



RESEARCH ARTICLE

Exploring Sustainable Development and Green Management Methods in Hotels: A Comparative Analysis

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The world is in danger due to the unsustainable use of resources, and so are hotels operating globally, which must change and adopt sustainable practices. This paper aims to thoroughly analyse the green management methods used in hotels to determine how they contribute to hotel sustainability and evaluate their advantages and disadvantages. Moreover, it will provide some guidelines for their effective implementation. The literature review and case studies show that while environmentally friendly practices have a negative impact on cost and employee acceptance, they have positive impact on operations, improving competitiveness and brand equity. For any hotel that wants to realize a low carbon footprint, attempts at energy efficiency, like the use of renewable energy and advanced lighting systems, are crucial. There are also discussions of water conservation practices, such as low-flow fixtures and wastewater reuse, given their possible effects on reducing water use. In addition, the review shows the importance of hotel industry leaders to promote green practices since they can affect their sustainability culture through management's support. Moreover, GHRM is essential in enhancing sustainability by involving and training employees. This critical analysis is based on four theories: the Triple Bottom Line (TBL) Framework, Resource-Based View (RBV), Stakeholder Theory, and Social Exchange Theory (SET). The findings indicate that hotels adopting these strategies can significantly contribute to sustainable development, combining economic goals with environmental conservationism.

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INTRODUCTION

Because of climate change and other environmental problems, hospitality has to adopt sustainable practices. There are obstacles yet opportunities for hotels to engage in degree management initiatives to reduce their impacts on the environment (Abdou et al., 2020; Nisar et al., 2021). Hotels labelled "green" prioritise the environment by incorporating various initiatives promoting eco-friendliness. Such initiatives include energy-efficient lighting, water conservation measures, waste management programs, and environmentally sustainable materials. These undertakings lead to reduced pollution in the hotel sector; resulting in lower costs and making clients even happier (Duric & Potočnik Topler, 2021). On the other hand, "non-green" hotels abide by traditional practices and do not make adjustments depending on their detrimental effects on the environment. The study explores the different ways of interpreting and executing principles of sustainable development in some hotels, comparing green management systems to their non-green counterparts.

Background and context

The hospitality sector contributes to environmental damage due to high energy, water, and waste consumption (Abdou et al., 2020). To address this, stakeholders develop green management strategies to minimize their adverse impacts on nature while enhancing their competitiveness and brand awareness. Some of these strategies involve adopting energy-efficient technology, conserving water by various means, recycling and composting to minimize refuse volume, and choosing sustainable resources for construction and operations.

Previous studies, such as Duric and Potočnik Topler's research (2021), indicate that implementing sustainable initiatives yields ecologically and financially beneficial outcomes for hotels (Lee, 2017; Tiwari & Thakur, 2021). Duric and Potocnik Topler (2021) showed that hotels that adopt green practices enhance the environment and gain significantly financially. Benefits from this include reduced energy and water costs, improved customer loyalty, and market positioning in response to growing consumer preference for environmentally friendly companies. In addition, hotels that pursue sustainable approaches can set themselves apart from their rivals, resulting in higher brand equity and a better reputation within the industry. This paper will examine different green management strategies in the hospitality business, comparing their ecological and financial implications. The study is intended to show how sustainable development principles can be integrated into hotel operations to benefit both the environment and corporations by analyzing these initiatives.

Purpose statement

This paper aims to thoroughly analyse the green management methods used in hotels to determine how they contribute to hotel sustainability and evaluate their advantages and disadvantages. Moreover, it will provide some guidelines for their effective implementation. A literature review alongside case studies is used to assess the efficiency of various green management techniques, focusing on their advantages and disadvantages to establishing whether they contribute towards hotel sustainability and may spur more praiseworthy environmental initiatives

Structure of the paper

The theoretical basis and previous research related to sustainable development and eco-friendly hotel management are presented in this comprehensive literature review. In addition, it examines green management strategies such as energy conservation, water-saving techniques, and waste disposal plans. It also discusses how leadership can help embrace a greener culture while incorporating green management into organizational goals. Furthermore, it addresses the importance of introducing Green Human Resource Management (GHRM) to promote sustainability through employee involvement and training. Finally, the key findings are summarised in the concluding section, along with recommendations for hoteliers who wish to achieve long-term profits from both environmental and economic perspectives over time.

LITERATURE REVIEW

Green hotel practices

Green hotel practices include various activities, such as energy efficiency initiatives, water conservation, and GHRM. Abdou et al. (2020) reveal that green hotel practices are significant in sustainable development through programs like energy efficiency, water conservation, and waste management. The activities are aimed at minimising the ecological footprint of hotel operations. The

demand for energy efficiency shapes the practices of green hotels. Several hotels have embraced advanced technologies such as energy-efficient bulbs and heating and cooling systems that are consistent with some international organizations' guidelines, such as ISO (International Organization for Standardization). An example is a comparative case study presented by Lee (2017), which shows how sustainable energy methods have been incorporated into the Mekong region. The increasing use of energy-saving lights and other related initiatives in four areas, namely Thailand, Cambodia, Lao, and Vietnam, can contribute to environmental conservation. According to Tiwari and Thakur (2021), in case studies of the hotels/resorts situated in Himachal Pradesh and Jammu and Kashmir in India, revealed that innovative technologies have great potential to reduce energy consumption in different of buildings, including hotels. In the analysis, Tiwari and Thakur (2021) showed that such practices have a potential for reducing carbon footprints. To save on power consumption, hotels can acquire floodlights made using LEDs or go solar, saving vast amounts of money in electricity bills, which is always based on what they were paying before implementing such changes (Olya et al., 2021).

Water-saving programs can involve the installation of tap faucets and showers with less friction, flushing bowls with two buttons, and washing machines that minimise water consumption. Citing Abdou et al. (2022), it is evident that this vastly reduces the demand for such resources in areas with scarce supplies. Furthermore, some establishments in this sector have initiated initiatives to recycle used bedding and towels by encouraging customers to maintain them for a while before they can be cleaned to conserve additional power and water (Jamal et al., 2021). Some examples of waste management practices in green hotels are recycling programs, composting food, and reducing the usage of single-use plastics (Yuniati, 2021; Sun et al., 2022). Sun et al. (2022) highlight that it is essential to separate and adequately discard waste to minimise the amount of it dumped in landfills. Other hotels have switched from mini soap dispensers to large ones, whereas other hotels have implemented online check-in and check-out systems that have reduced paper waste.

Leadership in green hotels

Effective leadership is at the core of successful green practices. Ahmed et al. (2021) discuss leadership as necessary in Malaysian green hotels. The Malaysian case study reveals the presence of numerous eco-friendly hotels, such as Hilton Kuala Lumpur, Shangri-La Kuala Lumpur, and Kuala Lumpur among others. Using Frangipani Langkawi Resort and Spa in Langkawi, Malaysia as a case study (figure 1), Ahmed et al. (2021) further argue that with a proper strategic vision from top management, it will be easier and more accessible for these hotels to embrace sustainable strategies. In this regard, leaders provide an organisational culture geared towards prioritising environmental sustainability (Rubio-Mozos et al., 2020). One of the ways leaderships achieves this is through setting strategic vision. Strategic leaders have showed that establishing clear environmental goals and discussing sustainability with interested stakeholders is vital for leaders' work (Yam, 2017; Lee, 2017). A green hotel's leadership needs an approach that embraces sustainability as part of its mission (Olya et al., 2021). Leaders must create long-term ecological targets, along with ways to achieve them.



Figure 1: Frangipani Langkawi resort and Spa in Langkawi, Malaysia

The commitment from top management, including conducting training or workshops on sustainability, support programs promoting green initiatives. The management also ensures adequate funds to support environmental projects (Ahmed et al., 2021). Consequently, the commitment to sustainable development enables heads of organisations to implement eco-friendly practices among their subordinates. Leaders involved must take tangible actions to demonstrate such a commitment, as Ahmed et al. (2021) suggested. For instance, they attend sustainability seminars, support green initiatives, and provide financial assistance for nature conservation projects. Figure 2 shows interrelated components of Frangipani Langkawi Resort and Spa, supporting the role of leadership in promoting sustainability science.

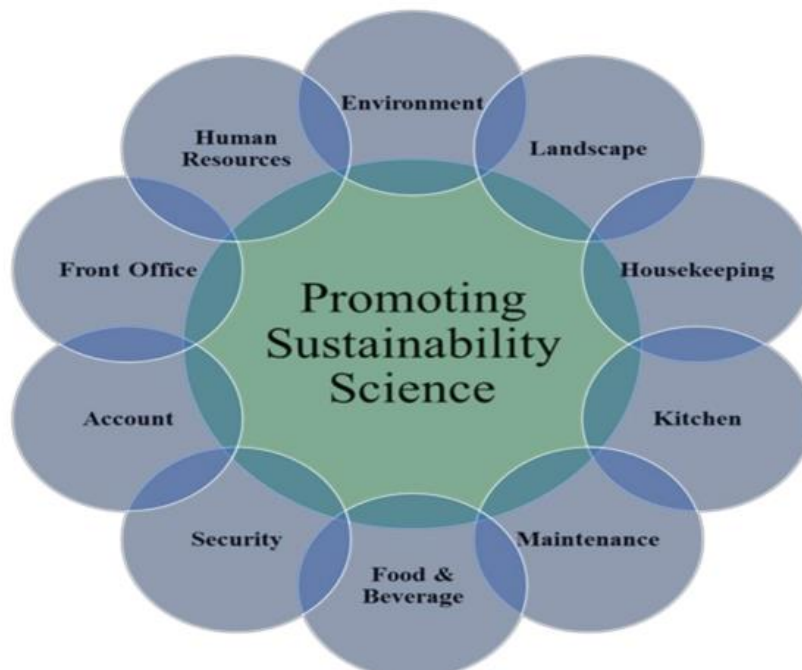


Figure 2: Interrelated components of Frangipani Langkawi Resort and Spa.

Fostering organisational culture helps leaders to develop and maintain sustainability projects. Lee (2017) emphasised that a supportive culture supports employee involvement in green projects, acknowledgment, and reward for the persons who exercise environmentally friendly behaviour, including everyday activities that perpetuate sustainability. Thus, leaders can make sure the entire organisation embraces eco-friendly approaches by fostering a culture of ecological sensitivity.

Green business strategies

Yousaf et al. (2021) explores approaches to adjusting eco-friendly aims to the company policies. Revising the case of Malaysia, Nisar et al. (2021) introduces the Malaysia's green-economy policy, which includes the goal of ensuring net zero greenhouse-gas emissions by 2050. In the country, companies are encouraged to develop internal sustainability policies to help achieve the overarching goal. Hotels like the Hilton heed to this call by implementing eco-friendly policies for their organization. From their perspective, if organisations have environmental policies in their business objectives, they would gain more sustainability. It is crucial to introduce ecological steps into the main line of industrial progress that will result in virtuous tourism. The efficient incorporation of environmental policies into organisations' corporate strategies is crucial for the sustainability of their profits by attracting more environmentally conscious customers (Úbeda-García et al., 2021). The evidence from Yousaf et al. (2021) suggests that these green initiatives minimise costs, maximise revenues, and enhance public image. Such organisations will pay less electricity bills or attract those who conserve because some activities consume less energy than others. Employing sustainable practices for business will improve a hotel's brand image and profile (Tanveer et al., 2024). Ecotourists are attracted to hotels that utilise green hotel practices; hence, they carve out a particular niche in the hospitality industry (Yousaf et al., 2021). This marketing move tends to foster loyalty among potential clients whose primary need is safeguarding the environment through green activities.

Green human resource management

Nisar et al. (2021) discovered that GHRM is evident in green hotels in Malaysia where green training and employee involvement enhance environmental performance. Additionally, Sobaih et al. (2020) systematically review GHRM practices in the hospitality industry, emphasising ecological sustainability. Green training programs for staff are necessary to equip them with all the skills and knowledge to ensure sustainability (Tulsi & Ji, 2020). For example, Nisar et al. (2021) argue that employees must be trained in energy-saving behaviours, waste management techniques, and water conservation methods. This training will help employees recognize how their actions impact the environment and motivate them to adopt an eco-friendly lifestyle instead.

The level of eco-friendliness in GHRM correlates with the ways employees undertake to maintain sustainability (Nisar et al., 2021). Employees would have stronger emotional ties to their respective objectives if they are actively involved in formulating and implementing policies to safeguard the environment (Nisar et al., 2021). Therefore, it is essential to have open communication spaces where people involved in this open-mindedness can get engaged in green jobs (Yusoff et al., 2020).

Organisational green culture

Building a green culture within the organisation promotes eco-friendly behaviour among employees. Yeşiltaş et al. (2022) revealed two types of hotels: green and non-green. Green hotels have gained popularity in recent years for giving utmost priority to the environment through sustainable practices. They have various strategies, such as recycling and using energy-effective devices, which help them achieve reduced carbon emissions and lower material consumption. However, non-green

hotels are not interested in environmental sustainability in their operations. They perform conventional business activities that may disregard their influence on nature. Fostering an ecologically conscious environment means incorporating environmental principles into the organisational culture. This indicates that if sustainability becomes inherent in the organisation's culture, its employees will mostly behave sustainably. Hotels ought to formulate an eco-friendly vision and mission statement that elaborates on their environmental commitment (Karatepe et al., 2022; Yeşiltaş et al., 2022). This conceptual framework must be conveyed to all staff members and integrated into hotels' rules, regulations, and evaluation procedures.

Impact on Sustainable Development in Hotels

To achieve sustainable development in the hotel industry, green hotels, good governance, environmentally friendly business strategies (GHRM), and overall green corporate cultures are essential (Khan et al., 2021; Yousaf et al., 2021). The strategies help reduce the hotel's environmental impact, improve its market position, and improve brand value.

One of the impacts of sustainable development on hotels is decreasing ecologic destruction. Green hotels utilise less energy, conserve more water, and minimize waste, thus reducing their ecological footprint (Yeşiltaş et al., 2022). Visionary leaders implement green practices and prioritise sustainability (Khan et al., 2021). Therefore, they achieve remarkable reduction in resource consumption and waste generation when their resource utilization policies match their green business plans.

Increased competition in markets is another key consequence. By enticing eco-tourists and promoting a favorable public image, hotels may boost their economic competitiveness. In Yousaf and others' (2021) view, hotels with green business strategies will be distinctive from their competitors. They attract more eco-tourists, leading to high occupancy rates, frequent usage of hotel amenities by customers, and favorable recommendations.

Another key benefit of green hotel practices is improved brand value. Embracing eco-friendly measures is how a hotel may enhance its brand value by showing its involvement in sustainable development and corporate social responsibility (Sharma et al., 2020). Yousaf et al. (2021) reveals that incorporating green initiatives into proper marketing instils client confidence and loyalty. This could give rise to better guest satisfaction, resulting in more return guests leaving good comments on the facility's service and enhancing its image.

Challenges of green management strategies

The first challenge in going green is that building new tech and supporting infrastructure costs money. In their study, Abdou et al. (2022) point out those energy-saving mechanisms, less water-consuming equipment, and waste disposal sites are costly options. Therefore, hotel owners must conduct a comprehensive return on investment analysis while considering future expenses and environmental advantages.

The second challenge is potential employee resistance. Implementing the green culture can sometimes be met with hostility from workers who are used to the traditional approaches. Nisar et al. (2021) stress that in order to deal with their defiant attitude employees must be involved and trained well enough. The participation of staff in the formulation of eco-friendly regulations, as well as the provision of incentives for sustainable actions can reduce resistance and improve acceptance.

Consistency is another challenge hotels face in their green practices. One of the challenges is coordinating ecological practices across multiple divisions. The need for clear guidelines, performance monitoring, and ongoing support to maintain compliance has been highlighted by Yeşiltaş et al. (2022). Regular evaluation and channels for feedback on mistakes or successes would help organizations improve their environmental practices.

Recommendations for improvement

Hotels should extensively assess their effect on the environment and seek enhancements. Environmental audits alongside sustainability appraisals can aid in collecting information plus designing explicit action plans (dos Santos et al., 2020). Hotels will engage efforts to promote ecological advantages while minimising costs. Investments in human resource development may lead to sustainability implementation through capacity building and employee sensitization. Nisar et al. (2021) point out that continuous training concerning sustainability issues and involving staff members in committee manning of environmental panels is desirable. This will ensure workers possess the knowledge, determination, and skills to help the hotel meet its ecological goals.

Technology results in more efficient and smoother running of programs that assist in protecting the environment. For instance, Ahmed et al. (2021) recommends incorporating energy management systems, water monitoring devices, and waste-tracking software into the same model. Such tools provide immediate feedback, which is vital for optimizing resource utilisation or even conserving them, thus promoting their growth.

Collaboration may increase the probability of success for sustainability initiatives. Hotels can endorse green practices in partnerships with suppliers, local communities, and environmentally concerned non-governmental organizations; as Yousaf et al. (2021) observe, this requires organizations to source materials from suppliers who stock ecologically friendly products. On the other hand, local communities need to engage in sustainable tourism to acquire and exchange knowledge with professionals around them. Notably, such measures can go beyond business-related reasons for collaborating with community members in the journey toward hotel sustainability.

Theoretical analysis

The journey towards sustainability in hotels involves many facets that must be well-balanced for economic, environmental, and social objectives. Such balance is essential since it enables the running of hotels that are not only friendly to the environment but also economically feasible and socially responsible. Important theoretical and practical frameworks exist that underpin this understanding and realisation of sustainable development in the hospitality industry. The current analysis uses the Triple Bottom Line (TBL) as it relates to sustainability in organizations.

The TBL framework was proposed by John Elkington in 1994 (Slaper & Hall, 2011). The theory contains a complete hypothesis of sustainability based on three key pillars: people, planet, and profit. Therefore, hotels can benefit from using the TBL, as it gives them a more complete picture of their operations with respect to sustainability by ensuring that they consider not only social and economic impacts but also environmental issues.

People relate to the social sustainability aspect of the theory. The concept is about how hotels affect their surroundings and those involved negatively or positively (Slaper & Hall, 2011). For instance, organizations may use their corporate social responsibility policies to improve the lives of the communities in which they operate. They can engage in charitable initiatives such as building schools

and hospitals. They can also support local communities by ensuring inclusive workplaces that promote job satisfaction among staff members.

Planet focuses on the environmental sustainability dimension of the theory. The ecological footprint of hotel operations needs to be minimised to realise environmental sustainability (Slaper & Hall, 2011). The goal can be achieved by reducing resource usage, emission levels, and waste generation. For instance, environmental sustainability practices in hotels include using less energy in lighting systems, water conservation mechanisms, recycling used items, or asking guests to be cautious about their carbon footprint. In this way, hotels can do less harm to our planet while also playing a role in achieving these broader sustainability targets.

Profit is the economic sustainability dimension of TBL (Slaper & Hall, 2011). Sustainability in economics is about managing hotels' finances without neglecting their obligation to the environment and society. This means weighing expenses for executing green programs against possible gains like reducing energy and water consumption costs and increasing profits from eco-friendly visitors. A sustainable economy additionally entails extending financial projections for several years so that the gains made through sustainable campaigns can increase the hotel's profits over time and keep it in an advantageous position compared to others within the industry. Support for cost-saving and profitability can be obtained from the Frangipani Langkawi Resort and Spa (figure 3).

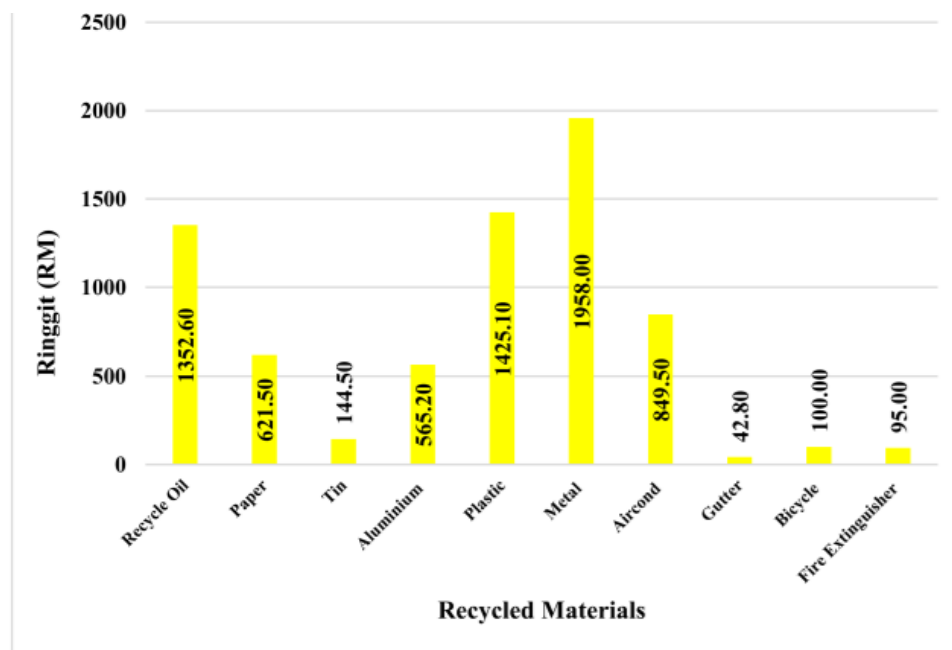


Figure 3: Savings (RM) from recycled materials at Frangipani Hotel, Malaysia, in 2017

Apart from the theories that support sustainability in hotels, there are others that focus on green management, including Resource-Based View (RBV), Stakeholder Theory, and Social Exchange Theory (SET). The RBV theory emphasised that hotels' internal resources and capabilities are the critical factors that would enable them to achieve competitive advantage over other firms (Madhani, 2010). As such, RBV helps hotels gain the upper hand above others through their unique resources, including updated environmental management standards, well-trained staff with sustainable-related skills, and the latest eco-friendly designs. Therefore, hotels invest in these resources to become more sustainable and have distinct identities within the industry.

Stakeholder theory is a concept that Freeman proposed, and it concentrates on the need for all stakeholders, such as customers, employees, suppliers, and the community, among others, to maintain business (Hörisch et al., 2014). In light of green management, hotels must consider expectations from all stakeholders before implementing any environmental policy or practice. There are many benefits associated with including interest parties when designing and executing eco-friendly projects, like enhanced customer loyalty, better employee productivity rates, and more trust. Blau (1964) proposed that Social Exchange Theory implies that the social involvement of individuals is based on their interactions with other individuals or organisations (Thomas & Gupta, 2021). In this view, it indicates that hotels support sustainability through participatory initiatives to develop a strong emotional bond with their stakeholders. For example, by employing eco-friendly approaches, hotels will enhance their reputation, earn admiration from buyers, and win the hearts of locals. Hence, these positive reciprocities will result in loyal patrons who are more satisfied at the workplace while at the same time growing the significance of the brand itself.

Application of theoretical models

The theoretical frameworks can help hotels comprehend the intricate nature of sustainability and develop comprehensive green management plans. Hotels can establish frameworks that would balance the environmental, social, and economic objectives with the help of the TBL, RBV, stakeholder theory, and recommendations from social exchange theorists. This implies that hotels should position themselves to develop and implement sustainability strategies that embody the three pillars of TBL. They can cultivate distinctive capabilities and resources to improve their green management performance. Regarding sustainability initiatives, hotels may involve stakeholders to win or earn their support. They can also respond to institutional pressures and industry norms for compliance purposes and conformity with best practices. Eventually, they make use of sustainability to build positive relationships, improving their reputation and market share. If hotels take a theoretical line towards green management, they would find it easier to navigate the intricacies surrounding it and prosper over time within a highly competitive and ever-changing sector.

Literature search

The literature review exhaustively explores academic articles and case studies on ecosystem evolution and hotel environmental governance. This comprehensive assessment aimed to provide extensive information about sustainable practices and their effects on the hotel sector. This study's pertinent materials were sourced from databases like Google Scholar, EBSCOhost, and JSTOR. Some keywords used to search these sources include sustainable development, green management, hotel sustainability, energy efficiency, water conservation, waste management, leadership, and Green Human Resource Management (GHRM).

The review's examination lists several aspects of sustainability – energy-saving devices, water conservation plans, and proper trash management methods, for example. Besides that, the paper assessed how leadership helps to grow a sense of accountability among workers in a company towards meeting sustainability goals, as well as GHRM's crucial input on additive devices defined by the environment. In addition, this study established some benchmarks apart from previous references throughout the literature that followed up on existing works looking into how green hotel management is faring at present and what is still absent. The identification made by this extensive review serves as a solid basis for studying sustainable practices in accommodation establishments, thus presenting an indisputable way to measure their success and difficulties related to this subject matter.

FINDINGS

The literature demonstrates that green management practices are beginning to be embraced by the hotel industry. A comparison of these sources indicates that environmentally friendly practices benefit the environment, promote personal involvement among employees, and improve organisational competitiveness. Such insights are crucial in grasping green management strategies' general effects and functions on hotels. The findings contain positive environmental impact, comparative analysis, challenges and opportunities, and recommendations.

Positive environmental impact

Investments in energy-saving gadgets, water conservation measures, and waste reduction can help hotels optimize their resources while maintaining low levels of environmental degradation. According to Abdou et al. (2020), energy-efficient lighting systems, HVAC (Heating, Ventilation, and Air Conditioning) appliances, or water-saving fittings are very important in reducing energy and water consumption rates. Therefore, these measures promote sustainability for an extended period at a lower cost. In addition, Ahmed et al.'s (2020) study indicates that using more advanced technologies by green hotels in Malaysia has reduced fuel usage, leading to fewer carbon emissions. Ahmed et al. (2020) reveal that hotel managers can significantly reduce their negative environmental impacts by employing waste reduction strategies such as recycling. For example, in the works of Abdou et al. (2020) and Yeşiltaş et al. (2022), garbage sorting and disposal techniques are aimed at minimising the volume of garbage dumped in landfills. In this way, hotel operators may adopt them to integrate green policies through circular economy programs at their establishments.

Hotels that adopt green practices can gain a competitive advantage in the hospitality industry. Ecologically oriented policies will ensure sustainability and enhance brand equity and market share (Yousaf et al., 2021). Although there is a vanishing real market, hotels are under more pressure to present themselves as green (Yuniati, 2021). In line with that, sustainable hotels have been observed to stand out from their competitors by attracting conscious guests about these matters. Such hotels can distinguish themselves from other hotels and win over customers' hearts when they adopt sustainability principles for their own sake (Yousaf et al., 2021). For example, Yousaf et al. (2021) explain that hotels remain in competition for clients predominantly interested in sustainable operations of tourism. There is little room for competition, as Ahmed et al. argue, because green hospitality providers engage deeply in activities that promote environmental conservation, thus making them attractive to customers.

GHRM improves the ecological performance of hotels through green training and employment involvement, according to Nisar et al. (2021) and Alreahi et al. (2022). Nisar et al. (2021) notes that through green training programs, employees gain the knowledge and skills necessary for integrating sustainability into their workplace cultures. By continuously training their employees on energy efficiency, solid waste disposal methods, and water conservation as prescribed by some brand certificates, hotels can also recruit people who will always ensure eco-friendly behaviour among themselves. Additionally, it should be mentioned that smaller organisations need to know about environmental training, as Alreahi et al. (2022) found out. Understand this argument because such programs make workers more aware of these issues, increasing time spent and improving this world. Recruitment for GHRM signifies a role of employees in promoting sustainability goals in their organisations. One way this can be done is by forming "green" committees, celebrating achievements related to sustainable practices by the hotels, or rewarding employees whose initiatives reduce pollution in their respective areas. Furthermore, Yeşiltaş et al. (2022) state that employee

involvement promotes organisational green culture, leading to high levels of consistency and more effective environmentally friendly behaviours.

Comparative analysis of green practices

Different green practices can be emphasised differently and approached in varying ways. Most of the literature has focused on energy efficiency. For example, Abdou et al. (2020) highlighted the importance of energy efficiency, while Ahmed et al. (2021) discussed the importance of energy-efficient technologies. The former dealt with general measures of saving energy, whereas the latter looked at the extent to which advanced technology could be utilised in green hotels in Malaysia. These two pieces of literature have suggested an excellent potential for reducing power consumption and CO₂ emissions in several ways, such as efficient lighting fixtures, HVAC systems, and water-saving devices.

Abdou et al. (2020) emphasise the importance of water conservation practices while aiming to reduce their usage in hotels. Some may argue that the benefits to be derived from water-saving devices and linen reuse programs are better addressed by Abdou et al. (2020), while others have a different point of view about these devices, for instance, Nisar et al. (2021) who see how green training would help promote them. Explaining these observations could involve specific technology applications and employee education and participation as vital aspects of successful water-saving strategies (Nisar et al., 2021).

Furthermore, waste reduction is another topic in the studies of both Abdou et al. (2020) and Yesiltas et al. (2022). Abdou et al. (2020) present a thorough overview of various methods for reducing waste, such as recycling and reuse. Conversely, Yeşiltaş et al. (2022) demonstrate that an organization can cultivate a green culture, providing the basis for these activities. Thus, effective waste management calls for both approaches to waste reduction and appropriate organizational contexts.

Challenges and opportunities

Implementing green management strategies comes with several challenges and opportunities. Financial investment in green technologies and infrastructure is among the most recognized issues. Abdou et al. (2020) found that installing energy-efficient systems and water-recycling devices is expensive. However, hotels must consider anticipated monetary gains and return on investment (ROI), among other environmental advantages. Also, Ahmed et al. (2021) observe that funding support and revenue incentives ought to be given to facilitate green practices that are being promoted.

Abdou et al. (2020) indicate that many workers have been used to the traditional ways; thus, their transitioning towards environmentally friendly measures may be hampered. Nisar et al. (2021) state that these strategies would help manage any employee resistance by involving them in the process and providing ample training. Thus, hotels can engage their workers in designing green policies and offer incentives for sustainable behaviours to mitigate resistance and foster participation. In agreement with this, Yeşiltaş et al. (2022) show that an organisation's culture supports environmentally friendly practices.

Technology is a significant opportunity to improve the effectiveness of sustainable practices. Ahmed et al. (2021) says that advanced technologies such as energy management systems, water monitoring devices, and waste tracking software can be used in our surroundings. These systems have the potential to provide real-time information, optimise resource consumption, and identify possibilities

for further development. Ahmed et al. (2021) extensively mentions technology's benefits and implementation strategies even if they are acknowledged by all the sources through the comparative assessment.

Recommendations for improvement

There are several suggestions to combat the challenges and improve the implementation of eco-friendly management strategies. All hotels should thoroughly consider their present impact on the environment, followed by a proposal for improvement. Environmental audits and sustainability assessments can provide relevant information to help create specific action plans (Abdou et al., 2020). Safeguarding the business objectives by adopting environmental policies is essential.

Environmental sustainability should be reflected in employees' training programs and educational frameworks (Nisar et al., 2021). Ongoing training on sustainability topics and involving workers in sustainable development committees and seminars can help (Nisar et al., 2021). This is also supported by Alreahi et al. (2022), who indicate that green training elevates employees' ecological awareness and makes them more committed to their companies' conservation efforts.

Green practices' engagement with suppliers, local communities, and environmental bodies/teamwork processes enhances sustainability (Yousaf et al., 2021). For example, supplier collaboration may lead to acquiring eco-friendly products to increase tourism sustainability through local community attachment. At the same time, producers may use partnerships with ecological organisations. Ahmed et al. (2021) have also observed that financial support and other incentives are vital in establishing ecological initiatives and ensuring collaborative efforts.

Experts agree that green hotel practices have positive environmental impacts, increased competitiveness, and employee engagement (Yousaf et al., 2021; Alreahi et al., 2022). Implementing energy-saving technologies, water-saving measures, and waste-reduction strategies make hotels ecologically sustainable. Green brand value and market positions are enhanced through efficient leadership and alignment of green business strategies with environmental policies. Therefore, GHRM practices such as green training and people's involvement at work are essential to ensure that hotel environmental performance remains high (Tanveer et al., 2024). Regardless of the need for initial investment costs or employee resistance, as reported in some sources, comprehensive assessments, training and education programs, or building partnerships have been revealed to improve the implementation of green management strategies. When a hotel chain implements these strategies, it becomes part of sustainable development and increase its ability to provide more eco-friendly services, which society increasingly demands.

DISCUSSION

Embracing green practices within the hospitality sector can bring about distinct benefits like being eco-friendly, having a competitive edge, and better employee relations. The benefits, however, are accompanied by challenges to be tackled collectively by stakeholders, whether managers, employees, or suppliers. This discussion will examine what these conclusions would mean in practice, the challenges to overcome in implementing green practices, and why constant education is vital.

Benefits of green practices

Most of the reviewed sources support the benefits of green practices in hotels (Sharma et al., 2020; Khan et al., 2021; TM et al., 2021). The endorsement of environmentally environment-friendly

practices, including the use renewable energy, eliminating wastefulness and minimising adverse environmental impact, is vital in the modern world. Hotels equipped with appliances that conserve water and energy and an elaborate garbage disposal system enhance sustainability while saving vast amounts of money in the long run. Such hotels contribute towards global sustainable development goals (figure 4) while remaining competitive (Abdou et al., 2020). Generally, green hotels enhance their reputation distinctively, attracting eco-conscious people and making them different from their competitors (Duric & Potočnik Topler, 2021).



Figure 4: Sustainable development goals

Another key benefit is increased employee involvement. For example, applying strategies like green training and employee engagement within a company raises the morale of its staff, leading to allegiance toward sustainable goals (Jamal et al., 2021; Alreahi et al., 2022). Employees who receive feedback from their leaders reporting on the various channels can easily change their attitudes towards environmental conservation. Consequently, this creates an environment that fosters ecological awareness.

Challenges in implementing green practices

While the benefits are clear, there are various challenges to overcome for green management strategies to be successfully integrated. One of the main impediments includes the initial investment required for establishing green technology and infrastructure. According to Abdou et al. (2020), energy-efficient systems such as those used in hotels have a high cost in addition to water-saving devices. Hence, they call for caution when returning on investment since the review would centre more on long-term environmental and financial benefits. In order to mitigate this challenge, Yam (2017) reveals that government organisations should provide financial assistance and incentives to enable people to adopt these environmental practices appropriately.

Another challenge is potential resistance from employees used to the status quo. Nisar et al. (2021) suggest that this opposition can be countered by relevant training and involvement of workers in such changes. Hotels should continue supporting learning initiatives to equip employees with the correct information on how to adopt eco-friendly practices effectively. It is equally important, therefore, for employers to involve their workers in formulating green policies while at the same time

recognising their valuable inputs towards their successful execution to minimise workplace absenteeism due to job dissatisfaction owing to ecological degradation (Yam, 2017).

Importance of continuous education and training

Continuous education and training can solve the knowledge gap by motivating employees to implement sustainable practices successfully. Hotels must keep their staff up-to-date with the latest developments and best practices in environmental regulations and technologies. Green training programs need regular reviews, mainly to reflect new information and innovations on sustainability (Tiwari & Thakur, 2021). Alreahi et al. (2022) point out that continuous learning improves environmental awareness among employees, leading to a more uniform and effective way of doing things regarding green issues. It is also necessary to broaden training beyond the hotel team alone. Other stakeholders like suppliers should also be included. By creating solid bonds between vendors and neighbouring towns, these establishments embrace green living and make people environmentally aware. Also, cooperation with producers on the supply of environmentally friendly goods and working with other communities can enhance the contribution made by going green.

CONCLUSION

Green management techniques are critical for the sustainable growth of hotels. Eco-friendly methods enable hotels to shrink their ecological footprints, contributing to the overall environmental sustainability goals. Some of these methods involve the conservation of energy and water, as well as a reduction of waste. The sustainability actions mitigate adverse environmental impacts, improve market competitiveness, and build strong brands. Consequently, hotel establishments that have adopted such practices are not only aligned with global sustainability initiatives, but also have an advantage over market share because there are consumers motivated by environmental considerations.

However, adopting green management practices faces some challenges in these aspects. Significant amounts of money may be required at the start to implement green technologies and infrastructures that will hinder many hotels. Besides, for successful implementation, it is essential to manage resistance from human resources towards such changes by developing knowledge transfer through ongoing learning programs. This translates into more stringent environmental regulations and new directive standards, adding to existing ones. Hotels should embrace a whole system approach in implementing their green management methods, which would entail investments in sustainable technologies, enhancing employee awareness of environmental responsibility and working in partnership with suppliers and others involved in retrofitted green construction.

Future research needs to concentrate on developing more creative techniques to help solve the problems brought about by green management practices within the hotel sector. Examining ways of reducing costs, identifying new educational approaches, and analysing how changes in legislation influence green initiatives can help promote sustainable development effectively. Besides, best practices for engaging stakeholders and including environmental concerns within the basic operational strategies for hotels may ensure the survival of sustainable development projects in the future.

RECOMMENDATIONS FOR FUTURE RESEARCH

Detailed studies on the financial implications of green practices in hotels should be conducted. The necessity of embracing eco-friendly technologies and practices for the financial welfare of the hotel

industry, as a whole, cannot be overstated, hence creating an intention for more investments into sustainable hotels. Comprehensive cost-benefit analyses to evaluate the required initial investment in green technologies alone and long-term savings related to lower energy, water consumption, and waste management costs should be part of future studies. Such findings would help hotels decide whether to go green by giving them a better understanding of the financial advantages and return on investment they have in the future.

Hotels should focus on developing and evaluating of training programs to improve green skills. The success of eco-friendly management practices largely depends on proper employee training programs. Future studies should seek to develop and evaluate employee training programs to increase their green skills and knowledge. Possible methods of general employee education include workshops, e-learning modules, and hands-on experiences. In addition, research must consider how such programs affect employees' dedication to environmentalism, adherence rates, and overall sustainability performance indicators for hotel establishments.

The role of regulatory structures in promoting green practices within hotels should be examined in the future. The regulatory structure considerably influences the transition to greener practices. As a result, future research should look into the existing environmental regulations and policies within the hotel industry that stimulate voluntary actions toward adopting green practices. Therefore, it is necessary to assess different government incentives, such as grants and laws used by investors in deciding on their sustainable technology options. In addition, it will be necessary for researchers to examine modern policies to unveil any loopholes before proposing new ones aimed at improving sustainability in this area.

Investigations should focus on the impact of green practices on consumer preferences and loyalty. In order to woo environmentally conscious guests, it is essential for hotels to comprehend how green practices influence consumer behaviour. Future research could investigate the impact of different green practices on consumer preferences, booking choices, and brand loyalty. Within this category, it should consider what premium consumers are ready to pay for sustainable services in hotels and their perception of the genuineness and effectiveness of these actions. Such studies enable hotels to get data that they can use to match their sustainability efforts with customer desires to stand better chances of making it big in the market.

Researchers should explore best practices for integrating green management into the core business model. Future studies should consider finding and analysing the best ways of incorporating eco-friendly management techniques into hotel routine functions. To this end, it is necessary to look at successful instances where some hotels have moulded sustainability into their systems and come up with some of the things that led to success in such conversions. It must also be noted that there is a need for research on how hotel green initiatives may be combined with general corporate strategies to attain enduring resilience and an edge above other firms in the industry.

Therefore, the information about all things related to green management will contribute positively to the understanding of practical and financial aspects with regard to the hotel industry, thus improving employees' training programs and urging them to play their part actively in sustainable practices. Establishing strategic policies on sustainability in the hospitality sector would also create a conducive environment for customers and help them understand their behaviour. Consequently, this measure will facilitate easier use and the integration of sustainable means of doing business in the hotel sector, spurring both environmental protection and long-term hotel profits.

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