

Article

Catalyzing Green Identity and Sustainable Advantage in Tourism and Hotel Businesses

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Abstract: Global environmental concerns necessitate a heightened focus on green practices by businesses to balance sustainability and profitability. Therefore, this study investigates the effects of green ambidexterity (GA), green organizational identity (GOI), and green internal marketing (GIM) on sustainable competitive advantage (SCA) in travel agencies and hotels. The PLS-SEM approach was used to test the proposed model of the study. In total, 317 valid responses were gathered from full-time middle- and upper-management personnel of travel agencies category A and five-star hotels operating in Egypt. The findings revealed that GA positively impacts GOI, GIM, and SCA. Also, GOI and GIM positively impact SCA. In addition, GOI and GIM mediate the relationship between GA and SCA. The study advanced dynamic capability theory by emphasizing the importance of internal processes in harnessing sustainability-oriented dynamic capabilities. The study recognized the relationship between SCA, GOI, GIM, and GA and provided insightful implications on how businesses might develop and use their sustainability-related strengths.

Keywords: green organizational identity; sustainable competitive advantage; green ambidexterity; green internal marketing; tourism and hospitality businesses



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1. Introduction

In light of growing global environmental concerns, businesses are placing greater emphasis on incorporating green practices, products, and strategies to meet societal expectations and regulatory mandates. To strike a balance between sustainability and profitability, organizations are exploring the concept of green ambidexterity, which involves simultaneously exploring and exploiting green innovations [1–5]. The concept of green ambidexterity refers to the organization's capacity to effectively combine and harmonize exploration and exploitation activities within the realm of sustainability. Exploration entails the discovery and cultivation of new environmentally sustainable opportunities, such as the exploration and implementation of innovative green technologies or practices. Exploitation, on the other hand, centers around capitalizing on existing green initiatives to optimize efficiency, minimize waste, and improve environmental performance [6,7].

Green ambidexterity is essential for achieving a sustainable competitive advantage in the tourism and hospitality industry. By implementing green practices like energy-efficient operations, waste reduction, and eco-friendly product offerings, businesses can distinguish themselves, lower costs, and attract the growing segment of environmentally conscious consumers. This dual emphasis on environmental and financial performance not only enhances organizational resilience but also supports the long-term sustainability of the tourism sector, which relies heavily on the conservation of natural resources and destinations [8,9]. Embracing green ambidexterity enables hospitality and tourism firms to stay ahead of regulatory changes, build a reputation for corporate social responsibility, and position themselves as leaders in sustainable tourism, thereby securing a sustainable competitive edge in an increasingly eco-conscious market [10].

Organizations that exhibit green ambidexterity proactively explore creative methods to minimize their environmental footprint while also refining and maximizing their existing green practices. This approach enables them to adapt to evolving market dynamics, regulatory standards, and stakeholder demands, consequently gaining a competitive edge in the green marketplace [9]. Attaining sustainable competitive advantage is a key objective for organizations, and green ambidexterity plays a crucial role in this pursuit. By concurrently exploring new green opportunities and leveraging existing ones, organizations can effectively respond to shifting environmental trends and meet evolving stakeholder expectations. This adaptability enables them to outperform competitors and seize emerging market prospects, all while optimizing their environmental performance [11]. Sustainable competitive advantage is the distinctive position and exceptional performance that organizations attain by embracing and successfully executing environmentally sustainable practices [12]. This advantage encompasses a range of benefits, such as cost savings through resource efficiency, enhanced brand reputation and differentiation, heightened customer loyalty, and adherence to environmental regulations [13].

Internal green marketing also refers to the internal procedures and endeavors undertaken by organizations to foster and bolster their green initiatives among employees [14,15]. This entails raising awareness, providing education on environmental matters, and aligning employees' behaviors and values with sustainability objectives [16]. The role of internal green marketing is pivotal in cultivating a sustainability-oriented culture within organizations [17]. Through effective communication of the significance of green initiatives, provision of training and resources, and acknowledgment and incentivization of environmentally responsible behaviors, organizations can engage employees and inspire their active participation in sustainable practices. This, in turn, elevates overall environmental performance and contributes to the attainment of sustainable competitive advantage [18,19].

A robust green organizational identity can also profoundly influence an organization's capacity to attain sustainable competitive advantage. When environmental sustainability is intricately woven into a company's mission, values, and operations, it yields numerous strategic advantages. A green identity serves to distinguish the company from competitors, enabling it to attract environmentally conscious consumers and stakeholders [20]. This differentiation can lead to heightened brand loyalty, enhanced pricing leverage, and opportunities to access green markets and supply chains [21,22].

Green organizational identity and green internal marketing are vital in the tourism and hospitality industry for promoting sustainability and enhancing brand reputation. A robust green organizational identity demonstrates a commitment to environmental stewardship, attracting eco-conscious travelers and distinguishing the business in a competitive market [23]. Green internal marketing ensures that employees are aligned with the organization's sustainability objectives, fostering environmentally friendly practices and improving overall service quality. This alignment not only boosts operational efficiency and reduces environmental impact but also cultivates a positive organizational culture that appeals to both employees and customers, ultimately driving long-term success and competitive advantage in the industry [24,25].

According to the dynamic capability theory, organizations that possess dynamic capabilities can attain a competitive advantage [26,27]. Dynamic capabilities are often linked to a long-term outlook. Green ambidexterity, internal green marketing, and the pursuit of a sustainable competitive advantage all share long-term sustainability objectives. The alignment of dynamic capability theory with the study's emphasis on enduring sustainability practices is evident [28,29].

Existing studies by Waqas et al. [30], Ngo [31], and Cao et al. [32] highlighted a dearth of empirical research specifically examining the interplay between green ambidexterity, sustainable competitive advantage, and internal green marketing. Further empirical investigations are necessary to substantiate and validate the theoretical framework in this area. Several studies, such as those conducted by Al-Khawaldah et al. [11] and Cao et al. [32], have examined green ambidexterity and sustainable competitive advantage in a broad context without a specific industry focus. However, there appears to be a research gap concerning the tourism and hospitality industry, which faces distinct environmental and sustainability challenges. Further investigation specific to this industry is warranted.

Furthermore, there is a potential gap in the investigation of internal green marketing and green organizational identity as two mediators in the relationship between green ambidexterity and sustainable competitive advantage. This study aims to examine the influence of internal green marketing and green organizational identity on the competitive advantage of tourism and hospitality businesses in the realm of environmental sustainability. The existing literature may lack empirical studies that offer substantial evidence regarding the impact of green ambidexterity, internal green marketing practices, and green organizational identity on sustainable competitive advantage within the tourism and hospitality sector.

Additionally, there is a notable gap in existing research regarding the alignment of internal green marketing strategies with the simultaneous exploration and exploitation of environmental initiatives, which characterizes green ambidexterity. The understanding of how organizations can effectively balance these elements to attain a sustainable competitive advantage remains insufficiently explored. Hence, this study aims to address this gap by pursuing three primary objectives: (1) investigating the impact of green ambidexterity on green internal marketing, green organizational identity, and sustainable competitive advantage, (2) evaluating the influence of green internal marketing and green organizational identity on sustainable competitive advantage, and (3) exploring the mediating roles of green internal marketing and green organizational identity in the relationship between green ambidexterity and sustainable competitive advantage in travel agencies and hotels.

2. Literature Review

2.1. Green Ambidexterity

Green ambidexterity encompasses an organization's capacity to concurrently engage in the exploration and exploitation of green opportunities [9]. Exploration entails actively seeking and experimenting with novel green practices, technologies, and market prospects. It involves activities like conducting research and development for environmentally friendly products, exploring alternative energy sources, and experimenting with sustainable business models. Through exploration, organizations can proactively anticipate emerging environmental trends, identify untapped market segments, and foster innovation in sustainability [11,33]. Exploitation, in contrast, centers on optimizing the efficiency and efficacy of established green practices, technologies, and market positions. It encompasses endeavors such as streamlining operations to minimize waste and energy usage, optimizing the sustainability of the supply chain, or leveraging the brand's reputation for environmental responsibility. The objective of exploitation is to capitalize on existing green initiatives and attain operational excellence [9,34].

2.2. Sustainable Competitive Advantage

Sustainable competitive advantage pertains to the advantageous position that organizations achieve by adopting environmentally sustainable practices, initiatives, and offerings. It encompasses leveraging sustainability as a means of differentiation and value generation, which enhances market standing, brand reputation, customer loyalty, and overall organizational performance. Sustainable competitive advantage acknowledges that environmental sustainability can serve as a pivotal catalyst for business success in the contemporary marketplace, which is increasingly characterized by social and environmental consciousness [35,36].

Sustainable competitive advantage is crucial for success in the tourism and hospitality industry. To thrive in the long run, organizations in this sector must maintain a competitive edge over their rivals [37]. A key component of this advantage is environmental sustainability. Firms that effectively integrate eco-friendly practices, such as energy efficiency, waste management, and the use of renewable resources, can better differentiate themselves and attract environmentally conscious consumers. By adopting a green ambidextrous approach that balances environmental and operational goals, these organizations can reduce costs, enhance their reputation, and contribute to the long-term sustainability of the tourism industry [38]. Enhancing operational efficiency stands as another pivotal aspect of sustainable competitive advantage. Streamlining processes via lean management, automation, and resource optimization empowers tourism and hospitality firms to bolster profitability and fortify resilience against market fluctuations. Moreover, crafting distinctive, experiential, and personalized products and services empowers organizations to carve a niche in the market and cultivate devoted customer bases [39]. Establishing a robust, trusted brand synonymous with environmental stewardship, quality, and exemplary customer service also serves as a significant driver of sustainable competitive advantage. Continuously innovating in terms of products, services, and business models, alongside the adeptness to adapt to evolving market dynamics and consumer preferences, further solidifies an organization's leadership position in the industry [40].

The adoption of environmentally sustainable practices empowers organizations to distinguish themselves from their competitors. By providing green products, services, or processes that cater to the preferences of environmentally conscious customers, organizations can establish a distinctive market position. Sustainable competitive advantage enables organizations to differentiate themselves in the marketplace and attract customers who prioritize sustainability when making purchasing decisions [41]. To attain and maintain a sustainable competitive advantage, organizations must incorporate sustainability into their fundamental business strategies, operations, and culture. This necessitates strategic planning, engagement with stakeholders, continual improvement, and a forward-looking perspective. Organizations that effectively harness sustainable competitive advantage not only contribute to a more sustainable future but also position themselves for long-term success in an ever-evolving business environment [42].

2.3. Green Internal Marketing

Green internal marketing, alternatively referred to as internal environmental marketing or green internal communication, encompasses the tactics and initiatives designed to propagate environmental sustainability and green practices within an organization, targeting both employees and stakeholders. It entails effective communication and active involvement of employees to cultivate a sustainability-oriented culture, encourage environmentally conscious behaviors, and align collective efforts toward the accomplishment of the organization's environmental objectives [15,16]. The foundation of successful internal green marketing lies in establishing awareness and comprehension among employees regarding the environmental values, goals, and initiatives of the organization. This entails regular communication through diverse channels like newsletters, intranet portals, email updates, and team meetings to disseminate information about sustainability endeavors, environmental accomplishments, and upcoming initiatives. By delivering clear and consistent

messages, employees gain a deeper understanding of the significance of environmental sustainability and their contributions to it [43]. Internal green marketing plays a vital role in cultivating an organizational culture that embraces and fosters environmental sustainability. Through employee engagement, educational initiatives, recognition of contributions, and the integration of green practices into policies and procedures, organizations can instigate significant change from within. This approach harnesses the collective efforts of employees and directs them toward the attainment of sustainability goals [13,16].

2.4. Green Organizational Identity

Green organizational identity encompasses the collective perception, values, and commitments of an organization, emphasizing its dedication to environmental sustainability. It goes beyond the mere adoption of eco-friendly policies, permeating the very essence of the organization by integrating sustainability into all aspects of its operations, culture, and mission [20,44]. In today's business landscape, characterized by increasing environmental awareness among consumers, investors, employees, and other stakeholders, a robust green organizational identity is indispensable. At the core of a green organizational identity lies the organization's fundamental values and mission statement, which should explicitly underscore environmental responsibility and sustainability [45,46]. By embedding green values into its mission, an organization demonstrates a long-term commitment to environmental stewardship. This commitment permeates decision-making processes, strategic planning, and the overall trajectory of the company, ensuring that sustainability is not merely an ancillary concern but a central tenet of its identity [24].

2.5. Dynamic Capability Theory

Dynamic capability theory (DCT) is a theoretical framework that elucidates how organizations can cultivate and utilize their capabilities to adapt, innovate, and effectively respond to shifts in the external environment [47]. It underscores the significance of a firm's capacity to sense, seize, and transform resources and capabilities to attain and uphold a competitive advantage [48]. According to dynamic capability theory, organizations that possess dynamic capabilities are more adept at adjusting to evolving environments [49]. Green ambidexterity can be regarded as one such dynamic capability. It encompasses the organization's capacity to effectively balance and adapt to both established green initiatives (exploitation) and novel environmentally friendly practices (exploration) [9].

Dynamic capability theory underscores the importance of perceiving environmental changes, capitalizing on opportunities, and reconfiguring resources. Green ambidexterity aligns with these principles as it encompasses the ability to sense environmental trends and adapt practices accordingly. Organizations that possess green ambidexterity are capable of swiftly responding to sustainability challenges and capitalizing on emerging opportunities [27,50,51]. Dynamic capability theory also provides insights into how internal green marketing functions as a mechanism for cultivating and strengthening dynamic capabilities associated with green practices. It facilitates the dissemination of knowledge and practices related to sustainability across the organization [52].

The green organizational identity functions as a dynamic capability that influences the organization's perception and response to sustainability challenges and opportunities. It facilitates the integration of sustainability into the organizational culture and the realignment of resources to support green initiatives. This ensures that sustainability becomes a fundamental element of the organization's strategic trajectory, thereby enhancing its capacity for innovation and adaptation [52,53]. A robust green identity offers the strategic versatility required to pursue both exploratory (innovation-driven) and exploitative (efficiency-oriented) green practices, a flexibility that is imperative for sustaining competitive advantage in dynamic environments [20].

2.6. Hypothesis Development

2.6.1. Green Ambidexterity and Sustainable Competitive Advantage

Organizations that can proficiently navigate the delicate balance between exploitative and exploratory activities within the realm of environmental sustainability are more inclined to achieve and uphold a competitive advantage in the green marketplace [54]. Exploitative activities encompass enhancing and refining current green practices, optimizing resource efficiency, and minimizing the environmental impact of an organization's existing operations. By prioritizing efficiency and effectiveness, organizations can realize cost savings, waste reduction, and an overall improvement in environmental performance. These enhancements contribute to a reduced environmental footprint and can yield advantages such as cost savings, enhanced operational performance, and increased resource productivity [25,55].

Exploratory activities involve venturing into new green initiatives, embracing innovative technologies, and crafting new products or services that exhibit enhanced environmental performance. These activities foster innovation, creativity, and adaptability in response to evolving environmental demands. By exploring fresh green opportunities, organizations can discover innovative solutions, establish distinct value propositions, and set themselves apart from competitors. This can lead to the emergence of new market prospects, the expansion of customer bases, and competitive advantages in terms of product offerings and market positioning [9,56,57].

Green ambidexterity entails achieving a harmonious equilibrium between exploitative and exploratory activities [58]. It acknowledges that organizations should not solely concentrate on enhancing current green practices (exploitation) or solely focus on exploring new green initiatives (exploration). Instead, they should pursue both simultaneously. This balance enables organizations to optimize their existing operations while also fostering innovation and adaptability in response to environmental challenges and opportunities. By effectively managing this equilibrium, organizations can attain a competitive advantage by harnessing the advantages of both exploitation and exploration [9].

Green ambidexterity significantly impacts the attainment of sustainable competitive advantage in tourism and hospitality organizations. By balancing a dual focus, these organizations can enhance their current operations to be more eco-efficient while also innovating to address new environmental [59,60]. This strategy optimizes resource usage, reduces operational costs, and improves overall environmental performance. Additionally, green ambidexterity helps organizations meet the increasing demand for sustainable practices among consumers, thereby boosting brand loyalty and attracting eco-conscious customers. Consequently, tourism and hospitality organizations that effectively implement green ambidexterity not only promote environmental sustainability but also secure a long-term competitive edge in the market [61,62]. So, the following hypothesis is assumed:

H1. *Green ambidexterity positively affects sustainable competitive advantage.*

2.6.2. Green Ambidexterity and Internal Green Marketing

Green ambidexterity and internal green marketing both share a mutual objective of cultivating environmental sustainability within an organization. Green ambidexterity emphasizes the equilibrium between exploitative and exploratory activities to attain sustainability, while internal green marketing centers on promoting sustainability-oriented behaviors and initiatives among employees. By aligning these objectives, organizations can establish a unified and interconnected approach to propel environmental sustainability [63,64].

Effective green ambidexterity necessitates the sharing of knowledge and collaboration among various functions and departments within the organization [65]. Internal green marketing plays a crucial role in facilitating this process by establishing platforms and channels that enable employees to share best practices, exchange ideas, and collaborate on projects related to sustainability. Through the exchange of knowledge and collaborative

efforts fostered by internal green marketing, the organization's capacity to strike a balance between exploitative and exploratory activities is enhanced [43,66,67].

Effective green ambidexterity necessitates the active collaboration and engagement of employees from various levels and functions within the organization. Internal green marketing plays a pivotal role in enabling collaborative decision-making processes by establishing platforms where employees can contribute their ideas, insights, and perspectives on sustainability matters. By involving employees in decision-making, organizations can leverage their diverse knowledge and experiences, fostering a sense of ownership and dedication to green ambidexterity [43,65].

Green ambidexterity greatly impacts internal green marketing in tourism and hospitality organizations. By cultivating a culture that values both the improvement of existing green practices and the pursuit of innovative environmental solutions, organizations can align their internal marketing strategies with their sustainability objectives. This alignment motivates employees to actively engage in and promote the organization's green initiatives, enhancing their commitment and involvement [9,44]. Consequently, employees become effective ambassadors of the organization's green values, improving internal communication and collaboration on sustainability efforts. This internal promotion of green initiatives not only boosts morale and job satisfaction but also strengthens the organization's overall brand image, making it more appealing to eco-conscious consumers and stakeholders [68,69]. Hence, the following hypothesis is proposed:

H2. *Green ambidexterity positively affects green internal marketing.*

2.6.3. Internal Green Marketing and Sustainable Competitive Advantage

The relationship between internal green marketing and sustainable competitive advantage is based on the capacity of internal green marketing to promote sustainability practices and behaviors within an organization, ultimately resulting in a strengthened competitive position in the green marketplace [15,70]. Internal green marketing plays a crucial role in promoting employee engagement and ensuring alignment with the organization's sustainability goals and initiatives [15]. Through effective communication, education, and training, internal green marketing helps employees comprehend the importance of sustainability and their role in advancing environmental sustainability efforts [16]. Engaged and aligned employees are more inclined to actively participate in green initiatives, thereby contributing to enhanced environmental performance and a reinforced competitive advantage [71,72].

Internal green marketing has the potential to foster innovation and differentiation, thereby resulting in a competitive advantage [73]. By cultivating a culture of sustainability and promoting the generation and sharing of ideas among employees, organizations can leverage their collective knowledge and creativity [74]. Internal green marketing also plays a crucial role in establishing a positive brand image and reputation for sustainability. When employees are well informed and passionate about the organization's green initiatives, they become brand ambassadors, promoting sustainability both internally and externally. Through their enthusiasm and dedication to sustainability, employees can effectively communicate the organization's commitment to customers, suppliers, investors, and other stakeholders, thereby enhancing its reputation as an environmentally responsible and sustainable entity. A strong brand image and reputation for sustainability can attract environmentally conscious customers and stakeholders, providing a competitive advantage [15,16,75].

Internal green marketing significantly enhances sustainable competitive advantage in tourism and hospitality organizations by integrating sustainability into the core of organizational culture and operations. Educating and motivating employees about the company's green initiatives through internal green marketing encourages the adoption and promotion of sustainable practices. This alignment ensures that sustainability goals are consistently met at all organizational levels, leading to more efficient resource use and reduced environmental impact [76,77]. Engaged employees can also deliver more authentic

and compelling sustainability messages to customers, improving the organization's brand image and reputation. This boost in brand loyalty and customer satisfaction among eco-conscious travelers strengthens the market position. Additionally, fostering a culture of sustainability helps attract and retain top talent who value environmental responsibility, further enhancing the competitive edge. Ultimately, internal green marketing drives operational efficiencies and environmental benefits while enabling the organization to stand out in the market, securing a sustainable competitive advantage [76,78]. Therefore, the following hypothesis is suggested:

H3. *Green internal marketing positively affects sustainable competitive advantage.*

2.6.4. Internal Green Marketing as a Mediator

Although both green ambidexterity and internal green marketing are essential for attaining a sustainable competitive advantage, they operate in distinct domains [79]. Green ambidexterity primarily focuses on the strategic and operational aspects of balancing exploitation and exploration, whereas internal green marketing is primarily concerned with effectively communicating and engaging employees regarding sustainability goals [63].

Internal green marketing plays a crucial role in ensuring that employees have a clear understanding of the organization's sustainability objectives and the significance of green ambidexterity [9]. Through effective communication of the rationale behind sustainability initiatives, internal green marketing aligns employees with the organization's strategic direction and cultivates a shared understanding of the importance of both exploitative and exploratory actions in achieving sustainable competitiveness [63,64].

Likewise, internal green marketing strengthens sustainable practices and behaviors that underpin both exploitative and exploratory activities. It advocates for the adoption of environmentally friendly processes, waste reduction, energy conservation, and other sustainable practices. Through this reinforcement, internal green marketing facilitates the successful implementation of green ambidexterity, resulting in enhanced environmental performance and a reinforced competitive position [9,80,81].

The synergy between green ambidexterity and internal green marketing not only enhances a tourism and hospitality organization's sustainability performance but also strengthens its competitive position in the market. This integrated approach ensures that the organization can continuously adapt and innovate in response to environmental challenges, securing a sustainable competitive advantage that competitors find difficult to replicate. Consequently, internal green marketing acts as a crucial mediator, amplifying the positive effects of green ambidexterity on sustainable competitive advantage in tourism and hospitality organizations [62,82]. Accordingly, the following hypothesis is formulated:

H4. *Green internal marketing positively mediates the link between green ambidexterity and sustainable competitive advantage.*

2.6.5. Green Ambidexterity and Green Organizational Identity

Green ambidexterity prompts organizations to consistently explore novel green technologies and practices (exploratory green practices) while refining and sustaining their existing environmental initiatives (exploitative green practices). This dynamic strategy nurtures a culture of innovation and adaptability, which are fundamental components of a resilient green organizational identity. Companies perceived as pioneers in environmental innovation often cultivate a more formidable and favorable green identity, earning esteem and acknowledgment from stakeholders [10]. Organizations that adeptly manage the exploration and exploitation of green practices showcase an authentic and enduring dedication to environmental sustainability. This dedication fosters credibility and trust among consumers, investors, and various stakeholders. A robust green identity frequently rests upon a bedrock of trust, wherein stakeholders have faith in the organization's unwavering commitment to environmental stewardship [83,84].

Green ambidexterity assists organizations in harmonizing their environmental practices with their fundamental values and mission. By melding innovative green approaches with effective, established ones, organizations can uphold coherence between their actions and stated environmental objectives. This harmonization bolsters the organization's green identity, embedding it as a cornerstone of the corporate culture and brand [62,67]. Employees tend to experience higher levels of engagement and motivation when employed by an organization that actively embraces and executes green initiatives. Green ambidexterity fosters a proactive and inventive workplace atmosphere, potentially elevating employee morale and dedication. Moreover, a robust green organizational identity has the potential to draw in talent that prioritizes sustainability, thereby bolstering the organization's reputation for environmental commitment [32,85,86].

Green ambidexterity plays a crucial role in shaping a green organizational identity within the tourism and hospitality industry. By optimizing existing sustainable practices while exploring new environmental innovations, organizations can deeply integrate environmental values into their operational and strategic frameworks. This dual approach enhances internal alignment and employee engagement while also bolstering the organization's external reputation as a sustainability leader. Consequently, green ambidexterity is essential for developing a strong and lasting green organizational identity, positioning tourism and hospitality organizations for long-term success in an increasingly eco-conscious market [87,88]. So, the following hypothesis is developed:

H5. *Green ambidexterity positively affects green organizational identity.*

2.6.6. Green Organizational Identity and Sustainable Competitive Advantage

A robust green organizational identity frequently results in heightened brand loyalty and customer favoritism. With consumers becoming progressively more environmentally aware, they gravitate towards brands that exhibit a sincere dedication to sustainability. By aligning its identity with green principles, an organization can allure and retain eco-conscious clientele, nurturing enduring loyalty and repeat patronage, thereby securing a competitive advantage in the market [20]. A green organizational identity serves to distinguish a company from its rivals. Amidst a saturated market, being acknowledged for sustainable practices can establish a company as unique, rendering its products and services more appealing to an expanding segment of environmentally conscious consumers. This distinction can result in augmented market share and customer base, ultimately fortifying its competitive edge [89].

Incorporating and assimilating sustainable practices frequently results in substantial cost reductions by enhancing efficiency and minimizing waste. A green organizational identity fosters ongoing advancements in these domains, enabling the company to diminish operational expenses. These savings can be reinvested in additional sustainable endeavors or allocated to provide more competitive pricing, thereby bolstering a sustainable competitive advantage [62]. Companies possessing a robust green identity frequently appeal to top-tier talent, particularly among younger cohorts who prioritize sustainability and corporate social responsibility. Attracting and retaining such talent guarantees that the organization harnesses a driven, inventive, and dedicated workforce. A proficient and dedicated workforce is vital for sustaining a competitive advantage [90,91].

A green organizational identity significantly boosts sustainable competitive advantage in tourism and hospitality organizations by embedding sustainability into the core values and operations of the business. This strong identity fosters a culture of environmental responsibility among employees, promoting consistent and innovative green practices [68,92]. It also enhances the organization's reputation among eco-conscious consumers, attracting a loyal customer base that values sustainability. Additionally, a green organizational identity can lead to operational efficiencies and cost savings through reduced resource consumption and waste. By aligning the organization's identity with sustainable principles, tourism

and hospitality businesses can differentiate themselves in a competitive market, ensuring long-term viability and success [93]. Accordingly, the following hypothesis is assumed:

H6. *Green organizational identity positively affects sustainable competitive advantage.*

2.6.7. Green Organizational Identity as a Mediator

Balancing exploratory and exploitative endeavors in environmental sustainability, known as green ambidexterity, stands as a pivotal capability for contemporary organizations striving to attain sustainable competitive advantage. Nonetheless, the direct impacts of green ambidexterity on competitive advantage are substantially amplified and mediated by the cultivation of a robust green organizational identity. This identity plays a vital intermediary role, translating the endeavors in green ambidexterity into tangible competitive advantages [11,94]. A robust green organizational identity, fostered through the consistent implementation of green ambidexterity, significantly enhances an organization's reputation and brand perception. When a company is viewed as environmentally responsible, it establishes trust and credibility among various stakeholders, including customers, employees, investors, and regulatory bodies. This trust is essential for gaining a competitive edge as it cultivates brand loyalty, attracts environmentally conscious consumers, and positions the company as a frontrunner in sustainability. Therefore, the green identity acts as a mediator in the correlation between green ambidexterity and competitive advantage by elevating the organization's public image and market attractiveness [9,89,95].

The green organizational identity holds a crucial role in both attracting and retaining top talent, a pivotal element for sustaining competitive advantage [84]. In today's workforce, particularly among younger employees, there is a growing emphasis on sustainability, making organizations that exhibit a strong dedication to environmental stewardship more appealing. Green ambidexterity ensures the continual involvement of the organization in sustainable practices and innovations, thereby reinforcing its green identity. This identity not only draws in professionals who share similar values but also heightens employee satisfaction and retention by fostering alignment with the company's values and mission. Consequently, the green identity acts as a link between green ambidexterity and competitive advantage by nurturing a motivated and committed workforce [69,96].

The synergy between green ambidexterity and a strong internal organizational identity not only enhances the organization's sustainability performance but also strengthens its competitive position in the tourism market. By embedding sustainability into the core of the organization's identity, tourism and hospitality businesses can continuously adapt and innovate in response to environmental challenges [97,98]. This integrated approach ensures that the organization remains agile and resilient, securing a sustainable competitive advantage that is both robust and enduring. Thus, a strong internal organizational identity serves as a crucial mediator, amplifying the positive effects of green ambidexterity on sustainable competitive advantage in tourism and hospitality organizations [20]. Based on the above discussion, the following hypothesis is adopted:

H7. *Green organizational identity positively mediates the link between green ambidexterity and sustainable competitive advantage.*

The theoretical model of the study is presented in Figure 1 below.

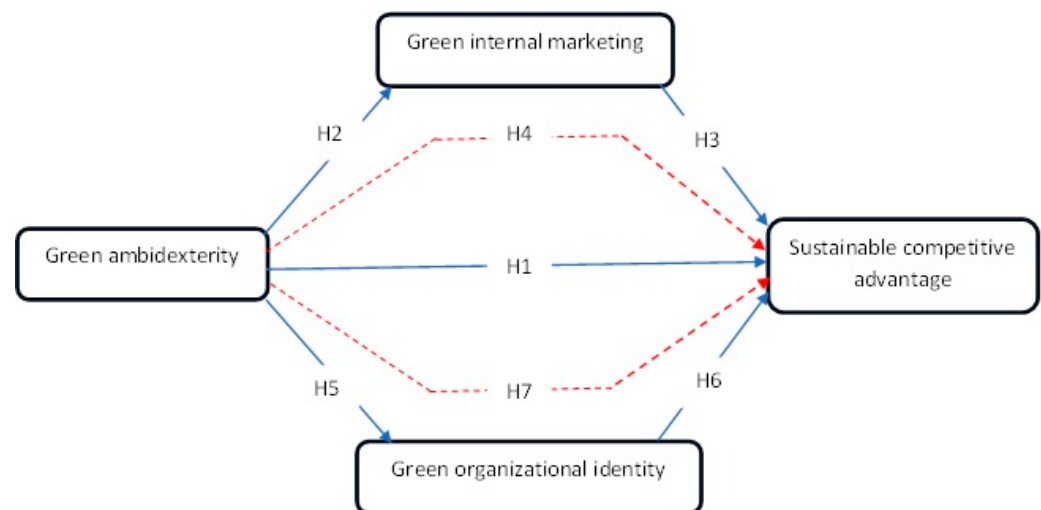


Figure 1. Theoretical model of the study.

3. Methodology

3.1. Questionnaire Design and Study Measures

The necessary information was acquired using a structured survey as part of a quantitative research methodology. A survey was used to investigate the influence of green ambidexterity in hotel and tourism enterprises (five-star hotels and category-A tourist firms) on green organizational identity, green internal marketing, and sustainable competitive advantage. A two-section questionnaire was used. In the first section, we discussed participants' characteristics, such as gender, age, education, and job experience. The three researched variables were analyzed in the second section.

Green ambidexterity was evaluated by an 8-item scale adapted from Úbeda-García et al. [9]. For example, "Our organization actively discovers new green markets" and "Our organization actively improves green products, processes, and services". In addition, sustainable competitive advantage was measured by a 4-item scale adopted from Lin and Chen [99]. Sample items include the following: "The firm has greater capability than competitors regarding green management" and "The firm offers better quality green products in comparison with major competitors". Moreover, green internal marketing was assessed by a 13-item scale by Vilkaitė-Vaitonė et al. [100]. For instance, "We organize presentations for employees to inform them about the green marketing strategy" and "Our organization culture makes green marketing easier for us". Furthermore, green organizational identity was evaluated by a six-item scale developed by Chen [22]. For example, "the company's top managers, middle managers, and employees have a strong sense of the company's history about environmental management and protection" and "the company's top managers, middle managers, and employees have a sense of pride in the company's environmental goals and missions". Complete measures items are presented in Appendix A.

3.2. Sample

The present study population is made up of full-time middle- and upper-management personnel from five-star hotels and category-A tourist companies in Egypt's Greater Cairo area. This study selected five-star hotels due to their extensive experience, standard operating procedures, continuous training, and regular employee surveys. The study focuses on 5-star hotels and category (A) travel agencies, which constitute the majority of Egypt's tourism and hospitality industry, for their exceptional services and commitment to quality guest services. They are companies that work in outbound and domestic tourism and provide a variety of services such as comprehensive trips, organizing tourism programs, booking travel tickets, religious tourism, tourist transportation, and other services [20,68,101]. As per the 2018 report by the Egyptian Ministry of Tourism, the Greater

Cairo region of Egypt contains 30 five-star hotels and 2222 category-A tourist companies. While the investigated enterprises were chosen using a judgmental sample strategy, the convenience sampling method was utilized to collect data from their employees. The enterprises under examination received 500 questionnaires from January to March 2024. Only 317 valid forms were collected from 20 five-star hotels and 55 category-A tourist companies, yielding a 63.4% response rate.

According to Table 1, 317 participants were involved in this study. Out of them, there were 235 (74.13%) men and 82 (25.87%) women. A total of 123 respondents (38.80%) were belonging to less than 30 years age group, 153 respondents (48.27%) were belonging to 30 to less than 40 years age group, while 30 (12.93%) were belonging to 40 to more than 50 years age group. In addition, 51 (16.09%) had high school degrees, while the majority (n = 256, 80.76%) had a bachelor's degree, and the minority (n = 10, 3.15%) had master's or PhD degrees. Moreover, 60 of employees (18.93%) had less than two years of work experience, 63 (19.87%) had two to five years of experience, 52 (16.41%) had six to ten years of experience, and 142 employees (44.79%) had ten years or more of work experience. In addition, 216 respondents (68.14%) had jobs in five-star hotels, whereas 101 (31.86%) had jobs in travel agencies.

Table 1. Participant's profile (N = 317).

		Frequency	Percent
Gender	Male	235	74.13
	Female	82	25.87
Age	Less than 30 years	123	38.80
	30 to less than 40 years	153	48.27
	40 to more than 50 years	30	12.93
Educational Level	High schools/institute	51	16.09
	Bachelor	256	80.76
	Master/PhD	10	3.15
Work Experience	Less than 2 years	60	18.93
	2 to 5 years	63	19.87
	6 to 10 years	52	16.41
	More than 10 years	142	44.79
Work Organization	Hotels	216	68.14
	Travel agency	101	31.86

3.3. Data Analysis

PLS-SEM is a widely used analytical method in various domains, including tourism and hospitality research Alsetoohy et al. [102]. It is a helpful method for examining complex structural models that involve both direct and indirect connections between several variables [103]. Consequently, this approach using WarpPLS software 7.0 was adopted in the current study to evaluate the research hypotheses [104].

3.4. Common Method Biases

Principal component analysis and Harman's single-factor test were used in the study to assess common method variance (CMV). The lack of a dominating factor accounting for more than 50% of the total variation in the study suggests that CMV is not a serious cause for concern.

4. Results

4.1. Reliability and Validity

The results tabulated in Table 2 showed the confirmatory factor analysis and indicated that item loading scores for all items of the measures were satisfactory Hair et al. [105] criterion that equals 0.5 or more and ranged from 0.678 to 0.867. Cronbach's alpha and

composite reliability were also adequate since all values are greater than 0.7. AVE values were adequate as well since they were larger than 0.5 for all variables, and VIF values since they were ≤ 3.3 , according to Hair et al. [106] and Kock [107] suggestions, respectively.

Table 2. Factor loadings, CA, CR, AVE, and VIF.

	Item Loading	CR	CA	AVE	VIF
Green organizational identity (GOI)	-				
GOI.1	0.884 **				
GOI.2	0.838 **				
GOI.3	0.832 **	0.908	0.877	0.625	2.782
GOI.4	0.786 **				
GOI.5	0.721 **				
GOI.6	0.660 **				
Sustainable Competitive Advantage (SCA)	-				
SCA.1	0.813 **				
SCA.2	0.867 **	0.920	0.883	0.741	1.988
SCA.3	0.884 **				
SCA.4	0.877 **				
Green Ambidexterity (GA)	-				
GA.1	0.762 **				
GA.2	0.797 **				
GA.3	0.739 **				
GA.4	0.797 **	0.918	0.897	0.582	2.610
GA.5	0.746 **				
GA.6	0.732 **				
GA.7	0.799 **				
GA.8	0.726 **				
Green Internal Marketing (GIM)	-				
GIM.1	0.730 **				
GIM.2	0.790 **				
GIM.3	0.768 **				
GIM.4	0.740 **				
GIM.5	0.776 **				
GIM.6	0.694 **				
GIM.7	0.771 **	0.941	0.932	0.553	2.333
GIM.8	0.704 **				
GIM.9	0.678 **				
GIM.10	0.696 **				
GIM.11	0.797 **				
GIM.12	0.776 **				
GIM.13	0.730 **				

CR: Composite reliability; CA: Cronbach's alpha; AVE: average variance extracted; VIF: variance inflation factors.

** $p < 0.05$

To demonstrate discriminant validity, the two latent variables' correlation must be fewer than unity and the AVE score for each variable must be larger than the highest common value, according to Franke and Sarstedt [108]. Consequently, the results in Table 3 confirm the research model's discriminant validity.

Table 3. Discriminant validity results—Fornell–Larcker criterion.

	GIM	SCA	GA	GOI
Green Internal Marketing (GIM)	0.743	0.530	0.717	0.675
Sustainable Competitive Advantage (SCA)	0.530	0.861	0.598	0.686
Green Ambidexterity (GA)	0.717	0.598	0.763	0.705
Green Organizational Identity (GOI)	0.675	0.686	0.705	0.791

Off-diagonal elements are correlations, and diagonal elements—values in bold—are square roots of AVE.

Furthermore, the HTMT for validity was measured (see Table 4), and all values were less than 0.85, confirming that the research model has the best validity.

Table 4. HTMT for validity.

HTMT Ratios “Good If <0.90, Best If <0.85”	GIM	SCA	GA	GOI
Green Internal Marketing (GIM)				
Sustainable Competitive Advantage (SCA)	0.585			
Green Ambidexterity (GA)	0.785	0.672		
Green Organizational Identity (GOI)	0.753	0.778	0.798	
<i>p</i> values (one-tailed) for HTMT ratios	GIM	SCA	GA	GOI
Green Internal Marketing (GIM)				
Sustainable Competitive Advantage (SCA)	<0.001			
Green Ambidexterity (GA)	<0.001	<0.001		
Green Organizational Identity (GOI)	<0.001	<0.001	<0.001	

4.2. Multigroup Analysis

Multigroup analysis was performed to determine whether there were substantial variances in employee answers due to changes in their work organization. The results of the tests revealed that there are no significant differences in all path coefficients between staff of five-star hotels and those of travel firms ($p > 0.05$), indicating no need for separate results.

4.3. Research Model Fit

Kock [104] suggested ten criteria to ensure the model fit, which all were accomplished by this study, as presented in Table 5.

Table 5. Model fit results.

	Assessment	Criterion
Average path coefficient (APC)	0.458, $p < 0.001$	$p < 0.05$
Average R-squared (ARS)	0.563, $p < 0.001$	$p < 0.05$
Average adjusted R-squared (AARS)	0.560, $p < 0.001$	$p < 0.05$
Average block VIF (AVIF)	3.456	Acceptable if ≤ 5 , ideally ≤ 3.3
Average full collinearity VIF (AFVIF)	2.429	Acceptable if ≤ 5 , ideally ≤ 3.3
Tenenhaus GoF (GoF)	0.593	Small ≥ 0.1 , medium ≥ 0.25 , large ≥ 0.36
Sympson's paradox ratio (SPR)	1.000	Acceptable if ≥ 0.7 , ideally = 1
R-squared contribution ratio (RSCR)	1.000	Acceptable if ≥ 0.9 , ideally = 1

Table 5. Cont.

	Assessment	Criterion
Statistical suppression ratio (SSR)	1.000	Acceptable if ≥ 0.7
Nonlinear bivariate causality direction ratio (NLBCDR)	1.000	Acceptable if ≥ 0.7

The ten fit indices are as follows: APC “ $p < 0.05$ ”, ARS “ $p < 0.05$ ”, AARS “ $p < 0.05$ ”, AVIF “acceptable if ≤ 5 , ideally ≤ 3.3 ”, AFVIF “acceptable if ≤ 5 , ideally ≤ 3.3 ”, GoF “small ≥ 0.1 , medium ≥ 0.25 , large ≥ 0.36 ”, SPR “acceptable if ≥ 0.7 , ideally = 1”, RSCR “acceptable if ≥ 0.9 , ideally = 1”, SSR “acceptable if ≥ 0.7 ”, and NLBCDR “acceptable if ≥ 0.7 ”. The proposed four-factor model provided data that were adequately fitted are as follows: “APC = 0.458, $p < 0.001$; ARS = 0.563, $p < 0.001$; AARS = 0.650, $p < 0.001$; AVIF = 3.456; AFVIF = 2.429; GoF = 0.593; SPR = 1.000; RSCR = 1.000; SSR = 1.000; and NLBCDR = 1.000”.

4.4. Results of Testing Hypotheses

The results of testing hypotheses are presented in Figure 2 and Tables 6 and 7. Findings showed that green ambidexterity (GA) positively affects sustainable competitive advantage (SCA) ($\beta = 0.09$, $p = 0.04$), green internal marketing (GIM) ($\beta = 0.78$, $p < 0.01$), and green organizational identity (GOI) ($\beta = 0.76$, $p < 0.01$), which means that when GA tends to be high, all SCA, GIM, and GOI tend to be higher. Therefore, H1, H2, and H5 are supported. In addition, SCA is positively influenced by GIM ($\beta = 0.15$, $p < 0.01$) and GOI ($\beta = 0.52$, $p < 0.01$), which means that SCA tends to be high as long as GIM and GOI are high. Thus, H3 and H6 are supported.

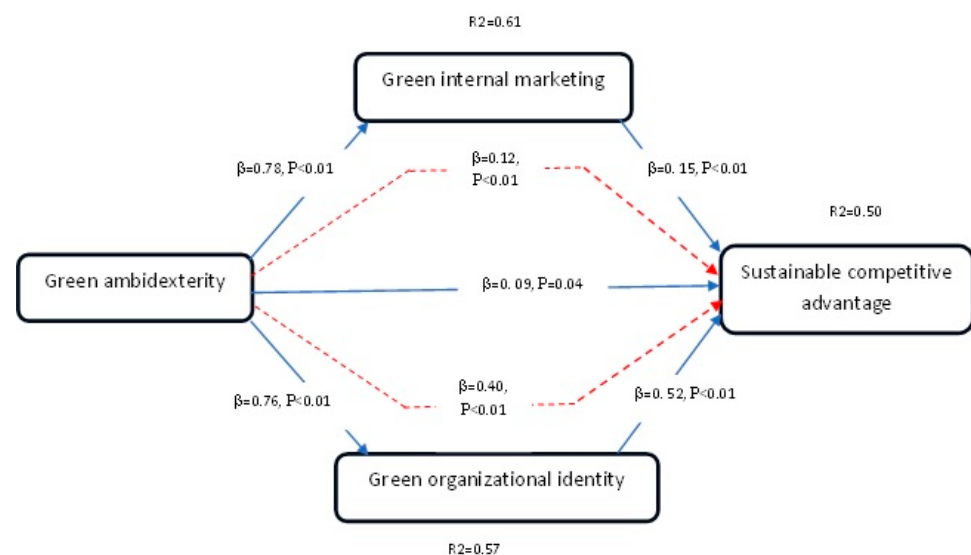


Figure 2. Final model of the study.

Table 6. Direct effects.

Hs	Relationship	Direct Effect (β)	Sig.	t-Value	Decision
H1	GA $\rightarrow$ SCA	0.09	$p = 0.04$	1.659	Supported
H2	GA $\rightarrow$ GIM	0.78	$p < 0.01$	15.707	Supported
H3	GIM $\rightarrow$ SCA	0.15	$p < 0.01$	2.641	Supported
H5	GA $\rightarrow$ GOI	0.76	$p < 0.01$	15.105	Supported
H6	GOI $\rightarrow$ SCA	0.52	$p < 0.01$	9.934	Supported

Lastly, to examine the role of GIM and GOI as mediators, a “Bootstrapped Confidence Interval” analysis was conducted (see Table 7).

For GIM, the results indicated that there was a significant indirect effect Std. $\beta = 0.117$ (0.78×0.15), which had a t-value of 2.250. Moreover, the indirect effect of 0.117, “95%

Bootstrapped Confidence Interval" (LL = 0.015, UL = 0.219), does not pass a zero in between, achieving mediation. Consequently, statistically significant evidence exists for the mediation role of GIM in the GA → SCA relationship. Thus, H4 is supported.

Table 7. Bootstrapped confidence interval analysis for mediation.

Hypo.	Path a	Path b	Indirect Effect	SE	t-Value	Bootstrapped Confidence Interval		Decision
						95% LL	95% UL	
H4: GA → GIM → SCA	0.780	0.150	0.117 (p -value < 0.05)	0.052	2.250	0.015	0.219	Mediation
H7: GA → GOI → SCA	0.760	0.520	0.395 (p -value < 0.05)	0.052	7.600	0.293	0.497	Mediation

For GOI, the results indicated that there was a significant indirect effect $\text{Std.}\beta = 0.395$ (0.76×0.52), which had a t -value of 7.600. Moreover, the indirect effect of 0.395, "95% Bootstrapped Confidence Interval" (LL = 0.293, UL = 0.497), does not pass a zero in between, achieving mediation. Consequently, statistically significant evidence exists for the mediation role of GOI in the GA → SCA relationship. Thus, H7 is supported.

5. Discussion

Five-star hotels and category-A travel agencies in Egypt are embracing green initiatives to improve their business practices in line with global sustainability needs. The current study examined the effect of green ambidexterity on sustainable competitive advantage in the Tourism and Hospitality businesses while exploring the mediating roles of green organizational identity and green internal marketing. The research provides empirical evidence for a direct influence of green ambidexterity on sustainable competitive advantage in travel agencies and hotels. This outcome suggests that the capacity of hotels and tourism businesses to effectively participate in green ambidextrous activities gives them access to ideas that enhance process efficiency and optimize product/service specifications in a way that generates a sustainable competitive advantage. This finding is consistent with other previous studies [9,58,109], which claimed the positive impact of green ambidexterity on performance in terms of sustainable competitive advantage. Green ambidexterity helps organizations to continually create and implement green initiatives associated with products, processes, and services to improve the organization's environmental performance and safeguard the environment to ultimately earn economic [110] and, hence, enhance sustainable competitive advantage.

The current research also provides empirical evidence for a direct influence of green ambidexterity on green internal marketing in travel agencies and hotels. This finding is consistent with those other studies of Fuchs et al. [43], Febriatmoko et al. [111], and Shehzad et al. [65] that emphasized the positive effect of green ambidexterity on green internal marketing. Internal green marketing and green ambidexterity both aim to cultivate environmental sustainability within an organization. Internal green marketing focuses on fostering sustainability-oriented behaviors and efforts among employees, whereas green ambidexterity emphasizes the balance between exploitative and exploratory activities to achieve sustainability. The success of marketing strategies is influenced by organizational ambidexterity caused by a focus on the green market [111], including a green internal marketing strategy. An organization's success has always been affected by its ability to innovate. Companies that innovate quickly and successfully have the required tools, a strong motivation to innovate, and a culture that encourages and promotes new ideas [112] and, hence, improve the culture of internal green marketing.

In addition, the current research provides empirical evidence for a direct influence of green internal marketing on sustainable competitive advantage and empirical evidence for the mediating influence of green internal marketing in the relationship between green ambidexterity and sustainable competitive advantage in travel agencies and hotels. Internal green marketing is critical for increasing employees' engagement in the organization's green goals; internal green marketing helps employees understand the relevance of green

goals and their role in furthering environmental sustainability initiatives through effective communication and training [15,16]. According to Chen et al. [71], employees who are motivated and engaged are more likely to take part in green initiatives, which may lead to improved environmental outcomes and a strengthened competitive edge. Furthermore, internal green marketing plays a vital role in involving and empowering employees to actively engage in green ambidexterity endeavors. It equips them with the essential knowledge, skills, and resources to contribute to sustainability initiatives, foster innovation, and identify opportunities for improvement. Employees who are engaged and empowered are more inclined to embrace green ambidexterity, thereby enhancing the organization's capabilities and gaining a competitive advantage [113,114].

Moreover, the study provides empirical evidence that a direct influence of green ambidexterity positively affects green organizational identity in travel agencies and hotels. This finding is consistent with those other studies of Pham et al. [86] and Cao and Zhang [115]. By embracing green ambidexterity, organizations can distinguish themselves in the market. Those who adeptly balance and merge green practices can position themselves as frontrunners in sustainability within their industries. This differentiation in the market elevates their green organizational identity, enticing environmentally conscious consumers and cultivating competitive advantages [62]. Organizations practicing green ambidexterity are better prepared to navigate regulatory shifts, market fluctuations, and environmental hurdles. This adaptability ensures sustained sustainability and resilience, further fortifying the organization's green identity. Stakeholders perceive such organizations as resilient and forward-looking, cementing their standing as environmentally responsible entities [24].

Lastly, the study provides empirical evidence for a direct influence of green organizational identity on sustainable competitive advantage and empirical evidence for the mediating influence of green organizational identity in the relationship between green ambidexterity and sustainable competitive advantage in travel agencies and hotels. A strong green organizational identity fosters an innovative culture centered on sustainability. Businesses are inclined to create novel products, services, and processes that cater to the changing market demands and tackle environmental issues. Ongoing innovation guarantees the company's enduring relevance and competitiveness [116,117]. In addition, a green organizational identity nurtures ongoing innovation and enduring resilience, which are vital for upholding a sustainable competitive advantage. Green ambidexterity encompasses both the exploration of novel sustainable technologies and practices and the exploitation of existing capabilities to enhance efficiency and diminish environmental impact [9,118]. This dual focus on innovation and optimization is ingrained in the organization's green identity, instilling a culture of continual enhancement and adaptability. The green identity acts as a mediator in this relationship by ensuring that the innovative endeavors in green ambidexterity consistently align with the company's overarching strategy, thereby fostering sustained growth and resilience in an ever-evolving market [5,41].

6. Theoretical Implications

The examination of the relationship between green ambidexterity, internal green marketing, and sustainable competitive advantage has made notable contributions to the dynamic capability theory. This theory centers on the understanding of how organizations cultivate and utilize their capabilities to adapt to dynamic environments and attain a competitive edge. The study broadened the comprehension of dynamic capabilities in the realm of sustainability by exploring the mediating role of internal green marketing. It acknowledged that dynamic capabilities encompass not only the capacity to balance exploitative and exploratory activities (green ambidexterity) but also the internal processes, communication, and learning mechanisms (internal green marketing) that facilitate and reinforce these capabilities.

The study identified a connection between green ambidexterity and internal green marketing as mutually reinforcing elements of dynamic capabilities. It emphasized the

significance of effective internal green marketing in enabling organizations to leverage and harness their green ambidexterity practices. This finding enhances the dynamic capability theory by underscoring the role of internal processes and communication in facilitating the establishment and implementation of dynamic capabilities.

Importantly, the study recognized internal green marketing as a mediator between green ambidexterity and sustainable competitive advantage. It indicated that internal green marketing plays a crucial role in translating the benefits of green ambidexterity into competitive advantages. This finding is in line with the principles of the dynamic capability theory, which underscores the importance of internal processes and capabilities in converting inputs (such as green ambidexterity) into desired outcomes (such as competitive advantage).

The study emphasized the significance of internal green marketing in driving organizational learning and adaptation. It proposed that internal green marketing facilitates the dissemination of knowledge, encourages collaboration, and cultivates a culture of learning within the organization. This observation aligns with the principles of the dynamic capability theory, which places importance on learning and adaptation as fundamental aspects of dynamic capabilities.

Moreover, the study contributed to the resource-based view (RBV) perspective, which is closely related to the dynamic capability theory. It suggested that internal green marketing assists organizations in effectively allocating resources between exploitative and exploratory activities. This resource allocation aligns with the RBV's emphasis on resource allocation decisions that generate and sustain competitive advantages.

Likewise, green organizational identity serves as a mediator that boosts the effectiveness of green ambidexterity. This identity reflects an organization's commitment to sustainability, shaping its perception and response to environmental opportunities and threats. The study suggests that a strong green organizational identity helps embed sustainability into the organizational culture and strategic framework, facilitating the reconfiguration of resources and alignment of strategies with environmental goals. This mediating role indicates that green identity itself is a dynamic capability, enhancing the organization's overall adaptability and resilience. It offers a deeper insight into how internal values and perceptions influence strategic capabilities.

In summary, the study examining the relationship between green ambidexterity, internal green marketing, and sustainable competitive advantage contributed to the advancement of the dynamic capability theory by emphasizing the significance of internal processes, communication, learning, and resource allocation in harnessing sustainability-oriented dynamic capabilities. It acknowledged the interconnectedness of green ambidexterity, internal green marketing, and competitive advantage, offering valuable insights into how organizations can effectively cultivate and leverage their capabilities within the realm of sustainability.

7. Practical Implications

The study exploring the impact of green ambidexterity on sustainable competitive advantage, mediated by internal green marketing, presents practical implications for organizations aiming to improve their sustainability and gain a competitive edge. To achieve this, organizations should foster a culture that values and prioritizes sustainability. This entails raising awareness among employees regarding the significance of sustainability and integrating sustainability into the organization's values and mission. By cultivating a culture that emphasizes sustainability, employees are more inclined to embrace green ambidexterity practices and actively participate in internal green marketing initiatives.

To ensure effective communication of sustainability goals, initiatives, and success stories within the organization, organizations need to establish and execute internal green marketing strategies. This can be achieved through the utilization of diverse communication channels like newsletters, intranets, training sessions, and workshops to keep employees well informed and engaged. In implementing internal green marketing strategies, it is

crucial to highlight the advantages of green ambidexterity and its role in contributing to the organization's competitive advantage.

Enabling and engaging employees in sustainability initiatives hold great importance. Organizations need to offer avenues for employees to contribute their ideas, suggestions, and feedback regarding green ambidexterity and internal green marketing. This can be accomplished through the implementation of suggestion boxes, innovation challenges, or cross-functional teams dedicated to sustainability. By involving employees, organizations can harness their creativity, knowledge, and expertise, which can result in innovative solutions and a fortified competitive position.

To bolster employees' comprehension of sustainability concepts, green ambidexterity practices, and internal green marketing techniques, organizations should allocate resources toward training and development programs. These initiatives can encompass workshops, seminars, and online courses, providing employees with the requisite knowledge and skills to make meaningful contributions to sustainability endeavors. By equipping employees with the necessary tools and knowledge, organizations can enhance their internal green marketing capabilities and foster the successful implementation of green ambidexterity practices.

Promoting collaboration and knowledge sharing among employees is also vital for effective internal green marketing and the successful implementation of green ambidexterity. Organizations should establish platforms and opportunities for employees to exchange best practices, lessons learned, and success stories regarding sustainability. This can be facilitated through cross-departmental meetings, communities of practice, or online collaboration platforms. By fostering collaboration and knowledge sharing, organizations can harness the collective intelligence of their employees and foster continuous improvement in sustainability performance.

Organizations should implement performance metrics and tracking systems to assess the influence of green ambidexterity and internal green marketing on competitive advantage. These metrics can encompass indicators such as energy efficiency, waste reduction, customer satisfaction, market share, and brand reputation. Through consistent measurement and tracking of performance, organizations can pinpoint areas that require improvement, make informed decisions based on data, and effectively communicate the value of their sustainability endeavors to stakeholders.

To complement internal green marketing, organizations should also prioritize effective external communication and marketing endeavors. Organizations must communicate their sustainability initiatives, accomplishments, and competitive advantages to external stakeholders, including customers, investors, and the public. This can be accomplished through various means, such as marketing campaigns, sustainability reports, social media platforms, and active participation in industry events. By adeptly communicating their sustainability commitments and performance, organizations can bolster their brand reputation and attract environmentally conscious customers.

The study emphasizes the necessity of cultivating a robust green organizational identity—comprising the firm's self-image and its associated green values, beliefs, and behaviors. For tourism and hospitality firms, prioritizing the development of a pervasive green identity across the organization is crucial. This effort can effectively leverage green ambidexterity (balancing the exploration of new green innovations and the exploitation of existing green capabilities) to achieve sustainable competitive advantages. Strategies to build a green organizational identity might include integrating sustainability messaging into the firm's vision and mission, demonstrating green behaviors through leadership, and fostering a green-oriented organizational culture.

8. Limitations and Future Research

While the study examining the impact of green ambidexterity on sustainable competitive advantage through the mediating roles of internal green marketing and green organizational identity offers valuable insights, it is essential to acknowledge its limitations

and identify potential avenues for future research. The findings of the study were specific to the context of travel agencies and hotels, and their generalizability to other sectors within tourism (e.g., airlines) or different organizational contexts may be limited. Future research could explore the applicability of the proposed relationships in various sectors or cultural contexts, thus providing a more comprehensive understanding of the phenomenon across diverse settings.

While the study primarily examined the mediating roles of internal green marketing and green organizational identity between green ambidexterity and competitive advantage, it is important to recognize that there may be other factors that mediate or moderate this relationship. Future research could explore additional variables, such as organizational culture, leadership styles, or external stakeholder influences, to gain a more comprehensive understanding of the underlying mechanisms at play. By considering these additional factors, researchers can enhance our understanding of the complexities and nuances in the relationship between green ambidexterity, internal green marketing, green organizational identity, and competitive advantage.

The study primarily focuses on competitive advantage as the performance outcome. However, there is an opportunity for future research to explore alternative performance outcomes. By investigating metrics such as financial performance, innovation outcomes, or employee satisfaction, researchers can gain a more comprehensive understanding of the effects of green ambidexterity, internal green marketing, and green organizational identity on organizational outcomes. Examining a broader range of performance indicators will provide valuable insights into the multifaceted impacts of sustainability-oriented practices within organizations.

The study centered around the dynamic capability theory, but there is room for future research to build upon this foundation. By exploring the integration of other theoretical perspectives, such as institutional theory, resource-based view, or stakeholder theory, a more comprehensive understanding of the complex dynamics between green ambidexterity, internal green marketing, green organizational identity, and competitive advantage can be achieved. Incorporating multiple theoretical frameworks will enable researchers to delve into the broader contextual factors and mechanisms that influence the relationships among these concepts, providing deeper insights and a more robust understanding of the subject matter.

The study predominantly concentrated on the organization level and the mediating role of internal green marketing and green organizational identity. However, there is an opportunity for future research to investigate the effects of green ambidexterity, internal green marketing, and green organizational identity at various levels, including the team or individual level. Exploring these constructs at different levels of analysis can offer a more nuanced understanding of their influence on competitive advantage. By examining the effects of green ambidexterity, internal green marketing, and green organizational identity at multiple levels, researchers can gain insights into the contextual dynamics and mechanisms that shape their impact on organizational performance.

Finally, the study focused on internal green marketing, which examined communication and engagement within the organization. However, there is a potential for future research to explore the effects of external green marketing initiatives on competitive advantage. This could entail investigating the impact of strategies like green advertising, eco-labeling, or sustainability reporting and how they interact with internal green marketing approaches. By examining the interplay between external and internal green marketing strategies, researchers can develop a more comprehensive understanding of their combined influence on competitive advantage.

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Conflicts of Interest: The authors declare no conflicts of interest.

Appendix A. Measurement Scales

Green organizational identity (GOI)

GOI.1. The company's top managers, middle managers, and employees have a strong sense of the company's history about environmental management and protection.

GOI.2. The company's top managers, middle managers, and employees have a sense of pride in the company's environmental goals and missions.

GOI.3. The company's top managers, middle managers, and employees feel that the company has carved out a significant position with respect to environmental management and protection.

GOI.4. The company's top managers, middle managers, and employees feel that the company have formulated a well-defined set of environmental goals and missions.

GOI.5. The company's top managers, middle managers, and employees are knowledgeable about the company's environmental traditions and cultures.

GOI.6. The company's top managers, middle managers, and employees identify strongly with the company's actions with respect to environmental management and protection.

Sustainable competitive advantage (SCA)

SCA.1. The firm has a low-cost competitive advantage regarding green management in comparison with major competitors.

SCA.2. The firm offers better quality green products in comparison with major competitors.

SCA.3. The firm invests more money in environmental research and development and green innovation than its competitors.

SCA.4. The firm has greater capability than competitors regarding green management.

Green ambidexterity (GA)

GA.1. Our organization actively improves green products, processes, and services.

GA.2. Our organization actively adjusts current green products, processes, and services.

GA.3. Our organization actively strengthens the current green market.

GA.4. Our organization actively strengthens current green technology.

GA.5. Our organization actively adopts new green products, processes, and services.

GA.6. Our organization actively exploits new green products, processes, and services.

GA.7. Our organization actively discovers new green markets.

GA.8. Our organization actively enters new green technology.

Green internal marketing (GIM)

GIM.1. Environmental issues are very relevant to the major functioning of the organization.

GIM.2. Our organization has a clear policy statement that calls for environmental awareness in all areas of operations.

GIM.3. Our organizational culture makes green marketing easier for us.

GIM.4. We try to promote environmental preservation as a major goal across all departments.

GIM.5. At our organization, we make a concerted effort to make every employee understand the importance of environmental preservation.

GIM.6. Our employees believe in the environmental values of our organization.

GIM.7. We encourage our employees to use eco-friendly products and services.

GIM.8. Environmental activities by candidates are a bonus in our recruitment process.

GIM.9. Exemplary environmental behavior is acknowledged and rewarded.

GIM.10. We have created internal environmental prize competitions that promote eco-friendly behavior.

GIM.11. We organize presentations for employees to inform them about the green marketing strategy.

GIM.12. We form environmental committees for implementing internal audits of environmental performance.

GIM.13. We apply a paperless policy in our personnel management where possible.

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