

# The Effect of Eco-Friendly Interior Designs in the Urban Hotel To Attract Potential Customers

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## Abstract

**Purpose:** The hospitality sector is vital to economic development, especially in metropolitan regions, where hotels are a pivotal factor in drawing in leisure and corporate visitors. Despite the potential advantages of urban hotels, there is a gap in empirical studies on the impacts of eco-friendly interior design on hotel appeal and guest behavior. Therefore, this study aims to fill out the research gap. **Research design, data and methodology:** This study employed a review of the literature systematically as its research design. The study's data collection technique involves exploring peer-reviewed journals through electronic databases like Scopus, and Web of Science. The present author double-checked the quality of instrument for all usable dataset. **Results:** Prior literature has stated a strong linkage between green interior design in urban hotels and customer behavior and hotel attractiveness. Using environmentally conscious methods, hotels can enhance the quality of their indoor atmosphere, preserve energy and water supplies, and establish a favorable public perception that appeals to environmentally aware consumers, thereby improving their overall experience and contentment. **Conclusions:** This study concludes that creating indoor spaces with environmental factors in mind could lead to a more enjoyable and beneficial atmosphere for hotel visitors and adopting a sustainability-oriented approach to hotel design and operations could attract potential customers.

**Keywords :** Urban Hotel Management, Green Interior Design, Hotel Marketing Plan

**JEL Classification Code:** L83, Z32, M31

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## 1. Introduction<sup>a</sup>

As per Chen and Peng (2018), the hotel industry faces mounting pressure to adopt eco-friendly and sustainable practices due to rising customer consciousness and apprehension regarding environmental problems. According to Lee et al. (2019), there has been an increase in the utilization of environmentally sustainable materials, energy-efficient lighting, water-saving fixtures, and other design

elements in the hospitality industry, which aim to minimize the ecological footprint of hotel operations. Urban hotels are deemed suitable for eco-friendly interior design due to their frequent occurrence in densely populated regions with significant foot traffic, consequently subjecting them to higher environmental rules and requirements (Chen & Peng, 2018). Adopting eco-friendly interior design is also advantageous for urban hotels since it can help them draw in clients who care about the environment, enhance their

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brand's reputation, and ultimately boost profitability (Lee et al., 2019). Despite the potential advantages of urban hotels, there is a gap in empirical studies on the impacts of eco-friendly interior design on hotel appeal and guest behavior. Therefore, this study aims to ascertain how eco-friendly interior design affects how appealing urban hotels are to potential guests.

As a result, the research question of the current study can be the following: How does eco-friendly interior design affect the attractiveness of urban hotels to potential customers? And the research object of this study could be the following statements. (1) To identify the benefits of eco-friendly interior design for urban hotels. (2) To assess customer perceptions and preferences towards eco-friendly interior design in urban hotels. (3) To determine how eco-friendly interior design can attract potential customers to urban hotels.

### 1.1. The Significance of the Research

The hospitality sector is vital to economic development, especially in metropolitan regions, where hotels are a pivotal factor in drawing in leisure and corporate visitors. Notwithstanding, the industry is also a significant agent of environmental deterioration, owing to its substantial utilization of energy and water, waste production, and discharge of carbon emissions. In response to these concerns, the hospitality sector has progressively adopted environmentally sustainable measures, such as eco-friendly interior design, to mitigate its ecological impact.

This research holds significance for multiple reasons. The study addresses a gap in the existing literature by presenting empirical evidence regarding the impact of environmentally conscious interior design on the appeal of urban hotels to prospective clientele. Prior research has delved into the effects of ecologically conscious practices on client contentment and loyalty within the hospitality sector. However, scant attention has been devoted to examining the function of sustainable interior design in enticing guests to urban hotels (Park & Kang, 2022). This study contributes to the existing research by investigating the precise impacts of environmentally conscious interior design on the appeal of urban hotels.

The study offers practical implications for hotel managers and designers who aim to enhance the competitiveness of urban hotels in the global market. The study conducted by Aksu et al. (2022) aims to assist hotel managers and designers make informed decisions regarding adopting and implementing eco-friendly interior design practices in their hotels. This is achieved by identifying the benefits of eco-friendly interior design for hotels and evaluating customer perceptions and preferences toward such design features. Consequently, enhancing the hotels'

brand image and reputation, drawing in eco-friendly clientele, and ultimately augmenting profitability can be achieved.

Ultimately, the research holds important ramifications for advancing sustainable development within hospitality. The Sustainable Development Goals (SDGs) outlined by the United Nations are significantly reached by the research conducted by Abdou et al. (2020). The study focuses on adopting ecologically friendly interior design principles in urban lodging facilities, which aligns with Goal 12: Responsibly Sourced Consumption and Production and Goal 13: Climate Action. The research outcomes have the potential to facilitate the advancement of ecologically sustainable tourism practices and incentivize the lodging industry to embrace more sustainable commercial frameworks, thereby contributing to the progression towards a more sustainable and robust hospitality sector.

### 1.2. Scope and Limitations of the Research

The study explores the impact of environmentally conscious interior design on the appeal of urban hotels for prospective clients. The study's objective is to analyze the advantages of environmentally conscious interior design for hotels, evaluate customer attitudes and inclinations towards such design, and measure the potential of eco-friendly interior design to entice potential customers to urban hotels.

To accomplish these goals, the research centers on scholarly articles that have been peer-reviewed and released within the past decade. These articles delve into the correlation between environmentally conscious interior design and the appeal of hotels. The exploration for pertinent articles was restricted to scholarly databases like Google Scholar, ScienceDirect, and JSTOR, utilizing phrases like "eco-friendly, interior design," "green design," "hotel attractiveness," and "customer behavior." The articles were chosen and filtered according to their pertinence to the research study, their approach's soundness, and their outcomes' dependability.

The study's undoing includes the dependence on existing literature and the probably limited selection of existing literature. The analysis aims to assess ecologically conscious interior design in urban hotels thoroughly, but its scope is confined to the examined research. There is a chance that the selected investigations may not provide a comprehensive portrayal of all of the research related to the subject. Furthermore, meaningful research may have been omitted from the analysis due to constraints about language or publication barriers. Moreover, the chosen study may encounter publication prejudice, where research with significant or positive outcomes is more likely to be released, resulting in overestimating the impact of eco-friendly interior design on hotel appeal.

Regardless of these constraints, this investigation offers valuable perspectives on the impact of environmentally conscious interior design on the appeal of city hotels to prospective clients, thereby enabling hotel administrators and designers to enhance their hotels' competitiveness worldwide.

## 2. Literature Review

### 2.1. Definition and Importance of Eco-friendly Interior Design

The eco-friendly interior design incorporates sustainable materials, efficient lighting, water-saving fixtures, and other design elements that minimize the environmental effects of building operations. This statement relates to a set of techniques and approaches intended to restrict the consumption of ecological resources, limit waste production, and enhance the well-being of individuals inhabiting a building (Ozturkoglu et al., 2021). This research conducted introduces a fresh idea for hospitality innovation that prioritizes sustainability and considers the triple bottom line. As per the writers, incorporating eco-friendly interior design is an essential aspect of this structure as it aids in minimizing the ecological consequences of hotel activities and enhancing the health of individuals within the building. The research highlights the necessity for hospitality establishments to implement a comprehensive strategy toward environmental consciousness, encompassing the integration of sustainable interior design methods. The study emphasizes that implementing environmentally conscious interior design can aid hotels in accomplishing their sustainability objectives by decreasing energy usage, water consumption, and waste production. Incorporating eco-friendly materials in interior design may mitigate the adverse effects of hotels on the environment and promote a healthier indoor atmosphere for guests and staff. Environmentally-conscious indoor planning may enhance hotel rooms' visual attractiveness while encouraging eco-friendly tourism methods.

The research conducted by Hou and Wu (2021) highlights the significance of sustainable indoor design in the hospitality sector by examining visitors' attitudes towards environmentally-friendly building design and their inclination to stay in eco-friendly hotels. The research indicates that visitors favor sustainable design, positively impacting their preference for eco-friendly accommodation. In addition, individuals who prioritize the environment may have a positive view of sustainable design and express a greater appreciation for staying in eco-friendly accommodations. The research emphasizes that

implementing sustainable interior design techniques in hotels can greatly influence guests' stay and appeal to eco-minded consumers. Hotels establishments that implement sustainable interior design techniques may lessen their ecological footprint, enhance indoor air quality, and offer clients a pleasant and healthier atmosphere. Through this approach, hospitality businesses can improve the general customer experience and distinguish themselves from rivals in the industry.

Interior design that is friendly to the environment offers numerous advantages to hotels, such as:

a) Decreased operational expenses: By implementing sustainable design elements, hotels can decrease their usage of resources such as water and energy, leading to reduced utility expenses and operating costs (Amandeep, 2017).

b) Enhanced indoor air quality: Environmentally conscious materials and design characteristics can enhance indoor air quality by decreasing harmful chemicals and contaminants (Ozturkoglu et al., 2021).

c) Improved guest experience: Interior design that prioritizes eco-friendliness can enhance the guest experience by creating a pleasant and healthful atmosphere that promotes relaxation and well-being (Hou & Wu, 2021).

### 2.2. Customer Perception and Preference Towards Eco-friendly Interior Design

Interior design that is mindful of the environment is crucial for hotels looking to appeal to eco-friendly customers. As per White et al. (2019), marketers face a significant obstacle in recognizing and comprehending the actions of eco-friendly customers while targeting them. The research emphasizes a lack of consistency in the perception of eco-friendly items and the driving force behind eco-conscious purchasing habits, which can pose difficulties in pinpointing a standardized consumer group. Notwithstanding the challenges in detecting environmentally conscious customers, the research emphasizes that sustainable design can still yield favorable outcomes on customer attitudes and inclinations toward hotels. The study indicates that incorporating sustainable elements like natural lighting, greenery, and eco-friendly materials can positively impact customers' views of hotels and their willingness to spend more on environmentally conscious accommodations. Furthermore, it is highlighted that incorporating sustainable design elements can enhance the guest's overall satisfaction and entice them to visit again.

As per the research (Kim & Kang, 2022), incorporating environmentally conscious design elements can create a more enjoyable and calming atmosphere for visitors, ultimately enhancing their fulfillment and satisfaction. This, conversely, may result in favorable verbal promotion and escalate the probability of recurring trips and

recommendations. Nonetheless, the research underscores that sustainable indoor settings may fail to lure and maintain ecologically aware consumers. The study proposes that hotels proficiently and candidly convey their dedication to the environment to establish a meaningful bond with eco-friendly consumers. Efficient transmission of environmentally conscious design characteristics and their advantages can aid hotels in distinguishing themselves from rivals and boosting their brand allegiance among eco-friendly consumers.

Interior design consciousness of the environment has gained significance for hotels that want to appeal to customers who prioritize eco-friendliness. According to the prior study (Soegoto, 2018), the perception and preference of consumers towards environmentally friendly products and services are influenced by their perception of eco-friendliness and their expectations of product quality. Eco-friendly interior design features, including energy-efficient lighting, fixtures that save water, and eco-friendly materials, may positively impact how customers perceive and prefer hotels. The research emphasizes the significance of customer contentment in the success of sustainable hotels. Additionally, the utilization of environmentally conscious interior design may enhance customer satisfaction. Furthermore, it is highlighted in the research that it is crucial to effectively convey the eco-friendly aspects of interior design to appeal to and maintain the loyalty of environmentally aware consumers. The study implies that hotels must clearly and efficiently communicate their dedication to the environment to establish an empathetic bond with eco-friendly consumers. By emphasizing the advantages of sustainable interior design characteristics, hotels can distinguish themselves from rivals and enhance their brand devotion among eco-aware clients. Nonetheless, the investigation underscores that environmentally friendly indoor design may not suffice to allure and maintain eco-aware clients. The study hints that hotels must consider aspects like customer service, pricing, location, and interior design that are not harmful to the environment. These variables may impact the contentment of consumers and their attitude toward hotels.

Pillai and Junare (2016) found that customers' understanding of environmental issues and willingness to pay more for eco-friendly products affect their choice of them. The study found that quality, safety, and health advantages affect consumers' impressions of eco-friendly items. Consumers consider energy efficiency, recycled materials, and degradability. Interior design features friendly to the environment, like lighting that saves energy, fixtures that conserve water, and eco-friendly materials, may favor how customers perceive and prefer hotels. Additionally, it is highlighted by the research that it is crucial to effectively convey the eco-friendly aspects of

interior design to appeal to and maintain environmentally aware customers. The study proposes that hotels openly and efficiently communicate their dedication to the environment to establish a meaningful bond with eco-friendly consumers. By emphasizing the advantages of sustainable interior design elements, hospitality establishments can distinguish themselves from rivals and enhance their brand allegiance among eco-minded guests.

As the past study (Alfuraty, 2020), multiple factors impact customer perception and preference towards eco-friendly products and services, including but not limited to environmental awareness, sustainability, and energy efficiency. The research emphasizes that incorporating environmentally conscious elements in interior design, such as using sustainable resources, can favor how guests perceive and favor hotels. Sustainable materials have a negligible environmental impact and are environmentally conscious. By incorporating sustainable materials in their interior design, hotels can create an eco-friendly atmosphere and improve their environmental sustainability. This can attract customers who prioritize ecological concerns and bolster brand allegiance. Additionally, it is highlighted in the research that it is crucial to uphold effective communication of eco-friendly interior design features as it is necessary to appeal to and maintain environmentally aware customers. Hotels establishments ought to effectively convey their eco-friendly dedication and utilization of sustainable components to establish a nostalgic bond with eco-conscious guests.

### **2.3. Existing Research on the Effect of Eco-friendly Interior Design on Hotel Attractiveness**

SOP (2020) reviewed hotel design and uncovered several studies on eco-friendly interior design's impact on hotel attractiveness. The study found that incorporating eco-friendly features into the interior design of hotels can positively affect how guests perceive their appeal, giving them a competitive advantage in the field. The report suggests that integrating eco-friendly features into indoor design, like using renewable materials, low-energy lighting, and water-saving fixtures, could positively affect the attractiveness of hotel accommodations. Furthermore, hotels implementing sustainable interior design methods may attract eco-minded consumers and enhance their image as socially aware enterprises. Hayles (2015) conducted a study on environmentally sustainable interior design and identified several factors that can influence the demand for eco-friendly interior design products in the hospitality industry. The research discovered that the hotel's appeal could be enhanced by incorporating environmentally conscious indoor design elements, like using sustainable resources and energy-saving illumination. The study

emphasizes that multiple factors, including customer education, pricing, accessibility, and promotion impact the interest in environmentally conscious interior design items in the hospitality sector. Hotels establishments that implement sustainable interior design methods have the potential to distinguish themselves from rivals and draw in consumers who prioritize environmental sustainability. Nonetheless, it has been observed that the accessibility and expenses related to environmentally conscious interior design commodities may pose an obstacle for hotels to incorporate them.

A study was conducted by Moise et al. (2021) to analyze the significance of eco-friendly measures among hotel visitors and to determine if gender plays a role in their viewpoints. The research discovered that sustainable methods, such as sustainable interior design, are greatly appreciated by hotel visitors and can favorably impact their perception of hotel appeal. The study emphasizes that incorporating environmentally conscious elements in interior design, like using sustainable resources and energy-saving illumination, can enhance the guests' contentment and simplicity by creating a serene and enjoyable ambiance. Implementing sustainable interior design techniques may improve the image of hotels as eco-friendly establishments, drawing in guests who prioritize environmental consciousness. Additionally, the research discovered that the perception of eco-friendly practices is influenced by gender, as female guests tend to prioritize eco-friendliness more than male guests. This implies that hotels implementing environmentally conscious interior design methods could potentially gain an edge in appealing to female guests.

Chan (2018) examined variables impacting the intention to revisit eco-friendly resorts, with customer satisfaction as a mediator. The research discovered that certain design elements, such as those promoting environmental sustainability, favorably impact customer contentment and can potentially increase return visits. The study emphasizes that incorporating environmentally conscious elements into the interior design, such as using sustainable resources and energy-saving illumination, can improve the guest's overall stay and foster a favorable impression of the hotel rooms. Interior design practices that are mindful of the environment may enhance the image of hotels as socially responsible establishments, potentially drawing in consumers who prioritize eco-friendliness. Additionally, the researchers discovered that customer contentment is a mediator in the correlation between environmentally-conscious design characteristics and the intention to revisit. Hotels implementing environmentally conscious interior design methods may enhance customer contentment, ultimately resulting in an increased likelihood of return visits.

## 2.4. Research Gap

Although some research has been conducted on the impact of environmentally conscious interior design on hotel appeal, there remains a shortage of investigation into its influence on consumer behavior. As mentioned by the prior study (Kim & Heo, 2021) recent publication, research is scarce on the correlation between eco-friendly interior design and customer behavior, indicating a gap in the existing literature. Furthermore, despite previous investigations into the impact of environmentally conscious interior design on hospitality establishments, insufficient attention has been given to the analysis of urban hotels. As per Kim and Kang (2022), there is a lack of research on eco-friendly interior design in urban hotels, as most studies have focused on resort settings.

## 2.5. Justification for the Current Study

Urban hotels are reputed for their significant ecological footprint, rendering environmentally conscious indoor styling methodologies indispensable in mitigating their unfavorable effect on the ecosystem. As per Mital et al. (2020), certain design practices for interiors can contribute to the betterment of the environment by decreasing the usage of natural resources, reducing waste generation, and enhancing the health and well-being of individuals residing in the building. Thus, additional investigation is required to examine the impact of environmentally conscious interior design on urban hotels. Comprehending the impact of ecologically conscious interior design on hotel appeal and client behavior may hold practical consequences for hotel professionals. Per Yadegaridehkordi et al. (2021), hotels can gain a competitive edge by implementing eco-friendly interior design practices that appeal to environmentally aware customers who prioritize eco-friendly products and services.

## 3. Research Method

This segment outlines the approach employed in this research to examine the impact of environmentally conscious indoor design in urban hotels to entice prospective clients.

### 3.1. Research Design and Approach

The study employed a review of the literature systematically as its research design. As per Pahlevan-Sharif et al. (2019), specific steps can be followed to conduct a comprehensive literature review, a rigorous approach to reviewing prior studies. This approach helps in minimizing

bias. This methodology is well-suited for the current investigation as it facilitates identifying and examining pertinent research on the impact of environmentally conscious interior design in metropolitan hotels.

### 3.1.1. Data Collection Methods and Sources

The study's data collection technique involves exploring peer-reviewed journals through electronic databases like Google Scholar, Scopus, and Web of Science. The exploration was carried out utilizing a blend of terms like "eco-friendly indoor design," "urban hotels," "customer behavior," and "hotel attractiveness." The criteria for selecting prior studies were limited to peer-reviewed journals written in English that focused on the impact of eco-friendly interior design in urban hotels on customer behavior and hotel attractiveness. The inclusion criteria encompassed studies that solely concentrated on accommodations apart from resorts, lodges, and motels (Phommahaxay et al., 2019; Woo & Kang, 2021; Nantharath et al., 2016).

### 3.1.2. Data Analysis Techniques

The study employed specific techniques for analyzing data, which involved a qualitative content analysis and a thematic analysis. The content analysis will identify pertinent research following the inclusion and exclusion criteria. The thematic analysis method will extract and categorize themes and concepts from the chosen studies.

Content analysis is a common research technique that systematically examines qualitative data to detect trends, themes, and significance. This study will use content analysis to analyze the information obtained from previous research. To maintain confidence in the outcomes, the content assessment will be carried out by a duo of unaffiliated evaluators. Adopting dual evaluators is intended to reduce partiality and enhance the authenticity of the outcomes. All reviewers will agree to discussion and consensus. This procedure shall guarantee that the evaluation is uniform, trustworthy, and can be replicated. Using a pair of reviewers further enables a comprehensive assessment of the information since diverse viewpoints and understandings can be obtained. Content analysis will require detecting significant patterns and themes in the data, along with exploring the connections between these themes and the study's research questions (Erlingsson & Brysiewicz, 2017). The presentation of the content analysis outcomes will be done concisely.

Thematic analysis is a method of identifying patterns and themes within qualitative data. The data from the chosen previous studies will be analyzed using thematic analysis. The objective is to detect prevalent patterns and ideas that arise from the information and to apply these patterns to offer an understanding of the impact of environmentally

conscious indoor design in urban hotels on consumer behavior and hotel appeal. The assessment will require identifying and encoding crucial ideas and patterns throughout the chosen research. The classification and summary of these themes will ensure a succinct and unambiguous representation of the discoveries. Implementing the thematic analysis technique can facilitate a comprehensive investigation of the information, as it can detect connections and trends that may not be readily observable from separate studies (Castleberry & Nolen, 2018; Nguyen et al., 2022).

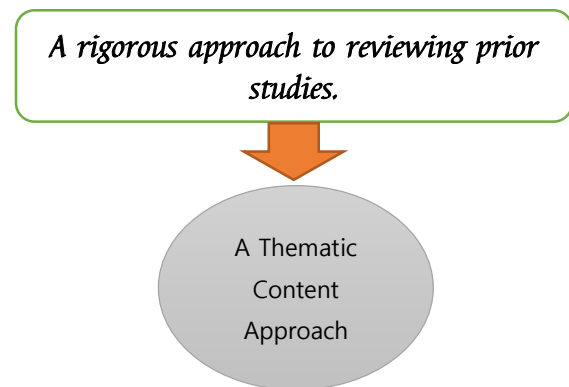


Figure 1 : Research Method

## 4. Research Findings

### 4.1. Effect 1: Improved Indoor Air Quality

Enhancing indoor air quality is a notable outcome of implementing eco-friendly interior design in urban hotels (Mata et al., 2021). Inadequate indoor air quality may result in health concerns such as respiratory complications, migraines, and hypersensitive reactions. Creating indoor spaces with environmental factors in mind could lead to a more enjoyable and beneficial atmosphere for visitors, as per research conducted by the previous work (Yu et al., 2020).

#### 4.1.1. Reduced VOC Emissions

Substances in various household items like paints, carpets, and furniture may contain VOCs. Recent research (Hernandez et al., 2020) has brought attention to the possible adverse effects of these compounds on indoor air quality and human health. Decorating indoor spaces in city hotels can reap advantages by utilizing paints and adhesives with low-VOC content and natural materials that do not discharge detrimental substances into the atmosphere, leading to a decline in VOC discharges. Specific research carried out by

Chan et al. (2009) discovered that the application of paints with low levels of VOC in hotel rooms caused a decrease in VOC levels, leading to better indoor air quality.

#### 4.1.2. Increased Use of Natural Ventilation

Promoting natural ventilation is one potential method for enhancing indoor air quality via eco-conscious interior design. Fresh air circulation can be facilitated by incorporating design elements such as operable windows and natural ventilation systems. Air quality improvement can be achieved through natural ventilation, leading to a healthier and more pleasant environment for guests (Chenari et al., 2016). A study by Chen (2009) discovered that implementing natural ventilation systems in hotel rooms significantly enhanced indoor air quality.

#### 4.1.3. Integration of Greenery and Biophilic Design

Using natural elements and biophilic design can enhance the air quality of indoor spaces in urban hotels (Song et al., 2022). The nature-inspired design integrates natural components like flora and organic substances into constructed areas. Such measures may enhance air quality by decreasing the concentration of harmful substances and improving the volume of oxygen in the atmosphere. According to recent research by Song et al. (2022), incorporating biophilic design in hotel rooms resulted in notable enhancements in indoor air quality, along with various other advantages, including decreased anxiety levels and increased contentment of guests. The combination of flora and fauna design can also result in a more appealing and hospitable environment for visitors, enhancing the overall desirability of the hotel rooms.

## 4.2. Effect 2: Energy Conservation

### 4.2.1. Use of Energy-Efficient Lighting

Efficient lighting is a crucial aspect of environmentally conscious interior design for urban-based hotels. Cutting-edge lighting technologies such as LED and CFL bulbs display a lower energy usage rate than conventional incandescent bulbs. Additionally, they have a longer lifespan, reducing the frequency of required replacements. The utilization of occupancy sensors, timers, and dimmer switches additionally boosts energy efficiency by guaranteeing that illumination is solely employed when necessary. According to research conducted by the study (Pace, 2016), the implementation of power-saving lighting had a notable impact on clients' contentment and their perception of environmental consciousness in the hospitality industry. The report stated a correlation between sustainable features, such as energy-efficient lighting, in hotel rooms and increased customer willingness to pay.

### 4.2.2. Use of Renewable Energy Sources

Implementing alternative energy sources like geothermal, wind, and solar energy is a growing trend in sustainable indoor design for urban-based hotels (Bajpai & Dash, 2018). Sustainable energy sources have the potential to decrease the environmental impact of hospitality establishments and offer a dependable and economical energy solution. A review conducted by Navratil et al. (2019) revealed that eco-friendly guests consider using sustainable energy sources a crucial aspect when choosing hotels. The study revealed a higher probability of guests opting for hotels that utilized sustainable energy sources instead of those that did not.

### 4.2.3. Integration of Smart Building Technologies

Advanced building technologies like automation, energy management, and occupancy sensors can significantly improve energy efficiency in environmentally conscious hotels. These systems adjust lighting, heating, and cooling based on occupancy levels and time of day to improve energy efficiency. Recent research (Kim & Kang, 2022) explored the potential impact of eco-friendly artwork on urban hotels' appeal to environmentally conscious consumers. The study discovered that incorporating advanced building systems was crucial in enhancing the apparent sustainability of hotels and drawing in ecologically aware consumers.

## 4.3. Water Conservation

A key component of eco-friendly hotel interior design is water saving. Hotels can save water by utilizing low-flow fixtures, reusing greywater, and collecting rainwater, according to a Tirado et al. (2019) study. The three subtitles that offer proof of how eco-friendly interior design can encourage water saving in urban hotels are as follows:

### 4.3.1. Use of Low-Flow Fixtures

Resource consumption in hospitality establishments may be decreased by adopting low-flow fixtures, including low-flow showerheads, toilets, and faucets. According to a study conducted by Hadengue et al. (2022), it has been suggested that the implementation of low-flow fixtures could lead to a notable reduction in water usage, with a possible decrease of up to 50%. These fittings can help eco-friendly hotels save water and lessen their environmental effect.

### 4.3.2. Recycling of Greywater

Greywater is used for non-potable uses like irrigation, toilet flushing, and cleaning. It comes from sources like sinks, showers, and washing machines. According to a study by Atanasova et al. (2017), reusing greywater can drastically reduce hotel water. Eco-friendly hotels can use greywater

recycling systems to save water and lessen the amount of wastewater transferred to treatment facilities.

#### 4.3.3. Rainwater Harvesting

To utilize rainwater for tasks such as irrigation, toilet flushing, and cleaning, it is necessary to gather and retain it. Recent research by Teston et al. (2022) suggests that installing rainwater harvesting systems in hotels can significantly reduce water consumption and the demand for drinkable water. Environmentally conscious hotels can collect rainwater to supplement their water supply and lessen their environmental effect.

#### 4.4. Positive Brand Image and Customer Attraction

Implementing eco-friendly interior design in urban hotels has been found to impact the brand image and customer attraction positively. This effect is achieved through improved reputation, increased attractiveness to eco-conscious customers, and enhanced customer experience and satisfaction.

##### 4.4.1. Improved Reputation and Customer Loyalty

Research has indicated that a hotel's positive perception among customers can be influenced by its eco-friendliness (Han et al., 2009). Using environmentally conscious interior design may enhance a hotel's image as a socially aware enterprise, resulting in higher customer allegiance and favorable verbal endorsements (Han et al., 2009). The impact can be increased if the hotel disseminates its eco-friendly initiatives to its guests through different means, including its online portal, social networking sites, and printed materials inside the rooms.

##### 4.4.2. Increased Attractiveness to Eco-Conscious Customers

Customers concerned about the environment are rising in the hospitality sector, and incorporating sustainable interior design can play a crucial role in drawing in these consumers. Research has indicated that consumers are willing to spend extra for a stay in an environmentally conscious hotel (Baker, 2014), and sustainable design elements like energy-saving illumination and water-conserving fixtures may influence their selection of hotel rooms.

##### 4.4.3. Improved Customer Experience and Satisfaction

Adopting environmentally conscious indoor planning may enhance the general client encounter and contentment. Research has indicated that guests perceive environmentally conscious hotels as superior quality and provide a more comfortable and soothing atmosphere (Ban et al., 2017). The utilization of natural elements and biophilic design has been observed to have a favorable effect on customer contentment

and welfare. Furthermore, using natural illumination and substances in sustainable indoor design planning may establish a tranquil ambiance. Incorporating environmentally conscious interior design may enhance client contentment and result in favorable feedback and recurring relationships.

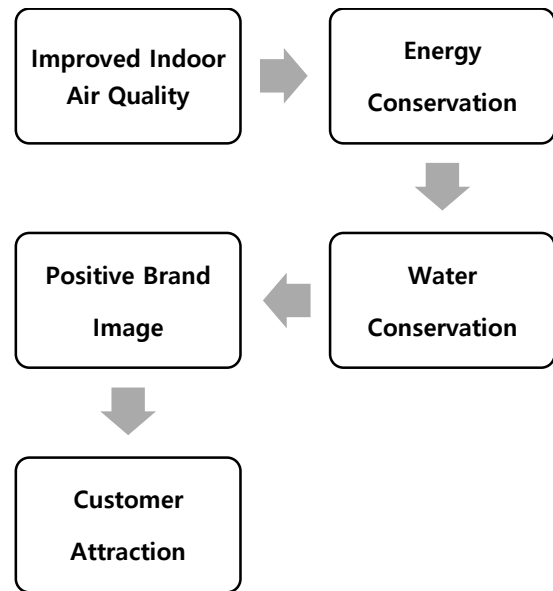


Figure 2: Summarized Figure of Findings

#### 5. Implications for Practitioners

The previous section highlighted the four effects of eco-friendly interior design in urban hotels. Within this segment, we shall examine the implications of these discoveries for professionals operating in the hospitality sector. Our report will briefly summarize the results and their significance, along with recommendations for incorporating environmentally conscious interior design in urban hotels and tactics for advertising and endorsing eco-friendly behaviors to draw in clients.

The study suggests a correlation between eco-friendly interior design in urban hotels and customer behavior and hotel attractiveness. Using environmentally conscious methods, hotels can enhance the quality of their indoor atmosphere, preserve energy and water supplies, and establish a favorable public perception that appeals to environmentally aware consumers, thereby improving their overall experience and contentment.

Practitioners in the hospitality industry can implement the eco-friendly interior design in urban hotels by adopting a sustainability-oriented approach to hotel design and



operations. This can involve using environmentally sustainable materials, installing energy-efficient lighting and fixtures, integrating smart building technologies, and incorporating greenery and biophilic design into hotel interiors. Training hotel staff on eco-friendly practices and promoting sustainability to guests through signage, educational materials, and other communication channels is also essential.

Practitioners in the hospitality industry can market and promote eco-friendly practices to attract customers by highlighting their sustainability efforts and initiatives. The hotel's commitment to sustainability can be demonstrated by utilizing eco-friendly certifications and ratings, such as Green Key and LEED. Hotels may also publicize their environmentally conscious initiatives via online platforms, advertising campaigns, and promotional activities. Promoting environmentally conscious practices and integrating sustainability into the hotel's brand identity is crucial for effective customer communication.

The study's results imply that implementing environmentally conscious interior design in urban hotels can bring advantages to the environment and the hospitality sector. Operators within the hospitality sector can incorporate ecologically conscious methodologies and approaches to enhance client experience and contentment, entice environmentally aware consumers, and establish a favorable corporate identity. By implementing eco-friendly practices in hotel design and operations, hotels can support the worldwide initiative to encourage sustainable tourism and establish a greener future.

## 6. Limitations and Conclusions

The study's potential limitations should not be overlooked. Initially, peer-reviewed journals were examined for pertinent literature, potentially missing considerable research discovered in alternative sources such as conference proceedings or industry reports. Furthermore, the analysis failed to consider additional factors that may influence consumer actions, like cost or geographic location and instead focused solely on how environmentally conscious interior design can influence the attractiveness of urban-based hotels to prospective customers. Furthermore, the research did not analyze the actual actions of customers when choosing environmentally conscious hotels; instead, it exclusively concentrated on how individuals perceived and favored eco-friendly indoor decoration.

Potential areas for further investigation may involve a deeper examination of the various elements that impact consumer decision-making when selecting environmentally conscious hotels. This could encompass geographical proximity, cost, and additional eco-friendly initiatives like sustainable waste disposal and responsible food purchases.

Furthermore, it may be worthwhile for upcoming investigations to consider alternative parties' viewpoints, including hotel managers and proprietors, when executing environmentally conscious procedures. It is also important to acknowledge the possible obstacles and compromises that may arise with these practices. Ultimately, it may be worthwhile for forthcoming investigations to consider the possibility of innovations and materials to enhance the eco-friendliness and appeal of urban hotels.

In brief, the ongoing study examined the influence of eco-friendly interior design in urban hotels on client behavior and hotel appeal. Reviewing previous studies has determined that implementing environmentally conscious interior design within urban hotels yields four main benefits: improved indoor air quality, decreased energy and water consumption, and a positive brand reputation that draws in clients.

The discussion centered on the hypothetical and applied consequences of the findings. Recommendations were made to incorporate environmentally conscious interior design in city hotels and advertise eco-friendly practices to entice customers. Nonetheless, the research also detected probable constraints, like the limited scope of the incorporated studies and the dependence on self-reported data.

The current research adds to the existing literature by presenting a thorough summary of the impacts of environmentally conscious indoor design in urban hotels and emphasizing the necessity for additional investigation in this domain. Further research is needed to examine the enduring consequences of environmentally conscious interiors in urban hotels and their influence on customer allegiance and economic viability.

Therefore, sustainable interior design in urban hotels is crucial to environmental and economic sustainability. By incorporating sustainable measures, hotels can decrease their ecological footprint while drawing and maintaining customers that prioritize eco-friendliness. Thus, hotel managers and practitioners should consider environmentally conscious interior design to enhance customer satisfaction and brand image.

## References

- Abdou, A. H., Hassan, T. H., & El Dief, M. M. (2020). A description of green hotel practices and their role in achieving sustainable development. *Sustainability*, 12(22), 9624.
- Aksu, A., Albayrak, T., & Caber, M. (2022). Hotel customer segmentation according to eco-service quality perception: the case of Russian tourists. *Journal of Hospitality and Tourism Insights*, 5(3), 501-514.
- Alfuraty, A. B. (2020). *Sustainable Environment in Interior Design: Design by Choosing Sustainable Materials*. In IOP conference

- series: materials science and engineering (Vol. 881, No. 1, p. 012035). IOP Publishing.
- Amandeep, A. (2017). Green hotels and sustainable hotel operations in India. *International Journal of Management and Social Sciences Research*, 6(2), 9-16.
- Atanasova, N., Dalmay, M., Comas, J., Poch, M., Rodriguez-Roda, I., & Buttiglieri, G. (2017). Optimized MBR for greywater reuse systems in hotel facilities. *Journal of environmental management*, 193, 503-511.
- Bajpai, P., & Dash, V. (2018). Hybrid renewable energy systems for power generation in stand-alone applications: A review. *Renewable and Sustainable Energy Reviews*, 16(5), 2926-2939.
- Baker, M. A., Davis, E. A., & Weaver, P. A. (2014). Eco-friendly attitudes, barriers to participation, and differences in behavior at green hotels. *Cornell Hospitality Quarterly*, 55(1), 89-99.
- Ban, J., & Ramsaran, R. R. (2017). An exploratory examination of service quality attributes in the ecotourism industry. *Journal of Travel & Tourism Marketing*, 34(1), 132-148.
- Castleberry, A., & Nolen, A. (2018). Thematic analysis of qualitative research data: Is it as easy as it sounds?. *Currents in pharmacy teaching and learning*, 10(6), 807-815.
- Chan, S. (2018). Factors affecting revisit intention with customer satisfaction as a mediating variable in eco friendly resorts. *Jurnal Manajemen Inovasi*, 9(1), 1-13.
- Chan, W., Lee, S. C., Chen, Y., Mak, B., Wong, K., Chan, C. S., ... & Guo, X. (2009). Indoor air quality in new hotels' guest rooms of the major world factory region. *International Journal of Hospitality Management*, 28(1), 26-32.
- Chen, A., & Peng, N. (2018). Green hotel knowledge and tourists' staying behavior. *Annals of Tourism Research*, 39(4), 2211-2219.
- Chen, Q. (2009). Ventilation performance prediction for buildings: A method overview and recent applications. *Building and environment*, 44(4), 848-858.
- Chenari, B., Carrilho, J. D., & da Silva, M. G. (2016). Towards sustainable, energy-efficient and healthy ventilation strategies in buildings: A review. *Renewable and Sustainable Energy Reviews*, 59, 1426-1447.
- Erlingsson, C., & Brysiewicz, P. (2017). A hands-on guide to doing content analysis. *African journal of emergency medicine*, 7(3), 93-99.
- Hadengue, B., Morgenroth, E., & Larsen, T. A. (2022). Screening innovative technologies for energy-efficient domestic hot water systems. *Journal of Environmental Management*, 320, 115713.
- Han, H., Hsu, L. T. J., & Lee, J. S. (2009). Empirical investigation of the roles of attitudes toward green behaviors, overall image, gender, and age in hotel customers' eco-friendly decision-making process. *International journal of hospitality management*, 28(4), 519-528.
- Hayles, C. S. (2015). Environmentally sustainable interior design: A snapshot of current supply of and demand for green, sustainable or Fair Trade products for interior design practice. *International Journal of Sustainable Built Environment*, 4(1), 100-108.
- Hernandez, G., Wallis, S. L., Graves, I., Narain, S., Birchmore, R., & Berry, T. A. (2020). The effect of ventilation on volatile organic compounds produced by new furnishings in residential buildings. *Atmospheric Environment: X*, 6(April), 100069.
- Hou, H., & Wu, H. (2021). Tourists' perceptions of green building design and their intention of staying in green hotel. *Tourism and Hospitality Research*, 21(1), 115-128.
- Kim, J., & Heo, W. (2021). Interior Design with Consumers' Perception about Art, Brand Image, and Sustainability. *Sustainability*, 13(8), 4557.
- Kim, J., & Kang, E. (2022). An Empirical Study of How Both Environmental Awareness and Interest in Artwork Can Be Incorporated into the Interior Design of Urban Hotels. *Sustainability*, 14(2), 1005.
- Lee, J. S., Hsu, L. T., Han, H., & Kim, Y. (2019). Understanding how consumers view green hotels: how a hotel's green image can influence behavioural intentions. *Journal of sustainable tourism*, 18(7), 901-914.
- Mata, T. M., Oliveira, G. M., Monteiro, H., Silva, G. V., Caetano, N. S., & Martins, A. A. (2021). Indoor Air Quality Improvement Using Nature-Based Solutions: Design Proposals to Greener Cities. *International Journal of Environmental Research and Public Health*, 18(16), 8472.
- Mittal, R., Maheshwari, R., Tripathi, S., & Pandey, S. (2020). Eco-friendly dentistry: Preventing pollution to promoting sustainability. *Indian Journal of Dental Sciences*, 12(4), 251-257.
- Moise, M. S., Gil-Saura, I., & Ruiz Molina, M. E. (2021). The importance of green practices for hotel guests: does gender matter?. *Economic Research-Ekonomska Istrazivanja*, 34(1), 3508-3529.
- Nantharath, P., Kang, E. G., & Hwang, H. J. (2016). Investment Analysis in the Hydroelectric Power Sector of the Lao People's Democratic Republic (Lao PDR). *Journal of Distribution Science*, 14(8), 5-8.
- Navratil, J., Picha, K., Buchecker, M., Martinat, S., Svec, R., Brezinova, M., & Knotek, J. (2019). Visitors' preferences of renewable energy options in "green" hotels. *Renewable energy*, 138, 1065-1077.
- Nguyen, L. T., Nantharath, P., & Kang, E. (2022). The sustainable care model for an ageing population in Vietnam: Evidence from a systematic review. *Sustainability*, 14(5), 2518.
- Ozturkoglu, Y., Sari, F. O., & Saygili, E. (2021). A new holistic conceptual framework for sustainability oriented hospitality innovation with triple bottom line perspective. *Journal of Hospitality and Tourism Technology*, 12(1), 39-57.
- Pace, L. A. (2016). How do tourism firms innovate for sustainable energy consumption? A capabilities perspective on the adoption of energy efficiency in tourism accommodation establishments. *Journal of Cleaner Production*, 111, 409-420.
- Pahlevan-Sharif, S., Mura, P., & Wijesinghe, S. N. (2019). A systematic review of systematic reviews in tourism. *Journal of Hospitality and Tourism Management*, 39, 158-165.
- Park, J. E., & Kang, E. (2022). The Mediating Role of Eco-Friendly Artwork for Urban Hotels to Attract Environmental Educated Consumers. *Sustainability*, 14(7), 3784.
- Phommahaxay, S., Kamnuansipla, P., Draper, J., Nantharath, P., & Kang, E. (2019). Preparedness of Lao People's Democratic Republic to Implement ASEAN Common Visa (ACV). *Research in World Economy*, 10(3), 419-430.
- Pillai, P., & Junare, S. O. (2016). A study on consumers' perception towards eco-friendly products in Ahmedabad. *International Journal of Research in IT and Management*, 6(7),

14-28.

- Soegoto, D. S. (2018, November). *Analysis of eco-friendly preference and eco-friendly product quality; their implications to customer satisfaction*. In *IOP Conference Series: Materials Science and Engineering* (Vol. 434, No. 1, p. 012164). IOP Publishing.
- Song, C., Ali, F., Cobanoglu, C., Nanu, L., & Lee, S. H. J. (2022). The effect of biophilic design on customer's subjective well-being in the hotel lobbies. *Journal of Hospitality and Tourism Management*, 52, 264-274.
- SOP, S. A. (2020). A systematic literature review on hotel design. *Turizm Akademik Dergisi*, 7(2), 297-310.
- Teston, A., Piccinini Scolaro, T., Kuntz Maykot, J., & Ghisi, E. (2022). Comprehensive Environmental Assessment of Rainwater Harvesting Systems: A Literature Review. *Water*, 14(17), 2716.
- White, K., Hardisty, Ds. J., & Habib, R. (2019). The elusive green consumer. *Harvard Business Review*, 11(1), 124-133.
- Woo, E. J., & Kang, E. (2021). The effect of environmental factors on customer's environmental protection pattern: An empirical text analysis in the literature. *International Journal of Environmental Sciences*, 7(1), 1-15.
- Yadegaridehkordi, E., Nilashi, M., Nasir, M. H. N. B. M., Momtazi, S., Samad, S., Supriyanto, E., & Ghabban, F. (2021). Customers segmentation in eco-friendly hotels using multi-criteria and machine learning techniques. *Technology in Society*, 65, 101528.
- Yu, J., Ariza-Montes, A., Hernández-Perlines, F., Vega-Muñoz, A., & Han, H. (2020). Hotels' eco-friendly physical environment as nature-based solutions for decreasing burnout and increasing job satisfaction and performance. *International Journal of Environmental Research and Public Health*, 17(17), 6357.