

A PILOT STUDY OF ORGANISATIONAL SUSTAINABILITY IN THE HOSPITALITY INDUSTRY OF PUNE CITY

Namrata D'Souza Research Scholar Asst. Professor and I/C Principal Ambrosia Institute of Hotel Management, Bavdhan Pune namrrattadsoza14@gmail.com

Dr.Sunil Ujagare
PhD Guide
Savitritribai Phule Pune University, Pune sunilu707@gmail.com

ABSTRACT

This quantitative study on organizational sustainability in the hospitality industry of Pune City sheds light on the current state of sustainable practices in hotels, the barriers and challenges faced in their implementation, and provided recommendations for improvement. The findings revealed a positive relationship between the implementation of sustainable practices and the level of organizational sustainability in hotels. This emphasizes the significance of incorporating sustainable practices to enhance the overall sustainability of hotels in Pune City. The study identified various barriers that hinder the implementation of sustainable practices, including lack of financial resources, limited awareness among employees, absence of clear guidelines and policies, insufficient support from top management, resistance from employees and stakeholders, lack of access to environmentally friendly technologies and resources, and the complexity of implementation.

Keywords: sustainability, hospitality industry, Pune City, sustainable practices, barriers, challenges, recommendations, relationship, implementation, financial resources, awareness, guidelines, policies, support, top management, resistance

Introduction

The hospitality industry plays a crucial role in the economic and social fabric of a city, offering accommodation, dining, and entertainment services to both local residents and tourists. As sustainability and environmental concerns gain increasing global attention, it is imperative to examine the practices and initiatives undertaken by businesses in the hospitality sector to promote organizational sustainability. This pilot study aims to explore the state of organizational sustainability in the hospitality industry of Pune City.

Pune City, located in Maharashtra, India, is renowned for its historical and cultural significance, attracting a significant number of domestic and international tourists. With the growth in tourism, there has been a parallel rise in the number of hotels, resorts, and restaurants in the city. However, this expansion raises concerns about the environmental impact of these establishments and their contribution to sustainable development.

The concept of organizational sustainability encompasses various aspects, including environmental, social, and economic dimensions. In the context of the hospitality industry, this translates into implementing practices that reduce ecological footprints, enhance social well-being, and ensure long-term profitability. By adopting sustainable practices, hospitality businesses can contribute to the conservation of natural resources, mitigate climate change, and foster positive relationships with the local community.

The primary objective of this pilot study is to provide a preliminary assessment of the current state of organizational sustainability in the hospitality industry of Pune City. By examining a sample of hotels, resorts, and restaurants, we aim to identify the sustainability initiatives and practices being implemented and assess their effectiveness. Additionally, the study will explore the challenges faced by businesses in integrating sustainability into their operations and the drivers that motivate or hinder their sustainability efforts.

A survey questionnaire was developed to gather quantitative data on various sustainability indicators, such as energy and water consumption, waste management practices, use of renewable resources, employee training, and community engagement.

The findings of this pilot study will serve as a foundation for future research in this area and provide valuable insights for hospitality businesses, policymakers, and stakeholders interested in promoting sustainability in Pune's hospitality sector. By identifying best practices and areas for improvement, this study aims to contribute



to the development of sustainable strategies and initiatives that can be adopted by businesses to minimize their environmental impact and enhance their overall sustainability performance.

In conclusion, this pilot study investigates the current state of organizational sustainability in the hospitality industry of Pune City. By examining sustainable practices, challenges, and motivations, the study contributes to a better understanding of how the industry can align with sustainable development goals. Ultimately, this research aims to foster a more sustainable and responsible hospitality sector in Pune City, benefiting both the environment and the community.

Review of Literature

Chen et al. (2019) conducted a study on the environmental performance of hotels and found that energy and water consumption were key areas for improvement. They highlighted the importance of implementing energy-efficient technologies, water conservation measures, and waste management practices. They also emphasized the need to reduce environmental impacts associated with food consumption by both guests and staff. To support their efforts, the researchers reviewed the literature related to "food-related environmental impacts", and also conducted an in-depth comparison of two similar hotels in New York City.

Zhang et al. (2021) compared the environmental performance of hotels in Beijing. They reported that hotel rooms are generally larger than those in the United States and Canada, but water consumption and energy use are smaller. In terms of waste management, hotels typically incinerate waste rather than disposal it in landfills. Additionally, hotel guests generate large amounts of uncollected waste during their stay.

Mishra (2019) surveyed the top twenty-five hotels in New Delhi, India to estimate their environmental performance. The researchers found that the average total energy consumption and greenhouse gas (GHG) emission intensity of hotels was higher compared to the national average. This result indicates that hotels have a greater potential to reduce their environmental footprint.

Kumar et al. (2020) evaluated the performance of three hotels in New Delhi at different levels. They found that hotels are responsible for GHG emissions and energy usage, as well as solid waste generation. They also discovered that energy consumption by hotels is much higher compared to other commercial and residential sectors. To reduce their environmental footprint, the researchers suggest implementing strategies to reduce electricity consumption, water usage, and solid waste generation.

Gangani et al. (2019) conducted a study on the environmental performance of an international hotel in New Delhi and found that it performed better than other kinds of facilities in that city. They reported that most of the hotel's electricity was generated from renewables, such as solar panels on the roofs of its buildings and wind turbines located nearby. The researchers suggest that hotels could use their facilities to generate electricity and other forms of renewable energy.

Meng et al. (2019) conducted a study on the environmental performance of two hotels in Beijing and found that hotel water consumption was better than expected. They also found that waste production was much smaller than what they predicted. The researchers suggest that hotels strive to reduce waste production with the use of less water and recyclable materials, such as packaging; however, this would be costly for some hotels.

Patel et al. (2019) conducted a study on the current environmental performance of Mumbai, India's hospitality industry. The researchers used data obtained from both databases as well as a questionnaire survey to measure their environmental performance against local standards. They found that hotels performed below local standards for energy consumption, water and sewage discharge, solid waste management, air pollution, and food production. They also noted that a significant portion of environmental impacts related to hotels were caused by unregulated commercial activities in the city. To improve their performance, the researchers suggest that hotels establish strict rules and regulations in order to reduce these impacts.

Kang (2014) examined the environmental performance of a hotel in Beijing, China. The researchers surveyed forty-one different buildings in the neighbourhood with 10–30 rooms to determine if they met certain emissions standards. Fifteen buildings were found to have poor air quality for tobacco smoke, which accounted for 94% of total rooms. The researchers found that hotels are responsible for a significant portion of the city's air pollution with their activities. Their efforts to reduce overall emissions are not sufficient; the researchers suggest that hotels can try a range of strategies such as: installing inefficient stoves or fireplaces in rooms, using less gas for lighting, and emitting fewer gases into the ventilation system in rooms.



Yang et al. (2019) conducted a study on the environmental performance of four hotels in Shanghai. The researchers used measurements data from sensors installed during their annual energy audits as well as data obtained from surveys and interviews to evaluate environmental performance against local standards. They found that hotels have poor energy consumption and GHG emission intensity. To reduce their environmental footprint, the researchers suggest that hotels use energy efficient lighting and appliances, install solar panels, and make more efforts to reduce their waste generation.

Yamane et al. (2019) reviewed the literature on hotels' environmental impact from 2015 to 2018. They found that 39% of total energy was supplied by fossil fuels; 30% came from renewable sources; and 33% came from natural gas. The researchers also found that hotels are responsible for a large portion of people's carbon emissions within cities. They also concluded that hotels could use a wide range of strategies to significantly reduce their GHG emissions and other environmental impacts.

Tiwari (2012) reviewed five studies pertaining to hotel construction in India. The researchers found that the hotels have a poor performance in terms of energy efficiency, water consumption, waste management, and solid waste production. They also observed that hotels generate a large amount of solid waste due to uncollected food and beverage containers.

Hegde et al. (2018) investigated the role of social responsibility in the hospitality industry and identified the significance of community engagement, ethical labor practices, and supporting local suppliers. They argued that socially responsible practices not only benefit the community but also enhance the reputation and competitiveness of hospitality businesses.

The economic aspect of sustainability has also been studied in the context of the hospitality industry. Mishra and Manohar (2017) examined the relationship between sustainable practices and financial performance in hotels and found a positive correlation. They suggested that sustainability initiatives, such as energy efficiency measures and waste reduction strategies, can lead to cost savings and increased profitability.

In conclusion, the literature review on organizational sustainability in the hospitality industry of Pune City and other cities has highlighted several key findings and research gaps. The studies reviewed have shed light on various aspects of sustainability, including environmental performance, social responsibility, and the economic implications of sustainable practices in hotels. The studies consistently identified energy and water consumption as key areas for improvement in hotels, emphasizing the importance of implementing energy-efficient technologies, water conservation measures, and waste management practices. Additionally, the role of social responsibility in the hospitality industry was highlighted, with a focus on community engagement, ethical labor practices, and supporting local suppliers.

However, several research gaps were identified within the literature. Firstly, there is a need for more comprehensive and comparative studies that encompass a wider range of geographical locations to provide a more holistic understanding of sustainability practices. Additionally, there is a need for further exploration of the social aspects of sustainability in the hospitality industry, including employee well-being, diversity and inclusion, and social impact on local communities. Longitudinal studies are also necessary to track the progress and effectiveness of sustainability initiatives over time. Comparative studies across different cities, countries, or types of hotels would provide valuable insights into the factors influencing sustainability performance and the identification of best practices. Furthermore, more research is needed to analyze the economic aspects of sustainability in the hospitality industry, including the cost-effectiveness of sustainability measures and the financial benefits of implementing sustainable practices. Lastly, the literature review identified a gap in research on small and medium-sized enterprises (SMEs) in the hospitality industry. Investigating the sustainability practices and challenges faced by SMEs would provide valuable insights, as these businesses often have limited resources and face unique barriers to implementing sustainable practices. Addressing these research gaps will contribute to the development of more effective strategies and practices for promoting sustainability in the hospitality industry. By implementing sustainable practices, hotels can reduce their environmental footprint, enhance their social responsibility, and potentially improve their financial performance. Ultimately, the findings from future research will help guide policymakers, industry professionals, and stakeholders in creating a more sustainable and responsible hospitality sector.

Objectives of the study

The objectives of the quantitative study on organizational sustainability in the hospitality industry of Pune City were as follows:

1. To assess the current level of organizational sustainability practices in hotels in Pune City.



2. To identify the barriers and challenges faced by hotels in implementing sustainable practices and suggest strategies for overcoming them.

Hypotheses

H1: There is a significant relationship between the implementation of sustainable practices and the level of organizational sustainability in hotels in Pune City.

H2: There are significant barriers and challenges that hinder the implementation of sustainable practices in hotels in Pune City.

Research Methodology

- Research Design: A quantitative research design was employed to investigate the organizational sustainability in the hospitality industry of Pune City.
- Sampling: A purposive sampling technique was used to select a representative sample of hotels in Pune City. The sample size was determined based on feasibility and resource constraints. The respondents in the study are executives, supervisors, managers, directors of Hotels, A graded restaurants and travel tourism sector persons. A sample size of 120 was considered for the current study.
- Data Collection: Surveys: A survey questionnaire was developed to collect quantitative data on various aspects of organizational sustainability, including energy and water consumption, waste management practices, social responsibility initiatives, and economic performance. The questionnaire was designed based on existing literature and validated measurement scales, if available. The survey was administered to hotel managers or sustainability officers.
- Data Analysis: Quantitative Analysis: The survey data was analysed using appropriate statistical methods, such as descriptive statistics, correlation analysis, and regression analysis. This analysis helped identify patterns, relationships, and trends in the data and provided quantitative insights into the sustainability practices of hotels in Pune City.
- Limitations and Ethical Considerations: The limitations of the study, such as sample size and potential biases, were acknowledged. Ethical considerations, such as obtaining informed consent from participants and maintaining confidentiality, were addressed throughout the research process.

By implementing this research methodology, the quantitative study provided valuable insights into the past state of organizational sustainability in the hospitality industry of Pune City, highlighting areas for improvement and informing future research and sustainability initiatives in the sector.

Data Analysis

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18 to 25 years	9	7.5	7.5	7.5
	26 to 35 years	16	13.3	13.3	20.8
	36 to 45 years	49	40.8	40.8	61.7
	46 to 55 years	26	21.7	21.7	83.3
	Above 55 years	20	16.7	16.7	100.0
	Total	120	100.0	100.0	

Table 1. Age

The table presents the distribution of respondents' age in the given sample of 120 participants. The majority of respondents fall within the age range of 36 to 45 years, accounting for 40.8% of the sample. This is followed by respondents aged 46 to 55 years, comprising 21.7% of the sample. Participants aged above 55 years and between 26 to 35 years represent 16.7% and 13.3% of the sample, respectively. The smallest age group is between 18 to 25 years, accounting for 7.5% of the sample. These findings indicate a relatively diverse age distribution among the respondents, which is important to consider when analyzing the data and drawing conclusions about the research study.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	91	75.8	75.8	75.8
	Female	29	24.2	24.2	100.0
	Total	120	100.0	100.0	

Table 2. Gender

The table presents the gender distribution of the respondents in the given sample of 120 participants. Among the respondents, 75.8% identified as male, while 24.2% identified as female. This indicates that there is a higher representation of male respondents in the sample compared to female respondents. It is important to consider this gender distribution while analyzing the data and interpreting the findings, as it may have implications for



understanding and addressing the research objectives and outcomes within the context of the hospitality industry in Pune City.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Firmly Disagree	13	10.8	10.8	10.8
	Disagree	10	8.3	8.3	19.2
	Neutral	4	3.3	3.3	22.5
	Agree	65	54.2	54.2	76.7
	Firmly Agree	28	23.3	23.3	100.0
	Total	120	100.0	100.0	

Table 3. Lack of financial resources is a significant barrier to implementing sustainable practices in our hotel.

The table displays the responses of the participants regarding the statement "Lack of financial resources is a significant barrier to implementing sustainable practices in our hotel." The respondents were asked to rate their agreement or disagreement on a Likert scale. The majority of respondents (54.2%) agreed with the statement, indicating that they perceive a lack of financial resources as a significant barrier to implementing sustainable practices in their hotel. Additionally, 23.3% of the respondents firmly agreed with the statement, further supporting the notion that financial constraints pose a significant challenge. On the other hand, a smaller proportion of respondents disagreed (8.3%) or firmly disagreed (10.8%) with the statement, suggesting that they do not consider financial resources as a major obstacle to implementing sustainable practices. A minority of respondents expressed a neutral stance (3.3%) on this matter. These findings highlight the perceived significance of financial limitations in hindering the implementation of sustainable practices in hotels, which may have implications for developing strategies to overcome this barrier and enhance organizational sustainability.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Firmly Disagree	8	6.7	6.7	6.7
	Disagree	7	5.8	5.8	12.5
	Neutral	6	5.0	5.0	17.5
	Agree	33	27.5	27.5	45.0
	Firmly Agree	66	55.0	55.0	100.0
	Total	120	100.0	100.0	

Table 4. Limited awareness and understanding among employees about the importance of sustainable practices hinder their implementation.

The table presents the responses of the participants regarding the statement "Limited awareness and understanding among employees about the importance of sustainable practices hinder their implementation." The respondents were asked to rate their agreement or disagreement on a Likert scale. The majority of respondents (55.0%) firmly agreed with the statement, indicating that they believe limited awareness and understanding among employees pose a significant hindrance to the implementation of sustainable practices. Additionally, 27.5% of the respondents agreed with the statement, further supporting the notion that employee awareness and understanding are crucial factors. On the other hand, a smaller proportion of respondents disagreed (5.8%) or firmly disagreed (6.7%) with the statement, suggesting that they do not perceive limited awareness and understanding as significant barriers. A minority of respondents expressed a neutral stance (5.0%) on this matter. These findings highlight the perceived importance of raising awareness and improving employee understanding about sustainable practices in order to facilitate their successful implementation within the hotel. Addressing this knowledge gap can potentially contribute to enhancing organizational sustainability in the hospitality industry.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Firmly Disagree	9	7.5	7.5	7.5
	Disagree	9	7.5	7.5	15.0
	Neutral	8	6.7	6.7	21.7
	Agree	50	41.7	41.7	63.3
	Firmly Agree	44	36.7	36.7	100.0
	Total	120	100.0	100.0	

Table 5. The absence of clear guidelines and policies regarding sustainable practices makes it challenging for our hotel to incorporate them.



The table represents the responses of the participants regarding the statement "The absence of clear guidelines and policies regarding sustainable practices makes it challenging for our hotel to incorporate them." The respondents were asked to rate their agreement or disagreement on a Likert scale. The findings indicate that a significant proportion of respondents (36.7%) firmly agreed with the statement, suggesting that the absence of clear guidelines and policies regarding sustainable practices poses a considerable challenge for their hotel in implementing such practices. Additionally, 41.7% of the respondents agreed with the statement, further supporting the notion that the lack of clear guidelines and policies hinders the incorporation of sustainable practices. Conversely, a smaller percentage of respondents disagreed (7.5%) or firmly disagreed (7.5%) with the statement, indicating that they do not perceive the absence of guidelines and policies as a significant barrier. A minority of respondents expressed a neutral stance (6.7%) on this matter. These findings highlight the importance of establishing clear guidelines and policies to provide a framework and direction for hotels to effectively incorporate sustainable practices. Addressing this issue can potentially facilitate the adoption of sustainable practices and enhance organizational sustainability in the hospitality industry.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Firmly Disagree	13	10.8	10.8	10.8
	Disagree	16	13.3	13.3	24.2
	Neutral	6	5.0	5.0	29.2
	Agree	49	40.8	40.8	70.0
	Firmly Agree	36	30.0	30.0	100.0
	Total	120	100.0	100.0	

Table 6. Insufficient support and engagement from top management hinder the successful implementation of sustainable practices.

The table presents the responses of the participants regarding the statement "Insufficient support and engagement from top management hinder the successful implementation of sustainable practices." The participants were asked to rate their level of agreement or disagreement on a Likert scale. The results reveal that a significant proportion of respondents (30.0%) firmly agreed with the statement, indicating that they strongly believe that insufficient support and engagement from top management hinder the successful implementation of sustainable practices in their hotel. Furthermore, 40.8% of the respondents agreed with the statement, suggesting that they also perceive a lack of support and engagement from top management as a barrier to the successful implementation of sustainable practices. On the other hand, a smaller percentage of respondents disagreed (13.3%) or firmly disagreed (10.8%) with the statement, indicating that they do not consider insufficient support and engagement from top management as significant hindrances. A small percentage of respondents remained neutral (5.0%) on the issue. These findings underscore the importance of strong support and active engagement from top management in driving the successful implementation of sustainable practices within hotels. Addressing this challenge and fostering a supportive management culture can facilitate the adoption of sustainable practices and contribute to the overall sustainability of the hospitality industry.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Firmly Disagree	13	10.8	10.8	10.8
	Disagree	17	14.2	14.2	25.0
	Neutral	9	7.5	7.5	32.5
	Agree	50	41.7	41.7	74.2
	Firmly Agree	31	25.8	25.8	100.0
	Total	120	100.0	100.0	

Table 7. Resistance from employees and other stakeholders poses challenges in implementing sustainable practices in our hotel.

The table presents the responses of the participants regarding the statement "Resistance from employees and other stakeholders poses challenges in implementing sustainable practices in our hotel." The participants were asked to rate their level of agreement or disagreement on a Likert scale. The results show that a significant proportion of respondents (25.8%) firmly agreed with the statement, indicating that they strongly believe that resistance from employees and other stakeholders poses challenges in implementing sustainable practices in their hotel. Additionally, 41.7% of the respondents agreed with the statement, suggesting that they also perceive resistance as a significant hurdle in the implementation of sustainable practices. On the other hand, a smaller percentage of respondents disagreed (14.2%) or firmly disagreed (10.8%) with the statement, indicating that they do not consider resistance from employees and other stakeholders as significant obstacles. A small percentage of respondents remained neutral (7.5%) on the issue. These findings highlight the importance of



addressing employee and stakeholder resistance when implementing sustainable practices in hotels. Strategies for stakeholder engagement, communication, and training may be necessary to overcome these challenges and create a supportive environment for sustainable initiatives.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Firmly Disagree	13	10.8	10.8	10.8
	Disagree	11	9.2	9.2	20.0
	Neutral	7	5.8	5.8	25.8
	Agree	46	38.3	38.3	64.2
	Firmly Agree	43	35.8	35.8	100.0
	Total	120	100.0	100.0	

Table 8. Lack of access to environmentally friendly technologies and resources hinders our ability to adopt sustainable practices.

The table presents the responses of the participants regarding the statement "Lack of access to environmentally friendly technologies and resources hinders our ability to adopt sustainable practices." The participants were asked to rate their level of agreement or disagreement on a Likert scale. The results show that a significant proportion of respondents (35.8%) firmly agreed with the statement, indicating that they strongly believe that the lack of access to environmentally friendly technologies and resources is a hindrance to adopting sustainable practices in their hotel. Additionally, 38.3% of the respondents agreed with the statement, suggesting that they also perceive the lack of access as a significant obstacle. On the other hand, a smaller percentage of respondents disagreed (9.2%) or firmly disagreed (10.8%) with the statement, indicating that they do not consider the lack of access to environmentally friendly technologies and resources as a significant barrier. A small percentage of respondents remained neutral (5.8%) on the issue. These findings highlight the importance of addressing the availability and accessibility of environmentally friendly technologies and resources when implementing sustainable practices in hotels. Efforts to identify and overcome barriers to access can help hotels overcome this challenge and move towards greater sustainability.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Firmly Disagree	6	5.0	5.0	5.0
	Disagree	13	10.8	10.8	15.8
	Neutral	9	7.5	7.5	23.3
	Agree	40	33.3	33.3	56.7
	Firmly Agree	52	43.3	43.3	100.0
	Total	120	100.0	100.0	

Table 9. The complexity and time-consuming nature of implementing sustainable practices present obstacles in our hotel.

The table presents the responses of the participants regarding the statement "The complexity and time-consuming nature of implementing sustainable practices present obstacles in our hotel." Participants were asked to rate their level of agreement or disagreement on a Likert scale. The results indicate that a significant portion of respondents (43.3%) firmly agreed with the statement, indicating that they strongly believe that the complexity and time-consuming nature of implementing sustainable practices present obstacles in their hotel. Additionally, 33.3% of the respondents agreed with the statement, suggesting that they also perceive the complexity and time-consuming nature as significant hurdles. On the other hand, a smaller percentage of respondents disagreed (10.8%) or firmly disagreed (5.0%) with the statement, indicating that they do not consider the complexity and time-consuming nature as significant barriers. A small percentage of respondents remained neutral (7.5%) on the issue. These findings highlight the challenges faced by hotels when it comes to implementing sustainable practices, particularly in terms of complexity and time commitment. Addressing these challenges through streamlined processes, training, and effective resource allocation can support hotels in overcoming these obstacles and advancing their sustainability efforts.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Firmly Disagree	11	9.2	9.2	9.2
	Disagree	12	10.0	10.0	19.2



Neutral	10	8.3	8.3	27.5	
Agree	49	40.8	40.8	68.3	
Firmly Agree	38	31.7	31.7	100.0	
Total	120	100.0	100.0		

Table 10. External factors, such as regulations and market demands, create challenges in implementing sustainable practices in our hotel.

The table displays the responses of the participants regarding the statement "External factors, such as regulations and market demands, create challenges in implementing sustainable practices in our hotel." The participants were asked to indicate their level of agreement or disagreement on a Likert scale. The findings reveal that a significant portion of the respondents (31.7%) firmly agree with the statement, suggesting that they strongly believe that external factors, including regulations and market demands, pose challenges in implementing sustainable practices in their hotel. Moreover, 40.8% of the respondents agree with the statement, indicating that they also perceive these external factors as influential hurdles. On the other hand, a smaller percentage of respondents disagreed (10.0%) or firmly disagreed (9.2%) with the statement, implying that they do not consider external factors to be significant obstacles. Additionally, 8.3% of the respondents remained neutral on the issue. These findings emphasize the impact of external factors, such as regulations and market demands, on the implementation of sustainable practices in hotels. To address these challenges, hotels can proactively stay updated with regulations, engage in industry trends, and align their sustainability initiatives with market demands to ensure successful implementation of sustainable practices.

Testing of Hypotheses

H1: There is a significant relationship between the implementation of sustainable practices and the level of organizational sustainability in hotels in Pune City.

		Level of implementation of sustainable practices	organizational sustainability
Level of implementation of	Pearson Correlation	1	.740**
sustainable practices	Sig. (2-tailed)		.000
	N	120	120
Level of organizational	Pearson Correlation	.740**	1
sustainability	Sig. (2-tailed)	.000	
	N	120	120
**. Correlation is significant a	nt the 0.01 level (2-tailed)).	

Table 11. Correlations

The correlation analysis between the level of implementation of sustainable practices and the level of organizational sustainability yielded a significant positive correlation coefficient of .740 (p < .01). This indicates a strong and positive relationship between these two variables. The correlation suggests that as the level of implementation of sustainable practices increases, the level of organizational sustainability also tends to increase. The p-value of .000 indicates that the correlation is statistically significant. These findings suggest that organizations in the hospitality industry that prioritize and actively implement sustainable practices are more likely to achieve higher levels of organizational sustainability. This correlation supports the notion that the successful implementation of sustainable practices positively influences the overall sustainability of the organization. It is important to note that correlation does not imply causation, and other factors may also contribute to organizational sustainability. However, based on this analysis, there is evidence to suggest that a strong relationship exists between the implementation of sustainable practices and the level of organizational sustainability in the studied context.

H2: There are significant barriers and challenges that hinder the implementation of sustainable practices in hotels in Pune City.

		Std.	Std. E1	rror
N	Mean	Deviation	Mean	



Lack of financial resources is a significant barrier to implementing	12	3.708	1.22575	.11189
sustainable practices in our hotel.	0	3		
Limited awareness and understanding among employees about the	12	4.183	1.18806	.10845
importance of sustainable practices hinder their implementation.	0	3		
The absence of clear guidelines and policies regarding sustainable	12	3.925	1.18933	.10857
practices makes it challenging for our hotel to incorporate them.	0	0		
Insufficient support and engagement from top management hinder the	12	3.658	1.32523	.12098
successful implementation of sustainable practices.	0	3		
Resistance from employees and other stakeholders poses challenges in	12	3.575	1.30714	.11932
implementing sustainable practices in our hotel.	0	0		
Lack of access to environmentally friendly technologies and resources	12	3.791	1.31504	.12005
hinders our ability to adopt sustainable practices.	0	7		
The complexity and time-consuming nature of implementing sustainable		3.991	1.18461	.10814
practices present obstacles in our hotel.	0	7		
External factors, such as regulations and market demands, create	12	3.758	1.25689	.11474
challenges in implementing sustainable practices in our hotel.	0	3		

Table 12. One-Sample Statistics

The table provides the descriptive statistics for Likert-type statements related to various barriers and challenges in implementing sustainable practices in a hotel. Each statement was rated on a scale of 1 to 5, with higher scores indicating stronger agreement with the statement. The mean scores for the different statements range from 3.575 to 4.183, suggesting that, on average, the respondents moderately agreed or agreed with the barriers and challenges identified. The standard deviations, ranging from 1.184 to 1.325, indicate some variability in responses among the participants. Based on the standard error mean values, which represent the average sampling error in the estimates, the means for each statement are considered reasonably reliable and representative of the population. Overall, the results suggest that the respondents perceived lack of financial resources, limited awareness and understanding among employees, the absence of clear guidelines and policies, insufficient support from top management, resistance from employees and stakeholders, lack of access to environmentally friendly technologies and resources, and the complexity of implementing sustainable practices as significant barriers and challenges in the hotel. Furthermore, external factors such as regulations and market demands were also perceived as creating challenges in implementing sustainable practices. These findings highlight the importance of addressing these barriers and challenges to enhance the implementation of sustainable practices in the hotel industry and promote organizational sustainability.

One-Sample Test							
One-Sample Test	Test Value = 3						
			Sig. (2-	Mean	95% Interval Difference	Confidence of the	
	t	df	tailed)	Difference	Lower	Upper	
Lack of financial resources is a significant barrier to implementing sustainable practices in our hotel.	6.330	11 9	.000	.70833	.4868	.9299	
Limited awareness and understanding among employees about the importance of sustainable practices hinder their implementation.		11 9	.000	1.18333	.9686	1.3981	
The absence of clear guidelines and policies regarding sustainable practices makes it challenging for our hotel to incorporate them.		11 9	.000	.92500	.7100	1.1400	
Insufficient support and engagement from top management hinder the successful implementation of sustainable practices.	5.442	11 9	.000	.65833	.4188	.8979	
Resistance from employees and other stakeholders poses challenges in implementing sustainable practices in our hotel.	4.819	11 9	.000	.57500	.3387	.8113	
Lack of access to environmentally friendly technologies and resources hinders our ability to adopt sustainable practices.	6.595	11 9	.000	.79167	.5540	1.0294	



The complexity and time-consuming nature of	9.170	11	.000	.99167	.7775	1.2058
implementing sustainable practices present		9				
obstacles in our hotel.						
External factors, such as regulations and market	6.609	11	.000	.75833	.5311	.9855
demands, create challenges in implementing		9				
sustainable practices in our hotel.						

Table 13. One sample test results.

The table presents the results of one-sample t-tests conducted on Likert-type statements related to barriers and challenges in implementing sustainable practices in a hotel. The test value used for comparison is 3, representing the neutral midpoint on the Likert scale. All the p-values are less than 0.05, indicating that the mean differences are statistically significant. This suggests that the respondents' ratings on these statements significantly deviate from the neutral midpoint of 3. These findings suggest that the respondents perceive lack of financial resources, limited awareness among employees, absence of clear guidelines and policies, insufficient support from top management, resistance from employees and stakeholders, lack of access to environmentally friendly technologies and resources, and the complexity of implementing sustainable practices as significant barriers and challenges in the hotel. External factors such as regulations and market demands were also seen as creating challenges.

Findings

- 1. The level of implementation of sustainable practices in hotels in Pune City is positively correlated with the level of organizational sustainability. There is a significant relationship between the two variables, indicating that as the implementation of sustainable practices increases, the level of organizational sustainability also tends to increase.
- 2. Lack of financial resources is identified as a significant barrier to implementing sustainable practices in hotels. A majority of respondents either agreed or strongly agreed that financial constraints hinder the adoption of sustainable practices.
- 3. Limited awareness and understanding among employees about the importance of sustainable practices is perceived as a hindrance to their implementation. The majority of respondents agreed or strongly agreed that employees' lack of awareness poses challenges in incorporating sustainable practices.
- 4. The absence of clear guidelines and policies regarding sustainable practices makes it challenging for hotels to incorporate them. A significant number of respondents agreed or strongly agreed that the absence of such guidelines and policies is a barrier to implementing sustainable practices.
- 5. Insufficient support and engagement from top management is seen as a hindrance to the successful implementation of sustainable practices. A majority of respondents agreed or strongly agreed that lack of support from top management poses challenges in incorporating sustainable practices.
- 6. Resistance from employees and other stakeholders is perceived as a challenge in implementing sustainable practices. A significant number of respondents agreed or strongly agreed that resistance from these groups hinders the adoption of sustainable practices.
- 7. Lack of access to environmentally friendly technologies and resources is considered a hindrance to adopting sustainable practices. The majority of respondents agreed or strongly agreed that the unavailability of such technologies and resources poses challenges.
- 8. The complexity and time-consuming nature of implementing sustainable practices are seen as obstacles in hotels. A significant number of respondents agreed or strongly agreed that the complexity and time required for implementing sustainable practices create challenges.
- 9. External factors, such as regulations and market demands, are recognized as creating challenges in implementing sustainable practices. A majority of respondents agreed or strongly agreed that external factors pose obstacles to adopting sustainable practices.

Conclusions

In conclusion, the quantitative study on organizational sustainability in the hospitality industry of Pune City shed light on the current state of sustainable practices in hotels, the barriers and challenges faced in their implementation, and provided recommendations for improvement. The findings revealed a positive relationship between the implementation of sustainable practices and the level of organizational sustainability in hotels. This emphasizes the significance of incorporating sustainable practices to enhance the overall sustainability of hotels in Pune City. The study identified various barriers that hinder the implementation of sustainable practices, including lack of financial resources, limited awareness among employees, absence of clear guidelines and policies, insufficient support from top management, resistance from employees and stakeholders, lack of access to environmentally friendly technologies and resources, and the complexity of implementation. These barriers



highlight the need for targeted strategies and interventions to address them and overcome the challenges associated with sustainable practices.

Based on the findings, the study provided recommendations for hotels in Pune City to enhance their organizational sustainability practices. These recommendations include securing financial resources, raising awareness and providing training programs, developing clear guidelines and policies, fostering support and engagement from top management, addressing resistance, and exploring opportunities for accessing environmentally friendly technologies and resources.

By implementing these recommendations, hotels in Pune City can overcome the identified barriers and improve their sustainability practices. This will not only contribute to the environmental and social well-being of the region but also enhance the reputation and competitiveness of the hospitality industry as a whole. Overall, the study highlights the importance of organizational sustainability in the hospitality industry and provides valuable insights for hotels in Pune City to develop and strengthen their sustainable practices. It also sets the foundation for further research and exploration in the field of sustainability in the hospitality sector.

Based on the findings of the quantitative study on organizational sustainability in the hospitality industry of Pune City, the following recommendations are suggested for hotels in the region to improve their sustainable practices:

- 1. Allocate adequate financial resources: Hotels should prioritize budget allocation for sustainable initiatives. This includes investing in energy-efficient technologies, waste reduction strategies, and sustainable procurement practices. By dedicating financial resources to sustainability, hotels can overcome the barrier of limited funding and make significant progress towards sustainable practices.
- 2. Enhance employee awareness and understanding: Conduct training programs and workshops to educate employees about the importance of sustainable practices. Create awareness campaigns that emphasize the benefits of sustainability for the environment, the community, and the hotel itself. By improving employee knowledge and understanding, hotels can foster a culture of sustainability and encourage active participation in sustainable initiatives.
- 3. Develop clear guidelines and policies: Establish comprehensive guidelines and policies that outline the expectations and requirements for sustainable practices within the hotel. These guidelines should cover areas such as energy conservation, waste management, water efficiency, and community engagement. Clear policies provide a framework for implementation and ensure consistency across departments.
- 4. Foster support and engagement from top management: Top management should demonstrate strong commitment and support for sustainable practices. They should actively participate in sustainability initiatives, allocate resources, and integrate sustainability into the hotel's strategic plans. By leading by example and providing support, top management can inspire and motivate employees at all levels to embrace sustainable practices.
- 5. Address resistance and stakeholder engagement: Identify potential sources of resistance to sustainable practices and develop strategies to overcome them. This may involve addressing misconceptions, addressing concerns, and involving key stakeholders in decision-making processes. Engage employees, guests, suppliers, and the local community to create a shared understanding of the benefits and importance of sustainability.
- 6. Explore partnerships and collaborations: Collaborate with local organizations, suppliers, and community groups that promote sustainable practices. Explore opportunities to source environmentally friendly products and services from local suppliers. By building partnerships, hotels can leverage shared resources, knowledge, and expertise to enhance their sustainability efforts.
- 7. Regular monitoring and evaluation: Establish a system for monitoring and evaluating the progress of sustainable practices within the hotel. Set measurable goals and targets to track performance and identify areas for improvement. Regularly review and update sustainability initiatives based on feedback and lessons learned.

By implementing these recommendations, hotels in Pune City can enhance their organizational sustainability practices and contribute to the overall sustainability of the hospitality industry in the region. These efforts will not only benefit the environment and the local community but also improve the reputation, competitiveness, and long-term viability of the hotels.

References

Akinwumi, A. O., Bao, Q., & Zhou, Z. (2018). Environmental performance of hotels in Paris: An empirical analysis. Sustainability, 10(2), 418.



- Chen, Y., Wang, Y., & Hsu, H. C. (2019). Environmental performance evaluation of hotels: A comparative case study in New York City. Journal of Hospitality and Tourism Management, 41, 108-115.
- Gangani, N., Chauhan, A., & Bhola, S. (2019). Environmental performance of an international hotel in New Delhi. International Journal of Sustainable Development & World Ecology, 26(7), 595-603.
- Hegde, G. R., Radhakrishna, R. B., & Sridhar, A. (2018). Social responsibility practices in the hospitality industry: A study of hotels in Bengaluru, India. Journal of Human Values, 24(2), 193-208.
- Jain, P., & Gursoy, D. (2016). Barriers to the implementation of sustainability practices in hotels: A closer look at the United States. Journal of Sustainable Tourism, 24(8-9), 1209-1230.
- Kang, J. (2014). Air pollution caused by hotels in Beijing, China: Evidence from indoor monitoring of fine particle and carbon dioxide. Building and Environment, 77, 103-109.
- Kumar, A., Sivaprakasam, P., & Shukla, A. (2020). Performance evaluation of hotels in New Delhi, India: An environmental perspective. International Journal of Environmental Science and Technology, 17(1), 63-74.
- Liu, J., Geng, Y., Lindner, S., Zhou, K., Yang, Y., Zeng, X., & Fujita, T. (2019). Environmental performance evaluation of hotels in Beijing, China: A comprehensive index system. Journal of Cleaner Production, 237, 117688.
- Meng, Q., Li, B., Zhang, B., & Huang, Q. (2019). Environmental performance evaluation of hotels in Beijing, China. Journal of Cleaner Production, 237, 117739.
- Mishra, R. (2019). Environmental performance evaluation of hotels in New Delhi, India. Journal of Environmental Planning and Management, 62(6), 1033-1050.
- Mishra, R., & Manohar, H. (2017). Sustainable practices and financial performance in Indian hotels: An empirical analysis. Journal of Sustainable Development, 10(5), 95-112.
- Mishra, R., & Rani, P. (2020). Drivers and motivations for sustainability practices in the Indian hotel industry: An exploratory study. International Journal of Hospitality & Tourism Administration, 21(2), 168-193.
- Nair, P. (2016). A study on work-related stress of employees in hotel industry. International Journal of Commerce and Management Research, 2(4), 40-45.
- Patel, S. S., Mishra, R., & Sharma, S. (2019). Assessment of environmental performance of hotels in Mumbai, India. International Journal of Sustainable Development & World Ecology, 26(2), 147-160.
- Tiwari, A. (2012). Environmentally sustainable construction practices in the Indian hotel industry: Barriers and opportunities. Sustainable Development, 20(4), 257-269.
- Wu, Y., Gao, Y., & Jiang, B. (2019). Environmental performance evaluation of hotels in Shanghai, China: A comprehensive index system. Journal of Cleaner Production, 235, 888-898.
- Xia, B., Geng, Y., & Hu, Y. (2019). Comparative environmental performance evaluation of hotels in Shanghai, China. Journal of Cleaner Production, 235, 926-935.
- Yamane, H., Iwamiya, T., Toshioka, T., & Nishikizawa, Y. (2019). Environmental performance evaluation of hotels in a metropolitan area. Journal of Environmental Planning and Management, 62(6), 1006-1032.
- Yang, Y., Yu, Y., Zhou, K., Lindner, S., Zeng, X., Geng, Y., ... & Fujita, T. (2019). Environmental performance evaluation of hotels in Shanghai, China: An empirical analysis. Journal of Cleaner Production, 236, 117695.
- Zhang, J., Qi, G., Zhang, M., & Wu, Y. (2021). Environmental performance comparison of hotels in Beijing. Sustainability, 13(2), 673.