Djøf Forlag.
- Scandic. (2024). Materiality Analysis – Vision and Strategy. Scandic Hotels Group Sustainability. Retrieved from <https://www.scandichotelsgroup.com/sustainability/vision-and-strategy/> (accessed April 2025)
- Simons, R. (1995). Levers of Control: How Managers Use Innovative Control Systems to Drive Strategic Renewal. Boston: Harvard Business School Press.
- van Tulder, R. (2013). Corporate social responsibility: From charity to sustainability. Rotterdam: Rotterdam School of Management, Erasmus University.
- Whelan, T., Atz, U., Van Holt, T., & Clark, C. (2021). ESG and financial performance: Uncovering the relationship by aggregating evidence from 1,000 plus studies published between 2015–2020. New York University Stern Center for Sustainable Business & Rockefeller Asset Management. https://www.stern.nyu.edu/sites/default/files/assets/documents/NYU-RAM_ESG-Paper_2021.pdf