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COLLEGE OF HOTEL AND TOURISM MANAGEMENT STUDIES & RESEARCH

NAAC Accredited with B+ in Cycle 1
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Internal Quality Assurance Cell in Collaboration with University of Mumbai Organizes

A One Day National Conference on

Embracing Wellness & Sustainable Development in Hospitality and Tourism Sector

N A T I O N A L   C O N F E R E N C E
November 28th, 2024

ON

Embracing Wellness & Sustainable Development in Hospitality and Tourism Sector

Organised by

Anjuman-I-Islam's

College of Hotel & Tourism Management Studies & Research

(Affiliated to the University of Mumbai)
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Editor's Note

We live in a world fuelled by ambitions where businesses are bullish about expansion by adding new product lines. The dynamic hospitality & Tourism sectors are no exception and are seeing a huge proliferation of entrepreneurship ventures with the addition of new product lines, each promising to be a potential disruptor. Still, very few have sustained in the current business ecosystem.

A one-day National Conference that was held on November 28th, 2024 under the aegis of the Internal Quality Assurance Cell in Collaboration with the University of Mumbai shed light on the core issue of sustaining these ventures. Aptly themed "Embracing Wellness & Sustainable Development in Hospitality & Tourism Sectors" this hybrid Conference was a platform that brought together research scholars, academics, students, and industry professionals. The keynote address delivered by distinguished keynote speaker Dr. Ashish Dahiya, Director and Professor at Maharshi Dayanand University (MDU), Rohtak, Haryana set the tone for the conference where he shed light on the strategies for designing the organizational intent consisting of mission, vision, and strategies in alignment with global macro goals like MDG (Millennium Development Goals), SDGs (Sustainable Development Goals) and more.

'Sustainability' is a mutual endeavour & a joint responsibility of Industry & Academia. Post pandemic sustainable initiatives have got a major thrust and are shaping up via different means & mediums. Although at a nascent stage, the stakeholders in Hospitality & Tourism sectors are strategizing to make their core offerings and workplaces more 'inclusive'. Thus creating equal opportunities for all. Dr Dahiya quoted the example of impact creating "Deafetria" - A Café run by mute & deaf people.

However, wellness in all forms precedes sustainability, especially the Mental Wellness. For which it's crucial to shatter the illusions, myths & the taboos that surround it. Industry must work together to ameliorate Wellness and turn it into Wellness Tourism product offerings.

Lastly, sustainability is also about recognising the wrongs, correcting it with the blended application of ancient & contemporary indigenous solutions, adopting preventive measures for the future and most importantly documenting every unfoldings for benefit of future generations.

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Importance of Incorporating Millets in Children's Diet and its Benefits in Today's Meal Patterns

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ABSTRACT

This study reviews the nutritional benefits of incorporating millets in children's meals. Millets are a small seeded grain which are known or their high nutritional value which includes vital vitamins, minerals, and dietary fibers. The study summarizes how adding millets to young children's diet can help in growth, development, and promote general health. Through a systematic examination of studies undertaken in varied settings, this review seeks to provide a thorough understanding of how millets contribute to treating nutritional inadequacies and supporting optimal well-being in this vital stage of early childhood. The results highlight millets' potential as a beneficial dietary element and provide information about how they can improve young children's nutritional environment.

This thorough analysis explores the nutritional benefits of including millets in children's meals. Millets, which include a range of small-seeded grains such as finger millet, pearl millet, and sorghum, have become nutritional powerhouses due to their high quantities of important components. This research reviews a large amount of previous scientific data and studies how eating millets can benefit growth and development in early stages of childhood. This study aims to provide practical insight in general to incorporate millets for enhancing the nutritional value of early childhood diet.
This study is done with an intention to promote general awareness about and promote further research about nutritional benefits of millets.

Keywords: Millets for Children, Health Benefits of Millets, Millets and Health, Healthy Diet, Growth and Development of Children.

OBJECTIVES

1. Study the importance of millet in early childhood nutrition.

2. To study the nutritional aspects of millet incorporation in children's diets.

3. Raise awareness about the importance of millet's nutritional value in a child's diet.

RESEARCH METHODOLOGY

This research is based on secondary data collection from various articles, websites, and government database

CONCLUSION

An extensive review of research emphasizes the numerous benefits of introducing millets, particularly finger millet, into children's diets. Because millets have a high nutritional content that includes important nutrients including proteins, dietary fiber, vitamins, and minerals, they provide a comprehensive nutritional resource for growing children. This compilation of research supports the idea that it is important to including millets in children's meals as it is a comprehensive and nutrient packed approach towards healthy development and overall wellbeing of children.

INTRODUCTION

Millets are referred to as "the nutri-cereals of today, and the coarse grains of yesterday." Since millets can withstand most pests and illnesses and thrive in the difficult conditions of arid and semi-arid regions of Asia and Africa, they are referred to as "future crops." (B. Dayakar Rao R. B., 2021)

Millets have been always popular in India, but in the 1960's during the Green Revolution more emphasis was given on certain crops for food security causing millets to become "orphan crops,". For a certain period of time millets were rarely eaten and virtually forgotten with the exception of certain pockets of rural India. Before the Green Revolution Millets accounted for almost 40 % of the total crops cultivated and now there have dropped down to 20 %. Today commercial crops like oilseeds, pulses, and maize have taken the position of millets in the region known for millet cultivation. These commercial crops are profitable, and various policies, such as subsidized inputs, procurement incentives, and Public Distribution System inclusion, support their production. Dietary trends have changed as a result, with a preference for fine-grain cereals that are high in calories. (B. Dayakar Rao, 2021).

Millets are small-seeded grains, the most common and important for food being sorghum (Sorghum bicolor L.), pearl millet (Pennisetum glaucum), finger millet (Eleusine carocana), teff (Eragrostis tef), proso millet (Panicum miliaceum), kodo millet (Paspalum scrobiculatum), foxtail millet (Setaria italica), little millet (Panicum sumatrense) and fonio (Digitaris exilis). (Rao, Malleshi, Annor, & Patil, 2022) (Rao, Malleshi, Annor, & Patil, 2022)

MILLET CULTIVATION AND INCORPORATION OF MILLETS IN INDIAN HOUSEHOLD MEALS

In the recent years millets were popular as rice and wheat, cultivation and consumption of millets was also well distributed throughout the country. In spite of its many uses and advantages, the area dedicated to the production of nutri-cereals had a sharp decrease in the post-green revolution era, falling by 41.65 percent between 1950–1951 and 2018–19. Low compensation relative to other food crops, a lack of price incentives and input subsidies, subsidized supply of flour through the Public Distribution System (PDS), a shift in consumer preferences as a result of processing difficulty, low flour shelf life, and low social status associated with millets, and the emphasis placed on rice and wheat during the green revolution are the main causes of this decline, according to reports.. (Devi Asha, 2022)

Even though millets are the first foods known to mankind, today due to industrialization, commercialization and over cultivation of wheat and rice has led to a decline in cultivation and consumption of Millets. Today there is a lot of awareness about Millets and there is a lot of scientific data to prove the nutritional benefits of Millets. Today Millets are now again becoming a feasible way to maintain a healthy lifestyle and reduce the risk of lifestyle disorders including diabetes, hypertension, and cardiovascular disease, which are becoming more common due to recent food and lifestyle practices. (Jyoti Prasad Nautiyal, December 2023)

Millets have always been a part of daily meals in rural India in the form of Bhakri, Rotis, Raggi Mudde, components of gruels and porridge, these a specially popular with the farming and rural communities as they are power packed with nutrients, carbohydrates and higher in satiety value. These grains are also used in several regional dishes like jowar roti and bajra khichdi. Because of their adaptability, millets can also be used to increase the nutritional diversity of porridges. They are also ideally suited for farming in rural locations due to its resistance to harsh weather, which helps to provide food security.

Millets are incorporated in special dishes and preparation throughout India in various recipes like Bajra Khichdi in Gujrat, Jowar Hurda in Maharashtra, Kodo Millet is added to Bhaja and Pithe in west Bengal to give it unique and distinctive taste. Ragi Mudde from Karnataka is the staple

of farming and rural community in that region, Kambu Sadam is a popular mildly fermented drink from Tamil Nadu which is loved by the locals. One of Kerala's popular breakfast choice Puttu incorporates barnyard millet in some recipes as well. Jowar, Bajra, Ragi are popular in Maharashtra where they are eaten with various chutneys, curd, jiggery or simply with raw crushed onion and green chilly

HOW MILLETS ADD TO THE NUTRITIONAL VALUE OF FOOD AND HELP TOWARDS MAINTAINING THE NUTRITIONAL BALANCE OF CHILDREN'S DIET

Dietary Fiber: Millets are a very good source of dietary fiber which aids in maintaining good gut health and digestion. (Shobana et al., 2013). (Shobana, 2013)

Nutrient Dense: Millets contain most important micro elements that help in supporting general health, which are vitamins, minerals, and antioxidants. (Saleh et al., 2013). (Saleh, 2013)

Gluten-Free: Millets do not have any gluten content so they are most suitable for people having gluten intolerance. (Hegde & Anila, 2002). (Hegde, 2002)

Slow-Release Carbohydrates: Millets contain complex carbs which stabilize blood sugar levels by slowly releasing energy. (Sharma et al., 2016). (Sharma, (2016))

High Protein Content: Millets are a great source of plant based protein for all vegetarians and vegans. (Anitha S. &., 2018)

Table 1. Amino acid profiles of different millet grains variety
(Foxtail, Proso, Pearl and Finger millet)

Amino acids (g/100g)	Foxtail millet (defatted flour) (a)	Proso millet (Dehulled Grain) (b,c)	Pearl millet (true prolamine) (c)	Finger millet (native grain) (d)
Essential Amino Acid				
Isoleucine	4.59	4.1	5.1	4.3
Leucine	13.60	12.2	14.1	10.8
Lysine	1.59	1.5	0.5	2.2
Methionine	3.06	2.2	1.0	2.9
Phenylalanine	6.27	5.5	7.6	6.0
Threonine	3.68	3.0	3.3	4.3
Valine	5.81	5.4	4.2	6.3
Histidine	2.11	2.1	1.7	2.3
Tryptophan	NA	0.8	1.2	NA
Nonessential Amino Acid				
Alanine	9.30	10.9	8.1	6.1

Arginine	3.00	3.2	0.9	3.4
Aspartic acid	7.71	6.2	6.2	5.7
Cystine	0.45	NA	0.8	NA
Glutamic Acid	22.00	21.3	22.8	23.2
Glycine	2.91	2.1	0.7	3.3
Serine	4.56	6.3	5.4	5.3
Tyrosine	2.44	4.0	2.7	3.6
Proline	5.54	7.3	8.2	9.9
*PER[b]	0.80	1.10	1.60	2.00

*Protein Efficiency Ratio (PER). NA: not available. References: (a) Kamara, et al. (2009); (b) Bagdi et al., 2011; (c) Saldivar (2003); (d) Devi et al. (2011). (Issoufou Amadou, 2013)

MILLETS OFFER NUMEROUS NUTRITIONAL BENEFITS FOR CHILDREN, CONTRIBUTING TO THEIR OVERALL GROWTH AND DEVELOPMENT

Rich in Nutrients: Bone development and general growth in children is supported by the rich content of iron, calcium, and vitamins found in millets. (Sharma et al., 2016). (Sharma R. K., 2016)

High in Fiber: Millets' high dietary fibre content helps children's gut bacteria to grow and maintain digestive health by reducing constipation. (Shobana et al., 2013). (Shobana, "Finger millet (Ragi, Eleusine coracana L.): A review of its nutritional properties, processing, and plausible health benefits.", 2013)

Balanced Carbohydrates: Millets contain complex carbs, these provide a high satiety value and provide long lasting energy to children, it also assists with blood sugar regulation. (Anitha & Vijayalakshmi, 2018). (Anitha S. &., "A review on nutritional properties, medicinal properties and pharmacological actions of millets." World Journal of Pharmaceutical Sciences,, 2018)

Gluten-Free Alternative: Millets can be consumed by children having gluten intolerance and also help in adding variety to their diet. (Hegde & Anila, 2002). (Hegde, "Raghu., 2002)

Protein Source: For growing children, millets are an excellent source of plant-based proteins that are essential for the growth of muscles and general body upkeep. (Saleh et al., 2013). (Saleh, Millets: A solution to agrarian and nutritional challenges, 2013)

Table 2: Nutritional benefits of millets
(For 100g of each cereal)

Millets	Protein (g)	Fiber (g)	Mineral (g)	Iron (mg)	Calcium (mg)
Pearl millet	10.6	1.3	2.3	16.9	38
Finger millet	7.3	3.6	2.7	3.9	344
Foxtail millet	12.3	8.0	3.3	2.8	31
Proso millet	12.5	2.2	1.9	0.8	14

Source: http://milletindia.org [23]

SCIENTIFIC EVIDENCE SHOWS EATING MILLETS LEADS TO BETTER GROWTH IN CHILDREN

A review and meta-analysis of eight previously published studies was conducted and the results were published in the journal Nutrients. Led by Dr. S. Anitha, Senior Scientist-Nutrition at the International Crops Research Institute of the Semi-Arid Tropics (ICRISAT), it involved seven organizations across four nations. The ICRISAT News Letter. (Seetha Anitha D. I.-P., 2022)

"These results are attributable to the naturally high nutrient content of millets that exhibit high amounts of growth-promoting nutrients, especially total protein, sulfur-containing amino acids, and calcium in the case of finger millets," stated Dr. Anitha. The review included infants, preschoolers, school-age children, and teenagers. Finger millet was utilized in five of the review's studies, sorghum was used in one, and a combination of millets—finger, pearl, foxtail, tiny, and Kodo millets—was used in two. When compared to children on standard rice-based diets, there was a relative rise of 28.2% in mean height, 26% in weight, 39% in the mid-upper arm circumference, and 37% in the chest circumference among the children fed millet-based meals. The children in the study consumed millet for a period of 3.5 months to 4 years. (Anitha D. , 2022)

Dr. Jacqueline Hughes, Director General of ICRISAT, stated, "These findings provide evidence that nutrition intervention programs can be developed and adapted to increase diversity in meals using millets, and thus to improve the nutritional content, including in school feeding and mother and child programs.

"Study author Dr. Hemalatha, Director at India's National Institute of Nutrition (NIN), said that implementing millet-based meals required menus to be designed for different age groups utilizing culturally sensitive and tasty recipes. (Dr. Hemalatha https://www.icrisat.org/scientific-evidence-shows-eating-millets-leads-to-better-growth-in-children)

According to the studies Dr. Givens mentions, millets can help with a wide range of dietary and health requirements. In addition to combating undernutrition in children, they also help control type 2 diabetes, overcome iron deficiency anemia, reduce total cholesterol, reduce obesity, and lessen the risk of cardiovascular disease. (Welfare, 2023)

Finger millets have a naturally high calcium content (364 ± 58 mg/100g of grain), from which the body ideally retains about 23%. According to available data, finger millet contains around 28% bioavailable calcium, or around 100 mg of bio available calcium per 100 grams of grains. If this is sufficiently incorporated in diets, this can aid children who are deficient in calcium, according to Dr. Anitha. (Anitha D., 2022)

This research was conducted in India using typically found rice based diets which are very common. The researchers also considered varied diets which included fruits, vegetables, dairy products and other staples. They found that minor dietary modification which should involve addition of good amount of nutrient dense foods such as substituting rice with millets will help over all development of children in a positive way.

Rich in Nutrients:
To put it briefly: Millets, especially finger millet, are rich in minerals (iron, calcium, and phosphorus), proteins, dietary fiber, and vitamins (especially B-complex vitamins). The general growth and development of children depend on these nutrients. (Shobana S. K., Finger millet (Ragi, Eleusine coracana L.): A review of its nutritional properties, processing, and probable health advantages., 2013)

High Calcium Content:
(Reference: Chandrasekara, 2011)To put it precisely Finger millet in particular has 3 times the calcium as compared to the calcium content in milk. During adolescence and early childhood calcium is essential for the development and growth of bones and general structure.

Rich in Protein:
In brief: Millets, notably finger millet, are good providers of plant-based proteins. For children's overall growth and the development of their muscles, proteins are essential. (Shobana S. &., 2007)

Antioxidant Source:
Shahidi, F. and Chandrasekara, A. (2011). Journal of Functional Foods, 3(2), 144-158. Determination of antioxidant activity in free and hydrolyzed fractions of millet grains and characterization of their phenolic profiles by HPLC-DAD-ESI-MSn. In brief: Antioxidants which

are found in millets can help in marinating the general well-being of an individual.

Suitable for Particular Dietary Requirements:
Millets are also suitable for Children who have special dietary need and are intolerant to Dairy or Gluten. (Source: Hithamani, 2014)

CONCLUSION

An extensive review of research emphasizes the numerous benefits of introducing millets, particularly finger millet, into children's diets. Because millets have a high nutritional content that includes important nutrients including proteins, dietary fiber, vitamins, and minerals, they provide a comprehensive nutritional resource for growing children (Shobana et al., 2013). As finger millet has higher calcium content as compared to milk it can be more beneficial in growth and development of bones in early child hood and adolescence. (Chandrasekara & Shahidi, 2011; Hithamani & Srinivasan, 2014). According to Shobana and Malleshi (2007), Millets are power packed with plant proteins and also help in muscle development during early stages of life.

The anti-oxidants found in millets counter the oxidative stress and enhance the general health of individuals. Hithamani and Srinivasan (2014) have highlighted the significance of millets in tailoring diets of kids who have special dietary requirements, they have also focused on their ability to bridge the nutrition gaps found in traditional dietary patterns. More research by Saleh, S. S. M. et al. (2013) confirms the nutritional benefits and emphasizes how Millets help towards growth and development in children After all the considerations, this compilation of research supports the idea that it is important to including millets in children's meals as it is a comprehensive and nutrient packed approach towards healthy development and overall wellbeing of children.

Millet can be introduced in children' diet gradually, millet can be added into popular foods like pulao, dosa, or roti. Delicious millet-based goodies like muffins or cookies can be prepared by using popular millet flours. Offer a variety of millet forms, including flakes, flour, and whole grains, so children can choose the one that best meets their tastes. It is important to be patient and understand the individual as they adapt to the incorporation of these power packed foods in their diet as they many a time are not a part of their routine eating patterns.

Today there is a great need to develop a thorough approach to educate mothers, care givers and professionals about the nutritional benefits of millets. An ideal way to this would be to conduct workshops, seminars, demonstrations where in the participants are able to interact with Nutritionist and Chefs so as to have a deeper understanding of the nutritional aspect and how to incorporate millets in a way that will be easily accepted by children. There should be collaboration with

schools, maternity homes, hospitals for education the staff working in these places to create awareness about millets. Material like pamphlets, brochures and online data on websites, blogs, and articles should be created for the same purpose.

More awareness can be created by sending small pieces of information via text message, and email. Information provided in schools, hospitals, maternity homes should be ideally printed or displayed in the native language, this will guarantees cultural relevance. With the help of these strategies put together awareness can be created about the nutritional benefits of millets which will lead to growth, development and physical well-being of our future generations.

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An Analytical Study on Consumers Choice of Beverages – Traditional Non-Alcoholic vis-a-vis Plant-Based and Dairy-Free Beverages

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ABSTRACT

This research paper works toward understanding and analyzing the shift in trends amongst consumers concerning Plant-based and Dairy-free beverages and healthier options like functional drinks, e.g. Kombucha. It also tries to explore how the rising popularity of Plant-based and Dairy-free beverages impacts traditional non-alcoholic beverage markets and understand consumer motivations and demographic differences. Plant-based milk alternatives are gradually gaining preference in India. However, amongst the low-income group, traditional beverages still remained the top choice as they felt these PB / DF beverages could serve as an option only for certain economic groups. Allergies, lactose intolerance and change in diet were also found to be a reason for substitutes to traditional non-alcoholic beverages. The demand for PB / DF beverages is expected to rise significantly over the next decade due to increasing concerns regarding the ecological impact of certain foods and beverages, heightened animal welfare issues, and growing health concerns.

Keywords: Plant-Based Drinks, Dairy-Free Beverages, Non-Alcoholic Beverages, Health Drinks, Energy drinks.

INTRODUCTION

Beverages have always been an integral part of any civilisation from the times unknown, as they are consumed for various reasons starting with the basic need to quench the thirst to stimulate, energize, intoxicate, or just part of socializing**.** The drinking habits have evolved and continues

just the way our diet has, owing to various factors such as Climate, Geographical conditions, Religious mandate, Social norms, Technological advancements, Cultural influences, awareness of Sustainable practices, and so on. From the fundamental need to procure potable water in the Stone Age to the stylish range of beverages available today, the expedition of human drinking habits echoes bigger societal changes and changing human needs.

The primary concern for early humans during the Stone Age was to procure clean drinkable water. Drinking habits developed with the need to find reliable water sources such as rivers, streams, and lakes. Climate and geography played a significant role, as availability changed from region to region. There is the suggestion that even in the Stone Age, humans began trying with fermentation. First forms of alcoholic beverages made from fruits and honey fermented naturally were consumed.

The shift to settled agricultural societies during the Neolithic Revolution may have happened around 10,000 BCE, which may have started the intentional production of alcoholic beverages. We find the mention of "Chicha," a Beer-like drink found in the Inca Civilisation, and other beverages made from fermented grains and fermented grapes. As civilizations advanced so did the drinking habits. In ancient Egypt, beer was a staple, consumed by all social classes, while wine was the preferred beverages of the Royals and Ministers. The Greeks and Romans placed a high cultural significance on wine, associating it with gods like Dionysus and Bacchus.

Later with the formation of religions, we find that alcohol was also used in rituals, ceremonies, and as offerings to gods. But when the ill effects of alcohol were witnessed religions took over guiding their followers about abstaining. Islam prohibited the consumption of alcohol and that led to the increase in popularity of non-alcoholic beverages like Sherbets and other fruit-based drinks, also due to climatic conditions some fruits were preserved in the form of dry fruits and concentrate that could be later mixed with water or Milk and consumed.

In Hinduism and Jainism, alcohol consumption is usually discouraged, particularly among those who adhere to a vegetarian lifestyle. The Renaissance and Enlightenment periods witnessed the introduction and growth of Tea & Coffee in Europe. These beverages brought through trade with the Middle East and Asia became associated with intellectual life and social gatherings. Coffeehouses, in particular, became hubs of political and philosophical discussion.

The beginning of the 19th century saw the mass production of both alcoholic and non-alcoholic beverages. Advancement in brewing, distillation, and bottling technologies were made that made beer, wine, and spirits easily available and reasonable. Conversely, the rise of industrial-scale

alcohol production and urbanisation also led to problems with alcoholism that prompted the Temperance movement to gain momentum.

(Company) The late 19th century saw the introduction of soft drinks, with Coca-Cola being one of the first. Coca-Cola was invented in 1886 by Dr. John Pemberton, an Atlanta pharmacist, and first served at Jacobs' Pharmacy in downtown Atlanta, Georgia. The drink was originally promoted as a tonic for common ailments and was based on cocaine from the coca leaf and caffeine from the kola nut. Cocaine was removed from the formula around 1903.

People became aware of the potential health risks related to too much alcohol consumption, which led to changes in their drinking habits. Light beers, low-alcohol wines, and non-alcoholic alternatives gained popularity. These times also witnessed a resurgence of interest in artisanal and craft beverages. The ethical and environmental impacts of drinking led to organic and fair-trade beverages, and the reduction of plastic packaging influenced consumption patterns.

Early 2000's saw the rise in consumption of Energy drinks especially Red Bull, that led to the market being flooded with other energy Drinks such as Power Horse, Monster, Sting, etc. However, a lot of research study revealed the harmful effects of these drinks. The upcoming trend in drinking is expected to be influenced by a growing focus on sustainability, health and wellness and environment concerns. The surge of beverages, like Kombucha, herbal teas, and vitamin-infused waters, reveals this trend. There is also a growing market for non-alcoholic alternatives to traditional drinks, catering to those who seek a healthier lifestyle or wish to avoid alcohol for personal or religious reasons.

Teetotaller - (www.merriam-webster.com) a person who abstains from alcohol might choose tea as his or her alternative beverage, but the word teetotaller has nothing to do with tea. More likely, the "tee" that begins the word teetotal is a reduplication of the letter "t" that begins total, emphasizing that one has pledged total abstinence.

Classification of Non-Alcoholic Beverages: Non- Alcoholic Beverages can be classified under the various headings depending on their function and composition such as

Thirst-quenchers- Water, Lemon Juice/ Lemonade, Buttermilk, Coconut water, etc.

Nourishing- Milk, Fruit juices, Yoghurt based drinks, Malt/ Cocoa Drinks.

Stimulating- Tea, Coffee, Cocoa

Refreshing- Aerated Waters, Mocktails.

Energy Drinks- Red Bull, Monster, Sting, Hell, etc.

Isotonic Beverages (Sports Drinks) - Boozt, Prime, Gatorade, Powerade, etc.

Plant-based/ Non Dairy beverages -

i.   *Cereal based*: Oat milk, Rice milk, Corn milk, Spelt milk.

ii.   *Legume based*: Soy milk, Nut milk, Lupin milk, Cowpea milk.

iii. *Nut based*: Almond milk, Coconut milk, Hazelnut milk, Pistachio milk, Pecan milk.

iv.   *Seed based*: Sesame milk, Flax milk, Hemp milk, Sunflower milk.

v.   *Pseudo-cereal based*: Quinoa milk, Teff milk, Amaranth milk.

REVIEW OF LITERATURE

(Swati Sethi, 2016) The nutritional construction and the processes involved in Plant-based & Non-dairy beverages were studied. Consumers are looking out for Vegan options for various reasons including lactose intolerance, allergies, Calorie watch, and prevalence of hypercholesterolemia or as against their bit for the cause of cruelty against animals. Thus, Plant-based milk alternatives are chosen, that can serve as an economical option for certain economic group. Determined research efforts are prerequisite in coming years in functional beverages segment to prepare tailor-made newer products which are tasty as well as nutritionally adequate.
 In today's world, consumers look for definite functionality in these drinks that forms a part of their lifestyle, to address different needs and lifestyles—to boost energy, fight ageing, fatigue and stress, target specific diseases and the sector is still growing. In recent years, these changes and developments have led to newer products in the beverages sector. Also, in recent years, plant sources (cereals and legumes) are accepted as functional food and nutraceuticals due to presence of health promoting components such as dietary fibres, minerals, vitamins and antioxidants.

(M.L.Perez-Rodriguez, 2023) The plant-based beverage (PBB) market was found to be growing, with products made from Soy, Oat, Almond, rice, Tigernut, and other plants. With the exception of soy drinks, which have comparable protein levels, 136 PBBs from Spain were found to have lower calcium and protein content than cow milk. Twenty-three percent of the products had vitamin D added, and about one-third were calcium-fortified. Compared to cow milk, most PBBs have more carbohydrates, particularly if sugars are added. However, all of them have some dietary fibre. While oat and rice drinks are higher in carbohydrates, soy and almond drinks have

healthier fats. Tigernut beverages should be used carefully because they are high in energy. Although they were regularly used, claims like "No added sugars" did not always signify a healthier product. PBBs offer special nutritional advantages and can be included in a balanced diet, but they are not a direct milk substitute. Better consumer education is recommended to understand product labels accurately.

(Aneta Popova, 2023) PBBs are popular for their potential health benefits and sustainability. There is interest in new sources for PBBs, like fruit kernels, due to their bioactive compounds (e.g., vitamins, flavonoids), which may offer health benefits. However, some PBBs may lack essential nutrients, and anti-nutrients—substances that can reduce nutrient absorption—are present in many plant-based sources. While some PBBs, like soy drinks, are nutritionally sufficient, others, like coconut drinks, require caution. Research is needed to improve the nutritional content of PBBs and assess their environmental impact, as well as ways to use them in recipes involving heat processing.

(Penha, 2021) Eco-friendly technologies highlighted such as ultrasound, ultra-high-pressure homogenization (UHPH), enzymatic processes, and fermentation that can be applied to improve the production of plant-based beverages. These methods have the potential to enhance the efficiency, nutritional content, taste, and functional properties of the beverages. However, despite their popularity, there are challenges in using these plant sources to make milk substitutes. As the demand for plant-based drinks grows, these technologies could play a key role in advancing the market.

(Neha Sharma, 2024) Various factors that influenced consumer behaviour toward plant-based beverages, examining motivations (e.g., health and environmental concerns) and barriers (e.g., sensory preferences) were studied. It recommends that the success of plant-based beverages depends not only on their nutritional and environmental benefits but also on understanding consumer behaviour. Factors like health concerns, sustainability awareness, and product innovation drive interest, while barriers such as unfamiliarity with new foods (food neophobia) and sensory issues like taste and texture can hinder acceptance. To overcome these obstacles, companies can focus on improving nutrition and customizing sensory attributes like flavour, colour, and texture to suit individual preferences. It emphasized the importance of a consumer-focused approach to attract new customers and build loyalty. Ongoing research and innovation are keys for companies to meet evolving demands, highlighting the industry's growth potential as it adapts to consumer needs.

(Nick W. Smith, 2022) This research article assessment states that Plant-based beverages (PBB)

used as milk alternatives generally do not match milk's nutritional content. A study in New Zealand found that PBBs are more expensive than milk and vary in nutrients, with soy being the closest to milk in protein and amino acid content. Most PBBs are fortified with calcium, but shaking the product affects the nutrient content at consumption. It also highlights that except for soy, PBBs are not suitable nutritional substitutes for milk, especially for children and pregnant women, and regulations could help improve their nutritional quality.

(**Merritt, 2023**) Plant-based drinks (PBD) are not suitable for infant nutrition, except for specific medical reasons like soy or rice-based formulas. For young children, Cow's milk provides important nutrients like protein and calcium, but most PBDs lack the same nutrition and are more expensive. Studies show that children who don't drink Cow's Milk may grow slower, and there is limited research on how PBDs affect children's diets. Soy drinks are the closest alternative, but others, like almond milk, fall short. Parents may choose PBDs for ethical or environmental reasons, but better education and improved labelling are needed to ensure children get proper nutrition. Future innovations like precision fermentation could offer better alternatives.

(**Insights, 2021**) Demand for plant-based products is predicted to increase considerably in the next decade as a response to growing concerns about the ecological footprint of some foods and beverages, escalating animal welfare issues, rising health concerns, and the threat of food insecurity. Plant-based beverages, like wheatgrass juice and Aloe Vera drinks, have become more popular due to their health benefits, especially during the COVID-19 pandemic. People are now more focused on diet and immunity, leading to a rise in demand for organic products. In the U.S., plant-based food sales grew significantly during the pandemic, reaching over $7 billion in 2020. Social media and the internet have helped educate consumers about the benefits of these products, boosting their popularity and sales.

(**Lab**) The plant-based beverage market may reach USD 32.29 billion by 2028, growing at a 9.07% CAGR from 2021 to 2028. Key drivers include the rising vegan population, health benefits of plant-based drinks, and increased demand in North America and Europe due to lactose intolerance and food allergies. However, challenges such as reduced nutritional value and sensory issues compared to cow's milk remain. The growing popularity of vegan and flexitarian diets further fuels market expansion in these regions.

OBJECTIVES

1. To study the preference levels of Plant-Based and Dairy-Free Beverages vis-a-vis traditional Non-Alcoholic beverages amongst consumers.

2. To analyse the reasons that results in inclination towards PB/DF beverages amongst various age-groups.

Research Methodology: For this research, primary data collection was done with an online survey and interview with Professionals from the Beverage Retail industry.

The questionnaire was divided into 2 sections. The first section includes the personal information such as the name, age and gender. The second section deals with the questions based on which the objectives were to be achieved.

Type of Research Methodology: Mixed methodology used for collecting Primary- Qualitative & Quantitative data through Interviews and Survey method using Questionnaire as a tool from following targeted groups.

1) UG & PG Students

2) Hospitality Professionals

3) Vegan Groups

Sample size:- 179 (122 Males & 57 Females)

Geographical location:- Mumbai and around.

Time Frame:- 2 weeks

Data Analysis & Interpretation:

1. Choice of beverage
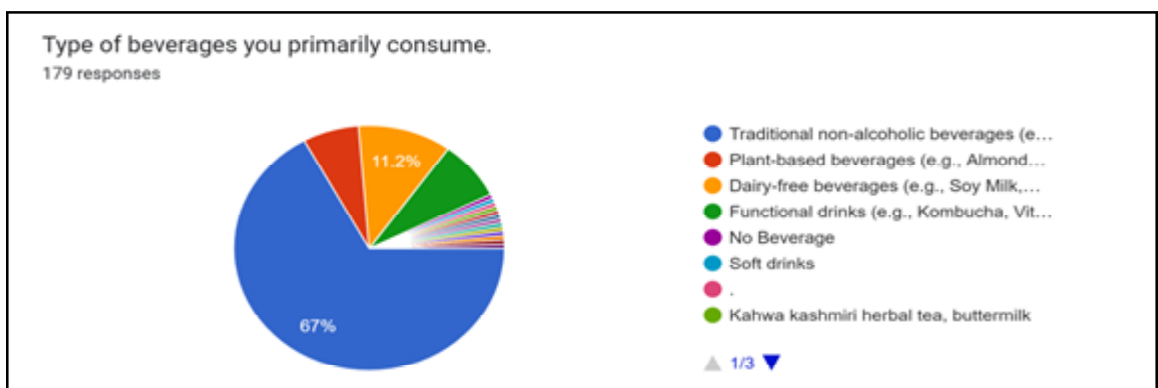
More than 1/3rd of the respondents consumed Traditional non-alcoholic beverages.

About 25.7% of the respondents consumed Plant-Based, Dairy-Free and Functional Beverages.

2. Factors that influences their choice.

What are the factors that influence your choice of beverages? (Select all that apply)
179 responses

Factor	Count
Taste	139 (77.7%)
Health benefits	104 (58.1%)
Availability	77 (43%)
Price	74 (41.3%)
Brand reputation	38 (21.2%)
Environmental impact	50 (27.9%)
Nutritional content	79 (44.1%)
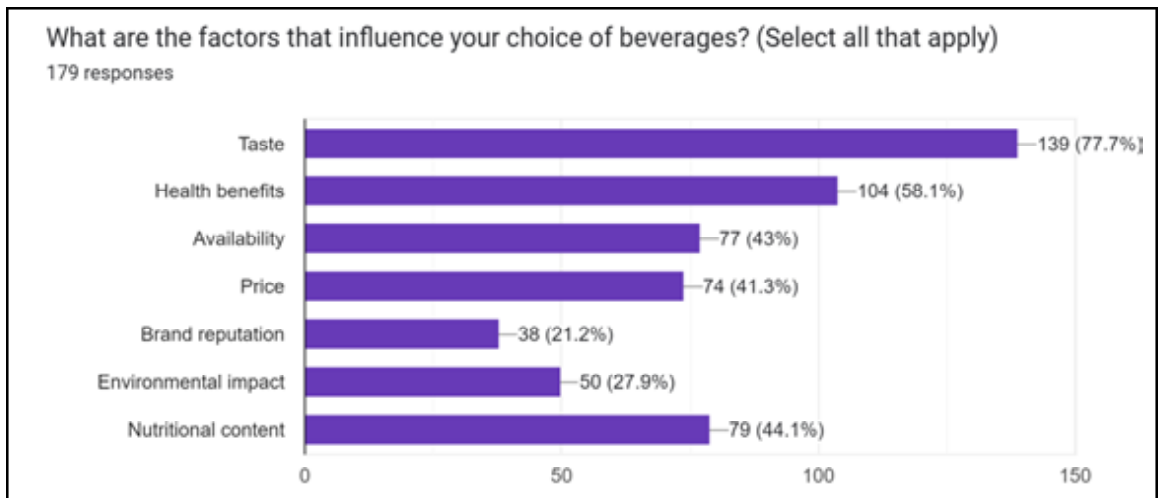
Taste was found to be the major factor that influenced the choice of beverage, followed by Health benefits, Nutritional content, Availability and Price. Considerable ratio of respondent also considered Environmental impact.

3. Health benefits presumably associated with PB/DF beverages

Which of the following health benefits do you associate with plant-based or Dairy-free beverages? (Select all that apply)
179 responses

Benefit	Count
Digestive health	96 (53.6%)
Weight management	76 (42.5%)
Improved energy levels	85 (47.5%)
Allergen-free options (e.g., lactose-free)	51 (28.5%)
High nutrient content (e.g., vitamins, minerals)	93 (52%)
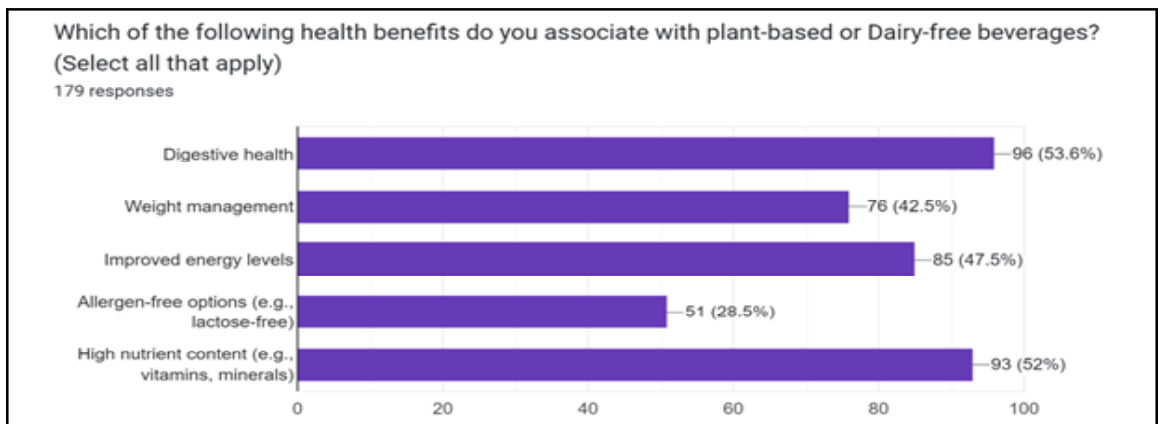
Digestive health, High nutrient content, improved energy levels were the major factors associated with PB/DF beverages followed by weight management and Allergen-free options.

4. Frequency of consumption.

How often do you consume plant-based or Dairy-free beverages?
179 responses

● Daily
● Several times a week
● Once a week
● Occasionally
● Never

41.3%
15.6%
15.1%
15.6%
12.3%
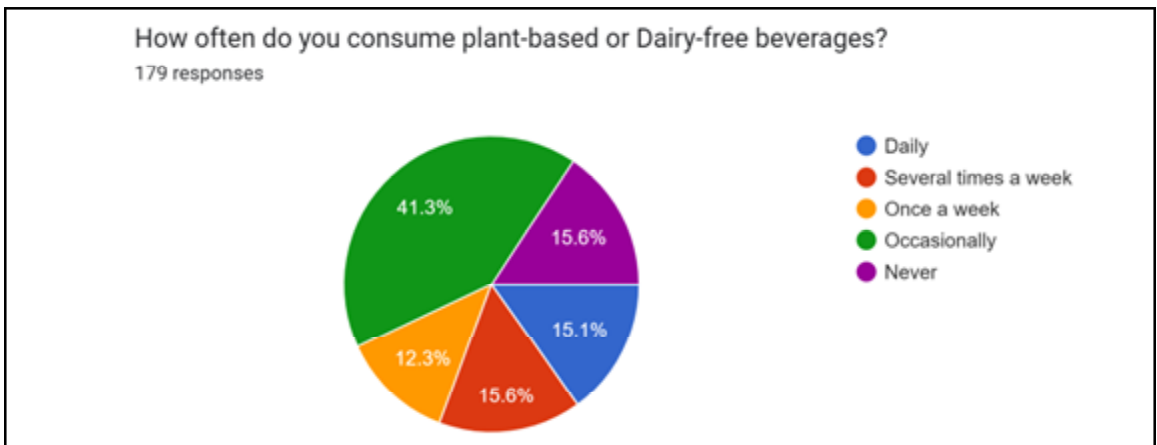
Only about 15.1% consumed PB/DF beverages on a daily basis and majority did not consume it on a frequent basis.

5. Inclination level towards PB/DF beverages amongst various age-groups.

Do you believe younger consumers (e.g., Millennials, Gen Z) are more inclined towards plant-based or Dairy-free beverages compared to older generations?
179 responses

● Strongly agree
● Agree
● Neutral
● Disagree
● Strongly disagree

33%
14.5%
13.4%
38%
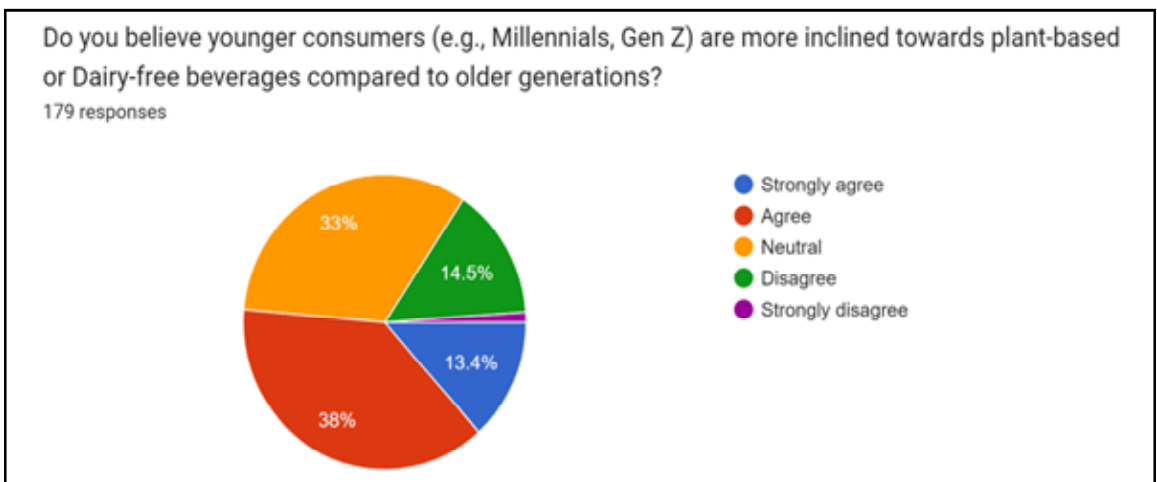
38% agreed and 13.4% strongly agreed where as 33% chose to be neutral thus indicating Gen Z / younger generations inclination towards PB/DF beverages.

6. Social Media influence as a factor.
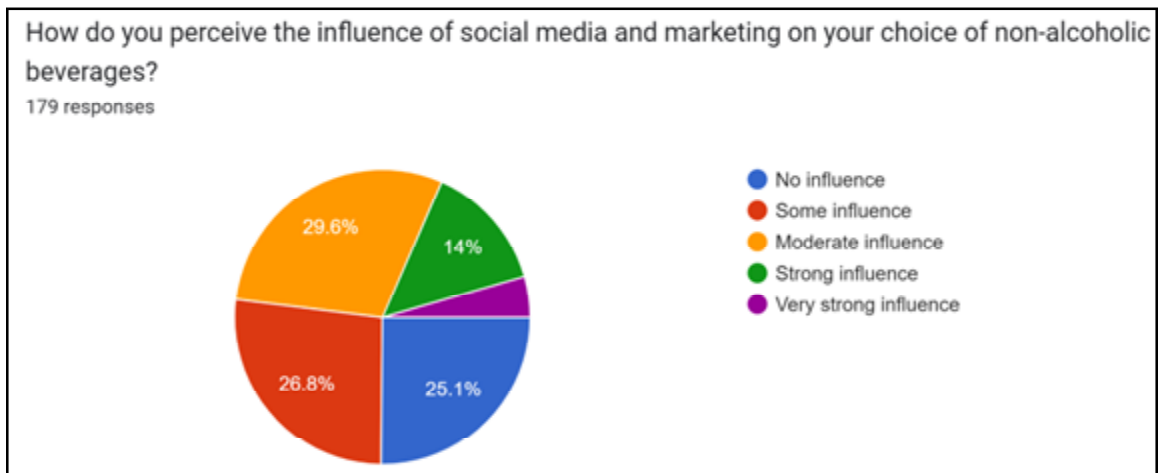
Only about 18.5% felt the Social media and Marketing to be factors influencing their choice of beverage.

7. Scope of switching the preference owing to eco-friendly factors.
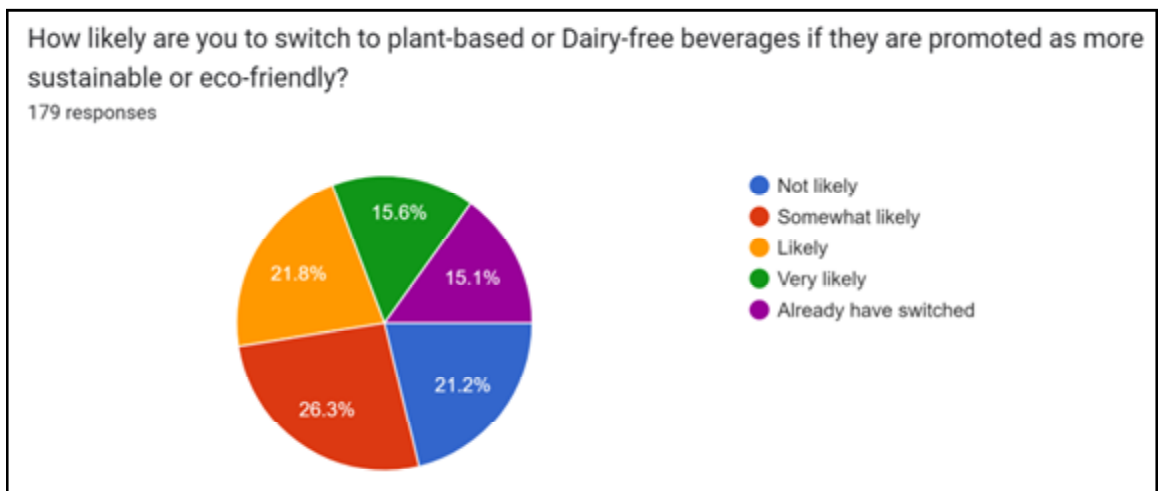
If promoted as more sustainable or eco-friendly only about 21.2% expressed that they were not likely to switch whereas 15.1% had already switched and 15.6% were very likely and 21.8% were likely to switch their preference.

8. PB / DF beverages rise's impact on Traditional non-alcoholic beverages.

Do you believe the rise in popularity of plant-based and Dairy-free beverages is reducing the consumption of traditional non-alcoholic beverages (e.g., Tea, Coffee, Aerated Waters)?

179 responses

- Yes, significantly
- Yes, somewhat
- No, not much
- No, not at all
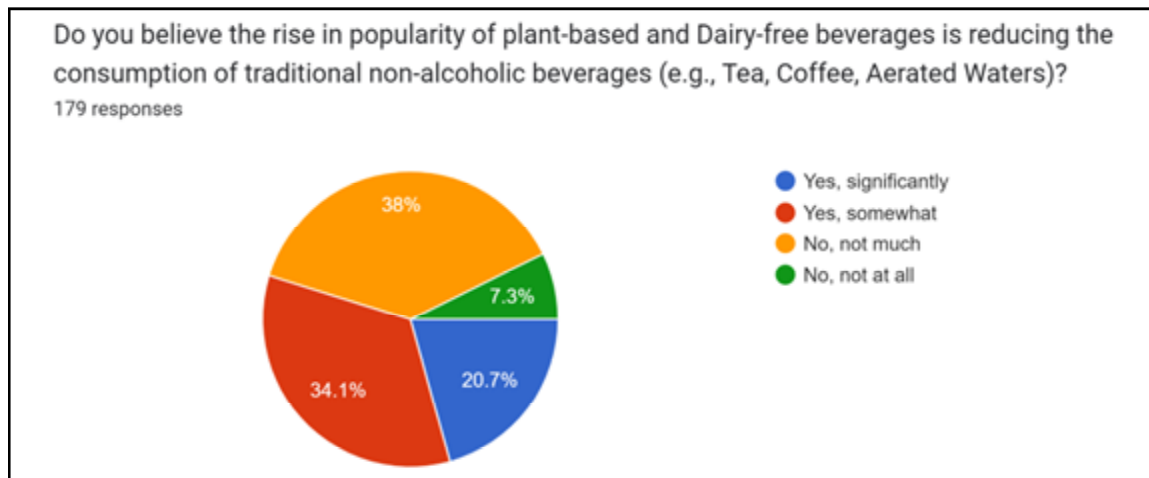
38% felt not much and 7.3% felt not at all whereas 34.1% & 20% felt that the rise in the popularity is reducing the consumption of traditional non-alcoholic beverages.

RECOMMENDATIONS & SUGGESTIONS

Detailed research can be conducted on how well aware the Indian consumers are when it comes to reading and understanding the labels of the PB/ DF beverages and also delve into the economical options that are or can be made easily available for those who may want to shift their preference owing to various reasons such as eco-friendly, sustainability price range or allergies.

CONCLUSION

Through the questionnaire responses and interviews with a few vegans, it was found that plant-based milk alternatives are slowly but steadily gaining preference in India. However, amongst the low-income group, traditional beverages still remained the top choice as they felt these PB / DF beverages could serve as an option only for certain economic groups. Allergies, lactose intolerance, and changes in diet were also found to be reasons for substituting traditional non-alcoholic beverages.

Certain research works stated that PBBs are not suitable nutritional substitutes for milk, especially for children and pregnant women, and regulations could help improve their nutritional quality. Indeed, recommendations exist from physicians' societies that PBB and milk are not interchangeable, particularly in the diets of infants and young children, due to the reduced nutritional value of PBB.

Demand for plant-based products is predicted to increase considerably in the next decade as a response to growing concerns about the ecological footprint of some foods and beverages, escalating animal welfare issues, rising health concerns, and the threat of food insecurity. PBBs like wheatgrass juice and Aloe Vera drinks, have become more popular due to their health benefits, especially during the COVID-19 pandemic. People are now more focused on diet and immunity, leading to a rise in demand for organic products. In the U.S., plant-based food sales grew significantly during the pandemic, reaching over $7 billion in 2020. Social media and the internet have helped educate consumers about the benefits of these products, boosting their popularity and sales.

Interaction with a few Ethical Vegan Campaigners and Managers of Reliance Fresh where a lot of varieties of Vegan food and PBB/ DF beverages were available on the shelf revealed that the Sales for the present moment are low but are positive that there will be a surge in the coming times as they feel people will get aware about the Allergies, Lactose intolerance, and Sustainability aspect in near future.

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The Impact of Training on Employee Job Performance in Housekeeping Department of Classified Hotels

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ABSTRACT

Objective: To study the Impact of training on the performance of employees in housekeeping department in star category hotels.

Introduction: In the hotel business, housekeeping is an important division of any lodging facility. The upkeep of the hotel is cleanliness and aesthetic standards depends heavily on a skilled housekeeper. Training inculcates positive perception of benefits among employees.This includes improved job performance, better productivity, job satisfaction and skill development. It also boosts their morale and they also feel valued. Training improves the individuals level of awareness and motivates the staff to improve their performance.

Research Methodology: To complete this research the author has referred to various research journals, books, newspaper, Textbooks, periodic magazines and journals.

Conclusion: The research has found out that there is significant impact on the employee job performance in classified hotels. Housekeeping department has large work source and hence the training is mandatory and beneficial parameter to get the effective human resource for the organization. Training is a crucial procedure that any company should carefully plan and carry out. This research's main goal is to evaluate the value of training in the workplace. Human capital has long been considered essential to an organizations effective operation due to its role in enhancing economic growth, company performance, and productivity.

Therefore, it is crucial to invest in human resources through training in order to strengthen the firms competitive position. This is because training can lead to higher quality, innovation, and productivity, which in turn can lead to increased profitability.

Keywords: Classified Hotels, Housekeeping Department, Training, Employee job performance

INTRODUCTION

In the hotel business, housekeeping is an important division of any lodging facility. The upkeep of the hotel's cleanliness and aesthetic standards depends heavily on a skilled housekeeper. Training inculcates positive perception of benefits among employees. This includes improved job performance, better productivity, job satisfaction and skill development. It also boosts their morale and they also feel valued. Training improves the individuals level of awareness and motivates the staff to improve their performance.

INTRODUCTION TO TRAINING

The purpose of training is to improve an individual's knowledge, skills, and competences within an organization through a methodical and planned procedure. It acts as a pillar for both professional and personal growth, enabling staff members to successfully transition into new positions, technology, and work processes. It is impossible to overestimate the value of training in today's quickly changing workplace. It is necessary to keep a competitive edge and guarantee that workers stay competent in their roles.

The main goals of training cover a number of important topics. Above all, developing one's skills is essential. This is giving staff members the specialized skills they require to carry out their tasks well, whether via technical training, leadership development, or improved customer service. Organizations may make sure that their staff is prepared to handle both present and upcoming difficulties by concentrating on these areas.

Enhancing performance is yet another important training objective. Increased productivity and efficiency can result from training programs that address identified performance gaps. This is advantageous to each employee individually as well as to the firm as a whole. Employees are more inclined to take the initiative and make valuable contributions to their teams when they have confidence in their abilities.

Furthermore, training is essential for assisting staff members in adjusting to changes in the workplace. A smooth transition can be facilitated for employees through appropriate training, regardless of the change in industry standards, organizational structure, or technology being implemented. This flexibility is essential for businesses hoping to prosper in a changing business environment.

Initiatives for training are also intimately related to employee retention and engagement. Investing in employees' professional development cultivates a feeling of worth and dedication. When

workers feel encouraged to grow, they are more likely to stay with the company, which lowers turnover and the related expenses of recruiting and onboarding new employees.

To achieve effective training outcomes, organizations must undertake a comprehensive approach. This begins with a thorough needs assessment to identify specific training requirements. Following this, relevant curricular must be developed that align with the organization's goals and the employees' learning needs. Implementing the training effectively involves engaging delivery methods that cater to different learning styles, ensuring that participants are motivated and invested in the process.

Finally, evaluating the impact of training is crucial for continuous improvement. By measuring the effectiveness of training programs through feedback, assessments, and performance metrics, organizations can refine their training initiatives, ensuring they remain relevant and impactful over time.The history of training reflects the evolution of educational practices and workforce development throughout human civilization. Here's an overview of its key milestones:

ORIGIN

Ancient Civilization:

Early Beginnings: The concept of training can be traced back to ancient societies where apprenticeships were the primary means of skill transfer. In civilizations such as Mesopotamia, Egypt, and Greece, knowledge was passed down generation to generation through practical experience and mentorship.

Formal Education: By the time of the Greeks and Romans, formal education began to take shape, focusing on rhetoric, philosophy, and practical skills for specific trades.

Middle Ages:

Guild System: During the medieval period, trade guilds emerged, formalizing apprenticeships and training methods. Young apprentices would learn a craft under the guidance of a master, combining hands-on experience with theoretical knowledge.

Renaissance and Enlightenment:

Rise of Universities: The Renaissance saw the establishment of universities, which broadened the scope of training beyond vocational skills to include subjects like sciences, humanities, and the arts. This period emphasized critical thinking and formal education.

Industrial Revolution:

Shift to Factories: The Industrial Revolution marked a significant turning point in training. As factories emerged, there was a need for a skilled workforce capable of operating machinery and also to organise other activities in the factories. On-the-job training became more common, and companies began to recognize the importance of systematic training methods.

Technical Schools: In response to the demand for skilled labor, technical schools and vocational training programs were established, providing more structured training options.

20th Century:

Scientific Management: The early 20th century introduced theories of scientific management, spearheaded by figures like Frederick Taylor. This led to more structured training programs focused on efficiency and productivity in the workplace.

World Wars: Both World Wars highlighted the need for effective training, particularly for military personnel. The development of standardized training programs became crucial for preparing soldiers for war, which later influenced civilian training practices.

Late 20th Century:

Corporate Training Programs: As businesses grew in complexity, organizations began to invest more in employee training and development. The establishment of corporate training departments became common, focusing on skills development, leadership training, and employee engagement.

Technological Advances: The introduction of computers and digital technologies transformed training methods. E-learning platforms and multimedia resources began to supplement traditional training approaches.

21st Century:

Continuous Learning: Today, training is viewed as a lifelong process.Employees of all levels are introduced to continous training programs. Organizations increasingly prioritize continuous learning and development to adapt to rapid changes in technology and market demands.

Blended Learning: The rise of blended learning models, which combine online and in-person training, reflects the growing emphasis on flexible and personalized learning experiences. Focus on Soft Skills: Modern training also places greater emphasis on soft skills, such as communication, teamwork, and emotional intelligence, recognizing their importance in a collaborative work

environment.Training has evolved from informal apprenticeship systems to sophisticated, structured programs that diverse needs of workforce.

This ongoing evolution continues to shape how organizations approach employee development and adaptation in an ever-changing world.

Training has its roots in prehistoric human cultures, when passing along abilities and information was essential to survival. Skills related to hunting, gathering, and crafting tools were passed down orally throughout families and tribes during the prehistoric era. More formal educational programs arose as societies developed; in ancient societies such as Egypt, Mesopotamia, and Greece, young people apprenticed with expert artisans to learn trades via practical experience. With an emphasis on philosophy, rhetoric, and practical skills, the Greeks and Romans advanced the development of formal educational systems. Trade guilds established institutionalized instruction during the Middle Ages through master-apprentice partnerships, in which apprentices resided with masters to acquire theoretical and practical expertise. With the founding of universities, the Renaissance increased access to higher education by providing a broader curriculum that went beyond practical training. Due to the Industrial Revolution, training took place in factories, giving rise to organized programs designed to increase productivity and efficiency. Training practices in the 20th century were inspired by military training techniques and scientific management ideas, especially during and after World Wars I and II. By the end of the 20th century, businesses realized how important it was to fund staff training initiatives that promoted engagement and skill growth. All things considered, the growth of training is a reflection of humanity's constant need to adapt and learn in rapidly changing settings.

Definition of Training - Training refers to the process of acquiring knowledge, skills, or competencies through instruction, practice, or experience. It can occur in various contexts, including education, sports, professional development, and personal growth. The primary goal of training is to enhance an individual's ability to perform specific tasks or roles effectively.

SIGNIFICANCE OF EMPLOYEE JOB PERFORMANCE

Why it is necessary to have effective workforce in housekeeping?

Employee job performance in the housekeeping department is crucial for several reasons:

1. Guest Satisfaction: Housekeeping directly influences the general appearance and cleanliness of hotel rooms and communal areas. Excellent performance guarantees that visitors have a good time, which encourages favorable feedback and repeat business.

2. Operational Efficiency: Effective housekeeping personnel can keep things running smoothly, cutting down on the amount of time it takes to clean rooms and guaranteeing that the establishment is always ready for visitors. This effectiveness helps to improve the department's operations and the hotel's general management.

3. Health and Safety: Maintaining hygienic standards lowers the chance of disease, infections, and mishaps thanks to good housekeeping practices. In the hotel sector, where clients place a high value on cleanliness, this is especially crucial.

4. Cost Management: High-performing housekeeping workers can achieve Effective resource use, reduced waste, and better inventory management (including cleaning supplies and linens), which can save the company money.

5. Team Morale: Positive work environments are created when employees perform effectively and receive recognition for their efforts. As a result, the housekeeping department may see reduced turnover rates, improved motivation, and higher morale.

6. Brand Reputation: Maintaining impeccable housekeeping standards can improve a hotel's standing. A home that is kept up well is frequently connected to excellence and professionalism, drawing in additional business.

7. Compliance with Standards: Many establishments in the hospitality industry are subject to stringent safety and hygiene requirements. Efficient housekeeping work performance guarantees adherence to these guidelines, averting possible legal complications.

Overall, the performance of housekeeping employees is essential for the success and reputation of hospitality establishments**.**

Impact of training on employee job performance in housekeeping department

Research Methodology: to complete this research the author has referred to various research journals, books, newspaper, Textbooks, periodic magazines and journals.

Literature Review: Impact of Training in the Housekeeping Department in Hotels on Employees

The housekeeping department is crucial in maintaining hotel standards and guest satisfaction. Training in this sector is essential for enhancing employee performance, job satisfaction, and overall service quality.

(Anupam Dhoundiyal, 2023) has mentioned in his research tha for new hires working in five-

star or comparable hotels in Mumbai and its suburbs, the study found a favorable relationship between training and employee satisfaction. Women were less concerned with social factors and the significance that training had in advancing one's career. There was undoubtedly room for improvement in terms of how well and efficiently Indian standalone hotels implemented training activities. Training has the biggest impact on postgraduate students, then undergraduates. The study indicated that while training had an impact on all characteristics shown to be related to employee satisfaction, its effects varied depending various workers, and hotels may use this information to determine where and how much human resources should be set aside to meet company goals and training needs.

(Tylliros, 2021) mentioned, they become aware of the guidelines through training. An organization's training department facilitates a new hire's assimilation into its customs. The Human Resources department and operations can communicate with each other through it. It is essential that new hires are oriented and inducted into the company after being hired by the department, and that they become acquainted with the company's objective and vision. A worker who lacks motivation will never provide consumers with high-quality work. To close the gap between the current specifications of personnel and the job requirements, additional training models had to be tailored.

(Shamim Ahammad, 2013) has explained, Human resource development includes training as well as other HR-related tasks including hiring, choosing, and paying employees. Providing employees with the information, skills, and attitudes that will enhance their present or future job performance is the human resources department's responsibility in order to increase the effectiveness of the organization. The training professional should understand the benefits and drawbacks of each training technique in order to apply the best ones. In addition to assessing training efficacy, measurements ought to be made in accordance with the models.

(Raggad, 2017) has stated, Training is a planned, structured, and ongoing activity that tries to increase a person's potential and capacity. Training results in the individual's transformation. knowledge, proficiency, and a shift in his or her conduct and focus in order to enhance their performance and caliber of their output.

(Khanfar, 2011) claims that this study aims to assess the scientific underpinnings of hotelling services training programs in establishments where employees have received the necessary training and qualifications. Additionally, this study intends to investigate how training quality affects hotel services. Additionally, this study explains the reality of the Total Quality Management concept and the potential for its implementation in hotel operations by relying on the Total Quality Approach, which is regarded as a turning point in the training of hotel cadres and

qualifies them by defining stages of the training process, but each stage requires planning and improvement through participation from all training process elements. It is advised to quantify the results of these procedures and the degree to which they impact hotel training quality, particularly the quality of general hotel services, and to record the findings if they are favorable for adoption and generalization. By doing this, the training procedure will be progressively enhanced in order to implement the Total Quality Approach in both teaching and training.

1. **Importance of Training in Housekeeping:** Training programs are designed to improve the skills and knowledge of housekeeping staff, leading to higher efficiency and productivity. According to Kwortnik and Thompson (2009), well-trained employees are more likely to adhere to hotel standards and policies, resulting in improved guest experiences.

2. **Impact on Employee Performance:** Research indicates a positive correlation between training and employee performance. A study by Namasasu (2021) found that targeted training significantly increased the efficiency of housekeeping staff, reducing the time taken to complete tasks without compromising quality. This improvement not only benefits the employees but also enhances overall hotel operations.

3. **Job Satisfaction and Retention:** Training programs contribute to increased job satisfaction among employees. As highlighted by Karatepe and Uludag (2008), employees who receive adequate training feel more competent and valued, which can lead to lower turnover rates. This is particularly important in the hospitality industry, where employee retention is critical for maintaining service consistency.

4. **Influence on Team Dynamics:** Effective training fosters teamwork and communication among staff. According to Kwortnik and Thompson (2009), group training sessions can enhance collaboration and improve interpersonal relationships, leading to a more harmonious work environment. This teamwork is vital in the fast-paced setting of hotel housekeeping.

5. **Adaptation to Technological Changes:** As hotels increasingly adopt new technologies, training becomes essential for staff to adapt and leverage these tools. Research by Sigala (2018) emphasizes that ongoing training ensures employees remain proficient in using technological advancements, ultimately enhancing operational efficiency.

CONCLUSION

The literature consistently supports the notion that training in the housekeeping department significantly impacts employee performance, job satisfaction, teamwork, and adaptability to technological changes. Investing in comprehensive training programs is essential for hotels aiming

to improve their service quality and employee retention.The research has found out that there is significant impact on the employee job performance in classified hotels. Housekeeping department has large workfp0rce and hence the training is mandatory and beneficial parameter to get the effective human resource for the organization. Training is a crucial procedure that any company should carefully plan and carry out. This dissertation's main goal is to evaluate the value of training in the workplace. Human capital has long been considered essential to an organization's effective operation due to its role in enhancing economic growth, company performance, and productivity. Therefore, it is crucial to invest in human resources through training in order to strengthen the firm's competitive position. This is because training can lead to higher quality, innovation, and productivity, which in turn can lead to increased profitability.

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Bridging the Skill Gap:
A Study on Matching Hospitality Education to Industry Demands

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ABSTRACT

Introduction: The hospitality and tourism industries are growing rapidly all around the world, and India is no exception. This industry contributes significantly to the country's economy. The industry has grown, creating a demand for qualified human resources. The industry's rapid rise in the last decade of the twentieth century and the first decade of the new millennium resulted in more options for graduates of hospitality and tourism programs. The demand for highly educated, knowledgeable, and multi-skilled individuals capable of assuming managerial and supervisory positions has grown. This produced a demand for qualified experts and professionals with educational backgrounds.

Objectives:

• To examine the relationship between the perspectives of students, teachers, and industry experts regarding the required industrial capabilities and the content of the hospitality degree program.

• To investigate current modalities of teaching and learning and how they might be merged by combining theory with practical experience through experiential learning to fulfill the demands and expectations of industry.

• To examine the outcomes of hospitality management courses about the industry's emerging trends and requirements.

Research Methodology: The investigation was conducted by analyzing secondary data. Secondary data sources include electronic and printed working papers, journals, books, annual reports, magazines, and research work.

Conclusion: There is a need to build positive relationships between educators and employment providers. Industry and academia should collaborate to determine what needs to be taught and how it will be executed. Efforts should be made to create the correct attitude through regular industrial exposure and training. According to them, value-based learning should be included in the curriculum to help students build attitudinal competencies. The industry should contribute to the formulation of a curriculum based on its needs and demands. Students should have both theoretical and practical expertise.

Keywords: *Hospitality Education, Skills, Education Gap, Hotel, Industry Expectation.*

INTRODUCTION

The hospitality and tourism industries are growing rapidly all around the world, and India is no exception. This industry contributes significantly to the country's economy. The industry has grown, creating a demand for qualified human resources. The industry's rapid rise in the last decade of the twentieth century and the first decade of the new millennium resulted in more options for graduates of hospitality and tourism programs. The demand for highly educated, knowledgeable, and multi-skilled individuals capable of assuming managerial and supervisory positions has grown. This produced a demand for not only qualified experts but also professionals with educational backgrounds.

The hospitality industry is thriving, as is the hospitality education sector. The rising demand for hospitality professionals with educational skills resulted in the establishment of a large number of hospitality management institutions that provide a variety of programs at various levels. As a result, the number of prospective employees in the hotel industry is expanding with time. The education sector is working to close the gap between the demand and supply of skilled educational skills experts in the hospitality industry.

Traditionally, much research in hospitality and tourism education has concentrated on improving students' learning abilities and strengthening instructors' teaching effectiveness. For example, scholars in hospitality and tourism have frequently evaluated students' learning styles, subject matter knowledge, and teaching methods and delivery. However, in recent years, the research paradigm has altered to better satisfy the demands of all important stakeholders, including students,

instructors, and industry employers. This transition has spurred a thorough evaluation of the applicability of hospitality and tourism education. Hospitality and tourism programs have undergone curriculum changes and development to generate personnel that are well-suited to the ever-changing hospitality and tourist industries in global society.

The hospitality and tourism industries are growing rapidly all around the world, and India is no exception. This industry contributes significantly to the country's economy. The industry has grown, creating a demand for qualified human resources. The industry's rapid rise in the last decade of the twentieth century and the first decade of the new millennium resulted in more options for graduates of hospitality and tourism programs. The demand for highly educated, knowledgeable, and multi-skilled individuals capable of assuming managerial and supervisory positions has grown. This produced a demand for not only qualified experts, but also professionals with educational backgrounds. This gap must be addressed, and we must strive to maintain the greatest possible relationship between universities that provide hotel management education and the hospitality industry. There should be a healthy interaction between the two so that both are aware of each other and strive towards a common objective that will benefit both in the long term.

The hospitality industry is thriving in India, as is the hospitality education sector. The rising demand for hospitality professionals with educational skills resulted in the establishment of a large number of hospitality management institutions that provide a variety of programs at various levels. As a result, the number of prospective employees in the hotel industry is expanding with time. The education sector is working to close the gap between the demand and supply of skilled educational skills experts in the hospitality industry. There is no doubt that the Indian hospitality education sector has expanded rapidly, and the number of students graduating each year is also increasing. However, there is a mismatch between what the industry requires and what institutions produce.

Undoubtedly, the Indian hospitality education sector has expanded rapidly, and the number of students graduating each year is also increasing. However, there is a mismatch between what the industry requires and what institutions produce. This gap must be addressed, and we must strive to maintain the greatest possible relationship between universities that provide hotel management education and the hospitality industry. There should be a healthy interaction between the two so that both are aware of each other and strive towards a common objective that will benefit both in the long term.

For decades, higher education in hospitality and tourism has undergone fundamental transformations

and dramatic alterations around the world.

With such competencies and skills, hospitality and tourism graduates are more prepared to address the dynamic and changing needs of society. Hospitality and tourism educators and academics must recognize rising demands for these competencies and skills, innovate curriculum design and delivery, and share best practices in a timely manner.

Recognizing the presence of technology in people's daily lives, including travel, an increasing number of tourism businesses and destinations have adopted influencer marketing as a technique for promoting destinations and communicating with prospective tourists.

With the use of social media and mobile apps that have been enhanced, a positive feedback loop can be established between the use of mobile technology and leisure trip experiences. Social media and technological advancements will continue to shape customer attitudes and choices in the travel and hospitality industry while empowering travel agencies and hospitality enterprises to target, position, and divide their clientele. Furthermore, societal changes brought about by the prevalence of racial injustice and hatred need the conduct of significant, evidence-based research that clarifies the distinct requirements and traits of hitherto unnoticed tourist segments.

The hospitality sector, which includes a broad range of services like hotels, restaurants, resorts, event organising, tourism, and travel services, is one of the fastest-growing industries in the world. The requirement for a knowledgeable and qualified staff that can provide excellent customer service, guarantee client happiness, and effectively manage intricate operations is growing along with the industry. Education and training in the hospitality industry are essential for giving people the attitudes, abilities, and information needed to thrive in this fast-paced.A solid foundation in key subjects including management, customer service, marketing, operations, and finance is offered by hospitality education. Theoretical knowledge and practical skills are acquired by students pursuing degrees or certifications in hospitality management or similar subjects, preparing them for a range of positions within the sector. A wide range of subjects are covered in hospitality education, from food and beverage services to hotel management. The importance placed on both hard and soft skills in hospitality education is one of its main features. Running a successful business requires having certain hard skills, such as accounting, human resource management, and hotel operations. These soft skills are essential in the hospitality industry, where direct connection with varied groups of people from different cultural backgrounds is crucial and the client experience is of utmost importance.

In hospitality education, practical training is just as important as theoretical understanding.

Internships and on-the-job training are common components of the curricula of hospitality degrees. Students can apply what they have learned in the classroom to actual scenarios through this practical experience. Students gain important insights into the daily operations of the hospitality business through internships, which frequently take place in hotels, restaurants, or other hospitality venues. They acquire first-hand knowledge of how to make decisions, interact with clients, and collaborate with others. Through this exposure, they gain the competence and self-assurance needed to succeed in a work environment. Furthermore, internships frequently act as a link between academic study and full-time employment; many students who complete internships well are offered permanent roles.

The hospitality sector is changing due to technology, and education needs to adapt as well. Training on the newest technologies, including online booking platforms, customer relationship management (CRM) tools, and property management systems (PMS), is a part of contemporary hospitality curricula. To effectively manage operations and maintain competitiveness in a tech-Additionally, virtual simulations and e-learning platforms are being used more and more in hospitality education to give students the opportunity to practice skills in a safe, online setting. Through the simulation of real-life situations that students might face in their professional lives, virtual reality (VR) and augmented reality (AR) technologies are also being used to improve training.

Building a skilled workforce that can handle the demands of a quickly changing industry requires education and training in the hospitality sector. Students are prepared for a variety of professional options through hospitality education, which integrates technology into the learning process and combines theoretical knowledge with real-world experience. The need for knowledgeable and skilled workers will continue to be essential as the sector expands in order to uphold high service standards and operational excellence. driven industry, one must be knowledgeable about these technologies.

OBJECTIVES OF THE STUDY

➢ To examine the relationship between the perspectives of students, teachers, and industry experts regarding the required industrial capabilities and the content of the hospitality degree program.

➢ To investigate current modalities of teaching and learning and how they might be merged by combining theory with practical experience through experiential learning to fulfill the demands and expectations of industry.

➢ To examine the outcomes of hospitality management courses about the industry's emerging trends and requirements.

RESEARCH METHODOLOGY

The investigation was conducted by analyzing secondary data. Secondary data sources include electronic and printed working papers, journals, books, annual reports, magazines, and research work, and consist of :

1. Data about different linked research work and the opinion of researchers about their work.

2. Information on previous and current literature on hotel management education and industry requirements.

3. Information on legal provisions, rules, regulations, and norms provided by the government.

4. Data acquired from books published on the hotel industry, front office, housekeeping, food and beverage services, business management and human resource practices, journals on commerce, marketing, and management, published reports and articles, weekly magazines, and websites relevant to the research.

REVIEW OF LITERATURE

According to Baum and Cho, Woods, Jang, and Erdem (2006), the industry values soft skills such as communication, teamwork, leadership, and problem-solving, in addition to technical expertise. The research shows that graduates usually lack soft skills. According to Kay and Russette (2000), hotel managers emphasized that while technical skills were properly taught, graduates frequently lacked soft skills and managerial competencies.

(Deegan, 2005) and strategic abilities (O'Leary & Deegan, 2005).

Current hospitality programs strive to combine academic knowledge with practical practice.

Connolly and McGing (2006) (MCGing, 2006) emphasized that institutions with strong industry relationships have higher graduate employment rates. Internships, mentorships, and guest lectures from industry leaders expose students to real-world difficulties and help them build problem-solving abilities, which are critical for job success. (Lashley, 2001)

According to Lashley (2001), academic institutions have responded to these trends by restructuring curricula to include internships, capstone projects, and industry partnerships to guarantee students

are job-ready when they graduate.

According to Suh, West, and Shin (2012), (Suh, 2012)many graduates feel detached from the practical skills required in their first jobs, resulting in greater turnover rates as they struggle to acclimatize to the expectations of the sector. This gap highlights the importance of stronger coordination between academia and industry in ensuring that hospitality schools generate graduates who fulfill industry requirements.

According to Arendt and Bosselman (2014), (SW Arendt, 2014) businesses are increasingly looking for graduates who can demonstrate cultural sensitivity and emotional intelligence as visitor diversity grows in global hospitality operations.

Internships are considered one of hospitality education's most effective experiential learning strategies Through industry internships, students can explore their career alternatives and expand the information already learned at traditional.

CONCLUSION

This literature analysis concludes that there is a large demand for trained and experienced labor in the hospitality industry. Knowledge, skills, abilities, and attitude are hospitality workplace competencies. Along with knowledge of the major operating areas of the hospitality industry, hospitality graduates must have a basic understanding of accounting, marketing, human resources, management, computer skills, foreign languages, first aid, issue resolution, scenario handling, and so on. There is a need to build positive relationships between educators and employment providers. Industry and academia should collaborate to determine what needs to be taught and how it will be executed. Efforts should be made to create the correct attitude through regular industrial exposure and training. According to them, value-based learning should be included in the curriculum to help students build attitudinal competencies. The industry should contribute to formulating a curriculum based on its needs and demands. Students should have both theoretical and practical expertise.

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A Study on Latest Innovations in Hotel Bed Linen

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ABSTRACT

The future of hotel bedding goes beyond simply offering a place to sleep. It's about combining cutting-edge technology, sustainability, and increased comfort into one package. It looks to the synergy of architectural design, material science, and the human desire for a personalized experience to take your stay to the next level. The world of hotel bedding has changed dramatically in recent years, with more alternatives than ever before in terms of materials, textures, and colors, nowadays, it's all about providing them precisely what they want. Natural fabrics such as cotton, linen, and wool are becoming increasingly popular in hotel bedding. These fabrics are not only comfy, but also seem and feel luxury. Another popular trend is eco-friendly bedding made from sustainable materials such as bamboo. Investing in high-quality bedding is a wise decision for any hotel seeking to give its visitors with a pleasant experience.

Keywords: *Hotel bedding, cut edge technology, sustainability, natural fabrics, eco-friendly bedding.*

INTRODUCTION

Linen in hotels is used for both utilitarian and aesthetic purposes. It improves the whole visitor experience by ensuring comfort, cleanliness, and a visually pleasing presentation. While choosing linens for the hotels, durability, ease of washing, and comfort are critical. Many hotels choose high-quality, easy-to-maintain textiles that can endure many washes to provide guests with a fresh

and appealing environment. Additionally, hotels may have specific color schemes and branding considerations when choosing linens to create a cohesive and aesthetically pleasing environment. When it comes to providing a comfortable and memorable experience for hotel guests, the quality of hotel linen is essential. From sumptuous bed sheets to fluffy towels, the appropriate hotel linen can enhance the environment and create a lasting impression on guests.

OBJECTIVES

1. To explore and identify the latest trends in hotel bed linen.

2. To provide comprehensive overview of innovations in hotel bed linen.

RESEARCH METHODOLOGY

It is a descriptive analysis of the studies undertaken by various Bloggers, international agencies, research scholars, and academicians. It is based on available secondary data related to the Hotels. The study relied on already published studies, reports, several journals, articles & books This secondary data was freely accessible via online journals and the library. Conclusions drawn are based on the present situation and past research studies already undertaken in this particular area

REVIEW OF LITERATURE

(Salfino, 2016) Modern consumers choose bedding with a more contemporary vibe. Percale sheets are clearly in style right now. Next fabric mix will include geometrics, strong themes, and romantic florals. Bedding with technological characteristics like ergonomic topstitching that creates the ideal sleeping position, multi-zone covers that encourage an even heat sensation and covers that release aphrodisiac smells are popular. Hoteliers are looking for tech properties, moisture wicking/moisture management in their sheets, along with temperature control bacteria resistance and anti-microbial qualities. Because of global warming, consumers are purchasing lighter down comforters and coverlets and throws.

(Parker, 2023) The main themes in 2023 is influencing the visitor experience include customized comfort, eco-friendliness, high-end thread counts, color psychology, smart bedding technologies, multi-layer bedding, and allergy-friendly alternatives. By adopting these trends, hotels are fostering an idyllic atmosphere that meets each guest's unique requirements and preferences, encourages environmental responsibility, and offers the highest level of comfort and relaxation.

(Milstein, 2023) While beds have become sleeker and simpler, pillows were formerly an extension of a room's décor. There was a rise in wood headboards in 2023, bigger, cozier headboards than

those that were before in style. "2024 is going to be a year of comfortable upholstery.

(Winsham, 2023) The eco-friendly change in material is the first trend in wholesale hotel bedding suppliers. Sustainable materials are being used in hotel bedding as a result of guest's growing preference for environmentally friendly options. Canadian hotels are realizing how individualized bedding may enhance their brand recognition. From personalized embroidery to unique design elements, customized bedding give an air of luxury.Hotels are investing in hypoallergenic options. From pillows to duvets, these allergy-friendly products not only cater to sensitive guest's but also create a cohesive and memorable guest experience that resonates with their unique identity.

(Eliya, 2024) Hotel linen trends are ever-changing, which can range from eco-friendly and sustainable materials to opulent and welcoming designs. Adopting the newest trends in bedding not only gives hotel rooms a stylish touch, but it also shows that you value your guest's needs. We may anticipate seeing even more cutting-edge and practical elements in hotel linens as technology develops. In the end, hotels need to keep up with the newest trends in order to remain competitive in a market that is always shifting. Thus, investing in the correct linen may make all the difference in ensuring that visitors have an amazing stay, whether it's through fashionable and practical bedding, eco-friendly towels, or unconventional decorative accents.

(Eliya, 2024) Thanks to technological developments, suppliers can now provide creative solutions like eco-friendly and sustainable linen alternatives and smart textiles that improve the visitor experience, by following the newest trends and making investments in cutting-edge technology. Suppliers of hotel linens may anticipate a wealthy and successful future.

(Content Team, 2024) An increasing number of people are interested in eco-friendly dyeing and finishing methods for bedsheets in addition to the focus on sustainable materials. Processes such as natural dyeing and low-impact dyeing methods are gaining traction as consumers seek bedding products that minimize environmental impact. With the rise of smart home technology, there's a growing market for smart bedding solutions. These may include bedsheets embedded with sensors for tracking sleep patterns, temperature-regulating capabilities, or even integrated wireless charging capabilities for electronic devices. Vintage and retro-inspired designs, including floral patterns, classic stripes, and nostalgic motifs, are making a comeback, adding a touch of nostalgia and charm to bedding collections. A growing number of consumers choose bedsheets made of blends or materials like microfiber that require less ironing and upkeep due to their hectic lifestyles and resistance to wrinkles. Uniquely patterned, textured, and designed bedsheets are fashionable right now. Customers are searching for sheets that will improve the visual attractiveness of their beds, from striking geometric prints to delicate, minimalist designs.

(Ellie Violet Bramley, 2024) From soft brushed cotton to aspiration ally rough linen; ticking stripes to bold, Instagram feed-friendly colours; scalloped-edges to the renaissance of the dust-collecting valance, beds are big business beyond the foundational mattress and frame.

(Waida, 2024) Unbelievably, 2,800 gallons of water are needed to wash a single queen-sized bed sheet. These kinds of statistics have prompted the development of in-room hospitality technology, such as the new polyester linens that mimic cotton and provide visitors the benefits of hypoallergenic bedding while conserving water. How do they accomplish that? Advances in polyester technology have produced a previously unseen kind of material that can be remelted and reconfigured into a new sheet, guaranteeing that every time guests arrive, they will be treated to a fresh set of linens

(Sandip Kumar, 2024) Linens for homes and hotels are crucial to atmosphere and comfort. The market is driven by Generation Z to purchase premium, ethically sourced textiles that complement their environmentally conscientious beliefs. Gen Z has emerged as a major influence on the tastes and fashions in home and hotel linen selections, influencing everything from the towels we use to the linens we sleep on. Gen Z looks for solutions that show their uniqueness and prefers expressive designs, bright and colorful patterns over typical white bedding. Furthermore, the appeal of our smart linens with features like temperature control and customization has been fueled by Gen Z's love of innovation.

(Shivangi Singh, 2024) Modern design is all about calmness, simplicity, and well-defined lines. These ideas are ideally embodied by plain bed linens. In India, modern design tendencies frequently highlight minimalism and simplicity. Simple solid color sheets look well in this style and give the bedroom a tidy, uncluttered appearance. This approach can make the space feel more calming and restful, which is ideal for a sleeping environment. Solid colors avoid the visual busyness that patterns might introduce, contributing to a sense of serenity. Solid color sheets provide great adaptability as Indian interior design grows to integrate traditional and contemporary features. Simple bed linens are now essential to every modern bedroom's design. They provide a serene ambiance, countless decorating options, and a sleek, modern appearance.

SELECTION OF RIGHT BED LINEN

Bed linens include Bed sheets, pillow & cushion, pillowcases, blankets or duvets & bedspreads. Common fabrics used for hotel quality bedding is egyptian cotton, cotton sateen, cotton percale sheets, pima cotton and linen. The material used for bed linen has a considerable influence on its durability, comfort, and overall feel. Look for high-quality fabrics such as cotton, sateen, and

percale. These fabrics are renowned for their softness, breathability, and ability to tolerate institutional washing. A greater thread count typically suggests a smoother, more durable fabric. Aim for a thread count of 200 or above for better-end hotel bedding. Check for crease resistance & long-lasting choices along with reinforced stitching, double hems, and high-quality workmanship. Anti-pilling is another important factor to consider when selecting hotel bed linen.

HOTEL BEDDING AND LINENS TRENDS

Personalized Comfort

Hotels are focusing on providing customized comfort to their guests. One of the prominent trends is the use of adjustable mattresses. Every guest can customize the hardness level of our mattresses to suit their own preferences, guaranteeing a restful night's sleep for all. In addition, hotels are using high-end pillows with a range of firmness settings to accommodate guests who like to sleep on their stomachs, sides, or backs. In order to ensure that its customers have a good and restful night's sleep, hotels offer both stiffer and softer beds, bespoke linens that reflect their brand identity and cater to the tastes of their visitors. The desire for custom linens with distinctive patterns, hues, and textures has increased as a result of this trend. This personalization by the hotel linen provider not only maintains the property's brand identification, but also provides a premium touch.

Sustainable Materials

Speaking of sustainability, hotels are also providing eco-friendly solutions for visitors who are concerned about their carbon impact. This involves employing organic ingredients and investing in eco-friendly production techniques. Hotels are adopting sustainability in their linen and bedding selections and make use of organic cotton and bamboo. These fabrics are not only kind on the environment, but also extremely soft and breathable. Sustainable bedding improves the environment while also providing visitors with a comfortable and healthy sleep experience. Hotels are also using recycled and repurposed materials, which reduces waste and promotes a circular economy and environmental responsibility. There's a growing interest in eco-friendly dyeing and finishing techniques for bedsheets. Processes such as natural dyeing and low-impact dyes methods are gaining traction as consumers seek bedding products that minimize environmental impact.

Luxury Thread Counts and Weaves

The pursuit of luxury extends to the thread counts and weaves of hotel linens., higher thread counts are sought after, ranging from 300 to 600 and sometimes even more than that. High-

quality bedding produced from natural fabrics such as cotton, linen, and wool will last longer. More popular are –

1. **Microfiber -** Created from finely woven polyester and polyamide fibers, resulting in a lightweight yet durable fabric. Microfiber sheets are hypoallergenic, dust mite-resistant, and quick-drying. Their smooth texture gives a premium touch.

2. **Tencel -** Fabric derived from wood pulp, usually eucalyptus trees. It is renowned for its silky smoothness, breathability, and moisture-wicking capabilities. It is biodegradable, temperature regulation capabilities and hypoallergenic nature.

3. **Sateen weave textiles -** Recognized for their shiny, velvety sheen. These cotton textiles feature a greater thread count and a unique shine, resulting in a sumptuous look and feel.

DURABILITY AND MAINTENANCE

For hotels, bedding must be both durable and easy to maintain. The regular laundering and use necessitate materials that can tolerate wear and tear while maintaining quality. Combed cotton is a form of cotton that has been processed specifically to eliminate short fibers and impurities. The resultant fabric is stronger, smoother, and less likely to pill. Polyester blends, Blending polyester with natural fibers such as cotton results in a fabric that is both long-lasting and simple to maintain. Polyester lends strength and wrinkle resistance to the combination, while cotton provides softness and breathability.

COLOUR PSYCHOLOGY

Colour psychology is important in determining the atmosphere and ambiance to create a cohesive and inviting atmosphere of a hotel room. Hotels are using patterns and textures in their bedding to create visual appeal and depth. While solid-coloured sheets are ageless, there is an increase in demand for patterned and printed bed sheets. These designs span from strong geometric patterns to complex floral prints, giving customers a broad range of alternatives to meet their décor tastes.

SMART BEDDING TECHNOLOGY

The use of technology into hotel bedding is an emerging trend. Smart beds with sensors and temperature control functions are gaining popularity. These mattresses can alter their hardness in response to the guest's body temperature, offering maximum comfort throughout the night. Furthermore, smart pillows with built-in speakers and wireless charging capabilities are becoming

increasingly popular. Performance textiles featuring moisture-wicking, temperature management, and wrinkle resistance are also becoming popular. These new materials boost comfort and durability, answering to consumer's demand for practical sleeping solutions.

LAYERED BEDDING & TEXTURE

Layered bedding and texture make a visually beautiful bed setting; give depth and texture to their beds. A mixture of duvets, coverlets, and throws in various fabrics and designs give a pleasant and comfortable look. Mixing and layering different textures and fabrics, such as linen with velvet or cotton with fake fur, creates visual intrigue and depth to the bedding outfit. Textured textiles, such as waffle weave and dobby weave, provide depth and visual appeal to hotel bedding. Waffle weave textiles feature a honeycomb structure that is very absorbent and quick to dry. Dobby weave textiles include delicate geometric designs that offer a subtle, sophisticated look to bedding. These textures improve the visual attractiveness & add the tactile experience. Embroidered bedding gives a personal touch; Hotels frequently opt to embroider their emblem or a distinctive pattern on their fabrics to create a sense of exclusivity and attention to detail.

Anti-allergenic Bedding

Hotels are including hypoallergenic bedding with allergen-resistant textiles, dust-mite-proof mattress coverings, and pillows with anti-allergenic fillings. For comfortable and worry-free stay of visitors with unique health needs.

Minimalist Aesthetics

Clean, minimalist designs with solid colors, simple stripes, or subtle textures are favored by those who prefer a more understated and modern look in their bedrooms.

Natural Dyes and Non-Toxic Finishes

As customers become more aware of the chemicals used in textile production, there is a growing demand for bedsheets dyed with natural and non-toxic dyes. Bedding companies are reacting to this desire by providing goods devoid of dangerous chemicals and pollutants.

Global Supply Chain Disruptions

The pandemic demonstrated the susceptibility of global supply systems to interruption. In response, hotel linen producers are rethinking their supply chain strategy to increase resilience and minimize reliance on foreign suppliers, diversifying sourcing routes, establishing local ties, and investing

in buffer inventories adopting a more agile and adaptable approach to supply chain management.

Embrace of Circular Economy Principles

As the circular economy gathers pace, hotel linen makers are reconsidering old linear manufacturing processes in favor of more environmentally friendly options. Instead of perceiving linens as disposable items, producers are looking for methods to extend their life through repair, refurbishing, and recycling. To reduce waste output, reduce environmental impact, and generate new revenue streams from secondary markets.

Textile Recycling

Some firms specialize in restoring hotel bedding. They work particularly to remove stains using specialized equipment or colour them in order to rejuvenate them or convert hotel bedding into T-shirts & gets donated for charity they may be recycled into padding, paper, moving blankets, cleaning supplies, and other products, or appropriately burnt to produce renewable energy.

CONCLUSION

High-quality hotel bed sheets provide an unprecedented degree of comfort and elegance to visitors. They are designed to provide a soft and smooth feel against the skin, creating a cozy and inviting atmosphere. Investing in high-quality hotel bedding helps both guests and the hotel's profitability. These sheets are made with high-quality materials and manufacturing processes to ensure long-lasting performance. They can tolerate continuous usage and regular cleaning without losing their quality over time. The most recent fabric trends for hotel bedding and towels showcase a dynamic combination of sustainability, comfort, durability, and beauty. Hotels provide a variety of elegant, eco-friendly alternatives, including organic cotton and bamboo, Egyptian cotton, and Tencel. Innovations in fabric technology, such as antimicrobial treatments and phase change materials, further enhance the guest experience. Customization and personalization add a unique touch, making guests feel valued and special.

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Yield Optimization in Hotels – A Study on Strategic Approaches

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ABSTRACT

This research paper explores the role of hotel revenue management in enhancing profitability through the strategic alignment of demand and supply. It emphasizes the importance of employing several strategies, such as pricing, forecasting with absolute accuracy and comprehensive data analysis, to sell rooms effectively to appropriate customers at optimal times and prices.

The paper highlights how the driving forces of price adjustments, which result from demand fluctuations, seasonality and prevailing market conditions, can maximize hotel revenue. It also highlights the resultant inventory management, cost reduction and enhanced customer satisfaction.

Examining market trends and consumer behaviour, the paper calls attention to the need for hotels to embrace strategic decision-making processes that enhance revenue and long-term sustainability and growth.

***Keywords:** Yield Optimization, Hotel Revenue Management, Dynamic Pricing, Demand Forecasting, Pricing Strategies*

INTRODUCTION

By effectively offering a suitable room to the ideal customer at the optimal time, for the correct price, and via the appropriate distribution channel, hotels can enhance their revenue and profitability. This practice is referred to as hotel yield management. Utilizing data and analytics to predict

customer behaviour, demand, and market trends enables hotels to make real-time changes to availability and pricing

Key components of hotel revenue management include:

- Forecasting demand, which estimates future needs based on past data, booking patterns, seasonality, and specific events, is critical to hotel revenue management.

- Dynamic pricing involves adjusting accommodation rates in real-time based on market influences such as competition, occupancy levels, and consumer behaviour.

- Channel Management: Selecting the most effective platforms (like OTAs and direct bookings) to connect with customers while minimizing distribution costs.

- Customer Segmentation: Understanding different customer categories (such as leisure versus business travellers) enables you to tailor offers and pricing accordingly.

- Inventory Management: Regulating the number of available rooms to maintain a balanced array of bookings, including securing valuable guests during peak times.

INVENTORY MANAGEMENT OR DISTRIBUTION MANAGEMENT

In revenue management, inventory refers to the products sold, specifically rooms. A room is treated as a perishable item, which means it has an "expiration date." It cannot be sold later if you fail to sell a room for tonight. Furthermore, a hotel incurs a loss when a room goes unsold. Consequently, choosing the right mix of distribution channels is a critical aspect of revenue management. The main channels you will likely engage with include metasearch engines, bed banks (or wholesalers), OTAs, and GDSs. You can develop a distribution strategy that optimises occupancy and revenue by utilising demand forecasting insights for various consumer segments and channels.

PRICING

The cost is A major factor affecting a guest's choice to book at your hotel. The key to boosting your earnings lies in pricing, which involves figuring out the optimal rates for your inventory. To gain insights into your clientele and identify booking patterns, performing a comprehensive market analysis is essential. This will help you create a suitable pricing strategy for your hotel

PRICING STRATEGIES AND APPROACHES

1. Dynamic pricing involves regularly updating accommodation prices—often multiple times

daily—based on consumer demand. Dynamic pricing strategies aim to secure the maximum possible price for the property.

2. Open pricing refers to establishing different rates for bookings made by various visitor segments at different times through various distribution channels, etc.

BEST PRACTICES IN HOTEL REVENUE MANAGEMENT

- **Transition to profit management**

  Although the existing model has evolved, they assessed corporate performance and were measured against competitors' standards.

- **Utilizing predictive analytics and data analysis**

  Successful business operations rely on data. Currently, predictive analytics and data science are widely used across various corporate sectors, including the hospitality industry.

- Management of booking channels and overbooking

  The channels through which customers make reservations greatly influence revenue. By managing the sources of customer bookings and preventing overbooking, channel management plays a crucial role in revenue management. Mobile-driven booking

- The use of chatbots and artificial intelligence:

Artificial intelligence and data science are not only trending but are also influencing revenue in the hospitality industry. Chatbots integrated into social media platforms, like a hotel's Facebook group, serve as an additional sales avenue.

REVIEW OF LITERATURE

An extensive literature survey is carried out as part of this research to analyze the existing features of hotel revenue management using the available literature and research journals.

Kimes, S.E.(1999)

Kimes reviewed the development of revenue management over the decade, emphasising the increasing importance of dynamic pricing models and forecasting methods. It also discussed how technology became a larger role in revenue management.

Cross, R.G. (1997),

This book detailed the principles of revenue management in the hotel industry. Cross-focused on the tactical side of pricing strategies, demand forecasting, and inventory control, providing actionable insights for practitioners.

Chiang, W.-C., Chen, J. C. H., & Xu, X. (2007)

This paper provided a comprehensive overview of industry revenue management practices, including hotel revenue management. It highlighted the development of algorithms and tools that allow hoteliers to forecast demand, set optimal prices, and allocate resources more efficiently.

Guadix, J., Onieva, L., Muñoz, J. & Alarcón, F. (2010)

This research explored how hotels were applying revenue management techniques in practice. The authors surveyed different hotels to analyse the use of RM practices, identifying common strategies and challenges faced in implementation.

Ivanov, S., & Zhechev, V. (2012)

This critical review analyzed different perspectives on hotel revenue management. The authors explored challenges and advancements in the field, such as over-reliance on automated systems and the lack of integration between departments.

Anderson, C.K., & Xie, X. (2010)

Anderson and Xie reviewed how revenue management practices evolved in the hotel industry over 25 years. They focused on how data-driven decision-making and technological advances have influenced modern RM practices.

Noone, B., McGuire, K., & Rohlfs, K. (2011)

This paper highlighted the role of social media in shaping demand forecasts and pricing strategies for hotels. The authors discussed how hotels could integrate customer reviews, social media activity, and online reputation into revenue management strategies.

Abrate, G., Nicolau, J.L., & Viglia, G. (2019)

This study investigated how dynamic pricing, when paired with consumer behavior data, impacts revenue maximization in the hotel sector. The authors explored how real-time data could enhance

pricing flexibility and drive occupancy rates.

Mauri, A.G. (2020)

This paper tackled the shifts in hotel revenue management due to the COVID-19 pandemic, highlighting the need for flexibility in pricing strategies, the importance of health protocols in customer preferences, and changes in travel patterns.

These studies provide a detailed evolution of revenue management practices from foundational concepts to modern-day applications involving big data and dynamic pricing strategies.

METHODOLOGY

This study used secondary data. To complete this research, the author has referred to various research journals, books, newspapers, Textbooks, periodic magazines and journals

STATEMENT OF PROBLEMS

Data Integration: Merging data from various sources, like CRM, booking systems, and PMS (Property Management Systems), can be tricky.

Predicting demand with precision is crucial but challenging. Unpredicted events such as community happenings, natural disasters, or economic shifts can influence forecasts and revenue.

Challenges of Dynamic Pricing: The effective execution of dynamic pricing requires real-time data and intricate algorithms.

OBJECTIVES

- To Maximize Revenue per Available Room:
- To Optimize Occupancy Levels
- To Enhance Profit Margins

SCOPE OF THE STUDY

Hotel revenue management encompasses strategies and practices to maximise a hotel's income through effective distribution, inventory control, and pricing. It involves analysing customer behaviour, competitor pricing, and market demand to optimise accommodation rates and occupancy levels. Revenue management techniques include segmenting clients, forecasting demand, and

implementing dynamic pricing. The research also investigates the impact of technology, distribution channels, and marketing strategies on revenue generation. The primary goal is to enhance profitability by aligning availability and pricing with consumer needs and market trends, thereby supporting the hotel's overall operations.

CONCLUSION

The research indicates that suitable revenue management strategies must be implemented to enhance hotel performance and profitability. The examination of primary data reveals that essential components for maximizing revenue include effective pricing strategies, demand forecasting, and technological integration. The significance and effectiveness of training staff in these strategies are also highlighted.

The speed at which these changes are enacted alongside data-driven decision-making will dictate their lasting impact. However, the report also points out several challenges, including market instability, consumer backlash against undesirable pricing strategies, and the obstacles associated with adopting new technology.

To achieve this, hotels must prioritise a customer-focused approach, invest in advanced revenue management technologies, and foster a culture of ongoing learning to find the optimal balance between guest satisfaction and profitability. Incorporating emerging trends like machine learning and artificial intelligence into revenue management practices can guide the future direction of this research.

LIMITATIONS

Hotel income management faces several limitations. Its primary focus is on data analysis, which can be tedious and complicated, especially for smaller hotels lacking advanced technology. Inaccurate data can adversely affect forecasting and decision-making. Additionally, it often emphasizes room sales over other revenue streams, like food and beverage, which may decrease profitability. Moreover, revenue management strategies might result in suboptimal pricing if they do not consider external factors such as economic downturns or sudden market shifts. Lastly, an overreliance on dynamic pricing could alienate loyal customers who appreciate consistency.

Ultimately, differing priorities and the absence of a cohesive strategy among sales, marketing, and operations can lead to internal disputes regarding revenue management. To address these challenges and enhance overall effectiveness, it is essential to implement a comprehensive approach that considers both data and human perspectives

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Scope and Benefits of Ecotourism for Local Communities in the Konkan Region, Maharashtra

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ABSTRACT

Eco tourism today has been recognized and validated as a great alternative to mass tourism and it is the need of the hour to promote eco-tourism in emerging tourist destinations. Certain destinations are already over run with mass tourism and the damage is irreversible. Eco tourism not only helps towards achieving environmental sustainability but also helps local communities in many ways. This review paper studies the scope of promoting ecotourism in the Konkan region and its potential benefits for local communities considering economic development, environmental sustainability, preservation, and cultural preservation. This study will highlight the benefits of eco-tourism to local communities considering job creation, income opportunities, cultural enrichment, and reducing negative impact on local resources. (Nulkar, 2014)

Keywords: Ecotourism, Konkan, local communities, sustainable development, community-based ecotourism, economic benefits

1. INTRODUCTION

According to the definition Ecotourism is responsible travel to natural areas involving the conservation of the environment, respecting the local culture, and improving the well-being of local people. (The International Ecotourism Society, 2013). The Konkan region of Maharashtra which stretches from Mumbai to Vengurla near Goa is one of the most bio diverse landscapes

in India. This region has beaches, marine eco systems, mangrove forest, wildlife sanctuaries, mountains and lush rain forest eco systems which are unexplored, in spite of having a lot of potential for ecotourism the true benefits will be only effective when they the local communities who reside in and protect these natural areas are benefited from Eco tourism and activities related to it.

The main purpose of this study is to understand the scope of eco-tourism in Konkan region and how it can contribute towards the, economic, environmental, and social benefits to the local population and communities.

Research Objective: To explore the scope and benefits of Eco Tourism in Konkan Region of Maharashtra.

Research Methodology: To complete this research, the author has referred to various research Journals, books, newspapers, Textbooks, periodic magazines and journals.

LITERATURE REVIEW

2. The Konkan Region: Natural and Cultural Wealth

2.1 Geographic and Ecological Significance

The Konkan region or the Konkan strip as it is popularly known is the entire costal stretch of Maharashtra state along the west coast of Maharashtra, it is bordered by the Arabian Sea and the Sahyadri Mountains. The Konkan region is ha a unique topography which makes it a hot spot for varied terrain and bio diversity, this topography, includes lush tropical forests, mangroves, marsh lands, and diverse marine ecosystems which includes coral stretches, making the region a popular destination for ecotourism today. The Western Ghats of Konkan feature in the top eight hot spots for bio diversity in the world making it a top choice for nature lovers and enthusiasts.

Tansa wildlife sanctuary, Rangaon beach, rivers like Barvi, Bhatsa, and Daherja. In Thane district have the necessary qualities which can be developed as ecotourism spots for adventure tourism and sports. Riagad district is also extremely varied in topography and has beaches like Akshi, Kondivli, Revedanda, Alibag, Mandwa, Versoli, Kashid, Murud and Nagaon. Some of the destination in Raigad district are already developed as tourism spots and others are unexplored and will be best suited for Eco tourism development. Phansad wildlife Sanctuary near Murud Janjira is extremely rich in bio diversity and has species like the Malabar red squirrel, gaur, leopards and a wide variety of birds, reptiles and insects. Marleshwar in Ratnagiri's district is

being looked a potential spot for promoting adventure sports. In Sindhudurg district Tarkarli, Chivala, Deobaug, Wayangani, Achara and Kunkeshwar beaches which are rare white sand beaches have been already developed as a marine ecotourism spots. (Lad, 2013)
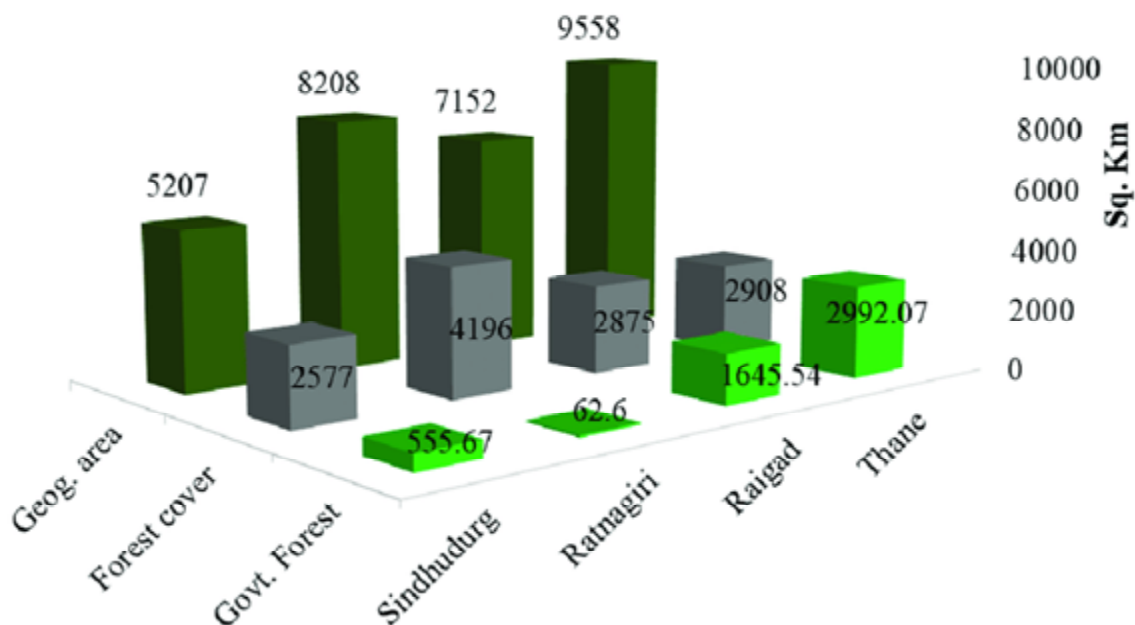
2.2 Cultural Heritage

Along with its varied and outstanding natural beauty Konkan also has a rich cultural heritage. A lot of ancient temples, forts from the time of Chatrapati Shivaji Maharaja, and traditional villages that show case the region's history and cultural diversity are found here. Local festivals like Shimga, (Dashavtar) Ganesh Festival, Jatra (Village Fair) local arts, crafts(Wooden toys of Sawantwadi), and cuisines like Malvani, Konkani offer an array of varied cultural experiences for visitors. When cultural elements are incorporated in Eco Tourism visitors and tourist develop a deeper understanding of the local culture and traditions, these experiences provide insights in the local culture, tradition and makes the travel experience more enriching. (Patil, 2012)

3. SCOPE OF ECOTOURISM IN THE KONKAN REGION

The naturally and culturally rich Konkan region has vast opportunities for the development of eco-tourism. A wide range of activities can be planned considering the ecological, cultural and sustainability aspect. Currently there are a lot of local families who offer home stays to tourist along with local delicacies, there are activities like Bird watching, wild life spotting, farm trips, river camping, fishing and many more which are offered on a micro scale by locals, if more awareness is created along with the help of Government there can be many more locals who can be involved in providing Eco Tourism based activities and services to tourist.

3.1 Nature-Based Ecotourism

Due to its rich bio diversity and the Western Ghats Konkan region is ideal for activities such as wild life spotting, nature treks, forest trails, bird watching, mangrove and back water safaris. Creating eco lodges and guided nature tours will help in providing tourist memorable, educative and immersive experiences along with job creation for local population as host (home stays), guides, and conservationist. Government policy and initiative along with the involvement of Forest, Tourism Departments will definitely play a significant role in the planning, implementation and success of these activities.

The revenue which is generated from these activities in turn can be utilized for forest conservation and the welfare and development of local communities (Pal, 2024)Tourist today seek the unknown and unconventional, they like to explore nature, wilderness immerse in local cultures and traditions and are willing to play a premium price for the same than going to the traditional tourist route which are often overcrowded and packed over capacity.

3.2 Marine and Coastal Ecotourism

White sand unpolluted beaches, mangrove forest, coral reefs and estuaries located in the Konkan region have a good foundation for ecotourism related activities like, dolphin spotting, snorkeling and mangrove tours. Local fishermen can offer tours in an ecofriendly manner and also show case their daily way of life to tourist to earn extra income and at the same time enrich the overall experience of the tourist. When sustainable tourism practices are implemented in costal areas they help towards the conservation of marine life and reduce the unnecessary burden on them due to over tourism (Patil, 2012)).

3.3 Agro-tourism

Agriculture has always been the back bone of the population from Konkan region, this region is famous for Mangoes, Kokum, Coconuts, Cashew, and Rice cultivation. Agro tourism is a type of tourism which is associated with visits to farms, learning about the cultivation and harvesting of crops and the process related to farming. (Kumar Parveen, 2021)). Children in urban areas find it hard to associate the relations between food ingredients and their sources, if they are introduced to this concept it can be helpful for them to have a better understating of the environment and the need to practice sustainability for its conservation. People from urban areas also like to connect to their roots and find such activities help to relax and unwind in a different way.

3.4 Cultural and Heritage Tourism

Promoting Cultural and Heritage tourism increases the participation of tourist in local festivals, events and sports which creates new markets for local craftsmen, artists, and artisans, this will also benefit local communities to preserve their local traditions and practices due to the increased foot fall of tourists (Selverajan, 2013)

4.1 Economic Benefits

One of the primary benefits of Eco Tourism for local communities is the creation of additional income. In Konkan region agriculture and fishing are the primary sources of income, Eco tourism allows them to diversify their sources to get access to additional income. Local residents can work as guides, tour operators, staff in eco lodgings, hotels and resorts or have their own businesses to provide, accommodation, food and other services. Regions that have developed community-based ecotourism practices have seen a 25% increase in their household income over five years according to a recent study.

Eco Tourism also helps in developing small scale business where women, local communities can be involved, demand for Home Stays, Local food, Handicrafts, lead to increased revenue. This increased revenue can be reinvested back into essential community development projects like healthcare, schools, and basic infrastructure for the benefit of locals (Das, 2018)

4.2 Environmental Benefits

Eco tourism also has shown to increase awareness about Environmental conservation, amongst tourist and locals alike. It has been seen in many destinations worldwide that if locals are made aware about the significance of Environment conservation they strive harder to work towards it

and also educate the tourist during their interaction with them. Training locals about sustainability and environment conservation creates a positive cycle of eco-tourism which is a wining situation for all who are involved, health of the environment is directly linked to the prosperity of local communities

4.3 Social and Cultural Benefits

In the culturally rich Konkan region, local festivals, events, dances, crafts, and food are integral to the cultural identity of the local population and region. Eco tourism will provide them a strong platform to them to showcase their culture. This will foster a sense of pride and belonging to the locals and inspire the future generations to preserve their local identity, culture and traditions.

Collaboration between local communities and government also leads to cohesion between the both and help in successfully manage eco-tourism related activities in the region

5. CHALLENGES AND RECOMMENDATIONS FOR ECOTOURISM DEVELOPMENT

Even though Eco Tourism has a lot of benefits it still is in its early stages and has few challenges, these challenges can definitely be overcome with the help of Government involvement at root level and integrating local communities. Awareness should be created at an early age to inculcate the benefits of conserving the environment and culture, this can be done by incorporating the subjects like Environment Science in syllabus of schools, though this step is taken by the government the study remains limited to class rooms. Teachers should be encourage to actively involve the students in field work which will help them to better understand the environment.

5.1 Infrastructure Development

In the Konkan region there is a lack of basic infrastructure in many remote locations, area like roads, electricity, basic sanitation, Lodgings are still behind as compared to other locations. The government should work towards prioritizing the development of Eco Tourism related projects which will have minimum environmental impact, such as solar-powered accommodations and waste management systems (MTDC, 2021). Government has also overcome a big obstacle in connectivity with the introduction of Konkan railways which has helps in providing connectivity to almost the entire Konkan region via rail, this is also a route to many popular destination like Goa and South India.

5.2 Training and Skill Building

Local communities has shown a positive outlook towards Eco-Tourism, one of the major obstacles

they find is lack of skills and knowledge which is required to manage Eco Tourism based programs. This training, skill building and education can be done by government agencies (Tourism Department) NGOs and private sector through Corporate Social Responsibility.

5.3 Policy Support and Regulation

Though the popularity of Eco Tourism is gaining foot hold in the Konkan region of Maharashtra there is a need to ensure that the idea of Eco Tourism is not lost due to the increased number of tourist traffic in such destinations and the benefits are reaching the local population rather than large hotel chains and international groups. (MTDC, 2021) The Maharashtra state Government is taking active steps to implement Policies and Regulation related to Eco Tourism, even so more awareness need to be created among tourist as well who visit this destinations, Flyers giving information about Eco Tourism, websites, Blogs and certain do and don't's related to the destinations should be made available in physical and online mediums (MTDC, 2021).

6. CONCLUSION

The Konkan region in Maharashtra has a great potential for Eco Tourism as it is enriched with natural beauty, varied and rich biodiversity, cultural heritage, history and scenic landscapes ranging from mountains, rivers, lakes, forests and beaches. In this region which is not much harmed by urbanization, pollution and Mass Tourism Eco Tourism can be a great path way to sustainable development of the region, its communities and the local population. If implemented in a right way Eco Tourism will help towards the environmental conservation, economic, social and infrastructure development in this region. To makes sure Eco Tourism is successfully implemented in the region there needs to be a combination of many factors that go hand in hand starting with Governments stringent policy creation and implementation with regards to Eco-Tourism implementation. Local government tourist bodies to work along with the resident population to create awareness and develop infrastructure and create an Eco Tourism based cohesive eco system which will include Nature-Based Ecotourism, Marine and Coastal Ecotourism, Agro-tourism, Cultural and Heritage Tourism to attain maximum benefit for the local communities through Eco-Tourism. On a larger scale there should be awareness about Eco Tourism in schools for children, in local community centers for adults and on blogs, web sites, tourist booking centers for tourist.

The success of Eco Tourism in this region will depend on overcoming the challenges of Infrastructure, community involvement, creating awareness, training, skill development, Policy creation, implementation and regulation by the government. By adopting a community-based

approach to ecotourism, the Konkan region can create a sustainable tourism model that benefits both locals and the environment.

Recently due to the increased connectivity and infrastructure there is good amount of influx of tourist in the Konkan region, there is a good scope to implement Eco Tourism in this region full of natural beauty, cultural heritage., wild life, and history, but there is a fine thin line which might be over stepped if steps are not at the right time. As individual we need to also think about sustainability, environment conservation, Eco tourism is definitely the way to move forward with this regards. This study hope to make the lay man understand the importance of Eco Tourism today so that we can conserve these natural wonders for the future generations to appreciate in today's age of modernization and Urbanization.

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Cloud-Based Solutions for Streamlining Operations in Hospitality

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ABSTRACT

This research paper explores the implementation and impact of cloud-based solutions in streamlining operations within the hospitality industry. The study examines how cloud technologies are transforming various aspects of hospitality management, including reservation systems, customer relationship management, inventory control, and financial operations. Through a comprehensive literature review and analysis of case studies, this paper highlights the benefits, challenges, and best practices associated with adopting cloud-based solutions in hotels, restaurants, and other hospitality businesses. The findings suggest that cloud technologies offer significant improvements in operational efficiency, cost reduction, and guest satisfaction. However, the research also identifies potential barriers to adoption and areas requiring further investigation. This study provides valuable insights for hospitality managers considering the implementation of cloud-based solutions and outlines directions for future research in this rapidly evolving field.

Keywords: *Cloud-Based Solutions, Cloud Computing, Hospitality Management, Property Management Systems (PMS), Customer Relationship Management (CRM),*

1. INTRODUCTION

The hospitality industry, characterized by its dynamic nature and customer-centric focus, has been experiencing a digital transformation in recent years. At the forefront of this change is the adoption of cloud-based solutions, which are revolutionizing the way hospitality businesses operate. Cloud computing, defined as the delivery of computing services over the internet, offers a range of benefits that are particularly relevant to the hospitality sector, including scalability, flexibility, and cost-efficiency.

The traditional model of hospitality operations often involves disparate systems for various functions such as reservations, property management, customer relationship management, (Wang, 2021) and financial reporting. This fragmentation can lead to inefficiencies, data silos, and difficulties in providing seamless guest experiences. (Martinez, 2023) Cloud-based solutions address these challenges by offering integrated platforms that can be accessed from anywhere, at any time, facilitating real-time data sharing and decision-making.

The objective of this research paper is to explore how cloud-based solutions are being utilized to streamline operations in the hospitality industry. Specifically, this study aims to:

1. Identify the key areas within hospitality operations where cloud-based solutions are being implemented.
2. Analyze the benefits and challenges associated with adopting cloud technologies in hospitality settings.
3. Examine case studies of successful cloud implementations in various hospitality businesses.
4. Assess the impact of cloud-based solutions on operational efficiency, cost management, and guest satisfaction.
5. Explore the future potential of cloud technologies in shaping the hospitality industry.

By addressing these objectives, this research paper seeks to provide a comprehensive understanding of the role of cloud-based solutions (Kim, 2023)in modernizing hospitality operations. The findings of this study will be valuable for hospitality managers, technology providers, and researchers interested in the intersection of cloud computing and the hospitality industry.

2. REVIEW OF LITERATURE

2.1 Cloud Computing in Hospitality: An Overview

Smith and Johnson (2022) provide a comprehensive overview of cloud computing adoption in the hospitality industry. Their study highlights the transition from on-premise systems to cloud-based

solutions, emphasizing the scalability and flexibility offered by cloud technologies. The authors argue that cloud computing enables hospitality businesses to adapt quickly to changing market conditions and customer expectations. (Smith, 2022)

2.2 Reservation Systems and Property Management

The research by Chen et al. (2023) focuses on cloud-based property management systems (PMS) and their impact on hotel operations. Their findings indicate that cloud-based PMS offer significant advantages over traditional systems, including real-time updates, improved data accuracy, and enhanced integration with other hotel systems. The study also notes that cloud-based reservation systems have led to increased booking efficiency and improved revenue management capabilities. (Chen, 2023) (Anderson, 2021)

2.3 Customer Relationship Management in the Cloud

Wang and Lee (2021) examine the role of cloud-based Customer Relationship Management (CRM) systems in enhancing guest experiences in the hospitality sector. Their research demonstrates how cloud CRM enables personalized guest interactions, targeted marketing campaigns, and improved loyalty program management. The authors emphasize the importance of data security and privacy considerations when implementing cloud-based CRM solutions. (Lee, 2021)

2.4 Financial Management and Reporting

A study by Rodriguez et al. (2022) investigates the impact of cloud-based financial management systems on hospitality businesses. The research highlights how cloud solutions streamline accounting processes, improve financial reporting accuracy, and provide real-time insights for decision-making. The authors also discuss the challenges of integrating cloud-based financial systems with existing infrastructure and the importance of staff training. (Rodriguez, 2022)

2.5 Optimizing restaurant operations through cloud-based inventory systems

Thompson and Brown (2023) explore the use of cloud-based inventory and supply chain management systems in the restaurant industry. Their research reveals that cloud solutions enable more accurate inventory tracking, reduce waste, and improve supplier relationships. The study also discusses the potential for predictive analytics (Zhao, 2022) in cloud-based systems to optimize inventory levels and reduce costs. (Thompson, 2023)

3. METHODOLOGY

This research employs a mixed-methods approach to comprehensively examine the impact of cloud-based solutions (Patel, 2022)on hospitality operations. The methodology consists of the following components:

3.1 Literature Review

An extensive review of academic journals, industry reports, and technology publications was conducted to establish the theoretical framework and identify key trends in cloud adoption within the hospitality sector. The literature review covered publications from the past five years to ensure relevance to current industry practices.

3.2 Case Study Analysis

Multiple case studies of hospitality businesses that have implemented cloud-based solutions were analyzed. These case studies were selected to represent a diverse range of hospitality sub-sectors, including hotels, restaurants, and travel agencies. The analysis focused on the implementation process, challenges encountered, and observed outcomes.

3.3 Qualitative Interviews

Semi-structured interviews were conducted with 15 hospitality industry professionals, including hotel managers, IT directors, and cloud solution providers. These interviews aimed to gather insights into the practical aspects of cloud adoption, perceived benefits, and ongoing challenges.
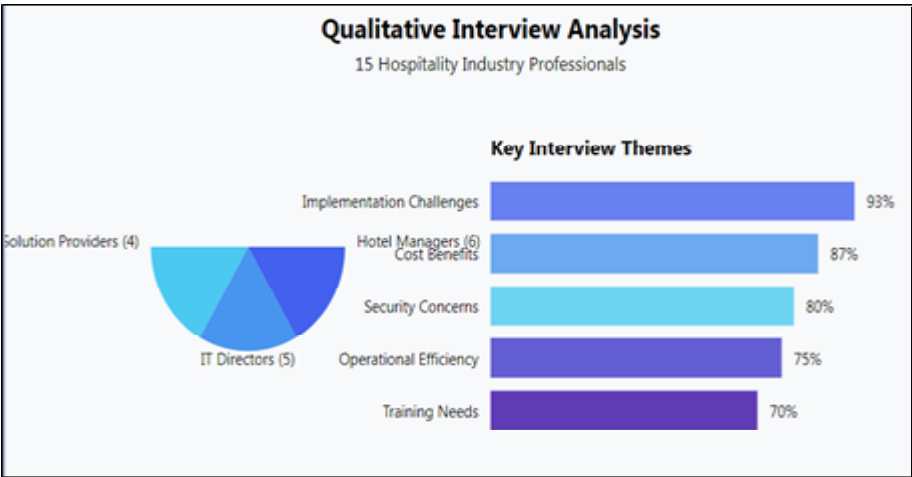
3.4 Quantitative Survey

A survey was distributed to 200 hospitality businesses across different geographical regions. The survey collected data on the types of cloud solutions implemented, satisfaction levels, impact on operational efficiency, and return on investment. The response rate was 67%, providing a substantial dataset for analysis.

Hospitality Business Cloud Solutions Survey

Response Rate: 67% (134 out of 200 businesses)

67%	50%	60%	40%
Response Rate	Satisfaction	Efficiency	ROI

Note: Data based on survey of 200 hospitality businesses across different regions
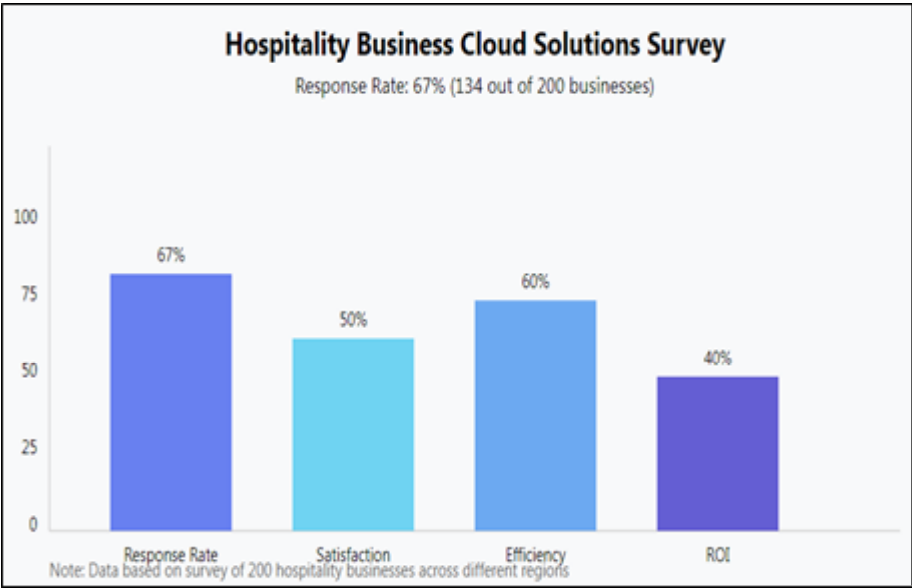
3.5 Data Analysis

Qualitative data from the literature review, case studies, and interviews were analyzed using thematic analysis to identify recurring patterns and key insights. Quantitative data from the survey were analyzed using statistical methods to determine correlations and trends in cloud adoption and its impact on hospitality operations.

This multi-faceted approach allows for a comprehensive examination of cloud-based solutions in the hospitality industry, combining theoretical insights with practical experiences and quantitative data.

4. RESULTS AND DISCUSSION

The analysis of the collected data reveals several key findings regarding the implementation and

impact of cloud-based solutions in the hospitality industry.

4.1 Adoption Rates and Trends

The survey results indicate a significant increase in cloud adoption within the hospitality sector over the past three years. Approximately 78% of respondents reported using at least one cloud-based solution in their operations, with property management systems (PMS) and customer relationship management (CRM) being the most commonly adopted technologies.
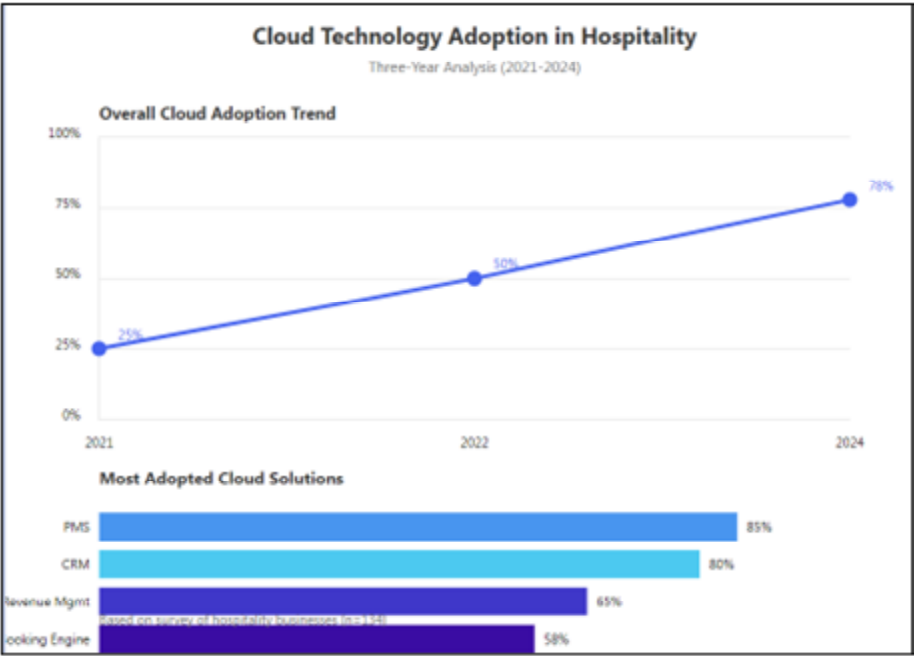
4.2 Operational Efficiency

Case study analyses and interview responses consistently highlight improvements in operational efficiency following the implementation of cloud-based solutions. Key areas of improvement include:

- Reduced manual data entry and associated errors
- Faster check-in and check-out processes
- Improved inventory management and reduced waste

- Enhanced communication between departments

Quantitative data from the survey supports these findings, with 82% of respondents reporting moderate to significant improvements in operational efficiency after adopting cloud solutions. (Fernandez, 2023)

Operational Efficiency Improvements
After Cloud Solution Implementation

Significant (45%)
Moderate (37%)
Minor (12%)
No Change (6%)

Key Improvements:
• Reduced manual data entry Faster check-in/out   • Improved inventory management
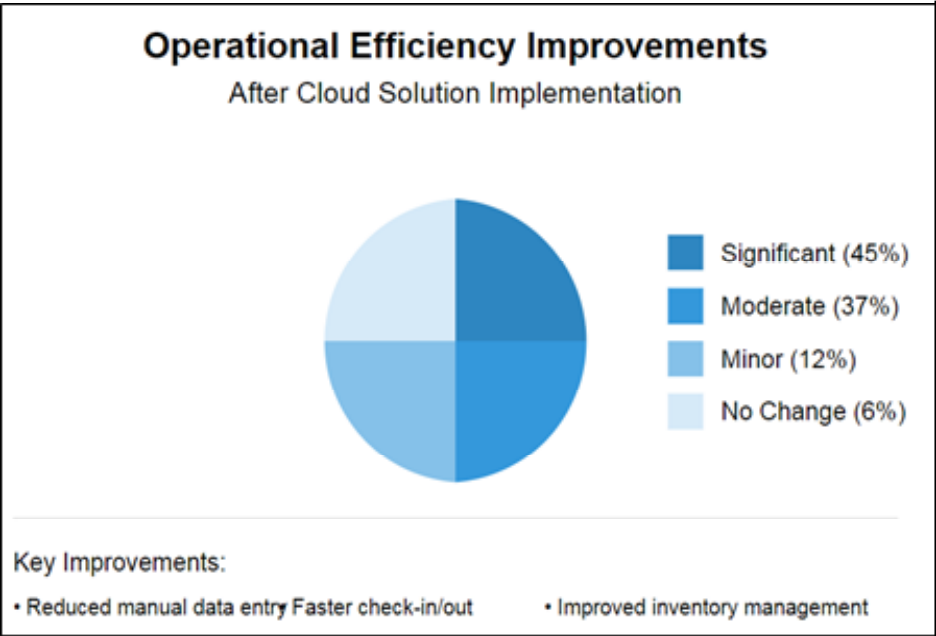
4.3 Cost Management

The research reveals a nuanced picture regarding cost management. While 68% of survey respondents reported overall cost savings due to cloud adoption, the interviews uncovered that initial implementation costs and ongoing subscription fees were concerns for some businesses, particularly smaller establishments.

However, the case studies demonstrate that medium to large hospitality businesses often achieve significant cost reductions in IT infrastructure, (O'Connor, 2021) maintenance, and staffing over time. For example, one hotel chain reported a 30% reduction in IT-related costs three years after transitioning to a cloud-based PMS.

Cost Management Analysis

Impact of Cloud Solution Implementation

Overall Cost Impact

30%

IT Cost
Reduction

Reported Savings (68%)
No Savings (32%)

Implementation Considerations:
• Initial setup costs
• Ongoing subscription fees
(Particularly impacting smaller businesses)
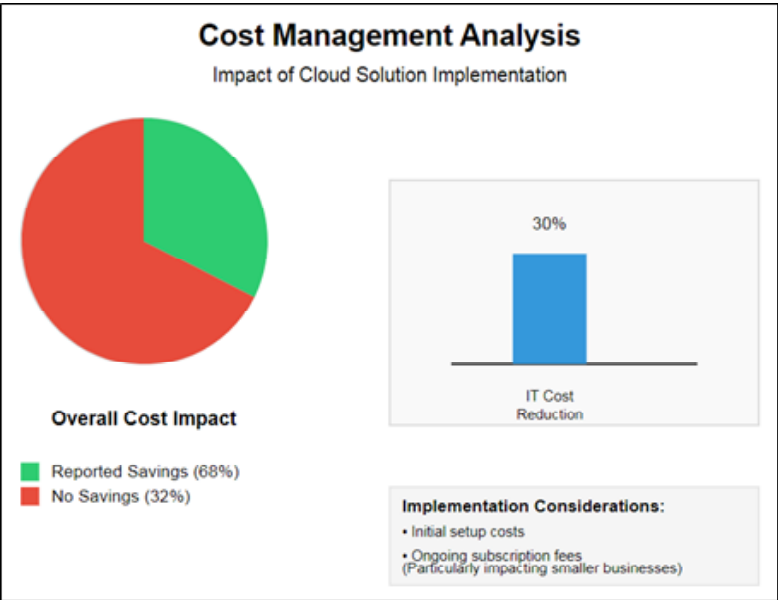
4.4 Guest Satisfaction

The impact of cloud-based solutions on guest satisfaction emerged as a significant finding. Interview participants consistently noted improvements in their ability to personalize guest experiences and respond quickly to guest requests. The survey data corroborates this, with 75% of respondents reporting increased guest satisfaction scores after implementing cloud-based CRM and service management systems.

Guest Satisfaction Analysis

75%
Reported Increased
Guest Satisfaction

P
Enhanced
Personalization

R
Faster
Response Time

C
Improved CRM
Integration
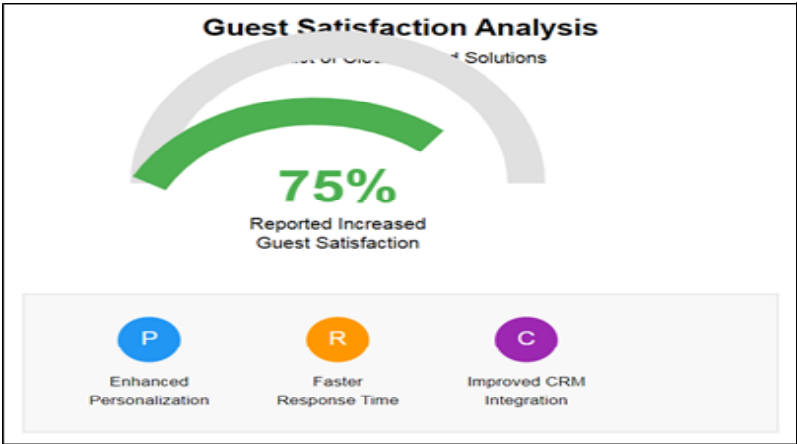
4.5 Integration Challenges

Despite the overall positive impact, the research identified integration challenges as a common obstacle in cloud adoption. Approximately 40% of survey respondents reported difficulties in integrating new cloud solutions with existing systems or other cloud services. The case studies and interviews revealed that successful integration often required careful planning, staff training, (Nguyen, 2021)and in some cases, custom development work. (Yoo, 2023)
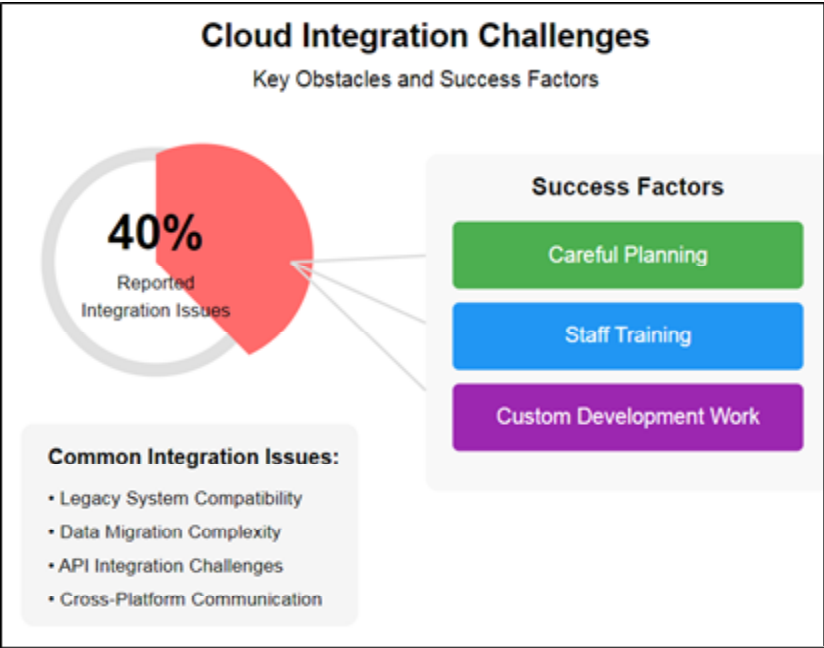
4.6 Data Security and Compliance

Data security emerged as a key concern among hospitality managers. While cloud providers generally offer robust security measures, the need for compliance with data protection regulations (such as GDPR) was identified as a challenge, particularly for businesses operating across multiple jurisdictions. (Davis, 2022)

4.7 Scalability and Flexibility

The ability to scale operations up or down quickly was highlighted as a significant advantage of cloud-based solutions, particularly in the context of seasonal fluctuations common in the hospitality

industry. Case studies demonstrated how cloud technologies enabled businesses to adjust their IT resources and costs in line with demand.

5. CONCLUSION

This research demonstrates that cloud-based solutions are playing a transformative role in streamlining operations within the hospitality industry. The findings indicate that cloud technologies offer significant benefits in terms of operational efficiency, cost management, and guest satisfaction. Key advantages include improved data accessibility, enhanced integration between different operational areas, and the ability to scale resources according to demand.

However, the study also highlights important challenges that hospitality businesses face when adopting cloud solutions, including integration difficulties, data security concerns, and the need for staff training. These challenges underscore the importance of careful planning and change management strategies when implementing cloud-based systems.

Overall, the research suggests that the benefits of cloud adoption outweigh the challenges for most hospitality businesses. As cloud technologies continue to evolve, they are likely to play an increasingly central role in shaping the future of hospitality operations.

6. SCOPE FOR FUTURE RESEARCH

While this study provides valuable insights into the current state of cloud adoption in the hospitality industry, several areas warrant further investigation:

1. Long-term impact: Longitudinal studies tracking the long-term effects of cloud adoption on hospitality businesses' performance and profitability.

2. Emerging technologies: Research on the integration of cloud solutions with emerging technologies such as artificial intelligence, Internet of Things (IoT), and blockchain in hospitality settings.

3. Small business adoption: In-depth studies focusing on the unique challenges and opportunities for small and independent hospitality businesses in adopting cloud solutions.

4. Cross-cultural comparisons: Comparative studies examining cloud adoption trends and impacts across different geographical regions and cultural contexts.

5. Sustainability impact: Investigation into how cloud-based solutions contribute to sustainability efforts in the hospitality industry, including energy efficiency and waste reduction.

6. Guest privacy: Further research on balancing personalized guest experiences enabled by cloud technologies with privacy concerns and regulatory compliance.

7. Workforce impact: Studies on how cloud adoption affects workforce dynamics, job roles, and skill requirements in the hospitality sector.

These areas of future research will contribute to a more comprehensive understanding of the role of cloud-based solutions in the evolving landscape of hospitality operations.

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The Influence of Sustainable Practices in the Hospitality and Culinary Tourism Sector of Western India

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ABSTRACT

Sustainable development in Western India's hospitality and culinary tourism sectors is crucial for economic growth while ensuring environmental and social sustainability. This study explores eco-friendly practices, including waste reduction, energy conservation, and adopting sustainable resources. Emphasis is placed on green technologies, such as solar energy and water-saving systems, tailored to regional needs. It highlights the role of Western India's culinary heritage in tourism, promoting farm-to-table initiatives, food waste reduction, and locally sourced ingredients. Collaboration between businesses of all sizes is essential to address sustainability challenges, fostering an industry that balances economic progress with environmental care and social equity.

Title: The Impact of Sustainable Practices in Indian Hospitality and Culinary Tourism
Purpose/ Objective:

- *Investigate the implementation of sustainable practices within Western India's hospitality sector, focusing on eco-friendly operations and resource management.*
- *Analyze the economic impact by evaluating the benefits and challenges faced by hotels and restaurants in adopting sustainable measures.*
- *Explore evolving consumer preferences for sustainability and their influence on accommodation choices, brand loyalty, and market trends in the region.*
- *Highlight the role of Western India's local cuisine in sustainable tourism, emphasizing farm-to-table practices and the benefits of sourcing local ingredients.*
- *Recommend strategies for collaboration between businesses to address sustainability challenges and promote regional environmental and social well-being.*

Design/Methodology/Approach:

This study employs structured interviews with key managerial personnel, including General and HR Managers, in Western India's hospitality sector. It explores sustainable practices like energy conservation, water management, waste reduction, and responsible sourcing. The research examines motivations, challenges, and outcomes of these efforts, ensuring confidentiality and adherence to ethical standards throughout the process.

Primary Data:

Questionnaires: Structured questionnaires were developed and distributed to key stakeholders, including General Managers, HR Managers, and stakeholders in various hotels and culinary establishments across Western India especially from Mumbai, Pune, Goa and western Maharashtra. The questionnaires will include both closed-ended and open-ended questions to capture quantitative data and qualitative insights.

Research limitations/Implications: This paper's limitations include potential gaps in generalizing findings across the entire hospitality sector due to a focus on selected hotels and limited access to broader industry data. Additionally, evolving sustainability practices and regional variances may affect the applicability of conclusions across different locations and operational scales.

Originality/Value:

The hospitality sector is becoming keenly aware of the benefits associated with implementing sustainability initiatives and optimizing its operations to encourage the tourism industry to conserve and protect natural resources, while at the same time maintaining guest expectations. (Daniel E. Meeroff, 2020). To address the fact that many lodging customers have become increasingly concerned about the environmental impact of the industry, a growing number of organizations have publicly emphasized their environmental commitment as a strategy to differentiate themselves from their competition. (Peter Jones (Business School, 2014) In recent years, sustainable practices within India's hospitality and culinary tourism sectors have become essential for driving economic growth while preserving environmental and social resources. This study explores eco-friendly practices such as waste reduction, energy efficiency, and responsible sourcing within hospitality, with a focus on solar energy, water conservation, and farm-to-table initiatives. Through case studies of innovative hotels and restaurants, it identifies the benefits and challenges of sustainable transformations. The research offers strategies to support a resilient, eco-conscious industry, providing guidance for businesses committed to environmental and social responsibility.

Keywords: Sustainable development, Hospitality and culinary tourism, Eco-friendly practices, green technologies, Local cuisine.

INTRODUCTION

Sustainable practices have emerged as vital components in India's hospitality and culinary tourism sectors, driving economic growth while safeguarding environmental and social resources. This study explores the impact of eco-friendly approaches, such as waste minimization, energy efficiency, and responsible sourcing, while assessing their contributions to sustainability and the challenges that arise in implementation. By focusing on innovative technologies like solar energy and local sourcing initiatives, the research seeks to provide insights for businesses striving to create a resilient and environmentally conscious tourism sector that positively impacts society and the environment.

SUB-TOPIC RELATED TO THE MAIN TOPIC

Growing Significance of Sustainability in Hospitality Sector

The increasing emphasis on sustainability in hotel management reflects shifting dynamics within the hospitality sector. This trend highlights the industry's awareness of its interconnection with broader societal and environmental health, addressing global ecological challenges and adapting to changing consumer expectations. By embracing responsible and community-oriented practices, India can harness the transformative power of tourism while safeguarding its rich religious and cultural heritage for future generations. (Mishra3, 2023)

Evolving Consumer Preferences

Mindful Consumption: Modern travelers prioritize eco-friendly accommodations, seeking hotels that align with their values through sustainable and ethical practices.

Building Brand Loyalty: Guests are more inclined to return to establishments that demonstrate a strong commitment to responsibility and ethical standards. ESG (Environmental, Social, and Governance) practices have deepened brand loyalty by fostering emotional connections with consumers who share similar values. (Darko Tipuric, 2024)

Cost Efficiency through Sustainability

Efficiency Initiatives: Implementing sustainable practices often leads to significant operational cost savings. Investments in water conservation methods, waste reduction strategies, and energy-efficient technologies not only benefit the environment but also enhance the hotel's financial performance over time.

Market Differentiation: Hotels that prioritize eco-friendly practices gain a competitive edge in a crowded market, with sustainability serving as a key differentiator. Positive Public Relations and Reviews: Guest reviews and positive PR are a result of sustainability initiatives. Cultural tourism products that were packaged creatively in offering identity or theme of tourist attraction must be able to ensure that tourists will get a specific and different quality of experience from other tourism products to encourage the emergence of a strong new visit motivation. (Rini Andari, 2022)

Evolving Guest Preferences and Sustainable Demand

Shifting Expectations: Today's travelers prioritize more than just location and amenities when choosing accommodations—they increasingly value sustainability. Ethical practices, environmental stewardship, and responsible management are becoming essential factors in their decision-making.

Cultural Shift Towards Mindful Consumption in Hospitality: A significant cultural transformation towards mindful consumption is driving a notable change within the hospitality industry. Travelers are increasingly aware of the impact their choices have on the environment and local communities. As a result, there is a growing preference for hotels that demonstrate a commitment to social and environmental responsibility. By promoting responsible tourism growth, mindfulness-driven travel could mitigate the detrimental effects of tourism. (Mishra, 2024) This trend is not only a reflection of personal values but also a response to heightened public awareness of global issues like climate change, prompting consumers to support businesses that align with their sustainable and ethical principles. Consequently, accommodations that actively promote and showcase their sustainability efforts are likely to attract and retain a consumer base that is becoming increasingly conscientious about its consumption habits.

Comprehensive Approach to Sustainability in Hospitality

Beyond Environmental Issues: A comprehensive approach to sustainability recognizes the significance of social responsibility and economic viability alongside environmental preservation. This approach not only ensures profitability and financial health but also involves actively engaging with and improving the well-being of the local community. It takes into account the economic impacts of business operations as well. The strong presence of food activities in tourism is increasingly being used to support sustainable development because it generates more indirect economic impacts such as higher farm income and job creation to the community where tourists visit. (Chin, 2021)

Interconnected Dimensions: A holistic perspective of sustainability in hotel management

underscores the interconnection between economic, social, and environmental dimensions. Decisions made in one area can trigger a ripple effect across others, as these elements are interdependent rather than isolated. For example, a hotel's financial choices can influence its ability to invest in sustainable technologies, while social initiatives may enhance community relations, subsequently affecting the hotel's overall reputation. These practices are not only aimed at reducing negative environmental impacts but also improving guest experiences and enhancing corporate social responsibility efforts. (Claudine Sykimte, 2023) Understanding these connections is essential for creating a lasting and balanced impact.

Review of literature:

Siti Kholijah in their research "Analysis of Economic and Environmental Benefits of Green Business Practices in the Hospitality and Tourism Sector" Indonesia, January, 2024 elaborates on the facts that the Governments, industry associations, and stakeholders need to establish and enforce regulations, standards, and incentives that encourage and support the adoption of sustainable practices. (Kholijah, 2024) Knowledge- sharing and capacity-building initiatives can also empower businesses to implement green strategies effectively. By embracing sustainability, businesses can reduce costs, attract environmentally conscious travelers, and contribute to the preservation of ecosystems and cultural heritage.

Harold B. Bueno, Vikneswaran Nair, Nicanor Reyes and Melinda D. Torre in their research emphasized that Sustainable Organic farming and farm-to-table tourism can be harnessed as a form of special interest tourism focusing on the unique travel experiences and dining activities that people can have in agricultural or regular dining settings. (Harold B. Bueno, Conceptualizing Farm-to -Table Tourism via Sustainable Organic Farming, 2016)

Dr. Edgar D'Souza in their research "Green Hotel Practices and Sustainable Development Goals: An Indian Perspective" (2023) offers a study on the perceptions of environmental management representatives in India's four and five-star hotels regarding green practices and their alignment with Sustainable Development Goals (SDGs). (D'Souza, 2023)It identifies both successes and challenges in areas such as energy efficiency, water management, and responsible waste disposal, emphasizing the need for increased adoption of renewable energy sources and effective water conservation strategies.

OBJECTIVE

The objective of this research is to investigate the implementation of sustainable practices in India's hospitality sector, analyse the economic advantages and challenges faced by businesses,

explore evolving consumer preferences regarding sustainability, highlight the significance of local cuisine in tourism, and recommend collaborative strategies for promoting environmental stewardship and social well-being.

Hypothesis:

This study hypothesizes that the implementation of sustainable practices in Western India's hospitality and culinary tourism sectors positively influences economic performance, enhances brand loyalty among consumers, and promotes environmental stewardship. Specifically, it is anticipated that hotels and restaurants adopting eco-friendly practices such as energy efficiency, waste reduction, and sourcing local ingredients will experience improved financial outcomes and increased customer satisfaction. Additionally, the study posits that the integration of sustainable practices aligns with the Sustainable Development Goals (SDGs), thereby fostering a more resilient industry that supports social equity and environmental conservation, ultimately benefiting both businesses and the communities they serve.

RESEARCH METHODOLOGY

Primary Data:

This study employs a structured questionnaire-based interview approach with key managers and stakeholders in India's hospitality sector, including General and HR Managers. These professionals provide insights on eco-friendly practices, such as energy conservation, water management, waste reduction, and responsible sourcing, in their hotels. The qualitative method allows a comprehensive view of motivations, challenges, and outcomes in sustainability efforts. All responses are treated confidentially, adhering to ethical standards to uphold data integrity throughout the research.

Secondary Data:

A review of existing case studies on sustainability practices in hospitality and culinary tourism will be conducted to contextualize the findings and identify best practices.

Tables and graphs:

The following data has been extracted from a questionnaire distributed to stakeholders in the hospitality sector to gather their insights. A sample size of 25 respondents participated in the survey.
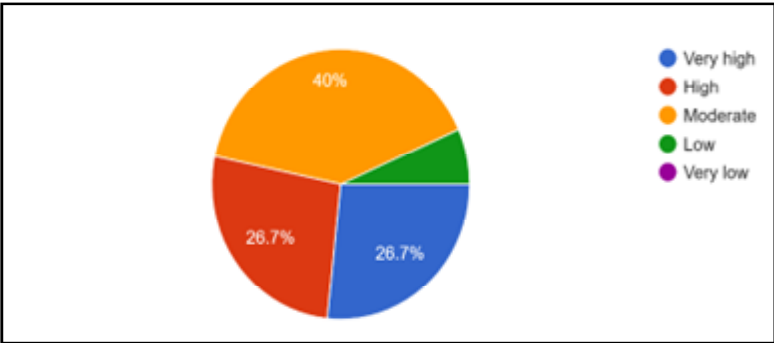
Chart 1 – Rating the organizations commitment to sustainability.
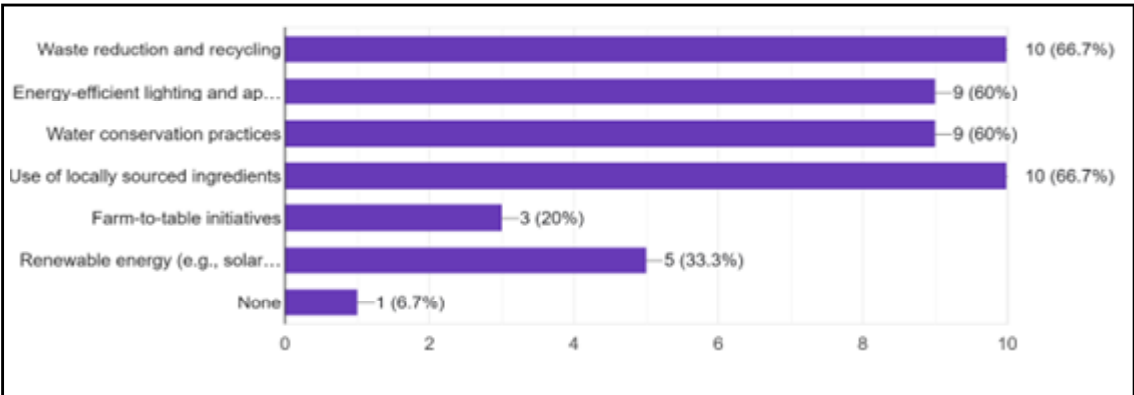
Chart 2 – Sustainable practices implemented in the organization.
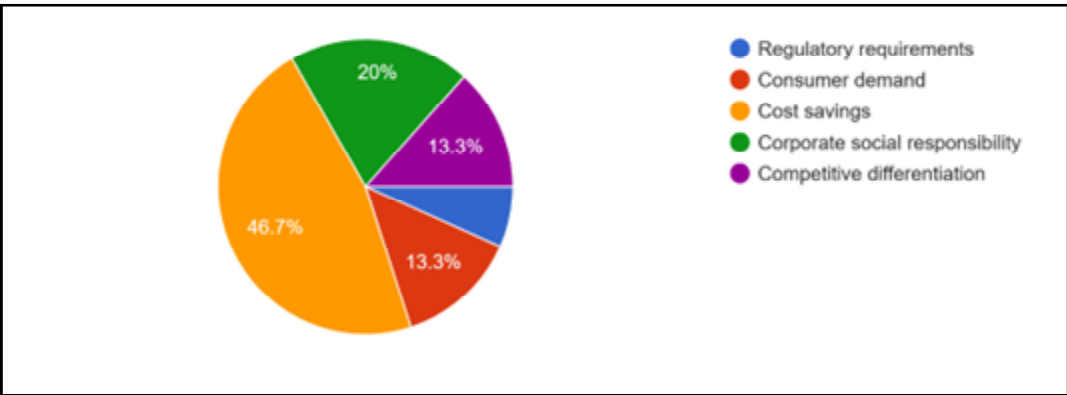
Chart 3 – Motivation behind adopting sustainable practices in organization.
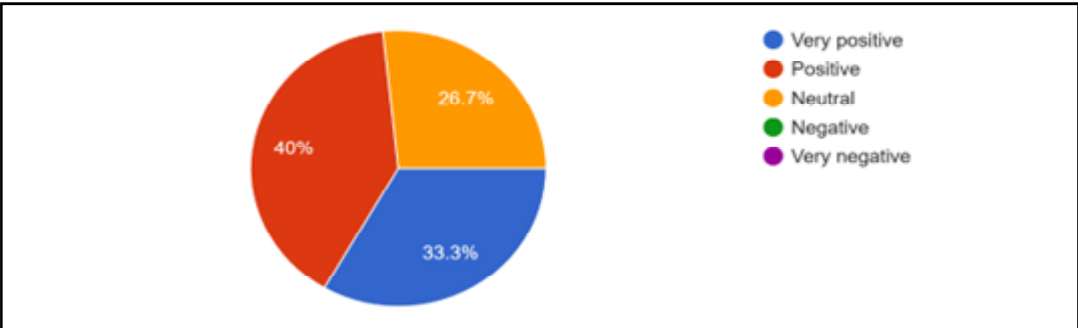
Chart 4 – Rating of economic impact of sustainable practices in the organization.
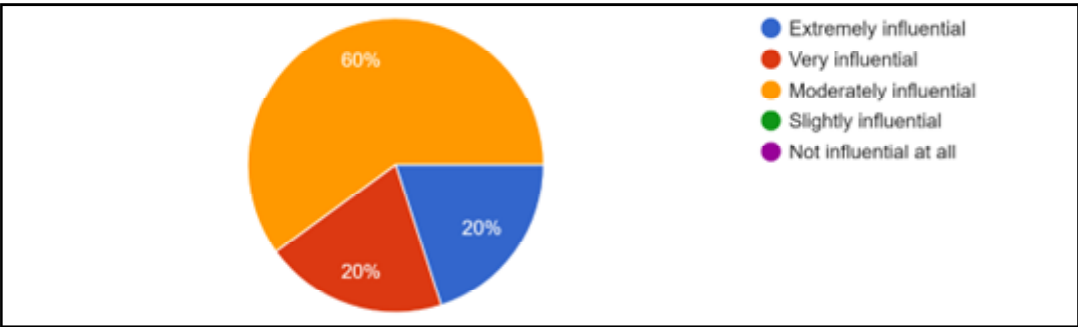
Chart 5 – Extent of consumer preferences influence in sustainable organization.
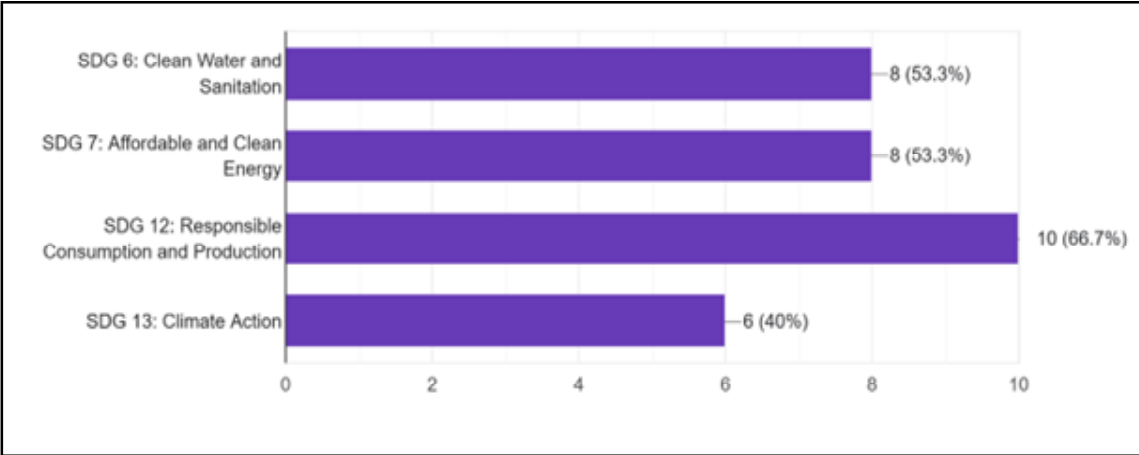
Chart 6 – Practices in the organization aligned with Sustainable Development Goals.
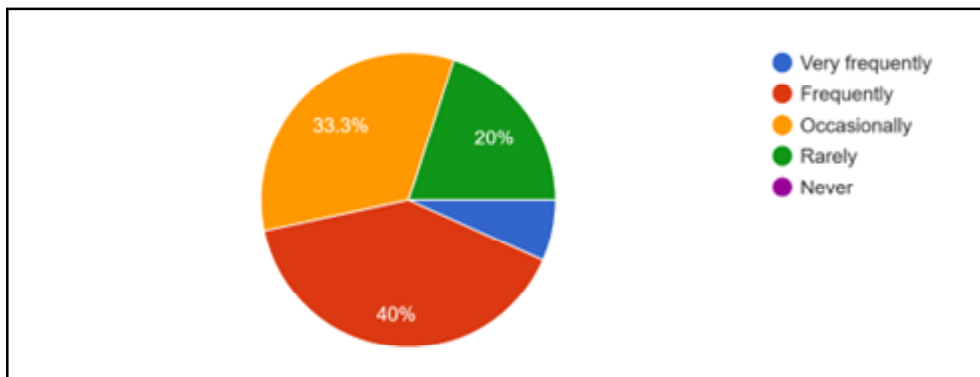
Chart 7 – Organizations engagement with local community or environmental initiatives.
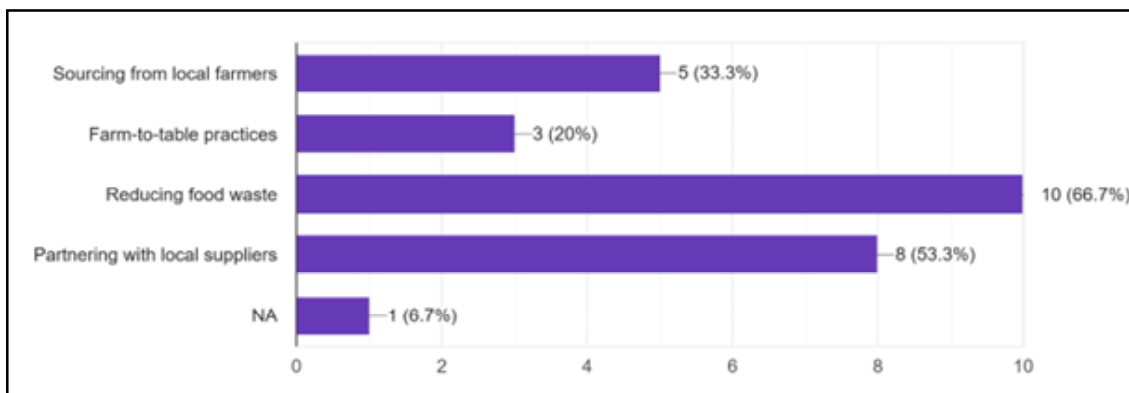
Chart 8 – Sustainable practices implemented in organization.
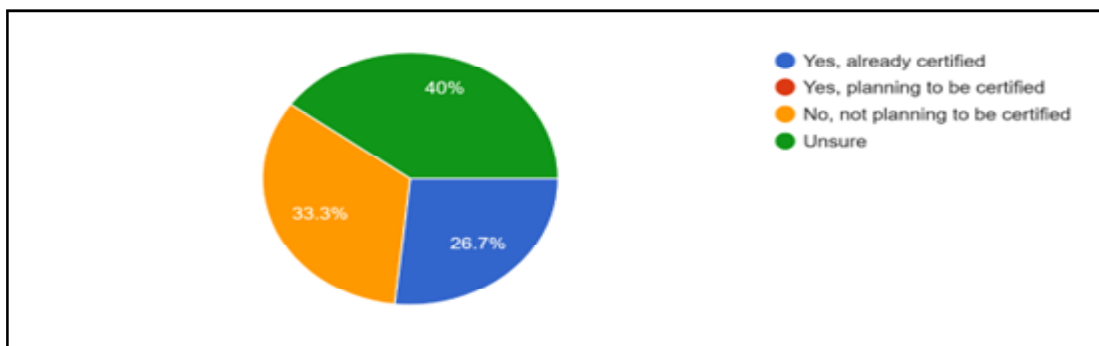
Chart 9 – Organization's Green Program Certification.
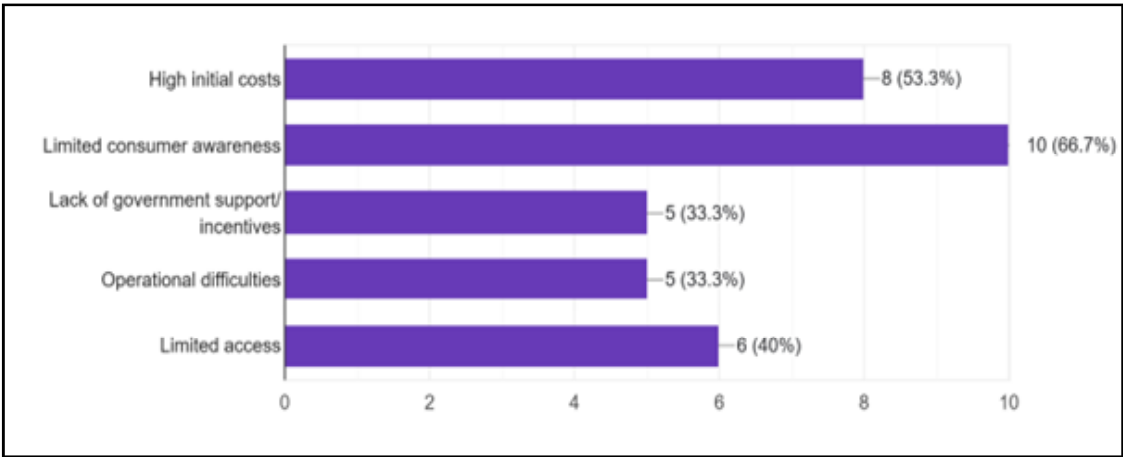
Chart 10 – Challenges faced by organization in implementing sustainable practices.

DATA ANALYSIS/INTERPRETATION

Primary Data:

The data interpretation is based on primary research, where responses from hospitality stakeholders were collected and analysed.

The findings in chart no 1 indicate that 40% of respondents perceive their organization's commitment to sustainability as "Moderate," while 26.7% rate it as "Very high" and another 26.7% as "High," reflecting a varied commitment level across the sector.

Chart 2 shows that 66.7% of organizations implement waste reduction, recycling, and locally sourced ingredients, while 33.3% use renewable energy and only 20% adopt farm-to-table initiatives.

Chart 3 shows that 46.7% of organizations prioritize cost savings as the main motivation for adopting sustainable practices, followed by corporate social responsibility at 20%.

As per chart 4, the 40% of respondents rate the economic impact of sustainable practices as positive, 33.3% as very positive, while 26.7% remain neutral.

As per chart 5, 60% of respondents feel consumer influence on sustainable practices is moderate, while 20% find it extremely influential and another 20% very influential.

Chart 6 shows organizations prioritize responsible consumption (66.7%), clean water and energy (53.3%), and climate action (40%). Chart 7 indicates 40% frequently engage with local communities, while 33.3% do so occasionally.

As per chart 8 & 9, The data reveals that organizations prioritize reducing food waste (66.7%) and partnering with local suppliers (53.3%), with fewer focusing on sourcing from local farmers (33.3%) or adopting farm-to-table practices (20%). Regarding green certification, 40% of organizations are unsure about pursuing it, 33.3% have no plans to seek certification, and 26.7% are already certified.

As per chart 10, the primary challenges organizations face in implementing sustainability practices include limited consumer awareness (66.7%) and higher initial costs (53.3%). Other challenges are limited access (40%), lack of government support (33.3%), and operational difficulties (33.3%).

Secondary Data:

A case study on Promoting Bihari cuisine as part of cultural tourism emphasizes on significant economic opportunities by linking local food traditions to tourism, enhancing both cultural heritage and regional development. ((Shakesh Singh, 2019)

"All our produce is 100 per cent organic and comes from our farms, which include leafy greens, vegetables, fruits, and herbs. We grow our own green salad leaves using hydroponic farming, which involves growing plants without soil, using water-based mineral nutrient solutions. Our hotels use solar energy for heating hot water, and 80 per cent of our lighting fixtures are energy-conserving LED. "We are converting our fleet of vehicles to hybrid to reduce our dependence on fossil fuels. Our goal is to be paperless in most of our key departments and to introduce an e-ordering and billing system," shared Kush Kapoor, CEO, Roseate Hotels & Resorts. (hospitalitybizindia.com, 2024)

Sindhudurg presents a sustainable alternative to Goa, offering eco-conscious hospitality like Coco Shambala that prioritizes local traditions and minimal environmental impact. With unspoiled beaches and cultural experiences, it embodies serene, sustainable travel for those seeking tranquillity. (Sharma, 2024)

RECOMMENDATIONS AND SUGGESTION

As per the findings, organizations should prioritize increasing consumer awareness and addressing the high initial costs associated with sustainability initiatives. Expanding partnerships with local

suppliers and farmers, along with seeking government support, can help overcome challenges. Additionally, pursuing green certifications could further enhance commitment to sustainability and environmental impact.

CONCLUSION

The study highlights the growing significance of sustainable practices within Western India's hospitality and culinary tourism sectors. By adopting eco-friendly initiatives, businesses can foster economic growth, enhance brand loyalty, and contribute to environmental preservation. Overcoming challenges like consumer awareness and initial costs will be crucial for creating a sustainable industry.

Researchers thank authors and researchers, including Daniel E. Meeroff, Peter Jones, and others, whose work on sustainable practices in hospitality and tourism greatly contributed to this study. Their insights guided my research into eco-friendly solutions. Researcher also appreciate the stakeholders who provided valuable inputs through their responses to the primary research questionnaire, which were essential in shaping the findings.

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Impact of Digital Nomads on Tourism Destinations in Himachal Pradesh

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ABSTRACT

Introduction: Himachal Pradesh is seeing increasing popularity with the Digital Nomad community. Many Pull factors are responsible for attracting Digital Nomads to Himachal Pradesh. The presence of digital nomads brings in many impacts at tourism destination. Globalization and rapid digitization post-COVID-19 have given rise to a new category of long-stay tourists called as Digital Nomads which refers to people who work remotely while traveling. The COVID-19 Pandemic has resulted in the increased usage of tools resulting in the mainstreaming of digital tools that enable anyone to work remotely.

Objectives: The major objectives of this research paper are to identify the impacts that Digital Nomad culture has on Himachal Pradesh, mitigate negative impacts, and capitalize on positive impacts for the benefit of all the stakeholders involved.

Methodology: This research is based on the findings of the secondary data and suggests strategies to mitigate negative impacts and embrace sustainable development.

Findings: The paper's findings are intended to serve as guidelines for policymakers, host communities, and stakeholders for creating sustainable growth and development that includes cultural preservation, control of inflationary tendencies, environmental conservation, and more in Himachal Pradesh. As remote work culture rises, many combine work and leisure, resulting in extended stays at exotic locales. This research paper investigates the types of impacts that the state is seeing due to increasing arrivals of digital nomads in Himachal Pradesh, a scenic state in North India known for its natural beauty and surrounds making it an idyllic tourism destination. It investigates how it affects local economies, accommodation industry, and infrastructure, socio-economic factors by undertaking qualitative research. It addresses both positive and negative impacts that DNs have on the destination as DNs provide year-round revenue opportunities to the destination stakeholders but also create some issues at the local level.

Keywords: Globalization, Digital nomads, Remote Work, Impacts, destination stakeholders.

INTRODUCTION

Enclosed by Himalayas Himachal Pradesh has been on every traveller's bucket list due to the presence of snow-clad mountains, rivers, gorges, lakes, and flower-filled meadows. The state is spread over an area of 55673 sq km and has 12 districts and over 65 lakh population. Tourism is a major revenue-generating sector here with a strong growth potential. The state has over 65 lakh people living in its 12 districts. The state has a total area of 55673 square kilometres. An essential role for the tourism sector plays in the Himachal Pradesh economy. One of the main revenue-generating sectors of this state's economy is the tourism business. The Himachal Pradesh tourism industry has enormous growth potential and is a new focus for the state's economy. The state has always attracted adventure tourists for ages due to the variety of activities it offers for adventure tourists, from trekking, mountaineering, hiking, kayaking, wildlife, mountain biking, etc., making it an idyllic place for tourists and aspiring Digital Nomads. (Tiwari) & (Baishya, 2017)

There is a new breed of long stay travellers who are visiting Himachal Pradesh in huge numbers called as Digital Nomads. They are the people who visit, work and stay at exotic destinations for longer durations. Digital Nomad is the term coined by Makimoto and Manners in 1997 which refers to impact of technology on the lives of individuals. (Manners, 1997)

Digital Nomadism can be defined as a person (Digital Nomad) who works remotely with the help of digital technology, has ability to work and travel simultaneously, has complete control over choice of location and visits at least 3 locations that are not their own or their friends or family home. This definition is based on 6 variables of frequency and autonomy of mobility, home-based practices, domestic vs transnational travel, legality, work life balance and co-working space usage. (Cook, 2023)

Himachal Pradesh as a state is considered to be one of the India's top preferred spots for workations. *Workation is a blend of two words Work and Vacation which means working in a usual manner while travelling long term to distress and take a break from usual lif. Although not same it is also sometimes used in place of bleisure.* (Altexsoft, n.d.)

Kullu in Himachal Pradesh has been the favourite spot for Digital Nomads due to strong internet connectivity, cabin amidst woods and number of leisure based activities for the digital nomads from fishing, hiking, rafting etc. (McDonagh, 2021)

Naggar in Himachal Pradesh Kullu Valley which is just 20 kms prior to Manali is emerging as a preferred spot for Digital Nomads with it's climate, cafes, limited restaurants and more. It is

seeing an increasing arrivals of Digital Nomads. (Raghuvanshy, 2021)

Even Dalhousie is a preferred spot for long stay tourists and with the development of hospitality facilities, visitor, amenities, easy access to other tourist spots like Chamba Valley and Khajjar enhances its appeal for tourists. It is admired by both international and domestic visitors. Improved connectivity, picturesque landscapes and overall tranquillity has made Dalhousie a preferred spot for Digital Nomads which has been identified as a trend to watch out for. (Setu, n.d.)

Manali is also a preferred spot for Digital Nomads due to high internet connectivity and mobile networks at almost every place. Many hostels see round the year movement of long stay Digital Nomads in Manali. Co working spaces for Digital Nomads in Manali are at the cost of $70 to $80 per month. Alongside many places at Manali offer amenities that are pro digital nomads. For eg Young Monk hostel in Manali is dedicated for like-minded solo travellers. (Young Monk Jibhi, n.d.)

CHARACTEREISTICS OF DIGITAL NOMADS

The hectic nature of remote work results in Digital Fatigue that remote workers undergo quite often. Digital Fatigue is a feeling of tiredness and a drop down in energy levels leading to symptoms such as headaches, blurred vision, joint pains insomnia and social isolation. This is one of the reasons for the emergence of Digital Nomadism. (Reszelska, 2021).

Remote work makes digital nomads work from many locations with access to high-speed internet like co-working spaces, restaurants, cafes, public spaces etc. The lifestyle of Digital Nomads comprises a blend of work, leisure, and tourism with multiple switches and frequent movements. (Tijs van den Broek, 2023)

Usually, DN's display the following characteristics; frequent travel, dependence on technology and high-speed internet connection, bonding with co-workers, networking to scale, share their expertise and skills, flexibility to select their work hours, location etc. (Asia, 2024)

Alongside this they stay for longer time at any destination, have similar consumption patterns like locals, contribute to local economy in splits, and indulge in leisure oriented tourism activities during their stay at the destination. In alignment with these characteristics are the destination characteristics which have acted as major pull factors for Digital Nomads. These factors are:

1. Himachal Pradesh is a culturally rich place offering flora & fauna, a salubrious round the year climate, monasteries, temples, and festivals.

2. Living in the mountains is beneficial for health keeping DN's physically fit and natural views rejuvenating mind from the digital fatigue.

3. The geography of Himachal Pradesh boosts creativity as it has orchards, snowy peaks, hot springs and many peaceful spots. (Akansha, 2023)

Although digital nomad visas are a new visa category that has been initiated, the policy making for research on digital nomadism is still in its infancy. (Bednorz, 2024)

OBJECTIVES

- Identify the challenges & impacts that Himachal Pradesh is facing due to rising tourism.

- Identify the distinct patterns that Digital Nomads display as against the usual tourists.

- Recognize the positive impacts that Digital Nomads have on the local economy and at the specific locations in Himachal Pradesh preferred by Digital Nomads

- Identify the potential positive social changes that presence of Digital Nomads has on Himachal Pradesh

- Recognize the negative impacts mainly 'gentrification' has on Himachal Pradesh and suggest solutions to mitigate it.

- Understand connection between presence of long stay Digital Nomads and the subsequent inflation at destination burdening the host communities.

- Recognize disconnect from local culture that Digital Nomads may face when staying at the destination.

- Based on the above put forth certain set of recommendations for two major stakeholders i.e. Digital Nomads and for planning authorities at the destination to elicit sustained benefits from DN Culture that benefit both the parties.

REVIEW OF LITERATURE

According to Cohen's typology of tourists, Digital Nomads can also be called as Drifters who are non-institutionalized as they do not seek any benefits from mass tourism industry but are more connected to the local community due to their lengthier stay duration. (Stainton, 2023)

They are also referred to as working holiday tourists. Many work holiday tourists defy the UNWTO definition of tourism as they earn money when on holiday by availing of a work holiday

visa. Working Tourists are those who combine work with tourism (Backpackers or Working Holiday Makers, 2014)

It involves extended stays in other countries by holidaymakers and includes social, economic, and cultural dimensions of host locales. (Richards, 2004)

"Technology turns tourism" or Tourism turns Technology" are the two phrases that can be applied as impacts as new places are emerging due to technology. Technology is motivating people to explore and visit hidden places that would never have come to the limelight in the absence of Social Media. (Bhatia, 2014)

Arrival of WorkstationX at remote location of Himachal Pradesh in Bir gave a new life to this hamlet. Bir aims at attracting more and more digital nomads as due to Workstation the place got internet connectivity, arrival of digital nomads is seen as a medium of bridging rural – urban divide by encouraging dialogue and skill transfer, locals can get trained as free lancers by guests and they can also train local kids in basic tech, many opportunities in tourism increased due to arrival of Workstation like increasing number of food joints, guides for local adventure activities, helped village farmers get a better price for their crops in local markets and this has also motivated corporates to initiate CSR Activities dedicated for local communities. One of the biggest outcomes of this has been that the society has gone cashless due to increasing digital transactions. Increasing Digital Nomads can also result into reverse migration which is beneficial for local communities. (Menon, 2019)

Presence of DN's leads to active skill share as DN's can teach locals some essential digital skills leading to active skill share between host communities and DN's (Angtyasti Jiwasiddi, 2022)

Today many host communities in Himachal Pradesh have got into businesses like creating of more co-working spaces, co-living spaces, and events due to the growing number of digital nomads. Destination sees a rise in niche tourism practices like minimalism, slow travel, local culinary experiences, desire to learn new languages, keen interest in host cultures, and vice versa. (Richards G., 2015) & (Ekaterina Chevtaeva, 2021)

For benefits of Digital Nomadism to sustain at destination it is important for authorities to ease the visa formalities and procedures as then DN's tend to stay at a place for less than 3 months due to non-availability of longer visas. (Sánchez-Vergara, 2023)

Frequent interaction between Destination/host communities promotes multiculturalism in host communities. (Maria do Rosário Mira, 2024)

When the world was reeling from the pandemic, many countries saw huge potential in Digital Nomad visas to restart the sector. They initiated this by offering attractive Visa Policies. (Bacchi, 2020)

DN's are mature with an open mind and promote cross-fertilization of ideas between themselves and the host community. Many also support local community initiatives by volunteering for community-centric initiatives. (flatio, 2023)

DN's coming at Himachal Pradesh always are on a look out of first-hand information about the activities to do, places to hang out at, attractions to see at the location which means that Co-living and co-working spaces serve as Tourist Information Centres Therefore Himachal Tourism Board may decide and make co-working spaces as their key stakeholders. Tochibayashi sees DN'S's as an opportunity to revitalise local economies, create innovation and generate new avenues for business. (Naoko Tochibayashi, 2024)

DN'S's are ambassadors of cultural exchange by developing collective intelligence. DN's have a pattern of setting up temporary base at the scenic and remote destinations that meet their work related criteria like access to high speed internet, bottled drinking water, ATM's, basic banking services, basic stationary etc leading to development of more service oriented businesses at remote towns and places. This helps small town's gain economically as presence of DN's leads to multiplier effect in the form of influx of cash. One more reason for this is DN's look beyond the regular destinations which are favourites of mass tourists. (Team, 2024)

Alongside many positive impacts that DN's bring in there are a certain negative impacts that need a close look. DN's are concentrated in a huge numbers at a certain spot resulting into ecological and cultural and social impacts. (Blázquez-Salom, 2021)

Destinations in Himachal Pradesh are experiencing Over Tourism putting its fragile ecology under tremendous strain, this is due to certain haphazard activities like trampling, pollution, deforestation, littering, soil erosion and endemic animal habitat disturbances. Narrow roads cause congestion leading to increase in pollution levels. Presence of long stay tourists like DN's may result into commercialisation leading to loss of authentic experiences amongst the locals. (admin, 2024)

Over extension of trash generation beyond the capacity of municipal authorities is also a cause of concern for authorities at Manali. Town's waste treatment plant is seeing 70 to 100 tonnes of daily garbage an increase by 240 % as the plant was designed to handle just 20 to 30 tonnes of garbage. (Bisht, 2024)

Gentrification is another negative impact that can be attributed to DN's. Gentrification is a gradual process in which DN's move in huge numbers in working class areas resulting into displacement and exclusion of native people from host communities. Since DN's earn more income they may displace traditional residents both residential and commercial. (Josefina Domínguez-Mujica, 2020)

This results into conversion of rental flats into tourist holiday homes. Many DN's earn well and look into purchasing and investment of flats, this results into increasing prices for food and housing this keep the aspiring young locals compelled to stay at their homes as they now cannot afford to move out and stay locally. (Agustín Cocola-Gant, 2020)

This is largely because huge influx of DN's results into inflation in host communities caused due to increased demand for housing and other resources that results makes it difficult for locals to live within their own communities. (Ko Koens, 2018)

Long stay DN's often experience disconnect from the local traditions as they hail from different cultures. This result into alienation wherein they feel a strong sense of disconnect, this has resulted into generation of co-living and co-working spaces. (Orel, 2019)

Apart from offering flexible memberships Co-working spaces offer comfortable work environment, amenities and from a social point of view conduct workshops and social activities to enhance networking, collaboration thus encouraging socialisation amongst DN's. (India, 2024)

Suggests that any co-working space must focus on 3 major factors like; enhancing comfort, encouraging social interactions, and encourage outdoor recreational activities resulting into increased interaction with host communities. (Chevtaeva, 2021) & (Ekaterina Chevtaeva B. N., 2023)

RESEARCH METHODOLOGY

This topic is based on thorough analysis of secondary data and based on the same here are the points that make the data analysis and interpretation.

Data analysis and Interpretation

Based on the characteristics above the further analysis of data also reveals that factors that are essential for success of DM culture;

1. Ease of movement and travel formalities

Wherein lengthy bureaucratic procedures to obtain the travel visa, travel costs to and from destination (Hall, 2018) . And, continuous travel that might interrupt the work that DN's do. (Richter, 2019). Visa regimes often determine the length of stay for DN's (Thompson, 2021)

Additionally, DN's take time to acclimatise themselves with destination services like decent accommodation, places to buy groceries, get laundry done etc. (Cook D. , 2020)

2. Travel Frequency

3 major travel frequencies are limited, frequent and continuous. (Daniel Schlagwein, 2020) However, many DN's refrain travelling frequently and prefer to stay at one place for long as frequent travels is costly and may prove to be a distraction. (Bozzi, 2024)

3. Destination selection criteria

Many DN's give priority to the following factors before moving towards the destination. These factors are;

i.   Availability of uninterrupted high speed internet, (Hong, 2023)

ii. Low cost of living at the destination, foreigners from western countries find it economically beneficial to work in Himachal Pradesh due to low cost of living. (Thompson B. , 2021)

iii. Many DN's prefer to find existing communities which they can be a part of. (Ahreum Lee, 2019)

iv. Connectivity in terms of easy access to transit hubs also plays an influential part in short-listing a specific destination. (Mladenoviæ, 2016)

v.   Destination centric factors like; availability of leisure, sports, climate, entertainment and self-enrichment activities also play a key role in short-listing of destination. (I Gusti Ketut Gede, 2021)

vi. Other factors like general understanding of English language, safety, openness of locals, fresh atmosphere etc. also influences the choice of destination. (Ahreum Lee A. L., 2019)

4. Availability of dedicated VISA and support of governments.

Initiatives like flexible taxation, visa free stays, long term e-residency programs have been successful. India does not offer dedicated DN Visa. But, factors like smooth flowing process, fast

track approvals and longer validity entice DN. Here participation of government with private sector is essential. (Vladimir Tyutyuryukov, 2021)

RECOMMENDATIONS AND SUGGESTIONS

It is important to sustainably develop Digital Nomad culture in Himachal Pradesh and following are the recommendations for DN's as well as for planning authorities to accomplish this goal.

FOR DN'S

1. Cultural orientations to familiarise DN's about local customs, traditions and way of life must be organized by locals and also bridges the gap between DN's and locals.

2. To reduce the dominance of corporate businesses and ensure that profits stay within the community DN's must be encouraged to support local businesses, purchase from local markets, stay at local homestays and join community run cafes.

3. Since Himachal Pradesh is ecologically sensitive region that is experiencing negative impacts of tourism. DN's must be encouraged to adapt sustainable living practices like: staying in eco-lodges, using public transportation, minimize waste, conserve water etc.

4. Encouraging DN's to stay at local lodges and homestays reduces the gap between DN's and locals, encourages authentic indigenous experiences and integrates them with the locals. (Sanghavi, 2021)

FOR AUTHORITIES

1. Authorities can focus on incorporating sustainable Internet coverage like for eg: solar powered Wi-Fi towers.

2. Arrange skill sharing workshops with skilled DN's that encourages entrepreneurship for locals.

3. Create a legal framework for DN's to stay longer and make a provision for long term residency for DN's at the destinations to stabilise the economic benefits.

4. Regularise the electricity supply at the destination or provide back up in the form of generators / inverters.

(Punta)

CONCLUSION

Based on the findings above we can conclude that positive benefits from the presence of DN's far outweigh negative impacts. Additionally, basic due diligence will create an eco-system that consistently enhances the influx of DN's in a way and manner that it turns bilaterally beneficial for both the parties. Most importantly if the benefits sustain in the long run then the Tourism Board may put forth the proposal to Centre for initiating the Digital Nomad Visa.

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Food Waste Management in Hotels: A Sustainable Approach to Minimising Environmental Impact

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ABSTRACT

Applied quantitative research approach to this study aims at examining food waste management practices among Hotels with emphasis on means of reducing the consequences on the natural environment. Purposive sampling method was used to sample 350 managers and staff of hotels who filled questionnaires containing key variables such as waste reduction measures, training, customers, and technology. The study further shows that there exist a lot of disparities in food waste management across these factors. Client, effective staff training, and integrating of modern technology are key determinants in environmental controls where hotel with effective staff training and modern technology has fewer adverse effects in this hotel wastage generation is less. Descriptive statistics and inferential data analysis of T-tests and ANOVA yields affirmative results about differences in waste reduction strategies and staff training levels for various categories of hotels. Hypothesis testing reveals that the level of staff training, combined with effective use of technology contributes to minimise food waste accounting for 47% of the variation. The research on the status of sustainable food waste in hotels should be beneficial for the improvement of emission-reducing measures. The next steps are the integration of waste tracking technologies; cohort training programs for staff; and public relations and educational efforts for clientele and customers. Moreover, enhancing the awareness of customers regarding the issue of food wastage and changing consumers' habits at restaurants are the beneficial steps to reach the overall waste minimization objectives. The study results provide support for applying the concept of sustainability primarily in the hospitality industry, which confirms the idea of using composite strategies in this area. Despite this, the study has its limitations: data collected is self-reported and the research was cross-sectional in nature; therefore, there is a need to use

longitudinal data and qualitative findings in future research. Overcoming these limitations may reveal a better perspective of the existing practices in managing food waste in order to develop the best practices or recommended strategies to encourage food sustainability in hotel industries.

Keywords: *Food waste management, Hotels, Sustainability, Staff training, Technology integration*

1. INTRODUCTION

Waste disposal in particular, is a big issue in the hotel industry since most of this waste is food and its disposal brings a significant negative influence to the environment and the resources used. Hotels coming as major stakeholders in the industry are leading causative agents of food waste which it offers both environmental pollution and cost implications on the industry. This paper thus recognises effective management of food waste as crucial in encouraging Ramsay's top management to instigate sustainable practices across the industry. Ad hoc factors governing food waste in hotel include; waste control methods, staff management on food waste, customers' awareness, and use of innovation technology. It is hereby important to tackle these areas in order to adopt sustainable measures in the hospitality industry and in parallel with the world goals.

Reducing food waste in hotels remains a research interest that has been explored across different parts of the world. For instance, an observation study carried out in the United Kingdom titled; 'Understanding the nature and extent of food waste in Hotels', noted that excess portioning and portioning overproduction were key drivers of food waste in hotels (Filimonau & De Coteau, 2019). Similar results were observed in Finland where hotels that practiced systematic waste management meant a drastic decrease in waste, this was due to best practices in staff training and quality customer relations (Silvennoinen et al., 2015).

In developing countries where food insecurity is a vice, food waste in hotels constitutes double burden. It causes various environmental issues but is a total misapplication of resources required in society. For example, Betz et al. (2015) revealed that hotels in India produce enormous amounts of food waste because of inadequate stock control and little or no management information on reducing food wastage among the hospitality sector workforce and customers. The call for an

appropriate management system for food waste is thus compelling especially in countries that are struggling with their supplies.

Although the problem has received more attention, some barriers have persisted mainly concerning technology implementation and staff development. Advanced technologies such as waste tracking technologies have displayed potential of decreasing food waste in different institutes such as hotels in the developed countries like United States by using the real time data about the waste generation to identify the opportunities for the change (Xue, et al., 2017). However, obsolete technology and little or no investment in waste management systems remain a challenge to the development of this sector in many developing countries.

Also the awareness of the customers is an important factor towards the success of waste management strategies. Customer knowledge of wasting food is said to increase individual-serving choices and engagement with the sustainability programs (Parsa et al., 2018). Still, increasing the awareness of the hotel guests can be a tough factor in most of its regions because sustainability initiatives are not set up widely in that areas.

Still much has to be done in relation to the reduction of food waste in hotels to which a great deal of attention has been given. Thus, the proposal to foster sustainable food waste management in hotels insists on the implementation of waste reduction measures, staff training, customer awareness, and interest, the adoption and integration of informational technologies. It is oxygen to the hospitality business and the fabric of solving these challenges is imperative not only to preserving the environment but also for sustainable economic gain. Although there is a significant amount of literature on the subject of food waste management in hotels, specific knowledge as to the sustainability of these interventions in the long term is lacking. Subsequent research should concern itself with analyzing the longevity of the measures and look to uncover specific effective strategies for specificity of the various areas and categories of hotels.

In summary, the management of food waste in hotels is a pressing issue with significant implications for the environment and the hospitality industry's sustainability efforts. By focusing on key factors such as staff training, customer awareness, and technology integration, hotels can reduce their environmental footprint and contribute to a more sustainable future.

2. LITERATURE REVIEW

Reduction of post-harvest food waste has become an important issue of discussion in managerial and academic circles within the hospitality industry particularly in hotels. Many research papers have been dedicated to trying to explain why food waste happens in the hospitality industry and

what are the consequences of such behaviour which underlines the need to address wastage issues through proper waste management plans. This paper reviews literature cantered on aspects of food waste management in hotels with regards to waste minimization measures, staff education and customer sensitization and technology.

2.1 Food Waste in the Hospitality Sector

Literature in the hospitality field shows that food waste is a dynamic problem in the sector due to overproportion, improper inventory control, and portion distortion (Filimonau & De Coteau, 2019). Similarly, Filimonau and De Coteau (2019) in a cross sectional survey on food waste management in hotels in United Kingdom established that overproduction of food and or poor handling of food was a major source of the waste. Based on their work, it may be concluded that large food waste losses can be effectively addressed by systematic strategies to reduce wastage.

2.2 Sustainable Food Waste Management Practices

Food waste management practices include activities that range from strategies such as waste reduction, food waste recycling and surplus food redistribution and reuse. As highlighted by Betz et al. (2015), portion control and inventory control are considered as the most effective measures for minimising food waste in hotels. In this vein, Derqui and Fernandez (2017) show that another set of activities also entails implementing a menu inventory to monitor food waste and training employees in responsible food waste management.

2.3 Role of Staff Training in Waste Reduction

More development is needed in staff training in an effort to minimize food wastage in hotels. One previous finding suggests that increased staff knowledge can help to identify waste in the working environment and also increase the ability effectively to eliminate waste (Betz et al., 2015). Another case that was revealed in the study conducted by Filimonau and De Coteau (2019) answered the question, according to which educational measures that take the form of training sessions aimed at preventing waste and promoting sustainable behavior in hotels helped to achieve a positive result in the fight against food waste. This is further affirmed by Silvennoinen et al., (2015) who observed that hotels that offered their staff with elaborate training measures, recorded an impressive reduction in the amount of food waste.

2.4 Customer Awareness and Its Impact on Food Waste

An understanding and customer actions greatly determine the amount of food wasted in the

hotels. Derqui et al. (2016) contributed that increasing the awareness of the customers can encourage the clients to select sustainable provisions like decreasing portion size and engaging in sustainability related programs. Parsa et al. (2018) established the assertion that customer information indeed averts waste hence there is the need for awareness creation.

2.5 Integration of Technology in Food Waste Management

The escalation of technology is central to the improvement of food waste management within the facility of the hotel. It has been observed that levels of food waste can be effectively reduced with best practices such as waste tracking and data analysis to know about more number of waste issues and monitor running data realtime (Silvennoinen et al., 2015; Xue et al., 2017). Xue et al's (2017) also show that technologies assists hotels in tracking and controlling the waste produced, thus contributing to the minimal generation of food wastes.

2.6 Challenges in Implementing Food Waste Management Strategies

Despite the potential benefits of food waste management strategies, several challenges hinder their implementation in hotels. In developing countries like India, poor inventory management, lack of staff training, and limited technological infrastructure are significant barriers to effective waste reduction (Betz et al., 2015). Additionally, cultural attitudes towards food waste and customer expectations pose challenges to implementing sustainable practices in some regions (Parsa et al., 2018).

2.7 Policy Interventions and Best Practices

Policy interventions play a crucial role in promoting food waste reduction in hotels. Studies have shown that government regulations and incentives can encourage hotels to adopt sustainable practices and reduce food waste levels (Filimonau & De Coteau, 2019). Furthermore, Derqui and Fernandez (2017) suggest that establishing industry standards and best practices can facilitate the widespread adoption of effective waste management strategies in the hospitality sector.

2.8 Hypotheses Development

Based on the literature review, the following hypotheses were proposed for the present study:

- **H1:** There are significant variations in food waste management practices in hotels, influenced by factors such as waste reduction strategies, staff training, customer awareness, and technology integration.

- **H2:** Targeted interventions, including staff training and technology integration, can effectively reduce food waste in hotels and enhance sustainability efforts.

The existing literature underscores the importance of a multifaceted approach to food waste management in hotels, emphasising the roles of staff training, customer awareness, technology integration, and policy interventions. This review highlights gaps in understanding the long-term effectiveness of these strategies and suggests the need for further research into innovative solutions tailored to regional and sector-specific challenges.

3. METHODOLOGY

This study employs a quantitative research design to explore food waste management practices in hotels, focusing on strategies to minimise environmental impact and enhance sustainability. The quantitative approach is well-suited for collecting and analysing numerical data, enabling the examination of relationships between key variables and testing the proposed hypotheses. This methodology aims to identify patterns and generalise findings across the hospitality sector based on the data collected.

The sample size for this study consists of 350 respondents, selected using purposive sampling. Purposive sampling, a non-probability sampling method, involves selecting individuals who are most likely to provide detailed and relevant information on food waste management practices in hotels. This approach ensures that the sample includes hotel managers, staff, and sustainability officers who have insights into food waste practices and strategies.

The key variables for this study are derived from existing literature and structured to capture different aspects of food waste management in hotels. These variables include waste reduction strategies, staff training, customer awareness, and technology integration.

- **Waste Reduction Strategies** measure the extent to which hotels implement practices to prevent and minimise food waste, such as accurate portion control, surplus food redistribution, and waste recycling.

- **Staff Training** assesses the effectiveness of training programs in enhancing staff awareness and capability to manage food waste efficiently. It includes factors such as the frequency, content, and effectiveness of training sessions.

- **Customer Awareness** evaluates the level of awareness among customers about food waste issues and their engagement in sustainability initiatives. This includes their understanding of portion control and willingness to participate in waste reduction programs.

- **Technology Integration** measures the adoption and effectiveness of technological solutions such as waste tracking systems, data analytics, and mobile applications to monitor and manage food waste.

The data was gather through structured questionnaires completed by the respondents. The questionnaires will be fully developed in order to capture detailed information on the above mentioned variables. Closed-ended questions and furthermore open-ended questions will be applied to measure quantitative outcomes and for the respondents to provide additional information about their experience and more detailed insight regarding food waste management.

As a quantitative research, statistical methods for data analysis will be used to analyze the retrieved data. To analyse the data collected in this study, the following analysis tools will be adopted: The descriptive statistics will include; Mean, median, mode, and standard deviation, these statistics will be used to describe the respondents' demographic information and their responses in general terms. With the use of inferential statistics such as t-tests, ANOVA and regression analysis hypothesis testing to determine the relationship between variables will be done.

In addition, the research intends to assess the externality level of different elements that are known to affect food waste management practices by hotels. Based on the above study, the following working hypotheses are assumed: Waste reduction methods, staff education, customer sensitisation, and technology have substantial influence on food waste management. Moreover, it implies that, through the implementation of detailed training operations and technology usage, feasible reduction of food waste occurring in hotels as well as increased sustainability is possible.

This reconnoitre study employs the following research design, sampling technique and variables: Sampling Type: Purposive Sampling This quantitative research design, coupled with purposive sampling, and an extensive variable list, should enable a rich analysis of food waste management in hotels. The results will support the identification of specific approaches to encourage sustainability and diminish waste production in hospitality organizations.

4. RESULTS

4.1 Descriptive Statistics

The descriptive statistics provide an overview of the key variables in the study, as shown in Table 1. The mean values indicate the central tendencies for each variable, while the standard deviations represent the variability or spread of responses. For waste reduction strategies, the mean score

is 3.7, indicating that hotels moderately implement waste reduction practices. The frequency distribution shows that most respondents rated the strategies as moderately effective (45%). Staff training has a mean score of 3.9, suggesting a generally high emphasis on staff training, with 40% indicating extensive training programs. Customer awareness has a mean score of 3.5, showing moderate awareness, with 50% of respondents indicating average customer knowledge about food waste. Technology integration has a mean score of 3.8, indicating moderate adoption, with 35% reporting substantial use of technology for waste management.

Table 1: Summary of Descriptive Statistics

Variable	Mean (X)	Standard Deviation (Y)	Frequency Distribution
Waste Reduction Strategies	3.7	0.8	Ineffective: 10%, Moderately effective: 45%, Effective: 45%
Staff Training	3.9	0.7	Limited: 20%, Moderate: 40%, Extensive: 40%
Customer Awareness	3.5	0.9	Low: 25%, Moderate: 50%, High: 25%
Technology Integration	3.8	0.8	Low: 20%, Moderate: 35%, High: 45%

4.2 Inferential Statistics

The t-test results compare the mean effectiveness of waste reduction strategies between small and large hotels. Large hotels have a mean waste reduction effectiveness score of 4.0 with a standard deviation of 0.6, while small hotels have a mean score of 3.5 with a standard deviation of 0.9. The t-value is 5.67, and the p-value is less than 0.001, indicating a statistically significant difference in waste reduction strategies between small and large hotels, with large hotels implementing more effective strategies.

Table 2: T-test Results Comparing Waste Reduction Strategies Between Small and Large Hotels

Group	Mean Waste Reduction Score	Standard Deviation	Sample Size (n)
Large Hotels	4.0	0.6	175
Small Hotels	3.5	0.9	175
t-value	5.67	p-value	< 0.001

The ANOVA results compare the effectiveness of staff training across luxury, mid-range, and budget hotels. The sum of squares between groups is 14.2 with 2 degrees of freedom, resulting in a mean square of 7.1. The sum of squares within groups is 145.0 with 347 degrees of freedom,

resulting in a mean square of 0.42. The F-value is 16.9, and the p-value is less than 0.001, indicating a statistically significant difference in staff training effectiveness across hotel categories.

Table 3: ANOVA Results for Staff Training Across Hotel Categories

Source of Variation	Sum of Squares (SS)	Degrees of Freedom (df)	Mean Square (MS)	F-value	p-value
Between Groups	14.2	2	7.1	16.9	< 0.001
Within Groups	145.0	347	0.42		
Total	159.2	349			

The regression analysis examines the impact of various factors on waste reduction effectiveness. The intercept indicates that the baseline effectiveness score is 2.5 when all predictor variables are zero. The coefficient for staff training (4.3) indicates that for each unit increase in staff training, waste reduction effectiveness increases by 4.3 points, with a t-value of 5.45 and a p-value of less than 0.001, indicating a significant effect. Similarly, the coefficient for technology integration (3.8) suggests that for each unit increase in technology integration, waste reduction effectiveness increases by 3.8 points, with a t-value of 4.92 and a p-value of less than 0.001, indicating a significant effect. The R-squared value of 0.47 indicates that 47% of the variance in waste reduction effectiveness can be explained by the three predictor variables, demonstrating that staff training, customer awareness, and technology integration significantly affect waste reduction practices.

Table 4: Regression Analysis of Waste Reduction Effectiveness

Predictor Variable	Coefficient (β)	Standard Error (SE)	t-value	p-value
Intercept	2.5	0.9	2.78	< 0.001
Staff Training (X1)	4.3	0.8	5.45	< 0.001
Customer Awareness (X2)	3.1	0.7	4.43	< 0.001
Technology Integration (X3)	3.8	0.9	4.92	< 0.001
R-squared	0.47			

5. SUMMARY OF RESULTS

The applied descriptive and inferential findings show that their there are noticeable differences whereby perceived food waste management in the hotels varies according to their categories as well as the main drivers of food waste reduction. Table 4 shows the t-test results for comparing the waste management between large and small hotels Large hotels are observed to be in having

better waste management as compared to the small hotels. It also turned out that training had different characteristics depending on the hotel type, while the training efficiency index was higher among the employees of luxurious hotels. Thus, the analysis of regression coefficients for the model suggests that staff training, customers' awareness, and the utilization of technologies explain 47% of the variation in the effectiveness of waste reduction. These findings have clearly depicted that a complex approach to handle the food waste issue in the context of Hotel Industry is inevitable.

5.1 Discussion

The conclusion drawn from this study indicate that there are high disparities in the management of food waste among the hotels, which corroborates earlier studies done. This section also presents a more detailed analysis of these findings, compared to the lens provided by the current literature, and the significance of the analysis. The analysis of variance shows that many of the measures of waste reduction practice such as waste reduction initiatives and staff awareness, customer awareness, technologies used, and training for employees differ in various types of facilities. The outcomes are similar to previous studies, which highlight the difficulties that hotels encounter when trying to implement a suitable food waste management methodology (Filimonau & De Coteau, 2019; Betz et al., 2015).

The respondents on average want hotels to have better waste management strategies since the mean score for waste reduction strategies was 3.7. However, comparing the means of waste reduction measures adopted by small and large hotels (t = 5.67, p < 0.001), it can be postulated that small hotels may have inadequate resources and awareness to apply efficient large scale waste management measures. This result corroborates preexisting literature, which indicates that waste management strategies vary per hotel type and its carrying capacity (Silvennoinen et al., 2015).

That staff training plays a key independent variable in food waste reduction was evident in the study. From the mean score of 3.9, one can appreciate that there is much emphasis administered to the training of staff; however, variance implies significant variations amongst the different types of hotels. As highlighted by literature, luxury hotels dedicate more resources towards covering a wider training management procedure and other studies have pointed out that staff awareness is key to the efficient handling of food waste management, (Derqui & Fernandez, 2017). The significance of staff training between luxury, mid-range and the budget hotel was also supported by the ANOVA test (F-value of 16.9 and p-value of less than 0.001).

Another driver on the reduction of waste is customer awareness. The overall mean of the identified score was 3.5, which reveals a moderate level of customers' awareness on the issue these results have shown that there is a need to focus on increasing the level of awareness in customers so that more specific campaigns might be launched to tackle food waste problem. This study is in alignment to the findings that have postulated that when customers are informed their likelihood of practicing waste-conscious measures like measuring proper portion sizes or engaging in sustainable systems the likelihood is high (Parsa et al., 2018).

The use of technology; in this case; was deemed to play a critical role in determining the amount of food that was consumed as well as the quantity that was wasted. The ratings average out to 3.8, meaning that many hotels are employing to a moderate extent technologies like waste tracking systems. This finding affirms research that shows how technology optimizes waste management by collecting data and directing how the system could improve (Xue et al., 2017). According to the regression results, staff training, customer awareness, and technology influence the effectiveness of waste reduction explaining a total of 47% of the variance (R-squared = 0.47). These results demonstrate that an array of strategies should be applied to address the issue of food waste such as staff education, customer involvement, and the use of technology.

5.2 Implications

The implications are therefore a number of and vast, and influence policies, hotel management, and future studies. Another important implication realized is the necessity of developing differentiated measures with regard to the scale and capacity of the hotel. The results highlighted that smaller hotels have issue in implementing the waste minimization system in their organization. Policy makers and industry players must ensure that small hotels receive relevant training including on waste management or are provided with access to relevant technologies.

Improving staff training is another important practical application arising from this research. Thus the study confirms that difference systematic extensive training programmes effectively enhances waste minimization in luxury hotels. The managers of hotels, motels, or restaurants should ensure that they organize periodical and comprehensive courses or seminars, which educate the employees about the ways of reducing wastage, job related sustainable methods, and innovations in technology. Further, adopting training exchange system between hotels could potentially enable smaller hotels learn some of the best practices from large mature hotels.

Ensuring that customer awareness is well enhanced acts as the main key for proper waste management. When it comes to customer knowledge, the results show a fairly good, but not

especially stellar, picture, which may indicate that more action is needed in this area. I also noted that hotel managers should engage guest awareness programs that aim at encouraging food wastage reduction among the guests. Promotional initiatives including portion size modifications, unfavourable messages to waste disposal and stainless signals may suitably educate customer interpersonal relations and lower waste counts.

Technology integration is another important implication that emerged from successful adoption of ICTs and innovative technologies in education. The study recommends that waste tracking technologies should be implemented to improve the status of waste management. Hotel managers should research and purchase cheap and efficient waste tracking systems that have a real-time display of waste behaviors. Also, engagement with suppliers or organisations dealing with technology means might help to advance the use of effective technologies to promote the overall success of waste management.

5.3 Limitations and Scope for Future Research

Despite this, this research also has several limitations that need to be further discussed so as to understand the results obtained in this study on food waste management practices in hotels. There is also a limitation toward use of self-reported information that might give social desirable responses. The truthfulness of the study findings might be slightly marred by the fact that respondents might have provided inflated estimates of their waste management practices. Future research could also collect data from different sources, for instance, direct observations and waste audits, this would increase the reliability of the collected data (Filimonau & De Coteau, 2019).

They are as follows LPA 1- The sample size although large enough to allow quantitative analysis may not be diverse enough to capture all types of hotels and their practices. The purposive sampling may reduce the external validity of the study. In future studies, further samples should be bigger and include more variability; these studies should employ random sampling techniques to limit the results of over-representation of the hospitality industry (Betz et al., 2015).

One is the research design which is a cross-sectional design, this makes the study give current practices of waste management but does not look into the future changes to made. Their use is also relevant for investigating the chronic impact of interventions and evaluating the state and dynamics of waste reduction gaols. Such studies can also be useful for assessing the sustainability of these interventions and for determining features that influence change in waste management practices (Xue et al., 2017).

The study focuses on a limited set of variables: continuing waste evaluation methods, employee

engagement, consumer sensitisation, and technology implementation. However, these variables are important others like; management leadership, financial constraints, cultural attitude towards waste food etc, may also bring in a lot of eminent difference. More work should consider using a greater number of variables in analyzing the intricacy of forces that define the complexity of food waste management (Parsa et al., 2018).

One possible weakness of the study is its geographical context, and thus different results could be achieved in other world areas. This is due to fact that cultural, economic and regulatory pattern of different countries and regions is a major determinant of food waste management. Cross-country comparison could be more useful in better understanding the status of food waste management and offer insights for improvement reflecting regional peculiarities (Silvennoinen et al., 2015).

Hence, this paper offers important results on the current status of food waste management in hotels as follows: This research has also the following limitations which should be considered in future studies. These are: self-reported measures, a sample size and sampling technique, cross-sectional study design, a small range of variables, and regional focus. Overcoming these limitations using more elaborate, and diversified, research agendas will allow to gain a better understanding of the, often scarcely documented, practice of food waste management, and to provide improved knowledge to design better and more effective interventions to improve the sustainability of the hospitality industry.

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Promoting Ecological Awareness and Sustaining a Carefully Nurtured Private Wildlife Sanctuary through Eco-tourism: A Case-study of SAI Sanctuary

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ABSTRACT

This case-study illustrates the development of what could be referred to as India's first private sanctuary. The case-study deals with the challenges faced by the founders during the process. The case-study also speaks about how eco-tourism initiatives in the sanctuary helps in promoting ecological awareness about the sanctuary among the general public, in addition to the importance of eco-tourism in sustaining the sanctuary.

"*A lush green, dense forest lies hidden in the Brahmagiri mountain range of the western ghats in Karnataka's Kodagu (Coorg) district,*" says an article[1] about probably what can be termed as India's first private wildlife sanctuary. It was in 1991 that an NRI couple - Pamela and Anil Malhotra - bought 55 acres of land in Theralau village of the Kodagu region of Southern Karnataka. Today the land is a beautiful forest covering more than 300 acres near the 'Brahmagiri Wildlife Sanctuary'. They have named the initiative as 'SAI Sanctuary'. The region is host to a variety of flora and fauna including the likes of Bengal Tiger, Sambhar, Leopards, Wild Boar, Hyena and Asian Elephants. "*Wouldn't it be great to wake up to the sound of chirping birds, with fresh air and splendid scenery around?*" asks Shreya Pareek in an article[2] about the sanctuary.

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[1] Rhea Almeida, "This Couple Turned 300 Acres Of Wasteland Into A Gorgeous Sanctuary In Coorg", Homegrown, June 8, 2021.

[2] Shreya Pareek, "The Couple Who Bought Barren Land In 1991 And Transformed It Into A 300 Acre Wildlife Sanctuary", The Better India, February 23, 2015.

THE BEGINNINGS

Anil had his schooling from the Dehradun Doon School and attended the Shivaji Military School in Pune, before graduating from St Xavier's College, Bombay, the Government Law College, and the London Institute of Bankers. He went to the USA after securing a Ph.D. in politics from the University of Hamburg, Germany. In the US, Anil, who owned an Indian restaurant, met Pamela, who graduated from University of Colorado. They settled in Hawaii[3].

It was in Hawaii that they started their environment-friendly initiatives. Having grown up in Dehradun, Anil's love for the environment started from childhood. Pamela grew up constantly surrounded by a large number of wooded estates in New Jersey ("*back when it was rural New Jersey*"[4]). They practiced organic farming on an area they owned in Hawaii. The produces was for their own consumption and they donated the excess produce to a local women's shelter. The rest of the available land was afforested by them.

In 1986, the Malhotras flew to India to be with the father of Anil who was seriously affected by age related ailments. Anil's father passed away soon. On a visit to Haridwar, Pamela and Anil were entranced by the beauty of the Himalayas and decided to focus their conservation efforts at Uttarakhand. The pollution that they observed in Haridwar was appalling. "*There was so much deforestation, the timber lobby was in charge, and the river was polluted. And no one seemed to care. That was when we decided to do something to reclaim the forests in India*," said Anil[5]. They founded a nonprofit organization, 'Himalaya Seva Dal', to protect forest and wildlife, and to empower the local population.

However, the sanctuary project in Uttarakhand did not last long. The prevailing 'Land Ceiling Act' prohibited individuals from owning more than 12 acres of land. Also, mass tourism and illegal constructions that were happening nearby ensured that the Uttarakhand sanctuary project had a life span of only five years.

Anil then travelled to the south of India and explored Kerala, Tamil Nadu, Karnataka, Andhra Pradesh and Goa. Eventually, they found that Karnataka's land laws fit their requirements. Pamela elaborates, "*If a piece of land has been deemed as a plantation, and*

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[3] Hawaii is an island state of the United States, in the Pacific Ocean about 2,000 miles (3,200 km) southwest of the U.S. mainland.

[4] https://www.goethe.de/ins/in/en/cul/nhk/fup/20860217.html, Accessed on October 21, 2024.

[5] Rohith B R, "We bought a sanctuary", Times of India, March 6, 2016.

has a coffee or cardamom certificate, it doesn't fall under the Land Ceiling Act."[6].

THE SANCTUARY IS BORN

It was during this phase that the Malhotras came upon vast coffee and cardamom plantations in Kodagu[3]. The plantations there had their natural fertility eroded due to decades of destructive agricultural practices. Many such farms were mortgaged and their owners were in debt. It was in 1991 that Pamela and Anil acquired about 55 acres of such land. The 55 acres of land in Kodagu was owned by a man named Subaya. "*When I came here with a friend who suggested I buy this land, it was a wasteland of 55 acres. The owner wanted to sell because he couldn't grow coffee or anything else here. For me and Pamela, this was what we were looking for all our life,*" informed Anil[4]. The Malhotras sold their property in Hawaii to buy the first 55 acres of land at the foothills of the Brahmagiri range. They faced challenges - from legal documentation to winning the trust of locals and encouraging them to not poach in the area. It was a legal maze to acquire wetlands and plantation lands, where No Objection Certificates (NOCs) are required from the entire family of land owners, which can sometimes amount to 50 individuals.

When they purchased the land, the land had a lot of native trees, including those of cardamom. The couple not only decided to retain those trees but also planted more of native trees around the existing ones. Three important rules was part of their conservation agenda - no chopping down of any tree, no human interference and no poachers. And with this thought, the efforts to make a wildlife sanctuary started in 1991.

But there were other challenges too. While one side of the river belonged to them, they soon realised that planting trees would not help if the farmers were using pesticides on the other side to grow crops. So they started buying land there whenever it was on sale. Through the next two decades, the couple bought several more tracts of unused and abandoned agricultural land in the adjoining areas. The neighbouring farmers began selling their lands off to the Malhotras because they found agriculture to be financially burdensome. The SAI Sanctuary was evolved with the motto of "*acquisition, protection and reclamation of forested lands and wildlife habitat where vital water sources have their origin*"[9]. The SAI Sanctuary gradually expanded up to 300 acres

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[6] https://www.goethe.de/ins/in/en/cul/nhk/fup/20860217.html, Accessed on October 21, 2024.

[7] Kodagu district (also known by its former name Coorg) is an administrative district in the Karnataka state of India.

[8] Rakhi Chakraborty, "A forest of their own: the story and struggle behind creating India's only private wildlife sanctuary", YourStory, December 24, 2017.

[9] Rohith B R, "We bought a sanctuary", Times of India, March 6, 2016.

as the Malhotras acquired neighboring properties.

INCREASING BIO-DIVERSITY

With the increase in green cover, there was an increase in the animal, avian and aquatic species. The sanctuary has a river running through it and the river hosts several aquatic species (fishes, snakes, etc.). There are almost 50 species of snakes - including king cobras, vipers and kraits - 102 species of butterflies, and 46 varieties of native trees. Many of the indigenous trees in the sanctuary have medicinal value.

The sanctuary is home to 24 species of mammals, including elephants, tigers, leopards, dhole (Indian wild dog), sambar, chital, the giant Malabar squirrel, the Nilgiri marten and river otters, etc. The sanctuary is also home to more than 100 species of birds. The trees in the forest helped birds like hornbill find their homes. About ten acres of the sanctuary is kept for coffee production and about 15 acres for cardamom. The coffee and cardamom trees provide habitat to bird species that are dependent on their berries and seeds.

The Malhotras believed that animals and forests needed each other. They said that while the forest provided shelter and food to animals, it's the animals that helped forests to regenerate - *indicating their inter-dependent nature and the necessity to preserve both*. "*We make sure that we don't interfere with these animals. Elephants are very important for regeneration of the forests as they swallow the seed completely without breaking it, unlike other species. Around 30 species of trees totally depend upon elephants for regeneration*," says Pamela[10]. At least four baby elephants have been born at SAI Sanctuary. At SAI Sanctuary, human intervention is negligible. They try to make their wildlife sanctuary as natural as they can – with the knowledge that even the dead trees provide nutrition to the soil.

Maintaining the ecologically pristine nature of the Western Ghats is critical for the rainfall in the South Indian peninsula. Increasing demand for water and the erosion of the region's green cover results in water shortage. "*I am sure everyone remembers the court fights between Karnataka and Tamil Nadu over the use of the Kaveri river. That's because we are not getting the rainfall we need in either location because forests have been cut down. So, if we take this seriously and protect our forests then we are ensuring our own survival by enabling rainfall*," says Pamela[11].

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[10] Shreya Pareek, "The Couple Who Bought Barren Land In 1991 And Transformed It Into A 300 Acre Wildlife Sanctuary", The Better India, February 23, 2015.

[11] Rakhi Chakraborty, "A forest of their own: the story and struggle behind creating India's only private wildlife sanctuary", YourStory, December 24, 2017.

CHALLENGES FACED

Hunting, poaching and gaining the trust of local communities was a challenge for the Malhotras. Pamela narrated an incident about a priest at a temple nearby being killed by a tiger. With little awareness about the importance of wildlife and ecological conservation, villagers preferred killing the animals to ensure a safe environment for themselves. For Anil and Pamela, gaining the trust of villagers was a challenge but when they referred them to the stories of Hanuman and Ganesha, deities in the Hindu culture, it was easy for them to connect to the issue. The couple also worked with the forest department to set up camera traps and keep poachers at bay. Cameras also help in identifying new animals. The Malhotras also started making the villagers aware of the ecosystem and the value it added to the lives of people.

"*The best teacher is nature herself*," said Pamela[12]. From locals' expertise, advice from NGOs, learnings from researchers and extensive reading, the nature-loving couple has gained enough knowledge to transplant and replant, grow saplings and grow the sanctuary, gradually and consistently. The couple also received help from other trustees of the trust towards the upkeep of the sanctuary.

MANAGING THE SANCTUARY – IN AND OUT

Initially, the Malhotras invested their own money. Now, the sanctuary is managed by a registered not-for-profit trust – 'Save Animals Initiative Sanctuary Trust' - that runs on donations, which receive tax exemptions for the donors. Operating the sanctuary as a trust also helps in furthering the conservation cause.

The Malhotras were also engaged in educational outreach programs and presentations to various audiences ranging from law associates and judges to college students, schools and business groups. Through these sessions, awareness was spread, inspiring people to appreciate, understand and preserve the rich biodiversity.

RESPONSIBLE TOURISM

In 2013, the Malhotras decided to open the sanctuary to eco-tourism. The sanctuary, which offers a unique experience to the visitors, runs completely on renewable energy. There is the use of three micro-hydro generators, solar energy panels and during days of cloudiness and rainfall, three small windmills meet the needs of providing electricity to the sanctuary.

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[12] Rhea Almeida, "This Couple Turned 300 Acres Of Wasteland Into A Gorgeous Sanctuary In Coorg", Homegrown, June 8, 2021.

In the sanctuary, 10-12 acres are kept aside for coffee growing and around 15 acres for cardamom. Organic farming is also done on the sanctuary and bamboo, rice, banana, tomato, and other vegetables and fruits are grown. The Sai Sanctuary has two eco-tourism cottages. Upto 16 guests can be accommodated in 2 cottages. The sanctuary do not provide any safari through motorized vehicles. Guided walking trails are available. The sanctuary provides opportunities for stargazing, bird-watching and spaces for practicing yoga and meditation. The cottage is equipped with a hot water supply by solar heating panels.

"*We also make sure that people who visit here are responsible tourists. We only take those people who are actually interested in exploring the beauty of nature. Smoking and drinking is not allowed as it disturbs the animals and the overall air which is so pure*," says Pamela[13]. In 2014, the sanctuary won the "Wildlife and Tourism Initiative of the Year" award by Sanctuary Asia in conjunction with 'Tour Operators for Tigers'.

Eco-tourism at the sanctuary provided multiple benefits – it brought in revenue that could be used towards the upkeep of the sanctuary, provided jobs to the native population, provided the visitors with an inspirational experience and the eco-tourists become the ambassadors of the afforestation initiative.

PRACTICING HUMAN VALUES IN A LIVING LABORATORY

Patience was one of the values that helped the Malhotras in evolving this sanctuary. "*First came the grasses*," said Pamela[14]. "*They came in thick… then, smaller shrubs. With them, the insects returned. Then, with the trees, came the monkeys and elephants. It took a lot of care, energy, time, and effort to bring them back. People thought we were crazy, but that's okay…*". "*We use our sanctuary as a living laboratory*," said Pamela[15]. "*It is a way for people to see how Mother Nature, if given half a chance, will regenerate herself*".

ENDING NOTES

As part of their outreach initiatives (including eco-tourism initiatives), the trustees of SAI Sanctuary

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[13] https://www.dailygood.org/story/1555/the-couple-who-bought-barren-land-in-1991-and-transformed-it-into-a-300-acre-wildlife-sanctuary-shreya-pareek/, Accessed on October 21, 2024.

[14] Rakhi Chakraborty, "A forest of their own: the story and struggle behind creating India's only private wildlife sanctuary", YourStory, December 24, 2017.

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attempt convincing large companies to buy land and let it flourish as part of their corporate social responsibility plans. "*Corporates should extend their CSR activities towards this sector*," says Pamela. "*Without water, what business will you do?*"[16]

On November 22, 2021, Anil Malhotra passed away at the age of 80. Anil and Pamela aimed to preserve the flora and fauna for the future generation. They hoped that people and especially youth will come forward to create and participate in environment and wildlife conservation efforts. Pamela tells[17], "*This is our life's work and it's been the most fulfilling experience of our lives. We'd love to pass on to others what we've learnt and help inspire them. Because truly our future as a beautiful living planet is dependent on it.*" The Malhotras believed that when we die we should give back the same (if not better) Earth which we got from our ancestors.

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The Influence of Digital Technologies on Wellness Tourism In India: Special Focus on Delhi-NCR

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ABSTRACT

The holistic medicinal practices, ayurveda, and yoga are in high demand, which fuels remarkable growth within the wellness tourism sector of the Indian tourism industry. Besides, digital technologies have reconstituted marketing, access, and consumption patterns of wellness services. This paper is a critical examination of the impact digital platforms have on wellness tourism within India, specifically within the Delhi-NCR (National Capital Region). These factors are further precipitated by the strategic location, world-class infrastructure, and proximity to spiritual centres such as Rishikesh and Haridwar, which have also led to the growth of wellness services and their eventual impact on customer behaviour. Newer digital trends that have enabled personalized experiences with AI (Artificial Intelligence) driven personalization, mobile apps, and virtual reality excursions have enhanced customer engagement multi-fold. The paper also delves into the challenges associated with promoting wellness tourism in rural regions, where digital infrastructure is still in its infancy. This also presents opportunities to help urban consumers reconnect with traditional wellness practices throughout the country. This research fundamentally highlights the need for India's tourism wellness sector to accelerate its growth through targeted marketing strategies and investment in digital infrastructure, in order to bridge the gap between rural and urban wellness destinations.

Keywords: Wellness Tourism in India, Digital Platforms in Wellness Tourism, Ayurveda and Yoga Tourism, Delhi-NCR Wellness Tourism, Digital Transformation in Wellness Services

1. INTRODUCTION

1.1 Background - Wellness Tourism in India: Economic and Cultural Significance

In India's travel and hospitality industries, wellness tourism is a rapidly expanding sector that emphasizes the maintenance or improvement of personal well-being through a variety of recreational activities, including yoga retreats, meditation, spa therapies, ayurvedic treatments, and holistic healing. The global destination for spiritual and physical rejuvenation is India, due to its ancient wellness traditions and rich cultural heritage. India will expand its wellness tourism segment at a compound annual growth rate CAGR (Compound annual growth rate) of 20% in the coming years, contributing to its tourism revenue and maintaining its status as a cultural ambassador for ancient medicinal practices. In addition to providing economic benefits, this expansion also promotes regional development in rural and semi-urban regions, supports local businesses, and creates employment opportunities. Support from the government for the promotion of health tourism could be consistent with India's overarching objective of improving the fundamental rights of its citizens.

1.2 Delhi-NCR as a Key Hub for Wellness Tourism

With its closeness to Delhi and adjoining regions, the National Capital Region of Delhi has become India's wellness tourist hotspot. It is appealing to both domestic visitors who are in search of affordable ayurveda treatments and high-end international clients who are interested in luxury retreats. The spiritual cities of Haridwar and Rishikesh, in addition to the world-class wellness centres, saunas, and resorts in Gurgaon, Noida, and Faridabad, contribute to the region's popularity as a tourist destination. The region's international airports, five-star hotels, and well-developed transportation systems render it an optimal starting point for wellness excursions in northern India. Furthermore, the region's contemporary infrastructure, traditional wellness practices, and rich historical and cultural heritage further bolster its status as a wellness tourism centre.

1.3 Digital Technologies and Their Role in Transforming Wellness Tourism

One of the most significant components of the global tourism industry's digitalisation is wellness tourism. Travellers are employing digital technologies, including smartphones, mobile applications, VR (Virtual Reality), and social media, to plan, schedule, and experience their wellness trips. Many sectors are adopting digital solutions due to the COVID-19 pandemic. Digital technologies improve the consumer experience by providing real-time information, seamless bookings, and personalized suggestions. To accommodate tech-savvy travellers, resorts and centres are creating user-friendly websites, applications, and virtual wellness programs. Digital platforms offer improved

access to information regarding wellness destinations, treatments, and experiences, thereby facilitating the preparation of well-informed travel decisions. Digital platforms, such as mobile applications and online marketing campaigns, have significantly promoted wellness tourism in Delhi-NCR by providing wellness itinerary services. Wellness experiences are now more accessible to a broader audience due to the availability of digital payment systems, online registration platforms, and virtual consultation services.

2. LITERATURE REVIEW

According to Éva Csirmaz and Károly Peto (2015) paper highlights the growing importance of health tourism in global tourism, with Europe leading in spa tourism. Key sectors include recreation, wellness, and spa tourism. Challenges include lack of standardized data, underutilization of natural resources, and need for comprehensive services and innovative strategies. Public-private partnerships and tourism management are crucial for maximizing growth.

A study by Yi Luo, Chiang Lanlung (Luke), Eojina Kim, Liang Rebecca Tang & Sung Mi Song (2018) explores the impact of wellness tourism experiences on quality of life (QOL). The research uses the experience economy framework and evaluates wellness tourism through four dimensions: educational, esthetic, escapist, and entertainment. The findings show that wellness tourism enhances leisure satisfaction, which in turn improves non-leisure aspects of life, such as work and family relationships. Escapism and education are the most influential dimensions, while entertainment has limited relevance. The study suggests that tailored marketing strategies targeting women and aging populations can promote well-being.

Nikhil Singh Charak's (2019) paper examines the potential of Himalayan spa resorts in positioning India as a global wellness tourism destination. It highlights Ayurveda, yoga, and meditation as key elements, with the Himalayan region's natural resources enhancing wellness offerings. Prominent resorts like Ananda and Khyber Spa blend traditional and modern treatments. The study distinguishes wellness tourism from medical tourism and stresses the need for more destination spas and infrastructure. The Indian government supports this with frameworks and promotional strategies. The research proposes a "push and pull" model for the region, advocating for improved infrastructure and global marketing to boost competitiveness.

A study by Alana K. Dillette, Alecia C. Douglas & Carey Andrzejewski (2021) explores the dimensions of holistic wellness experienced through international wellness tourism. The research identifies four key dimensions: body, mind, spirit, and environment. Body wellness involves physical activities, healthy culinary experiences, detox programs, and rejuvenation. Mind wellness

involves personal growth and transformation, while spiritual wellness involves emotional connections and community interactions. The environment, including service quality and location, shapes wellness experiences. The study suggests wellness providers should offer clearer program descriptions, promote community engagement, and design environments that foster holistic health.

Wellness tourism, valued at $639 billion in 2017, is expected to reach $919 billion by 2022, according to a study by **Sergey Kazakov and Olga Oyner (2021).** The field, which includes medical and well-being tourism, is expected to combine health, well-being, hospitality, and technology. The future of wellness tourism is expected to be driven by rising stress levels, aging populations, and demand for personalized services. Technological innovations like 3D printing and real-time diagnostics are expected to transform the industry. However, challenges include ethical concerns, skepticism about holistic approaches, and the need for consistent conceptual frameworks.

The study **"The Role of Technology in Promoting Wellness Tourism: A Case Study of Thrissur, Kerala" by Mr. Prakasha N. and Dr. Mahesh Kumar K. (2024)** explores how technology is reshaping wellness tourism in Thrissur. It highlights the use of digital platforms, VR, AR, and mobile apps to enhance visitor experiences, marketing, and engagement. Technologies like virtual consultations and personalized wellness plans have broadened Thrissur's global appeal. Challenges like digital divides and data privacy are addressed, with recommendations to use data analytics, embrace sustainability, and innovate digitally to strengthen Thrissur's position in wellness tourism.

2.1 The Concept and Growth of Wellness Tourism in India

The global tourism industry on fitness is bourgeoning with concentration on wellness, management of stress, and healthcare with a view towards prevention. India is gaining prominence in this field because of its rich history in health care practices. According to the Global Wellness Institute, this sector is touted to realize a 20% CAGR in regional development, reflecting the demand at the global level for wellness destinations. One of India's most important cities, Delhi-NCR, is a big part of the fast growth of the health sector. The area is replete with health-oriented establishments, including upscale retreats and healing centres that emphasise traditional practices such as ayurveda and yoga.

- **Key Markets and Wellness Traditions**

Indian wellness tourism is promoted by inbound tourists from other countries, mainly Europe and North America, who come to the country for its image of holistic and alternative care. Towns in India such as Haridwar, where Patanjali Yogpeeth is situated, are experiencing an increase in the

number of people looking for getaways that make lives healthy. It has also become attractive because Delhi is located close to spiritual centres and an assortment of modern vacation treatments along with the availability of traditional ayurvedic medicines.

2.2 Digital Technologies in Tourism

a. The Role of Digital Platforms in Tourism

Digital technologies have totally changed the way the global tourism business is operating and how travellers can plan, book, and enjoy their tours so much more easily. These include online reviews, smartphone apps, social media, and websites. Generally, personal experiences and *Nowness* services, an outcome of real-time communication, have helped open up tourism and increased its accessibility. Increased usage of smartphones and internet penetration, catalysed by the digital economy strategy of the government, has hastened this shift in India. Online travel firms, such as *MakeMyTrip, Yatra, and Clear trip-end*, enjoy immense influence in offering hotel accommodations, transportation tickets, and other services. To promote their places, they also subscribe to social media channels such as *Facebook, Instagram and YouTube.*

b. Global and Indian Contexts of Digital Tourism

Only two digital technologies that play an important role in tourism marketing and management are VR and AR (Augmented Reality), which allow for the distant investigation of places brought forward by prospective tourists. They assist in building a relationship between travellers and health places. One of the major digital innovations in tourism marketing and management is the Indian *Incredible India* campaign, incorporating digital marketing to attract international travellers with its multi-cultural and wellness facets.

2.3 Wellness Tourism and Digital Platforms

a. The Role of Digital Platforms in Promoting Wellness Tourism

The same guests now seek, book, and rate health services from any part of the world with much ease through digital media. The sites allow visitors to reserve accommodations in real time, compare services, and review them. Wellness facilities in Delhi-NCR have used digital media through websites, mobile phone applications, and social media to push their services to both domestic and foreign audiences. Many resorts also offer, or even require, virtual consultations with ayurvedic physicians, yoga instructors, and nutritionists before arrival so that guests can plan their excursions. This digital-first strategy makes wellness services more accessible to

travellers, who now can easily find and book retreats that match their needs.

b. Trends in Online Bookings, Customer Reviews, and Digital Marketing

People use sites such as *Booking.com, TripAdvisor, Retreat Guru, and BookYogaRetreats.com* to compare prices and book on-site health programs. Review from customers is very important when making a choice, and digital marketing uses social media sites such as *Instagram, Facebook, and YouTube* to promote health centres and practitioners. In order to attract new consumers and enhance visibility, influencers generally discuss their experiences at luxury resorts, ayurvedic centres, and yoga retreats. Among the digital marketing strategies that are employed to attract younger, tech-savvy travellers who are interested in wellness tourism experiences, are targeted advertising and SEO (Search Engine Optimization).

2.4 Problem Statement

The literature on the impact of digital technologies on wellness tourism in specific regions such as Delhi-NCR is significantly lacking, despite the fact that wellness tourism and digital technologies are emergent research areas in global tourism studies. The majority of this subject's literature draws from broader national trends or traditional wellness destinations such as Kerala and Uttarakhand, failing to consider how technology is transforming wellness experiences in urban centres such as Delhi-NCR. Within India, particularly in Delhi-NCR, the demand for personalized, digitally driven wellness tourism experiences remains unabated. Digital platforms are vital for wellness tourists to seek out, reserve, and engage with wellness providers, but humanities literature has questioned its application to India and Delhi-NCR.

It is the objective of this paper to address these gaps by examining the influence of digital technologies on the wellness tourism sector in Delhi-NCR. The study will emphasise the significance of this emerging urban centre in the wellness tourism sector and provide a perspective on the ways in which technology is revolutionising traditional wellness in the contemporary digital era.

In Delhi, the emerging urban centre of NCR, the knowledge gap presents an opportunity to explore the integration of traditional wellness practices with digital tools. Gaining an understanding of the digitally induced changes in wellness tourism could offer valuable insights into the trends that are affecting other urban centres in India. To fully capture the regional variations in digital technology adoption and adaptation within wellness tourism frameworks, specialised research is required. Further research is needed on wellness tourism and digital technologies in Delhi-NCR.

3. GEOGRAPHICAL AREA OF THE STUDY: DELHI-NCR

Delhi-NCR is a major hub for medical tourism in India. There are many traditional and modern health services in Delhi, such as ayurveda, naturopathy, and yoga. The Indira Gandhi International Airport is the main airport in the area. A lot of people from other countries come to this area to find health-related services. Since the area is close to Rishikesh and Haridwar, it is well-known for yoga and other alternative therapies. There are a lot more tourists in Delhi-NCR now that digital technologies are widely used. Because of this, it's a great spot to check out how these technologies change health tourism. Both the government and private businesses are working to make the internet better for tourists.

4. RESEARCH QUESTIONS

- How do digital platforms promote wellness tourism and influence tourist choices and behaviour in Delhi NCR?

- How effective are digital platforms in improving the accessibility of wellness tourism?

- What are the key digital trends driving change in the wellness tourism sector in Delhi NCR?

5. OBJECTIVES

- To analyse the role of digital platforms in promoting wellness tourism Delhi-NCR.

- To assess the effectiveness of digital platforms in improving the accessibility and reach of wellness tourism.

- To examine the key digital trends that are transforming wellness tourism in Delhi-NCR, including the integration of virtual experiences, AI-driven personalization, and mobile applications.

6. RESEARCH METHODOLOGY

This study employs a descriptive research design to explores the impact of digital technologies on wellness tourism in India, focusing on the Delhi-NCR region. The research aims to understand the effects of digital platforms on operational efficiency, marketing strategies, and consumer experiences. This paper used secondary data sources, which includes literature, government reports, industry analyses, and case studies, to understand current trends, challenges, and emerging opportunities in wellness tourism. The study uses various data sources, including academic articles, tourism organizations Reports, market research, and digital platforms such as *Google Trends,*

MakeMyTrip, and TripAdvisor.

7. ANALYSIS AND DISCUSSION

7.1 Role of Digital Platforms in Promoting Wellness Tourism

a. Influence of Digital Platforms on Consumer Behaviour in Wellness Tourism

Online travel agencies (OTAs), social media, and wellness tourism websites influence customer behaviour. As wellness tourism demand grows, customers increasingly rely on these platforms to research, evaluate, and book wellness experiences. The decision-making process of consumers regarding wellness tourism has been significantly influenced by social media platforms such as *Facebook, Instagram, and YouTube* in Delhi-NCR. Potential tourists are frequently motivated to pursue comparable experiences through wellness retreats, yoga centres, and ayurvedic remedies, which are frequently disseminated by influencers, travel bloggers, and wellness practitioners. The utilisation of these platforms by luxury resorts and yoga retreats to offer exhaustive descriptions of their services and amenities, including customer testimonials, fosters trust among prospective clients. OTAs such as *Yatra, and MakeMyTrip* facilitate the research and ordering of wellness retreats, detox programs, and spa services in Delhi, NCR.

b. Case Studies of Successful Digital Campaigns and Platforms in Wellness Tourism

Digital platforms help promote India as a wellness tourism destination in general, and Delhi in particular. The high-end wellness retreat of Ananda in the Himalayas markets its programs on *Instagram, Facebook, and YouTube*, incorporating traditional Indian practices along with modern luxury amenities. In the same way, Vana Retreat in Dehradun publicizes its wellness offerings and engages travellers through OTAs and its website by regularly updating content, testimonials, and educational information. User-generated content and its utilization, coupled with OTA networks, is how the Westin Sohna Resort and Spa in Delhi-NCR comes to the forefront in the promotional arena. Even the government of India-backed Incredible India campaign has used digital media to promote wellness tourism in India, especially in Delhi-NCR. The campaign includes a fully functional website, online videos, and partnerships with international travel websites. In sum, India has been quite successful in marketing wellness tourism through government-supported programs and digital platforms.

c. Digital Platforms and Their Role in Shaping Wellness Tourism Trends.

Digital platforms brought about a sea change in the wellness tourism segment, particularly in Delhi-NCR. Due to more online bookings and customer reviews, the experiences in wellness

have gained easy access. Thus, travellers can book their choice programs. Wellness centres are now able to reach out to newer customers and interact with people across the globe through social media marketing. Two such virtual wellness experiences created the ease of connecting with tourists through ayurvedic consultations and yoga classes. The success of digital campaigns comprising social media and online travel agents shows how important digital technologies will be during the future growth of wellness tourism in the region.

7.2 Accessibility and Reach of Wellness Tourism in Rural India

a. Bridging the Gap Between Urban Consumers and Rural Wellness Destinations

Companies such as *TripAdvisor, Booking.com, and Airbnb* have bridged that gap in finding wellness destinations in rural areas of India, therefore diffusing the concept of wellness to under-developed areas of tourism. Websites specializing in wellness tourism, such as *RetreatGuru.com and BookYogaRetreats.com*, have made it easier for individuals traveling from cities to access wellness services. This digital intervention could serve as a tool to showcase rural Himalayan or Kerala resorts that offer traditional ayurvedic treatments to a global audience. Social media sites such as *Instagram, Facebook, and YouTube* engender trust among people and bring in tourists, thereby creating a community.

b. Challenges and Opportunities for Wellness Tourism in Underdeveloped Regions

While digital platforms create areas of opportunities for wellness tourism in rural India, there are still concerns regarding technological literacy, restricted access to digital payment systems, and non-feasibility of proper internet connectivity. Most of the tiny wellness centres in the countryside mostly smaller, family-run affairs - can do little more than word-of-mouth marketing or attempt to get a basic listing online. Building and maintaining a website is expensive. However, the prospects for wellness tourism in rural India are huge. There is an emergent demand for retreats that offer ayurvedic treatments, yoga programs, and meditation. This demand is being tapped by digital platforms by offering wellness tourism combined with ecotourism, adventure tourism, and cultural learning. On the other hand, rural tourism is also gaining through active promotion on digital platforms by the government on sites such as *Incredible India* and *state-level initiatives*. They are teaching rural wellness providers to use digital marketing techniques and building the infrastructure that will take advantage of the growing digital tourism industry in rural areas.

c. The Role of Digital Platforms in Marketing and Accessibility

Websites such as *Airbnb* and OTAs sites such as *MakeMyTrip and Yatra* can help in better

wellness tourism in rural India. These sites will highlight the facilities of the rural wellness centres by adopting improved marketing techniques to attract professionals from cities and tourists from other countries. It can be done with the support of health influencers and targeted advertisements. The inclusion of wellness destinations in rural areas into the digital economy is a sure way of connecting city people with wellness providers in rural areas. Wellness tourism in parts of India that are less developed should see quite broad growth in the next few years, further fueled by investment in digital infrastructure and marketing training for rural service providers.

7.3 Key Digital Trends in Wellness Tourism

Wellness tourism in India is being disrupted by digital technologies making access to experiences more accessible, personalized, and immersive. Mobile apps, VR, and AI-driven personalization of the experience will make wellness more accessible and immersive. Delhi-NCR is now fast emerging as a high-tech wellness service delivery hub. Wellness resorts offer virtual tours that let visitors fully experience the resort's atmosphere, treatments, and facilities before they decide to book their stay. VR has become popular in India's wellness tourism industry because it can connect with tourists from other countries who might want to virtually check out the area before they go. Most resorts in Delhi-NCR have started testing VR-based marketing strategies. For example, The Westin Sohna Resort & Spa lets customers see its spa and wellness retreats from the comfort of their own homes. Another huge digital trend in which developments are being updated is AI-powered personalized wellness packages. AI-powered technologies take a person's health data, preferences, and past behaviour to devise a personalized wellness prescription package. AI has been adopted in India by wellness centres to make the customer experience better. For instance, resorts of wellness such as The Roseate and Vana Retreat use AI to customize the package of wellness for each guest.

a. The Role of Mobile Apps in On-the-Go Wellness Services.

Wellness tourism has moved towards mobile apps that offer a variety of services, such as virtual yoga classes, meditation guides, meal tracking, and fitness routines. Tourists can stick to their wellness routines while travelling with these apps, which let them work out or meditate from their hotel rooms at faraway wellness destinations. Indian wellness tech companies such as *Cure.fit and HealthifyMe* serve this market by providing on-demand wellness services and custom meal and exercise plans created by AI that analyses data generated by users. India's wellness resorts, including those in Delhi NCR, are also making their own mobile apps that will let visitors book for treatments, get personalised wellness advice, and talk to specialists online. For tech-savvy tourists, these apps make wellness travel easier and more enjoyable.

b. Adoption of Digital Trends in India's Wellness Tourism Sector.

Digital trends in wellness tourism in India, particularly in Delhi-NCR, are gaining momentum. Technologies such as VR, AI-driven personalization, and mobile wellness applications enable resorts to differentiate themselves and improve tourists' experiences. These technologies create new markets for globalization and enhance the accessibility, personalized, and immersive nature of wellness services. The integration of these technologies will forever influence the future of wellness tourism in India.

8. RECOMMENDATIONS

Wellness tourism in India is rapidly changing, giving the government, tour boards, and internet marketers a chance to capitalize. To accomplish this, the government should allocate resources to the integration of digital infrastructure in rural wellness destinations, including the enhancement of internet connectivity, the provision of incentives for digital payment systems, and the establishment of online booking platforms. This will allow underdeveloped regions to experience the development of wellness tourism. It is imperative that government-led campaigns, such as *Incredible India*, continue to promote Indian wellness through digital platforms, including mobile applications, websites, and social media. This is particularly important for promoting Delhi-NCR as a wellness tourism centre. Tourism organisations and digital marketers should devise digital marketing strategies for wellness tourism. Wellness influencers and travel bloggers to create and disseminate authentic experiences from Delhi-NCR and other Indian wellness centres, thereby reaching a diverse audience, including younger and tech-savvy tourism consumers. Wellness centres and digital marketers must also integrate AI and VR.

Wellness centres that integrate AI-driven personalisation into their services can provide customised wellness programmes, tailored to the health data and preferences of individual clients. AI algorithms optimise individualised wellness consultations, personalised diet plans, and yoga regimens to prioritise customer satisfaction and enhance the overall wellness experience. Wellness resorts in Delhi, NCR, can differentiate themselves from their competitors and enhance their competitiveness in this market segment by providing distinctive experiences that incorporate VR technology. The government and tourism agencies must also invest in the capacity development of wellness providers to assist them in the effective adoption of digital tools. The government and tourism agencies must provide training to wellness centre proprietors, particularly those in rural areas, on how to use digital marketing platforms, administer online reservations, and interact with tourists via social media. Digital literacy programs are highly beneficial for the establishment of smaller-scale wellness centres, which enhance their capacity to market their services online and compete

with larger, more established operators.

Future research in the field of digital technologies and wellness tourism is essential. Understanding the impact of emergent technologies, such as AI or VR, on consumer purchasing behaviour in wellness tourism is crucial. Understanding how digital platforms have changed access, marketing, and the economic feasibility of rural wellness centres may help explain the digital shift in this industry. Additional research opportunities include the function of mobile phone applications in wellness tourism, particularly in the context of on-the-go wellness. This would provide valuable insights into the development and optimization of mobile technology within the wellness tourism industry.

9. CONCLUSION

In general, new digital technologies have impacted the wellness tourism industry in India, particularly in the Delhi NCR. With the rise of digital platforms, wellness centres have become more accessible, drawing in tech-savvy individuals who value personalised experiences. Notable developments encompass AR/VR, smartphone applications, and AI-powered customisation. The lack of infrastructure, digital literacy, and internet access in rural areas is one of the main obstacles. The tourism industry in rural areas could benefit greatly from more funding for digital infrastructure, training for wellness providers, and strategic advertising. Wellness tourism is poised to experience growth as the sector becomes more accessible and customer experiences are improved through digitisation. Wellness centres need to use cutting-edge digital tools if they want to be competitive. Wellness tourism in India of the future will take advantage of digital innovations to provide worldwide accessibility, individualisation, and immersion.

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WEB3 in Hospitality and Tourism: Glimpses into the Future of Sustainable Hospitality and Tourism

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ABSTRACT

The future of the internet, Web3 also referred to as blockchain or decentralized ledger, is becoming a transformative force for various business segments. As with other industries, this evolution brings many opportunities and innovations in the hospitality and tourism sector too, redefining the way businesses operate and customers experience services. With growing concern around environmental sustainability and the new traveler class emerging in millennials and Gen-Z, hospitality businesses shying away from adopting advanced technologies can see an erosion of their customers. Connecting data, transactions, and experiences, lies at the fulcrum of web3 or blockchain technologies. A next-generation technology, web3 is a decentralized network that facilitates direct and secure communications among users, applications, and data. Web3, the future of technology, integrates decentralized data points, DeFi, non-fungible tokens (NFTs), decentralized governance, cloud services, and self-sovereign identity. The data is transparently stored on interconnected blocks and most importantly is immutable, therefore providing absolute security. The transparent and interconnected blocks of information enable peer-to-peer transactions, both value-based and financial. Metaverse provides the immersive face of web3, offering innovative and convenient ways for businesses to deliver products, services, and experiences.

Keywords: Blockchain technology, Non-fungible tokens (NFTs), Distributed, Decentralized and Autonomous systems, and Metaverse.

INTRODUCTION

Web3 holds the potential to reimagine and deliver for the hospitality and tourism industry with innovative practices providing, accessibility, peer-to-peer interactions, and immersive experiences reducing dependencies on intermediaries. The integration of NFTs and the Metaverse will help create virtual experiences apart from the creation of unique digital assets linked to travel. Decentralized booking platforms, smart contracts, payment systems, social media, tourist information platforms, and tokenization of tourism assets are some innovative applications.

Objective

1. This paper aims to provide a comprehensive roadmap for the digital transformation of this sector, with a specific focus on leveraging disruptive new-gen Web3 technologies.

2. This paper explores the implications for both, the demand and supply sides of hospitality, the role of community-owned economies, and social tokens in shaping the future landscape.

3. It discusses specific applications of web3 in hospitality and tourism management, providing use case examples and insights into their potential impacts on the industry. By examining the possible benefits for tourists, tourism destinations, and the transformative possibilities for hospitality and tourism management, this paper offers insights into the future of travel and tourism in the web3 era.

Research Methodology

A qualitative methodology was adopted for this paper given the exploratory nature of the subject. This included third-party references, primary experience in the industry, and publicly available information on use cases from operating businesses. It was focused on collecting and analyzing words (written and spoken), textual information, and visual data.

Interpretation

A compelling case for the hospitality sector, NFTs deliver value to hotel assets during and long after a stay. NFT collections such as room keys, local art on a hotel's wall, etc., can offer unique solutions to the sector's inherent complexity and provide revenue-generating opportunities. The hospitality and tourism sector has immense potential for transformation by adopting web3 technology to enhance business profitability and customer experiential value. Consider scenarios such as:

- Virtual property walk-throughs that can expand customer reach at an unprecedented scale,

enhance customer experience, and optimize global sales and marketing costs.

- NFT-based memberships that can provide secure and flexible membership benefits with the potential for transfers and resale in secondary markets to the owners while reducing administrative costs for the hospitality companies.

Leading adopters of web3 include hotels like Le Bristol in Paris, which launched their NFT programs. Luxury brands are also developing NFTs for their limited-edition collections.

Originality

Through conducting a critical review of present business scenarios and assessing technology for transformation, this paper explores the benefits of blockchain technology to drive business at scale, optimize costs, and enhance customer experience with the adoption of decentralized ledgers as a qualitative study and presents a theoretical framework for digital transformation of the Hospitality & Tourism industry providing research guidance. The introduction section of this paper has provided a set of strategic frameworks and actions for the deep integration of the Hospitality and Tourism industry with Web 3.0 technologies, aiming at guiding and accelerating the digital transformation towards a futuristic digital economy.

REVIEW OF LITERATURE

Web3 Applications in Hospitality and Tourism Management

1. NON-FUNGIBLE TOKENS (NFTs)

- NFTs are digital representations of real-world assets or processes. Customizable to the asset they represent, the NFTs contain all the attributes of the physical asset in a digital format and are stored on decentralized ledgers. The key benefits of NFTs are that they are transparent, traceable, and immutable, providing unparalleled safety and security for the data they represent.
- NFTs, a key feature of web3 technology, unlock unprecedented use cases across businesses including the hospitality and tourism sector. NFTs provide authenticity and ownership rights to their owners. Hotel room keys, tickets, and other elements can be represented as non-fungible tokens. NFTs will allow hotel companies and customers to profit by trading these digital assets in secondary markets. Some of the use cases are listed as follows:
- Secure and efficient travel packages with NFT-based bookings ensuring transparent ownership and a resale potential when applied to bookings, information, and loyalty programs.
- Decentralized hospitality marketplaces facilitate peer-to-peer accommodation rentals, activity

bookings, and local service discovery bypassing traditional intermediaries.

- Incentivize and reward customer engagement with gamified loyalty programs leveraging NFT-based rewards, community governance, and interactive experiences.
- Increased brand recognition with engaging NFT-based loyalty rewards for the hospitality and tourism businesses.
- NFTs allow hotels to provide customers to tour their properties, book rooms of their choice, and receive receipts as proof of booking.
- NFTs do not lose value and can be further traded at a standard price making the rebooking process highly simplified for the customers.
- Smart access NFT keys can replace traditional room keys improving safety and engagement.
- Hospitality and tourism companies can also use NFTs for complimentary gifts and perks.

2. DECENTRALIZED AUTONOMOUS ORGANIZATIONS (DAOs)

DAOs are blockchain-based communities designed to bring a transparent and democratic management structure to businesses and other collaborative projects. In simple terms, DAOs offer a flash way of describing an entity without centralized leadership, a community-driven entity without central authority. The collective members own a DAO which is achieved with the ownership of a given token – 'a governance token'. Some of the existing use cases that are transforming the hospitality and tourism sector landscape are as follows:

- CitizenM has launched DAOs for fractional ownership and community-driven governance of its hotels. The "We Are CitizenM" project provides fractional ownership through NFTs. Its DAO project allows token holders a participative experience in the hotel design and service offerings.
- Leveraging cryptocurrencies and NFTs, Travala.com provides blockchain-based travel bookings and loyalty rewards.
- SITA, a leading airline industry provider, expects to see web3 as commonplace at leading airports, with a vital role in optimizing processes, avoiding disruption, and facilitating intuitive, immersive control of intelligent airports.

Private clubs and loyalty programs have an opportunity to re-imagine customer experience creating token-gated experiences, perks, and benefits rather than pushing customers to provide their emails, personal details, and phone numbers, offsetting their privacy concerns. Examples include Mandala Club in Singapore, Club3 in Los Angeles, and Drunken Monkeys Members Club in London.

- Drunken Monkey has launched their NFT that allows lifetime access to a luxury concierge

membership in 20 global destinations. The digital membership model means that every membership, represented as a unique NFT, is tradeable on the secondary market, allowing members to enjoy elite perks, explore investment potential, and increase financial gain.

3. WEB3 TOURISM

By providing decentralized and immutable records, blockchain creates transparency and security for travelers, tour operators, and service providers. An integration of blockchain, AI, virtual reality, and other cutting-edge technologies has the potential to offer immersive experiences and decentralized services.

- Shanghai aims to generate $6.9 billion annually by establishing a comprehensive Web3 tourism ecosystem. The city is actively seeking collaboration with industry stakeholders to develop and implement transformative Web3 tourism projects. These initiatives include digitizing cultural artefacts, loyalty programs, and providing secure and transparent travel services. A tourism strategy, China aims to promote sustainable tourism to protect its rich cultural heritage and attract tech-savvy travelers to curated and personalized travel experiences.

4. BIG DATA, ANALYTICS, AND ARTIFICIAL INTELLIGENCE

Building a community of standalone properties Web3 has the potential to deliver significant benefits with the emergence of community-owned economies and social tokens. The social tokens enable two-way relationships between customers and hospitality companies, hotels, tour operators, travel companies, restaurants, etc.

Single and standalone properties can come together in a decentralized ledger to cohesively offer varied customer experiences while retaining individual controls but allowing a frictionless global reach to their customers through inter-connected systems for bookings, loyalty programs, special initiatives, etc., backed by smart contracts. Smart contracts are digital agreements that are signed and stored in a blockchain network, which executes automatically when the contract's terms and conditions (T&Cs) are met. The T&Cs are written in blockchain-specific programming languages.

The good news is that web3 does not cannibalize the existing vast network of systems and instead collaborates to augment the massive web2 hospitality networks, create a new way of engagement between stakeholders, and generate new ways of income. For example, approximately Marriott has 200+ million members, Hilton has 180+ million members, and World of Hyatt has 30+ million members. Online businesses, such as Expedia, Booking.com, etc., have a large user base, Airbnb has a decentralized model, and TripAdvisor has active community engagement and potential

for personalized recommendations. Collective migration of this data to Web3, enables big-data and artificial intelligent for all stakeholders, equipping them with an unprecedented scale of insights into customer behaviors so that they can create new ways to build brand loyalty. Web3 allows anyone to create gated gardens for harvesting and rally people via distributed governance and new incentive structures. Influencers who succeed will be able to cultivate deep relationships, foster trust within their networks, and provide utility to their followers.

Decentralized tourist information platforms can provide more accurate and up-to-date information, reducing advertorial influences, and curating customized localized experiences. Embracing web3 technologies, hospitality businesses can establish a loyal base of customers and continue customizing their experiences with intelligent insights.

5. BUILDING SUSTAINABLE AND ENGAGING BRANDS

The hospitality and tourism industry has traditionally relied on intermediaries and centralized platforms for its business. Almost the entire industry uses third parties to manage user information, leading to notable issues of data theft, loss, and real-time accessibility. Tiered transactions involving multiple third parties, offices in various locations, etc., result in time delays, increased costs, inflexible structures, and fraudulent transactions to quote a few - all of them chipping away at the customer experience. Some leading hospitality brands like Marriott have already identified this challenge and exploring blockchain, cryptography, and data privacy to create the 'Known Traveler Digital Identification' program, which eliminates security vulnerabilities by storing all information in one data garden. Marriott has identified that a more secure and efficient ID would facilitate the continued growth of international travel.

Customer engagement is a critical success criterion for all hospitality brands without exception and presently this is controlled largely by third-party centralized platforms like TripAdvisor, Yelp, etc., and the actual hospitality products offering the services do not have control or actionable access to this customer feedback. Web3 technology offers an opportunity for hospitality and tourism brands to directly engage with their customers through its decentralized ledger network while operating in a harmonious environment with third-party platforms. Decentralized reviews improve customers' trust significantly as these are not prone to manipulation or censorship, owing to the immutable nature of data stored on blockchain platforms. In the digital age where data is at the core of success for every enterprise, service providers can leverage data from personalized reviews to tailor-fit their services to customer preferences, easily and cost-effectively. Simply put this means having the competency to deliver customized solutions at a global scale. Decentralized data will also allow the customers more control over their data, and hence increased

privacy and security, in comparison to web2-based social media platforms. Some of the game-changing applications that hospitality and tourism industry businesses can adopt are listed below:

- Co-creation and ownership of NFTs which offer gated content, products, or experiences and help with building and augmenting communities through incentives.
- Digital twins offer the potential to monetize the brand by offering limited digital collections to increase destination awareness, branding, and management.
- Create virtual engagement with the destination to increase motivation and result in positive decision-making with personalized interaction and engagement.
- Tokenizing physical assets such as hotels, restaurants, and attractions, will enable fractional ownership, increasing liquidity and reducing costs for the service providers.
- Increase engagement and loyalty of customers by enabling participation in the ownership of the hospitality assets.

CONCLUSION

We can conclude that web3 technologies enable a more equitable market dynamic and in embracing these new-age technologies, hospitality and tourism companies can increase their profitability with reduced costs and dependencies on third parties. For an industry that is challenged with notable financial fluctuations, sharing the risk and reward with more stakeholders through fractional ownership, it provides a financial security blanket apart from infusing liquidity into the business. Creating a large lake of decentralization of data enabling cutting-edge artificial intelligence, curating personalized experiences, reducing dependencies on third parties, and strengthening business processes with decentralized booking platforms, smart contract automation, payment systems, and tokenization of physical assets, will result in lower operating costs and increased customer loyalty – everything adding to real profits in the books.

Adding to all of it is exploring the Web3 Metaverse — a world of immersive experiences!

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Study of Irregular Working Hours in Hotel Sector

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ABSTRACT

The hotel sector is synonymous with working hours that are long, unpredictable and result in poor outcomes for employees. Arguably, they constitute one of the most significant features of the employment relationship, yet little research exists to explore the factors influencing the scheduling of hours and the degree of control employees can exert on their pattern of work. This research would try to highlight the impact of irregular working hours on the employees. Qualitative research was conducted to identify the influence of work life conflicts on the employee.

The result presented here are all true with respect and the questions were asked to hotel staff. The findings suggest that a combination of customer demand patterns and the choice by employers to minimise labour costs effectively reduce employees' ability to control or challenge work schedules. The results also suggests that lack of employee voice is depriving workers of a healthy work-life balance and their ability to perform their taks efficiently.

Keywords: *Employement relationship, employee voice, hotels, work schedules, working time control*

INTRODUCTION

Today the hospitality industry is too competitive and to stay with the competition hotels have to cut down on employee costs, which means the employees are made to work long

working hours and indulge in shift duties where the timings are irregular and indefinite. There is also a tremendous load in handling demanding and difficult customers politely as these are considered a take-for-granted phenomenon in the hospitality industry.

In order to remain a successful player in the competitive game of the industry hotel management prioritize customer retention and profitability over employee discontent and stress. This stress creates a demand on an individual to make a decision on the balance between work and family. People have difficulty working in different roles or even multiple roles at workplace as well as at home which leads to stress. Multiple surveys conducted to examine this discovered that only 36% of the respondents rated a job as the most important priority in their lives and if employees feel that work–life is not balanced, they may leave the job and seek "quality of life".

Using a work–life balance approach to mastermind employees' well-being has emerged as a strategic human resources management tool in the western world. However, while there is solid debate about work–life balance in the context of long-hours culture, there is little relationship between workers' family situation and preferences for working fewer hours. On the other hand, there are many cases that suggest that work–life balance assists in retention, productivity and the recruitment of good staff.

In general, hotels provide a traditional remuneration package to employees for the purpose of attracting talents and increasing retention rate. It includes "benefits" such as leave for getting married, compassionate leave, holiday house, office parties, and training courses for personal development, etc. Many benefits are designed to be family-friendly to balance shift workers' family needs due to their erratic job nature. However, from the perspective of work–life balance in today's working environment, these "benefits" tend to be segmented and can only be regarded as a piece-meal approach to staff support. In a workplace that is characterized by long and irregular working hours, the existing "family-friendly" related practices may not be adequate for employees to deal with their daily family responsibilities

1.1. Basic Definition

1. **Hospitality industry:** Is a broad category of fields within the service industry that includes lodging, restaurant, event planning, theme parks, transportation, cruise lines and additional

fields within tourism industry. A hospitality unit such as a restaurant, hotel, or even an amusement park consists of multiple groups such as facility maintenance, direct operations (servers, housekeepers, porters, kitchen workers, bartenders, etc.), management, marketing, and human resources.

2. **Irregular working hours:** Irregular working hours are established for certain industries or positions where workers sometimes need to continue performing their duties after regular working hours.

OBJECTIVES

1. To study the impact of irregular working hours on the employees .
2. To understand the effects of unbalanced workload.
3. To understand work life conflict.
4. To understand how to deal with irregular working hours.
5. To study the factors affecting working hours.

REVIEW OF LITERATURE

Introduction: "Study of irregular working hours in Hotel Sector" in program refers to the study on how the irregular and long working hours and shift duties affect the hotel employees,. It provided an insight on how this affects their work-life balance, making them demoralized and reconsider their career in the hotel industry. It also provides some inputs on how the management assisted by their HR department can facilitate changes which can bring about a positive change.

1. **Rajan (2020) -** stated "the workload is closely related to employees' health status and if working hours are extended, it will undoubtedly be the cause of heavy workload and will affect employee health."

2. **Hori & Chao (2019) -** stated that employees are subjected to high emotional pressures during dealing with consumers, which they are unable to handle.

3. **Moon (2015) -** stated that Shifting work is essential in hotels since this business operates 24 hours per day, 7 days per week, despite holidays, to satisfy guests.

4. **Nelson - Horchler (1991) -** conducted a survey and discovered that only 36% of the respondents rated a job as the most important priority in their lives.

5. **According to Greenhaus and Beutell (1985) -** time-based conflict is one of the three forms of work/life conflicts (in additional to strain-based and behavior-based conflicts) for employees.

6. **As per Cushing (2004)** - A culture of long working hours in the hospitality industry is so typical that many workers see their working hours as normal and rarely question this practice. Recent studies on long-hours culture have brought the issue back under the spotlight.

7. **Tabacchi (1990)** - Empirical research on employee burnout has been extensively conducted in the hospitality industry especially to explain why food-service managers suddenly quit their job.

METHODOLOGY

4.1. Research Design:

Hotel Industry is very dynamic with hotels working on a 24/7 basis catered by employees related to various areas. It may probably be the only industry which works on holidays and festive ocassions, To achieve the key hospitality goals and objectives it is also desired that employees are able to meet the customer demands by working beyond their defined working hours, sacrificing their personal time and time with their family. This has a negative impact on their work-life balance which make the employees rethink about their prospects in this industry.

The basic aim of this research is to dig deep into this malaise by meeting the hotel managers and trying to obtain their views on the impact of irregular working hours on the hotel workforce. The result of the study would be beneficial for all the stakeholders of hotel industry.

4.2. Sampling:

A prevalent review of literature was done referring various research paper and article of different journals, books and websites for studies related to the research paper and quantitative study was done with the help of a basic questionnaire circulated to the employees of hotel sector. Structured questionnaire was framed to find out the conclusion to determine the relevance and impact of irregular working hours in the hotel sector on the employees. The well framed questionnaire was distributed to the employees of hotels.

4.3. Data Collection

Both the types of data primary and secondary were used for drawing conclusion of research.

4.3.1. Primary data

Collection of primary data was done with the help of questionnaire which was circulated to the hotel management employees. 15 well designed question were framed in a sequential order to

gather information regarding the impact of irregular working hours in the hotel sector.

4.3.2. Secondary data

Collection of secondary data was done by referring various research paper of eminent journals, articles from renowned authors, various websites, and other prominent publication of various sources.

RESULT AND DISCUSSION

Well-structured closed ended questionnaires were correctly filled by the respondents of hotel management employees. The data gathered by the questionnaire is represented in the diagrams below.
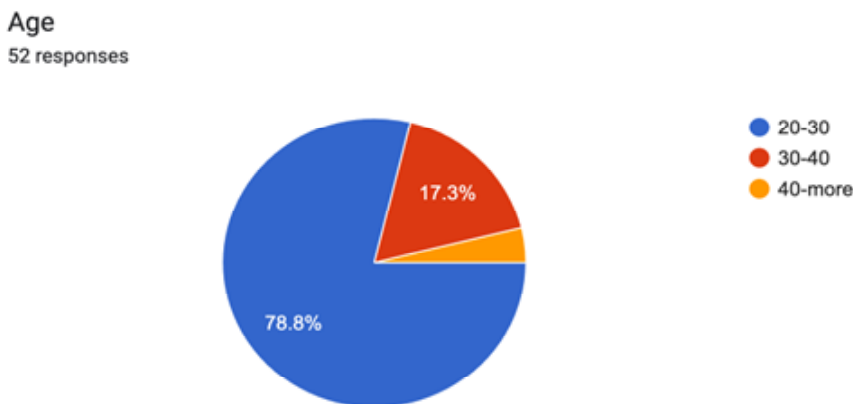
Figure 5.1 : I received 52 responses. 79% are in the age group 20-30
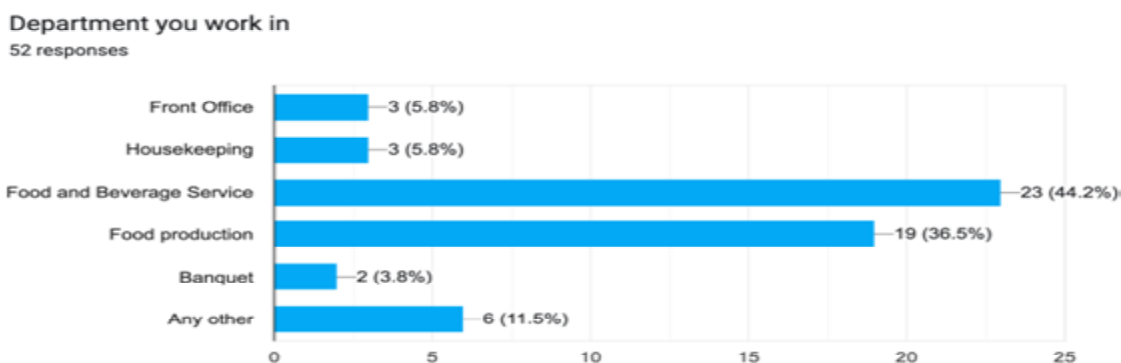
Figure 5.2 : Shows the different departments the employees work in

How long do you work?
51 responses
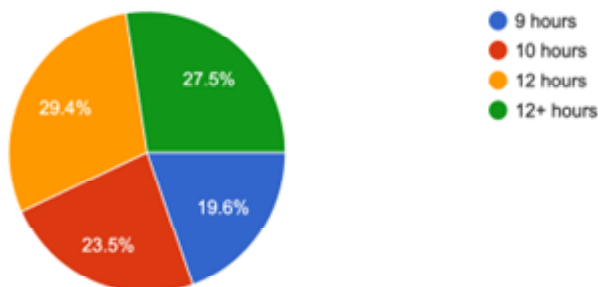
Figure 5.3 : Shows respondent's working hours -50% were 12 hours and above

What are your shift timings?
50 responses
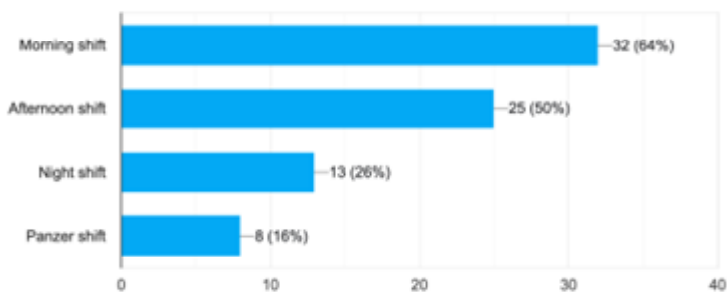
Figure 5.4 : Shows majority respondents work in morning and afternoon shift

Which is your preferred shift?
50 responses
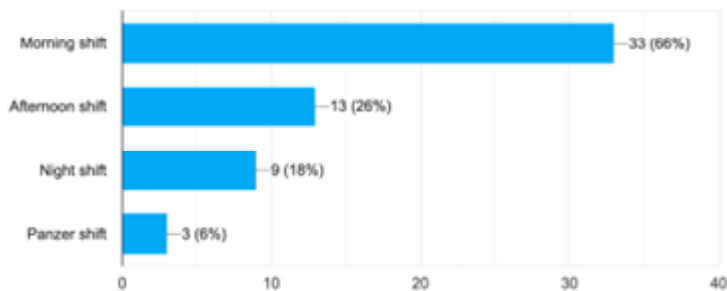
Figure 5.5 : Shows 66% respondents preferred morning shift

How many offs do you receive?

49 responses

Legend:
- Once a week
- Once every fortnight
- 6 offs in a month
- 8 offs in a month

24.5%
10.2%
65.3%
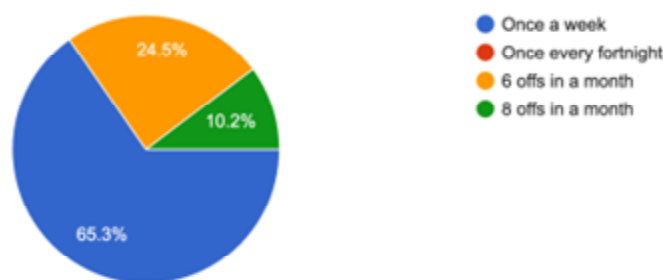
Figure 5.6 : Shows 65% respondents receive offs once a week

What is the frequency of shift change?

48 responses

Legend:
- Weekly
- Fortnightly
- Monthly

43.8%
18.8%
37.5%
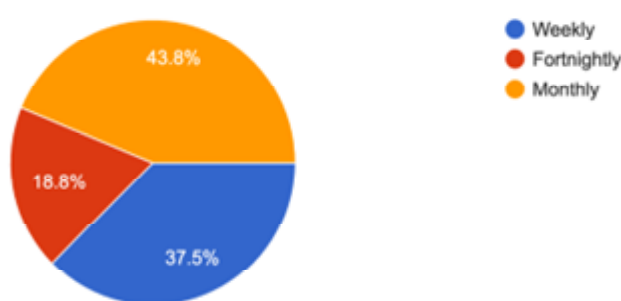
Figure 5.7 : Shows 44% respondents have shift change on monthly basis

How much in advance are shift schedules communicated to you?

51 responses

Legend:
- Fixed shifts are planned 15 days in advance
- Fixed shifts are planned 7 days in advance
- Shifts are planned in advance but changes are communicated a day prior

56.9%
21.6%
21.6%
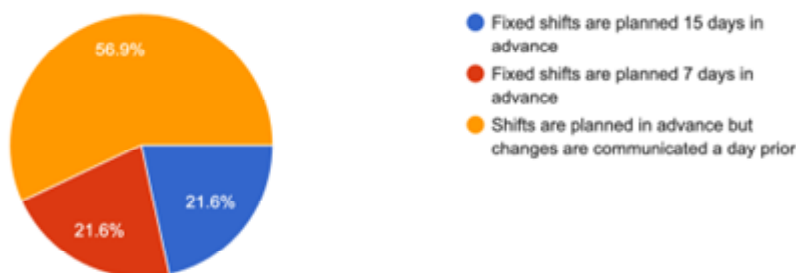
Figure 5.8 : Shows that most shifts are planned in advance

Do you work double shifts in absence of reliever?
50 responses

- Yes, its common
- Yes, occasionally when reliever has an emergency
- Never
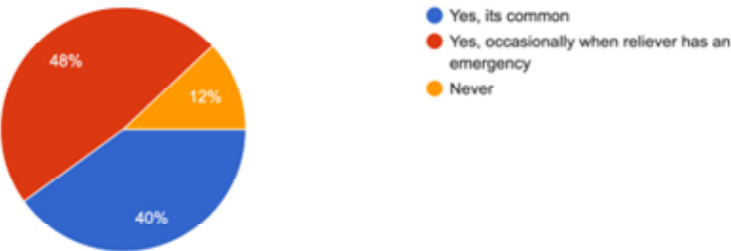
Figure 5.9 : Shows that nearly 88% have worked in double shifts

How irregular working hours affect you?
50 responses
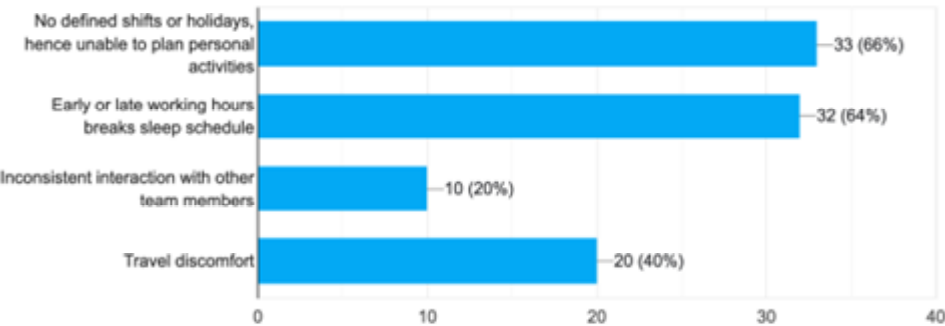
Figure 5.10 : Shows the impact of irregular working hours at personal and health levels

Impact of irregular work hours on your health.
51 responses

- Yes, no definite sleep schedule leading to fatigue
- No
- Maybe
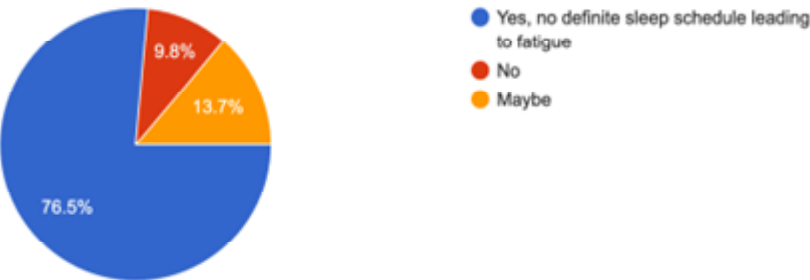
Figure 5.11 : shows major impact (77%) on sleep schedule

How do you deal with break shifts?
50 responses

Category	Value
Never worked in break shifts	19 (38%)
Choose a job location closer to home	14 (28%)
Request a longer break to facilitate rest and travel	9 (18%)
Remain frustrated with break shifts	14 (28%)
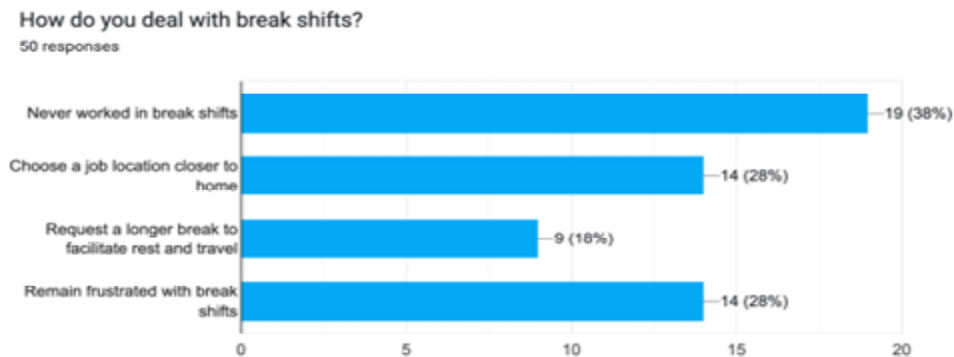
Figure 5.12 : Shows how respondents deal with break shifts

Do we need to change the work schedule in hotel sector?
50 responses

Category	Value
Yes	34 (68%)
No	4 (8%)
Make the work schedule consistent on monthly basis	13 (26%)
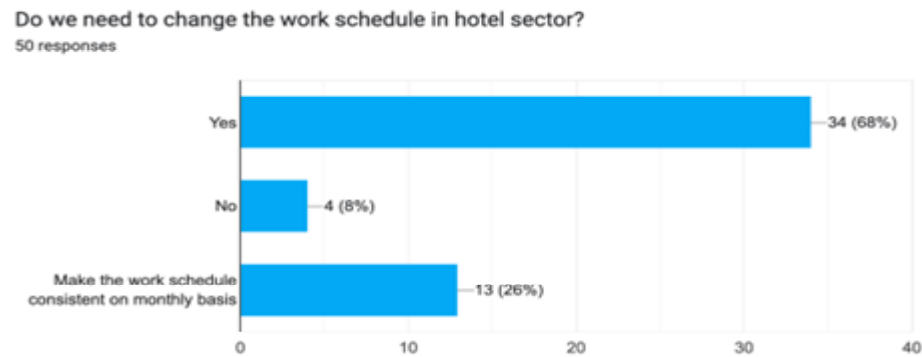
Figure 5.13 : 92% Respondents expect change in work schedule

How do you take care of travel during shift hours?
50 responses

- Hotel provides pick up and drop facilities
- Use my own vehicle
- Use public transport
- Use taxi services reimbursed by hotel

64%
10%
26%
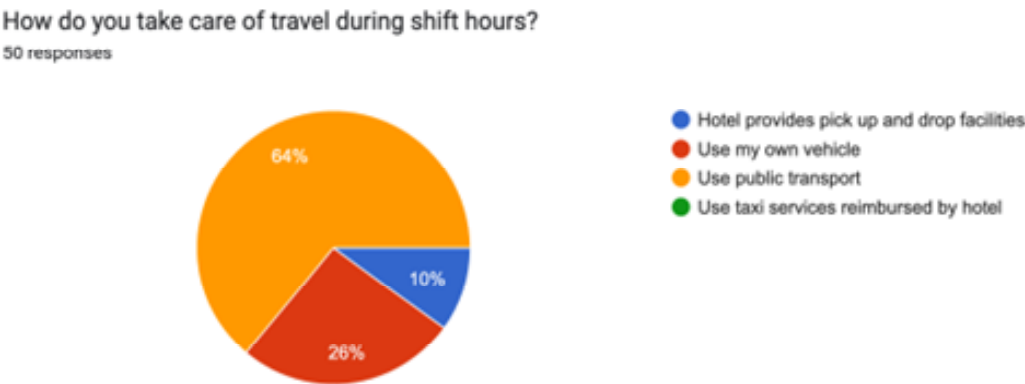
Figure 5.14 : Shows 90% use public transport or own vehicle

How long do you intend to work in shifts?
50 responses

- All my life
- Till I move up to a senior position
- Next 10 years
- Shift duties has made me rethink on my area of work
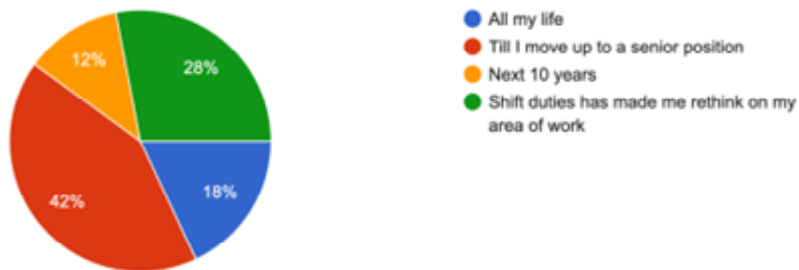
Figure 5.15 : Shows 70% have intention to move out of shift duties

Would you recommend hospitality industry as a good career to others
52 responses
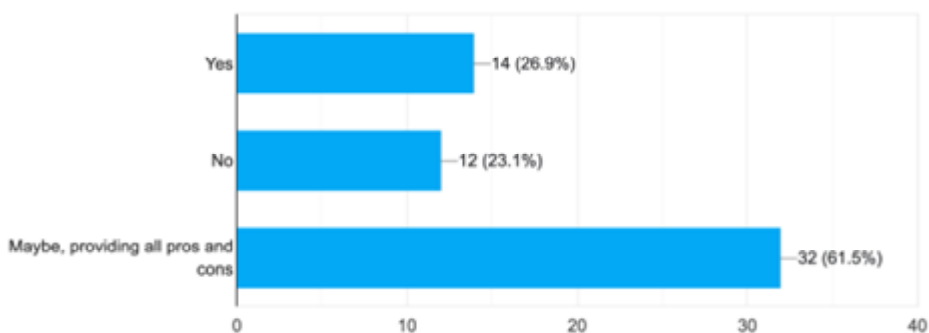
Figure 5.16 : Shows 23% are against recommending hospitality industry

CONCLUSION

The aim of this research was to determine the impact of irregular working hours on employees in the hotel sector. This study provides valuable implications for the hotel industry on the aspects of what organizations can do to improve employees' work–life balance.

In the hospitality industry, working hours have always been a problem as there is no fixed working hours. Over a period the workload will affect the health of hotel employees and demotivate and demoralize them. The research revealed that a compressed work week transforming the 6-day work week pattern to 5-day has proved to be successful, however this may also impact the

availability of adequate employees to manage the work. The study also opens up the direction of devising other innovative ideas that "accommodates" employees with more free time by providing an adequate number of employees to ensure the working hours, so that the workload does not influence the staff's physical and mental health. Although, working in shifts, is unavoidable in hospitality industry, arranging shifts will reduce the impact on staff health. During a busy day, the head of the department should divide the work properly to avoid health problems like fatigue, stress and Injuries. This findings helps upgrade the knowledge of the human resource to protect the staff and reduce the turnover intention of hotel employees.

RECOMMENDATIONS

The following points will prove to be useful for the hotel management employees as well as the hotel industry.

1. **Listen to employees and appreciate their differences and needs:** This should be carefully planned in various forms such as focus group, individual interviews, discussion sessions or web-based surveys to stimulate mutual communications.

2. **Provide more free time and increase flexibility on work schedule:** Flexibility could also be in the form of a management mechanism that allows employees to choose their preferred days off or change the scheduled roster on a fair rotation base so as to accommodate personal needs when required.

3. **Organise team building sessions:** Team building session help employees understand their team mates better and promotes unity. Certain activities and excercises should be arranged.

4. **Arrange gatherings outside workplace:** Organizing gatherings outside the workplace will bring change in atmosphere and environment, motivating the employees to work energetically and efficiently.

5. **Recognize good work:** Encouraging employees and awarding them with appriciation certificates for good and hard work will make them feel valued.

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Detailed Study of Benefits and Promotion of Health and Wellbeing Tourism

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ABSTRACT

This review of Research paper intends to showcase the theoretical relationship between health and wellbeing tourism which is emerging as a fast growing segment within the global tourism industry, driven by the increasing emphasis on personal health, preventive care and holistic wellness. The study highlights the key benefits of this sector, including improved physical health, enhanced mental and emotional wellness and the adoption of preventive healthcare. Additionally, health and well being tourism fosters cultural exchange, engineering new wellness travel experience, economic growth, development of infrastructure of host state and cities.

Furthermore the study delves into the promotion strategies employed by the health tourism sector, such as need for a brand in India as wellness destination, new nexus of travel,work and wellness, initiative taken by health care providers. It emphasizes the importance of sustainable practice and role of government in ensuring quality care and accessibility .The research concludes with opportunities within the industry, offering insight into the future trends which will help in continued emerging trend in health and well-being tourism.

Keywords: *Tourism industry, wellbeing tourism, health benefits, healthcare, holistic wellness.*

INTRODUCTION

Health and well-being tourism refers to travel practices that focus on augmenting physical, mental or spiritual health. It includes activities and services aimed at improving overall wellness, often in natural or serene environments. This type of tourism has grown in acceptance as people become more health –conscious and seek out experiences that offer relaxation and rejuvenation. With roots in ancient traditions, such as Roman baths, Japanese onsens, and Ayurvedic retreats in India, this sector has evolved to address contemporary needs for a holistic healing.

There are several key aspects of health and wellbeing tourism:

1. **Wellness tourism:** this is travel aimed at promoting personal health and well-being through activities like yoga, meditation, spa treatments and healthy diets. Destination may offer wellness retreats, spas or eco-friendly environments that promotes relaxation and rejuvenation. India is the birthplace of yoga, attracting millions to centres like Rishikesh, dubbed the "Yoga Capital of the World." Meditation programs in serene ashrams such as Vipassana centers offer mental clarity.

2. **Preventive and holistic health tourism:** This focuses on retaining health and preventing illness through traditional and alternative treatments like Ayurveda, acupuncture, and naturopathy as well as practices like detox programs and clean eating habit development programs. Traditional Indian diets enriched with spices like turmeric and ginger, known for their anti-inflammatory properties, are a significant draw.

3. **Spa and wellness retreats:** These offer treatments such as massages, facials, hydrotherapy and alternative therapies many retreats also focus on detoxification and stress relief. Spas in cities like Goa and Kerala provide Ayurvedic therapies, herbal massages, and rejuvenation packages. Retreats in Uttarakhand and Himachal Pradesh offer eco-tourism combined with wellness activities in pristine natural environments.

4. **Fitness and adventure tourism:** This includes physical activities such as hiking, cycling or fitness camps. Travellers engage in activities that improve physical fitness while exploring new environment.

Hiking and Trekking: Destinations like Himachal Pradesh, Uttarakhand, and Ladakh are renowned for trekking routes such as the Roopkund Trek and Chadar Trek.

Cycling: Coastal routes in Kerala and the Western Ghats are favorites for cycling enthusiasts.

Fitness Camps: Boot camps in Goa and yoga-plus-fitness retreats in Karnataka blend rigorous physical activity with wellness practices.

Water Adventures: Activities like kayaking and river rafting, especially in Rishikesh, appeal to wellness tourists seeking adrenaline and fitness benefits.

5. **Spiritual tourism:** Some travellers seek spiritual growth and mental clearness through meditation, yoga, mindfulness, retreats, and other meditative practices in peaceful or scared locations.

Health and well-being tourism is unique in that it combines travel with personal development and self-care. It is not only about escaping from the routine but also about returning with renewed sense of health, vitality and inner balance. (Daniel Badulescu, n.d.)

METHODOLOGY

* **Primary data -** Using structured questionnaire to study about the interest and to identify the need for health and wellbeing tourism. A set questionnaire will be circulated amongst travellers and service providers to identify their opinion, preferences and experiences of those who are involved in this sector. About 50 travellers will be questioned to get desired response on which the data analysis will be based on.

Results: as per my study conducted the findings were based on my questionnaire which says 78% of my respondents that wellness tourism positively impacts overall well being

18% of my samples are uncertain as it could suggest scepticism about its effectiveness or disappointment with previous experience whereas on 4% which is a small percent believe wellness tourism does not have positive impact depending on individual experiences

CONCLUSION

We can say that tourism is a very productive activity both for the tourist and the government. As health and wellness tourism grows it represents a meaningful shift in how people approach travel, blending relaxation with personal health goals. Looking forward, this sector is set to play an integral role in future of tourism, providing not just escape but by providing overall lifestyle changes and health benefit for the travellers

The Role and significance of health and well-being tourism:

Health and well-being tourism, often referred to as wellness tourism, plays a significant role in

the global travel industry, reflecting a growing trend where travellers seek to enhance their physical, mental, and spiritual health through their journeys. Here are some key aspects of its role and significance:

1. **Improvement of physical and mental health:** health and wellbeing tourism provides travellers with opportunities to enhance their physical, mental and emotional health through various experiences such s spa tourism, yoga retreats, detox programs. Many people choose these experiences to disconnect from daily routines and regain mental clarity.

2. **Preventive health and lifestyle changes:** This form of tourism encourages health practices, helping individuals adopt healthy habits before health issues arise. Many wellness retreats focuses on long term lifestyle changes , like healthy eating, exercise, mindfulness, and stress management

3. **Economic Benefits for destination:** It can be a significant driver of economic growth especially for destinations that specialize in wellness and medical services. This sector attracts a high spending demographic, as wellness tourist often seek quality services and are willing to invest in health-focused experiences. Which in return leads to local economies, hospitality, health care and retail sectors.

4. **Cultural exchange and heritage preservation:** Many health and wellbeing tourism practise draw from traditional healing methods and ancient health philosophies, such as Ayurveda in India, traditional Chinese medicines or Japanese onsen (hot spring) culture. Local communities benefits from the preservation and promotion of traditional practices which in turn contributes to cultural heritage and tourism appeal (https://www.toppr.com/, n.d.)

5. **Job creation and community development:** The growth of health and wellbeing tourism creates job opportunities for local communities, including roles in hospitality, health care and wellness services and environmental conservation.

6. **Post-Pandemic Recovery:** The COVID-19 pandemic has heightened awareness of health and well-being, leading to increased interest in wellness travel as a way to recover physically and mentally.

7. **Environmental benefits:** Health and well-being tourism often overlaps with eco tourism as both emphasize a connection with nature and sustainable practices. Wellness retreats especially those in natural setting like mountains, forests , or beaches encourage eco-friendly practises and raise awareness about environmental conservation .This emphasis on nature centric experiences benefits both travellers and the destinations, promoting sustainable tour-

ism models and environmental protection.

List of government schemes

1. National medical and wellness tourism board: (AYUSH)
2. Incredible India wellness tourism campaign
3. Swadesh Drashan scheme
4. Prashad scheme (pilgrimage, rejuvenation and spiritual augmentation drive)
5. Ministry of AYUSH initiatives
6. Financial Assistance and grants
7. Skilled development programs; viz ; Hunar se rozgar tak and Skill India
8. Market Access and international promotion
9. Visa reforms and E-medical visas
10. State-specific initiatives for Kerala, Goa, Maharashtra and Uttarakhand. (List of schemes of the government of India, n.d.)

LIST OF HEALTH AND WELLBEING COMPANIES IN INDIA:

1. On surity
2. Paz care
3. Nano health
4. The Fuller Life
5. Infinite Health Studios
6. Stepathlon
7. Healthily me

SAMPLING STRATERGY

Online survey:

This study takes travellers as the research object. Before the formal distribution of the questionnaire, this study invited 50 travellers who are frequent travellers used to review the questionnaire. The research group carried out the survey in a number of travellers. A total of 15 questionnaires were sent among travellers which included travellers from various age groups.

Observational studies:

Thematic analysis was employed to interpret data, identifying key theme such as motivation for wellness travel, challenges, or areas for improvement in service offerings. Visitors' behaviour towards wellness locations to gauge preferences and engagements with specific activities and environment.

Ethical observation:

Participants were fully briefed on study's purpose also Ensured transparency, anonymity and consent in survey distribution.

Participants' identities and responses are kept private to ensure data privacy by securely storing collected data.

Limitations:

The research has limitations, as it focuses only on wellbeing tourism, due to complex nature and field, diverse tourist motivations and variation in data sources the few challenges are:

1. Motivational complexity: travellers' motivation are diverse and may not be solely health-focused , they may also seek relaxation and adventure

2. Economic influence: well tourism can be costly, making it more sensitive to economic down turns.

3. Access to diverse demographics : sampling may be biased if it only includes certain demographic such as tourists from high income group

4. Rapid evolving trends: changing consumer preferences and technologically advancements can create shift in interest for e.g.; digital detox, yoga centric wellbeing

5. Clean eating habits etc.

RESULTS AND DISCUSSION

1. How old are you?

48 responses
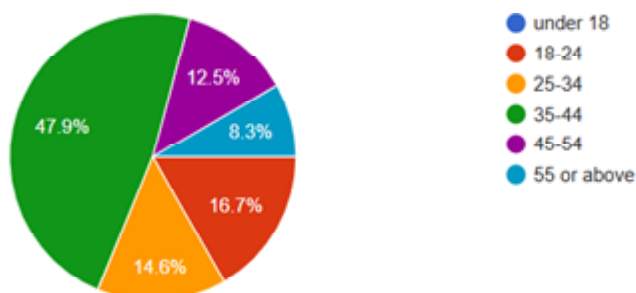
Fig. i : The survey age group.

Interpretation:

The table shows various age percentage of age groups of respondents who were the variables for this research analysis. The maximum respondents in the age group of 35-44 years were indulging in tourism activities.

2. What are your primary reason for engaging in wellness tourism?

49 responses
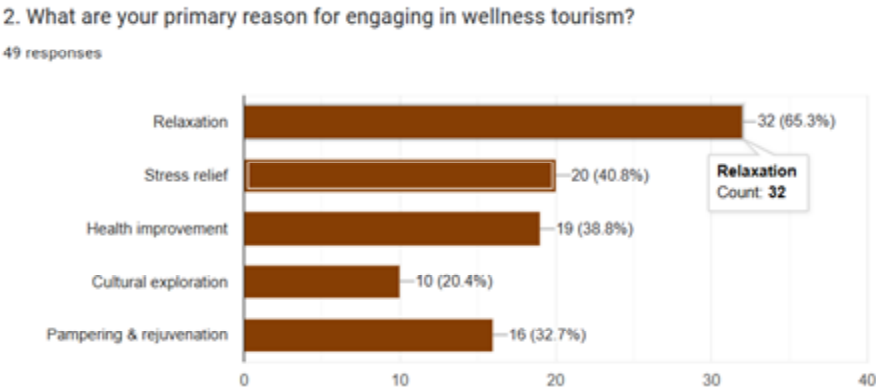
Fig. ii. The primary reason for engaging in wellness tourism.

Interpretation:

The table shows 65.3% of the variables choosing relaxation as their primary motivation whereas 40.8% indicates that wellness tourist seek to reduce stress, which is a significant count.

3 . What is your preferred destination for wellness?

50 responses

Fig. iii. Preference of the travel destination for wellness tourism.

Interpretation:

The table shows 65.3% of the variables choosing relaxation as their primary motivation where as 40.8% indicates that wellness tourist seek to reduce stress, which is a significant count. It was also further seen that Kerala was the preferred destination for the Wellness tourism category followed by Rishikesh and Dehradun.

6. What factors do you consider when choosing a wellness provider?

50 responses
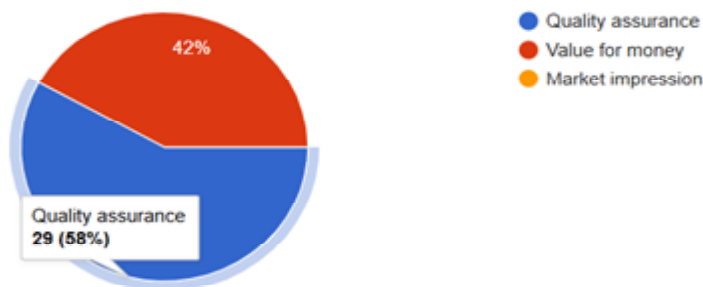
Fig. iv. Decision-making factors for choosing wellness provider.

Interpretation:

The Pie chart shows factors influencing the choice of wellness provider among 50 respondent. 58% prioritize quality assurance while 42% considered value for money, hence quality assurance is the most important factor in wellbeing tourism.

4. How frequently do you participate in wellness tourism?

50 responses
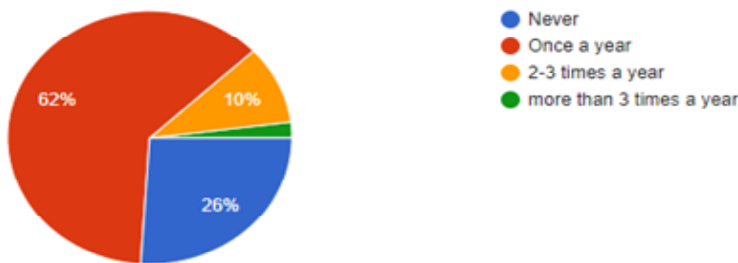
Fig. v. The nature of frequency for participation in wellness tourism.

Interpretation:

Value for money is important for 42% of the respondent which suggests that cost effectiveness plays a significant role for many individual when making g decision in wellness sector. The majority of participants (62%) were annual tourists, preferring to indulge in wellness travel at least once a year.

Quality Assurance is the most important factor with 58% prioritizing it when selecting a wellness provider.

13. Do you believe wellness tourism has a positive impact on overall well being?

50 responses
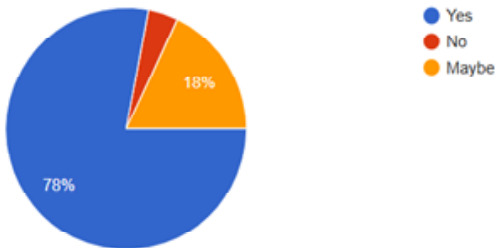
Fig. vi. The positive impact of wellness tourism on overall well-being.

Interpretation:

Though maximum respondents found wellness travel an expensive 78% of respondent, believe that wellness tourism positively impact overall wellbeing. This indicates a strong perception of the benefits associated with wellness tourism such as relaxation, stress relief and health improvement.

5. what wellness activities are you interested in (select all that apply)

49 responses
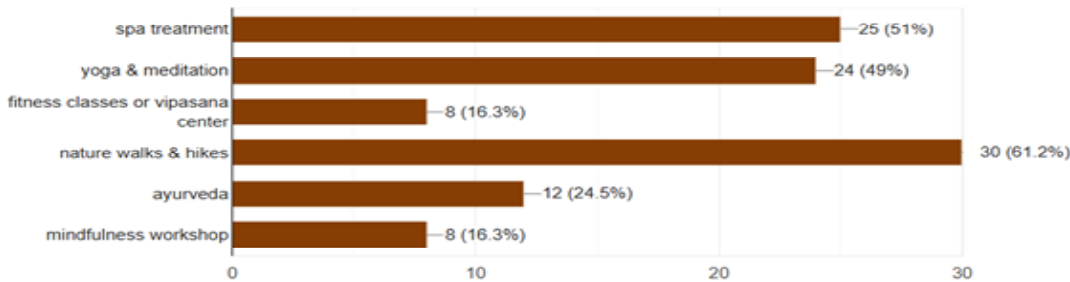
Fig. vii. The preferred choice for the wellness activity.

Interpretation:

Based on the above data it indicates nature walk and hikes have high interest with 30 respondents 61.2% have strong preference for outdoor and nature based activities

Whereas yoga and spa treatments is reflecting significant interest for mental well ness and self-care activities

LITREATURE REVIEW

Health and wellbeing tourism is an important source to improve the economy. Experimental evidences support the assumption that need for mental wellness and relaxation contributes to overall health and wellbeing. Health and wellbeing tourism is one of the fastest growing sector in the fields of tourism accepted globally. The present paper aims to provide a detailed study of benefits and promotion of health & wellbeing tourism , schemes available by the government for assistance and for generating employment .Health and wellbeing tourism focuses on rising understanding of travellers behaviour, need for mental health and stress relief. However it highlights on the need for standardization quality, cultural sensitivity and as emerging trend in travel and tourism. As wellness tourism becoming increasingly popular it will be essential to balance the benefits for the traveller with potential impact on communities and environment.

FINDINGS:

- **Reduce the seasonality of visitor flow instead focus on travel of visitors throughout the year.**
  Unlike traditional tourism that peaks during summers and holidays, the wellness travellers leverage diverse offerings such as yoga retreats, spa-tourism and nature-based tourism opportunities regardless of the season.

- **It helps in mental restoration.**
  It provides a structured environment for relaxation, mindfulness and rejuvenation. Activities like meditation, spa-therapies and nature indulgence have been scientifically proven to reduce cortisol levels (stress hormone) and enhance mental clarity. Mental restoration from these experiences contributes to improved focus, creativity and overall quality of life.

- **It is a customer driven tourism.**
  Travellers seek tailor made wellness solutions, based on their unique health goals such as fitness retreats, detox programs or spiritual journeys. A customer centric approach enhances visitor satisfaction and promotes brand loyalty for wellness tourism providers.

- **It helps in choosing wellness that fits individual needs.**
  Wellness tourism supports diverse wellbeing pathways, allowing visitors to choose experiences that align with their individual needs. Whether the traveller seeks physical recovery, emotional balance or spiritual growth, they can select options that resonate with their personal goals and lifestyles. The inclusivity of these factors attracts a broader audience from millennials seeking adventure and mindfulness seeking older adults focusing on longevity and vitality.

SUGGESTIONS

A scope of Wellness tourism suggests, that there is a growing demand for holistic health solutions amid rising stress levels, globally. Also, there is an opportunity for the destinations to capitalise on the local resources such as the serene landscapes and cultural healing practices. The development of hybrid resources that is, integrating leisure with health improvement, can be commercially successful union.

- Need and developing more wellness tourism itinerary.
- Need for helpdesk and separate lounge at the airport and major railway stations.
- Encouraging partnership between airports and airlines and wellness business.
- Healthy hotels should go mainstream.
- Wellness products and brands, travel with their customer.
- Job opportunities for spa and yoga centres.
- A new nexus of travel, work and wellness to be created
- Focus on inclusivity and accessibility

CONCLUSION

The research concludes that health and wellness tourism offers significant benefits promoting physical, mental and emotional well-being while boosting local economies and cultural exchange for host communities. It highlights the immense potential of this sector, emphasizing its role in fostering sustainable development through eco-friendly practices, quality assurance and cultural sensitivity. By integrating wellness focused experiences such as spa retreats, nature therapies and mindful practices, this niche market not only addresses health challenges but also enhances the travel experience. With strategic promotion and innovation, wellness tourism is poised to grow, establishing itself as vital pillar not just here in India, but in the entire global tourism industry.

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Evaluating the Role of Internships in Enhancing Students' Employability in the Hospitality Industry

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ABSTRACT

In the realm of hotel management education in India, industrial training stands as a pivotal component, contributing to the development of students' technical skills across the four major operational departments of a hotel. This research aims to scrutinize the imperative need for and significance of industrial training programs for undergraduate students in hotel management. Focusing on structured, meaningful, supervised, and practical orientation, the study seeks to underscore the transformative impact of such programs on students who have completed their tenure in the industry. The investigation also endeavors to identify potential gaps between academic curriculum and industry requirements. Authenticating the results through inquiries directed at hotel staff and students from diverse institutions who have successfully undergone industrial training, this research provides a comprehensive examination of the key elements contributing to the efficacy of these programs. Throughout the study, the importance of practical knowledge in shaping a holistic understanding of hospitality management is emphasized. The findings presented here encapsulate the voices of those directly impacted by industrial training, shedding light on the multifaceted aspects that define the symbiotic relationship between academic learning and real-world application.

Keywords: *Hotel Management, Industrial Training, Practical Knowledge, Importance of Training, Employability.*

The dynamic and ever-evolving nature of the hospitality industry demands a workforce equipped with both theoretical knowledge and practical skills. As students aspire to carve out successful careers in this vibrant sector, the significance of internships cannot be overstated. Internships serve as a crucial bridge between academic learning and real-world application, providing students with invaluable hands-on experience and a deeper understanding of the complexities within the hospitality industry.

In recent years, the hospitality industry has witnessed a paradigm shift in its hiring practices, with employers placing a premium on practical competencies and industry-specific know-how. In light of this, internships emerge as a pivotal component of a student's educational journey, offering a unique opportunity to apply classroom theories in real-world settings. This paper seeks to explore the multifaceted impact of internships on students' employability in the hospitality industry, examining how these experiential learning opportunities contribute to skill development, professional networking, and overall career preparedness.

Internships not only provide students with a platform to refine their technical skills but also expose them to the nuances of customer service, problem-solving, and team collaboration – skills that are quintessential in the hospitality sector. By immersing themselves in the daily operations of hotels, restaurants, event management companies, and other hospitality establishments, students gain insights into the industry's intricacies, cultivating a practical acumen that transcends textbook knowledge.

Furthermore, internships facilitate the cultivation of a professional network, connecting students with industry experts, mentors, and potential employers. Building relationships during internships not only enhances students' understanding of industry dynamics but also opens doors to future employment opportunities. The connections forged during internships often prove to be instrumental in securing post-graduation employment, as employers place a high value on candidates with both academic qualifications and practical experience.

As the hospitality industry evolves to meet the changing needs of consumers and technology, the adaptability and versatility cultivated during internships become increasingly indispensable. This paper will delve into the transformative impact of internships on students' employability, shedding light on how these experiences empower students to navigate the challenges of the modern hospitality landscape and emerge as competent and confident professionals. Through a comprehensive analysis of the various dimensions of internships, this research aims to contribute valuable insights into the symbiotic relationship between experiential learning and career readiness in the vibrant and competitive realm of the hospitality industry.

1.1 Basic Definition

1. **Hospitality industry:** Is a broad category of fields within the service industry that includes lodging, restaurant, event planning, theme parks, transportation, cruise lines and additional fields within tourism industry. A hospitality unit such as a restaurant, hotel, or even an amusement park consists of multiple groups such as facility maintenance, direct operations (servers, housekeepers, porters, kitchen workers, bartenders, etc.), management, marketing, and human resources.

2. **Industrial training:** Industrial Training refers to a program which aims to provide supervised practical training within a specified timeframe. This training can be carried out either in government organizations or in the private sector.

SOURCE

3. **Employability:** The term employability has been described as the ability to travel self-sufficiently to sustainable jobs within the market labor to achieve capacity (Rothwell, 2017)

4. **Employability Skills**: (Robinson, 2000) defined employability skills as the fundamental skills required for obtaining, maintaining, and excelling at a job.

1.2 Objectives:

1. Assessing the Impact of Practical Experience.
2. Exploring Networking Opportunities.
3. Identifying Long-term Employment Outcomes.
4. Assess the impact of hospitality internships on students' personal growth and skill development.
5. Identify any potential barriers or challenges faced during the internship that may impact students' employability or career progression.

REVIEW OF LITERATURE

The literature on evaluating the role of internships in enhancing students' employability in the hospitality industry underscores their pivotal impact. Numerous studies emphasize the practical experience gained during internships as a crucial factor in developing students' skills and competencies. Internships contribute to bridging the gap between academic knowledge and industry requirements, fostering a holistic understanding of the hospitality sector.

Internship can be defined as short-term practical work experience where students have the

opportunity to apply theory into practice by merging their learning gained in a classroom-based environment with real-life working environment (Narayanan, 2010)

Research by (Smith, (2017)) emphasizes the practical experience gained during internships as a crucial factor in fostering a comprehensive understanding of the hospitality sector. This sentiment is echoed by (Jones, 2018) who found that internships contribute significantly to bridging the gap between academic knowledge and industry requirements.

Liu, Xu, and Weitz (2011) expressed that internship is a creative method of business education that enhances the students' positive expertise at the workplace. Liu et al. (2011) added that for both interns and host corporations, productive experiences provide positive results. Multiple aspects enhance the positive perception of learning, including emotional idioms, emotional camouflaging, emotional interaction, enterprise's social activities, and mentorship. These aspects influence the intern's career behavior, obligation, and satisfaction. Effective mentoring in both enterprises and academic institutions is another main component of an effective internship. Liu et al. (2011) mentioned that learning and mentorships were two key factors for successful internships. The more the intern learns from an internship, the more likelihood of finding a suitable job assignment and developing an effective obligation toward the host of the internship increases.

(Liu, 2011) expressed that internship is a creative method of business education that enhances the students' positive expertise at the workplace. (Liu, 2011) added that for both interns and host corporations, productive experiences provide positive results. Multiple aspects enhance the positive perception of learning, including emotional idioms, emotional camouflaging, emotional interaction, enterprise's social activities, and mentorship. These aspects influence the intern's career behavior, obligation, and satisfaction. Effective mentoring in both enterprises and academic institutions is another main component of an effective internship. (Liu, 2011) mentioned that learning and mentorships were two key factors for successful internships. The more the intern learns from an internship, the more likelihood of finding a suitable job assignment and developing an effective obligation toward the host of the internship increases.

Internships have been shown to benefit students, employers, and society as a whole in a number of ways. From the students' perspective, internships provide them with real-world job experience and help them develop employability skills that are highly regarded by employers (Yang, 2016). They also give students an overview of the work environment, which can be helpful in their career choices (Chan, 2020). From the employers' perspective, internships can be an effective way to find talented individuals who may help grow their companies and overcome unemployment issues (Mabiza, 2017)

In conclusion, the literature reviewed highlights the multifaceted impact of internships on students' employability in the hospitality industry. From skill development and industry-relevant learning to networking opportunities and long-term career success, internships play a pivotal role in preparing students for the demands of the dynamic and competitive hospitality sector.

METHODOLOGY

3.1. Research Design:

Internships play a pivotal role in shaping students' employability within the hospitality industry. This research aims to evaluate the impact of internships on students' employability, focusing on hotel management education. The study seeks to understand how successful completion of internships contributes to the development of practical knowledge and skills, ultimately influencing students' readiness for employment. Additionally, the research will explore the perspectives of students, industry professionals, and educational institutions regarding the significance of internships in preparing students for successful careers in the hospitality sector.

3.2. Sampling:

An exhaustive review of existing literature, including research papers, articles, journals, books, and reputable websites, will form the foundation for this study. To supplement this, a quantitative approach will be adopted through a structured questionnaire distributed to undergraduate students enrolled in hotel management programs. The questionnaire will be meticulously designed to assess the role of internships in enhancing students' employability, identifying key competencies gained during internships, and evaluating the alignment between academic curriculum and industry demands.

3.3. Data Collection:

The research will involve the collection of both primary and secondary data to derive comprehensive insights.

3.3.1. Primary Data:

Primary data will be collected through a structured questionnaire. This questionnaire will consist of 15 well-crafted questions, sequentially framed to capture information from students pursuing undergraduate and graduate courses in hotel management. The questions will focus on the perceived impact of internships on employability, specific skills acquired, and the overall effectiveness of the internship experience in preparing students for careers in the hospitality industry.

3.3.2. Secondary Data:

Secondary data will be gathered by consulting various research papers from eminent journals, articles authored by recognized industry experts, information available on reputable websites, and other noteworthy publications. This secondary data will provide a broader context, offering insights into industry trends, best practices, and employer expectations regarding the employability of students who have undergone internships.

3.4. Data Analysis:

Quantitative data obtained from the questionnaire will undergo statistical analysis to identify trends, correlations, and patterns. Qualitative data from open-ended questions will be subjected to thematic analysis to extract meaningful insights. The integration of both quantitative and qualitative findings will contribute to a holistic understanding of how internships impact students' employability in the hospitality industry.

3.5. Conclusion and Recommendations:

The research findings will be used to draw conclusions on the effectiveness of internships in enhancing students' employability within the hospitality sector. Recommendations will be formulated based on these conclusions, aimed at optimizing internship programs to better align with industry needs and enhance overall student outcomes in terms of employability.

RESULT AND DISCUSSION

Well-structured closed ended questionnaires were correctly filled by the respondents of hotel management undergraduate course as well as graduate. The data gathered by the questionnaire is represented in the diagrams.
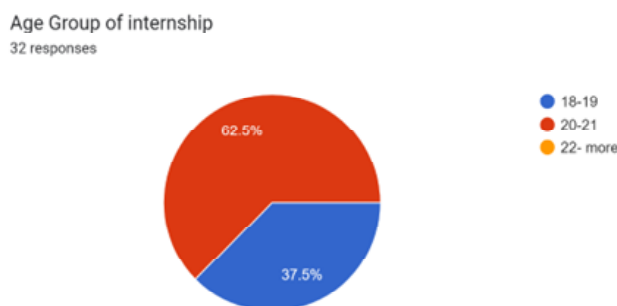
Figure 4.1 : Out of the 32 responses received, 62.5% belonged to the age group of 20 to 21 years old, while 37.5% were from the 18 to 19 years old group.

Gender

32 responses
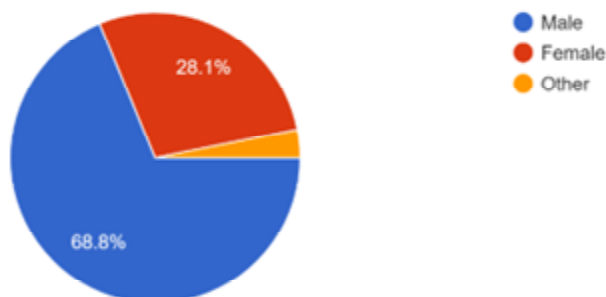
Figure 4.2 : Received 32 responses. 68.8% Male, 28.1% Female And 3.1% Other

Department where you trained

32 responses
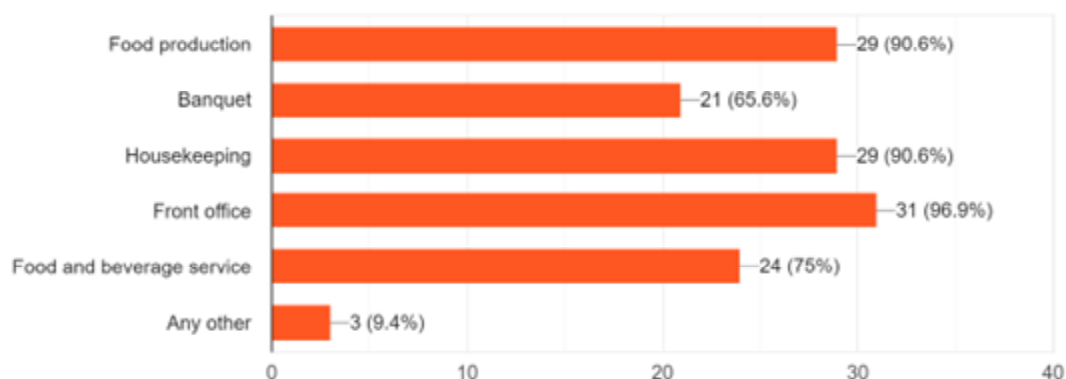
Figure 4.3 : Above graph represent the department where they trained:

- Food Production: 90.6%
- Banquet: 65.6%
- Housekeeping: 90.6%
- Front office: 96.9%
- Food and beverage service: 75%
- Other: 9.4%

How do you believe your hospitality internship has positively impacted your employability?
32 responses
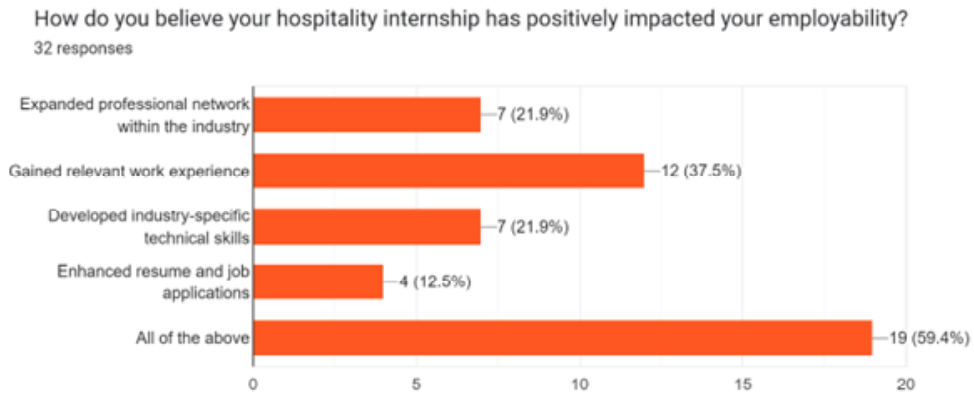
Figure 4.4 : Above figure shows the impact of internship in their employability

Did your hospitality internship provide you with valuable networking opportunities within the industry?
32 responses
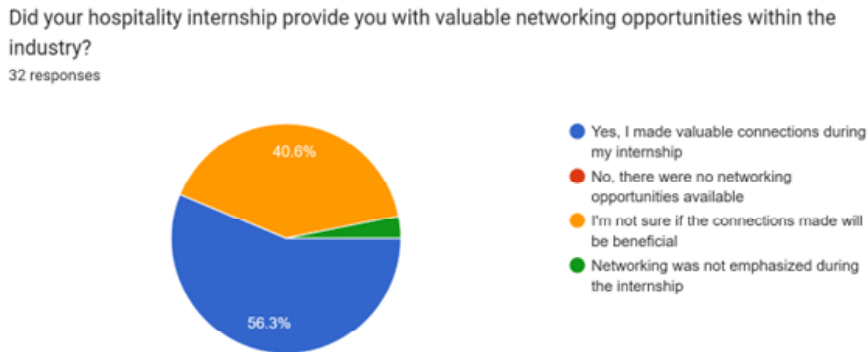
Figure 4.5 : Above figure shows the networking opportunities

During the internship, did you receive constructive feedback and mentoring from supervisors or mentors?
32 responses
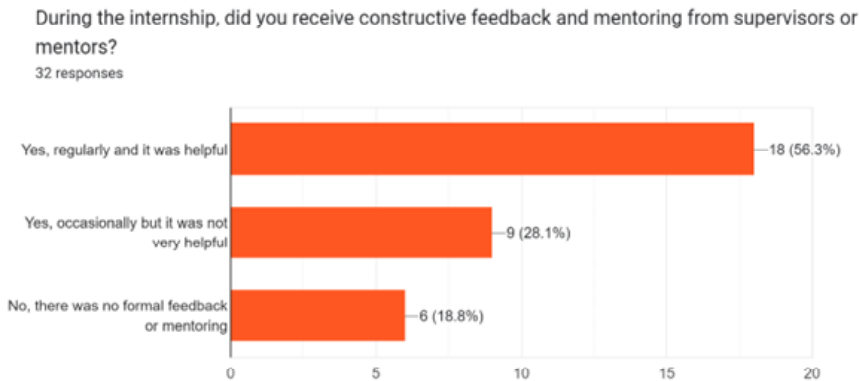
Figure 4.6 : Above graph represent the constructive feedback and mentoring from supervisors or mentors

Did your internship offer any opportunities to take on leadership roles or responsibilities?
32 responses
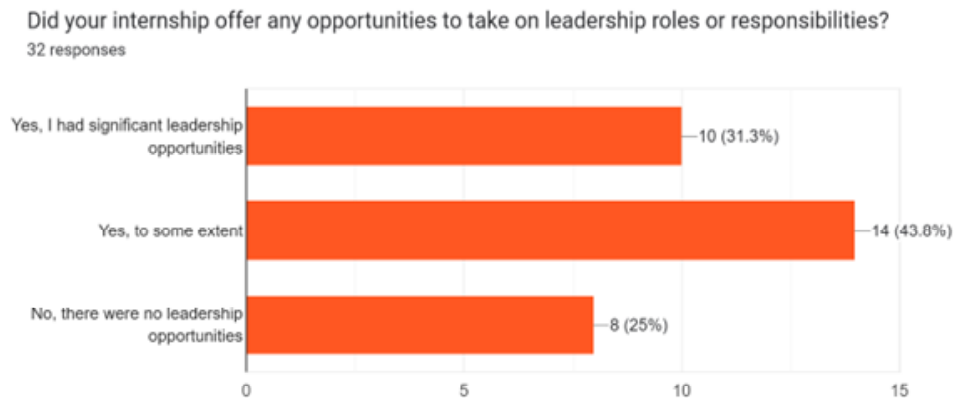
Figure 4.7 : opportunities offers to take on leadership roles or responsibilities

How do you perceive the impact of the hospitality internship on your overall employability in the job market?
32 responses
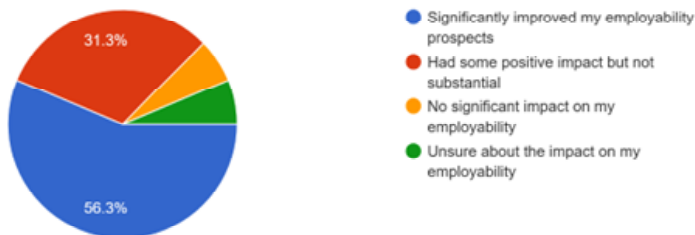
Figure 4.8 : 56.3% had significantly improved their employability prospects, while 31.3% Had some positive impact but not substantial.

Did the hospitality internship lead to any job offers or employment opportunities?
32 responses
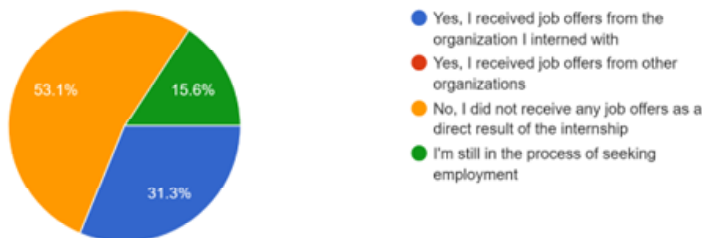
Figure 4.9 : 31.3% had received job offers, 53.1% didn't receive any offers, 15.6% are still in the process of seeking employment.

During your hospitality internship, which aspect of personal growth did you experience the most?
31 responses

Aspect	Value
Improved communication and interpersonal skills	21 (67.7%)
Enhanced problem-solving abilities	16 (51.6%)
Increased adaptability and resilience	16 (51.6%)
Strengthened time management skills	17 (54.8%)
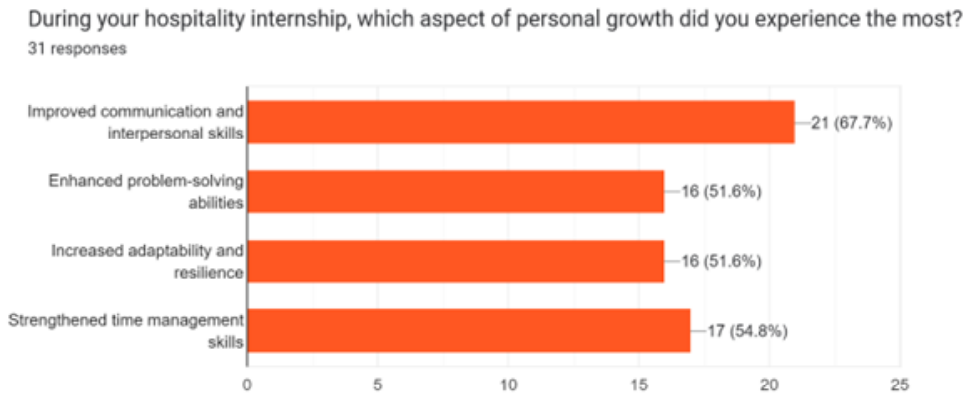
Figure 4.10 : Enhancing communication and interpersonal skills constituted the most significant aspect of personal growth during the internship

How do you perceive the impact of your hospitality internship on your professional growth?
32 responses

Response	Value
Highly beneficial for my career advancement	16 (50%)
Somewhat beneficial, but not significantly impactful	13 (40.6%)
No noticeable impact on my career growth	0 (0%)
I'm unsure about its impact	3 (9.4%)
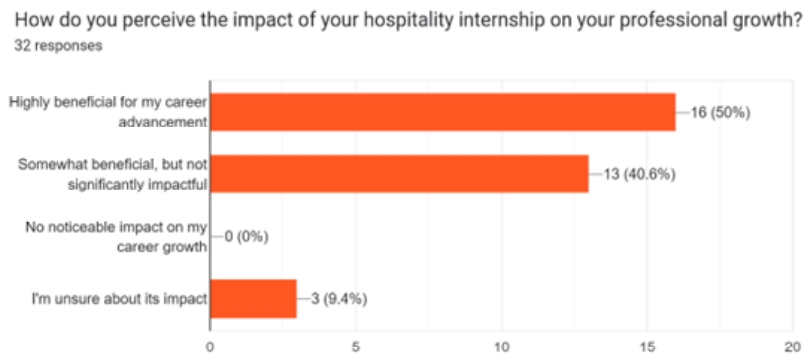
Figure 4.11 : 50% of students assert that the internship has had a highly beneficial impact on their career advancement.

Which of the following skills did you believe were most crucial for your employability, and were developed during your internship?
31 responses

- 45.2% Customer service and relationship management
- 16.1% Data analysis and reporting
- 12.9% Leadership and team management
- 25.8% Industry-specific technical skills (e.g.. culinary, front desk operations)
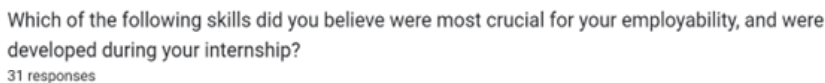
Figure 4.12 : 45.2% of students believe that customer service and relationship management skills were crucial for their employability.

During the internship, which area of the hospitality industry did you gain the most experience in?
32 responses
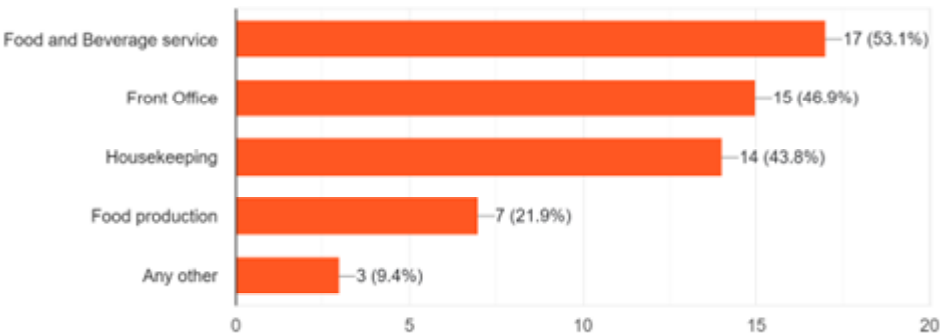
Figure 4.13 : 53.1% of students acquired the most experience in Food & Beverage Service.

How did your internship experience contribute to your understanding of the hospitality industry and its operations?
32 responses
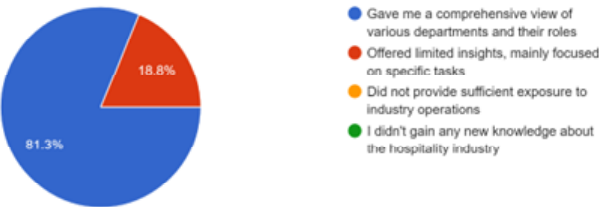
Figure 4.14 : For 81.3% of students, the internship experience provided a comprehensive view of various departments and their roles, contributing significantly to their understanding of the hospitality industry and its operations.

Did you have the opportunity to apply theoretical knowledge gained from your academic studies during the internship?
32 responses

Figure 4.15 : The majority of students were able to apply their academic knowledge in practical scenarios.

How has the hospitality internship influenced your career aspirations?
31 responses

Motivated me to explore other industries or career paths — 18 (58.1%)
Reinforced my desire to pursue a career in the hospitality industry — 9 (29%)
It had no significant influence on my career aspirations — 4 (12.9%)
I'm unsure about my career aspirations at this point — 0 (0%)
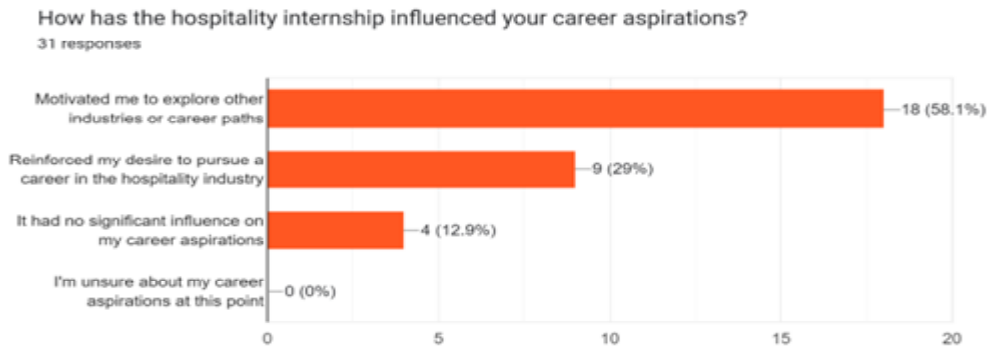
Figure 4.16 : For 29% of students, the hospitality internship reinforced their desire to pursue a career in the hospitality industry and influenced their career aspirations.

In what ways did your internship enhance your understanding of customer service in the hospitality context?
32 responses

Handling challenging customer situations — 24 (75%)
Identifying and meeting customer needs — 15 (46.9%)
Improving customer satisfaction through service delivery — 17 (53.1%)
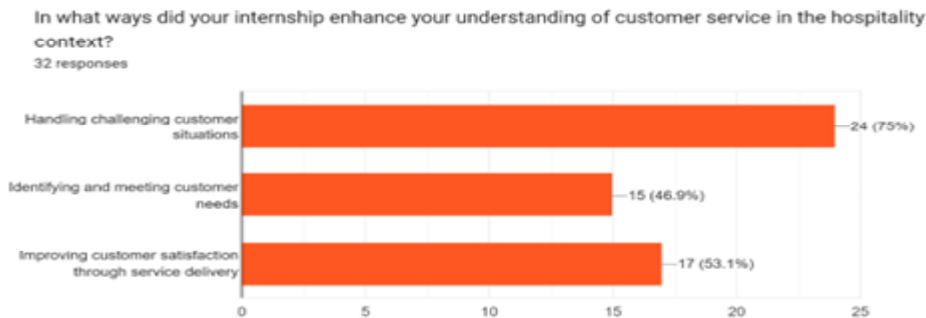
Figure 4.17 : The internship significantly improved the majority of students' capacity to handle challenging customer situations and deepened their understanding of hospitality customer service.

Would you recommend a hospitality internship to other students interested in the industry?
32 responses

Yes, definitely — 26 (81.3%)
Yes, but with some reservations — 9 (28.1%)
No, not based on my experience — 1 (3.1%)
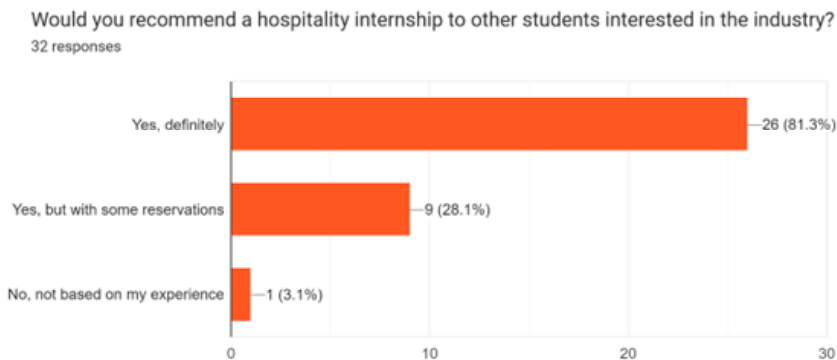
Figure 4.18 : The majority of students would recommend the hospitality internship to other students interested in the industry.

CONCLUSION

This research underscores how crucial internships are for students studying hotel management. These internships act as a foundation for students to develop their professional skills and gain practical knowledge. By participating in internships across different departments, students significantly improve their communication, management abilities, and overall employability. Exposure to leadership roles, constructive feedback, and mentorship during internships plays a key role in boosting employability and preparing students for the dynamic hospitality industry.

Internship experiences provide students with a comprehensive understanding of various aspects of the hospitality industry. The study highlights the importance of customer service and relationship management skills for employability, emphasizing their essential role in the field. Additionally, the research confirms that internships have a positive impact on career advancement and provide valuable experience, especially in Food & Beverage Service.

Internships are shown to bridge the gap between academic knowledge and real-world scenarios, helping students solidify their career goals. This study emphasizes the significant role of internships in shaping the skills and preparedness of hotel management students for successful careers in the industry.

RECOMMENDATIONS

1. **Internship Duration and Scope:**
   - Consider extending the internship period to provide students with a more immersive and impactful experience.
   - Encourage internships across various departments, reflecting the diverse operational areas within the industry.

2. Integration of Practical Knowledge:
   - Emphasize a practical-oriented approach during internships to enhance hands-on skills.
   - Advocate for exposure to leadership roles, constructive feedback, and mentoring to foster professional growth.

3. Industry-Institute Collaboration:
   - Establish closer ties between hospitality institutes and industry stakeholders for continuous feedback and curriculum updates.
   - Ensure that the syllabus aligns with industry standards, incorporating the latest trends and technologies.

4. Departmental Diversity:
   - Acknowledge the diverse impact of internships on employability across different departments, such as Food Production, Banquet, Housekeeping, Front Office, and Food and Beverage Service.
   - Tailor internship programs to offer a well-rounded experience in various departments, catering to the specific needs of each role.

5. Career Guidance and Placement Support:
   - Strengthen career guidance initiatives to assist students in identifying and pursuing their preferred career paths within the hospitality sector.
   - Facilitate opportunities for trainees to take on leadership roles and responsibilities, enhancing their confidence and readiness for the job market.

6. Continuous Learning and Technological Integration:
   - Encourage continuous learning by incorporating the latest technologies used in the hospitality industry into the curriculum.
   - Advocate for the use of software for bookings and online services, preparing students for the evolving technological landscape.

7. Feedback Mechanism:
   - Implement a robust feedback mechanism where hotel management trainees provide continuous insights into their learning experiences during internships.
   - Regularly review and update internship programs based on constructive feedback from both students and industry professionals.

8. Networking Opportunities:
   - Facilitate increased interaction between human resources departments of hotels and educational institutions.
   - Encourage dialogue between industry professionals and students to enhance networking opportunities and promote a seamless transition from academia to the workforce.

By implementing these recommendations, the hospitality industry can further optimize the impact of internships on students' employability, ensuring a well-rounded and industry-relevant learning experience for future professionals.

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The Role of Chatbots in Enhancing Travel Recommendations and Streamlining Booking Processes – A Study

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ABSTRACT

Objective
- *To examine the integration of Chatbots in the hospitality service chain.*
- *To identify potential challenges and limitations associated with Chatbot use, including technology adoption, user acceptance, and privacy concerns..*

Introduction

This study explores the role of Chatbots in enhancing travel recommendations and streamlining booking processes in the travel industry. As travelers seek personalized and efficient experiences, Chatbots have emerged as key tools for providing instant, tailored recommendations and simplifying the booking journey. By utilizing AI, Chatbots can analyze user preferences, offer customized suggestions, and facilitate smooth bookings, improving both convenience and satisfaction. This research examines how Chatbots contribute to a more seamless and efficient travel planning experience, highlighting their impact on customer engagement, operational efficiency, and the overall travel experience.

Research Methodology: To complete this research the author has referred to various research journals, books, newspaper, Textbooks, periodic magazines and journals.

Conclusion : Chatbots hold great potential for transforming the hospitality industry by enhancing both operational efficiency and guest satisfaction. As AI technology continues to evolve, Chatbots are likely to play an increasingly central role in guest services, providing a seamless, 24/7 interaction that meets the demands of modern travelers. However, successful implementation will require balancing technology with the human touch, ensuring that guests feel both assisted and valued.

Keywords: Chatbots, Simplified Bookings, Tourism Industry, Digital Transformation, Guest services automation, Cost effective.

WHAT IS CHATBOT?

A Chatbot is a sophisticated computer program that mimics human communication by interacting with people in a conversational fashion. A CHATBOT is a synthetic virtual creature that communicates with users through interactive speech or writing abilities. This Chatbot uses machine learning and artificial intelligence ideas to communicate directly with users. **(Rohit Tamrakar, 2021)**. You can ask a Chatbot a question or explain an issue, and it will either make sense of what you said or respond. Certain Chatbots are straightforward and merely react to the query. Some are intelligent; they learn about you from data gathered and change over time to help you more effectively.

HOW CHATBOT WORKS?

Imagine that we are at an unknown location with a lot of questions and that we have access to digital devices. Yes, we can definitely get an answer from the Chatbot. In order to function, a Chatbot must take user input, decipher its meaning, and then respond in a conversational manner. A command or message, either in voice or text format, is sent by the user to start the procedure. In order to identify important information like intent (the reason for the input) and entities (particular data like names, dates, or locations), the Chatbot employs natural language processing (NLP) to evaluate the input. It does this by tokenizing the input into smaller parts like words or phrases. When someone asks, "What's the weather in Kerala tomorrow?" for example, the Chatbot understands that the user wants to check the weather and pulls out the entities (location: Kerla, time: tomorrow).

After comprehending the input, the Chatbot generates a response to process the request. While rule-based Chatbots adhere to preset scripts, AI-powered Chatbots provide more dynamic, context-aware responses by utilizing machine learning and external resources such as APIs. Sophisticated Chatbots get better over time by evaluating interactions and tailoring subsequent answers.

HOW IT ALL STARTED?

ELIZA, one of the first Chatbots created by Joseph Weizenbaum in the 1960s, was intended to mimic a psychotherapist by employing pattern-matching algorithms. Kenneth Colby went one step farther in 1972 with PARRY, which imitated a patient suffering from schizophrenia. True understanding was absent from these early machines, which could only respond with pre-programmed responses.

Advanced pattern matching and script-based learning were first used in the 1990s with Richard

Wallace's ALICE (Artificial Linguistic Internet Computer Entity). At the same time, Jabberwacky sought to mimic more hilarious and natural-sounding dialogue.

The emergence of AI-powered Chatbots that use machine learning and natural language processing (NLP) in the 2010s marked a revolution in Chatbot technology. With their ability to automate tasks and engage in dynamic conversations, virtual assistants such as Alexa (2014), Google Assistant (2016), and Siri (2011) became well-known.

These days, Chatbots can have extremely complex, human-like interactions because to sophisticated AI frameworks like OpenAI's ChatGPT. They are now utilized in a variety of sectors, including healthcare and customer service, demonstrating the quick advancement of technology.

HOW CHATBOTS ARE TRANSFORMING DIFFERENT INDUSTRIES?

Many businesses utilize Chatbots, which are designed to fulfill particular requirements and increase productivity. As demonstrated by sites like Amazon or Shopify, they help with product recommendations, order monitoring, and customer service in e-commerce and retail. Chatbots for healthcare, like Babylon Health's, may schedule appointments, assess symptoms, and remind users to take their medications. Account queries, payments, and fraud warnings are handled by bots in the banking and finance industry, such as Bank of America's Erica. Students can learn and get academic answers from educational Chatbots like Duolingo's language tutor. As demonstrated by Expedia's Chatbot, travel and hospitality bots help with trip planning, hotel reservations, and flight booking. In the entertainment industry, bots on websites such as Spotify provide interactive storytelling or music recommendations. While real estate Chatbots, such as those on Zillow, assist consumers in finding homes and setting up viewings, human resources Chatbots expedite employee onboarding, set up interviews, and respond to HR-related inquiries. While technology support bots aid with troubleshooting and IT helpdesk inquiries, government Chatbots streamline access to public services and information, including passport applications. Chatbots enhance user experiences and expedite processes in all of these industries.

CHATBOT IN TOURISM INDUSTRY

The adoption of artificial intelligence (AI) in the tourism and hospitality industry has gained significant attention, with Chatbots emerging as a prominent tool for enhancing customer service. Chatbots, defined as AI-driven conversational agents, have been increasingly utilized to provide travel recommendations and assist in booking processes The travel sector benefits greatly from Chatbots because they improve customer satisfaction, boost productivity, and simplify processes. They help tourists at every turn, from booking and preparation to post-trip assistance. By offering

tailored suggestions based on criteria like budget, destination, and trip dates, travel Chatbots can assist users in their search for flights, lodging, and rental cars. Moreover, Chatbots improve customer service by answering frequently asked questions about destinations, visa requirements, baggage policies, and more, available 24/7. They can also manage itinerary changes, offer travel tips, and suggest local attractions or dining options, enhancing the overall travel experience. Seven out of ten customers say they feel closer to companies they can message, and 65% of customers say they prefer to communicate with businesses using chat, according to Meta's research. Furthermore, 75% of consumers are willing to pay more to purchase from businesses that provide them with a positive customer experience, according to Zendesk study **(Heber, 2023)**.

CHATBOT FOR TOURISM INDUSTRY: BENEFITS

Those in the travel facilitation, hotels, hospitality, airlines, and event planning sectors stand to gain the most from expedited booking processes and faster customer support response times. In addition, a travel industry Chatbot provides a number of advantages:

Bilingual Support: By offering customer service in multiple languages, multilingual Chatbots provide notable benefits in the international travel and tourist sector. Studies indicate that 74% of customers are more likely to make a second purchase if they are assisted in their native tongue, which increases customer satisfaction **(Prakash, 2022)**.

Customized Suggestions: Travel Chatbots are able to provide customized recommendations, including lodging recommendations or exclusive deals, by utilizing information from prior consumer encounters. As Chatbots gain experience and refine their recommendations over time, these customized offerings aid in client retention **(Gatzioufa & Saprikis, Chatbots in tourism: A literature review on users' behavioral intention towards their adoption , 2023)**

24/7 Availability: By offering 24/7 support, Chatbots help clients get help whenever they need it, circumventing the drawbacks of human operators who might not always be available at busy times. This constant accessibility fosters long-term relationships and trust with clients.

Simplified bookings: Chatbots enable users make bookings for hotels, flights, and activities, which results in faster and more effective transactions and higher booking conversion rates.

Cost Efficiency: Automating routine customer service tasks like answering FAQs and processing simple bookings helps reduce operational costs, freeing up human agents to handle more complex inquiries

LITERATURE REVIEW

The Development and Ethical Consequences of Chatbots

Chatbots efficiently reach large audiences on messaging apps and streamline customer support processes with little human intervention **(Eleni Adamopoulou, 2021)**. The ability to differentiate between Chatbots and human representatives is getting harder as AI and machine learning advances. This study presents the basic ideas of Chatbots, offering developers and users guidance for efficient implementation and development. Subsequent research endeavors may concentrate on contrasting Chatbot platforms, assessing their inventiveness and capabilities, and tackling moral dilemmas like misuse and deceit when consumers confuse Chatbots for people.

Impact of Chatbots on Customer Outcomes in the Travel and Hospitality Sector"

Chatbots may have an impact on customer outcomes in the travel and hospitality sector. There are several opportunities to expand knowledge and comprehension of Chatbot applications in hospitality and tourism due to the growing interest in Chatbot research **(Fateh Mohd Khan, 2023)**.

Enhancing the Travel Experience: The Role of Chatbots in the Tourism Industry

Travelers' interactions with services at every point of their journey, from planning to post-trip, are being revolutionized by the growing integration of Chatbots into the tourist sector. A thorough analysis of the literature on the subject shows how Chatbots can improve customer service, expedite processes, and offer tailored recommendations. These artificial intelligence (AI)-driven solutions, which frequently make use of natural language processing (NLP), may effectively respond to consumer questions, offer suggestions, and provide real-time travel conditions updates, all of which improve customer satisfaction and engagement **(Miguel-Ángel García-Madurga, 2023)**.

Revolutionizing Travel

Travel Chatbots are transforming the way we explore the world. Always available, multilingual, and personalized, they guide travelers from bustling cities to serene destinations, making each trip unforgettable. Gone are the days of tedious bookings and endless phone calls. These AI-powered assistants are reshaping the travel industry by offering speed, customization, and seamless experiences, becoming indispensable tools for both travelers and agencies **(Shetty, 2023)**.

Meeting the Communication Demands of Modern Travelers

As travelers increasingly seek personalized experiences, the demand for seamless communication across various platforms has grown. While traditional methods like email and social media remain important, messaging apps are now emerging as the preferred channel for customer interaction. Research shows that messaging apps have surpassed social networks in user numbers, and the travel industry is adopting Chatbots through these platforms to meet travelers' needs for instant, efficient communication. This shift highlights the growing importance of Chatbots in providing real-time engagement **(White, n.d.)**.

The Role of Chatbots and AI in Shaping the Future of Travel and Hospitality

This study examines the role of Chatbots in the travel and hospitality sectors, highlighting their growing importance in the digital landscape. The adoption of AI systems is reshaping communication, with more users preferring Chatbots over traditional methods. As AI, robotics, and service automation (RAISA) gain traction, the travel and hospitality industries will experience significant changes, influencing both corporate cultures and consumer experiences. The future remains uncertain, but these technologies are poised to transform how businesses interact with customers **(Hosseini, 2020)**.

Chatbots in the Tourism Industry: Opportunities and Challenges

In the tourism industry, Chatbots improve customer service by handling reservations, offering real-time assistance, and making tailored recommendations using artificial intelligence (AI) and natural language processing (NLP). These tools improve user experiences by learning from data to customize services, expedite communication, and serve international passengers. They must, however, overcome obstacles such as the inability to handle intricate inquiries, deal with sensitive client demands, and possible problems with data accuracy and system performance. To get beyond these obstacles and guarantee successful implementation in the travel and tourist sector, constant innovation is necessary **(Gatzioufa & Saprikis, 2023)**.

The Role of Advanced Chatbots and E-Tourism Challenges

The travel and hospitality industry has seen a change in the past ten years due to information and communication technologies. The use of more complex Chatbots is one of the most recent (Kenyt.AI, 2023)interaction between the service provider and the visitor. But to meet the problems of e-tourism, which are taking on new dimensions, such rapid technological and financial advancement calls for ongoing investments, upskilling, and system innovation. Therefore, the

expectations of users (driven and stimulated by technical developments) surpass what was deemed cutting-edge technology just two years ago **(Davide Calvaresi, 2021)**.

Challenges of Chatbots in the Travel Industry

In the travel sector, Chatbots encounter a number of difficulties. Information overload is a significant problem, since visitors frequently find it difficult to sort through the abundance of material. Personalized recommendations can be provided by Chatbots, but it can take a lot of resources to make sure these recommendations are correct and pertinent. Additionally, clients who require nuanced service may become frustrated since Chatbots may not be able to answer sophisticated or emotive concerns. Maintaining round-the-clock assistance across several time zones can also burden technical infrastructure, and if Chatbot mistakes in reservations or travel information are not fixed, they can harm reputations **(Kenyt.AI, 2023)**.

CONCLUSION

In order to sum up, chatbots are quickly taking the lead in the travel sector and significantly enhancing the way reservations are handled and travel suggestions are generated. Large volumes of passenger data, including historical preferences, financial limitations, and particular requirements, can be analyzed by these AI-powered technologies to generate tailored, real-time recommendations. By providing customized options, this not only improves the traveler's experience but also streamlines decision-making and increases the effectiveness of the planning process. Furthermore, by enabling tourists to make bookings, change arrangements, and get prompt help without requiring human contact, chatbots expedite the booking process. This decrease in manual procedures makes travel easier and more convenient by speeding up response times, reducing errors, and guaranteeing 24-hour service availability.

Chatbots increase overall operational efficiency by automating routine operations, freeing up human agents to concentrate on more complicated client inquiries and value-added services. Because they can manage higher client engagement volumes without hiring more employees, travel agencies can save money as a result of the efficiency improvements. As travelers increasingly demand instant, personalized experiences, the role of chatbots in the travel sector will only grow. Their ability to deliver customized travel suggestions, handle booking requests, and provide customer support around the clock will continue to shape the future of the industry

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Prioritising Mental Health:
A Call for Change in the Hospitality Industry

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ABSTRACT

October marks Mental Health Awareness Month, culminating in World Mental Health Day on October 10, drawing attention to the vital need for mental health awareness in the hospitality industry. Despite being a dynamic sector, the hospitality workforce often faces neglect regarding mental wellbeing; a situation was worsened by the COVID-19 pandemic, which heightened stressors such as long hours, high pressure environments, and insufficient mental health resources. This paper critically examines the mental health challenges faced by hospitality employees, particularly new entrants, who are increasingly vulnerable to stress and burnout due to unrealistic job expectations and inadequate support systems. The stigma surrounding mental health issues creates a culture of silence, hindering employees from seeking help. Nevertheless, the hospitality industry has the potential to initiate transformative changes.

This study emphasises the importance of supporting a culture of mental health awareness, advocating for technological advancements, and implementing innovative practices that can help reduce employee pressures. By prioritising mental wellbeing, hospitality organisations can enhance workforce satisfaction, improve talent retention, and reinforce organisational success. Through qualitative analysis and exploration of current literature, coupled with insights gathered from industry leaders and educational professionals, this research emphasizes on the necessity for actionable steps to create a supportive and resilient work environment. The paper calls for a cultural shift in the hospitality sector that values employee mental wellness as fundamental to operational excellence and guest satisfaction, thus paving the way for a more sustainable future.

Keywords: *Mental Health, Hospitality Industry, Employee Wellbeing, Mental Health Awareness, Organisational Change, Workplace Culture.*

1. INTRODUCTION

October serves as Mental Health Awareness Month, culminating in World Mental Health Day on October 10. This paper highlights the significance of mental health awareness within the hospitality industry, which, despite its dynamic nature and numerous opportunities, often neglects the mental well being of its workforce. The COVID-19 pandemic has intensified existing challenges, including long hours, high pressure environments, and inadequate mental health resources. Employees, burdened with customer service expectations, frequently face stress and burnout, which correlates with rising anxiety and depression. New entrants, particularly recent graduates, struggle as they transition into roles that often fail to reflect their qualifications. Undervalued and under compensated, they experience insecurity that can lower morale and lead to high turnover, hindering potential innovation.

Compounding these issues, a pervasive stigma surrounding mental health creates a culture of silence that discourages employees from seeking help. Nevertheless, the hospitality sector has the potential to embrace transformative change. By leveraging technology and innovative business models to alleviate employee pressures and encouraging open dialogues about mental health, the industry can create a more supportive environment. Prioritising mental health initiatives is crucial not just for individual wellbeing but also for attracting and retaining talent in a competitive market driven by socially conscious millennials and Gen Z workers.

Industry leaders and policymakers must recognise that mental health is a critical business issue. Advocating for a cultural shift that values employee mental wellness can significantly enhance workforce satisfaction and guest experiences, creating a more sustainable future for the hospitality sector.

Critical examination of employee challenges highlights the urgent need to promote mental health awareness and implement actionable strategies that cultivate a supportive and resilient work environment. By prioritising mental well being, the hospitality industry can improve employee satisfaction, retention, and overall organisational success.

1.1 Research Design

1.1. a Purpose:
This research aims to explore the critical importance of mental health awareness within the hospitality sector and its implications for employee wellbeing, specifically in high pressure environments. By identifying how a culture of mental health awareness can enhance employee satisfaction, retention, and productivity, the study seeks to examine the correlation between

employee wellbeing and the overall success of hospitality organisations.

1.1. b Scope:

The scope of this study is restricted to the hotels in India particularly in metropolitan cities, covering an analysis of the challenges faced by hospitality employees, with particular attention to work culture, mental health issues, and the specific experiences of new industry entrants. By understanding these challenges, the research aims to highlight the barriers to mental health support and create a foundation for recommending actionable improvements.

1.1. c Methodology:

The research employs qualitative analysis through a thorough literature review and case studies. Primary data was collected using observational and experiential methods, drawing on the researcher's 25 years of experience as an educator and trainer in the hospitality sector. This involved interactions with faculty at hotel management colleges, new graduates, students, and Training Managers from various hotels where she has conducted training programs and delivered lectures. Discussions with industry leaders and educators explored current and potential methods for supporting the emotional wellbeing of hospitality professionals. Secondary data was gathered from journals and published materials.

1.1. d Limitations:

While this research aims to provide insights into mental health awareness in India's hospitality sector, particularly within metropolitan cities, it has limitations. The analysis focuses primarily on trends observed in urban areas and may not reflect the experiences or approaches to mental health found in rural regions or smaller cities. Consequently, the findings may not be universally applicable in all contexts. Future research should broaden its scope to include additional geographic areas and hospitality sub sectors for a more comprehensive understanding of mental health challenges and solutions.

Additionally, the study is limited to the hotel industry and does not cover other sectors. The qualitative data collected are not quantifiable, and the research relies solely on observational and experiential methods without incorporating additional data collection techniques.

1.2 REVIEW OF LITERATURE

The hospitality industry has long prioritised customer satisfaction, often at the expense of employee mental health. This relentless focus on service excellence can lead to neglecting the mental wellbeing of employees, ultimately contributing to detrimental work conditions that perpetuate stress and burnout. As highlighted by Bishop, Johnson, and Miller (2023), there exists a critical

connection between employee wellbeing and organisational success, where a satisfied and mentally healthy workforce translates into improved service quality and enhanced customer satisfaction. Despite this evidence, the industry continues to grapple with significant challenges, including persistent high turnover rates and low job satisfaction among staff members.

High turnover rates in the hospitality sector reflect deeper issues related to workplace culture, workload expectations, and the availability of mental health support. Numerous employees express feelings of being overwhelmed by the demands of their customer service roles, often leading to increased anxiety and depression (Mann et al., 2021). A thorough investigation by Kwortnik and Thompson (2023) emphasises that inadequate mental health resources and support systems increase these difficulties, driving talented workers away from an already vulnerable industry. Furthermore, a study by McHugh and McMahon (2021) underlines the multifaceted nature of mental health challenges in this sector, linking them to organisational factors such as culture and management practices.

The literature consistently indicates that without proactive measures to address mental health issues, hospitality organisations risk undermining their operational success and compromising service quality (Kim & Jogaratnam, 2022; Pizam & Shani, 2021). For instance, Goh and Etheridge (2021) discuss mental health initiatives implemented in a post pandemic environment, demonstrating that structured support can lead to enhanced employee retention and overall morale. Additionally, Tews and Noone (2022) highlight the significant influence of organisational culture on employee wellbeing, suggesting that creating a supportive and understanding environment is crucial to lessen the likelihood of stressors that affect mental health.

In light of these findings, it is imperative for the hospitality industry to re evaluate its approach to employee wellbeing. Implementing mental health initiatives not only creates a healthier work environment but also contributes to greater organisational resilience and long term success, ultimately benefiting both employees and customers alike (Roberts & Ritchie, 2023; Lu & Adhikari, 2023). As highlighted by Duffy (2022), the role of management is paramount in supporting mental health within hospitality settings, demonstrating that leadership commitment to employee wellbeing is essential for cultivating a thriving workforce. Addressing these challenges with appropriate strategies can mitigate the adverse effects of stress, enhance employee engagement, and ultimately lead to better outcomes for the entire hospitality industry.

1.3 CHALLENGES

The hospitality sector faces numerous challenges that significantly impact employee mental health.

1.3. a Work Environment:

The industry is characterised by high pressure conditions and extended working hours, leading to burnout and worsen mental health issues among employees. These demanding work environments can create a cycle of stress that diminishes job satisfaction and overall wellbeing.

1.3. b Emotional Toll:

The COVID-19 pandemic further amplified these challenges, exposing the mental strain experienced by hospitality workers. Many new graduates entering the job market felt particularly unprepared to handle the unique pressures of the industry. The pandemic not only disrupted employment but also intensified feelings of anxiety and uncertainty, leaving many young professionals without appropriate coping mechanisms.

1.3. c Lack of Representation:

There is a notable lack of mental health initiatives specifically designed for the hospitality sector. Most available resources may not address the unique stresses faced by hospitality workers, leading to a gap in support for employees. The absence of tailored mental health programs limits the industry's ability to effectively promote employee wellbeing, ultimately impacting both individual workers and organisational success.

1.4 OPPORTUNITIES

The hospitality industry presents several opportunities to enhance employee wellbeing and improve organisational culture.

1.4. a Awareness Campaigns:

Initiatives aimed at educating both employees and employers about mental health resources are crucial. Awareness campaigns can highlight the importance of support networks, helping to de stigmatise mental health issues and encouraging individuals to seek assistance when needed.

1.4. b Technological Advancement:

Embracing technological advancements offers another valuable opportunity. By utilising technology to streamline operations, organisations can reduce workloads and enhance efficiency. These mechanisms to reduce stress can lead to improved job satisfaction, as employees may find their roles more manageable and less overwhelming.

1.4. c Employee Engagement:

Ensuring employee engagement through feedback and involvement in decision making processes can create a more inclusive workplace culture. When employees feel valued and empowered to

contribute their ideas, it cultivates a sense of belonging and ownership, ultimately enhancing morale and motivation.

1.5 LIMITATIONS

Despite the potential for improvement in mental health within the hospitality industry, several limitations can hinder progress.

1.5. a Generalsation:
Research can fail to fully account for the diverse range of roles and settings within the industry. This generalsation can overlook unique challenges faced by specific positions, leading to ineffective solutions.

1.5. b Resource Availability:
Another limitation is the variability in resources available across different organisations. This inconsistency can result in unequal implementation of mental health initiatives, with some employees receiving substantial support while others lack essential resources.

1.5. c Cultural Factors:
Cultural attitudes toward mental health can also hinder the effectiveness of interventions. In some cultures, discussing mental health issues may be stigmatised, making individuals less likely to engage in available resources.

1.5. d Economic Pressures:
Financial constraints can further deter organisations from investing in comprehensive mental health programs. The costs associated with developing and implementing these initiatives can be seen as a burden, particularly for smaller firms.

1.5. e On boarding Inequities:
New employees often face inadequate training and support upon entering the workforce, leading to feelings of disconnection and isolation.

1.5. f Longitudinal Studies:
A lack of long term research limits the ability to assess the sustained impact of mental health initiatives, creating gaps in effective understanding and strategy development.

Addressing these limitations is critical for creating and supporting a lasting change.

1.6 CONCLUSION

The hospitality industry has served as a vital pillar of societies throughout the world, providing countless jobs and facilitating intercultural connections that enrich our communities. However, amid its many contributions, the mental health of the workforce must no longer be treated as an afterthought. A culture that prioritises mental wellbeing is essential for creating a robust and sustainable future for the industry. As such, industry leaders need to prioritise the mental health of their employees, recognising that a healthy workforce is integral to operational success.

To achieve this, organisations must create a supportive and understanding environment where mental health is openly discussed and prioritised. This can involve implementing mental health resources, awareness campaigns, and employee engagement initiatives that encourage open dialogue. Also, embracing technological advancements can significantly reduce employee stressors, streamlining operations and enhancing job satisfaction. By leveraging technology thoughtfully, businesses can help employees manage their workloads more effectively and create a healthier work life balance.

As we reflect on Mental Health Awareness, it is evident that the time for change is now. A shift in focus towards mental health will not only enhance the wellbeing of employees but also elevate the overall guest experience. When staff feel valued and supported, they are more likely to provide exceptional service, creating a positive atmosphere for all.

Together, we have the powerful opportunity to transform our industry into one that not only excels in service but also champions mental health and wellbeing. By wholeheartedly committing to this mission, we can cultivate a healthier workforce, creating a more enriching experience for both employees and guests. Let's ensure that the hospitality industry not only thrives but also plays a crucial role in uplifting communities and strengthening the economy.

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5. NIMHANS (National Institute of Mental Health and Neurosciences)
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Ecotourism and The Tharu Community of Valmiki Tiger Reserve: A Route towards Regional Development

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ABSTRACT

Ecotourism is a specific tourism which comes under the umbrella of sustainable tourism. In the current scenario, ecotourism is recognized as the best approach, especially in regions rich in biodiversity and inhabited by indigenous communities. This paper's main content is Valmiki Tiger Reserve in Bihar, India, and the Indigenous Community called 'Tharu', which resides around it. The study explores the potential of ecotourism that contributes to regional development and environmental conservation. This paper also highlights the contribution of ecotourism towards improving the socio-economic condition of the Tharu tribe, the current scenario of ecotourism in Valmiki Tiger Reserve, the Tharu community's involvement in tourism activities and how ecotourism is used as a network for socio-economic empowerment and cultural preservation. The researcher also elaborates on the challenges faced by the Tharu tribe and the environment in the context of ecotourism development and provides recommendations for sustainable practices that benefit both the Tharu tribe and the surrounding environment. The researcher used a descriptive research design based on the secondary data and utilized a qualitative approach to support the paper and achieve the objectives. In conclusion, the paper gives insights into ecotourism, its contribution to the indigenous community and environment, and how it simultaneously benefits humans and nature.

Keywords: *Valmiki Tiger Reserve, Tharu Community, Bihar Ecotourism, Green Tourism, Valmiki National Park*

INTRODUCTION

Definition & Background of Ecotourism

Ecotourism is a specific tourism defined under the umbrella of Sustainable Tourism. In **1980,** Mexican environmentalist **Hector Ceballos Lacsurain** coined the term Ecotourism. According to Ceballos, "Ecotourism is defined as travelling to an undistributed and uncontaminated natural area to enjoy and admire the scenery, wildlife, and existing cultural aspects". In the modern era, the demand for ecotourism has risen because of mass tourism and over-tourism. In 2015, **TIES** defined ecotourism as "responsible travel to natural areas that conserves the environment, sustains the well-being of the local people, and involves interpretation and education."

The main components of ecotourism are **Natural Biodiversity, Local Community** and **Education**. These three are the main components on which ecotourism exists.

Ecotourism background in India

The global beginning of ecotourism in the 1980s and 1990s influenced the Indian tourism market. Ecotourism started gaining popularity as a niche and is widely accepted sustainably. The Government started to expand ecotourism in the '90s by taking initiatives in national parks and wildlife sanctuaries. The protected areas' rules and laws are redefined, and proper laws are focused on wildlife. In 1998, the Indian Government launched the National Ecotourism Policy to preserve and balance conservation through environmental protection and the economic development of the local people. The policy includes a sustainable approach, conservation & environment education, local community participation, concise guidelines and laws for protected areas, promotion of destinations, infrastructure enhancement, and stakeholder collaboration. Again in 2011. The Ministry of Environment, Forest and Climate Changes (MOEFCC) introduced the National Ecotourism Policy and Guidelines (2011) to give strength and formalize the ecotourism policies, specifically in ecologically sensitive areas like protected areas which include national parks, wildlife sanctuaries, forests, Biosphere Reserve. The 2011 National Ecotourism Policy is introduced to strengthen the 1998 National Ecotourism Policy.

ECOTOURISM SCENARIO IN BIHAR

Bihar, rich in cultural and heritage aspects, is known as the land of Buddha. The tourism sector mainly circulates heritage, religious, and cultural sites. However, the Bihar Tourism Ministry since 2014 focused on developing new ecotourism destinations.

Some of the destinations developed into ecotourism sites are:

➢ **Valmiki Tiger reserve**

➢ **Ghora Katora Lake**

➢ **Bhimbandh Wildlife Sanctuary**

➢ **Kaimur Hills and Waterfalls**

➢ **Barabar Caves**

The forest department of Bihar collaborated with agencies and developed Valmiki Tiger Reserve, which is also the only National Park of Bihar as an Ecotourism Spot. The VTR ranked India's 17th Tiger Reserve, and in 2022, it was recorded as the home of 54 Bengal Tigers. The Tiger Reserve, named after the great Rishi Valmiki, borders Nepal's Chitwan National Park and is situated at the confluence of the Gandak River. The reserve continuously expands with the Chitwan National Park to the North and the Parsa Wildlife Reserve of Nepal to the northeast. With a total area of 899.38 sq. km, the reserve is part of the Valmiki-Chitwan-Parsa Terai Arc Tiger Conservation landscape, which concludes the total area of 3,549 sq. km. The World Wildlife Fund has designated the reserve as the Level 1 Tiger Conservation Unit (TCU). Level 1 Tiger Conservation Units (TCU) ensure the long-term survival of the tigers in the Indian Sub-Continent.

INTRODUCTION OF VALMIKI TIGER RESERVE

- The total area of the Valmiki tiger reserve is 899.38 sq km.
- It is a protected area established for Bengal Tiger.
- The reserve concludes three ranges- Valmiki Wildlife Sanctuary, Someshwar Wildlife Sanctuary and Gandak Wildlife Sanctuary.
- Valmiki Wildlife Sanctuary is the reserve's core area, further divided into eight regions for administrative purposes.
- The Valmiki Reserve is a continuous part of Nepal's Chitwan National Park and Parsa Wildlife Reserve.
- This reserve is only Tiger Reserve and National Park of Bihar.

VALMIKI TIGER RESERVE (ECOLOGICAL AND CULTURAL SIGNIFICANCE)

Valmiki Tiger Reserve: The Ecological Significance

In 1994, the Valmiki Tiger reserve was included in Project Tiger, which significantly helped

conserve tigers and biodiversity in Bihar, India. The reserve's location in the Gangetic Plains bio-geographic Zone is the easternmost limit of the Himalayan Terai Forests. The reserve is ecologically rich because it is home to diverse flora and fauna, including rare and endangered species. The reserve includes seven forest types & grasslands, a variety of mammals, tigers, bears, leopards, Indian Gaurs, wild dogs, Birds, Reptiles, Fish etc. Factors like rich biodiversity, location, conservation potential, and the declining rate of tigers due to poaching and hunting lead to the inclusion of reserves in Project Tiger.

Valmiki Tiger Reserve: The Cultural Aspects

The Valmiki Tiger Reserve has a significant mythological connection with Maharishi Valmiki, the prominent author of the great Hindu epic Ramayana.

The Tharu tribes surrounding the reserve practice cultures and customs deeply rooted in agriculture and forest. For centuries, their livelihood has been based on forest resources, from food to fooder, making them culturally rich.

The harvest festival called *Maghi* and the spring festival called *Phaguwa* are celebrated by local tribes with great enthusiasm, which is also directly connected with the agricultural cycle and forest resources.

Traditional practices followed by the Tharu people included agriculture, fishing, medicinal plants, animal farming, etc.

The Tharu community is very good at craftsmanship and folk arts. *Weaving, Pottery making,* and *Embroidery* all showcase the influence of forest and nature.

Folklore traditions of citing stories of deadly wildlife encounters, sacred forest nature, and forest spirits are all passed down by generations, which showcase their cultural bond with nature.

Someshwar Fort, which is within the range, also adds historical dimensions to the cultural aspects of Valmiki Tiger Reserve. This fort embodied historical and archaeological significance, elaborating on past and ancient times.

Cross-border significance- The Valmiki tiger reserve highlights the importance of cross-border cultural influence. The geographical location of the reserve is extended across the border with the neighbouring country Nepal, which acts as a meeting point for diverse cultural aspects. The local customs and practices are influenced by both Indian and Nepalese traditions, which again hints at the rich cultural significance of Valmiki Tiger Reserve.

HISTORICAL BACKGROUND OF (THARU COMMUNITY) IN AND AROUND VALMIKI TIGER RESERVE, BIHAR

The exact origin of the Tharu Tribe is controversial, but the most accepted theory is that they are a race that belongs to ***Dravidian*** (according to O'Malley, 1997). Their ancestors once ruled the Ganges valley, and later, they were driven up into the forests of Sub-Himalaya. They came in contact with Nepalese and other tribes, and because of this contact, they acquired some physical instances, such as slightly Mongolian features. Their language generally combines Nepalese, Bihari Bhojpuri and Hindi.

GROWTH OF TOURISM IN AND AROUND VALMIKI TIGER RESERVE

In 1994, the Valmiki Tiger Reserve was included in Project Tiger, which increased its visibility as a tourism destination. The project Tiger was a national conservation initiative to protect India's Tiger population.

Because of the inclusion of VTR in Project Tiger, the development of infrastructure improved among the researchers. Like routes for safari, forest lodges and rooms are developed to attract tourists, especially those interested in wildlife and nature.

Tourism activities like jungle safari, ***Gandak safari, bird watching, boating,*** and ***village tours*** have been developed lately. The local communities, especially the Tharu communities, are engaged in these activities.

For tourists, eco-lodges, eco camps, bamboo huts, tree houses, and interpretation centres are created. The government also improved the connectivity to VTR by enhancing the road facilities.

ARCHAEOLOGICAL VALUES OF VALMIKI TIGER RESERVE

In the ***Rampurwa village,*** two pillars from the Ashokan period are kept made of polished sandstone. It is believed that the pilar at Lauriya is 2000 years old and 35 feet in height.

Chanki Garh, Nandan Garh, an ***80-foot tall mound***, is also found near Ashokan pillars.

Locals believed that the mound was an Ashokan stupa filled with Lord Buddha's pyre's ashes. So, it also implicates the importance of Buddhist culture.

IMPACT OF TOURISM ACTIVITIES ON THE LIVELIHOOD OF THARU COMMUNITY

Tourism growth in VTR (Valmiki Tiger Reserve) opened new economic opportunities for the

local and Tharu communities. Many were involved in agricultural activities, forest products for food, and fishing, and others are now engaged in tourism activities for economic stability and livelihood.

They also involved themselves as guide, drivers and workers in hotels, lodges, etc. These help in the capitalization of cultural identification, and the stability in income growth contributes to regional economic development.

THE CHALLENGES FACED BY THE THARU COMMUNITY AND ENVIRONMENT IN THE CONTEXT OF ECOTOURISM DEVELOPMENT IN AND AROUND VALMIKI TIGER RESERVE

➢ **Economic Marginalization / Disparities**

- **Limited Benefits-** The direct benefits of tourism are limited. Although ecotourism ensures complete support to the local communities because of limited infrastructure, skills and market skills hinder direct benefit. The involvement of outsiders in operating tours and other stakeholders looking to maximize their profit also leads to limited benefits.

- **Inequal distribution of the resources-** Some communities and tribes are getting priority because of the high numbers, but other small tribes are less approached, which generates imbalance and leads to inequalities in the distribution of resources.

➢ **Cultural Erosion & Extinction**

- **Commercialization of Culture and Identity-** The Tharu communities, whose cultural beliefs, customs and practices are unique, are approached for modernization, e.g., the traditional crafts are modernized and commercialized. They produce it according to the demand in the market. So, this leads to altering traditional practices to cater to tourists' expectations.

- **Loss of traditional knowledge and practices-** Young generations are attracted to the new traditions and practices. Tourists' practices influence them, and they gradually lose their traditional knowledge and heritage.

➢ **Environmental Destruction**

- **Pressure on Natural Resources-** Increased tourist activities, especially in sensitive areas, will lead to habitat degradation, ultimately affecting wildlife and biodiversity.

- **Waste Management Issues-** Ecotourism initiatives sometimes face challenges like waste management. If it's not handled correctly, then it will be a threat to wildlife and the

surroundings.

➢ **Conflict with the Conservation Policies and Initiatives**

- **Restrictive Conservation Policies & Human-Wildlife Conflict-** The increase in conservation policies will restrict the presence of Tharu and other communities in the Jungle, ultimately restricting their traditional livelihood practices. These increasing tourism activities will also disturb wildlife habitats, and the conflict between wildlife and humans will be frequent.

➢ **Governance and Participation**

- **Limited Local Involvement in Decision Making-** The involvement of Locals in decision-making is very important. Otherwise, it will lead to the failure of initiatives.

- **Bureaucratic Hurdels (Red Tape)-** The bureaucratic workers are slow in implementing the initiatives, especially the community-based initiatives, and will also abstain from the participation of local communities. Sometimes, excessive bureaucracy to official rules acts as a hurdle.

VALMIKI RECOVERY PROJECT: WILDLIFE TRUST OF INDIA

The Valmiki Tiger Reserve include more than 150 villages, which puts biotic pressure on the reserve. The ***WTI (Wildlife Trust of India)*** conducted a study in 2024, concluding that 74% of villagers depend on forests. Their activities in the forests are fuel wood, cattle rearing, bamboo & small timber, etc. The study shows that 95% of villagers rear cattle, and 40% of villagers depend on the forest for grazing and fodder. The 73% families primary livelihood option is agriculture. The study reveals that 90% of villagers were unaware of the conservation value, and they consider the forests as resources for firewood, food providers and housing.

WTI (Wildlife Trust of India has been working with Valmiki Tiger Reserve since 2003. ***The primary purpose was to recover the Tiger population, protect the Reserve, and shift locals' dependency on the Tiger Reserve.***

The project they launched was unique as it adopted the 360-degree approach to take care of the reserves and the local communities and the sustainable livelihood approach.

To implement the approaches, the Wildlife Trust of India implemented ***Eco Development Ventures in 7 of the 26 villages in Done Valley.*** The primary purpose was to reduce the villagers' dependency on the forest, reduce crop damage and land degradation, increase non-farm activities,

promote sustainable livelihoods, and strengthen the organizations.

- In *2018*, WTI conducted a third-party impact assessment of the Valmiki Tiger Reserve about the role of *Self-Help Groups (SHGs)* in the economic and social results in the Reserve and Done Valley. Some of the activities the WTI engaged the self-help group are skill development training for economic development, *grass weaving, a STEP (Support to Training and Employment Programme for Women)* project of Govt. of India, Improved cooking stoves, animal husbandry, financial literacy, seed and irrigation facility, energy security, etc. All these activities played a significant role in up-scaling the economic growth of the regions. The main goal was to fulfil the planned project regarding the reserve. That is,

  ➢ *Increasing the spaces for the Tigers.*

  ➢ *Making an environment where tigers can be freely bred and exist.*

  ➢ *Also, to increase the socio-economic resilience.*

- A few projects run by Wildlife Tiger Trust in Valmiki Tiger Reserve are:
  ➢ The women in Valmiki Tiger Reserves were trained in constructing an improved cook stove, which is good for the environment and does not depend on forest byproducts.

  ➢ The first-aid training was given to local people to reduce the conflict between humans and forest animals.

  ➢ Community leader and staff empowerment to reduce the animal and people conflict in reserve and nearby places.

  ➢ The WTI organizes meetings with the Primary Response Team to reduce human and jungle animal conflict.

  ➢ The WTI also conducts Wildlife Crime Prevention Training in Valmiki Tiger Reserve.

  ➢ The local communities were included in the project work and assigned as vigilance volunteers.

  ➢ Communities were trained on the Biological Project.

- WTI in 2017, in association with the Department of Humanities and Social Science, IIT Kanpur and Bihar State Forest Department, gave training to the women weavers from Done Valley. The weavers were trained to make Handicrafts using Moonj Grass.

- The ***Moonj*** and ***Kharai*** Grasses are locally available. The Tharu family shows their love and care for the bride by passing baskets woven by women folk. These baskets are made of Munj and Kharia Grass. They believe that the bigger and stronger the basket is, the more it is filled with paddy, which shows the more prosperity she will get in her in-laws' house. These baskets are vibrant; the primary colours are ***Red***, ***Green*** and **Blue**. This is the traditional art that most Tharu community women are skilled in, and these skills are passed on to younger generations as a proud and compulsory achievement.

- Tharu women weavers are trained to adopt green livelihoods. For this, they were trained for 12-day workshop classes. It was organized by WTI in collaboration with the Shrishti Institute of Art, Design and Technology, Bangalore and Valmiki Tiger Reserve. ***From 53 Shelf Help Group, 26 women were selected and trained to make new products from the grasses,*** which they traditionally used to weave baskets and other items. They are trained in making new products rather than traditional ones because of modern requirements like lunch boxes, toys, bedroom slippers, lampshades, small furniture, casserole cases, laptop covers, iPad cases, etc.

CONCLUSION

The research highlights the positive aspects of ecotourism and a way towards sustainable development. Ecotourism, a pillar of sustainability and development, is used as a route for achieving regional and community development.

The VTR (Valmiki Tiger Reserve) and the local tribes, which used to be invisible from the main screen because it became a protected area in 1994, have become lively. The VTR and the locals started getting recognition and achieved all the positive benefits.

The VTR has cultural, ecological, historical and archaeological significance and holds a special status among the Tharu Community tribes. The Tharu communities, whose beliefs and customs are unique, are the leading tribes of VTR—because the authorities' initiatives helped these tribes get better livelihoods. This started getting both challenges and opportunities.

Organizations like WTI (Wildlife Trust of India) took the initiative to develop VTR and the local tribes regionally. They focused on the socio-economic development of the reserve. Initiatives like the development of eco ventures and self-help groups (SHSs) helped the Tharu tribes become an empowered community, and because of this, the economic conditions are improving. They are involved in modern training and skills development, such as grass weaving, eco-friendly handicrafts, etc. Such initiatives boost the economic conditions and help preserve and promote VTR and the local people.

Despite the advancements and achievements, many challenges arise due to ecotourism development, especially in these local communities, like limited resource allocation and favouring only the leading community or external stakeholders. This all led to disparities and marginalization of the smaller groups and people. Cultural erosion and environmental degradation also surface, precisely due to the sensitive zones of the reserve—all of which lead to human-wildlife conflict.

However, initiatives by the concerned authorities in collaboration with WTI, like the Valmiki Recovery Project, are doing incredible work and giving promising and fruitful solutions. It helps significantly in promoting awareness among communities regarding the conservation of natural resources.

In conclusion, ecotourism and green practices in Valmiki Tiger Reserve significantly promote promising regional development routes. With the continuous efforts and investment with the involvement of local people, engagement in VTR can emerge as a role model for ecologically sensitive regional development.

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Identifying Key Drivers of Technology Adoption in Smart Hotels in India: A Factor Analysis of Guest Preferences

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ABSTRACT

Purpose-This study, through a factor analysis of guest preferences, examines the dominant forces driving technology adoption in smart hotels. With the hospitality industry migrating toward the Internet of Things, artificial intelligence, and automation, understanding guest attitudes toward these innovations is critical to successful adoption. This research is based on the Technology Acceptance Model (TAM) and Innovation Diffusion Theory (IDT), with an objective to validate the importance of technological features, attitude towards technology, and how they impact guest satisfaction.

Methodology - *A standardized questionnaire was developed and administered to 260 respondents. Exploratory factor analysis, confirmatory factor analysis, and using the Structural equation modelling technique using Statistical package for Social Sciences (SPSS) and Analyze-Modeler-Software- Tools (AMOS).*

Findings - *Factor analysis indicated three underlying factors, which are technological features, guest attitudes, and satisfaction, and indicated how they interplay with each other in influencing the adoption of technology. Findings pointed out that convenient and personalized technologies, including smart room controls and AI-powered services, increase guest satisfaction and the overall hotel experience. It also indicated the positive relationship between attitudes toward technology among guests and perceived satisfaction. By identifying the factors that drive technology adoption, this research provides actionable insights for hotel operators and technology developers to optimize their smart hotel offerings and align them with evolving guest expectations. Originality of research- The research was conducted to understand the driving factors behind incorporation of advanced technologies in small hotels of India.*

Keywords: *Automation, Technological features, Guest attitude, Satisfaction, Convenient technologies.*

INTRODUCTION

The rapid evolution of technology has dramatically changed the hospitality industry, and smart hotels are perhaps the best example of this change. Smart hotels use advanced technologies to enhance the guest experience, streamline operations, and make it more personalized and efficient to stay. From smart room controls and AI-driven concierge services to advanced automation and seamless mobile check-ins, these innovations promise to revolutionize the way guests interact with their accommodation.

Despite all these, the adoption of technology in smart hotels is not uniform among different hotels, and guest preferences may also determine the success achieved with these technological integrations. Insights that can be obtained will enable hotel operators to realize optimization of their offers that should be aligned with customer expectations.

This exploratory study will explore the underlying dimensions of technology adoption in smart hotels by using factor analysis of guest preferences. This is because this study, by studying a variety of technological features and their attractiveness, delves into the factors underlying the dimensions of influence that might affect technology adoption. Through this research, actionable insight will be provided for hotel managers and technology developers so that they can further tailor their smart hotel offerings in alignment with the needs and wants of their clientele, since these are constantly changing over time.

In an industry that thrives on high guest satisfaction, understanding the drivers of technology adoption can create a competitive advantage. This study bridges the gap of technological innovation and guest expectations and contributes to a discourse that can help better integrate technology into the hospitality experience.

The hospitality industry has evolved because of the innovation of hotels that employ technology to create a better experience for the guest and enhance operational efficiency.

These new hotels are sophisticated with the use of IoT, AI, and automation in offering personal and services (Buhalis & Law 2008); (Tussyadiah & Park 2018). With changing guests needs and requirements in the hospitality industry hotel operations must become aware of technological changes as an indicator of gaining upper hand for guests' satisfaction. Present studies indicate that even though technology has advantages in keeping up with the trends but guest acceptance and application rely on their choices and value in (Gretzel in 2011 and Leung et al. in 2013). To elaborate further in this line, Tussyadiah and Park, 2018 demonstrate that custom experience

features and AI-supported services such as smart rooms are significant for customers who consider value in terms of convenience and customization in today's era.

According to Buhalis and Law (2008) matching the pace is a necessity to integrate the technology within the hospitality industry for fulfilling the wants and needs of the guest.

1.1 Objectives

1. To identify Key Technological Features in Smart Hotels.
2. To test Guest Preferences for Various Technological Functions.
3. To identify Factors that Influence Technology Adoption.

2. LITERATURE REVIEW

Smart hotel technology integration transforms the hospitality business by gaining very high operation efficiency and enhanced customer experience. The adoption and integration of smart technologies will vary based on key determinations of features that guests consider valuable. This literature review seeks to analyse factors affecting technology adoption in smart hotels. This report proceeds to evaluate its application based on factor analysis in determining the critical drivers.

Smart hotels are using the latest technology to make the guest experience much more personalized and efficient. According to Buhalis and Law (2008), technological innovations in hospitality, like IoT devices and automation, have become central to improve service quality and operational efficiency. Such innovations include smart room controls, voice-activated systems, and AI-powered concierge services-all of which provide a seamless and customized guest experience.

Understanding guest preferences is the key towards the successful integration of technology in the smart hotel.

Gretzel, 2011 underscores that guests are now asking for very personalized and convenient experiences empowered by technology.

The paper concludes that, for example services such as mobile check in, in room personalisation, and requests for real-time services are valued services that the modern traveler. For example, Leung, Law, Van Hoof, and Buhalis (2013) established that guests require convenience technology solutions and efficiency in the processes of staying at a facility to ensure relevance in technology provided for guests. Factor analysis is a statistical technique used in identifying hidden dimensions of large datasets by gathering together variables which are highly correlated (Hair et al., 2010).

This is an appropriate methodology for determining guest preferences regarding smart hotel technologies.

Tussyadiah and Park (2018) applied factor analysis to ascertain consumer acceptance of augmented reality in tourism across various dimensions. This dimension consists of perceived ease of use and perceived usefulness. A similar approach may be taken to establish factors contributing to technology adoption in smart hotels. Many studies have highlighted several key factors that affect the adoption of technology in the hospitality industry. Buhalis and Law (2008) indicate that convenience and efficiency are among the main drivers, where guests tend to prefer technologies that make their stay easier and increase their comfort.

Gretzel (2011) adds personalization as a key factor, as guest value technologies that can be customized and tailored for them. In addition, the value of technology, which includes its impact on quality in the guest experience, is an important factor that determines adoption decisions (Leung et al., 2013). 2.1Gaps and Future Research While existing research is helpful in explaining the benefits of technology in hospitality, understanding the specific drivers of technology adoption within smart hotels is still something of a gap. Previous studies focus on technology in general, focusing less precisely on the feature that drives real guest preference (Tussyadiah & Park, 2018). Thus, it aims to fill this gap by using factor analysis and identifying and examining significant drivers of technology adoption from the viewpoint of a hotel guest.

2.1 Gaps and Future Research

While existing research provides valuable insights into the benefits of technology in hospitality, there remains a gap in understanding the specific drivers of technology adoption in smart hotels. Previous studies often address technology broadly, without delving into the precise features that influence guest preferences (Tussyadiah & Park, 2018). This study aims to address this gap by using factor analysis to identify and analyse the key drivers of technology adoption from the perspective of hotel guests.

3. THEORETICAL BACKGROUND

The integration of technology in smart hotels is a growing trend that reflects broader shifts in consumer expectations and technological advancements. To effectively leverage these technologies, it is essential to understand the theoretical frameworks that explain technology adoption and guest preferences. This theoretical background explores key concepts related to technology adoption, guest preferences, and the use of factor analysis in identifying drivers of technology adoption.

3.1. Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM), developed by Davis (1989), is a foundational theory in understanding technology adoption. TAM posits that perceived ease of use and perceived usefulness are the primary determinants of technology acceptance. According to Davis, perceived ease of use refers to the degree to which a person believes that using a technology will be free of effort, while perceived usefulness relates to the degree to which a person believes that using a technology will enhance their job performance. In the context of smart hotels, these dimensions can help explain why guests adopt certain technological features, such as smart room controls or automated check-in systems (Davis, 1989; Venkatesh & Davis, 2000).

3.2. Innovation Diffusion Theory (IDT)

Innovation Diffusion Theory (IDT), proposed by Rogers (2003), provides another lens for examining technology adoption. Rogers identifies several factors that influence the adoption of innovations, including relative advantage, compatibility, complexity, trial ability, and observability. Relative advantage refers to the perceived benefits of the innovation compared to existing solutions, while compatibility is the degree to which the innovation fits with the existing values and past experiences of potential adopters. In the context of smart hotels, features that offer clear benefits over traditional systems and integrate seamlessly with guests' preferences are more likely to be adopted (Rogers, 2003; Tornatzky & Klein, 1982).

3.3. Guest Preferences and Technology

Understanding guest preferences is critical for the successful implementation of smart hotel technologies. Research by Gretzel (2011) highlights that personalization and convenience are major factors driving technology adoption in the hospitality industry. Guests increasingly seek technologies that offer customized experiences and streamline their interactions with the hotel. For instance, mobile check-ins and personalized room settings are valued for their ability to enhance convenience and improve overall satisfaction (Gretzel, 2011; Leung, Law, Van Hoof, & Buhalis, 2013).

3.4. Factor Analysis in Identifying Drivers

Factor analysis is a statistical method used to identify underlying relationships between variables by grouping them into factors (Hair, Black, Babin, Anderson, & Tatham, 2010). In the context of smart hotels, factor analysis can be used to uncover the key drivers of technology adoption by analysing guest preferences for various technological features. Tussyadiah and Park (2018)

employed factor analysis to examine consumer acceptance of augmented reality in tourism, identifying key dimensions such as perceived ease of use and perceived usefulness. This approach allows researchers to distill complex data into manageable factors that reflect the primary drivers of technology adoption (Hair et al., 2010).

3.5. Application to Smart Hotels

The application of TAM and IDT, combined with insights into guest preferences, provides a comprehensive framework for understanding technology adoption in smart hotels. By employing factor analysis, researchers can identify the specific technological features that are most influential in shaping guest preferences and adoption behaviour. This theoretical background informs the current study's aim to identify and analyse the key drivers of technology adoption in smart hotels, offering practical insights for enhancing technology implementation and guest satisfaction.

1. H1: The Importance of Technological Features positively influences Attitude toward Technology.

The hypothesis "The Importance of Technological Features positively influences Attitude toward Technology" suggests that when guests perceive technological features in hotels as important or valuable, it shapes their attitude toward technology in a favourable way. This means that guests who recognize the convenience, efficiency, and innovation that technology brings to their hotel experience are more likely to develop a positive attitude toward using such technology.

2. H2: The Importance of Technological Features positively influences Guest Satisfaction and Technological Impact.

This hypothesis proposes that when a hotel offers technological features that guests deem valuable, it enhances their satisfaction because these features improve the quality of their stay (e.g., faster check-ins, personalized services, etc.). Additionally, when guests see that technology plays a meaningful role in making their stay more convenient or enjoyable, they are more likely to view it positively, which contributes to their perception of its impact. Thus, the more important these features are to the guests, the higher the chances that they will feel both satisfied and positively impacted by the technology

3. H3: Attitude Toward Technology positively influences Guest Satisfaction and Technological Impact.

The hypothesis suggests that when guests have a favourable attitude toward technology, they are more likely to feel satisfied with their hotel experience because the technological features align

with their preferences. Guests with a positive attitude are more receptive to using technology during their stay, such as mobile apps for booking services, room controls via smart devices, or virtual concierge services. As a result, they are more likely to perceive that technology has a significant and beneficial impact on their stay, leading to higher guest satisfaction and a stronger perception of the technological impact

4. RESEARCH METHODOLOGY

This research employs a quantitative methodology to collect data aimed at achieving the study's objectives. The research strategy and approach are outlined as follows.

A structured questionnaire was created and distributed among multiple respondents through convenient sampling method. Quantitative research study was conducted to understand the factors influencing technology adoption in small hotels of India. Questionnaire was created based on the information collected from literatures, journals and multiple other sources. A pilot study was conducted and circulated among 20 respondents to understand the effectiveness of the questionnaire. Finally the questionnaire was distributed among 254 respondents. The questionnaire was divided into two segments: one comprising of demographic profile and other comprising of the factors influencing technology adoption.

The data analysis for this research was conducted using a computer program that is Statistical Package for Social Science (SPSS) and is presented in a table format, accompanied by descriptions for each table. The statistical methods used for data analysis include: Frequency and percentage were employed to describe the respondents' demographics, including gender, age, marital status, educational level, occupation, and monthly income. Exploratory factor analysis was applied to find out the latent variables. Confirmatory factor analysis was conducted to create the measurement and structural model (SEM) using AMOS as well as to test the hypothesis generated in the previous section.

5. DATA ANALYSIS AND INTERPRETATION

In this section the data collected and analysed are interpreted and discussed elaborately for proper understanding.

Table 1: Demographic Profile

Demographic Variable	Categories	Frequency	Percent (%)	Valid Percent (%)	Cumulative Percent (%)
AGE	UNDER 18	14	5.5	5.5	5.5
	18-24	221	87.0	87.0	92.5
	25-34	8	3.1	3.1	95.7
	35-44	4	1.6	1.6	97.2
	45-54	4	1.6	1.6	98.8
	55-64	3	1.2	1.2	100.0
	Total	254	100.0	100.0	
GENDER	MALE	152	59.8	59.8	59.8
	FEMALE	100	39.4	39.4	99.2
	PREFER NOT TO SAY	2	0.8	0.8	100.0
	Total	254	100.0	100.0	
OCCUPATION	STUDENT	221	87.0	87.0	87.0
	PROFESSIONAL/MANAGERIAL	21	8.3	8.3	95.3
	TECHNICAL/SKILLED	3	1.2	1.2	96.5
	SERVICE/CLERICAL	6	2.4	2.4	98.8
	RETIRED	3	1.2	1.2	100.0
	Total	254	100.0	100.0	
FREQUENCY OF STAY	RARELY	112	44.1	44.1	44.1
	OCCASIONALLY	100	39.4	39.4	83.5
	FREQUENTLY	30	11.8	11.8	95.3
	VERY FREQUENTLY	12	4.7	4.7	100.0
	Total	254	100.0	100.0	
FREQUENCY OF USE OF TECHNOLOGY	NEVER	34	13.4	13.4	13.4
	RARELY	71	28.0	28.0	41.3
	SOMETIMES	87	34.3	34.3	75.6
	OFTEN	37	14.6	14.6	90.2
	ALWAYS	25	9.8	9.8	100.0
	Total	254	100.0	100.0	

ENCOUNTERED TECHNOLOGICAL FEATURES	MOBILE CHECK-IN/CHECK-OUT	68	26.8	26.8	26.8
	SMART ROOM CONTROL (TEMPERATURE, LIGHTING)	37	14.6	14.6	41.3
	VOICE ACTIVATED ASSISTANCE	19	7.5	7.5	48.8
	IN-ROOM TABLETS/DIGITAL CONCIERGE	17	6.7	6.7	55.5
	AUTOMATED ROOM SERVICE ORDERS	27	10.6	10.6	66.1
	VIRTUAL/AUGMENTED REALITY EXPERIENCES	7	2.8	2.8	68.9
	HIGH-SPEED WI-FI	49	19.3	19.3	88.2
	SMART MIRRORS/INTERACTIVE DISPLAYS	6	2.4	2.4	90.6
	OTHERS	24	9.4	9.4	100.0
	Total	254	100.0	100.0	

The majority of respondents (87%) are aged 18-24, showing a very young demographic. Smaller groups fall into older age brackets: 3.1% are aged 25-34, and very few respondents are 35 or older, making up less than 5% combined. Only 5.5% are under 18.This suggests the sample primarily consists of young adults, likely college-aged or early in their careers. The sample is predominantly male, with 59.8% of respondents identifying as male and 39.4% as female. A very small proportion (0.8%) preferred not to disclose their gender. This indicates a slightly imbalanced gender distribution, skewing male. A vast majority (87%) of respondents are students, which aligns with the young age demographic (18-24). A small portion of respondents are in professional/ managerial roles (8.3%), while even fewer are in technical/skilled (1.2%), service/clerical (2.4%), or retired (1.2%) positions. The sample is clearly dominated by students, reflecting its youth-oriented makeup. The largest group of respondents (44.1%) stays "rarely," with another significant portion (39.4%) staying "occasionally". Only 11.8% stay "frequently" and 4.7% stay "very frequently." This suggests that most respondents do not stay in this context regularly, which could imply they're casual or infrequent visit. A considerable number of respondents (34.3%) use technology "sometimes," and 28% use it "rarely." Fewer respondents use technology "often" (14.6%) or "always" (9.8%). Surprisingly, 13.4% "never" use technology, despite being in the younger age group. This could indicate a mixed relationship with technology, where a significant portion still does not heavily rely on or use it regularly. The most commonly encountered feature is mobile check-in/check-out (26.8%), followed by high-speed Wi-Fi (19.3%) and smart room controls (14.6%). Features like voice-activated assistance (7.5%), automated room service (10.6%), and in-room tablets (6.7%) are less frequently encountered. The least encountered technologies are virtual/augmented reality (2.8%) and smart mirrors (2.4%). This suggests that while some

newer technologies are being adopted, respondents mostly encounter simpler or more widely available features like mobile check-in and Wi-Fi.

The latent structure for identifying the key drivers of technological adoption was examined using Principal Axis Factoring (PAF) with Promax rotation. The initial inspection of the R matrix indicated a substantial number of the coefficients were above 0.40. The Kaiser-Meyer-Olkin(KMO) index was 0.964, exceeding the recommended value of 0.6(Kaiser,1970) and Bartlett's Test of Sphericity (Bartlett,1954), reached statistical significance ($X2 = 5666.032$, $P<000.1$), indicating that the collected data were suitable for factor analysis. The results of initial analysis revealed three factors with Eigen value over 1, explaining 51.521%, 7.163% and 3.812% of total variance respectively. However the scree plot showed a clear break after the first factor (Figure 1), suggesting potential one factor solution for identifying the key drivers of technology adoption. Following the best practices of item retention, it has been found out there are cross loading in pattern matrix table has been found in PAT 3, PAT 4 and PAT 5. Hence the above mentioned items were removed and the data was analysed further with the rest of the items. Again after analysis cross loading was observed in items PAT 1 and PAT 2 with PAT 6 having a low loading estimate of 0.3. Hence , by following the best practices of item retention, PAT 1 , PAT 2, PAT 3, PAT 4, PAT 5 and PAT 6 were removed at the data was analysed finally. Nine items were loaded in Factor 1(Level of satisfaction and impact: LOS 1, LOS 2, LOS 3, LOS 4, LOS 5, IOT 1, IOT 2, IOT 3 and IOT 4), eight items are loaded in factor 2(Importance of technological features: IFT 1, IFT 2, IFT 3, IFT 4, IFT 5, IFT 6, IFT 7 and IFT 8) and six items are loaded in factor 3(Attitude towards technology: ATT 1, ATT 2, ATT 3, ATT 4, ATT 5 and ATT 6). The figure of scree plot and the table on standardized factor loadings from the exploratory factor analysis are displayed below.
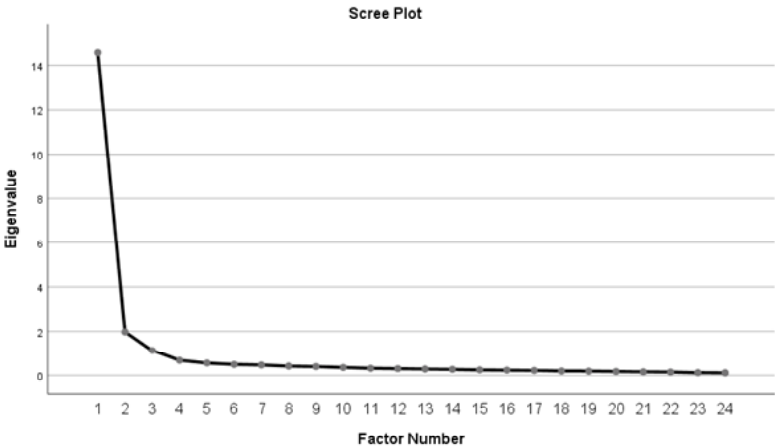

Figure 1: Scree Plot

Table 2: Pattern Matrix[a]

	Factor		
	1	2	3
1 IMPORTANCEOF TECHNOLOGICAL FEATURES		.583	
2 IMPORTANCEOF TECHNOLOGICAL FEATURES		.467	
3 IMPORTANCEOF TECHNOLOGICAL FEATURES		.825	
4 IMPORTANCEOF TECHNOLOGICAL FEATURES		.935	
5 IMPORTANCEOF TECHNOLOGICAL FEATURES		.793	
6 IMPORTANCE OF TECHNOLOGICAL FEATURES		.842	
7 IMPORTANCEOF TECHNOLOGICAL FEATURES		.466	
8 IMPORTANCEOF TECHNOLOGICAL FEATURES		.708	
1 ATTITUTE TOWARDS TECHNOLOGY			.690
2 ATTITUTE TOWARDS TECHNOLOGY			.805
3 ATTITUTE TOWARDS TECHNOLOGY			.827
4 ATTITUTE TOWARDS TECHNOLOGY			.866
5 ATTITUTE TOWARDS TECHNOLOGY			.891
6 ATTITUTE TOWARDS TECHNOLOGY			.867
1 LEVEL OF SATISFACTION	.778		
2 LEVEL OF SATISFACTION	.749		
3 LEVEL OF SATISFACTION	.776		
4 LEVEL OF SATISFACTION	.808		
5 LEVEL OF SATISFACTION	.744		
1 IMPACT OF TECHNOLOGY	.791		
2 IMPACT OF TECHNOLOGY	.765		
3 IMPACT OF TECHNOLOGY	.801		
4 IMPACT OF TECHNOLOGY	.840		

Extraction Method: Principal Axis Factoring.
Rotation Method: Promax with Kaiser Normalization.
a. Rotation converged in 6 iterations.

For further validation we have used Confirmatory factor analysis. The AMOS version 26 was used to perform confirmatory factor analysis. The model was created and assessed systematically to test the reliability, convergent and discriminant validity. The graphical presentation of initial and final model is displayed below.
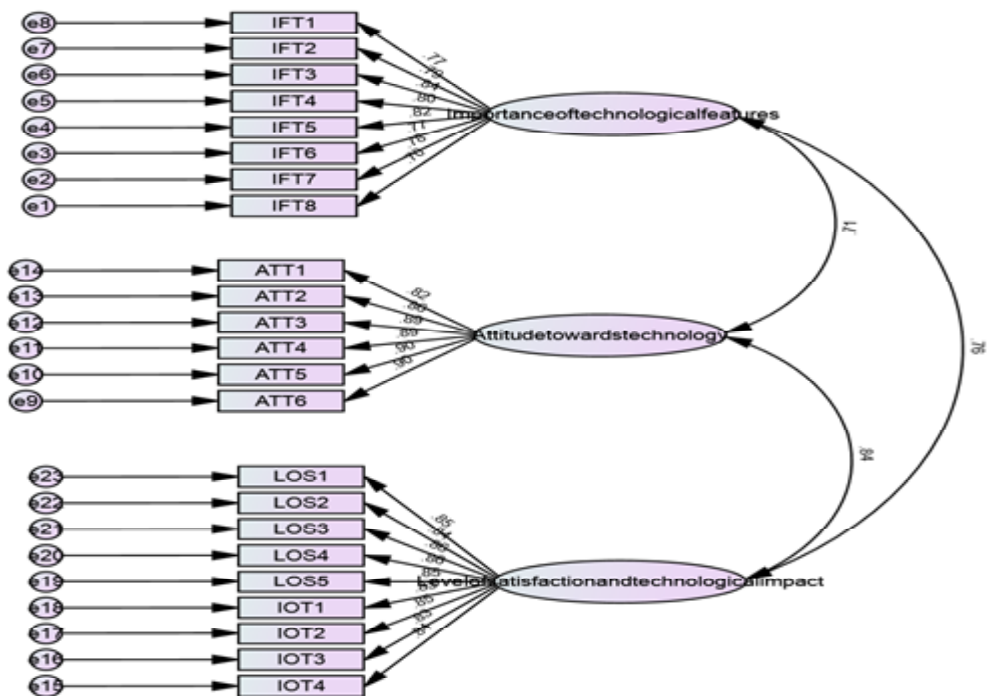
Figure 2: Initial CFA Model

Table 3: Reliability and Convergent Validity

Variables/ Constructs	Items	Standardized Factor Loadings	Cronbach Alpha	Composite Reliability	Average Variance Extracted	Maximum Shared Variance
Importance of Technological Features	IAT 8 IAT 7 IAT 6 IAT 5 IAT 4 IAT 3 IAT 2 IAT 1	.702 .775 .770 .819 .799 .839 .789 .772	0.921	0.944	0.613	0.581
Attitude Toward Technology	ATT 6 ATT 5 ATT 4 ATT 3 ATT 2 ATT 1	.903 .900 .894 .891 .864 .824	0.944	0.958	0.803	0.702

Level of Satisfaction and Technological Impact	IOT 4	.839	0.947	0.961	0.725	0.702
	IOT 3	.835				
	IOT 2	.845				
	IOT 1	.827				
	LOS 5	.849				
	LOS 4	.861				
	LOS 3	.864				
	LOS 2	.837				
	LOS 1	.851				

Figure 3: Initial CFA Model

The results of the CFA gave a good fit of statistics of the model, having a chi-square to degree of freedom ratio x²/df of 2.49, the Root Mean Square Error of Approximation (RMSEA) of 0.077, the Root Mean Square Residual (RMR) of 0.074, and Comparative Fit Index (CFI) of 0.940. These are within the threshold values prescribed by Hu and Bentler, (1999) and Browne and Cudeck, (1992), guidelines of RMSEA < 0.08, RMR < 0.05, and CFI > 0.90.
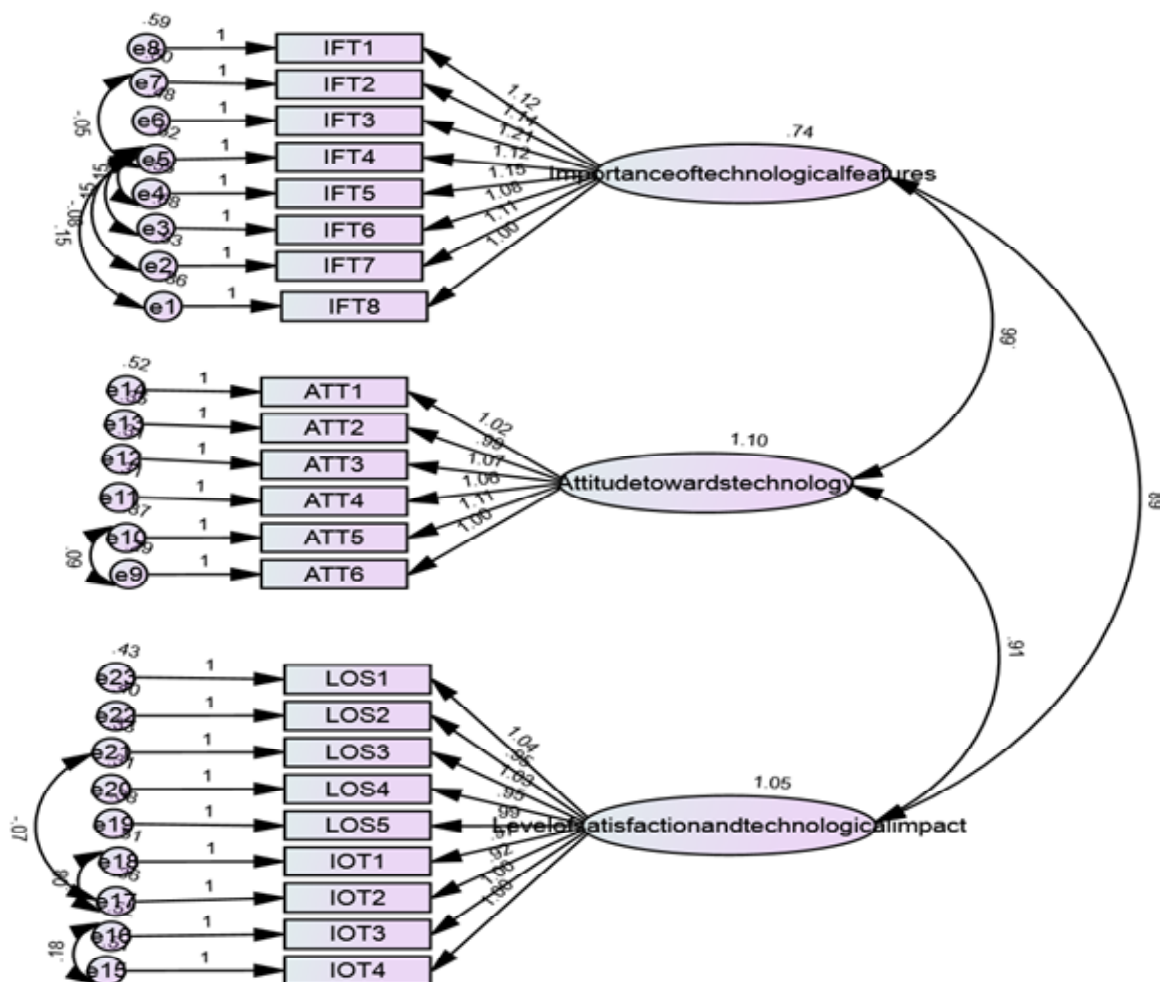
All the item standardized factor loadings were more than 0.60, and the Average Variance Extracted was above 0.50, with strong convergent validity evidence (Hair et al., 2017). Additionally, the MSV was smaller than the relevant AVE for all items, hence increasing convergent validity. Cronbach's alpha and composite reliability of all items were above 0.70, and therefore all constructs had good reliability.

Table 4 : Discriminant Validity

Construct	Importance of Technological Features (IFT)	Attitude Toward Technology (ATT)	Level of Satisfaction and Technological Impact (IOT/LOS
Importance of Technological Features (IFT)	0.783		
Attitude Toward Technology (ATT)	0.708	0.896	
Level of Satisfaction and Technological Impact (IOT/LOS)	0.762	0.838	0.851

For the discriminant validity, we used the criteria of Fornell & Larcker in 1981. The square root of AVE values are in the diagonal bold. Other values present in the table denote inter-variable correlations. Using the criteria, for each inter-variable correlation value in each row and column, it should be lesser than its corresponding bold value in that row or column. It can be seen in the table, and therefore, the variables show very good discriminant validity.

Hypothesis testing

To investigate the relationships among importance of technological features, attitude towards technology and level of satisfaction and technological impact, we used structural equation modelling (SEM) through AMOS path analysis. This analysis incorporated factor scores obtained from confirmatory factor analysis (CFA). Below is the graphical representation of the structural model, followed by the result.
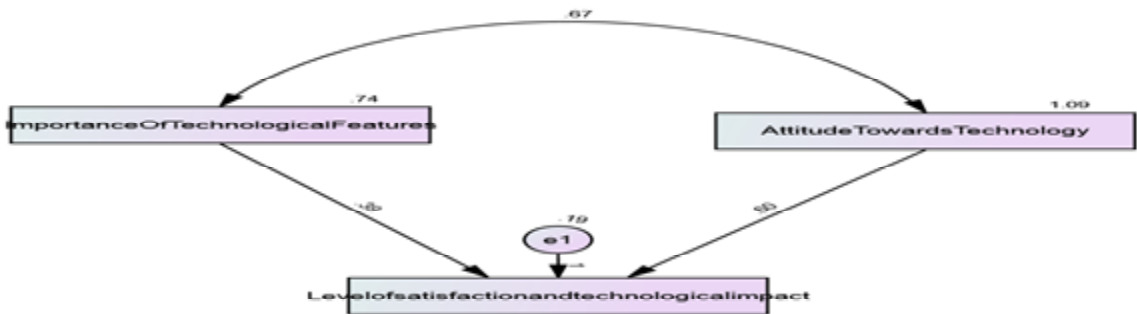
Figure 4: Hypothesis testing model

MODEL FIT SUMMARY

It shows a perfect fit of the hypothesized model with the data. Chi-Square Test of Model (CMIN) = 0.000 with an exact fit, though it does have 0 degrees of freedom, and there is equality of parameters and moments in this saturated model. Thus, some of the fit indices, like the Root Mean Square Error of Approximation (RMSEA), cannot be calculated because the model is saturated. However, other fit indices provide a convincing argument for the adequacy of the model. The Comparative Fit Index (CFI) is at 1.000, which represents an excellent fit, and the Goodness of Fit Index (GFI) is also 1.000, which indicates a perfect fit as well. The value of Root Mean Square Residual (RMR) is 0.000, which indicates no residual variance and is therefore ideal.

In summary, these results validate the conclusion that the model is a good fit for the data. Both the paths from Importance of Technological Features and Attitude towards Technology to Level of Satisfaction and Technological Impact are statistically significant and positive, which means an increase in satisfaction levels with improvement in technological features and attitudes towards technology. Moreover, the model proves to be highly reliable and valid since factor loadings are very high, thus making the relations created in the model more sound.

The hypotheses derived from the path analysis indicate that person-job fit is positively and significantly associated with employee creativity ($\beta=0.066$, P<0.05). Meanwhile, person-organization fit exhibits a negative and significant correlation with employee creativity ($\beta = -0.089$, P<0.05). Besides, person-job fit shows a positive and significant relationship with career commitment ($\beta=0.196$, P<0.05), and so is person-organization fit related positively and significantly to career commitment ($\beta=0.219$, P<0.05). In addition, career commitment is significantly and positively associated with employee creativity ($\beta=0.565$, P<0.05). However, psychological safety

Table 5: Regression Weights

H. No.	Paths	Estimate	S.E.	C.R.	P	Remarks
H1	Importance of Technological Features → Attitude Toward Technology	.668	.070	9.503	***	H1 Supported
H2	Importance of Technological Features → Guest Satisfaction and Technological Impact	.392	.048	8.096	***	H2 Supported
H3	Attitude Toward Technology → Guest Satisfaction and Technological Impact	.603	.040	15.151	***	H3 Supported

reveals a positive but insignificant relationship with employee creativity (â = 0.066, P > 0.05). Based on these findings, we accept hypotheses H1, H3, H4, and H5.

6. FINDINGS AND DISCUSSION

The discussion of this research focuses on the relationships among technological features, attitudes toward technology, and their impact on guest satisfaction and frequency of stay in small hotels in India.

The results show that the perceived importance of technological features, such as mobile check-ins, smart room controls, and high-speed Wi-Fi, significantly influences attitudes toward technology and satisfaction levels. This is in line with the first hypothesis (H1), which is supported by the positive association between the perceived importance of technological features and overall guest satisfaction. What is remarkable in this respect is that high factor loadings were reported on the confirmatory factor analysis where guests perceived technology as a component of their stay. Further, attitudes toward technology influenced both level of satisfaction and number of stays (H2).

Guests who are favorably disposed toward technological advancements have a higher chance of return visits to hotels since they consider such innovations to be beneficial additions to their stay. This further supports the assumption that positive attitudes towards technology promote loyalty and raise the chances of repeat stays. The study also presents satisfaction and technological impact as the mediator between the significance of technological features and the number of stay visits (H3). This implies that, although technological features are significant, their ability to enhance satisfaction is the most important factor that motivates guests to return. Surprisingly, the results also indicate that guests who prefer smart technologies stay more often (H4), meaning that a positive attitude toward advanced technology motivates repeat visits.

Another outcome of the analysis was differences that resulted in high satisfaction based on guest perceptions regarding the importance placed on technology and attitude about this technology (H5) is that the guests who considered putting heavy weights on the importance of this technology will be satisfied more. Finally, a relationship between attitude towards technology, and satisfaction, as being sensed, also supports the sixth hypothesis (H6). This work complements the existing literature since its importance is placed on hotels to integrate advanced technological features within them in order to realize satisfying expectations from tech-savvy, generally younger, customers, resulting in better satisfaction and eventually loyalty.

7. CONCLUSION

In conclusion, the current research focus on the role that technological features play in the small hotels of India to shape the guest satisfaction and the frequency of stay. It also sheds light on the importance of including advanced technologies like mobile check-ins, smart room controls, and high-speed Wi-Fi for modern travelers. Results A high value for technological features given to visitors shows that they are likely to be in a positive attitude toward technology, which will increase their overall satisfaction and likelihood to repeat the stay. The mediating effect of guest satisfaction and influence of technology add a great emphasis on the point that although availability of technological features is significant, yet the performance of the same to change the guest experience is fundamental. This study contributes to the ever-increasing literature on hotel management and technology adoption since through this study it indicates to hotels that an innovation with technology can induce more loyalty in guests. These are critically crucial in this competitive hospitality environment, with guests that expect almost seamless, customised experiences.

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Sustainable Practices in Urban and Rural Tourism Development

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ABSTRACT

Purpose/ Objective: *This research article explores the crucial role of sustainable practices in developing urban and regional tourism sectors.*

Design/Methodology/Approach: *To conclude, the Researcher used a secondary data collection method that included references from research journals, books, newspapers, and videos.*

Findings/Conclusion: *The article focuses on Sustainable practices performed in regional and urban sectors to develop the tourism sector. While researching, researchers found that many metropolitan and regional tourism properties have started paying attention to sustainability and emphasizing educating guests and their participation in sustainable practices.*

Research limitations/Implications*: While this study is based on secondary data, it is crucial to highlight that future research could greatly benefit from including primary data. The potential for designing a structured questionnaire, circulating it to the primary data, and completing the research by applying various tests could significantly enhance the depth and accuracy of the findings.*

Originality/Value*: Sustainable tourism and urban development are becoming more popular. However, to our knowledge, very few studies have integrated those two fields, and no comprehensive, sustainable model for urban tourist growth has been introduced. Besides providing visitors with a meaningful experience and maintaining a high level of satisfaction, sustainable tourism should also increase visitors' understanding of sustainability issues and encourage them to adopt sustainable travel habits. The concept of sustainability, a complex and multifaceted issue, is of utmost importance to scholars, policy-makers, educators, and individuals. Each of us has a role to play in this discourse. In 1987, the European Commission*

(EU) published the study Our Common Future, which defined sustainable development *as meeting 'the needs of the present without compromising the ability of future generations to meet their own needs.'*

Keywords: *Sustainable Tourism, Urban Tourism Development, Sustainable Practices, Rural and Urban Sectors, Policymaking*

INTRODUCTION

The act of people willingly leaving their home environment to see another one is what makes them tourists. Regardless of how near or far away this setting (destination) is, these people will typically partake in various activities. As a result, tourists are visitors, and their actions while traveling to another location could be categorized as tourism. In 1963, the United Nations Conference on International Travel and Tourism decided to refer to people traveling to another country as "visitors" (as opposed to "residents"). Two visitor classifications were covered by this definition: Tourists were defined as short-term visitors who stayed in a place for at least 24 hours. Their visit may be classified as leisure if they are traveling for religious, health, sports, vacation, research, or recreational reasons. As an alternative, travelers, such as Cruise Liners. These definitions, however, do not account for domestic travelers. The Institute of Tourism, which subsequently changed its name to the Tourism Society, proposed in 1976 that tourism is the short-term, transient movement of people to locations other than their usual areas of residence and employment. Thus, travel for any reason, including day trips or excursions, is considered tourism. At the 1981 International Conference on Leisure Recreation Tourism, which was hosted in Cardiff by the Tourism Society and the Worldwide Network of Tourism Experts (AIEST), this more expansive definition was somewhat modified: "Tourism may be defined in terms of particular activities, selected by choice, and undertaken outside the home environment." Overnight stays away from home may or may not be a part of tourism. Tourism comprises the activities of persons traveling to and staying in places outside of their usual environment for not more than one consecutive year for leisure, business, or other purposes," according to a 1991 declaration by the United Nations World Tourism Organization. At this point, domestic and foreign travel may be distinguished The former pertains to travel that is conducted solely within the borders of the traveler's nation of residence. The latter describes travel that takes place inside one's own nation. Domestic travel will decrease the amount of money leaving the tourists' home country and have

an effect on the balance of payments. (Camilleri, 2017/09/30)

Due to an even more fundamental shift to "post-modern" patterns of consumption, which establishes tourism as one of the benchmarks of modes of production and consumption in the knowledge economy, the tourism industry is undergoing significant changes in terms of the market, industry structure, and the product itself. Economic development is significantly shaped by tourism, both numerically and qualitatively, and consolidated tourist models need to quickly adjust to a new and evolving reality (Pasquinelli, 30 August 2016) Since the late 1980s, research on sustainable tourism has grown in popularity. However, the discussion of sustainable tourism is fragmented, inconsistent, and frequently faulty due to erroneous presumptions and reasoning. (Liu, 2003).As one of the first industries to develop definitions, guiding principles, strategies, and action plans for "sustainable tourism," the tourism industry has a long history of implementing sustainability-related efforts (World Travel and Tourism Council, 1998). Even though the tourist industry is relatively new, it deserves praise for swiftly shifting from its early emphasis on financial gains to an understanding of its broader environmental implications. (Budeanu, 2016)According to the UN Report of the World Commission on Environment and Development, Our Common Future, sustainable development is defined as development that satisfies current generations' needs without jeopardising the capacity of future generations to satisfy their own. The process of enhancing human life quality within the parameters of what is known as the carrying capacity of sustainable ecosystems is another definition of sustainable development.

Design/Methodology/Approach: To conclude, the Researcher used a secondary data collection method that included references from research journals, books, newspapers, and videos.

SUSTAINABLE DEVELOPMENT PRACTICES IN RURAL REGIONS

The phrase "rural tourism" refers to various tourism-related activities and forms that occur outside of cities and in places where mass tourism is well-established. Hunting, fishing, ecotourism, and other types of tourism in rural areas are all included in the category of rural tourism, which can be a professional and supplemental source of income (Sandra Kantar, 2017). One type of tourism in isolated or rural locations is called "rural tourism." It supports economic, ecological, and sociocultural regeneration to improve the situation and standard of living of the local population and environment. Therefore, rural tourism promotes local cuisine and leisure activities in pristine settings while allowing rural communities to flourish and find methods to improve or add value to the area's natural features, cultural attractions, and activities. In rural places, it also offers job opportunities and revenue. It is crucial for the revival of both cultural and natural resources. As a result, rural tourism contributes significantly to the rural economies. (Chan, 30/06/2023)Sabah,

Malaysia's rural locations and attractions are endowed with a wealth of natural and cultural treasures, as well as distinctive landscapes that draw tourists. In order to provide genuine experiences, these distinctive rural tourist destinations need to use sustainable techniques. Additionally, rural tourism is expanding quickly as more people search for new places to get away from the city and their jobs. Travelers who want to visit isolated places and those interested in rural tourism have modified their behavior as a result of the recent COVID-19 outbreak. Rural tourism offers excellent chances to satisfy the needs of travelers who like to engage in physically and mentally soothing activities in a natural setting or who wish to unwind and revitalize following the pandemic.

1:- Agriculture and rural tourism:-One of the main strategies to improve rural tourism's sustainability is to work toward a win-win partnership with agriculture. Enhancing the connection between rural tourism and agriculture can significantly boost rural regions' ecological and economic viability by supplying rural tourism products. By optimizing the mutually beneficial interaction between rural tourism and agriculture, farmers who engage in both the busy farming season and the busiest travel season can improve livelihood sustainability. (An, 2020/09/19)

2:- Diversification and businesses:- Numerous efforts that aim to promote sustainable rural tourism can be identified from the standpoint of agricultural diversification; these range from farm-based activities to rural tourism activities involving rural, natural, and cultural resources. Agricultural diversification-based rural tourism not only allows for the addition of tourism revenue to agricultural income, but it also safeguards the agricultural system and the environment. Businesses preserve the local culture, enhance the value of the locations, beautify rural properties, and develop new rural tourism experiences. Farmers' and businesspeople' efforts to draw tourists with alluring rural tourism programs must be combined in order to satisfy the various demands of rural tourism visitors.

3:- Satisfaction of tourists:- Tourist satisfaction with rural tourism can be defined as their assessment of how their experiences during their visit differed from their pre-visit expectations. Satisfaction following a rural tourist experience is crucial for ensuring the sustainability of rural tourism since it fosters patronage of the place. Sustainable rural tourism is made feasible by a number of factors, including visitor satisfaction, environmental preservation, people' quality of life, cultural advancement, and economic growth.

4:- Community:- As the primary operator of rural tourism, the community's active participation is crucial to maintaining the industry's viability. The community is an important entity that may safeguard rural areas' natural environment, maintain the area's cultural character, and assist in

giving locals economic advantages. By dispersing the benefits of rural tourism, community involvement maximizes economic benefits and helps prevent unfavorable socio cultural shifts that may result from its growth. Tourism experiences in rural areas can be impacted by community involvement.

SUSTAINABLE DEVELOPMENT PRACTICES IN URBAN REGIONS

Urban tourism can be distinguished from other types of tourism by a number of characteristics that define urban tourism destinations overall, even though they may not apply to all urban locations and may apply to some non-urban sites. A sizable portion of visitors to cities are so primarily for non-leisure reasons, such as business, attending conferences, shopping, or visiting friends and family. Significant (sometimes majority) consumers of attractions and infrastructure that was primarily built for non-tourism objectives are locals (and commuters). The quantity, diversity, and scope of primary and secondary attractions are frequently high in metropolitan areas. The fact that tourism is only one of many economic activities in a city and must contend with numerous other businesses for resources like labor and land is one of its most distinctive features in an urban setting. This affects how industry, government, and residential communities perceive the significance and level of understanding of tourism-related issues. (Edwards, Otober 2008)

Among the major issues facing modern society are desertification, pollution, emissions, food shortages, depletion of natural resources, global warming, and climate change .Due to advancements in travel and transportation technology, economic expansion, and an increase in disposable income, tourism has expanded significantly over the last 70 years .Despite the fact that most people live in cities and that most people travel to them, sustainable tourism places a strong emphasis on the natural environment, rural settings, and protected land .The tendency of urbanization and the increase in the global population's financial and technological capacity to travel and experience life in other countries make sustainable urban tourism development (SUTD) an important topic. Ljubljana was one of the capitals that made significant investments in an integrated marketing mix to draw tourists, but now that it is a "hot" and well-liked tourist destination, the city's government is now worried about how to manage the growth of urban tourism in a sustainable way. However, certain other cities throughout the world—like Venice, Dubrovnik, Barcelona, etc.—are already experiencing the negative consequences of high tourism, and cities must adapt to meet the Sustainable Development Goals (SDG). (Barbara Grah, 2020)

Geographers conducted the majority of the 1960s study on urban tourism, which saw a resurgence in the 1990s. In addition to encouraging equitable development in the area, urban tourism has the

ability to stimulate economic growth. Sustainability, planning, management, impacts, cultural agendas, visitor perception and satisfaction, urban regeneration, models, tourist city typologies, city case studies, social theory, transportation and infrastructure, marketing, and place imagery are among the themes that are prioritized in urban tourism research. Social inequality patterns are evident in the way that user satisfaction with the services is impacted by the spatial distribution of users, or their neighborhoods of origin. Regarding who determines the priorities for urban tourism, industry and academia have different opinions.

These days, cities need to play a significant part in solving environmental issues. They are hubs for productivity, efficiency, investment, and innovation, but they also contribute significantly to climate change. The ecological urbanization of cities is the answer to both global climate change and sustainable growth. As a result, urban managers' campaigns and initiatives to promote the sustainable development of surrounding regions, cities, and rural areas are becoming increasingly significant.

Globally, the importance of cities in sustainable development is becoming increasingly acknowledged. Some of the cities' roles include delivering services to citizens and businesses, generating employment, and promoting research and development both inside and beyond the economic sector. These functions, however, benefit the entire territory in which cities are located and are not just restricted to the administrative borders of cities. A contemporary city must prove that it satisfies environmental standards to succeed.

While metropolitan areas can achieve and expedite local socio-economic development, they also present environmental challenges.The characteristics of cities dictate how they should be governed and maintained because they are unique local settings. A workable urban development plan should incorporate aspects that will give the local community a competitive edge and relate to the city's image and brand. Today's corporate and non-profit organizations, including the government, must establish and maintain long-lasting and efficient systems that allow them to quickly adapt to changes in the trends that define the environment in which they operate.

Under these circumstances, the local government and other partners (stakeholders) may decide on the best ways to support sustainable urban growth. A new paradigm is evolving today, where the person is referred to as a "stakeholder" and acknowledged as a partner of the public administration. The development of urban regions through integrated urban transport systems for people' accessibility and mobility, as well as ecologically friendly structures that use renewable energy, may result from this collaboration of urban stakeholders. Competitiveness is necessary since cities today compete with other urban areas worldwide for investments, people, and tourists.

Effective urban management can mitigate the adverse ecological, economic, and social impacts of tourism. It is crucial to note that there is a fairly substantial difference between urban governance, which relates to other elements, and urban management, which refers to the authorities carrying out the policies. In his paper, the author comes to the conclusion that urban management is a reform of municipal administration, with the goal of achieving equilibrium between social and economic development, which coexist in a precarious way.'

Determining a tourist destination's degree of sustainability is one of the primary obstacles to attaining sustainable tourism. This obstacle has complicated decision-making and made it challenging to meet the demands of tourist destinations. Planning and developing tourism with the requirements and impacts in mind is necessary to achieve sustainable tourism. (Zamfir, 2015)

CONCLUSION

Numerous academic studies highlight a variety of sustainable techniques used worldwide in both rural and urban regions. By enabling future generations to witness the beauty of the environment firsthand rather than only learning about it from stories and history books, these actions are essential now to ensure a brighter tomorrow.

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Exploratory Study on the Usage of Clear Ice and Its Impact on Cocktail Making

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ABSTRACT

This research paper examines the vital role of ice in cocktail preparation, tracing its transformation from a luxury item to an essential component of modern mixology. Defined as frozen water, ice goes beyond chilling drinks; it enhances flavor, aesthetics, and the overall drinking experience. The historical context, initiated by Frederic Tudor in the early 1800s, highlights the evolution of the ice trade and its profound impact on social customs and beverage consumption in American and European cultures.

The study delves into the science of ice production, emphasizing the importance of clarity, achieved through directional freezing, and how different shapes and sizes of ice—such as cubes, crushed, or spheres—affect dilution rates and flavor preservation.

Through qualitative and quantitative analysis, the paper reveals a growing recognition among mixologists of ice's significance in enhancing sensory experiences and cocktail artistry. By understanding how ice characteristics interact with cocktail composition, bartenders can refine temperature, dilution, and presentation to improve the drinking experience.

***Purpose/Objective:** To explore and understand how ice can impact the final outcome in cocktails*

***Design/ Methodology/Approach:** The research is completed by circulating a structured questionnaire to bar professionals from various outlets. To obtain the required data from the respondents, the researcher conducted a random sampling method.*

***Research limitations:** As the usage and awareness of clear ice in comparatively low in India*

the quantitative research data was collected from selected beverage professionals who are actively using clear ice and have goo beverage programs launched and practiced in the bars and restaurants they are currently working. This research paper can be further used to study why Indian bartenders resist from using clear ice for beverages served in their bars.

Keywords: *Ice, Bar, Beverages, Bartending, Cocktail*

INTRODUCTION

In simple terms Ice is defined as frozen water. In order to produce ice, it is sufficient for an individual to introduce water into ice cube trays and subject them to freezing conditions at the lowest temperature setting available in a refrigeration unit. Although it appears simple, the quality and purity of ice impact a beverage's overall flavor and temperature. In many small establishments, ice is considered the most underrated ingredient in the bar, yet the bars cannot run successfully without ice. It is one of the most vital ingredients that change the drinking experience. It not only chills the beverage but also enhances its visual appeal, balances the flavor of the drink and achieves perfect consistency of the beverage in which it is added. Ice is no longer considered as a background ingredient in cocktail mixing; it is crucial. It regulates the temperature, dilution, and appearance of beverages, playing an important role in the experience. (Team, 2024)

Historical references state that adding ice to beverages became part of American and European lifestyles, and it was once a luxurious commodity that was traded and stored to enjoy chilled beverages. However, many outlets consider ice to be just another ingredient. It has been noticed that nowadays, bartenders invest a great amount of time in shaping and producing pure and quality ice with different shapes and sizes that are suitable for specific beverages.

REVIEW OF LITERATURE

History of Ice

The book The Frozen Water Trade reveals how the 19th-century natural ice trade transformed beverage consumption in North America. Pioneered by Boston businessman Frederic Tudor, the first to commercially ship ice to tropical regions like the West Indies and India, the industry thrived as ice harvested from New England lakes was stored in large ice houses and shipped

domestically and internationally. Natural ice became vital for refrigeration, ice cream production, and cooling drinks long before artificial refrigeration existed. Workers harvested ice during winter, insulating it with sawdust for transport. The trade peaked in the late 19th century, particularly in cities like New York, which relied heavily on ice from sources like the Kennebec River in Maine. However, the rise of artificial ice plants, pollution, and technological advances led to the industry's decline by the early 20th century. Today, remnants of this trade exist in small museums that preserve its history. (Weightman, 2002)

Mr. Frederic Tudor a great visionary, started shipping ice around the world in 1806. The idea that seemed impossible and foolish then changed the world's drinking patterns and behavior. Mr. Tudor invested in ships and embarked on the journey to establish a worldwide ice trade by collecting ice from New England ponds and moving it to the American South, Cuba, Calcutta, etc. In the mid-1800s, Londoners served crystal clear ice collected from Wenham Lake in Massachusetts. (Holmberg, 2014)

Ice was initially harvested in large blocks from frozen lakes and then shipped to areas with hotter climates. Credit: Historic Collection/Alamy Stock Photo (Brady, 2023)

Ice's role in chilling the beverage and enhancing its taste in olden times

Ice has long been a luxurious commodity used by emperors and wealthy individuals across different eras. Historical references, such as those in the Roman era, reveal that ice was prized for its ability to chill beverages and enhance their taste. Roman Emperor Nero, for example, is known to have consumed honey-flavored iced drinks. Wealthy Romans sourced ice from mountainous regions and stored it using early insulation methods. In Persia, ice storage technologies like the 'yakchal' (an ancient ice house) were used. Over time, the methods of ice production and its use in beverages evolved, marking significant technological advancements in ice manufacturing and its application in cooling drinks for elite feasts and gatherings. (Rail, 2020) .

Archaeologists have uncovered an 18th-century ice store beneath a residence near Regent's Park in London, shedding light on the city's ice trade. Built-in the 1780s, it is the earliest known commercial ice store and has been designated a scheduled monument by Historic England. The store was revealed during excavations for a new project designed by John Nash. This discovery connects the elite's early use of ice for beverages and medical purposes to the broader ice availability by the 1830s and 40s. In the 1820s, ice merchant William Leftwich began importing Norwegian ice for distribution to restaurants, homes, and medical institutions. The 9.5-meter-deep and 7.5-meter-wide cavern had been backfilled after WWII and required extensive excavation. The find highlights the transition from ice being a luxury item to a widely accessible commodity, underscoring its role in shaping drinking culture during that time. (Addley, 2018)

Because of rising temperatures, ice became an important part of American drinking culture during the nineteenth century. Cities like New Orleans, San Francisco, and New York began receiving regular ice shipments, which significantly impacted local cocktail traditions. As the natural ice industry declined, industrial refrigeration and artificial ice succeeded it. Concurrently, brewers in Chile used iceberg ice to freeze their beer, with ships carrying icebergs from the South Pole by the 1850s. (Rail, 2020) (Rail, 2020)

In 1815, Frederic Tudor, the "Ice King," introduced ice to Cuba, where it became popular in the local café culture, particularly in iced versions of café Cubano and rum-based drinks. By 1820, Tudor brought ice to New Orleans, where it helped shape the emerging American cocktail culture. His innovation, initially focused on enhancing drink experiences rather than food preservation, led to widespread demand for chilled alcohol and played a key role in the development of modern cocktails. (Brady, 2023)After digging into the history of the Ice trade, it was discovered that there is a close relationship between the surface area, volume, and surrounding heat of ice. To understand this better, research on the structure of ice was done.

Structure of Ice- Why Ice Floats?

Ice melts more slowly when more significant because its volume increases faster than its surface area. For example, tripling the size of a cube results in a ninefold increase in surface area and a twenty-sevenfold increase in volume, making large ice cubes ideal for slow melting and large-scale ice shipments.

While lake ice is typically clear and freezer ice is cloudy, both types effectively chill beverages. Clear ice is preferred for its visual appeal and ability to form large, attractive cubes, while cloudy ice may break into smaller shards, potentially diluting drinks. Though clear ice is favored for cocktails like an old-fashioned, cloudy ice doesn't affect flavor. The text also provides tips for

making clear ice at home. (Arnold, 2014)

Ice is the solid phase of water (H2O) that forms at 32°F (0°C). As water starts to freeze, the molecules arrange themselves into a hexagonal crystalline structure. This hexagonal formation is consistent when water reaches freezing temperatures, so snowflakes always have six sides. Another interesting property of water is that, unlike many other substances like steel, it expands and becomes less dense when it freezes. (Holmberg, 2014)

Ice is a crystalline form of water that consists of two hydrogen and one oxygen atoms. Ice and liquid water have the same component atoms, but their molecular structures differ. Ice is a more ordered and orderly arrangement of molecules than liquid water, with looser connections and the ability to move closer together. Typically, compounds with more tightly packed molecules have higher densities than ones with more expansive molecular space. Ice's peculiar chemical arrangement causes it to have a lower density than liquid water, a factor responsible for its floating. (Zumdahl, 2024)

Ice and Science-

How water turns into ice and its relationship with the clarity

Ice cools drinks by absorbing heat from them. Since ice is colder than the drink, the warmer molecules transfer heat to the ice, which cools the drink down. This process occurs in stages: the ice first cools the top layer of the drink, which then sinks as it becomes denser, while the warmer, less dense water rises to the top and gets cooled by the ice.

Clarity in Ice

Clear ice forms through a slow, controlled freezing process that allows impurities to be expelled, resulting in transparency. In natural lakes, ice freezes layer by layer from the surface downward. Water, which reaches its highest density at 4°C, expands as it cools further, causing denser water to sink while colder water remains at the top. This creates optimal conditions for slow, uniform freezing. Supercooling, where water stays liquid below 0°C until nucleation occurs, is also crucial in producing clear ice. As crystallization begins, the water stabilizes at 0°C, and ice crystals grow gradually, expelling air and minerals. In contrast, rapid freezing, such as in conventional freezers, creates multiple nucleation points, resulting in smaller, cloudier ice crystals that trap impurities and freeze unevenly. For clear ice, mimicking natural lake conditions with slow, directional freezing is critical to achieving smooth, transparent results without trapped air or minerals. (Arnold, 2014)Cloudy ice cubes, typically produced in home freezers, contain

impurities and trapped air, which can negatively affect cocktails. Clear, pure ice is preferred for its better cooling and slower melting properties, preserving the drink's flavor. In contrast, cloudy ice dilutes drinks more quickly, altering the taste and reducing the quality of the drinking experience. Clear ice enhances the sipping expertise by providing a more prolonged, controlled melt. (Holmberg, 2014)

Crystal-clear, high-quality ice tastes better and melts more slowly than cloudy ice, affecting how quickly a cocktail chills. While slow melting is ideal for preserving flavor, it may take longer to cool the drink. Aesthetically, clear ice enhances the drinking experience. This clarity is achieved through directional freezing, where water freezes from one direction, expelling trapped air and impurities, unlike the standard freezing method, where ice forms outside. This process mimics natural freezing in lakes and ponds, producing purer, clearer ice that improves taste and presentation.

Speed of freezing Ice

Rapid freezing, on the other hand, causes the creation of ice with multiple air pockets and impurities, resulting in a hazy look. Thus, the direction and speed of freezing are crucial in defining the clarity. (The Ice Book, Camper English)

Appearance Enhancement with Clear Ice

Clear ice has become a symbol of quality in the cocktail industry, enhancing aesthetics and the drinking experience. Companies like Hundredweight and Just-Ice use "directional freezing" to achieve clarity, though bartenders like Tom Macy argue that ice type doesn't impact flavor. The focus on large, slow-melting ice began with figures like Sasha Petraske, and today, clarity is prioritized, with 75% of Chicago bars using clear ice. Preferences for ice production vary, with some favoring machine-made ice and others valuing hand-hewn craftsmanship. (Robert Simonson, 2019)

While in India, brands like Premium Ice (Mumbai) and Just Ice Co. (Delhi, Pune) are leading the Indian market for clear ice and encouraging more bartenders in making a right choice of ice for various cocktails. Bartenders and beverage experts in India are coming forward and endorsing the usage of clear ice in cocktails. Also, the manufacturers emphasizes on the quality of water and hygiene practices followed during manufacturing which impacts the final appearance and structure of the ice. (Khandelwal, 2022)

Types of Ice

Schott highlights that the effectiveness of ice in cocktails depends on minimizing the surface

area-to-volume ratio. While shapes like diamonds are visually appealing, cubes and spheres with a 2-inch diameter provide the most efficient ratio, while half-moon shapes have a higher ratio. For rapid chilling, bars often use crushed ice, but The Aviary uses consistent BB-sized ice spheres weighing 1,200 pieces per drink. This growing understanding of ice's role has elevated it from a background element to a key component in modern mixology, enhancing overall drink quality. (Adams, 2018)

Various ice forms include:

Cubed Ice: Standard 1x1-inch cubes melt at a balanced rate, making them versatile for different cocktails. Their consistent melting enhances flavor and texture without overpowering the drink, which is crucial for cocktail perfection.

Crushed Ice: For slushy drinks, crushed ice cools and dilutes rapidly. Its small, uniform pieces preserve flavors and encourage creativity in mixology.

Collins Spears: These long, slender ice shapes are designed for tall drinks. They enhance presentation and provide a unique vertical chill, which is especially beneficial for carbonated cocktails. They help maintain carbonation and temperature balance while adding sophistication.

Ice Spheres: Slow-melting and elegant, ice spheres offer the slowest dilution rate, making them perfect for sipping high-quality spirits and crafted cocktails. They elevate the presentation and demonstrate the care taken in cocktail preparation.

Overall, the choice of ice affects cocktails' flavor, temperature, and aesthetics, highlighting its essential role in mixology. This awareness of ice quality and type underscores the importance of ice as a critical component in creating an exceptional drinking experience. (Team, 2024)

While researching the ideal shape of ice suitable for cocktail making, it was found that restaurateur and bartender Francis Schott purchased a Kold-Draft Ice Machine, which provided the bar with stylish, chunky cubes rather than hollow and flimsy standard bar ice. (Simonson, 2016)

Role of Ice in Cocktail Making

The quality of ice is vital for both taste and appearance in cocktails. Clear ice is best achieved using purified or distilled water, boiled to remove gases, and frozen slowly in an insulated container with directional freezing to remove impurities. Ice can be shaped with standard trays, crushers, or molds, and specialized presses are ideal for round spheres. To preserve ice quality, store it in an airtight container to avoid odor absorption and flavor contamination. Prompt use

reduces cloudiness, ensuring better ice for high-quality cocktails. Proper preparation and storage are key to optimal ice. (Turner, 2023)

Camper English, author of **The Ice Book**, defines a "dirty dump" as using the same ice to shake and serve a drink. While this can make the drink appear frothy and cloudy, especially with herbs or fruit, it's not recommended for fizzy drinks, as it can flatten carbonation. However, English supports the technique for cocktails like a mai tai or margarita on the rocks, where the noncarbonated ingredients and the drink's aesthetics are suited to the dirty dump method. (Brady, 2023)

The most significant innovation in ice preparation in modern American beverage culture comes from Japan, where ice is highly valued. This cultural respect has influenced global bartending, with Japanese mixologist Hidetsugu Ueno of Bar High Five popularizing precision-carved ice "jewels" to enhance cocktail quality. This approach emphasizes the importance of ice shape and purity, contributing to a broader trend of treating ice not just as a cooling agent, but as an essential element in the art of cocktail-making. (Rail, 2020).

Ice in drinks chills and dilutes the drink, varying the rate according to its size, shape, and mixing method. This happens when mixing and after pouring if the cocktail is served on the rocks. To effectively manage these effects, bartenders must carefully select the appropriate ice for each drink. (Holmberg, 2014)

Chilling The primary function of ice is to cool the drink. Cocktails that are properly cooled are both refreshing and energetic, while beverages that are not chilled enough can be less pleasurable. The temperature of a drink influences its flavor, with particular flavors being more noticeable at certain degrees.

Dilution: Ice melts and dilutes cocktails, which can improve flavor blending but may weaken the drink if used excessively. Finding the ideal balance entails selecting the right ice and understanding its melting properties.

Appearance: Ice is essential to a cocktail's look. Clear, well-shaped ice improves the drink's visual appeal, but foggy or uneven ice reduces it. Ice is an integral part of the drink presentation and overall experience in premium establishments.

Research Methodology: Both primary and secondary data collection methods were applied by conducting a survey and referring to books and online articles. Quantitative research was done by conducting a survey and sharing a structured questionnaire with a sample size of 35 people

actively working in the beverage industry. The following data was collected

Data analysis/Interpretation:
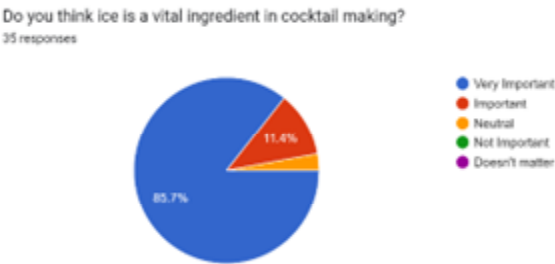
Figure 1: The above figure shows that the majority of bar professionals think that ice is a vital ingredient in cocktail making, while a smaller number of bar professionals think that ice is not a very important ingredient.

Figure 2: From the above figure, we can deduce that around 85% of bar professionals think that the shape and size of ice affect the taste of cocktails.
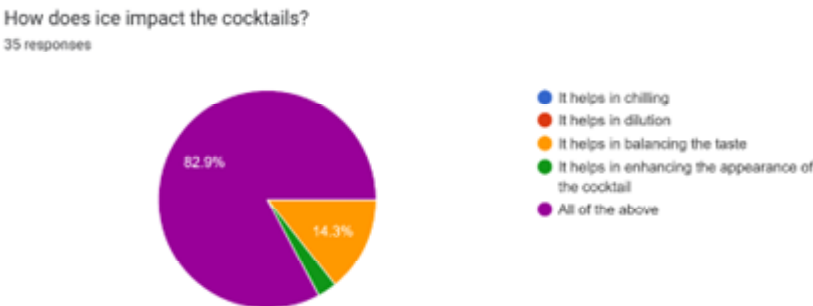
Figure 3: From this pie diagram,, we can see that around 82.9% of bar professionals think that ice has a crucial role in cocktail making, including chilling the drink, dilution, balancing the taste of a drink and enhancing the appearance of the cocktail.

Do you use clear ice in your bar?
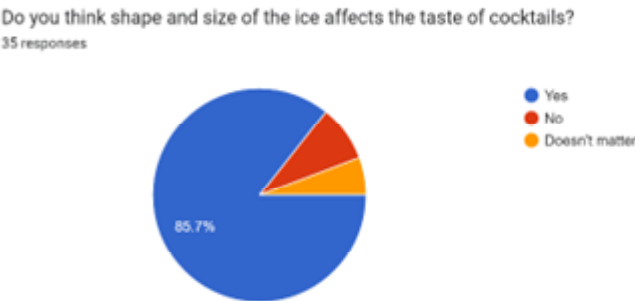35 responses
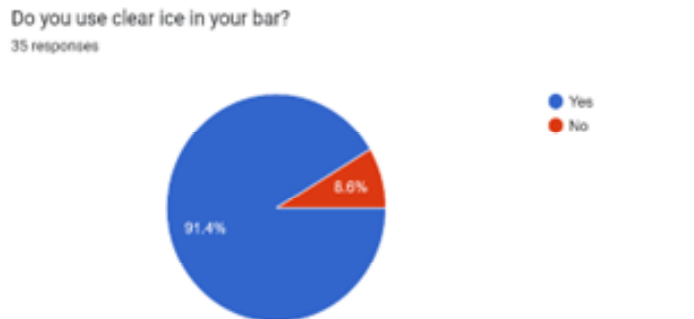
Figure 4: The above figure reveals that 91.4%, which is a huge percentage of bar professionals, use clear ice.

Do you think that the quality of ice affects the taste of the cocktail?
35 responses
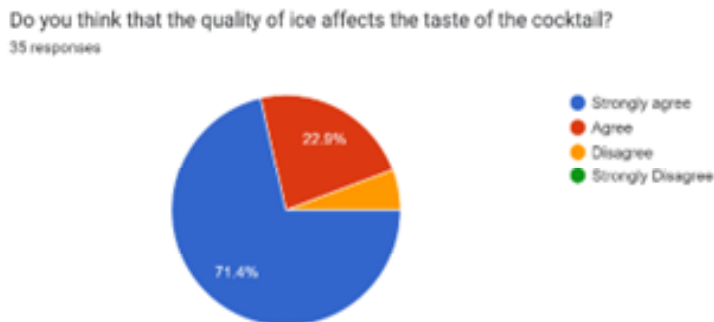
Figure 5: 71.4% of bar professionals strongly agree that the quality of ice affects the taste of the cocktail, while a very small percentage of people do not agree with this.

Does temperature of ice affects the quality, taste and appearance of the cocktail?
35 responses
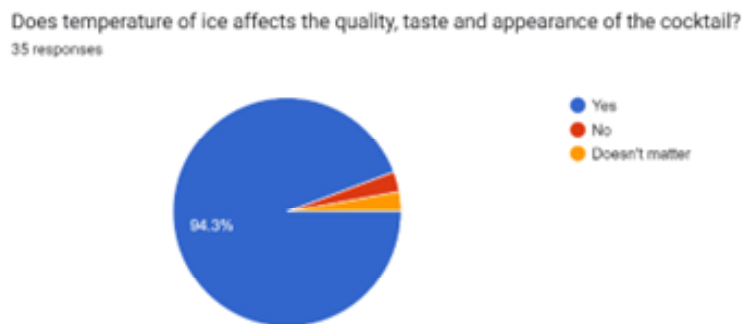
Figure 6: The given figure shows that 94.3% of bar professionals believe that temperature affects the quality, taste, and appearance of cocktails.
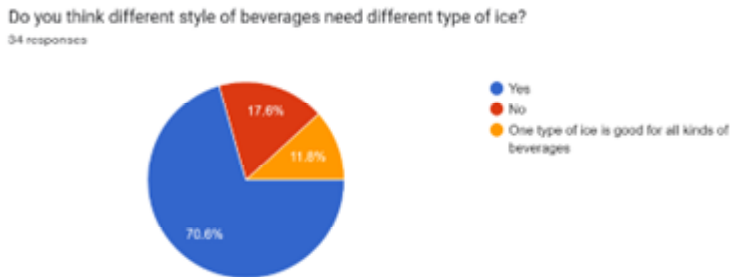
Figure 7: 70.6% bar professionals think that different styles of beverages need different type of ice while 17.6% think otherwise. On the other hand, 11.8% bar professionals think one type of ice is good for all kinds of beverages.
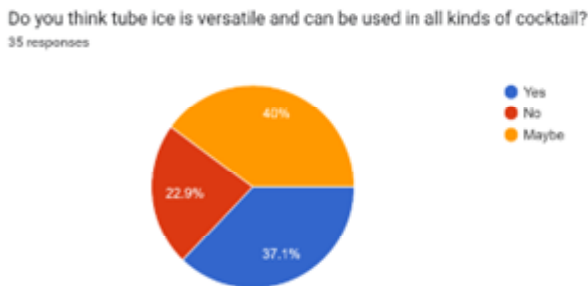
Figure 8: The above figure shows varied opinions about tube ice. 37.1% of bar professionals feel that tube ice is versatile, while 22.9% think the opposite. 40% of bar professionals are not sure about it.

Figure 9: 40% of bar professionals know ice-making techniques.

Are you aware of directional freezing technique?
35 responses
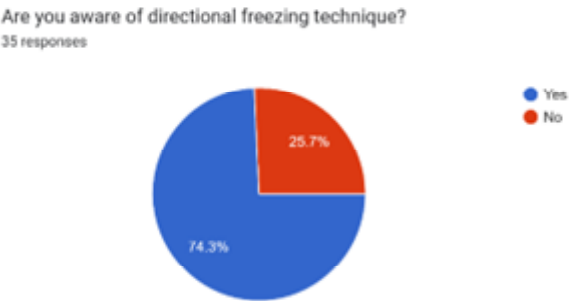
Figure 10: The above figures show that 74.3% of bar professionals are aware of the directional freezing technique.

Do you think that speed required for freezing can impact the clarity of ice?
35 responses
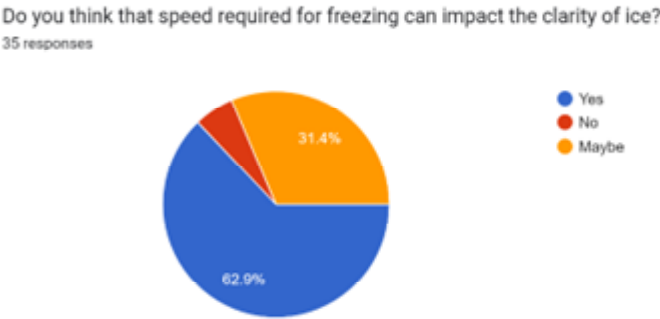
Figure 11: Around 62.9% of bar professionals think that speed required for freezing can impact the clarity of ice.

Do you think making clear block of ice in house can help you focus on the quality of cocktail's taste, balance and appearance?
35 responses

Figure 12: The above diagrams show that 57.1% of bar professionals think that making clear block ice in house can help to focus on the quality of the cocktail's taste, balance and appearance.
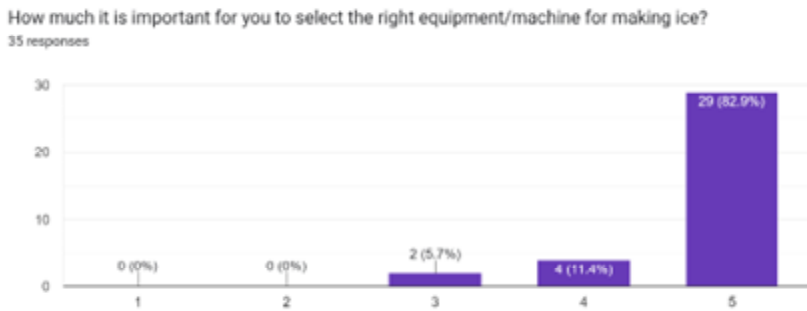
Figure 13: The above graph shows that 82.9% of bar professionals think that it is very important to select the right equipment/machine for making ice.

CONCLUSION

The evolution of ice from a luxury item to a staple in everyday life has significantly impacted beverage consumption. The 19th-century natural ice trade and advancements in artificial refrigeration made ice widely accessible, enabling the creation of diverse cocktails. Scientifically, ice's structure, melting properties, and clarity are vital for cocktail preparation. Clear ice enhances the visual appeal and improves the taste of cocktails, merging art and science in mixology. As cocktail culture progresses, there is an increasing focus on high-quality, well-shaped ice, reflecting a broader trend toward excellence in the beverage industry. However, research indicates a notable gap in bartenders' understanding of ice's importance, particularly in India. While bartenders in significant cities are beginning to appreciate clear ice, about 80% still lack a comprehensive understanding of its science and applications, especially in mid-tier and lower-level bars. Targeted educational initiatives on ice selection and production methods are essential to imp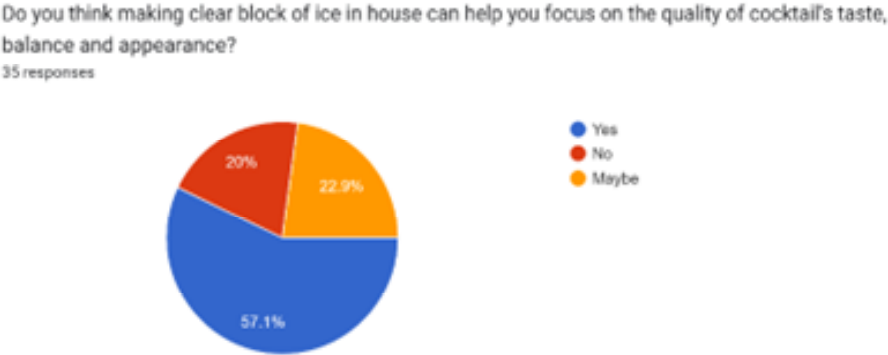roving cocktail standards. While awareness is growing, there is still a critical need for enhanced education and access to quality ice. This will elevate cocktail culture and consumer experiences, highlighting ice's crucial role in mixology.

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Digital Tourism Leverages Digital Tools and Information Communication Technologies

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ABSTRACT

Digital transformation is reshaping the tourism industry by integrating advanced technologies such as information communication technologies (ICT), artificial intelligence (AI), the Internet of Things (IoT), and virtual reality (VR) to enhance traveller experiences and streamline operations. This transformation enables tourism organizations to deliver personalized services that meet the expectations of modern consumers, fostering higher customer satisfaction and loyalty. For example, airlines like Qantas utilize customer data to tailor services, while mobile apps enhance overall travel experiences. Destination marketing organizations (DMOs) are shifting from traditional consumer-centric models to more interactive, engaging approaches driven by social media and mobile communication, effectively expanding their reach.

The Fourth Industrial Revolution emphasizes sustainability and inclusivity in tourism, promoting innovations like smart travel initiatives that enhance convenience and security for travellers. Despite the numerous advantages of digitalization, challenges such as skill gaps, financial constraints, and infrastructure disparities persist, particularly for small and medium-sized enterprises (SMEs). As the tourism sector continues to embrace these digital solutions, it must also address these barriers through targeted policy measures, mentoring, and technical assistance. Ultimately, a balanced integration of digital and physical elements will allow the industry to drive sustainable growth and meet the evolving needs of travellers globally.

Keywords: Digitalization, tourism, information, technology, business.

INTRODUCTION

Digital tourism utilizes digital tools and information communication technologies (ICT) to enhance tourism experiences, improving service quality and visitor satisfaction while boosting the competitiveness of tourism organizations (Benyon et al., 2014). The travel industry has led in digital innovation, with the World Economic Forum's Digital Transformation Initiative (DTI) projecting that digitalization in aviation, travel, and tourism could generate up to US$305 billion in added value from 2016 to 2025. This shift is expected to redirect approximately US$100 billion from traditional businesses to emerging competitors, resulting in overall benefits for consumers and society estimated at US$700 billion (World Economic Forum, 2017). Technology now influences every aspect of the travel ecosystem, highlighting the need for workforce development focused on these advancements (United Nations World Tourism Organization, 2016).

A key benefit of digitalization in tourism is the ability to collect and analyze customer data, which allows companies to create personalized experiences tailored to today's consumer expectations. By understanding customer behavior through data, businesses can enhance the entire customer journey. For instance, Australian airline Qantas has partnered with the customer data platform Umbel to develop a data hub that focuses on customer preferences and behaviors. This hub facilitates personalized in-flight entertainment, real-time ticket booking, and streamlined check-in. Additionally, Qantas provides a smartphone app that serves as a travel companion, anticipating customer needs and offering tailored support throughout their journey. These data-driven initiatives not only enhance customer satisfaction but also bolster Qantas's competitive advantage in the airline industry (Qantas Airways, n.d.).

Frank Cuypers, from the tourism consultancy Destination Think, highlights that digital disruptors like social media, mobile technology, and accessible information allow destination marketers to reach consumers and stakeholders on an unprecedented scale. To adapt, destination marketing organizations (DMOs) need to shift from a consumer-centric to a hosting model—moving from one-way communication to engagement and transitioning from traditional marketing to management practices. This shift is vital for DMOs to effectively engage in today's evolving destination marketing landscape (Cuypers, F).

Mobile platforms and communication are crucial for destination marketing organizations (DMOs) to engage with visitors throughout their journey—from awareness and booking to experiencing the destination and post-visit interaction. Social media amplifies word-of-mouth recommendations, turning travelers into content creators central to marketing strategies. According to TCI Research, 31% of sharing economy users often share their travel experiences online, broadening their

recommendations' reach (TCI Research).

Digital transformation modernizes traditional business processes by leveraging digital technologies to create new services and enhance customer satisfaction. Embracing these solutions enables businesses to improve operational and management practices and adapt continuously to market changes, focusing on long-term planning and integrating technology into core operations (Gibson, 2024; Deloitte, 2020).

The tourism industry has been a pioneer in adopting digital transformation, integrating information and communication technology (ICT) into business practices. This evolution includes smart travel initiatives, which enhance convenience and security through features like smart visas and automated security, thereby reshaping tourism business models and improving customer engagement (Buhalis and Amaranggana, 2014; World Economic Forum, 2018).

The digitalization of travel has significantly enhanced affordability, accessibility, and convenience. The World Economic Forum's Digital Transformation Initiative projects that by 2025, digital integration in aviation, travel, and tourism could contribute up to $305 billion in industry value, shift $100 billion from established companies to newcomers, and yield $700 billion in benefits for consumers and society. This transformation underscores the pivotal role of technology-driven productivity in tourism, with smartphones and social media becoming essential for improving hospitality experiences.

To adapt to these changes, many tourism businesses are implementing digital solutions to enhance productivity, customer satisfaction, and profitability. For example, Marriott International has introduced a mobile app that allows guests to access their rooms directly, improving their overall experience while providing 24/7 customer support. Continued digital advancements are necessary to meet future workforce development needs and employee expectations.

The Fourth Industrial Revolution and Its Impact on Tourism

The Fourth Industrial Revolution has brought unprecedented changes to societies, particularly through digitalization, which has significantly impacted the tourism sector. As an early adopter of online booking for flights and hotels, tourism has established itself as a leader in digital innovation, continuously embracing new technologies to enhance competitiveness, support growth, and align with the United Nations' Sustainable Development Goals (SDGs).

Digitalization aims to improve the travel experience by making it seamless, convenient, and high-quality while promoting sustainability. Technologies such as the Internet of Things (IoT), artificial

intelligence, augmented and virtual reality, and blockchain are transforming tourism, enabling more efficient, inclusive, and sustainable offerings. These advancements also address challenges like seasonality and overcrowding, leading to the development of smarter destinations.

Furthermore, digitalization fosters environmental sustainability through innovations in resource efficiency and smart assets, resulting in a reduced industry footprint and the creation of new job roles within the sector.

Smart Travel Facilitation

Similar to the transformative impact of smartphones on telecommunications and media, a comprehensive smart travel model—encompassing smart visas, streamlined borders, security procedures, and infrastructure—is set to revolutionize tourism. With these advancements, travelers can book flights and check in online, store digital boarding passes on their smartphones, and pass through automated clearance gates with ease. This approach not only simplifies the travel experience but also enhances security.

In summary, digital integration in tourism is leading to a more efficient, sustainable, and inclusive industry. Moving forward, embracing these technological advancements is essential for ensuring tourism's continued growth and its positive contributions to global development goals. The future of travel rests in innovation, and by harnessing digital tools, the tourism sector can tackle current challenges and elevate the travel experience for people around the world (UN Tourism).

Digital Solutions for the Public Sector and Tourism Managers

Digitalization is essential for local authorities and destination management organizations (DMOs) in managing the seasonal influx of tourists, which impacts local resources, infrastructure, transport systems, and services. By integrating digital tools, these entities create a smoother and more sustainable arrival experience for visitors, especially benefiting rural and remote destinations. Digital tools also improve trend tracking and measurement, which is transformative for developing sustainable tourism strategies at local, regional, national, and EU levels (European Commission, 2020).

Digital Solutions for Visitors

For tourists, digitalization enables personalized experiences that they can access before, during, and after their trip. It provides integrated, user-friendly information on services, special offers, maps, events, experiences, infrastructure, and sustainability and safety levels.

A key to successful digital adoption lies in stakeholder readiness, which depends on the skills of those involved and governance systems that encourage collaboration among residents, visitors, various government levels, and sectors. With increased preparedness and cooperation, digital solutions can greatly enhance the tourism experience while advancing sustainable practices (European Commission, 2020).

The Impact of Digital Technologies on the Tourism Industry

Digital technologies have reshaped the tourism sector, transforming businesses, products, experiences, ecosystems, and destinations. This shift has redefined the traditional roles of both tourism providers and consumers, creating new roles, relationships, business models, and skills. Digital platforms have expanded the variety and volume of tourism services available, with on-demand features accelerating transactions, market visibility, and feedback loops. These developments offer both opportunities and challenges for tourism SMEs as they adapt to evolving consumer demands and explore new markets. Fostering an innovative digital culture within tourism SMEs is crucial for maintaining the global competitiveness of European destinations (Dredge et al., 2018).

Challenges Faced by Tourism SMEs

The diversity and complexity across tourism sub-sectors and the varied needs in urban, rural, and island areas present regulatory and capacity-building challenges in digital tourism. Additionally, institutional differences across Europe can make digital solution adoption more complex (Dredge et al., 2018).

Skills Development

A skilled workforce is critical for digital integration in tourism, yet many SMEs lack the technical resources necessary to fully embrace digital tools. This gap is often due to a lack of awareness about the skills required and limited staffing, which constrains the time and effort available for learning new digital processes (Dredge et al., 2018).

Financial Barriers

Financial constraints are frequently cited as a major barrier to adopting digital technologies in tourism SMEs. Many businesses are uncertain whether the investment in new technologies will yield sufficient returns, which often leads to hesitancy in adopting digital solutions (Dredge et al., 2018).

Infrastructure Challenges

Access to digital infrastructure varies significantly based on geographic location. While SMEs in urban areas usually benefit from modern wireless and fiber broadband, those in rural or remote regions often face limited infrastructure, making it harder to compete in a digital market (Dredge et al., 2018).

Mentoring Support

Mentoring initiatives play a vital role in encouraging innovation, creativity, and capacity building in the tourism sector. By connecting tourism enterprises with technology and cultural sectors, mentoring provides timely, relevant support, helping SMEs navigate digitalization challenges more effectively (Dredge et al., 2018).

Recommendations for Policy Responses

To tackle the challenges facing tourism SMEs, policy measures should harness knowledge networks and cluster initiatives led by public bodies and professional associations. Regular consultation with these groups is essential for crafting digital policies that address the specific e-business, e-commerce, and e-governance needs of SMEs across local, regional, and national levels.

Targeted Technical Assistance

Technical support should be customized to assist different groups of SMEs—those just beginning digital adoption, those transitioning into e-commerce, and those already advanced in digitalization and exploring new technologies. This support should align with lifelong learning goals and promote workforce digital empowerment.

Promoting Reliable Digital Infrastructure

Reliable digital infrastructure is especially important in rural regions, where connectivity challenges are common. Policymakers should prioritize efforts that improve digital literacy and infrastructure, ensuring inclusive access to the digital economy across all areas.

Incorporating Smart Growth Strategies

Digital research and development in tourism should incorporate smart growth strategies to promote long-term sustainability. Cross-industry collaboration is essential to integrate tourism activities into larger economic value chains, supporting overall economic development (Dredge et al., 2018).

Exploring the Potential of Digital Transformation in Tourism

Despite the transformative potential of digital solutions in tourism, many advantages remain untapped due to various sectoral challenges. A literature review by Rodrigues, Eusébio, and Breda (2023) highlights existing knowledge gaps regarding the role of digital transformation in promoting sustainable development within tourism and suggests areas for further research.

The emergence of Industry 4.0 has led to the creation of a "phygital" environment, where the digital and physical realms converge to enhance production processes. This integration depends on interconnected information and communication technologies (ICTs) such as artificial intelligence, the Internet of Things (IoT), blockchain, cloud computing, and big data. These advanced technologies facilitate the development of a smart value chain, allowing for continuous data exchange and processing through autonomous methods (Xu et al., 2018).

The Role of ICTs in Smart Tourism

Information and Communication Technologies (ICTs) are central to the smart tourism concept, which aims to create innovative processes by maximizing stakeholder contributions. In this framework, the emphasis is on leveraging the potential of these technologies rather than their physical presence. The goal of smart tourism is to boost sustainability by efficiently using technologies and existing resources to improve competitiveness (Buhalis et al., 2019).

Smart tourism is structured around three main components that make use of information and communication tools: smart destinations, smart experiences, and smart business systems (Lopez, 2015).

Understanding E-Tourism and Digital Tourism Strategy

E-tourism leverages information and communication technologies (ICTs) to enhance efficiency and effectiveness across various sectors of tourism, including travel, hospitality, and catering. Defined by Buhalis (2003), it encompasses activities such as online travel agencies, e-information, e-booking for accommodations and transport, and electronic payments.

The "National Tourism Development Strategy 2030," introduced in 2018, emphasizes a Digital Tourism Strategy aimed at improving professional competitiveness, digital skills, digital marketing, economic transparency, and data management, among other areas. This shift toward digital tourism is driven by new tools and techniques, prompting the development of a model that integrates marketing tools within a cohesive framework to adapt to technological changes. By understanding

and implementing these digital tools, businesses and destinations can enhance their competitiveness. A long-term digital tourism strategy is essential for effectively applying digital solutions throughout the sector (Happ and Ivancsó-Horváth, 2018).

The Role of Digital Technology in Tourism

Digital technology plays a crucial role in enhancing the tourist experience by providing information about resources and infrastructure, promoting new experiences, and improving comfort and safety at destinations. It aids in purchasing goods and services, as well as in planning personalized experiences through data analysis of past behaviors. Technologies such as websites, social media, online banking, and mobile applications enhance service quality and facilitate bookings for excursions, accommodations, and transportation.

The transformation of tourism infrastructure has made travel a popular leisure activity, with travel apps becoming essential for planning and executing trips. However, the market's saturation with numerous options has led to fierce competition for customer loyalty. This competition can be analyzed by considering the products available to meet consumer needs, reflecting the rise of unorganized tourists who adeptly use digital tools to plan their travels. While cost remains a contentious issue, the quality of experiences increasingly drives growth in this traveler segment (Bozhuk et al., 2020).

The Impact of Digitalization on Sustainable Tourism Development

Digitalization has significantly transformed the delivery and management of tourism experiences, fostering a relationship with sustainable tourism development. It enhances access to information and improves interactions between stakeholders and destinations, empowering travelers to make informed choices that minimize their environmental impact. Technology enables destination managers and businesses to create innovative products, optimize resources, and promote effective marketing while contributing to environmental conservation. Communities gain access to tourism value chains and services previously unavailable. However, challenges such as data protection concerns, resource limitations, and the digital divide must be addressed. By adopting digital technology ethically and inclusively, tourism stakeholders can unlock new opportunities for sustainability, resilience, and inclusive growth in the sector (Ndhlovu, Kifworo, and Dube, 2024).

The Impact of Digital Transformation on the Tourism Industry

The tourism industry has undergone a major transformation through digital advancements, including cloud-based booking systems and digital platforms for sharing experiences. Smart devices now

enable travelers to manage nearly all aspects of their trips independently. Digital transformation addresses traditional challenges and promotes innovation by introducing new business models and opportunities for tourism companies to redefine customer value and operational strategies. However, a balance between digital and physical processes remains essential, as some customer and employee needs are not fully digitizable. To stay competitive, tourism managers must adapt business models to align with evolving technologies and seek creative value delivery methods (Imtiaz and Kim, 2019).

Evolution of Travel Booking

Historically, individuals were required to visit travel agents in person whenever they wanted to book a ticket. However, the rise of digital technologies such as smartphones, wearables, virtual reality, and artificial intelligence has drastically transformed this process. These innovations have led to the establishment of computerized reservation systems and global distribution systems, enabling tourism businesses, including tour operators and airlines, to meet customer demands more effectively and at a lower cost (Chatzisavva, 2018).

Changing Customer Expectations in Tourism

The rapid advancement and widespread adoption of digital technologies within the tourism sector have significantly shifted customer expectations. With the availability of unlimited mobile internet and the growth of social networks, businesses are increasingly focused on capturing customer attention through unique ideas and promotions that facilitate communication, sharing, and operational efficiency (Alexieva, 2016).

The Impact of New Economic Models on Tourism

The tourism industry is embracing innovation through emerging economic models like the sharing economy, which relies on collaborative consumption platforms such as Booking.com, Uber, and Airbnb to offer personalized, data-driven experiences. This trend is set to expand, further shaping new economic frameworks within tourism (Sundararajan, 2016). Additionally, the integration of the Internet of Things (IoT) presents transformative opportunities for the sector. IoT applications spanning personalization, real-time information, security, and streamlined operations are collectively advancing "smart tourism." These digital tools enrich customer experiences and support operational efficiency, emphasizing the need for IoT adoption to foster a dynamic, engaging, and sustainable tourism ecosystem (Dave, 2018).

The Impact of Virtual Reality on Travel Marketing

Virtual reality (VR) technology has become a powerful tool for marketing travel brands and promotional campaigns. By utilizing this technology, travel companies can offer engaging experiences that allow customers to explore new destinations or experience exotic adventures from the comfort of their homes. The application of VR in the travel and tourism sector significantly shapes how customers perceive destinations. The potential applications of virtual reality in tourism are extensive, as this technology has revolutionized the industry by enabling travelers to virtually tour hotels or attractions prior to booking (Jayendran & Rejikumar, 2018).

The Importance of Customer Engagement in Tourism

With constant connectivity, companies now prioritize delivering personalized, relevant, and timely product information, often more crucial than the product itself. This shift emphasizes customer engagement as essential for success in tourism. To strengthen relationships, many tourism companies globally have adopted engagement strategies to interact with clients throughout their journey before, during, and after their experiences. Personalization and relevance are central to building effective customer connections (Acquaro, M., 2017).

RESEARCH METHODOLOGY

The research methodology used in this study is based on qualitative analysis, aimed at capturing in-depth insights into tourists' experiences and perspectives on digital tourism. A qualitative approach was chosen to allow for a rich, descriptive understanding of complex, subjective elements. Data were gathered through focus groups. This method facilitated the exploration of themes and patterns, analysed using thematic analysis to identify recurring ideas and perspectives across the data. This methodology provided a comprehensive understanding of the subject by focusing on depth and context, making the findings credible.

CONCLUSION

In conclusion, digital transformation is revolutionizing tourism, enhancing both the traveler experience and business operations. By adopting advanced ICTs like IoT, AI, and VR, tourism businesses deliver personalized, seamless, and immersive experiences that meet modern traveler expectations. Digital platforms like Airbnb and Uber showcase the sharing economy's impact, providing travelers with convenience and diversity in options. Meanwhile, smart tourism enables efficient resource management, aligning the sector with global sustainability goals. For tourism SMEs, digitalization opens new markets but also introduces challenges, such as skills gaps and

infrastructure needs, which require targeted support. As Industry 4.0 propels further innovation, a balanced integration of physical and digital offerings will allow tourism organizations to drive sustainable development, boost competitiveness, and foster an inclusive, resilient ecosystem that meets the evolving needs of travelers worldwide.

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Unfolding Potential of Heritage Tourism at Cacabe de Tanna

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INTRODUCTION

Cacabe de Tanna is located along the Western Coast of India and is a hill fort called Giri Durg. It has been mentioned in countless old maps and texts. It served as a coastal port for ships and was famous for horse trade between Arabs, Portuguese, Marathas. It is believed to have been used as a storehouse, guardian against sea, coastal attacks. However, overgrowth of vegetation and more attention to larger heritage sites had led to neglect of this site that faced encroachment for a very long time. In 2023 it was restored by a collaborative effort of Government and Corporate Social Responsibility. This study focuses on development of Heritage Tourism at Cacabe de Tanna, importance of role of C.S.R., new initiatives taken up by Cultural and Tourism Industry and ecological importance of forts located on coasts. It also highlights the preservation, promotion of Fort Tourism and its importance in Modern Education Systems.

OBJECTIVES

1. To study Cacabe de Tanna as a Heritage Site of Historical Importance

2. To study Corporate Social Responsibility as a path to reviving Heritage Tourism

3. To study the influence of Coastal Forts in making cities sustainable

4. To study importance of Fort Tourism in Modern Education System

RESEARCH METHODOLOGY

This research has been conducted through primary, qualitative data collected from talks with personnel specialised in Archaeology, Fort Management as well as secondary data, that is through

books, research papers, interviews and sites.

LITERATURE REVIEW

(Burgess) had classified Cacabe de Tanna as a Grade III monument in the *'Revised List of Antiquarian remains in the Bombay Presidency'* that is monuments that are not of much archaeological, historical importance in 1885.

(Naravane) – has written a book highlighting the importance of coastal forts along Western Coast of Maharashtra and the influence of Portuguese, Marathas and British powers.

(Academy of Architecture Mumbai) - prepared a report which states the heritage value of Cacabe de Tanna after multiple surveys and excavations, listing the various archaeological remains at the site.

(Architect and Interiors India) - published an article mentioning successful completion of The Ghodbunder Fort Conservation Project taken up by Sankraman Design Studio under Maharashtra Vaibhav Protected Monuments Adoption Scheme of the government.

(Devyani) - published an article in the 7th issue of *'African Journal of Landscape Architecture'* where Sion, Thane and Ghodbunder fort are studied comparatively thereby stating need of involvement of Cacabe de Tanna in tourist circuits and suggesting repurpose of the fort as an open-air theatre.

(Joshi) - published a book in Marathi which mentions importance of forts and consists of methods of fort conservation and preservation.

(Narkhede and Darade) - published research stating the ethics of fort maintenance and enhancing their tourism potential.

 (Anastassova) - has conducted a survey through her research paper which focuses on challenges and need of proper web marketing of heritage sites of tourism in developing countries.

DATA ANALYSIS

Heritage Value of Cacabe de Tanna

Cacabe de Tanna is a hill fort with steep stone cut walls. It is also a military outpost that has been mentioned in various old maps and texts. It has a strategic location as there is a small passageway for the river which proves the existence of ship building taking place at the fort.

Although built by the Portuguese, it was strengthened during the reign of Sambhaji Maharaj of the Maratha Empire. At present, architectural buildings located include the base of a lighthouse, dome remains, and stone arches of a Portuguese Church dedicated to Saint John which became the bungalow of Nawab of Ghodbunder, serving as the M.T.D.C. guest house at present. There are also remains of a store house, water tank, 2 English tombs and a rest house owned by a Parsi ship builder called Navroji Vadia. All this evidence enhances Cacabe de Tanna's potential as a site for Heritage Tourism.

ADOPT A MONUMENT SCHEME

'Adopt a Monument Scheme' is an initiative by the Government to protect and conserve Monuments of Heritage, Historical Value with the help of private companies, NGOs and individuals. This scheme is known as the 'Maharashtra Vaibhav Protected Monuments Adoption Scheme' in the State of Maharashtra.

Under this scheme The Sankraman Design Studio, a private company was handed over the Project of Cacabe de Tanna for Architectural Conservation. The fort was successfully restored in 2023 under leadership of Shwetambari Shinde and Sapna Lakhe.

Fig.1 (left) and Fig.2 (right) Digital and live Layout of Cacabe de Tanna cited from: (Architect and Interiors India)

RESTORATION OF CACABE DE TANNA

The Sankraman Design Studio is a private company which has successfully completed the

restoration of Cacabe de Tanna. This project called The Bunder Print overall totals to around 2 crores rupees. The restoration of Cacabe de Tanna was important as it had wilderness, shrubs growing all around. The roots, creepers and branches of vegetation had grown through the walls of the fort, thereby making it weak and unstable. The southern walls of fortification had disappeared leaving no traces about the location of entrances.

Fig. 3 wilderness growth (left) and Fig. 4 creepers penetrating walls (right) fort before restoration: (Academy of Architecture Mumbai)

Once restored, Cacabe de Tanna has regained the majestic look that stands proven to its rich history. It is enabled such that locals can feel a connect to their heritage. An enhanced space has been made which can be used for various events, activities. Walls with various door openings can now be clearly seen to have a semicircular arch. It is believed to have been used for residential purposes.

Fig. 5 (left) and Fig. 6 (right) doorways in wall, Images after restoration (Architect and Interiors India)

Fig. 7 (left) and Fig. 8 (right) After Restoration of Fort

This project also received the 'Restoration Project of the Year' at the Aces of Space Design Awards 2023. The potential for Heritage Tourism has been revived through this restoration.

COASTAL FORTS ARE GREEN LUNGS OF THANE

Cacabe de Tanna is located along the Western coast of India. It has a wide extent of mangroves at its base that act as a carbon sink naturally. The fort also provides a view of Vasai Creek and areas beyond Ulhas River. It also has non-native species of Baobab planted by the Portuguese. A Case Study involving Cacabe de Tanna has proved that it is rich in biodiversity (Devyani). The fort itself is a green patch that aids in reducing the pollution of the urban city. It plays an important role in making Thane a Sustainable City and can therefore be called as the lungs of Thane.

CHALLENGES

Cacabe de Tanna had faced severe neglect after being classified as Grade III in 1885. The lack of maintenance led to an extensive heritage loss when wilderness and vegetation took over many archaeological structures, invading making them hollow internally such that the structures had risks of collapsing in harsh monsoon rain. Although restored now it is possible that the Ghodbunder Fort would go back to its past state if measures to protect it are not enacted in the future. The lack of security and entrance fee makes Cacabe de Tanna prone to the challenge of trespassers who do not understand the importance of heritage monuments. There is also a need to ensure that

the fort does not become a haven for alcoholics and drug addicts.

RECOMMENDATIONS AND SUGGESTIONS

C.S.R. as the Future of Heritage Tourism

Corporate Social Responsibility (C.S.R.) plays an active role in the revival of Heritage Tourism. It has been mentioned in The Companies Act 2013 that Conservation of National Heritage is a function of C.S.R. Private companies with high turnovers can provide funds for restoration, protection and promotion of heritage sites. This involves activities like setting up accommodation for tourists, restaurants, cafes, plans for architecture restoration, regular check and cleaning drives etc. while ensuring that the original heritage value of the site is not lost. C.S.R. can be the aid through which unexplored heritage sites can be popularized amongst tourists.

Web Marketing of Cacabe de Tanna

Web Marketing and the involvement of new technology in promotion of Heritage Tourism is necessary. However, it should be ensured that the promotion is proper in nature. The table mentioned below shows a survey on websites that promote Heritage Sites for Tourism in Developing Countries.

Table 1: cited from: (Anastassova)

Sr. No.	Website Characteristics	Importance Scale	Performance Scale
1.	Ease of Navigation	3.8	3.7
2.	Content of Site	4.6	4.3
3.	Attractive design	4.3	3.8
4.	Accessibility	5.1	4.1
5.	Key Words	3.4	3.1
6.	Desire for Next Visit	3.2	3.5
7.	Provoking Visit to the Heritage Site	3.4	3.9

Table of Importance and Performance Scale of Websites in Promotion of Heritage Tourism

Here in Table:1, Scale of 1 = Not Important, Scale of 6 = Very Important

Performance Scale of 1 = Poor, Performance Scale of 6 = Excellent

This proves the significance of proper web marketing of heritage sites like Cacabe de Tanna. A website with authentic information, easy access, proper key words which pulls tourists to visit the site is necessary.

Ghodbunder Fort and Modern Education

It has been observed that a local school, 'Raja Shivaji Vidyalaya' practiced cleaning drives and set up cultural exhibitions by using the fort as an open-air auditorium (Academy of Architecture Mumbai) The New Education Policy 2020 includes Forts and Fortification as an important subject that has been accepted by various universities, colleges. Students can be taken on educational tours, aiming on field projects to forts like Cacabe de Tanna due to their Historical importance. Experience learning can be encouraged.

Tourist Involvement at Cacabe de Tanna

Cultural and Tourism Industries can together arrange various activities for the repurpose of Cacabe de Tanna. These activities would involve sustainable involvement of tourists while also promoting the historical, heritage and archaeological importance of the fort.

Table 2: Tourist Involvement and Repurpose of Cacabe de Tanna (Source: primary)

Sr. No.	Repurpose	Activities
1.	Open Air Theatre	Street Plays, Re Enacting Historical Scenes, Short Film Competitions
2.	Cultural Exhibitions	Paintings, Wildlife Photography, Nature Photography, Bird Photography, Pottery, Local Food exhibitions can be held
3.	Art Street	Cultural Meets for Youth, Young Artists, Trekkers, History Enthusiasts, Archaeologists etc
4.	Heritage Walks	Understanding Historical Significance of the site
5.	Viewing Decks	Bird Watching, Wildlife Photography, Stargazing etc
6.	Educational Tours (Field Projects)	Practice of Educational Tours, tree plantation drives, cleanliness drives etc
7.	Other Activities	Introduction of adventure activities like rifle shooting, parks, rope climbing, treasure hunts etc.

Thus, it is observed from the above Table:2 that with successful involvement of tourists, students and fort enthusiasts Cacabe de Tanna has been added into a larger tourist circuit. This has been possible under Swadesh Darshan where various unexplored tourist sites are connected and advertised amongst tourists. However, once tourists start visiting Cacabe de Tanna it also needs to be ensured that there is no over tourism that may cause harm to the Heritage Site and the locals.

FINDINGS OF THE STUDY

It is evident that Cacabe de Tanna, has played an influential role during the Portuguese, Maratha and British Rule in India. 'Adopt a Monument Scheme' has helped the fort regain its heritage value. Corporate Social Responsibility is the gateway to a sustainable future of Ghodbunder Fort and other Heritage Sites. Heritage Tourism at Cacabe de Tanna needs to be promoted through various technological mediums. It has been observed that Cultural and Tourism Industries have opportunities to generate new recreational activities at Cacabe de Tanna. Swadesh Darshan has played role in successfully connecting Cacabe de Tanna to a larger tourist circuit. Coastal Forts have been proven to be significant as they are green lungs that make Thane a Green City with an extensive vegetative cover . At present, the importance of Fort Tourism is also highlighted in education through experience learning. Cacabe de Tanna is an example of inspiration for other forts that are being restored into heritage sites.

CONCLUSION

Through this study it can be concluded that Cacabe de Tanna is a significant site for Heritage Tourism that has faced severe neglect in the past. The fort contributes to a rich biodiversity and stands protecting evidence of the history of Portuguese, Maratha and British Powers. It is observed that Corporate Social Responsibility and Adopt a Monument Scheme of the Government play an important role in the revival of Heritage Tourism. Cacabe de Tanna together with other forts acts as the Green Lungs of Thane and make the city sustainable. Various educational purposes of the fort can be explored in collaboration with the Modern Education System. More number of tourists will be attracted to visit Cacabe de Tanna due to its restoration. However, it needs to be ensured that the fort stays protected and well maintained even in the future. Together with proper web marketing and sustainable tourist involvement, recreational activities new employment opportunities have also been generated.

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An Exploratory Study on Sustainability and Wellness Tourism in India

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ABSTRACT

Introduction: *Traveling to preserve or improve one's own well-being is known as wellness tourism, and it has become increasingly popular in recent years. At the same time, sustainability is becoming increasingly important in many industries, including tourism. Consequently, sustainable wellness tourism incorporates economic, social, and environmental sustainability concepts with wellness-oriented travel experiences. This study examines the idea of sustainability in wellness tourism, emphasizing its application and effects on travel destinations, local communities, and visitors. It is observed that wellness tourism is at its peak in most of the developed countries and in India too. It not only brings in many economic benefits but also the mushrooming of wellness centers in the country has given rise to the concern for quality service, keeping in mind the sustainability aspect and struggle to retain customers. Ayurveda, yoga, naturopathy, umami, Siddha, and homeopathy are all included in AYUSH, an initiative by the Tourism Ministry of India. The government's focus on improving the standard of wellness delivery facilities is a reassuring sign for the industry. The government must prioritize service quality to keep tourists given the rising demand and unrealized potential of wellness tourism. Because of this, service quality has been seen as the most important element in creating a lasting relationship between a client and a service provider.*

Objective:

1. To gain insights into wellness tourism in India

2. Explore the different initiatives introduced in India to promote sustainability in wellness tourism.

3. *Advantages that both local communities and India can gain by embracing practices that promote sustainability in wellness tourism.*

Research Methodology:

The author has consulted various research journals, books, newspapers, and textbooks to complete this research.

Conclusion:

By achieving a balance between improving individual well-being and protecting the environment, culture, and local economies, sustainable wellness tourism holds great promise. Wellness resorts, through their adoption of sustainable practices, can create long-lasting benefits for both guests and host communities. Despite the current challenges of accessibility, over-tourism, and greenwashing, the long-term potential of sustainable wellness tourism is in its ability to provide life-changing experiences while safeguarding the environment for future generations.

Keywords: Wellness- Tourism, Health, Tourists, Ayush, Sustainability

INTRODUCTION

"Atithi Devo Bhava" – is the famous phrase used in India to welcome guests. The guests are welcomed in the true meaning of 'Guest is God.' It reflects the rich cultural heritage and tradition of welcoming the guest with utmost warmth and hospitality. India is a nation with a humongous diversity. It covers a vast expanse right from the snow-clad Himalayan ranges in the North to the peninsulas of the South and from the humid deltas of the East to arid climatic conditions to the west and from dry heat and cold of the central plateau to the cool foothills and golden romantic beaches. All of these make it possible for the tourists to choose an incredible destination to visit, learn the customs and traditions and also savour the local food of that particular region. India as a country takes pride in having this kind of diversity with geographical conditions, climate, religions, languages, cultures, traditions, flora and fauna, food etc. Diversity is the essence of India and its tourism industry. Owing to this diversity, domestic as well as foreign travellers visit India and its states with numerous motives of travel. And in turn it gives rise to various sections in the Tourism sector. Tourism is not only travelling to a certain destination but also availing of all allied services like hotels, restaurants, places of visit, souvenir shops as well as local items

sold by the natives.

TYPES OF TOURISM IN INDIA

(Panneerselvam, 2013)

1. Adventure Tourism: This type of tourism is a recent one grabbing attention of tourist in India. This type of tourism involves visiting remote places, and indulging in activities experiencing the locale and getting lost in the fun and thrill involved. Adventure tourism has shown remarkable growth in the recent years.

2. Wild life Tourism: (Saksena, 2021) India's landscape is adorned with a diverse array of wildlife species, many of which are rare and distinct to this region, and breathtaking natural beauty. The breathtaking wildlife of India, displayed through jungle safaris across various national parks and sanctuaries, attracts millions of nature lovers and wildlife enthusiasts from all corners of the globe.

3. Pilgrim Tourism: (Shinde, 2018) Many religions have flourished in India from ages together and have their own places of worship. Right from temples to shrines to churches to gurdwaras to mosques, there are a lot of places of pilgrimage that a tourist may visit in India. Unlike other tourism types, Pilgrimage tourism is an opportunity to lower down one's pace and get closer to God and oneself with spirituality. The pilgrimage tradition served as a major foundation for the current pilgrimage tourism sector, which is still thriving today due to the economics of religious devotion. (SHinde, 2012)

4. Culinary tourism: (R.K., 2015) With a diverse range of flavours, ingredients, and cooking methods that have been passed down through grannies and aunties, India's culinary scenario is as diverse as its rich cultural legacy. Every region has its peculiar culinary customs that are shaped by its topography, climate, history, and culture. India presents an endless array of gastronomic experiences to be enjoyed.

5. Heritage tourism: (S.Shankar, 2015) By bringing tourists into contact with their communities, heritage tourism helps towns and cities preserve their historic, cultural, and natural riches. Tourists are more inclined to actively participate in the preservation of these historic resources when they feel a connection to their own, their communities, their regions, or their country's heritage.

6. Sports Tourism: (Bhosale, 2017) Sports tourism has the potential to be an alarming tool for

advancing global interdependence, understanding, and world peace. Around the world, sports tourism can help build a new international economic framework that encourages consistent social and economic advancement, particularly in developing countries, and helps close the widening economic gap between developed and developing countries.

7. Eco – Tourism: (SINGH, 2016) A new approach to tourism, ecotourism emphasizes environmentally friendly travel to virgin locations with the aim of understanding the environment's natural and cultural heritage. It bestows a strong emphasis on causing low to negligible amount of ecological disturbance possible while creating business opportunities that motivate native people to preserve and safeguard their natural resources.

8. Wellness Tourism: (Rawat, 2017)Wellness tourism emphasise on improvement in the physical and mental health, emotional rejuvenation by means of spirituality. Here one is able to connect with the soul and attain peace, away from the busy life of a bustling city. India always had the potential but has now started spreading its wings in the arena of wellness tourism. Owing to its rich cultural heritage and traditional practices of Ayurveda and Yoga, India is now becoming the hub of wellness. Many people mistaken it with medical tourism. But in the medical tourism scenario tourists are patients visiting or travelling for treatment purpose. Few states viz. Maharashtra, Uttarakhand and Kerala stand out to be the Wellness hubs in India.

New forms of tourism will arise globally as the types of tours that passengers seek change along with their motivations. Local communities, tour operators, ancillary businesses, the Ministry of Tourism, and India as a whole all benefit greatly from tourism, yet it frequently comes at the expense of the local natural flora and fauna. Collaboration between the Indian government and its inhabitants is crucial to guarantee that the advantages of tourism are reaped through sustainable practices, safeguarding the environment for future generations.

WELLNESS TOURISM AND SUSTAINABILITY

Sustainability is being well focused on fulfilling the needs of the current generations without any compromises for the Gen Z and Gen Alpha and future generations to come. This needs to be done by keeping a balance between Economic growth, Care for the environment and Social well- being of the humans. It is the need of the hour that all of us help the government to become efficient by adopting sustainable practices even in Tourism sector. The world tourism sector has already adopted sustainable practices to improve quality of life. Though its quiet cliché "Grass is greener on the other side", its time we make the grass greener on our side too. Its time for us to employ

those traditional practices with a lot of pride that ancestor and grandparents practiced as normal life during their era. At the same time, we need to understand being sustainable doesn't mean we forego luxurious and lavish lifestyle. All it means is we have to make few changes in the practices and use resources very consciously and responsibly so that they don't reach a point of depletion and the generations to come can also savour the fruits of mother nature.

FOCAL POINTS OF SUSTAINABLE AND WELLNESS TOURISM

1. **Eco–friendly Infrastructure and Operations:**

    Sustainable wellness tourism aims to equip spas, retreats, and wellness resorts with environmentally friendly facilities. This includes recycling initiatives, solar energy use, sustainable water management, and energy-efficient buildings. Several hotels and resorts are now working toward green certifications like LEED to demonstrate their dedication to sustainability.

2. **Waste – Reduction and Resource Management:**

    (Mohinder Chand, 2017) Wellness tourism destinations are emphasizing responsible resource management with a strong emphasis on holistic health. Reducing food waste, obtaining organic and locally grown products, minimizing plastic use, and encouraging zero-waste procedures in health resorts are some ways to lessen the environmental impact. To promote sustainable practices, many spas also choose for natural and organic materials rather than treatments that heavily rely on chemicals.

3. **Sustainable spa and Treatment practices:**

    Several spas and wellness resorts provide organic and natural therapies to reduce their environmental impact. Herbs, plants, and ingredients from sustainable sources are frequently used in Ayurvedic, naturopathy, Unani, Homeopathy and herbal medicinal practices. To improve health benefits and lessen ecological effects, sustainable wellness also encourages the use of natural materials like mud, seawater, and minerals.

4. **Promoting Local culture and Traditions:**

    (T.K, 2023) Sustainable wellness tourism often integrates local cultures and traditions into wellness offerings. This supports the preservation of cultural heritage and provides economic opportunities for local artisans, healers, and therapists. For example, the benefit elements shed light on the health advantages that visitors seek at Kerala's Ayurvedic health facilities. They are also essential in shaping policies to expand this tourism sector. Understanding these benefits is key to designing customized Ayurvedic health packages and creating policies that

appeal to domestic and international tourists.

5. **Supporting Local economies:**

Sustainable wellness tourism poses opportunities for local communities by creating jobs and building business partnerships. Many wellness resorts prioritize hiring local staff, sourcing food and materials from nearby farms, and collaborating with regional businesses. This approach supports sustainable livelihoods and strengthens the economic health of host communities.

Merging sustainability with tourism can have a positive impact as mentioned below:

1. **Environmental Benefits:**

Sustainable wellness travel promotes eco-friendly behaviours to reduce environmental damage. Locations prioritizing preserving natural landscapes, conserving energy, and cutting waste enhance the wellness experience while helping the environment. Essential components of wellness tourism include fresh air, clean, green places, and unpolluted environments.

2. **Economic Benefits for local Communities:**

When planned with sustainability in mind, wellness tourism can have a significant positive economic impact on nearby communities. Wellness tourism can promote sustainable economic development by promoting indigenous customs, generating employment, and procuring locally. Especially in rural areas where wellness retreats are frequently found, this aids in lowering poverty and fostering inclusive growth.

3. **Enhanced wellness Experience for tourists:**

More and more tourists are looking for wellness experiences that are genuine, relevant, and consistent with their values. An eco-friendly wellness resort enhances the overall wellness experience by providing a closer connection to the environment and local culture. Many tourists feel more fulfilled and accountable when they combine eco-friendly activities with wellness pursuits like yoga, meditation, or organic spa treatments.

4. **Positive social impact:**

Sustainable wellness travel raises knowledge of regional social and cultural issues and encourages ethical consumption. Wellness tourism fosters positive connections between visitors and their destinations by interacting with local communities, contributing to philanthropic organizations, and assisting in the preservation of cultural heritage.

CHALLENGES IN ACHIEVING SUSTAINABILITY IN WELLNESS TOURISM

1. **Balancing Tourism growth with environmental conservation:**

One of the main obstacles to sustainable wellness tourism is ensuring that the expansion of travel does not deteriorate the environment. Overtourism at well-known wellness locations may result in wildlife displacement, water pollution, or deforestation. Balancing growth and conservation requires appropriate regulation and community-based tourist concepts.

2. **Certification and Authenticity issues:**

The term "greenwashing" describes how many wellness businesses claim to be "sustainable" or "eco-friendly" while failing to follow appropriate sustainability guidelines. Wellness resorts and companies must commit to genuine and verifiable sustainability measures if they hope to see long-term success in sustainable wellness tourism.

3. **Economic accessibility:**

Due to the costs of maintaining environmentally friendly infrastructure and the provision of organic, locally produced food, many sustainable wellness resorts cater primarily to wealthy tourists as wellness tourism grows. One of the biggest challenges is making sustainable wellness travel available to a wider spectrum of people.

4. **Education and Awareness:**

Visitors to wellness centers may or may not be aware of sustainable practices. Some people might not prioritize eco-friendly options when choosing a wellness resort. Implementing educational activities and encouraging open communication about sustainability practices are crucial to improving consumer understanding of the significance of sustainability in wellness tourism.

Initiatives taken in India to promote sustainable wellness tourism in India:

1. Reducing wastage and pollution is the first and most important step. Here, the industry stakeholders are advised to use all resources efficiently.

2. Support the local communities by promoting cultural and traditional values via shows, involving the localities in decision-making regarding tourism planning and activities and promoting their businesses, which would boost the local economy and create employment.

3. Not only the tourists but also the local people must be educated regarding the importance of

conserving various resources and environmental issues.

4. Usage of sustainable transport facilities like that cycle would help improve the health of the tourists and not pollute the natural flora and fauna of that region. The accommodations can also be eco-friendly – using buckets for bathing instead of bathtubs in guest rooms, which would result in water conservation. These rooms with large windows would bring in a lot of natural light and air into the rooms, saving a lot of electricity.

5. Many state tourism boards and private companies promote wellness vacations that use eco-friendly designs, such as utilizing locally produced materials, switching to renewable energy, and conserving water and other resources.

6. India encourages health travel based on yoga and ancient Ayurvedic methods. The Ministry of Ayurveda, Yoga & Naturopathy, Unani, Siddha, and Homeopathy (AYUSH) certifies centers that guarantee sustainable, genuine, and culturally sensitive practices.

7. Travelers can participate in eco-friendly wellness activities while supporting local livelihoods through initiatives that support community-based wellness tourism, such as those in rural India and the Himalayas.

REVIEW OF LITERATURE

(Maitra, 2022) Through this research, the author has made it clear that Indian medicine streams like Ayurveda, Yoga, and Unani not only keep illness at bay but also can help individuals to lead a stress-free and also spiritually balanced lifestyle. This research was undertaken to identify new dimensions in wellness tourism across the county. There has been a spike in demand for wellness tourism post-Covid -19, where people have also started taking care of their physical and mental health. The author also mentions that the Government, along with the Ministry of Tourism, must take initiatives to create awareness and organize seminars and workshops promoting wellness among the citizens of India.

(Mohinder Chand, 2017) Through this research, the author draws attention to India, which is on its way to becoming a gigantic player in the tourism and hospitality industry. It provides millions of employment opportunities. At the same time, it also affected the ecosystem we live in. To safeguard the environment, the industry has taken initiatives to bring about sustainable changes in operations. Paper-less guest check-ins. Usage of recycled paper for printing, Biodegradable key cards, usage of electronic files that paper files, rigorous decomposing of waste generated in the hotel, using of manure for the landscaping of the hotel, service of water to guests only when

asked, ingredients are purchased form local vendors, left-over food is donated to local needy people, rainwater is used is flushing systems, automatic faucets, using furniture made of recycled wood etc. are some of the practices that the authors has brought to light that are deployed by the hotels nowadays.

(Pereria, 2018) This study was carried out in North Goa to understand consumer behavior towards spa, health and wellness tourism activities. The study concludes that wellness tourism is experiencing substantial growth due to the increase in domestic and international travelers, leading to a rapid rise in Ayurvedic spas. This shift has the potential to diversify Goa's traditionally beach-focused tourism landscape. With the demand for spa services steadily increasing, it is essential to promote health and wellness tourism through strengthened marketing and customer retention strategies.

(Gautam, 2024) The researcher mentions that in order to maintain the region's tradition and culture while fostering economic growth, Sikkim's tourism industry must be sustainable. A sustainable strategy entails evaluating local populations, the environment, and tourists' demands. He stresses a few pointers that must be considered for bringing in sustainability in tourism in Sikkim viz. environmental impacts, local community engagement and financial growth, challenges and scope of improvements. Co-operation from the government and stakeholders of the tourism sector, and lastly says creating awareness through education is of utmost importance.

(Bushra Choudhary, 2022) In the post-pandemic era, India's wellness tourism industry holds vast potential, with many favorable conditions supporting rapid growth. After COVID-19, major travel companies and marketers can leverage these opportunities to promote wellness travel in India, attracting travellers for health-focused experiences. Author points out that medical and wellness travel in India is expected to grow faster. However, wellness service providers must take proactive measures to reassure travellers by strictly following safety protocols to protect against COVID-19.

(Sibi. P.S., 2017) There are two major categories of tourists who come to Puducherry: those who are looking for specific experiences surrounding Auroville and those who are focused on locations like the heritage town and beaches. Approximately 70% of wellness tourism centers around Aurobindo Ashram and Auroville, where visitors are drawn to spiritual, wellness, and nature-focused experiences and leave feeling physically and mentally revitalized. Nevertheless, Puducherry's true potential in this sector is still undermarketed despite its abundance of wellness services. The author also mentions that the survey done by him provides convincing proof that Puducherry's wellness tourism industry is expanding. Therefore, by employing an appropriate

marketing plan, a profitable market can be reached. It's important to note that the wellness tourism market may not be Pondicherry's primary marketplace. Instead, it is necessary to draw in a new market of wellness visitors.

(KONCUL, 2012) The importance of wellness activities is becoming more widely acknowledged as a crucial component of leading a healthy lifestyle. Nowadays, many people realize that spending free time engaging in wellness, fitness, and health activities greatly increases longevity and enjoyment. Economists are keeping a careful eye on this trend to pinpoint and prove a connection between productivity and well-being. With an eye toward the future, tourism experts hope this industry will continue to flourish. It is anticipated that employment and investment prospects in this area would grow quickly as well.

(Dr. Yogesh Pisolkar, 2018) Through the research, the author has learned about various challenges that Malwan faces with respect to wellness tourism. A few reasons have been mentioned viz., 1. Due to a hike in tourism, a lot of homestays have sprung up, which in turn is using up a huge amount of groundwater, and few of them are calling for water through tankers, 2. To aid the commuting of the tourists traveling in and around Malwan, there have been infrastructural developments, and these are spoiling the aesthetic beauty of the place, 3. At the moment, local communities are not sufficiently motivated to protect their material and immaterial history and establish it as a wellness tourist brand. It's still challenging to change local perspectives and improve abilities to promote medical and heritage tourism.

(DATTA, 2022) The field of wellness tourism is complicated and incorporates many aspects of travel and health. Although the COVID-19 epidemic had a negative effect on the travel industry, many international travellers are now looking for wellness travel as a way to improve their health, self-esteem, and sense of renewal. India has enormous potential to become a global leader in wellness tourism thanks to its abundant offers in yoga, Ayurveda, spirituality, and meditation. Today's tourists place a high value on health precautions thus creating top-notch facilities in these vital wellness sectors might significantly improve visitor happiness and raise India's standing in the market.

(V.A, 2015) Like other industries, tourism has been impacted by the worldwide economic downturn that began in 2007–2008, increasing people's desire for rest and rejuvenation. The wellness tourism industry has grown significantly as more individuals look for places that provide wellness treatments, even though other types of tourism have declined. WHO's focus on holistic health and rising public awareness of individual well-being are the main drivers of this movement. This has been exploited by luxury hotels, which now include services including spas, beauty treatments,

occupational rehabilitation, and spiritual pursuits. Since data is still being collected, this article focuses mostly on the conceptual components of wellness tourism.

OBJECTIVES

1. To gain insights into wellness tourism in India

2. Explore the different initiatives introduced in India to promote sustainability in wellness tourism.

3. Advantages that both local communities and India can gain by embracing practices that promote sustainability in wellness tourism.

RESEARCH METHODOLOGY

The present study has been descriptive; the data were obtained from secondary sources. The secondary data has been collected from various references that already existed in published form; part of the paper is based on a literature review, the method comprising of collecting all the available papers relating to the theme and selecting relevant papers/books for the review purpose. Selection of the paper is done on the basis of their relevance and contribution to the body of knowledge. The author has attempted to do a primary reading of the selected papers, which will constitute the core of this review study.

CONCLUSION

Sustainable wellness tourism aims to strike a balance between individual well-being, cultural preservation, environmental conservation, and local economic assistance. By implementing eco-friendly methods, wellness destinations can generate long-term advantages for both guests and host communities. This strategy focuses on lessening the influence on the environment through actions like trash reduction, water conservation, and the usage of renewable energy. Furthermore, by fostering employment possibilities, honoring cultural customs, and promoting genuine regional goods, sustainable wellness tourism boosts local economies.

Although sustainable health travel provides life-changing experiences, there are a number of issues that must be resolved. Greenwashing, the practice of companies deceptively promoting environmentally beneficial operations, can deceive travellers and undermine sincere sustainability initiatives. Another problem is accessibility, since many wellness locations are still exclusive and expensive. Overtourism is also dangerous since it can strain local resources and degrade habitats.

Notwithstanding these obstacles, there is a lot of promise for sustainable wellness travel. It gives

travellers a greater sense of wellbeing and promotes environmental stewardship by creating deep connections with nature and culture. In the end, this helps create a tourism model that benefits both tourists and local communities while preserving the environment for coming generations.

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An Overview of Homestay Tourism in India for Last One Decade

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ABSTRACT

Introduction:

People choose short breaks as a means to escape their busy lives. India provides distinctive travel experiences because of its rich cultural heritage and stunning natural surroundings. Today's travelers choose homestays for genuine cultural immersion in search of experiences outside of hotels. Under the Incredible India concept, homestays offer individualized stays that promote tourism while conserving the native way of life. Through an analysis of trends, growth, opportunities, and difficulties over the last ten years, this study offers a thorough overview of the homestay sector.

Objectives:

The objectives of this study are to:

1) To understand the development of homestay tourism and tourist for last one decade in India.

2) To analyze the changing preferences and expectations of travelers who opt for homestays.

Research Methodology:

This study examines the patterns, expansion, prospects, and difficulties of India's homestay sector throughout the past decade using a secondary data analysis methodology. To emphasize regional trends, traveler preferences, and sustainable tourism, data is gathered from reputable sources such as government programs, industry studies, scholarly journals, and travel websites.

Conclusion:

Results show that homestays help to preserve natural resources and cultural legacy in addition to meeting the changing needs of tourists. Homestays are positioned as a major

role in contemporary travel since they create jobs and steady revenue for nearby communities. Their revolutionary importance in encouraging ethical tourism and influencing upcoming travel trends is highlighted in this study.

Keywords: *Homestays, B & B accommodations, Home away from home, Farm stays, Sustainable Tourism.*

INTRODUCTION

People desire to break free of the monotonous pattern that includes a busy schedule, business phone calls, and taking public or private transportation to get to work on time. They merely want to escape their busy lives by taking a day trip, an overnight excursion, a brief getaway within the state, out-of-state or even out of country journey.

One of those places that appear on every traveler's list is India. This is mostly due to its immense, sweeping natural beauty, seasonal variations, cultural richness, and the diversity of ethnicities and warm-heartedness of its residents. Now a day's tourists want to come out of the normal routine of exploring a new place and staying in hotels, instead they want to be adventurous (want to explore new places and a different kind of accommodation).

Today's tourists choose to be adventurous (want to explore new areas and a different form of housing) rather than sticking to the traditional pattern of seeing new places and staying in hotels. The ability to unwind and revitalize in a location that makes you feel at home is the ultimate joy of a vacation. Homestays are unquestionably a method to support India's growing tourism industry.

A growing idea in the tourism and hospitality sectors, home-stay is regarded as the greatest lodging substitute for hotels. Unlike hotel accommodations, a homestay allows you to experience the land, people, culture, and cuisine of any location in all of its perfection. Families with additional room and a financial necessity or desire to entertain travelers frequently set up a portion of their home as a homestay.

There are many different types of homestays, including upscale, quaint, rural, and commercial/ workspace accommodations. Heritage homes, farm houses, bungalows, ancestral homes, stone homes, villas or chalets could be transformed into homestays, providing a comfortable stay away from bustling towns and cities but close to tourist sites. Homestays help to preserve the area's

natural populace. Due to the int4ense competition in the homestay sector; homeowners have erected extravagant amenities like swimming pools, gyms, and house auditoriums for a premium homestay experience.

To promote homestays Government of India, Ministry of Tourism has set some common national standards and guidelines for classification of incredible India Homestay Establishments. Under Incredible India Homestay accommodations will be divided into Silver and Gold categories. Only in situations where the owner/promoter of the establishment and his/her family are physically dwelling in the same establishment and renting out a minimum of one room and a maximum of six rooms (12 beds) will the categorization of Incredible India Homestay Establishment be provided.

OBJECTIVES OF RESEARCH STUDY

1. To understand the development of homestay tourism and tourist for last one decade in India.

2. To analyze the changing preferences and expectations of travelers who opt for homestays.

3. To Identified relevant and reliable secondary data sources with information on homestays from the past ten years that are pertinent and trustworthy. (Academic journals, business papers, travel websites, government publications, and information from homestay platforms and online travel companies are all potential sources).

REVIEW OF LITERATURE

Lakhvinder Singh (2014) writes that India has a big tourism industry with an endless supply of services and goods. A microtourism business is Home-Stay. It is a novel idea that India has adopted. However, many enthusiastic communities and people are willing to run this business without having much understanding or experience. A critical issue that needs to be addressed is the absence of a coordinated vision, plan, policy, strategy, and program within the government. It has to do a lot more research because it has the potential to be a tremendously powerful instrument for poverty reduction. One of the Indian government's tourism policies can and should be to direct foreign visitors to the country's rural areas. Fostering a rural tourist environment and making it easy for the public and commercial sectors to conduct business in a way that benefits all parties concerned. (Singh S. B., 2014)

Mr.Venkatesh.R & Mr. Mukesh.H.V (April 2015) article published in worldwidejournals, writes about the role of homestays in promoting rural tourism. The study found that the use of house stays could open up new prospects for lodging as well as serve as a vehicle for promoting rural

tourism and its advantages for the community, business, and art and culture of the area. As time went on, it became clear from the study that additional challenges needed to be met before the primary goal of promoting such tourism in any relevant region could be achieved. Rural tourism might be tremendously helpful to our community if properly promoted. It might be a long-term revenue-generating project for our government's rural development efforts. It has the potential to enable the transfer of resources from urban to rural economies. It may deter rural residents from relocating to cities. **(Mukesh.H.V, 2015)**

Tania kishore Jaleel (2015) Mint Author writes about Kanika Gupta, an exporter from Delhi she has traveled from Kashmir to coorg where she preferred homestays. She also writes about kanika guptas experience of helping family prepare meals and ate with them. She prefers homestays as it costs around 300 for stay and around 100 for food. Author also writes that According to a report titled Homestays in India: Trends and Patterns by travel portal HolidayIQ, the number of homestays has increased from 17 in 2004 to 1,663 across 207 destinations. Kerala, Karnataka, Himachal Pradesh, Maharashtra, and Tamil Nadu currently have the highest percentage (88%) of homestays.

Author has given statistical data of top 5 destinations with most number of homestays. **(Jaleel, 2015)**

Destination	No of Homestays
Coorg, Karnataka	287
Kochi, Kerala	157
Alappuzha, Kerala	94
Chikmagalur, Karnataka	70
Wayanad, Kerala	50

Prachi S. Navare & Dr. Sanjay Mali (2016) writes about the local experience and life of the people who owns homestays and how tourists get to experience the same by staying with them they also get to know about the culture and history of that place. Author suggests that homestay owner's needs to work on hygiene; amenities provided and enhanced security measures. It is also important for tourists to co-ordinate with locals to maintain natural and cultural beauty of destination. **(mali, 2016)**

Badya Sapam (2019) Mint According to the author, MakeMyTrip surveyed 3,000 Indian travelers between the ages of 18 and 55 between September and October. According to a poll by online travel agency MakeMyTrip, one in every two Indian tourists prefers to book an alternative

lodging option over a standard hotel. According to the survey titled "Where will India stay on their next trip," millennials are driving the trend since they have demonstrated a larger propensity to book alternative accommodations both domestically and abroad based on their different travel preferences. "The hospitality sector's varied offerings in terms of alternative lodging options, such as homestays, villas, hostels, flats, and short-term rentals, are crucial in addressing the changing needs of travelers. The study's findings demonstrate how this market segment is steadily gaining ground, according to Vipul Prakash, global chief operating officer of MakeMyTrip Ltd. **(Sapam, 2019)**

Sutheeshna Babu S. & Dripto Mukhopadhyay (2020) write in international journal of tourism and travel that the future of the homestay segment is promising due to distinct characteristics such as low investment, unique experiences for tourists such as local culture and cuisine, remote regions can be promoted with the help of homestay owners, can promote local level income generation, and can serve the purpose of women empowerment. Researchers suggest that the nodal department implement a technology-driven centralized system or a single window system to ease the application procedure. The nodal department can also assist in the coordination and acquisition of relevant documents, such as the No Objection Certificate. To encourage homestay, the registered unit can be supported by policy prescriptions such as domestic-rate electricity and water prices, non-commercial property taxes, and tax exemption. **(Mukhopadhyay, 2020)**

Blogger Priyanka Gupta (2021) who was in investment banking left her job to write and travel world. She chose homestays because she wanted to experience local life and cuisine as a traveler. By residing in villages, you obtain a better understanding of the natural world and learn about Indian culture and eating customs. She has discussed her observations of how homestay hosts frequently share their dining rooms, kitchens, and living areas with visitors. She also mentioned some typical problems with homestays, such as dirty toilets, cobwebs, dirty linen and blankets, etc., but she also mentions some positive aspects, such as the possibility that someone may volunteer to carry your luggage or the possibility that they will arrange for pick-up or drop-off. **(Gupta, 2021)**

Swapan Raghu Sanand (2021) from Financial express Business news explains about the The idea of staying at home is becoming more popular in the post-pandemic environment. Travelers today want to feel all the amenities of home, but the homestay turns into an immersed experience in the vacation spot of their choice. A feeling that leads to an experience is the notion of being where you want to explore. In contrast to hotels, travelers can approach homestays with specific and one-of-a-kind criteria and participate in a more individualized way.

Sarabjeet Singh, Head of Expressions at IHCL, says in an exclusive interview with Financial Express Online, "In February 2019, when we launched 'ama Stays & Trails,' it was the first branded product in India's rapidly expanding homestay business. IHCL, a leader in Indian hospitality, has promoted a number of tourism hotspots, including Rajasthan, Kerala, Goa, the Andaman Islands, and more recently, North-East India. **(Sanand, 2021; Sanand, 2021)**

ETTravelWorld (2021) published an article that Ministry of Tourism to organise training workshop for homestay owners in which Tourism minister Sri. Prahlad Singh Patel inaugurated a three day mega homestay development & training workshop in Darjeeling for a total of 450 homestay owners by IIAS School of management, the knowledge partner, would train them in different spheres of hospitality like behavioral skills, marketing and sales skills, and destination promotion skills. **(Times, 2021)**

Debanjan Basak & Subham Roy (2021) writes that people should invest in sustainable employment facilities to improve employment quality, economic viability, and local prosperity. To supply it, demand-driven handcraft production, tourism employment development, and market connections are required. The tourist duration of stay and new destination development should be prioritized. Even while environmental sustainability has no visible impact on visitor contentment, understanding how it affects total visitor pleasure with nature-based tourism remains critical. **(Roy, 2021)**

Sandhya keelery (2022) published an article which shows statistics on distribution of homestays according to the number of room in the homestay property. According to the survey conducted in the year 2019-2020. **(Keelery, 2022)**

No of Rooms in Homestay property	Percentage
Two room Homestays	4%
Three room Homestays	18%
Four room Homestays	28%
Five room Homestays	19%
More than six room Homestays	7%

Sakshi singh (11 February, 2022) in ETHospitalityWorld article writes about the 'Home away from home', a research by a hotel investment advisory company, outlines the prospects and trends in the luxury rentals and boutique homestays market. The paper claims that India has enormous potential for luxurious homestays. According to projections, the Indian travel market would increase from 11% to 11.51% by 2020, when it will have already surpassed a staggering USD 48 billion. Residences in various price levels are available on the homestay market. Budget

travellers have various hotel options, with 65 percent of lodgings costing more than INR 4500 per night and 31 percent of homestays serving the middle-class and luxury segments. **(Singh S., 2022)**

Ramit Sethi (2022) article published in financial express talks about a licensed homestay that has a recurring effect on the industry. The majority of governments attempted to extend the following benefits through various programs, according to an ACRA 2020 report: incentives, subsidies, and tax breaks. The most common ones are domestic electricity prices, exemption from luxury taxes, and exemption from land transaction fees. Other benefits mentioned by state governments included setting up training for skill development, listing on official websites, assisting with online payment options, and so on. **(Sethi, 2022)**

Hotelivet (2022) The Indian Hotel Owners Sentiment Survey, this survey was aimed at highlighting the opinions, perceptions and concerns of Indian Hotel Owners in a post-pandemic world. Which Positioning does most of your hotel portfolio fall in? This sample set represents ~21% of the country's branded hotel inventory across varied market positioning and locations. The Owners collectively have/ are about to have/ had in the past an affiliation with ~22 brands (domestic and international) allowing for unbiased and independent responses to the questions posed in the survey.
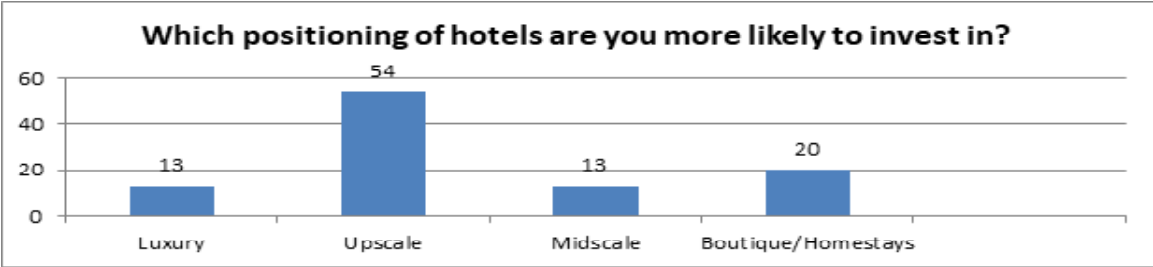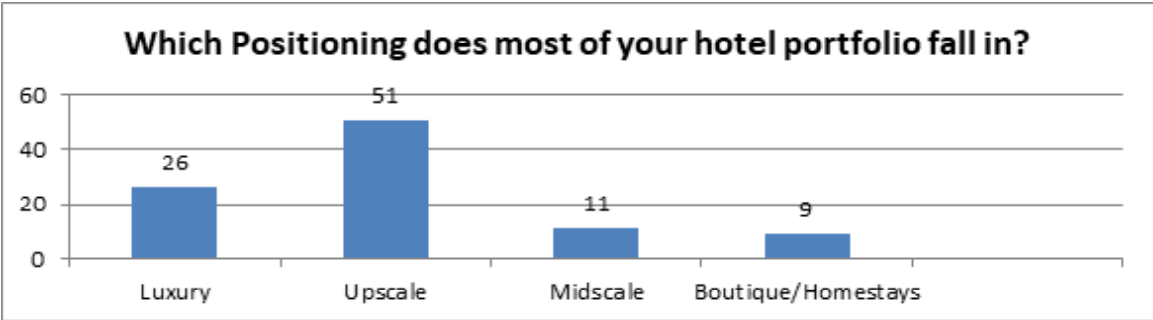
Most Preferred Homestay Brands ama, Saffron stays and Vista rooms.

In Indian Hotel Owners Sentiment Survey 2022, question asked on homestays was please select whether you agree or disagree with the following statements.

Homestay/boutique brands will erode significant leisure demand from mainstream hotel brands in the medium-long term 57% Agree to the above statement. **(Hotelivate, 2022)**

Mid-day in its article published on lifestyle and travel, (12 February 2023) writes that for a variety of reasons, homestays are becoming the biggest trend in India. Homestays are providing developing company chances due to the significant demand in the Indian market. They are a good option for homeowners as well as travelers. As a homestay is a private dwelling that has been converted by the host into lodging, it also discusses the hype around them. A wide range of extras are included, including meals, a personal butler, local transportation, and pickups. It's a great way to become active in neighborhood issues and feel at "home away from home." The serene surroundings play a significant role in why homestays are rising in popularity. Because they are located in attractive neighborhoods away from the crowded city center and popular tourist areas, homestays are the perfect vacation for tourists. Tourists can escape tourist traps, touts, fraud, and other issues while sipping coffee and admiring the sunrise between the hills. The article also discusses unique activities, authentic local experiences, distinctive accommodations, individualized service, and inexpensive tourist alternatives. **(Mid-day, 2023)**

Swagat Dam (4 May 2023) from Vogue India in its article on culture and living, writes about

hotels against homestays for COVID19. Cozy homestays offer an enticing alternative to the manufactured comfort of hotels in the homestays vs. hotels debate, especially for longer vacations. During the pandemic, many businesses adopted the idea of "work from home," and the digital nomad culture experienced an unprecedented rise in popularity. Many regarded this as a chance to choose extended stays in cities far from their homes. Nearly all of us had at least one buddy who, after Covid struck, relocated to the hills or to Goa and spent a significant amount of time there. Homestays became and still are the home away from home for many digital nomads because they offer ghar ka khaana, free wifi, and beautiful vistas. **(Dam, 2023)**

Author Pratim Chatterjee's research examines rural tourism as a sustainable industry that includes preserving the environment, creating possibilities for entrepreneurship, and upholding local village customs, values, and practices. Running homestays can offer substitute lodging choices and spur rural tourism, which will help the local economy, community, and artistic and cultural landscape. By shifting resources from urban to rural areas and reducing rural-urban migration, a well-executed marketing strategy for rural tourism can have a major positive social impact. In addition to supporting sustainable revenue creation and reducing rural-urban migration, village tourism can boost rural development and create jobs and income. **(Chattterjee, 2024)**

METHODOLOGY

In order to investigate the patterns, expansion, opportunities, and difficulties of the homestay sector in India during the previous ten years, this study uses a secondary data analytic approach. The study collects data from an array of reliable sources, such as government publications, business reports, academic journals, travel websites, and information from homestay platforms and online travel agencies.

Key steps in methodology

Literature Review: A comprehensive review of previous research on the evolution of homestays and travel trends in India.

Data Collection: Secondary data was gathered from respectable sources, including government tourist programs (such the Incredible India Homestay guidelines), travel websites (like HolidayIQ), and industry reports.

Data Synthesis and Analysis: To find trends in booking patterns, marketing tactics, and changing traveler preferences, the gathered data is combined. States like Kerala, Karnataka, Maharashtra and Himachal Pradesh are highlighted in the report, which also concentrates on regional trends.

Comparative Analysis: In order to comprehend homestay tourism's unique attraction and contribution to sustainable tourism, the study contrasts it with conventional lodging models.

Contextual Analysis: In order to throw light on the rising popularity of homestays, important aspects such as intercultural interchange, the economic impact on local communities, and traveler happiness are investigated.

This approach offers insights into how these changes fit with changing tourist expectations and allows for a comprehensive understanding of the homestay industry's influence on contemporary tourism.

LIMITATIONS

Dependency on Secondary Data: The study solely uses pre-existing data from web resources, government publications, and scholarly journals.

Geographic Bias: The majority of secondary data emphasizes homestays in well-known states like Maharashtra, Kerala, Karnataka, and Himachal Pradesh, possibly ignoring advancements in less well-known areas.

Quick Industry Changes: The travel and hospitality industries are ever-evolving. The information which was obtained might not accurately reflect the most recent changes, and trends like post-pandemic travel behavior might have changed.

Generalization Problems: Although the study generalizes homestay patterns throughout India, regional, demographic, and individual traveler preferences and experiences could vary considerably.

Limited Understanding of Regulatory Impact: While the report talks about government programs like Incredible India Homestay, it doesn't go into great detail about how these regulations affect the number and quality of homestays.

Considering these drawbacks, the study provides a useful summary of the growth of the homestay sector and advances knowledge of visitor preferences and environmentally friendly travel.

SUGGESTIONS FOR FURTHER STUDY OR RESEARCH

Future studies can examine the influence of internet platforms, post-pandemic traveler behavior, the effects of government policies, and homestays in lesser-known areas. Sustainable practices, financial gains, cultural preservation, and matching visitor expectations with services are important issues. Deeper understanding of the changing homestay industry in India will be possible using mixed-method approaches.

CONCLUSION

Through the use of secondary data research, we are able to obtain important insights into how homestays have changed over the past ten years and a comprehensive understanding of their impact on the travel industry and the promotion of cultural immersion experiences.

Given an overview of the research on the use of homestays, traveler preferences, levels of satisfaction, and effects on local communities helps to understand rise of homestays in India which is a reflection of the evolving tastes of tourists looking for genuine and meaningful experiences. Adventurous travelers have taken to the idea of staying with locals to learn about their culture firsthand and to support local economy. Homestays are still popular because they not only give visitors a special and enlightening experience, but they also play a significant part in safeguarding the natural and cultural history of the areas they operate in and helps in supporting sustainable revenue creation of jobs and income.

Tania kishore Jaleel Mint Author writes about Kanika Gupta, an exporter from Delhi that she prefers homestays as it costs around 300 for stay and around 100 for food. Author also writes that According to a report titled Homestays in India: Trends and Patterns by travel portal Holiday IQ, the number of homestays has increased from 17 in 2004 to 1,663 across 207 destinations. Kerala, Karnataka, Himachal Pradesh, Maharashtra, and Tamil Nadu currently have the highest percentage (88%) of homestays.

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Embracing Change in Hospitality Eco-Friendliness and Sustainability and (Educating) Hospitality Students to Implement Practices at Educational Institutes

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ABSTRACT

The hospitality Industry plays a vital role in providing clean and comfortable accommodations to customers travelling from various parts of the world. It is responsible for making the guest's stay pleasant and memorable. There is constant change in service level, technology, and new equipment. At the same time, too much pressure is on hotels to save water and energy as there are many carbon footprints. There is a threat to the environment. Hospitality education institutes play a vital role in shaping students' futures. When we start educating the students about the importance of sustainability at the institute level, it will help the hospitality industry in future to make the planet a better place.

Objective: To understand the eco-friendly and sustainable practices followed by Hospitality institutes and the role of hospitality students in embracing sustainable change in the Hospitality Industy.

Research Methodology: Primary data: The primary data was collected through a structured questionnaire targeting a sample size of 50 Third year Hospitality Students.

Secondary data: Secondary data was collected by referring to various research papers in eminent journals, textbooks, websites, and articles from renowned authors to gather information about the topic.

Conclusion: The research would focus on the students embracing the change in hotels and getting educated and trained at hospitality institutes, the challenges they face and their

opinions and ideas, which would bring about change in the Hospitality industry regarding eco-friendliness and sustainability, thus making the planet a better place for the future hospitality industry and the generations to come.

Keywords: *Sustainability, Technology, Carbon footprints, Hospitality Industry, Eco-friendly, Education.*

INTRODUCTION

The hospitality sector, which provides a wide range of services to meet the demands of millions of tourists annually, is a vital component of international travel and tourism. The main objective of the hospitality business is to give customers a clean, comfortable, and unforgettable stay, whether in opulent hotels and resorts or more affordable lodging options. The hotel business is a service-driven sector constantly changing to satisfy the needs of contemporary travellers. It incorporates new ideas, technologies, and higher service standards to remain competitive.

We must embrace the change in the hospitality industry regarding sustainability and eco-friendliness. The Hospitality Industry is dynamic and has been changing with its trends. Guests have higher expectations and demand more personalized service. The need and ability to provide a hyper-personalized experience drive the need for intelligent rooms, an emerging trend.

(Singh, 2024).The world is changing fast, and so are the guests. Travel patterns, room expectations, and service are changing. Along with this comes the most challenging part: increased carbon footprints as hotels require more electricity and water and use more resources to emit carbon dioxide. Hence, it's a global concern for the hotel industry to wake up and work towards sustainability and eco-friendliness to save resources for years and reduce pollution. The more we accept change in the Hotel Industry, the better it will be for the Institutes to train the students and make them aware of guest expectations, sustainability, and eco-friendly hotels.

However, with these advancements comes a growing responsibility that extends beyond customer satisfaction into environmental sustainability. In recent years, there has been a notable shift in the way the hospitality industry views its impact on the environment. As one of the world's largest industries, hospitality has a significant carbon footprint, primarily due to its high consumption of energy and water, as well as the generation of waste. Hotels and other hospitality establishments

consume vast resources to maintain guest comfort, including air conditioning, heating, lighting, laundry services, and food preparation. This level of consumption, combined with increasing environmental awareness among consumers, has put pressure on the industry to adopt sustainable practices and reduce its ecological impact. The ultimate goal of sustainability is to minimize your hotel's impact on the region by reducing the unnecessary use of energy, supporting the use of alternative energy, and reducing greenhouse gases to change the course of global warming. The change in hotels is to maximize impact without using excessive power. Using eco-friendly cleaning products and amenities will enable hotels to be more sustainable.

One of the significant challenges facing the hospitality industry today is balancing the need for exceptional guest experiences with environmental stewardship. Guests expect high levels of comfort and convenience during their stay, which can often conflict with efforts to reduce energy and use of water. For example, while guests may enjoy daily towel and linen changes, this practice significantly increases water consumption. Similarly, round-the-clock climate control and lighting in hotel rooms contribute to excessive energy use. In response to these challenges, many hotels invest in energy-efficient technologies, such as smart thermostats, LED lighting, and water-saving fixtures, to reduce their environmental impact without compromising guest satisfaction.

According to a sustainability report by Booking.com, 68% of clients are interested in finding eco-friendly hotels, and 87% of travelers worldwide want to travel sustainably. More tourists and environmentally conscious customers are ready to participate in sustainable practices, and more rooms are demanded. The hospitality industry can benefit customers and the environment by promoting eco-friendly technologies and adopting the three 'R's—Reduce, Reuse, and Recycle. (Bhargava, 2021) .When we reduce wastage, reuse products, and recycle water and energy, hotels contribute to the environment.

ROLE OF HOSPITALITY INSTITUTES AND EDUCATING HOSPITALITY STUDENTS

At the heart of this shift toward sustainability is recognizing that the hospitality industry must actively mitigate environmental harm. UNESCO has declared that education for sustainable development is not an option but a priority; hence, students learn and become more conscious when participating in the program.

Education: According to the dictionary, education is the act or process of imparting or acquiring particular knowledge or skills. Hospitality Institutes impart knowledge, train students to be independent, inspire them to learn skills and give practical knowledge.

SUSTAINABLE TOURISM AND ECO-FRIENDLINESS

This term was used at the 1992 Rio Earth Summit and is defined as 'Development that meets the needs of the present without compromising the ability of future generations to meet their own needs. 'This means the environment shouldn't be harmed and affected by current use, and we should preserve the resources for future generations.

Eco-friendliness: Eco-friendly hotels mean using environmentally friendly products that don't harm the environment. The need has arrived to be environmentally conscious, use environmentally friendly products, and be sustainable at the Hotel Institutes. We must educate the students to be mindful of environmental changes due to global warming and think of sustainability before it's too late.

This is where the role of hospitality education becomes critical. Hospitality schools and institutions are vital in shaping the industry's future leaders and equipping students with the skills and knowledge needed to implement sustainable practices. By incorporating sustainability into the curriculum, educational institutions can raise awareness about environmental issues and inspire the next generation of hospitality professionals to take action. This education goes beyond theory, providing students with practical tools and strategies to reduce energy and water consumption, minimise waste, and promote eco-friendly initiatives in the establishments they will manage in the future. Educating students about sustainability at the institutional level will have a far-reaching impact on the industry. By instilling values of environmental responsibility in future hospitality leaders, the industry can work towards a more sustainable future. In the long term, this shift towards sustainability will help the hospitality industry reduce its carbon footprint and enhance its reputation among environmentally conscious travelers. To operationalize education associated with sustainability, teaching approaches must focus on elements relating to learning processes rather than the accumulation of knowledge—to develop graduates with capabilities to improvise, adapt, innovate, and be creative. (Thomas, December 15, 2010 issue 3 volume 7).To educate students about sustainability, one must focus on practical learning, where you can encourage the students to adopt new procedures, innovate, work in a team and think holistically about eco-friendly hotel institutes. Embracing sustainability means reducing waste, saving energy, using eco-friendly resources, and promoting green practices to create a hotel environment that cares for guests and the planet.

WELCOMING IDEAS OF HOSPITALITY STUDENTS AT HOSPITALITY INSTITUTES

A professional and systematic environmental management approach is needed to reduce resource

consumption and the negative impacts of various campus operations and promote campus sustainability. (a, November 2008). At the Hotel Institute level, more planning and a systematic approach are required to implement eco-friendly and sustainable practices to avoid negative impacts on the campus. A systematic approach to sustainability is crucial as educational institutions mold the leaders of the hospitality industry of the future. This requires meticulous preparation and the application of tactics that reduce the adverse effects on the environment while raising staff and student knowledge and participation. Institutions that prioritize sustainability stand to benefit the larger community and improve their operational efficiency. By stressing these behaviours, educators can better equip students to adopt environmentally responsible practices in their future employment, resulting in a more sustainable hospitality sector for future generations. As sustainability and eco-friendliness become a core aspect of hospitality education, it will pave the way for a more responsible, efficient, and eco-friendly industry that supports business growth and the planet's well-being. In hospitality schools, students are vital to the cause of sustainability and environmental friendliness. Leading green practices projects on campus and in the industry can impact the upcoming generation of hospitality employees. Hospitality students are future leaders, and instilling sustainability into their education will ensure that they lead by example, promote responsible practices, and implement eco-friendly solutions within their organizations and institutes. There is a growing preference among consumers for sustainable and eco-friendly businesses.

To cultivate a new generation of environmentally conscious professionals, the hotel Institutes must embrace sustainability and eco-friendliness, and the education of students is essential.

The following methods should be used in educational institutions:

- Incorporate Sustainability Topics in the curriculum: Incorporate modules in hospitality courses that discuss eco-friendly technologies, sustainable practices, and environmental effect assessments.

- Case Studies: Examine prosperous, sustainable hospitality enterprises to demonstrate practical implementations and give the students a case study to solve the problems and develop possible solutions.

- Engage students in hands-on projects that entail implementing sustainable practices, such as trash reduction or energy efficiency initiatives in campus facilities, as part of practical training by planting more trees, weighing how much food waste is there, and sitting Hotels and Sustainable Food Production Methods. Provide culinary lessons with an emphasis on limiting food waste and obtaining organic, locally sourced foods.

- Industry Collaboration can be done by assisting students with internships and hands-on experience in environmentally-conscious hotels and restaurants.

- Students can advocate for water-saving innovations like low-flow faucets and rainwater harvesting while introducing energy-efficient features like solar panels or LED lighting in campus buildings. They may also lessen waste on campus by supporting zero-waste projects, such as initiating composting programs or eliminating single-use plastics in cafeterias.

- Students studying hospitality may advocate sustainable sourcing practices in the institution's operations, such as encouraging organic and locally produced food in cafeterias and event catering. They can also plan and organise environmentally friendly events and set sustainable hotel standards.

- Participating and Practising that Hospitality Students Can Help Hospitality Institutes Adopt Sustainability and Eco-friendliness. Students studying hospitality are becoming increasingly aware of the necessity of incorporating sustainability and environmental friendliness into the hospitality sector's operations. They are essential in bringing about beneficial environmental improvements in hospitality institutes as future leaders, paving the way for the rest of the industry to follow. Their unique viewpoints, creative ideas, and grasp of emerging technology are essential to sustainable operations in hospitality schools and institutions.

- **The students can suggest using a zero-waste policy.** Whether organic or paper waste, it needs to be stopped and controlled at the institute level. Hospitality Institutes can adopt practices to reuse utensils and plates so they don't harm the environment. Also, they can encourage the installation of composting machines so that food waste can be prepared and used as fertiliser.

- **Select eco-friendly cleaning products** that will protect the environment. The Hotel Industry uses the same, which students at the Institute level can practise.

- **Educating students and conducting workshops**: When you involve the students in activities, they become more interested and learn more about sustainability. Organising more guest lectures by industry experts who could speak about the importance of sustainability and eco-friendliness will generate interest.

- **Conducting a certification program:** If institutes collaborate with the institute that gives certification, students will learn through this.

CHALLENGES FACED AT THE HOSPITALITY INSTITUTE:

The students do have great ideas, and many are considered at the Institute level, but they face some challenges while adopting and implementing these practices in the educational field.

1. **Budget limitation**: The Institute may be tight on budget and may not invest in the sustainability of the Institute. The challenge students feel about implementing sustainability at the institute level is that the institute does not have a sufficient budget to implement all the ideas. Or they do not have enough resources, and there is short-term focus and inconsistent policy to implement their ideas. Lack of group efforts and less coordination is also observed. Many students are not aware of the issue that the institute is facing, so it's challenging to implement student's ideas about sustainability.

2. **Lack of interest**: The students and the management are not interested in bringing that change at the Institute. The Institute is concerned but may not be interested in implementing students' ideas.

3. **Resistance to change**: Few Institutes are reluctant to change and do not welcome the idea of sustainability and eco-friendly Institutes. They fear expenses and the amount of work it would involve.

4. **Approval for new ideas:** Implementing the concept of a sustainable and eco-friendly Institute is equally challenging as it involves a significant change, and management approval is required. Solar panels and unique lights involve high costs and substantial investments, and sometimes, people are reluctant to make those significant changes.

DATA ANALYSIS AND INTERPRETATION

The researcher received 58 responses from the Third-year students. The questionnaire was well-structured and asked 22 questions. The students are aware of the practices followed at hotels. At the same time, they have new ideas for sustainability and eco-friendly practices to be followed in Hotel Institutes. They are pro and ready to bring change to the Hotel world.

- 93.2 per cent of students know sustainability and eco-friendliness in hotels, and 91.5 per cent feel it's essential to be mindful of these issues.

- 83.1 per cent of students feel that they would be interested in bringing noticeable change to Hospitality Institute regarding sustainability.

l   91.5 per cent of students feel they play an essential role in contributing ideas on sustainability

and eco-friendly practices.

- 49.2 per cent of students felt that more than 60 per cent and above students would join these students to follow sustainability and eco-friendliness in the Hotel Institute.

- 54.2 per cent of students feel it's possible to make necessary changes, whereas 40.7 per cent of students think it's impossible to make the changes immediately.

- 93.2 per cent of students felt that adding the topic of sustainability and eco-friendliness to the curriculum would benefit the students.

- 96.6 per cent of students felt that organizing more guest lectures on sustainability in hotels will significantly impact the students.

- 100 per cent of students felt that taking small steps at the institute level to promote eco-friendliness and sustainability would benefit the hospitality Institute by reducing wastage.

- 96.6 per cent of students felt that promoting eco-friendly practices and sustainability would maximize guest satisfaction and reduce hotel carbon footprints.

- 94.9 per cent of students felt that educating students about sustainability will enable the hospitality industry and hospitality institutes to contribute towards saving the planet and making the earth greener.

The students answered different questions about the **practices followed at their institute** and these are the **few recommendations** for others Hospitality Institutes.

- The college has a breakout zone at the institute, with all sorts of plants planted by the students.

- Various plants are situated at the college entrance, which is more inclined towards eco-friendly practices and keeping the environment cleaner. Also, every floor has a small plant.

- Many students mentioned managing waste at the institute, where food portion size is controlled; the composting machine is used and recycled and used for college gardens. Leftover food can be donated.

- Dry and wet garbage is separated. During their lunch break, the students know there is NO food wastage. Short videos are created, or posters are displayed at the institute.

- Other students mentioned using energy-efficient lighting, water conservation, sustainable sourcing of local ingredients, eco-friendly cleaning agents, and a focus on reducing paper use

through digitalization.

- To save water at the Hospitality institute, the students feel that having separate taps, one for drinking and one for other purposes, will help.

- Leaked taps are repaired immediately. At the same time, sensor taps need to be installed. Water should be recycled, but it doesn't happen at the Institute level.

- Many students felt neglected in many back-of-the-house areas, few kitchens, and waste management. Some students felt promoting eco-friendly amenities was important.

- Minimising the use of plastic should be done. The use of solar panels for the industry is a must. Local sourcing in hotel operations is to be done. Additionally, the students would advocate for sustainable initiatives and encourage guests to adopt green practices during their stays.

- Like hotels at the Institute level, LED lighting will be used, smart thermostats will be installed, and energy-efficient heating, ventilation, and air conditioning (HVAC) systems will be implemented in classrooms, offices, and public spaces.

- **To save energy**:
  o Install motion-sensing lights.
  o Use an Air conditioner for a few hour.
  o Classroom audits should be done.
  o Energy-efficient lighting should be used in the public areas of the Institute.
  o Recycling bins and water-saving taps should be installed, and reusable bottles and cups should be encouraged.
  o The institutes could also decorate with plants for better air quality and promote eco-friendly practices through posters.
  o Furniture from recycled or sustainably harvested materials like bamboo and cork can be used.
  o Kinetic floor tiles are to be used to generate electricity as people walk on them.
  o Landscaping for public areas to be done. Like a small vertical garden for better air quality.
  o The students felt saving the planet is essential because natural resources are limited, and pollution harms our environment. By making hospitality students environmentally concerned, we prepare them to run eco-friendly hotels and businesses that protect the planet for future generations while meeting guest expectations.

o   At the Institute level, one should implement sustainability and eco-friendly practices by going green, going paperless, using reusable linen, conserving water, and conserving energy.

LIMITATION

Getting detailed information from the Institute by the students was difficult. The confidentiality had to be maintained about the amount invested on saving energy and water every year by the Hospitality Institute and was difficult to get any information related to that.

SUGGESTION

As the students have realized the importance of adopting sustainability and eco-friendly practices in the Hotel Institutes, the management must focus on investing in solar panels, water conservation and energy-efficient lights. With the Joint efforts of the management, the education body, and the hospitality industry, we can bring about change for the benefit of the students at the institute level; they are trained to be environmentally conscious. Make necessary changes in the curriculum. The Institutes should organize more guest lectures from Industry experts, making the students more environmentally conscious and sensitive. Ensuring it is everyone's responsibility to save, recycle and reuse resources would contribute to saving Mother Earth, making it greener and happier.

Conclusion: The research focused on the students embracing the change in hotels and getting educated and trained at hospitality institutes, the challenges they face and their opinions and ideas, which would bring about change in the Hospitality industry regarding eco-friendliness and sustainability, thus making the planet a better place for the future hospitality industry and the generations to come.

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Role of Emotional Intelligence in Strengthening Employee Retention and Employee Performance in the Hospitality Industry: Utilization of Sustainable Practices

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ABSTRACT

Purpose: This research will determine the relationship between Emotional Intelligence and Sustainable growth and practices. Its impact on employee retention and performance in the Hospitality industry

Design/Methodology/Approach: The study employed review research papers to determine the relationship between emotional intelligence and the achievement of sustainable growth— the effect of emotional Intelligence and Sustainable growth on Employee Retention in the Hospitality industry. Secondary data gathered from the literature and scholarly articles relating to EI was used in the study.

Findings: This research examines the significance of emotional intelligence (EI) in staff retention and the promotion of sustainable development.

It was found that there is a significant relationship between Emotional Intelligence and sustainable development, and these two factors affect employee retention in the hospitality industry. EI facilitates employee productivity by helping workers deal with others and themselves.

Research limitations/Implications: This study is based on secondary data. The research can be done by focusing on designing a structured questionnaire, circulating it to the primary data, and completing the research by applying various tests.

Originality/Value: According to Goleman (1995), emotional intelligence (EI) is the capacity to identify, regulate, and understand one's and those of others. The notion encompasses four interpersonal and personal qualities or skills: Self-awareness is the capacity to become aware of one's own emotions and experiences and recognize how they influence our thoughts, feelings, behaviors, and interactions at any given moment. This domain is the cornerstone of emotional intelligence. Two facets of self-management are motivation and self-control. Self-regulation inhibits disruptive emotions and the reflexive actions that accompany them before acting. It allows reliable environments to grow and encourages productivity even in the face of difficulty or stress.

Keywords: Emotional Intelligence, Self-management, Job Satisfaction, Employee Retention, Social Awareness, Sustainable Practices

1. INTRODUCTION

EI facilitates employee productivity by helping workers deal with others and themselves. According to the report, EI is crucial for companies to maintain their personnel. The staff understood the impact of emotions on decision-making.

Emotional intelligence (EI) plays a significant role in today's business world. It helps managers enhance organizational success, development, and growth. Emotional intelligence refers to measuring capabilities, accepting and handling one's and other's emotions, and guiding the behavior and actions of others. (Kazi Sirajum Munira, 2022) (Christine Wamsler, 2020). In the workplace, EI helps motivate employees to resolve conflict, influence others, generate a culture of cooperation, and foster psychological safety within teams. (Dr. Kaenat Malik, 2023) (Isabel Coronado-Maldonado, 2023). At an individual level, EI supports us in making conversations without offending others' feelings, managing our emotions, and improving relationships with people. (Ahangar, 2012). On the other hand, sustainable leadership creates sustainable outcomes socially, economically, and environmentally. (Liao, 2022). Emotional intelligence can significantly influence an organization, business, and service to achieve sustainable benefits or results. Highly

emotionally intelligent managers can predict employees' and customers' emotions or mental states, effectively making sustainable and appropriate decisions. (Haddad, 2023). The current research intends to explore the likely link between emotional intelligence and sustainable leadership. In the age of the digital economy, the need for emotional intelligence (EI) is greater than ever. Today's rate of technological progress is going to replace cognitive and manual routine tasks so that employees can take on more responsible roles. Employees must have the skills to use their EI (Lunenburg, 2011) (Gardner, 1995). EI is required to become a successful leader in the new business arena. EI is increasingly acknowledged as one of the most crucial talents for leaders to collaborate and communicate effectively under various scenarios. (Goleman, 1995) Extensive research shows that EI has attracted tremendous interest from scholars and practitioners as it explains variations in leadership behavior. (Md. Sahidur Rahman)(Mary Gemma Cherry, 2014); (Carsten C. Schermuly, 2022).EI primarily states proficiencies that allow awareness of one's emotional state and the ability to use emotions to influence role performance positively. Goleman (1995) first introduced it in the popular media. EI has received considerable attention in mainstream culture and business. (Andrew S Klein, 2013).

Now, the business community considers EI a broadly accepted practice for recruiting, training, teamwork, and leadership development. (Kamal M.Y., 2017). A leader or manager wants to comprehend EI that contributes to corporate performance. Stephens and Carmeli (2016) argued that people with high EI are broadening their expertise and capability to communicate and cooperate efficiently for successful project outcomes. Handong Tang et al. (2020) showed that managers with high EI have more potential to use structural holes, and managers with high EI can stimulate employees' innovative behavior, thus improving employees' job performance. (Handong Tang).

2. LITERATURE REVIEW

Emotional Intelligence (EI) Emotional intelligence means the capability to apprehend how people feel and react and utilize this trait to develop better judgments on different problems. In recent years, emotional intelligence has become popular, with researchers exploring its impact on various aspects of human behavior and decision-making processes. It supports interacting with each other and understanding their needs. EI is the competency to observe and express emotions precisely.While artificial intelligence is a machine's ability to process information and simulate human intelligence to accomplish a task, emotional intelligence is an individual's capacity to recognize, define, and control emotions to achieve the desired outcome in an organizational setting. The functional areas of HR, which include performance management, learning and development, recruitment, and pay management, have been heavily impacted by AI in HR

operations. However, a study discovered that despite its advancements, AI still has limitations in forecasting specific emotions that will boost organizational efficiency, highlighting the need for further. Furthermore, the study suggests that AI's limitations in predicting specific emotions that will boost organizational efficiency are mainly due to the lack of diverse and inclusive data sets and the need for more sophisticated algorithms to accurately capture and represent emotional nuances in human behavior. The study aims to investigate emotional intelligence's function in artificial intelligence and use machine learning to foresee potential emotions. In conclusion, incorporating diverse and inclusive data sets and developing more sophisticated algorithms are crucial to improving AI's ability to capture and represent emotional nuances in human behavior accurately, ultimately enhancing organizational efficiency.

The primary goal of the current study was to examine emotional intelligence's impact on employee engagement and talent retention. It is worthwhile to research employee engagement since it leads to talent retention. Using random sampling, information was obtained from 100 respondents in the IT industry. The core data for the study was gathered through a self-administered questionnaire. Participants filled out two surveys:(1) The Emotional Intelligence Appraisal (Bradberry & Greaves, 2003) (Sabet, Mirhashemi, & Ganji, 2005) Assesses an individual's general emotional intelligence as well as their self-awareness, self-management, social awareness, relationship management, and self-awareness; and (2) the Employee Engagement Questionnaire (Schaufeli, Bakker, & Salanova, 2006), which evaluates employee involvement. The outcomes met the objectives of the current study and went in the anticipated direction. The results showed a significant, vital link between the two research variables. (Jain & Duggal, 2016).

3. EMPLOYEE RETENTION

If there is a corporation, there is a great approach to determine how well it can handle challenges. About fifty years have passed since organizational behavior (OB) research and discussion began. (Luthans, 2012). Things always remain the same, demonstrating that organizational management issues have existed since the beginning of human civilization. The focus and context of the surrounding environment have undoubtedly changed, even though the issues facing an organization and the solutions offered have not. For instance, managers were occupied with reorganizing their companies between the 1980s and the mid-1990s to boost customer interest in purchasing, boost productivity, and address the problems of competing in global marketplaces. For instance, a study conducted on Fortune 500 businesses between 1995 and 2005 revealed that the most popular initiatives were Six Sigma quality programs, shared services creation, cost reduction programs, and restructuring (downsizing) (Luthans, 2012).

Employee engagement and talent management have a significant impact, according to (Muhamad Ekhsan, 2022). This also holds for the variables of individual achievement. This study explains how businesses implement talent management to strengthen employee ties and enhance personal performance (Bhatnagar, 2007). It also explains the strategy of talent management and the function of employee engagement as a bridge between the two relationships.

The factors that influence organizational trust in talent management are described by (Özçelik, 2015). In this instance, talent management can also be seen as how the organization's efforts to keep staff members engaged would save expenses for hiring new hires. Employee engagement can mitigate the impact of employer branding on employee retention, as explained by Bhatnagar. The researcher explains that talent backed by work ties will significantly impact employee retention. This is consistent with studies done by (Hughes & Rog, 2008), but their study was restricted to lodging establishments. According to (Ali Chitsaz-Isfahani, 2014), organizational trust mediates between company branding and employee retention. However, there is currently no conclusive evidence that organizational trust mediates the association between these two factors in a positive and meaningful way, similar to the relationship between employee engagement and retention. This underscores the need for further research in this area. Human resource assets become valuable but are frequently invisible to management from the psychological perspective of employee retention as a future element for the organization to retain brilliant people. (Nanda Reza Fahlevi, 2021).

4. EMPLOYEE PERFORMANCE IN THE GROWTH OF ORGANISATION

Armstrong (2006) claims that there is a culture of high performance, while Gruman and Saks (2011) think that performance management is essential to the effectiveness of a business. According to the United States Office of Personnel Management (2001), performance management is a systematic process that includes workload planning, expectation setting, ongoing performance monitoring, building capacity, periodic performance appraisal, and high-performance recompensation. In a study conducted in 2012, Rasch concluded that high-tech companies are cutting staff in their existing markets to invest in these new markets. Pitt and Foreman (1999) discuss performance as a factor influencing resource consumption.

Another author, Gounaris, 2005, believes that job satisfaction is a crucial performance measurement indicator, along with the effectiveness of the company's internal marketing strategy and decision-making processes. (Gruman & Saks, 2011) Concur that a high level of employee commitment results in improved performance. Comparatively speaking, Ind. (2007) notes that businesses that offer flexible work schedules and development initiatives that promote active intellectual

engagement outperform those that do not in terms of financial performance.

Managers need to be aware of what their staff members need and allow them to express their thoughts and demonstrate their skills. Despite this, a study by human resources specialists conducted in 2010 by Allan revealed that only 65% of organizations' management required employees to complete total evaluations, and 47% of managers believed that performance management was primarily a human resources procedure and not essential to the business's success. Barr (2012) claims managers continue to select the most productive employees for various reasons, including decision validation when terminating underperforming employees, ongoing promotion, and development chances.

5. SUSTAINABLE HUMAN PRACTICES AND EMPLOYEE RETENTION

Adopting HRM techniques that have an influence both inside and outside the organization over an extended period while accounting for unanticipated side effects and negative feedback is known as sustainable HRM. Within Sustainable Human Resource Management (SHRM), we take a social sustainability approach from the workers' viewpoint, drawing on findings from earlier research and reports like the Global Reporting Initiative (GRI). Our long-term initiatives on social issues about the working relationship, like worker participation, worker cooperation, equal opportunity, and worker development, are underpinned by our unwavering commitment to worker health and safety, ensuring a secure and caring environment for all. Sustainable Human Resource Management (SHRM) aims to improve employees' attitudes and behaviors, boosting their motivation and sense of belonging. It also gives managers the tools to assess and address employees' needs and issues, raising worker satisfaction and promoting long-term organizational success. Because replacing employees is expensive and affects organizational performance, many firms have prioritized employee retention in their HR strategies. (E. Kennedy, 2010). To preserve a competitive edge, it is vital to keep skilled people who will contribute to the company over the long run. (L. Book, 2019).According to Kaliprasad (2006), the motivational, interaction, learning, and vision processes are the four main connected processes that can be used for an efficient human resource planning system. These processes have a substantial impact on the retention strategies that are employed. Employee retention contributes to their engagement and gives them a path that significantly raises their value to the organization. (Kaliprasad, 2006). According to Mattox and Jinkerson (2005) (J.R. Mattox, 2005), companies that implement SHRM-related initiatives see an improvement in employee attitudes about retention. (Poe, 2003) Demonstrated that social and non-monetary appreciation is as crucial as pay to keep employees. According to Wang Fu et al. (2017), workers may view the company as an institution that shares their social views rather than just a place to work, which fosters more robust employee identification and,

ultimately, higher employee retention. (W. Wang, 2017) (L. Lee, 2018).

6. CONCLUSION

Therefore, reports like those from the Global Reporting Initiative (GRI), which include indicators of employee engagement, collaboration, equal opportunities, development, and health and safety, can be used to evaluate and plan a sustainable human resources policy. Consequently, sound, sustainable social HR management fosters better relationships inside the company and increases employee loyalty and retention, boosting overall performance. Given the high expense of hiring and firing employees, managers should encourage assessment programs backed by career development, planning, and training—relationships and inspiration that raise wages and foster employee loyalty. Emotional intelligence plays a significant role in the workplace. It is essential for establishing and preserving solid bonds with coworkers and reaching higher levels of job satisfaction. A favorable correlation has been seen between an employee's emotional intelligence and job happiness. Employees' job positions appear to impact their emotional intelligence scores.

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Emerging Trend of Sustainable Baking In Bakery Industry

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ABSTRACT

A new area of study called "Sustainable Baking" blends contemporary sustainability ideas with conventional baking methods. This research examines the many facets of sustainable baking, such as the sourcing of Ingredients, energy efficiency, waste minimization, and community impact. Bakers can minimize their ecological footprint or biological footprint while producing delectable items by incorporating these principles.

The study provides practical insights and techniques, emphasizing the significance of implementing sustainable practices in both home and professional baking settings.

Purpose/Objective:

- *To explore the potential of sustainable ingredient sourcing in reducing the ecological impact of bakery production.*
- *To evaluate energy-efficient baking methods and their effect on reducing the carbon footprint in both home and commercial bakeries.*
- *To examine strategies for minimizing food waste and promoting recycling in bakery operations.*
- *To investigate the role of sustainable baking practices in fostering community engagement and supporting local economies.*
- *To provide actionable recommendations for incorporating sustainability into everyday baking, both professionally and at the consumer level.*

Design/Methodology/Approach:

This study aims to explore the emerging trend of sustainable baking in the bakery industry, focusing on energy conservation, water management, waste reduction, and responsible sourcing. Through structured interviews with chefs and hospitality professionals, the research

examines motivations, challenges, and outcomes of implementing sustainable practices. The findings will offer valuable insights into best practices, highlight key obstacles, and provide actionable recommendations to integrate sustainability in both small and large-scale bakery operations, fostering environmentally responsible production.

Primary Data:

Questionnaires:

Structured questionnaires were distributed to key stakeholders, including General Managers, HR Managers, and chefs, from bakery establishments across Mumbai, Pune, and western Maharashtra. The questionnaires included both closed-ended and open-ended questions, capturing quantitative data and qualitative insights on the emerging trend of sustainable baking in the region's bakery industry.

Research limitations/Implications: *The research on sustainable baking offers valuable insights into integrating eco-friendly practices in the bakery industry. However, its scope is limited to Western Maharashtra, potentially restricting the generalizability of findings. Additionally, reliance on self-reported data through questionnaires may introduce biases, impacting the accuracy of the conclusions drawn.*

Originality/Value:

Sustainable baking is an emerging trend that integrates eco-friendly principles into traditional baking practices. This study explores sustainable ingredient sourcing, energy-efficient methods, waste reduction, and community impact, offering actionable insights to promote environmentally responsible practices in both home and professional bakery settings.

Waste management in perishable food items is essential for overall sustainability. Organizations are eager to explore different ways to find the solution for waste management. (Fikri Dweiri, 2021). Consumers increasingly see food as an opportunity to experience flavours and textures and are particularly responsive to products that are positioned as natural and healthy. Increased health awareness will be a strong driver of the trend to provide the market with baked goods with increased nutritional value, high in fibre, protein, and other plant-based additives. (Maria Królak, et al., 2022).

Sustainability presents a universal challenge that all industries must actively address, including the bakery and pastry arts. It is imperative to adopt eco-friendly practices, emphasising streamlined resource planning. (Vohra, 2024)

Keywords: *Sustainable baking, Ingredient sourcing, Energy efficiency, Waste minimization, Ecological Footprint.*

INTRODUCTION

Sustainable baking is an emerging field that integrates eco-friendly principles with traditional baking techniques. This research explores key aspects of sustainable baking, including responsible ingredient sourcing, energy conservation, waste reduction, and the broader impact on communities. By adopting sustainable practices, bakers can significantly reduce their ecological footprint while still producing high-quality, delicious baked goods. The study aims to offer valuable insights and practical strategies for incorporating sustainability into both home and professional baking environments, highlighting the importance of these practices in promoting long-term environmental and social benefits in the bakery industry.

Sub-topic related to the main topic:

Introduction to Sustainable Baking
Sustainable baking blends traditional baking techniques with eco-friendly practices, focusing on reducing environmental impacts. The rise of sustainability in the bakery industry emphasizes the need to implement responsible sourcing, waste reduction, energy efficiency, and ethical labor practices.

Sourcing Ingredients Responsibly
Sourcing ingredients responsibly is the first step toward sustainability in baking. Choosing local, organic, and non-GMO ingredients reduces the carbon footprint associated with long-distance transportation India's non-GMO food products market size in 2021 is USD 3,027 Million. The rise in health consciousness in the country is pulling people towards picking upon preventative health care. (choudhari, 2022).

Energy Efficiency in Baking
Bakeries consume substantial energy, especially in commercial operations. To reduce this consumption, bakeries can adopt energy-efficient appliances such as ovens, mixers, and refrigerators. The transition to renewable energy sources like solar or wind power can also significantly decrease energy-related emissions. These strategies not only help the environment but also result in cost savings over time, making energy efficiency an essential aspect of sustainable baking.

Waste Minimization
Minimizing waste is essential in sustainable baking. Bakeries can reduce food waste by repurposing leftovers, such as turning stale bread into breadcrumbs or using overripe fruits in cakes. Reducing

packaging waste with recyclable or biodegradable materials, along with recycling and composting, helps bakeries lower their environmental impact. Human errors emphasized by the respondents may be related to the failure to maintain

Cleanliness in POS area and insufficient control of the time the products spend in the shop, leading to the presence of expired products (failure to follow FIFO). (Goryñska-Goldmann, 2021).

Sustainable Packaging Solutions

Packaging is a significant waste source in the bakery industry. Sustainable alternatives like biodegradable, recyclable, or compostable materials, along with minimalist packaging, help reduce environmental impact. Despite higher initial costs, the long-term benefits and growing consumer demand for eco-friendly options make sustainable packaging a valuable investment for bakeries. With their biodegradable nature, paperboard boxes are becoming popular for pastries and cakes. Biodegradable films derived from plant-based sources offer a promising alternative to plastic for bread packaging. The benefit lies in these materials' ability to decompose naturally, reducing the strain on landfills. (Navigating Trends in Sustainable Packaging Materials for the Baking Industry, 2024).

WATER CONSERVATION IN THE BAKERY INDUSTRY

Water usage is another critical factor in sustainable baking. water and its quality indicators in the technology of production of bakery products with deferred baking has a great impact on the quality of the finished product - these are issues of the state of water in frozen products; organoleptic, physic - chemical, microbiological parameters, water hardness, its technological parameters and prescription quantity. Implementing water-saving technologies such as low-flow faucets, water-efficient dishwashers, and water recycling systems can help conserve this precious resource. Reducing water consumption not only benefits the environment but also cuts costs for bakeries, making it a win-win practice for sustainability. (Olha Petkova, 2022 june).

Environmental Impact and Carbon Footprint

Bakery operations impact the environment beyond ingredients and energy use, with transportation contributing to carbon emissions. By sourcing locally, optimizing supply chains, using sustainable packaging, and participating in carbon offset programs, bakeries can reduce their carbon footprint and contribute to climate change mitigation efforts.

Community Impact and Social Responsibility

Sustainable baking supports local economies by sourcing ingredients from farmers, promoting ethical labor practices, fair wages, and community outreach, while educating consumers and supporting social and environmental causes.

Challenges in Implementing Sustainable Practices

Sustainable baking faces challenges like high ingredient costs, consumer resistance to eco-friendly products, and limited supplier availability. Overcoming these obstacles is essential for the long-term sustainability of the bakery industry.

THE FUTURE OF SUSTAINABLE BAKING

The future of sustainable baking looks promising, with continuous advancements in technology, growing consumer awareness, and more regulatory support. Innovations in energy-efficient appliances, waste management, and sustainable packaging will drive the industry toward a greener future. As demand for eco-friendly products increases, bakeries will continue to evolve, benefiting both the environment and the community.

REVIEW OF LITERATURE

(Kamila de Oliveira do Nasciment, 2018) In their research coined that "Consumer awareness of food ingredients and the desire for simple, natural foods have pushed food manufacturers to develop products with clean labels. It is therefore critical to consider the implications of developing a clean label product, considering the effects of those changes may have on sensory quality and microbiological control, while also maintaining regulatory compliance".

Mr. Amit Kumar, Anupa Bora from Department of Hospitality Management, CT University Ludhiana, Punjab in their research "A Study Of Challenges Faced By Bakery Management In Ghaziabad emphasizes on " Adopting sustainable practices, embracing technology, and establishing a strong online presence are critical in today's digital age. By reducing food waste, implementing recycling programs, and using eco-friendly packaging, bakery management can demonstrate environmental responsibility." (Mr. Amit Kumar, 2023)

Dirk Siegfried Hübner in their research "Case study on sustainability as an influencing factor on the purchasing behaviour of bakery consumers Consumption behaviour of baked goods among the urban population in Germany" quotes "To better appeal to consumers, bakers may need to focus more on communicating their sustainable production practices. Transparency about

the origin of ingredients, organic farming methods and social responsibility could increase consumer trust and willingness to pay a higher price for sustainable baked goods. In addition, measures to reduce the environmental footprint during production, such as the use of renewable energy sources and the avoidance of food waste, could help to increase consumer interest." (Hübner D. S., 2024)

Objective:

The key objective of this research paper is to explore sustainable baking practices, focusing on ingredient sourcing, energy efficiency, waste reduction, and environmental impact, while providing actionable insights for bakeries to adopt eco-friendly solutions.

Hypothesis:

This research hypothesizes that adopting sustainable baking practices, including responsible ingredient sourcing, energy efficiency, waste minimization, and eco-friendly packaging, can significantly reduce the environmental impact of bakeries while maintaining product quality and profitability. It further suggests that the implementation of these practices will lead to long-term benefits for both the bakery industry and the broader community, fostering a shift towards more environmentally conscious and socially responsible baking operations.

RESEARCH METHODOLOGY

Primary Data:

This study employs a structured questionnaire-based interview approach with key managers and stakeholders in the baking industry, including General and HR Managers, Chefs & Academicians. The focus is on sustainable baking practices such as energy conservation, waste reduction, responsible sourcing, and eco-friendly packaging. Responses are confidential, ensuring ethical data integrity throughout the study.

Secondary Data:

A review of existing case studies, news periodicals, and books on sustainability practices in the baking industry will be conducted to contextualize the findings and identify best practices. This review will focus on documented efforts within bakeries to adopt sustainable baking methods, such as responsible sourcing of ingredients, energy-efficient baking techniques, waste reduction strategies, and the use of eco-friendly packaging. By analysing these sources, the study aims to highlight successful examples, challenges faced, and the overall impact of sustainable practices

in the bakery sector, offering valuable insights for future adoption.
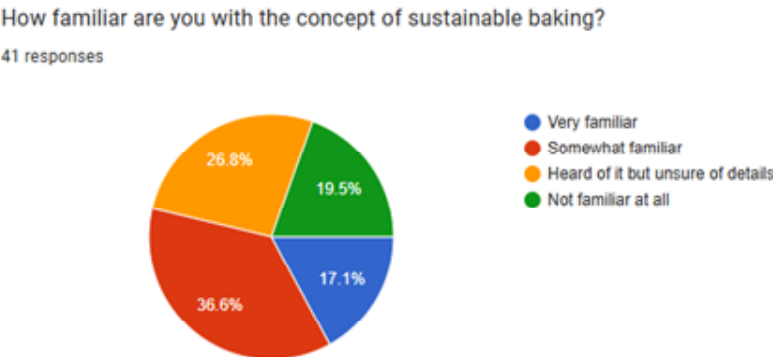
Tables and graphs:

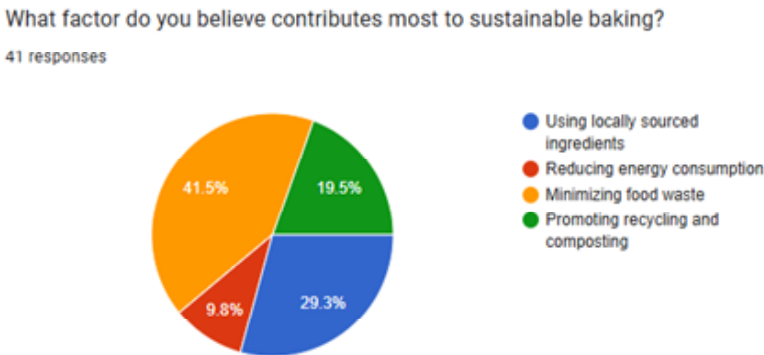How familiar are you with the concept of sustainable baking?

41 responses

Figure 1 : Familiarity on the concept of sustainable baking.

What factor do you believe contributes most to sustainable baking?

41 responses

Figure 2 : Contribution to sustainable baking

How often do you use locally sourced or organic ingredients in baking?

41 responses
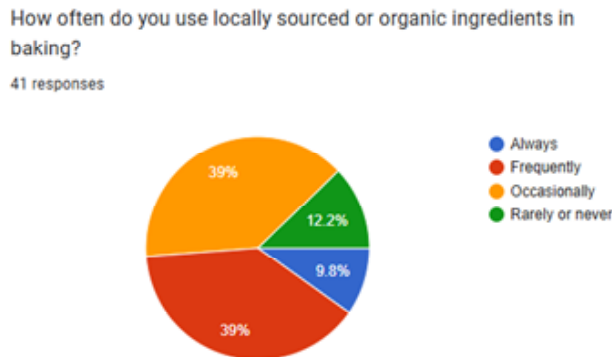
Figure 3 : Sourcing of organic ingredients

What challenges do you face in adopting sustainable baking practices?

41 responses

- High cost of sustainable ingredients
- Limited availability of resources
- Lack of awareness or knowledge
- Time constraints or complexity
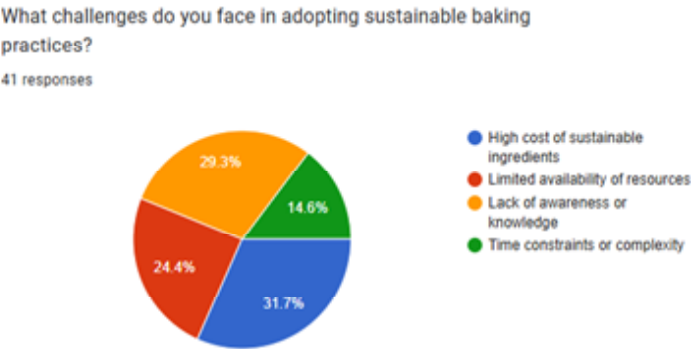
Figure 4 : Challenges faced in adopting sustainable baking practices.

Which energy-efficient baking method do you currently use or are most interested in adopting?

41 responses

- Convection ovens
- Batch baking to optimize oven use
- Solar-powered baking equipment
- None
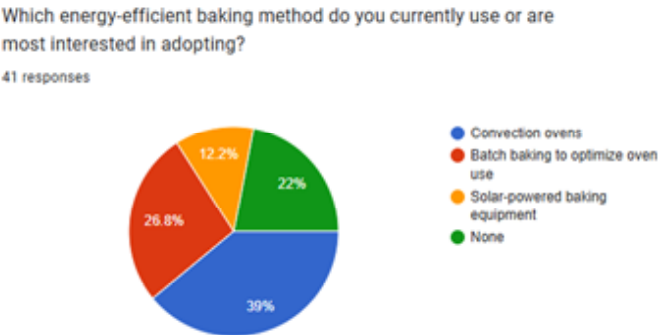
Figure 5 : Energy efficient baking methods used.

How do you handle leftover ingredients or unsold baked goods?

41 responses

- Reuse in other recipes
- Donate to local communities or food banks
- Compost or recycle
- Discard
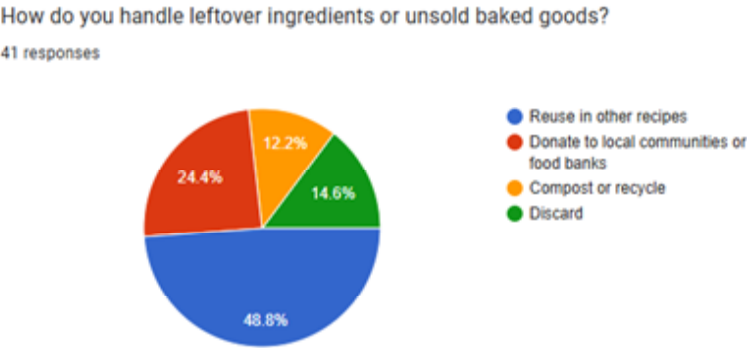
Figure 6 : Handling of leftover or unsold baked goods

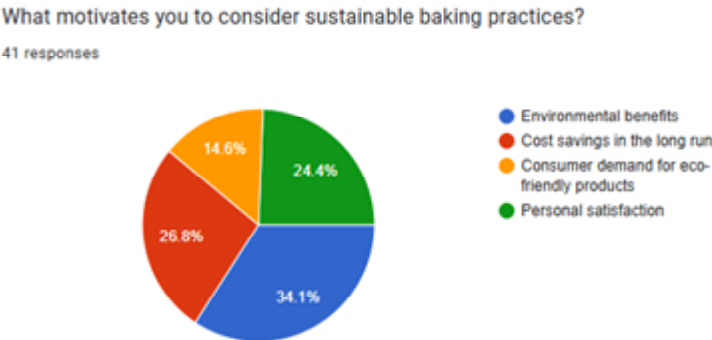What motivates you to consider sustainable baking practices?

41 responses

Figure 7 : Motivational factor to consider sustainable baking practices.

How do you perceive the role of sustainable baking in supporting
local economies?

41 responses
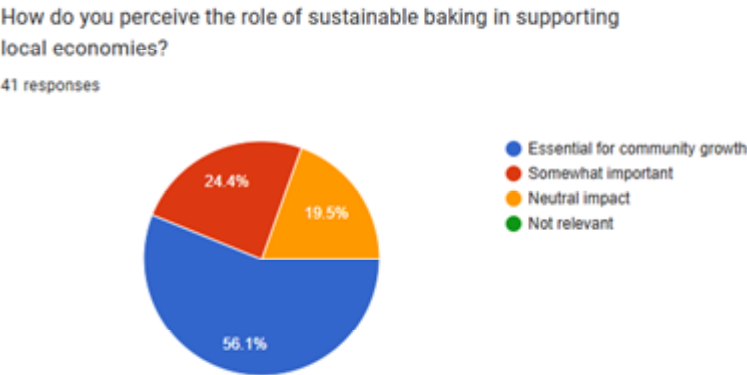
Figure 8 : Perception of the role od sustainable baking in supporting local economies.

Which of the following waste-reduction strategies do you actively
implement?

41 responses

Figure 9 : Implementation of Waste reduction strategies
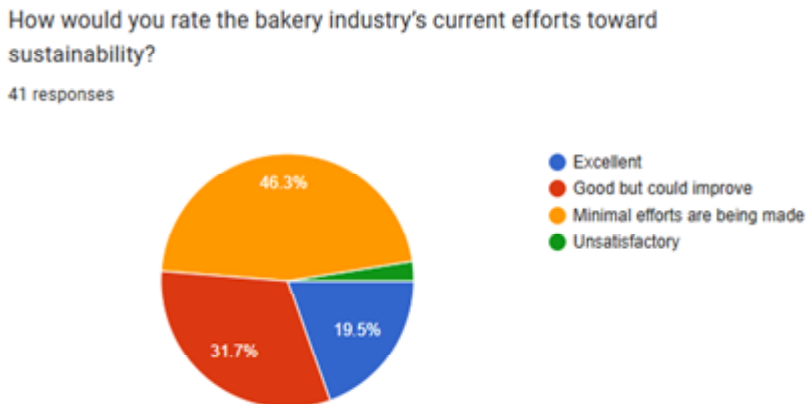
Figure 10 : Rating on Bakery Industry's current efforts towards sustainability

DATA ANALYSIS/INTERPRETATION

Primary Data:

The survey, as illustrated by Figures 1–10, provides insightful data on sustainable baking. Figure 1 shows that while 36% are somewhat familiar with the concept and 17% are fully familiar, a significant 46.3% view the bakery industry's current sustainability efforts as minimal (Figure 10). Figure 2 highlights that 41.5% prioritize minimizing food waste, and Figure 3 reveals that 78% frequently or occasionally source organic ingredients, though barriers like high costs (31.7%, Figure 4) and limited knowledge (29.3%) persist.

Figures 5 and 9 underline the importance of efficient practices, with 39% using convection ovens and 63.4% adopting precise measurements. Innovative solutions, such as repurposing leftovers (48.8%, Figure 6), are gaining traction, while motivational factors like environmental benefits (34.1%, Figure 7) drive adoption. Figure 8 underscores the positive perception, with 56.1% linking sustainable baking to community growth. Suggestions include cost subsidies, skill training, and investment in energy-efficient technologies to bridge gaps and unlock the sector's eco-potential.

Secondary Data:

As per the reading on Automore Website - For bakeries, going green is no longer just a niche trend but a business imperative that resonates with a broad segment of consumers. By adopting sustainable practices, your bakery can demonstrate its commitment to the environment and the

community, creating a brand that people feel good about supporting. Remember, every small step towards sustainability can have a significant impact. Start your journey today, and let your customers know that every bite they take supports not just your business, but also the planet. (desaitech, 2024). Mr. Dirk Siegfried Hübner in their study on sustainable baking Quotes "The concept of sustainability has become increasingly important in the purchasing decisions of consumers around the world. This is particularly true in the food industry, where customers are becoming increasingly aware of the environmental and social impact of the products they buy". (Hübner M. D., 2024)

RECOMMENDATIONS AND SUGGESTION

To promote sustainable baking, it is recommended that bakeries prioritize responsible ingredient sourcing, focusing on local and organic products to reduce environmental impact. Investments in energy-efficient appliances and renewable energy can significantly cut carbon emissions. Waste minimization through precise measurements, repurposing leftovers, and sustainable packaging should be emphasized. Educational initiatives and government incentives can address cost and knowledge barriers. By adopting these practices, bakeries can enhance their ecological responsibility while supporting local communities and meeting growing consumer demand for eco-friendly products.

CONCLUSION

This research highlights the transformative potential of sustainable baking in reducing environmental impact and fostering community engagement. By adopting responsible sourcing, energy efficiency, and waste minimization practices, the bakery industry can balance ecological responsibility with profitability. I sincerely thank the stakeholders for their valuable inputs to the primary research. My heartfelt gratitude to Anjuman-I-Islam's IHMCT, and my principals, Dr. Rukshana Billimoria and Mr. Harish Suvarna, for their unwavering support.

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