THE CHALLENGES OF INTEGRATING SUSTAINABLE PRACTICES IN HOTELS AND LODGES: A CASE STUDY OF VICTORIA FALLS

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Abstract

This study investigates the challenges associated with integrating sustainable practices in the accommodation sector of Victoria Falls, Zimbabwe. Despite the growing recognition of green tourism as vital for all tourist destinations, hotels in developing countries, including Zimbabwe, often struggle to implement effective environmental measures. This research examines the barriers to adopting sustainable operating strategies within the hotels and lodges of Victoria Falls. Using a mixed methods approach, data were gathered from hotel employees and managers. Qualitative insights were obtained through interviews with fifteen purposively selected key informants, while quantitative data were collected via questionnaires distributed to 150 participants using stratified random sampling. Thematic analysis was employed to interpret the qualitative data, and quantitative results were analyzed using Excel and manual calculations. Findings indicate that the hotel sector primarily adopts simple and cost-effective green practices focused on energy management, water conservation, and waste management. However, significant challenges hinder the effective implementation of these initiatives, including the high costs of acquiring green technology, insufficient stakeholder support, and limited financial resources. Additional barriers identified include a lack of awareness, inadequate infrastructure, and weak regulatory frameworks. This research highlights the intricate relationship between internal and external factors that influence the adoption of green strategies. It emphasizes the importance of organizational culture, leadership commitment, stakeholder engagement, and industry collaboration in overcoming these challenges. The study concludes by recommending the development of a stronger green tourism policy, enhanced guest education, and active stakeholder engagement to promote the implementation of sustainable practices in Zimbabwe's hotel sector.

Keywords

Sustainable Practice, Victoria Falls, Energy Management, Green Tourism

1. Introduction and Background

1.1 Introduction

Globally, hotels are recognized as significant contributors to pollution and waste (Deser, Phillips, Bourdette, and Teng, 2012). Their year-round operations lead to high energy and water consumption, resulting in substantial waste production (Aguilar-Virgen, Taboada-González, and Ojeda-Benítez, 2013). This continuous operation positions hotels among the largest emitters of greenhouse gases, which contribute to environmental degradation. Consequently, adopting strategies to mitigate these emissions is crucial for environmental sustainability (Al-Juboori, Sher, Khalid, Niazi, and Chen, 2020). Although the importance of promoting green practices was previously overlooked, increasing pollution and environmental concerns have brought this issue to the forefront (Sarkar, 2013). Recently, the popularity of green practices in hotels has surged, laying a strong foundation for improved business performance (Esty, D.C. and Simmons, 2011).

Stakeholders in the hotel industry are increasingly aware of the social, economic, and environmental impacts of their operations at local, regional, and global levels (Céspedes-Lorente, De Burgos-Jiménez, and Álvarez-Gil, 2003). Both hoteliers and tourists are becoming more conscious of environmental issues, leading to a growing demand for green services and products (Mazhenova, Choi, and Chung, 2016). This shift pressures the

hotel sector to adopt environmentally friendly practices (Graci, and Dodds, 2008), which have been shown to reduce operational costs and enhance profitability (Rahman, Reynolds, and Svaren, 2012). Green practices, as defined by Pujara, Pathak, Sharma, and Govani (2019) and Murugesan (2008), aim to minimize solid waste, conserve water and energy, lower operational costs, and protect the natural environment. These eco-friendly initiatives not only improve a hotel's image but also help mitigate negative environmental impacts, ensuring long-term success (Mbasera, Du Plessis, Saayman, and Kruger, 2016; Nagaty, 2022).

In the hotel industry, energy efficiency, waste management, and water conservation are critical areas where green practices are prominently applied (Han, Lee, Trang, and Kim, 2018; Nagaty, 2022). However, implementing green operating strategies in accommodation facilities, particularly in developing countries like Zimbabwe, poses significant challenges. Hotels in Zimbabwe face hurdles such as financial constraints, inadequate infrastructure, and a reliance on traditional energy sources like diesel generators and firewood during power outages (Chirambo, 2017).

Research indicates that while chain hotels are more likely to implement green practices, independent hotels are also making efforts to reduce energy usage (Rahman et al., 2012). However, the hospitality industry remains a significant source of environmental harm, with hotels contributing substantial carbon emissions and resource waste (Chan, 2021). For instance, hotels are reported to produce carbon dioxide emissions equivalent to 19 volcanic eruptions annually, alongside considerable energy expenditures and waste generation. This environmental toll underscores the urgency of effective green management strategies in the hotel sector (Chan, 2021; Abeydeera, and Karunasena, 2019).

While green management practices have thrived in developed nations, where resources and governmental support facilitate their implementation, developing countries encounter various hurdles. In Africa, challenges such as poverty, political instability, and insufficient infrastructure hinder sustainable tourism development (Tosun, 2001). For example, limited financial access in Kenya restricts investments in energy-efficient systems, while Tanzania suffers from a lack of knowledge about sustainability, hampering eco-friendly initiatives (Brahmbhatt, Haddaoui, Page, 2017).

In Zimbabwe, political instability and outdated infrastructure present notable challenges in adopting green operating strategies. Implementing environmentally efficient technologies and effective management of water resources can lower operational costs while promoting sustainability (Kasim et al., 2014). This research seeks to investigate how hotels in Victoria Falls implement reduction and recycling strategies, outlining the barriers to adopting green operating practices and recommending effective approaches for integrating these strategies into local accommodations.

1.2 Problem Statement

Globally, hotels contribute substantially to pollution and waste, producing an average of 1 kg of waste per night (Mbasera, 2015), which highlights the urgent need for effective green practices. The challenges faced by hotels in adopting these sustainable practices are particularly pronounced in developing countries, where resource constraints and inadequate support for sustainability initiatives hinder progress. Despite the growing recognition of green tourism practices globally, research on their application in Zimbabwe is limited (Zengeni, 2022). The limited research coupled with inadequate implementation of green tourism practices does not only threaten the local ecosystem but also impacts the socio-economic framework of an area (Chen & Tung, 2014). Moreover, Zengeni (2022) posit that there is a lot of acknowledgment of green tourism practices yet there has not been an adequate study to determine the application of green tourism principles in Zimbabwe. This study aims to investigate how hotels in Victoria Falls are currently implementing reduction and recycling strategies, identify the barriers to adopting green operating strategies, and recommend effective approaches for integrating sustainability into their operations.

2.   Literature Review

2.1 Introduction to Green Tourism in Zimbabwe

The exploration of green tourism practices within Zimbabwe's hotel sector remains limited, with scant literature addressing this topic. To understand the current landscape of green tourism in Zimbabwe, it is essential to review existing research by other scholars. A literature review serves as a comprehensive summary of prior studies on a specific phenomenon (Snyder, 2019). This review encompasses scholarly articles, books, and academic sources pertinent to the subject, aiming to enumerate, describe, summarize, and objectively evaluate previous research. By conducting a literature review, researchers gain a deeper insight into the developments related to their area of study. This investigation will cover sustainable tourism, the concept of green tourism, and its relationship with the hotel industry. Additionally, it will address green hotels, the demand for such accommodations, and the challenges faced in implementing green tourism practices.

Understanding *Sustainable* Tourism

Although this study highlights green tourism, it is crucial to define sustainable tourism as the broader category encompassing it. The concept of sustainability emerged in the 1980s, as it became evident that significant environmental changes were rapidly occurring due to human activities (Mebratu, 1998). Consequently, strategies aimed at making tourism more sustainable have gained traction in response to the growing recognition of tourism's environmental impacts. Over the past two decades, the connection between tourism growth and environmental health has garnered increased interest (Erdogan & Tosun, 2009), paving the way for the development of sustainable tourism.

According to the Brundtland Report (1987), sustainable tourism is characterized as development that meets present needs without compromising the ability of future generations to meet their own. This concept, which first emerged in the 1970s (Mebratu, 1998), emphasizes the responsible use and management of resources to fulfill economic, social, and cultural needs while preserving ecological integrity and biodiversity for both current and future generations (Muhanna, 2006). Juganaru and Juganaru (2008) categorize various forms of sustainable tourism, including ecotourism, green tourism, soft tourism, rural tourism, agro-tourism, community tourism, and responsible tourism, all of which contrast with conventional mass tourism.

Defining Green Tourism

To establish a common understanding, it is essential to define green tourism, the focal point of this study. Green tourism refers to any tourism that is connected to the natural environment and cultural heritage of a region or that practices environmental management (Meler, and Ham, 2012). This definition emphasizes two key aspects: the relationship with the natural environment and cultural heritage, as well as the importance of responsible environmental management. However, the term "green" lacks clarity, raising questions about the specific efforts required from tourism organizations to be considered genuinely "green."

Yfantidou and Matarazzo (2017) offer a definition of green tourism that highlights its local community control, job creation, and economic benefits while preserving culture. However, this definition overlooks the critical aspect of environmental protection. It is vital to determine which elements of local culture should be enhanced and how to measure local community control over these benefits, as such control is often elusive.

Faulk (2000) defines green tourism as a model that is environmentally friendly, ecologically sensitive, and compatible with ecological principles. This definition underscores the importance of preserving the natural environment, yet it raises questions about what constitutes "environment." There are various interpretations of the environment, including natural, manmade, and social contexts, which necessitate a clear definition within the scope of green tourism.

For this research, the definition proposed by Dodds and Joppe (2001) will be utilized, as it emphasizes the primary goal of green tourism: minimizing the negative impacts of tourism activities on the surrounding natural environment while encouraging the active participation of both visitors and local communities in environmental protection efforts.

Benefits of Green Practices

The implementation of green practices in hotels offers numerous advantages, which are outlined below.

Cost Reduction

Implementing eco-friendly practices is increasingly recognized as a smart business strategy within the hotel industry. However, Esty, and Simmons, (2011) note that adopting a green mindset does not always translate into sustainable actions, as some view it as an added burden—either in terms of increased costs or reduced revenues. While concerns persist that green initiatives might negatively impact the financial performance of hotels by causing customer discomfort, many establishments have begun to acknowledge that environmentally friendly practices can lead to significant cost savings (Kularatne et al., 2019). These practices not only foster an eco-conscious business environment but also reduce potential operational costs associated with higher consumption of resources (Viterouli, Belias, Koustelios, Tsigilis, and Bakogiannis, 2023). Such initiatives positively influence brand image, ultimately contributing to the economic sustainability of local communities (Chavalittumrong, and Speece, 2022). According to Zengeni et al. (2013), green hotels have experienced benefits like reduced costs and liabilities, enhanced profitability, and favorable cash flow, making them high-return, low-risk investments.

Table 1 illustrates how environmentally friendly upgrades can lead to lower energy and water costs, as well as waste reduction. By investing in resource-efficient and energy-saving equipment, hotels can achieve both economic and environmental benefits.

Item	Investment (US$)	Annual Savings (US$)	Payback Period
Energy Monitoring System	11,000	About 10%	N/A
Quantum Heat Recovery	9,000	7,500	1.2 years
Centralised Mini Chillers	130,000	44,000	1.8 years
Energy Efficient Bulbs	8,500	17,000	6 months
Biomass Absorption Chillers	11,500	41,000	2.8 years
LPG Boilers for Laundry	27,000	17,000	1.6 years
Rainwater Reservoir	36,000	330,000	1 month

Table 1: How environmentally friendly upgrades lead to energy and water costs reduction

Source: UNEP (2013)

Image Enhancement

Rani and Rashi (2014) argue that hotels adopting environmentally conscious practices project a more favorable image. These green initiatives not only contribute to a sustainable environment by conserving natural resources but also enhance guests' perceptions of the hotel. They reduce pollution and help maintain ecological balance in the area (Lynes & Dredge, 2006). Bagur-Femenias et al. (2016) highlight that hotels implementing green management systems and obtaining environmental certifications tend to see improved operational performance and a better public image. Participation in environmental certification programs—such as eco-labels or environmental management systems—greatly enhances a hotel's potential for improving its sustainable practices (Palazzo et al., 2022).

Competitive Advantage

By adopting eco-friendly business practices, hotels can tap into a market of environmentally conscious consumers. This demographic not only supports the hotel's long-term profitability but also contributes to environmental preservation (Aleksandrovna, Nazhmidenovna, , Mizamgalievna, Rysty, Gulmira, Madina, and Shakizada, 2021). Font, Haas, and Thorpe, (2001) assert that implementing sustainable tourism practices provides hotels with a competitive edge, attracting eco-minded customers while also appealing to a broader audience. Engaging in green initiatives allows hotels to differentiate themselves in the marketplace, offering a strategic advantage over competitors (Walsh, and Dodds, 2017).

Guest Satisfaction

Green practices are linked to increased customer satisfaction, fostering positive word-of-mouth referrals that attract new guests and enhance loyalty among existing ones (Deraman et al., 2017). These practices often lead to more enjoyable and authentic travel experiences, strengthening connections with local communities (Rani & Rashi, 2014). Environmentally conscious travelers are increasingly aware of and appreciative of hotels' efforts to minimize their ecological impact. As noted by Londono and Hernandez-Maskivker (2016), with rising concerns about climate change, travelers are more inclined to choose environmentally responsible hotels. Guests who recognize and appreciate green initiatives are not only more likely to support these establishments but also to engage in environmental conservation themselves (Fukey & Issac, 2014).

How can hotels implement green tourism strategies

Hotels are actively pursuing efficient green tourism strategies while ensuring guest comfort remains uncompromised. They have implemented measures like linen and towel reuse to reduce guest energy consumption (Hall & Page, 2009; Timothy & Teye, 2009). Through eco-friendly policies, hotel management addresses environmental concerns linked to their commercial activities (Mbasera, Du Plessis, Saayman, & Kruger, 2016). Green practices aim to mitigate the increased demand for energy and water caused by enhancing guest comfort (Mbasera et al., 2016; Fadhil, 2015; Fukey & Issac, 2014; Kasavana, 2008). Hotels worldwide are adopting a variety of green initiatives, ranging from simple to innovative solutions (Kasavana, 2008). Here are some key eco-friendly mechanisms being implemented in hotels globally.

Respect:

Hotels should exhibit respect for themselves, others, property, and the diverse environments encompassing the planet (Bohdanowicz, Zientara, and Novotna, 2011). Upholding sustainability involves showing reverence for the natural environment and local communities (Tawiah et al., 2021). Respect also entails abiding by bioclimatic building standards to minimize energy consumption for heating and cooling systems (Kasavana, 2008).

Refuse:

Hotels should reject products that harm the environment, people, or ecosystems (Bohdanowicz et al 2011. Some hotels have been criticized for "greenwashing" by superficially claiming environmental friendliness (Andreoli, Crespo, and Minciotti, 2017) Genuine eco-friendly establishments transparently communicate their practices and

are recognized by reputable bodies (Gupta, Dash, and Mishra, 2019; Furqan et al., 2010). Hotels can be eco-certified by reputable associations and as such they can communicate their eco-friendly practices on their websites.

Reduce:
Hotels consume substantial energy, but initiatives can curtail resource wastage. Strategies like adjusting room temperatures when unoccupied and optimizing lighting can significantly reduce energy bills (Fukey & Issac, 2014; The Green Diary, 2019). To cut waste, hotels can donate or repurpose items, switch to bulk purchasing, and implement water-saving measures (Bruns-smith et al., 2015; Fukey & Issac). Water conservation methods, such as aerating and recycling, along with installing water-efficient appliances, are effective in minimizing water usage (Bruns-smith et al., 2015).

Reuse:
Reusing involves reclaiming used products to prevent them from becoming too worn out for further use (Follett, 2015). Luxury hotel amenities like swimming pools and spas contribute significantly to water consumption (Singhal et al., 2018). Various hotel areas generate substantial wastewater, leading to environmental pollution (Green Diary, 2019). Hotels utilize water for multiple purposes, and encouraging guests to reuse towels and linens can save water, energy, and detergents (Fukey & Issac, 2014). Yet, some guests expect daily linen changes, viewing them as part of the service they pay for, causing dissatisfaction when not provided (Yi et al., 2018).

Renew:
Renewing involves repairing and repurposing used products to serve their function again (Follett, 2015). Hotels can reduce waste by repairing and reusing durable items like kitchen appliances and furnishings (Legan and Helena, 2019).

Recycle:
Recycling is the process of repurposing materials to reduce the need for raw resources and energy (Follett, 2015). Hotels face challenges in managing solid waste, with each guest generating about one kilogram daily (Fadhil, 2015). Recycling practices in the hotel industry help in waste management and cost savings (Fukey & Issac, 2014). Hotels are increasingly focusing on recycling various materials, including composting organic waste to create organic gardens and offer organic food options to health-conscious customers (Kasavana, 2008). This approach not only helps in waste reduction but also results in cost savings for the hotel.

Responsibility:
Hotels bear moral and legal responsibilities for their environmental impact and can mitigate this through renewable energy technologies like solar panels and heat recovery units (Follett, 2015). These technologies, along with green building practices, can significantly reduce energy consumption and enhance environmental performance (Soares, Bastos, Pereira., Soares, Amaral, Asadi, Rodrigues, Lamas, Monteiro, Lopes, and Gaspar, 2017).

Rethink:
To promote sustainability, hotels need to rethink their operations towards eco-friendliness and comply with green tourism laws (Follett, 2015; Njerekai, 2019). This includes reconsidering purchasing practices to minimize packaging, buying in bulk, and sourcing locally to reduce carbon emissions and support the local economy (Kasavana, 2008). A shift in mindset towards sustainability is crucial for hotels to minimize their environmental impact.

Replant:
Replanting efforts, such as incorporating green spaces into hotel architecture, can contribute to reforestation and wildlife conservation, providing habitats for animals and helping to combat deforestation (Green Diary, 2019). Hotels can use trees and bushes strategically to offer shade, wind protection, and habitats for wildlife around their premises.

Restore:
Hotels have a responsibility to restore ecosystems and biodiversity by avoiding locations of high biodiversity value during their development, minimizing environmental impact, and investing in conservation efforts (Milder, Newsom, Sierra, and Bahn, 2016). Restoration involves bringing damaged systems back to their original or improved states to promote recovery and sustainability without further harm (Milder et al 2016). By prioritizing the protection of biodiversity and associated livelihoods during site selection, design, and construction, hotels can contribute positively to environmental preservation.

Challenges in Adopting Green Tourism Practices

The tourism industry has made significant efforts over the years to integrate environmentally friendly practices. However, several challenges hinder the effective implementation of green tourism. Below are some of the key obstacles faced.

Lack of Skills, Expertise, and Information

A major barrier to adopting environmentally friendly practices in hotels is the lack of skills, knowledge, and experience within the organization and the industry as a whole (Graci & Dodds, 2008). Fukey and Issac (2014) emphasize that insufficient information regarding environmental issues and potential solutions is a fundamental constraint for many hotels. Dodds (2008) further notes that the absence of knowledge-sharing about best practices has obstructed the implementation of green initiatives. As highlighted by Mbasera et al. (2017), the success of any program relies heavily on having knowledgeable human resources in environmental management.

Extra Costs

Implementing environmentally friendly methods often leads to a significant increase in operational costs, which poses challenges for individual businesses striving to become more environmentally responsible (Esty and Simmons 2011). For instance, constructing green buildings can result in a ten to fifteen percent rise in infrastructure costs (Fukey & Issac, 2014). To mitigate these high expenses, hotel owners frequently opt for simpler, low-cost initiatives rather than comprehensive green building measures. While many believe that environmentally friendly practices can lead to cost savings, for numerous managers, this remains more of a theoretical benefit than a reality (Sarkis, Zhu, and Lai, 2011). Tzschentke, Kirk, and Lynch (2008) note that several hotel managers hesitate to adopt green practices due to concerns about costs associated with environmental auditing, certification fees, and facility upgrades, all of which require substantial financial investment. Nevertheless, Clarkson, Li, Richardson, and Vasvari, (2011) suggest that environmentally friendly practices can be implemented without necessitating large cash outlays.

Lack of Policies and Regulations

Esty and Simmons (2011) found that in regions with minimal or no governmental regulations regarding the tourism sector, voluntary initiatives tend to diminish as a result of reduced regulatory pressure. Mbasera et al. (2017) concluded that many hotels in developing countries face challenges in implementing environmental management standards due to a lack of governmental support and appropriate regulations. For hotels to adopt green management practices, both customers and the establishments themselves must be actively involved in reducing environmental impacts and committed to mitigating harm (Mbasera, 2018).

Lack of Awareness and Support

Research conducted by Mbasera et al. (2017) in Zimbabwean hotels indicates that local customers have a limited understanding of environmental issues, a common challenge in many developing nations. This lack of awareness often leads hotel owners to deprioritize the implementation of green practices. Many guests are unaware of the eco-friendly initiatives undertaken by hotels. A study by Fukey and Issac (2014) revealed that while most guests engage in recycling at home, they often prefer hotels that do not prioritize environmental options, requesting daily linen changes despite the associated environmental impacts (Clarkson et 2011).

Lack of Employee Support

The success of green initiatives heavily relies on the active participation of hotel staff. It is crucial for employees to be educated and trained, fostering a sense of responsibility toward environmental conservation (Nisar, Haider, Ali, Jamshed, Ryu, and Gill, 2021). Training can start with simple actions, such as switching off electronic devices when not in use to conserve energy. Providing adequate supervision and training significantly motivates employees to engage in environmentally friendly practices (Ercantan, and Eyupoglu, 2022).

2.2 Theoretical Framework
Normalization Process Theory (NPT) and Green Operating Strategies in Hotels

Normalization Process Theory (NPT) offers a valuable framework for understanding the implementation of green operating strategies in hotels. NPT focuses on the social processes necessary for integrating new practices, which is essential for the hospitality sector seeking to adopt sustainable methods. The components of NPT include coherence where hotel staff need to grasp the reasoning behind green initiatives, such as energy-efficient practices and waste reduction strategies (McEvoy et al., 2014). Further, cognitive participation, which involves engaging all stakeholders' management and employees alike in the decision-making process is crucial for fostering a commitment to sustainability (Khalil et al., 2022). The implementation of green strategies under NPT involve collective action where encouraging a unified approach among hotel staff to adopt green practices, including eco-innovation and sustainable procurement (Mbasera, 2015). Additionally, reflexive monitoring involving regular

evaluation of the effectiveness of green initiatives is necessary to ensure ongoing improvement and adaptation (McEvoy et al., 2014). Despite these strategies, some hotel managers may resist adopting green practices due to a lack of understanding or concerns about costs. This underscores the importance of comprehensive training and awareness programs to address these challenges (Mbasera, 2015).

Institutional Theory
Institutional theory offers a valuable lens for examining the obstacles that hotels encounter when trying to implement green operating strategies. This theory highlights the impact of institutional pressures—normative, coercive, and mimetic on organizational behaviours. For instance, tourism standards play a pivotal role in this context (Joseph et al., 2017). Regulatory frameworks and industry guidelines compel hotels to adopt specific environmental practices, as evidenced in Sarawak, where compliance with ASEAN standards is necessary. Additionally, professional networks and societal expectations significantly influence sustainability initiatives, underscoring the importance of maintaining legitimacy among stakeholders (Mzembe et al., 2019).

According to Joseph et al. (2017), hotels frequently emulate the practices of successful peers to boost their legitimacy, which can inadvertently stifle innovation if not managed appropriately. However, institutional theory also posits that barriers to adopting green strategies arise from tensions between different norms. Conflicts between global sustainability standards and local operational practices can hinder effective implementation (Falaster, Zanin, and Guerrazzi, 2017). Furthermore, resource constraints can impede hotels' ability to adopt sustainable practices, particularly for smaller establishments that may lack the financial and human resources necessary for such initiatives (Elshaer, Azazz, and Fayyad, 2023).

Stakeholder Theory
Stakeholder theory underscores the significance of engaging various parties involved in hotel operations to effectively implement green strategies. This theory emphasizes the roles of managers, employees, and customers in fostering sustainable practices (Murtaza, Khan, and Mustafa, 2012). For managers, it is crucial to adopt green marketing strategies and invest in eco-innovation to align business objectives with sustainability goals (Khalil et al., 2022). Regarding employee involvement, implementing training and awareness programs can enhance environmental behaviours, thereby cultivating a culture of sustainability within the organization (ibid). Additionally, engaging customers through awareness initiatives and loyalty programs can stimulate demand for green practices, positively influencing hotel operations (Barakat and Wada, 2021). However, in the context of hotels and lodges, limited budgets can pose challenges to the adoption of green technologies and practices (Kannangara, Shamil, and Surangi, 2024). Finally, cultural resistance may arise, where stakeholders resist changes due to entrenched practices and profit-driven motives (Qi & Ong, 2023).

The Resource-Based View Theory (RBVT)
The Resource-Based View Theory (RBVT) offers a framework for analyzing how resources are utilized in the implementation of green operating strategies. This strategic management theory suggests that a firm's distinctive resources and capabilities are essential for achieving a competitive advantage. According to RBVT, an organization's competitive edge arises from its unique, valuable, rare, and non-imitable resources and capabilities (Kaufman, 2015). It emphasizes the significance of internal resources over external market conditions. In the context of hotels and lodges in Victoria Falls, the RBV underscores the importance of specific resources that can support sustainability initiatives. Salsabila et al. (2022) highlight that hotels can capitalize on both tangible assets, like energy-efficient technologies, and intangible assets, such as brand reputation, supportive leadership, and employees well-trained in sustainability practices to improve their sustainability efforts. Furthermore, Agrawal et al. (2024) stress that the capacity to adapt and innovate in response to environmental challenges is vital for hotels looking to implement green strategies. On the flip side, a shortage of essential resources, such as working capital, can limit many hotels' ability to invest in sustainable practices (Agrawal et al., 2024). They also point out that hotels face regulatory challenges, as environmental regulations can hinder the adoption of sustainable practices. The strategic value of RBV is further emphasized by the idea that effectively utilizing unique resources can provide a sustainable competitive advantage in the hospitality industry (Bertram, 2016; Salsabila et al., 2022). While RBV serves as a useful framework for understanding resource utilization, it is crucial to acknowledge that external factors, including market dynamics and consumer preferences, also play a significant role in the successful implementation of green strategies in hotels. This broader perspective can reveal additional challenges and opportunities during the implementation process.

2.3 Conceptual Framework
The Concept of Sustainable Development
Sustainable development focuses on integrating environmental, economic, and social dimensions to enhance competitiveness while minimizing the ecological impact of hotels and lodges (Zhylenko, Khalatur, Pavlenko, and

Pavlenko, 2022). This approach necessitates the adoption of green strategies that align with low-carbon tourism, which is becoming increasingly important in the hospitality sector (Fan, Huang, and Li, 2023).

Hotels can implement eco-innovative strategies aimed at reducing energy consumption and waste generation as part of their green initiatives (Fan & Li, 2023). Furthermore, engaging stakeholders, including managers, employees, and customers, in environmental management processes can enhance these efforts (Khalil et al., 2022). The adoption of such green practices can attract environmentally conscious tourists, thereby benefiting the business (Jovanović, 2019).

However, the concept also highlights several challenges to implementing these green initiatives. Resistance from management and staff towards adopting new practices can hinder progress (Khalil et al., 2022). Additionally, financial constraints can limit investments in sustainable technologies (Zhylenko et al., 2024). Lastly, there is often a lack of awareness among customers about the benefits of choosing green hotels (Cozzio, 2019).

Environmental Degradation in the Hospitality Sector

The issue of environmental degradation is a significant concern within green operating strategies in hotels and lodges (Sedaghat & Ziyaee, 2024). The hospitality industry plays a substantial role in environmental challenges, contributing to pollution, overconsumption of resources, and waste generation (Umoh, 2024). Nevertheless, adopting eco-friendly practices can help alleviate these impacts. Increased tourism in the sector leads to elevated carbon footprints due to greater transportation needs and energy consumption (Makoondlall-Chadee and Bokhoree, 2024). Moreover, hotels exacerbate water scarcity and pollution through excessive water usage and waste (Umoh, 2024).

To address these issues, hotels can implement sustainable initiatives, such as energy-efficient technologies and effective waste management systems, to lessen their environmental footprint (Khatter, 2023). Community engagement is also vital for fostering sustainable practices and ensuring fair resource allocation (Makoondlall-Chadee and Bokhoree, 2024). However, the hospitality industry faces numerous challenges in this regard. Resistance from both management and guests can impede the implementation of green practices (Khalil et al., 2022). Additionally, financial limitations and a lack of awareness regarding sustainability issues present significant obstacles (Khatter, 2023).

3.   Research Methodology

Research methodology refers to the theoretical framework guiding an inquiry (Antwi & Hamza, 2015). This study employs a mixed-methods approach, which combines qualitative and quantitative research elements, allowing for a more comprehensive understanding of the subject (Johnson, Onwuegbuzie, & Turner, 2007). Mixed methods research is particularly useful when existing studies are fragmented or inconclusive, as is the case with green tourism in Zimbabwe (Creswell, 2014).

Mixed methods research questions incorporate both quantitative and qualitative elements (Onwuegbuzie & Leech, 2006). The exploratory research design was chosen for this study, as it is well-suited for topics characterized by uncertainty and limited prior research (Saunders & Lewis, 2012). Given the scarcity of studies on green tourism practices in Zimbabwe, this design facilitated a deeper exploration of the practices adopted by hotels.

Data collection techniques included focus group discussions, observations, surveys, and interviews (Creswell, 2009). Instruments used were an interview guide, observation schedule, and questionnaire. The target population consisted of hoteliers and lodge operators identified through a facilities register from the Zimbabwe Tourism Authority (ZTA). Stratified sampling was employed for quantitative data, dividing respondents into groups of hotels and lodges to enhance precision (Bacon-Shone, 2015). For qualitative data, purposive sampling was used to select participants based on their relevant knowledge of green tourism practices (Pietersen & Maree, 2016; Saunders, Lewis, Thornhill, and Bristow, 2015). The final sample comprised 55 hotels and lodges in Victoria Falls.

Primary data were collected through self-administered questionnaires and interviews conducted between December 2023 and April 2024. Secondary data were gathered from literature on green tourism practices, including journal articles, websites, and government reports. Quantitative data were analyzed using Excel and manual calculations, while qualitative data were examined using thematic analysis, incorporating verbatim quotes to illustrate findings. This approach allowed for identifying patterns and themes, facilitating a clearer understanding of the results.

To ensure validity, questionnaires were administered uniformly to all participants. The researcher maintained a record of raw data, including notes and recordings, to support the dependability of findings. Participants were informed about the study's nature and consent was obtained prior to their involvement. Anonymity and confidentiality were prioritized throughout the research process.

4. Findings

Qualitative and quantitative data were presented, interpreted, and discussed in relation to the research objectives. The emerging topics represent the dominant themes that align with the research aims. The themes were structured according to the sequence of the research questions, and similar responses have been consolidated to provide a more comprehensive analysis. Selected quotes have been chosen to effectively illustrate the concepts they represent. This approach aims to evaluate the challenges associated with implementing green operating strategies in hotels and lodges, specifically in the context of the Victoria Falls Hotels and Lodges.

Theme 1: Reduction initiatives
This theme outlines the current reduction and recycling initiatives adopted by hotels and lodges to minimize waste generation, conserve resources, and promote recycling. In response to the open-ended questionnaire, hotels shared various methods for implementing recycling and reduction strategies, as illustrated in Figure 1.

Reduction measure	Distribution of Hotels (55) per Reduction Measure
Waste reduction	55%
Green Procurement Measures	18%
Waste Audits	5%
Food waste reduction Measures	15%
Resource monitoring Measures	7%
Going Green Campaigns	16%
Hotel Rooms Efficiency	27%
Digital Initiatives	36%

Table 2: Reduction measure and distribution of hotels
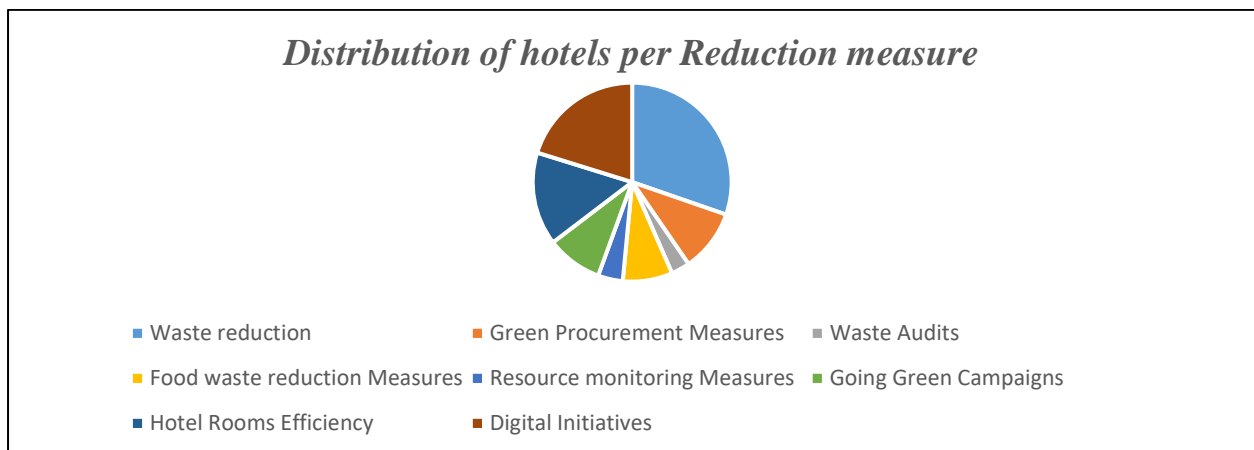

Figure 1: Distribution of hotels per reduction

Key findings indicate that hotels and lodges in Victoria Falls have adopted reduction strategies primarily aimed at minimizing energy consumption. Waste reduction emerged as the top strategy employed by accommodation facilities, as indicated in Table 1. This finding is significant, highlighting that hotels have identified effective and straightforward methods for reducing waste. Our results suggest that practical solutions, such as reducing or eliminating plastic bag usage, can ensure reduced waste generation and improved waste management without significantly increasing costs. One respondent noted, "We've implemented a waste minimization program by reducing single-use plastics, implementing composting practices, and encouraging guests to opt for digital communication." This quote illustrates two key points: first, the strong commitment to waste reduction, and second, the emphasis on digital initiatives as a viable reduction measure.

Hotel room efficiency ranks as the third most popular reduction measure, with 27% of respondents indicating its use. Those who advocated for this strategy mentioned, "We have low-flow faucets and showerheads to conserve water, and we use LED lights to limit energy usage for lighting." Green procurement measures were also noted, with hotels sourcing concentrated solutions for cleaning products. Additionally, some hotels have adopted food waste reduction strategies, such as donating surplus food and only preparing what is certain to be used. Employee and guest education campaigns have proven effective in reducing energy use across hotels and lodges in Victoria Falls. These three strategies ranked between 15% and 18% among the 55 hotels that reported using them. According to hotel managers, these strategies yield positive results.

It is noteworthy that resource monitoring measures and waste audits ranked low, with only 7% and 5% of respondents reporting their use. Interestingly, more complex reduction strategies, such as audits and monitoring, are primarily employed by larger hotels. Planned comparisons revealed that larger hotels, being more financially stable, can afford to outsource assistance, thanks to their access to larger budgets and human resources. Our findings strongly support the effectiveness of waste reduction and digital initiatives, as these require minimal training or financial investment beyond an initial outlay, which accommodations from five-star hotels to small lodges are willing to make.
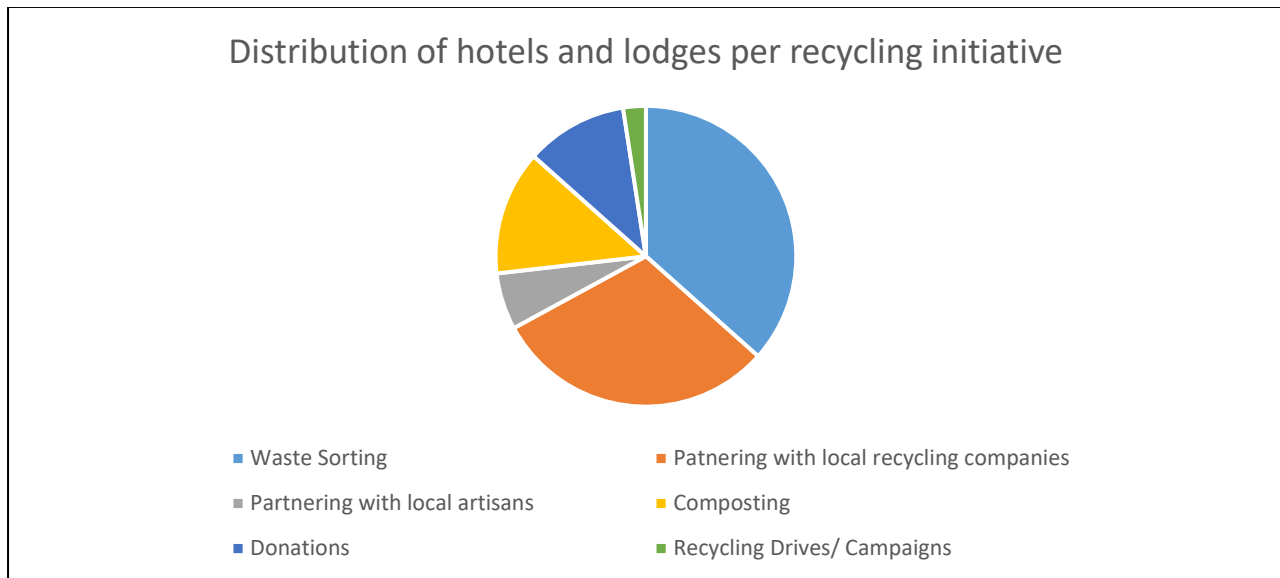
Theme 2: Recycling Initiatives

Figure 2: Distribution of hotels and lodges per recycling initiative

     Figure 2 illustrates the distribution of hotels engaged in various recycling initiatives. Waste sorting emerged as the most prevalent practice, with 30 out of 55 respondents confirming its implementation. Waste sorting involves using brightly colored, easily identifiable bins to separate waste into categories such as glass, paper, plastics, and electronics, facilitating easier recycling. The researcher believes that waste sorting scored highly due to its low initial cost, with most segregation bins priced between $50 and $100, making it feasible for hotels with a good budgeting scheme.

     Hotels and lodges have also reported partnerships with local recycling companies and artisans to recycle waste. Several recycling companies in the Victoria Falls area collect waste from hotels for recycling, although the specific methods of recycling remain unclear. Respondents indicated a decrease in participation from 55% to 45% due to the substantial financial commitment required, particularly for smaller hotels lacking larger budgets. Local artisans collect waste materials, especially textiles and glass, to repurpose into unique art pieces, which are either sold back to the hotels for decoration or offered to guests as souvenirs.

     The data revealed that most leftover food not suitable for donation is composted, which is the most viable option since food is organic and can decompose. Hotels with gardens utilize compost to fertilize their plants, ensuring chemical-free and healthy food for their guests. Sixteen percent of respondents mentioned donating to local charities, providing not only surplus food but also used blankets, linens, and mattresses. This practice not only reduces non-degradable waste in landfills but also fulfills the social responsibility of hotels within their communities. However, recycling drives and campaigns appear to be less prioritized among this group, with the reasons for this trend remaining unclear.
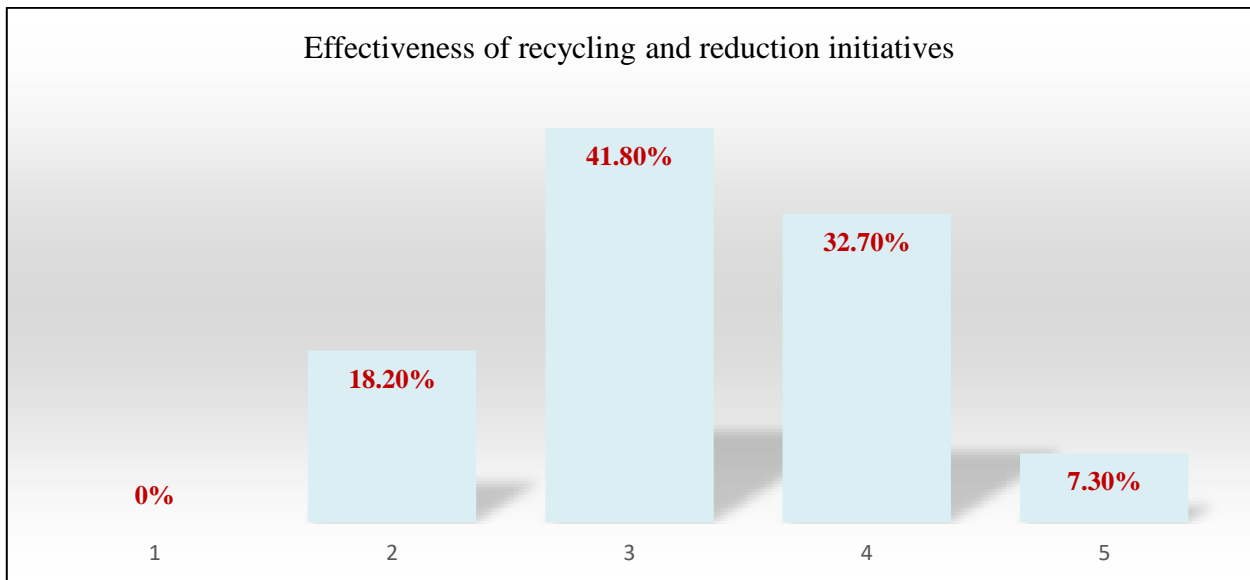
Figure 3: Effectiveness of recycling and reduction initiatives

To assess how hotels and lodges in Victoria Falls perceive the effectiveness of their recycling and reduction initiatives, the collected data indicated that most believe their efforts are only average, suggesting room for improvement.

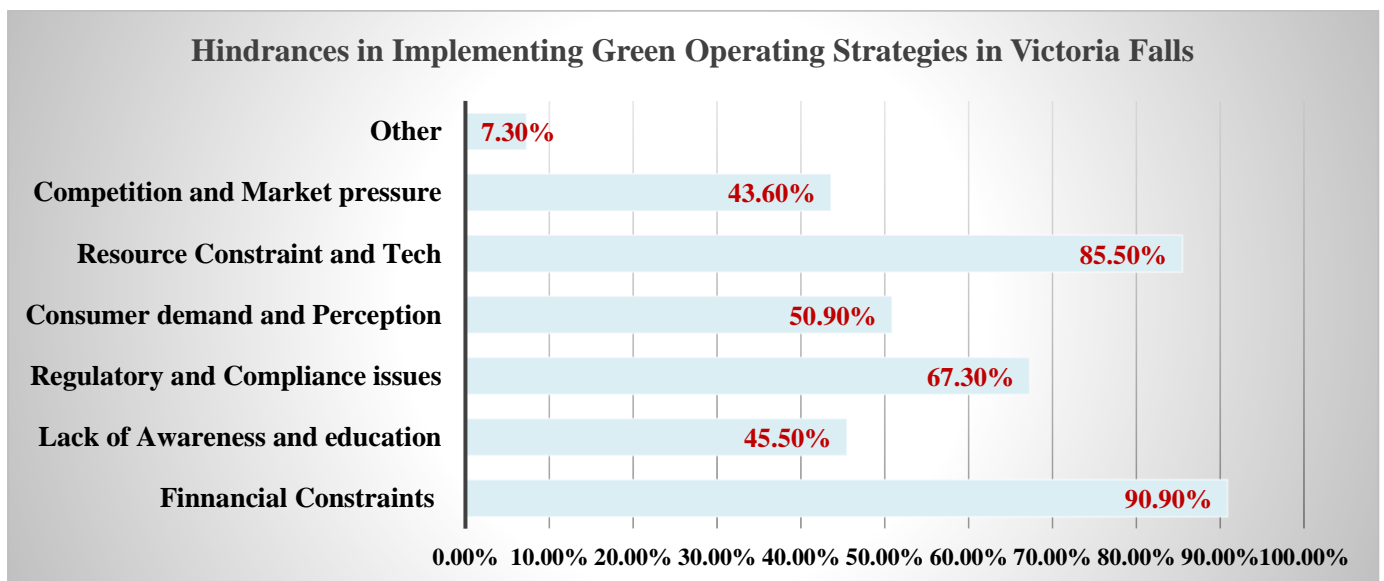*Theme 3: Hindrances in implementing green operating strategies.*

Figure 4: Hindrances in implementing green operating strategies

Several challenges hinder the implementation of green operating strategies in hotels in Victoria Falls. The analysis revealed that financial constraints are the most significant barrier, affecting 90.9% of the total respondents. This confirms the initial assumption that hotels struggle with financial limitations when attempting to adopt green strategies.
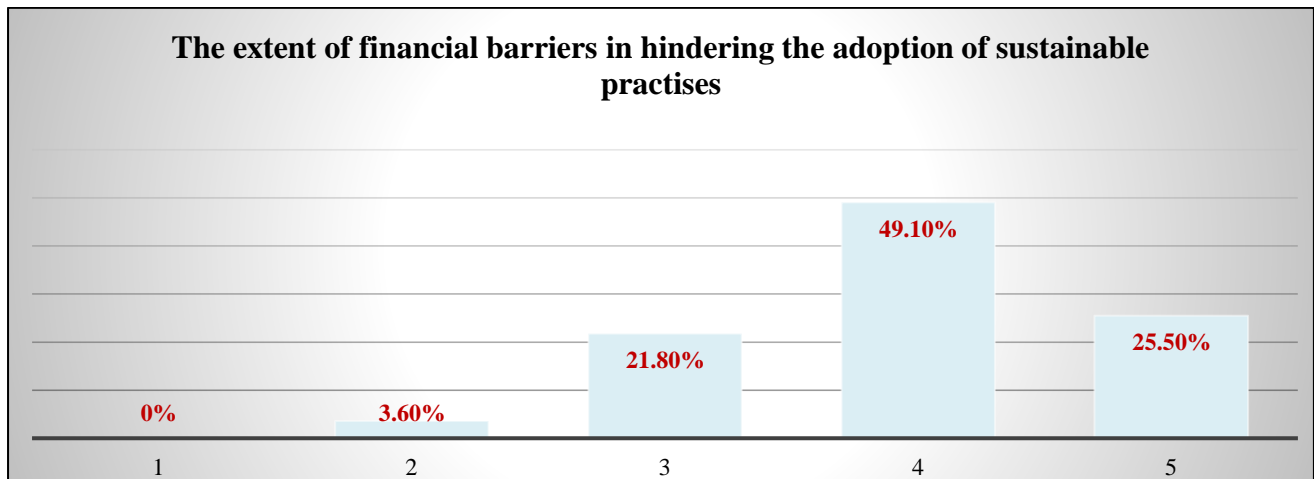
The extent of financial barriers in hindering the adoption of sustainable practises

Figure 5: Financial barriers in hindering adoption to sustainable practices

Figure 5 provides a clear breakdown of the percentage of hotels that acknowledge financial barriers to initiating sustainable practices, with many respondents rating these constraints above 3. Notably, the few hotels that did not identify financial constraints are part of larger hotel groups or chains, which can more easily secure funding for these initiatives. Research also highlighted resource constraints and technological limitations as the second most common hindrance. As a developing country, Zimbabwe faces challenges in acquiring advanced green technologies, such as greywater systems, food waste decomposers, and energy-efficient chillers, which are often costly and less accessible than in Western countries. The findings corroborate with literature that puts out that hotels in Zimbabwe face hurdles such as financial constraints, inadequate infrastructure, and a reliance on traditional energy sources like diesel generators and firewood during power outages (Chirambo, 2017). This supports previous literature that identifies resource and technological constraints as significant barriers to implementing green operational strategies.

Our results also show that regulatory and compliance issues (67.3%) and consumer demand and perception (50.9%) are external factors that hinder hotels in Victoria Falls from adopting environmentally friendly practices. The influence of consumer demands and perceptions is particularly noteworthy, indicating that external factors can be as impactful as internal constraints in preventing the implementation of green strategies. Additionally, a significant finding was the role of lack of awareness and education as a critical barrier, with 45.5% of respondents identifying this issue (Figure 4). This suggests that awareness and education are as important as other hindrances in the context of this study.
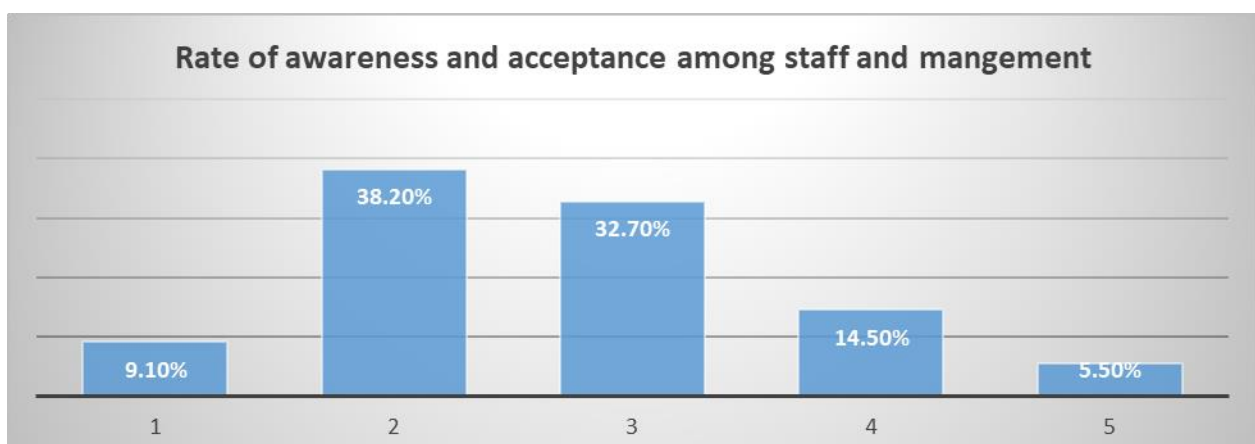

Figure 6: Rate of awareness and acceptance among staff and management

A Likert scale was utilized to assess the levels of awareness and acceptance of green initiatives among staff and management, with the findings illustrated in Figure 6. The results indicate a significant lack of awareness regarding sustainability, which is quite concerning. The 9.10% recorded in category [1] predominantly reflects small-scale, family-owned lodges. Categories [2] to [4] represent the majority of hotels, which exhibit an average level of awareness but largely fall short in accepting the necessary changes. Notably, 5.5% of respondents from well-established five-star hotels reported similar trends. These findings underscore the challenges faced in promoting green operational strategies within the hospitality sector in Victoria Falls.

Theme 4: Effective implementation of green operating strategies

This section aims to share research results from hotel and lodges staff and key sources on the tactics for improving the integration of eco-friendly tourism practices within Zimbabwe's hotel industry

Table 3 Statisics describing strategies to improve the implementation of green tourism practices in the Victoria Falls accommodation sector

Strategy	Distribution of Hotels (55) per Strategy
Legal Framework and Enforcement	**100 %**
Establish and enforce green tourism practices within the Tourism Act to make them legally binding.	70 %
Only license hotels that are compliant with Green Tourism standards	30 %
Education and Awareness	**100%**
Provide education on green tourism practices to staff	55%
Provide education on green tourism practices to guests	45%
Government Financial Support and Innovation	**100%**
Allocate funding for the advancement of green tourism technologies in Zimbabwe	70%
Encourage research on new green tourism practices and their implementation strategies	20%
Initiate Green Tourism Innovation Challenges at the Zimbabwe Tourism Authority (ZTA).	10%
Implementation and Participation	**100%**
Conduct training programs for staff on how to implement and promote green tourism practices	50 %
Encourage staff participation in green tourism practices and in promoting these practices to guests	30%
Encourage guests to take part in green tourism practices	20%
Incentives and Recognition	**100%**
Recognize and reward Green Hotels, possibly at events like Sanganai/Hlanganani expo	60%
Ensure that only Green Tourism Compliant Hotels host government conferences and workshops	20%
Guest Rewards: Offer incentives to guests who participate in green tourism practices	10%
Offer rewards or incentives to staff who actively engage in green tourism practices	10%

Table 3: Descriptive statistics

The study was conducted with the hotel, lodge employees, and key informants underscored essential strategies to bolster the integration of green tourism practices in Victoria Falls accommodation sector. The responses indicate a strong commitment towards legal grounding for sustainability and a recognition of the need for regulatory frameworks to drive sustainability. It was widely acknowledged that making green tourism practices legally binding and exclusively licensing Green Tourism Compliant hotels by the Zimbabwe Tourism Authority (ZTA) were crucial recommendations. These findings align with Mbasera (2018) who emphasizes the pivotal role of government policies in realizing the concept of green hotels. Furthermore, Alyahia et al (2024) caution against false green claims by hotels to uphold the authenticity of eco-friendly practices. Punitha, Aziz, and Rahman (2015) emphasize the necessity of robust policies to avert environmental harm, urging global authorities to devise stringent measures compelling hotels to embrace sustainable practices. Asante et al, (2022) highlight the inadequacy of current green policies due to subpar implementation.

The research also highlights the significance of staff engagement and training in green tourism practices as pivotal strategies for enhancing implementation. Ercantan, and Eyupoglu, (2022) stress the role of employee awareness in driving green initiatives, advocating for consistent communication of green practices and their implications to encourage active participation. The findings are in alignment with literature as Nisar et at (2021) suggest that hotels should facilitate staff involvement in green initiatives to foster motivation and avoid feelings of disadvantage.

Additionally, implementing reward and recognition systems for hotels and guests emerged as effective strategies. Nisar et al (2021) propose the use of reward mechanisms to incentivize green practices, emphasizing the importance of acknowledging hotels that excel in promoting environmentally responsible tourism. This aligns with Furqan et al. (2010), who argue that recognition schemes help set standards in sustainable tourism. Furthermore, the allocation of financial resources to develop green tourism technologies in Zimbabwe was deemed crucial by hotel employees (Masviba, 2022) These findings echo Mbasera (2016), who advocates for substantial financial investments to effectively implement green practices.

In summary, the study sheds light on key strategies essential for advancing green operating practices in Victoria Falls Hotels/Lodges, emphasizing the enforcement of regulations, staff engagement, recognition systems, and financial commitments as vital components in fostering sustainable tourism practices. The research findings underscore a disparity in the implementation of sustainability measures between 5-star hotels and smaller accommodation facilities in Victoria Falls. Larger establishments demonstrate a stronger commitment to environmental initiatives due to their substantial budgets, enabling them to adopt multiple strategies simultaneously. Moreover, the clientele of these hotels, often high-profile guests, subjects them to heightened scrutiny, influencing their operational practices. This aligns with Kassim (2009), who highlighted the financial constraints hindering smaller hotels from embracing environmental strategies despite recognizing their long-term benefits.

Conversely, smaller hotels tend to prioritize sustainability measures less effectively, as noted by Goodall (1995). While they may implement basic initiatives like digital receipts, larger hotels excel in more impactful strategies such as resource monitoring and waste audits, attributed to their greater resources and expertise. The proposal by Giri (2021) for a waste management model, successfully applied in a Victoria Falls hotel, offers a pathway towards zero waste, albeit with challenges in cost estimations and adaptability for smaller establishments with limited resources.

The study also reveals a limited adoption of green tourism practices in the Zimbabwean hotel sector, focusing primarily on energy, water, and waste management. Noteworthy practices include energy-saving measures, waste composting, and water conservation initiatives like leak detection and linen reuse programs. However, there are areas that warrant improvement, such as enhancing recycling efforts, utilizing motion sensors, implementing greywater recycling systems, and rainwater harvesting, which are currently overlooked in the sector's sustainability endeavors.

Implementing green operating strategies in hotels and lodges in Victoria Falls faces significant challenges primarily stemming from financial constraints, limited resources, and technological gaps. Fazzari et al. (1988) highlight the cash flow sensitivity resulting from funding limitations, impacting the ability of Victoria Falls hotels and lodges to embrace sustainable initiatives.

Another major barrier identified is the lack of awareness and education within the sector. Ignorance and complacency among management and staff hinder the adoption of sustainable practices, reflecting a broader issue of environmental understanding. Fukey and Issac (2014) and Dodds (2008) emphasize the need for increased awareness of the environmental impacts of hotel operations.

In Victoria Falls, limited competition and market pressure, especially among the few 5-star hotels, reduce the incentive for sustainable investments. Milder et al (2016) note that competitive influence prompts hotels to adopt green strategies, particularly boutique hotels catering to guests valuing environmental responsibility. Consumer demand plays a pivotal role, with environmentally-conscious guests preferring hotels demonstrating sustainability commitments. Londono and Hernandez-Maskivker (2016) underscores that such guests actively seek eco-friendly accommodations, encouraging comprehensive green practices for competitive advantage.

Moreover, the study highlights the lack of support from key stakeholders like the government and hotel guests, alongside challenges in securing shareholder backing for green initiatives. Managers and employees cite financial barriers, skill gaps, and training deficiencies as impediments to implementing green tourism practices. Addressing these hindrances, including enhancing awareness, promoting stakeholder engagement, and investing in staff training, is crucial to fostering a sustainable culture in Victoria Falls hotels and lodges.

5. Conclusion

The evaluation of hindrances in implementing green operating strategies in hotels and lodges in Victoria Falls reveals several key findings. Firstly, larger hotels, particularly 5-star establishments, are more proactive in adopting reduction and recycling strategies compared to smaller accommodations, which often cite high initial costs as a barrier (Kassim, 2009). Smaller hotels tend to implement less effective sustainability measures due to limited resources and a reliance on easily attainable initiatives, while larger hotels benefit from greater expertise and financial capacity (Walsh and Dodds, 2017). Secondly, significant challenges stem from financial constraints and inadequate technology, exacerbated by Zimbabwe's severe economic instability, which hampers investments in green practices (Fazzari et al., 1988). Additionally, a lack of awareness and education among management and staff further hinders the adoption of sustainable strategies, compounded by the brain drain of skilled professionals seeking opportunities abroad (Esty and Simmons, 2011; Mbasera et al, 2017) Lastly, limited local competition in Victoria Falls reduces pressure on hotels to implement green strategies, though consumer demand for sustainability among environmentally-conscious guests could drive change, particularly among boutique hotels (Aleksandrovna et al 2021). Overall, addressing financial and educational barriers, alongside enhancing competition, is crucial for promoting sustainable practices in the hospitality sector.

Recommendations

In response to the escalating environmental challenges faced by Zimbabwe's hospitality industry, urgent action is crucial. Accommodation facilities in tourism destinations are significantly impacting the environment through habitat degradation, resource depletion, and negative effects on local ecosystems. To tackle these issues effectively, a range of measures can be implemented:

Funding of Green Tourism Practices:
The study emphasizes the necessity of funding green tourism practices in Zimbabwe's hotel sector. High implementation costs have been identified as a major obstacle by both hotel managers and employees. Therefore, it is essential for hotels to allocate dedicated resources for implementing green practices by including them in their budgets. The government should establish a financial reserve to provide loans specifically for sustainability initiatives, with repayment structures tailored to hotels' financial capabilities. To ensure transparency and accountability, a rigorous application process should be put in place, involving multiple levels of approval to minimize corruption risks. Upon approval, hotels would commit to implementing agreed-upon green practices within set timeframes, overseen by a monitoring body.

Stakeholder Engagement:
Engaging stakeholders such as hotel guests, government entities, and hotel employees is crucial. Stakeholders like guests and employees play a vital role in green practices' success, as their consent may be required for actions like linen reuse or using refillable dispensers. The government can incentivize green initiatives through measures like tax rebates for purchasing green equipment.

Education and Training:
Regular training and education for employees, guests, and hotel managers are necessary for successful green practices implementation. Resistance from some guests and additional workload for employees can be mitigated through education. Extending green tourism education to both local and international guests via various platforms is essential for widespread support.

Policy Formulation:
The government should enact policies that enforce green tourism practices, making them mandatory for all tourism and hospitality businesses. Creating a green tourism statutory instrument can ensure compliance and incentivize hotels to embrace sustainable practices. Monitoring and enforcement mechanisms are crucial to ensure compliance and prevent greenwashing.

Recognition and Reward Systems:
Implementing reward systems for hotels and guests can motivate the adoption of green initiatives. Financial and non-financial rewards can be offered to hotels that engage in green practices, fostering a culture of environmental consciousness.

Research and Development:
Engaging in research and development is essential for the tourism industry to stay abreast of evolving trends and technologies. Encouraging innovation in green tourism practices can help hotels contribute significantly to environmental protection.

Integrating sustainable practices in hotels and lodges in Victoria Falls is a multifaceted challenge that requires collaboration between stakeholders, continuous education, effective enforcement of standards, and innovative approaches to engage both staff and guests. Addressing these challenges will be crucial for the long-term success of green tourism in the region. By implementing these measures, Zimbabwe can develop a sustainable tourism sector that not only enhances the visitor experience but also preserves the environment and supports local communities for the long term.

References

Abeydeera, L.H.U.W. and Karunasena, G., 2019. Carbon emissions of hotels: The case of the Sri Lankan hotel industry. *Buildings*, *9*(11), p.227.

Aguilar-Virgen, Q., Taboada-González, P. and Ojeda-Benítez, S., 2013. Seasonal analysis of the generation and composition of solid waste: potential use—a case study. *Environmental monitoring and assessment*, *185*, pp.4633-4645.

Alcamo, J., Puig, D., Olhoff, A., Demkine, V. and Metz, B., 2013. The emissions gap report 2013: a UNEP synthesis report. United Nations Environment Programme.

Aleksandrovna, T.M., Nazhmidenovna, D.G., Mizamgalievna, A.E., Rysty, B., Gulmira, B., Madina, A. and Shakizada, N., 2021. Sustainable hotel development. *Academy of Strategic Management Journal*, *20*, pp.1-16.

Al-Juboori, O., Sher, F., Khalid, U., Niazi, M.B.K. and Chen, G.Z., 2020. Electrochemical production of sustainable hydrocarbon fuels from CO2 co-electrolysis in eutectic molten melts. *ACS Sustainable Chemistry & Engineering*, *8*(34), pp.12877-12890.

Alyahia, M., Azazz, A.M., Fayyad, S., Elshaer, I.A. and Mohammad, A.A., 2024. Greenwashing behavior in hotels industry: The role of green transparency and green authenticity. *Sustainability*, *16*(3), p.1050.

Andreoli, T.P., Crespo, A. and Minciotti, S., 2017. What has been (short) written about greenwashing: a bibliometric research and a critical analysis of the articles found regarding this theme. *Revista de Gestão Social e Ambiental-RGSA*, *11*(2), pp.54-72.

Antwi, S.K. and Hamza, K., 2015. Qualitative and quantitative research paradigms in business research: A philosophical reflection. *European journal of business and management*, *7*(3), pp.217-225.

Asante, D., Ampah, J.D., Afrane, S., Adjei-Darko, P., Asante, B., Fosu, E., Dankwah, D.A. and Amoh, P.O., 2022. Prioritizing strategies to eliminate barriers to renewable energy adoption and development in Ghana: A CRITIC-fuzzy TOPSIS approach. *Renewable Energy*, *195*, pp.47-65.

Bacon-Shone, J., 2015. Introduction to quantitative research methods pres. *Loughborough Univeristy (Issue February)*.

Bagur-Femenias, L., Celma, D. and Patau, J., 2016. The adoption of environmental practices in small hotels. voluntary or mandatory? An empirical approach. *Sustainability*, *8*(7), p.695.

Barakat, S.R. and Wada, E.K., 2021. Stakeholder theory in the hospitality field: insights drawn from a systematic literature review. *Hospitality & Society*, *11*(2), pp.183-207.

Bohdanowicz, P., Zientara, P. and Novotna, E., 2011. International hotel chains and environmental protection: an analysis of Hilton's we care! programme (Europe, 2006–2008). *Journal of Sustainable Tourism*, *19*(7), pp.797-816.

Bollenbach, L., Schmitz, J., Niermann, C. and Kanning, M., 2022. How do people feel while walking in the city? Using walking-triggered e-diaries to investigate the association of social interaction and environmental greenness during everyday life walking. *Frontiers in Psychology*, *13*, p.970336.

Brahmbhatt, M., Haddaoui, C. and Page, J., 2017. Green industrialisation and entrepreneurship in Africa. *Contributing paper for African Economic Outlook*, pp.1-60.

Brundtland, G.H., 1987. Brundtland report. Our common future. *Comissão Mundial*, *4*(1), pp.17-25.

Bruns-Smith, A., Choy, V., Chong, H. and Verma, R., 2015. Environmental sustainability in the hospitality industry: Best practices, guest participation, and customer satisfaction.

Céspedes-Lorente, J., De Burgos-Jiménez, J. and Álvarez-Gil, M.J., 2003. Stakeholders' environmental influence. An empirical analysis in the Spanish hotel industry. *Scandinavian journal of management*, *19*(3), pp.333-358.

Chan, E. S. W. (2013). Greening the hospitality industry: A study of environmental practices in hotels. Journal of Sustainable Tourism, 21(3), 431-446.

Chan, E.S., 2021. Why do hotels find reducing their carbon footprint difficult?. *International Journal of Contemporary Hospitality Management*, *33*(5), pp.1646-1667.

Chavalittumrong, P. and Speece, M., 2022. Three-Pillar Sustainability and Brand Image: A Qualitative Investigation in Thailand's Household Durables Industry. *Sustainability*, *14*(18), p.11699.

Chirambo, D., 2017. *Enhancing renewable energy deployment in Malawi through climate finance instruments: policy challenges and prospects* (Doctoral dissertation, Brandenburgische Technische Universität Cottbus-Senftenberg).

Clarkson, P.M., Li, Y., Richardson, G.D. and Vasvari, F.P., 2011. Does it really pay to be green? Determinants and consequences of proactive environmental strategies. *Journal of accounting and public policy*, *30*(2), pp.122-144.

Cozzio, C., 2019. The Concept of Sustainability in Hotel Industry: Current dominant orientations and future issues. *International Journal of Sustainable Development*, *22*(1-2), pp.61-87.

Creswell, J.W., 2009. Research methods. *JW Creswell, Research design: qualitative, quantitative and mixed methods approaches*, pp.15-17.

Deraman, A.B. and Salman, F.A., 2019. Managing usability evaluation practices in agile development environments. *International Journal of Electrical and Computer Engineering*, 9(2), p.1288.

Deser, C., Phillips, A., Bourdette, V. and Teng, H., 2012. Uncertainty in climate change projections: the role of internal variability. *Climate dynamics*, 38, pp.527-546.

Dodds, R. and Joppe, M., 2001. Promoting urban green tourism: The development of the other map of Toronto. *Journal of Vacation Marketing*, 7(3), pp.261-267.

Elshaer, I.A., Azazz, A.M. and Fayyad, S., 2023. Green management and sustainable performance of small-and medium-sized hospitality businesses: moderating the role of an employee's pro-environmental behaviour. *International Journal of Environmental Research and Public Health*, 20(3), p.2244.

Ercantan, O. and Eyupoglu, S., 2022. How do green human resource management practices encourage employees to engage in green behavior? Perceptions of university students as prospective employees. *Sustainability*, 14(3), p.1718.

Erdogan, N. and Tosun, C., 2009. Environmental performance of tourism accommodations in the protected areas: Case of Goreme Historical National Park. *International journal of hospitality management*, 28(3), pp.406-414.

Esty, D.C. and Simmons, P.J., 2011. *The green to gold business playbook: How to implement sustainability practices for bottom-line results in every business function*. John Wiley & Sons.

Esty, D.C. and Simmons, P.J., 2011. *The green to gold business playbook: How to implement sustainability practices for bottom-line results in every business function*. John Wiley & Sons.

Falaster, C., Zanin, L.M. and Guerrazzi, L.A., 2017. Teoria institucional na pesquisa em turismo: novas oportunidades de uma teoria em evolução. *Revista Brasileira de Pesquisa em Turismo*, 11, pp.270-293.

Fan, Z.H., Huang, F. and Li, J.T., 2023. Research on the Development of Green Hotels in the Context of Low Carbon Tourism. *Proceedings of Business and Economic Studies*, 6(5), pp.59-65.

Faulk, E.S., 2000. A survey of environmental management by hotels and related tourism businesses. *OIKOS PhD Summer Academy*, pp.1-22.

Fazzari, S., Hubbard, R.G. and Petersen, B., 1988. Investment, financing decisions, and tax policy. *The American economic review*, 78(2), pp.200-205.

Font, X.A.V.I.E.R., Haas, E. and Thorpe, K.I.R.S.T.Y., 2001. Lesley Forsyth, With Contributions From Featured Organizations. *Tourism Ecolabelling: Certification and Promotion of Sustainable Management*, 271.

Fukey, L.N. and Issac, S.S., 2014. Connect among green, sustainability and hotel industry: a prospective simulation study. *Energy conservation*, 6(8).

Furqan, A., Som, A.P.M. and Hussin, R., 2010. Promoting green tourism for future sustainability. *Theoretical and empirical researches in urban management*, 5(8 (17)), pp.64-74.

Furqan, M. (2010). Environmental management systems in hotels: A study of adoption and implementation. Journal of Sustainable Tourism, 18(7), 867-884.

Giri, S., 2021. Integrated solid waste management: a case study of a hotel in Kathmandu, Nepal. *EPRA Int J Multidiscip Res*, 7(5), pp.264-268.

Graci, S. and Dodds, R., 2008. Why go green? The business case for environmental commitment in the Canadian hotel industry. *Anatolia*, 19(2), pp.251-270.

Gupta, A., Dash, S. and Mishra, A., 2019. All that glitters is not green: Creating trustworthy ecofriendly services at green hotels. *Tourism Management*, 70, pp.155-169.

Hall, C.M. and Page, S.J., 2009. Progress in tourism management: From the geography of tourism to geographies of tourism–A review. *Tourism management*, 30(1), pp.3-16.

Hillary, R., 1995. The EU eco-management and audit scheme as a vehicle to promote cleaner production. *Eco-Management and Auditing: The Journal of Corporate Environmental Management*, 2(1), pp.1-7.

Johnson, R.B., Onwuegbuzie, A.J. and Turner, L.A., 2007. Toward a definition of mixed methods research. *Journal of mixed methods research*, 1(2), pp.112-133.

Joseph, C., Nichol, E.O., Abdullah, V.C.S.L.B. and Jussem, P.M., 2016. Hotel environmental sustainability practices within institutional theory framework. *Journal of Borneo-Kalimantan*, 2(2).

Jovanović, S., 2019. Green hotels as a new trend in the function of sustainable development and competitiveness improvement. *Economics of Sustainable Development*, 3(1), pp.1-7.

Juganaru, I.D., Juganaru, M. and Anghel, A.N.D.R.E.E.A., 2008. Sustainable tourism types. *Annals of University of Craiova-Economic Sciences Series*, 2(36), pp.797-804.

Kannangara, C., Shamil, M.M.M. and Surangi, H.A.K.N.S., 2024. The Power of Change Champions: Influencing Environmental Sustainability Strategies in Sri Lankan Hotels.

Kasavana, M. (2008). Sustainable hospitality operations: A study of energy efficiency in hotels. International Journal of Contemporary Hospitality Management, 20(4), 412-422.

Kasim, A., Gursoy, D., Okumus, F. and Wong, A., 2014. The importance of water management in hotels: a framework for sustainability through innovation. *Journal of Sustainable Tourism*, 22(7), pp.1090-1107.

Kaufman, B.E., 2015. The RBV theory foundation of strategic HRM: Critical flaws, problems for research and practice, and an alternative economics paradigm. *Human Resource Management Journal*, 25(4), pp.516-540.

Khalil, N., Abdullah, S.N.C., Haron, S.N. and Hamid, M.Y., 2022. A review of green practices and initiatives from stakeholder's perspectives towards sustainable hotel operations and performance impact. *Journal of Facilities Management*, (ahead-of-print).

Khatter, A., 2023. Strategic Management and Stakeholder Engagement: A Case for Environmental Sustainability.

Kularatne, T., Wilson, C., Månsson, J., Hoang, V. and Lee, B., 2019. Do environmentally sustainable practices make hotels more efficient? A study of major hotels in Sri Lanka. *Tourism Management*, 71, pp.213-225.

Londoño, M.L. and Hernandez-Maskivker, G., 2016. Green practices in hotels: the case of the GreenLeaders Program from TripAdvisor. *WIT Transactions on Ecology and the Environment*, 201, pp.1-13.

Lynes, J.K. and Dredge, D., 2006. Going green: Motivations for environmental commitment in the airline industry. A case study of Scandinavian Airlines. *Journal of sustainable tourism*, 14(2), pp.116-138.

Makoondlall-Chadee, T. and Bokhoree, C., 2024. Understanding the Influencing Factors of Pro-Environmental Behavior in the Hotel Sector of Mauritius Island. *Tourism and Hospitality*, 5(4), pp.942-976.

Masviba, M., 2022. Development of a green tourism implementation framework for the hotel sector in Zimbabwe (Doctoral dissertation, CHINHOYI UNIVERSITY OF TECHNOLOGY).

Mazhenova, S., Choi, J.G. and Chung, J., 2016. International tourists' awareness and attitude about environmental responsibility and sustainable practices. *Global Business & Finance Review (GBFR)*, 21(2), pp.132-146.

Mazzoli, C., Corticelli, R., Dragonetti, L., Ferrante, A., Van Oorschot, J. and Ritzen, M., 2022. Assessing and Developing Circular Deep Renovation Interventions towards Decarbonisation: The Italian Pilot Case of "Corte Palazzo" in Argelato. *Sustainability*, 14(20), p.13150.

Mbasera, M., Du Plessis, E., Saayman, M. and Kruger, M., 2016. Environmentally-friendly practices in hotels. Acta Commercii, 16(1), pp.1-8.

Mbasera, M., du Plessis, E., Saayman, M. and Kruger, M., 2018. Determining the impact of green management policies on hotel performance: A manager's perspective. *African Journal of Hospitality, Tourism and Leisure*, 7(3), pp.1-13.

McEvoy, R.D., Antic, N.A., Heeley, E., Luo, Y., Ou, Q., Zhang, X., Mediano, O., Chen, R., Drager, L.F., Liu, Z. and Chen, G., 2016. CPAP for prevention of cardiovascular events in obstructive sleep apnea. *New England Journal of Medicine*, 375(10), pp.919-931.

Mebratu, D., 1998. Sustainability and sustainable development: historical and conceptual review. *Environmental impact assessment review*, 18(6), pp.493-520.

Meler, M. and Ham, M., 2012. Green marketing for green tourism. In *Faculty of tourism and hospitality management in opatija. Biennial International congress. tourism & hospitality industry* (p. 130). University of Rijeka, Faculty of Tourism & Hospitality Management.

Milder, J.C., Newsom, D., Sierra, C. and Bahn, V., 2016. Reducing tourism's threats to biodiversity: effects of a voluntary sustainability standard and training program on 106 Latin American hotels, lodges and guesthouses. *Journal of Sustainable Tourism*, 24(12), pp.1727-1740.

Muhanna, E., 2006. Sustainable tourism development and environmental management for developing countries. *Problems and Perspectives in Management*, 4(2), pp.14-30.

Murtaza, S.H., Khan, A. and Mustafa, S.M., 2012. Eco-centric success: Stakeholder approaches to sustainable performance via green improvisation behavior and environmental orientation in the hotel industry. *Business Strategy and the Environment*.

Murugesan, S., 2008. Harnessing green IT: Principles and practices. *IT professional*, 10(1), pp.24-33.

Mzembe, A.N., Melissen, F. and Novakovic, Y., 2019. Greening the hospitality industry in the developing world: Analysis of the drivers and barriers. *Business Ethics: A European Review*, 28(3), pp.335-348.

Nagaty, S.A., 2022. Eco-friendly initiatives and corporate reputation: the mediating effect of corporate social responsibility. In *The Business and Management Review* (Vol. 13, pp. 313-329). Centre for Business & Economic Research London.

Nisar, Q.A., Haider, S., Ali, F., Jamshed, S., Ryu, K. and Gill, S.S., 2021. Green human resource management practices and environmental performance in Malaysian green hotels: The role of green intellectual capital and pro-environmental behavior. *Journal of cleaner production*, 311, p.127504.

Njerekai, C., 2019. The context and future of tourism in Africa's national parks: Could privatization within protected areas be the panacea?. In *Natural Resources, Tourism and Community Livelihoods in Southern Africa* (pp. 38-51). Routledge.

Pietersen, J. and Maree, K., 2016. Overview of some of the most popular statistical techniques. *First steps in research*, 2, pp.249-304.

Pujara, Y., Pathak, P., Sharma, A. and Govani, J., 2019. Review on Indian Municipal Solid Waste Management practices for reduction of environmental impacts to achieve sustainable development goals. *Journal of environmental management*, *248*, p.109238.

Punitha, S., Aziz, Y.A. and Rahman, A.A., 2015. Conceptualisation of green marketing mix in the hotel industry. *Hospitality and Tourism 2015: Proceedings of HTC 2015 (Malacca, Malaysia, 2-3 November 2015)*, p.227.

Qi, H. and Ong, F., 2023. Stakeholders in the greening process of business events: A constructivist grounded theory to the Chinese context. *Event Management*, *27*(1), pp.1-17.

Rahman, I., Reynolds, D. and Svaren, S., 2012. How "green" are North American hotels? An exploration of low-cost adoption practices. *International journal of hospitality management*, *31*(3), pp.720-727.

Rahman, I., Reynolds, D. and Svaren, S., 2012. How "green" are North American hotels? An exploration of low-cost adoption practices. *International journal of hospitality management*, *31*(3), pp.720-727.

Rani, R. and Rashi, 2014. A study of green practices in hospitality and tourism industry in India. *Int Res J Manag Sci Technol*, *5*(7), pp.85-93.

Rohit, Agrawal., Ashutosh, Samadhiya., Audrius, Banaitis., Anil, Kumar. (2024). 4. Entrepreneurial barriers in achieving sustainable business and cultivation of innovation: a resource-based view theory perspective. Management Decision, Available from: 10.1108/md-11-2023-2032

Ryzhchenko, O., 2017. National approach to the coverage of historical events (on the example of the novels of Boris Akunin and Ken Follet).

Sarkar, A.N., 2013. Promoting eco-innovations to leverage sustainable development of eco-industry and green growth. *European Journal of Sustainable Development*, *2*(1), pp.171-171.

Sarkis, J., Zhu, Q. and Lai, K.H., 2011. An organizational theoretic review of green supply chain management literature. *International journal of production economics*, *130*(1), pp.1-15.

Saunders, M.N., Lewis, P., Thornhill, A. and Bristow, A., 2015. Understanding research philosophy and approaches to theory development

Sedaghat, M. and Ziyaee, M., 2024. A paradigmatic model of Sustainable Tourism Development in Islamic Republic of Iran. *Journal of Tourism and Development*, *13*(1), pp.79-107.

Shinta, Salsabila., Radhiana, Radhiana., Juwita, Juwita., Putri, Mauliza. (2022). 5. Challenges of the Resource-Based View Approach in Improving Business Organizational Performance. Proceedings of International Conference on Multidisciplinary Research, Available from: 10.32672/pic-mr.v5i2.5416

Slaper, T.F. and Hall, T.J., 2011. The triple bottom line: What is it and how does it work. *Indiana business review*, *86*(1), pp.4-8.

Snyder, H., 2019. Literature review as a research methodology: An overview and guidelines. *Journal of business research*, *104*, pp.333-339.

Soares, N., Bastos, J., Pereira, L.D., Soares, A., Amaral, A.R., Asadi, E., Rodrigues, E., Lamas, F.B., Monteiro, H., Lopes, M.A.R. and Gaspar, A.R., 2017. A review on current advances in the energy and environmental performance of buildings towards a more sustainable built environment. *Renewable and Sustainable Energy Reviews*, *77*, pp.845-860.

Tawiah, K. (2021). Organizational culture and sustainability practices in hotels. Journal of Hospitality and Tourism Research, 45(1), 135-148.

Timothy, D. and Teye, V., 2009. *Tourism and the lodging sector*. Routledge.

Tosun, C., 2001. Challenges of sustainable tourism development in the developing world: the case of Turkey. *Tourism management*, *22*(3), pp.289-303.

Tzschentke, N.A., Kirk, D. and Lynch, P.A., 2008. Going green: Decisional factors in small hospitality operations. *International Journal of Hospitality Management*, *27*(1), pp.126-133.

Tzschuck, K. (2017). The impact of financial resources on sustainability practices in hotels. International Journal of Hospitality Management, 66, 137-145.

Umoh, S.U., 2024. Green Hotels and Green Practices in South Africa. In *Future Tourism Trends Volume 1* (pp. 91-98). Emerald Publishing Limited.

Viterouli, M., Belias, D., Koustelios, A., Tsigilis, N. and Bakogiannis, D., 2023. Fostering Sustainability Through the Integration of Green Human Resource Management and Change Management: Nurturing Eco-Conscious Organizational Practices. In *Managing Successful and Ethical Organizational Change* (pp. 241-278). IGI Global.

Walsh, P.R. and Dodds, R., 2017. Measuring the choice of environmental sustainability strategies in creating a competitive advantage. *Business Strategy and the Environment*, *26*(5), pp.672-687.

Walsh, P.R. and Dodds, R., 2017. Measuring the choice of environmental sustainability strategies in creating a competitive advantage. *Business Strategy and the Environment*, *26*(5), pp.672-687.

Wu, H.J. and Dunn, S.C., 1995. Environmentally responsible logistics systems. *International journal of physical distribution & logistics management*, *25*(2), pp.20-38.

Yfantidou, G. and Matarazzo, M., 2017. The future of sustainable tourism in developing countries. *Sustainable development*, 25(6), pp.459-466.

Zengeni, R., 2013. *Assessing Soil Carbon and Carbon Dioxide Effluxes Under Different Vegetation Cover Conditions in the Eastern Cape Province, South Africa* (Doctoral dissertation, Nelson Mandela Metropolitan University).

Zhylenko, K., Khalatur, S., Pavlenko, O. and Pavlenko, O., 2022. Formation of macroeconomic indicators under the influence of MICE-tourism.

Zhylenko, S. and Zarytska, V., 2024. MECHANISMS OF AGGRESSION: PSYCHOLOGICAL ANALYSIS OF THE PHENOMENON. *Innovative Solution in Modern Science*, 2(62), pp.36-51.