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आज़ादी का
अमृत महोत्सव

REVOLUTIONIZING TRENDS IN HOTEL ROOMS DIVISION



INSTITUTE OF HOTEL MANAGEMENT CATERING TECHNOLOGY & APPLIED NUTRITION, CHENNAI

(An Autonomous Body under Ministry of Tourism, Govt. of India, New Delhi)
(Affiliated to National Council for Hotel Management, Noida & IGNOU, New Delhi)
IV Cross Street, C.I.T. Campus, TTTI-Taramani Post, Chennai - 600 113, India

Phone: Office: 044-22542029, Fax: 044-22541615

Email: ihmtaramani@gmail.com Website: www.ihmchennai.org



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INSTITUTE OF HOTEL MANAGEMENT CATERING TECHNOLOGY & APPLIED NUTRITION CHENNAI

Editors

Sri. Jitendra Das

Dr. J. Eugene



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Dr. Chandra Mohan.B, I.A.S.,

Chairman



**Principal Secretary to
Government, Tourism,
Culture and Religious
Endowments Department,
Government of Tamil Nadu**

Foreword

It is heartening to write a foreword to the book **"Revolutionizing Trends in Hotel Rooms Division"**. This outcome is a sequel to the International E-Conference on the said theme by IHM Chennai. This EConference is a new milestone in the academic journey of IHM Chennai.



I am impressed by the contributions from different domains. One can see the diversity of topics in this book ranging from the simple cleaning of a hotel guest room to Artificial Intelligence. This book has attempted to compile research findings of authors who have worked on a spectrum of topics like new trends in housekeeping, service excellence in Front Office, technology in guest rooms, post-pandemic standard Operating Procedures, Human Resources in Rooms Division, Robots in Rooms Division and so on.

This book throws light on the less focused areas of the rooms division, thereby serving as important reference material for hospitality students, faculties, and hoteliers.

I sincerely appreciate the efforts of the team in charge of publishing this. I wish the team the very best for a successful year ahead!

(Dr. Chandra Mohan B)

Chairman,

Board of Governors

Institute of Hotel Management

**Catering Technology & Applied
Nutrition, Chennai**

SANDEEP NANDURI, IAS

Director of Tourism



Message

I am extremely delighted to witness the progress of IHM Chennai in all areas of academics. IHM Chennai is taking every possible step to foster the required skills amongst the students, needed to propel and prosper in the hospitality industry.

IHM Chennai has convened an International E-Conference titled "**Revolutionizing Trends in Hotel Rooms Division**" which is praise worthy. A lot of planning and coordination goes into organising a conference and IHM Chennai has accomplished it admirably and flawlessly. During the technical sessions, a large number of papers were presented, and they are now being published in the form of an edited book with an ISBN.



This edited book is an outstanding abridged account of the newer trends pertaining to the rooms division of a hotel. This would immensely help the students, faculty, and industry experts to understand the rooms division of a hotel from a research perspective.

I congratulate all the paper presenters for adding new insights and knowledge to the existing literature, thereby contributing immensely to fostering research. I appreciate the entire team of IHM Chennai for inculcating the true spirit of research among the students by including them in this endeavour.

I wish the team at IHM Chennai all the very best for their brilliant endeavours.

Thank you!


(SANDEEP NANDURI)



Tamil Nadu Tourism Complex, No.2, Wallajah Road, Chennai - 600 002.

Phone: +91 - 44 - 2533 3555 / 2533 3850 - 54 Fax: +91 - 44 - 2533 3772

Toll Free No. 1800 4253 1111. E-mail: ttdc.chennai@gmail.com

Website : www.tamilnadutourism.tn.gov.in



सत्यमेव जयते

ज्ञान भूषण, भा आ से
Gyan Bhushan, IES



आर्थिक सलाहकार एवं मुख्य कार्यकारी अधिकारी
एन.सी.एच.एम.सी.टी.
भारत सरकार
पर्यटन मंत्रालय
नई दिल्ली

ECONOMIC ADVISOR & CEO
NCHMCT
GOVERNMENT OF INDIA
MINISTRY OF TOURISM
NEW DELHI

Dated: 28th April 2022

It is heartening to write a message to this Conference Proceedings titled **"Revolutionizing Trends in Hotel Rooms Division"** published by IHM Chennai. Organizing a Conference is very vital to disseminate informative and intriguing findings after a thorough research. 11TM Chennai has taken this step to collaborate with various colleges, Institutes, Hotels and research scholars and had successfully brought everyone under a single roof to share knowledge through paper presentations.

I commend the organizing team for meticulously planning the event. It is encouraging to see that the speakers of the conference are holding key positions in the Industry and are from various parts of the globe like India, Armenia, Dubai and Canada.

The proceeding has almost 50 research papers covering wide range of topics on Hotel Rooms Division. The research rigour is perspicuously evident in this book. This book is sure to help the budding talents in a big way.

The reviewers did an outstanding job of reviewing each and every paper, assuring high-quality, press-worthy materials. I wish to express my appreciation to the editors for their efforts in bringing this book to perfection.

I wish all the very best for the future endeavours.


(Gyan Bhushan)

8^{वॉ} तल, ईस्ट विंग, 36 चंद्रलोक भवन, जनपथ, नई दिल्ली-110001 दूरभाष : 91-11-23724164
8th Floor, East Wing, 36 Chanderlok Building, Janpath, New Delhi - 110001 Tel. : 91-11-2372416
E-mail : bhushan.gyan@gov.in

MOHAMED FAROUK

Regional Director,
India Tourism



Message

Research is the need of the hour. An important outcome of a research work is publication and IHM Chennai has prudently persuaded this mission perspicuously. It gives me immense happiness to record my message as part of this skillfully edited book "**Revolutionizing Trends in Hotel Rooms Division**". As such, hotel industry is going through a massive change especially after pandemic. This opportune moment was very well utilized by IHM Chennai to explore and discover about the changes and trends through a conference.

I have seen IHM Chennai performing outstandingly in academics, extra-curricular activities, Co-curricular activities and so on. This academic novelty of conducting an E-Conference is definitely a feather on its cap. I am amazed to witness the fact that around 50 research papers from different Institutions have made its way to this book for publication.

IHM Chennai has carved a niche for itself through this E-Conference. Its collaborative power has rightly impacted researchers of various institutes resulting in many number of papers. A few Institutions that have participated in the Conference include Garden City University, ISRO, IHM Bhopal, IHM Kolkata, IHM Kovalam, IHM Pusa, MD University Rohtak, Madurai Kamaraj University, SRM (Deemed to be University), VIT (Deemed to be University) and many more.

This edited book will serve as a reservoir of research findings and a treasure trove of information. This bulky book also showcases the research acumen of various researches, thereby disseminating the vital trends in research.

I congratulate the students, staff and Principal for this painstaking task. Well done! Kudos!

Wishing you many more such editions in the coming years.

Thank you.

(Mohamed Farouk)

154, Anna Salai, Chennai, 600002, Tamil Nadu.
Tel: 044-28461459, 28460285, Fax: 044-28460193,
indiatourism.chn@nic.in

R. PARIMALA

Principal i/c



Message

I feel elated as I write this message for the edited book **“Revolutionizing Trends in Hotel Rooms Division”**, which is an outcome of the International E-Conference organized by our team on 15th March 2022. As such the theme on which the conference has been convened is unique and sets a significant stance. Though Rooms Division in a hotel is of paramount prominence pertaining to guests’ stay experience, satisfaction and generating revenue, it has all the more garnered a different shape especially during and post pandemic. The approach to rooming the guest and servicing the guest rooms are quite different than how it used to be. These changes have co-created new guest expectations and experiences.

Ideally, we have captured the changing paradigm in Rooms Division and envisaged the evolving trends by organizing this E-Conference. The discussions and deliberations by researchers during technical sessions of the conference are easily accessible now by everyone through this edited book. I am pleased to highlight the fact that academicians and researchers were able to showcase their findings on a plethora of novel topics like robotic cleaning in hotels, Nano-technology in housekeeping, Guest’s perceptions and expectations in the hotel industry in present scenario, Environment sustainability through best housekeeping practices, TQM in housekeeping, Role of Towel origami in guest delight experience, Connecting with guests with apps and voice control, Room division approaches towards single lady travelers, Experiencing economy and essentials in the room divisions, Augmented reality in Rooms Divisions and so on. I am sure the scholastic contributions from various authors of different Institutes imbued in this book, set the tone for knowledge dissemination and adds new information to the existing literature.

I congratulate the entire Conference team for organizing and coordinating flawlessly and for carving out this publication intensively.

A handwritten signature in black ink, which appears to read "Parimala R". The signature is written in a cursive, flowing style.

Smt. R. Parimala
Principal i/c

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“360° VIEW FOR 365 DAYS” AUGMENTED REALITY IN HOSPITALITY INDUSTRY

T. L. Shine

*A.C.M, Scf Keepakam,
Satish Dhawan Space Centre – Shar
Indian Space Research Organisation, Sriharikota Range - P.O Dist-Nellore*

V. Vinish

Advocate, Kerala High Court

ABSTRACT

In the wake of new technology adoption due to COVID Pandemic hospitality industry is at the perfect place for adoption of Augmented reality. Not surprisingly, resources from various industries are entering Augmented Reality (AR) as a tool to increase customer satisfaction and increase their core, one industry in particular is the hospitality industry. In recent years, Augmented Reality (AR) has emerged as an important marketing tool, allowing businesses to change the way customer’s assumption, the place they are going to stay. Technology is very important in the hospitality industry because hotels sell virtual space, which can be improved with Augmented Reality. It allows hotels and other related businesses to improve the physical environment they sell (i.e. their hotel and rooms), or to improve their experience to virtually exploring the surrounding area and the information available. Another key detail is the number of information that visitors usually request so that the hotels/ resort are well aware of the guest requirements before and after they arrive. Augmented reality technology can make this vast amount of information easily accessible to customers at all times of the day, improving their overall knowledge& experiences, augmented reality can be seen twice as much in the hotel industry as a front of the house application and in back of the house application combined with other technologies. With Augmented Reality new experiences can be created and new revenue streams made available through this technology.

Keywords: Pests, Augmented Reality, Technology, Transformation, Hospitality.

OBJECTIVES OF THE STUDY

1. How Augmented Reality Transform Hospitality Industry
2. Augmented Reality Technology
3. Evolving Augmented Reality Technology & Application in travel, tourism & Hospitality
4. Augmented Reality possibilities in the hospitality industry.
5. Using Augmented Reality to boost hotel booking

Shine & Vinish

INTRODUCTION

Augmented Reality the word Augmented means to do something great by adding to it and reality means real which is true. Therefore, in concurrence with Augmented Reality, it is defined as a combination of a real user-friendly scene viewed and a computer-generated visual interface that adds a scene with more information. Augmented Reality (AR) was first revealed in 1960 as per Augmented reality in context to India (vol.3, Issue July 2015) by M/S Neha & Rajneesh T.

Now the latest technology is easily designed, used to organize real time viewing and now as per the technology friendly process Augmented reality is a hassle free application for many users. Enriching the real world through computation based information is known as Augmented Reality.

How Augmented Reality Transform Hospitality Industry

In recent years, augmented reality (AR) has emerged as an important marketing tool, allowing businesses to change the way customers perceive their environment they are going to stay or are in. Technology is very important in the hospitality industry because hotels& resort are selling the reality what is presently available in physical environment (virtual space), which can be upgraded with Augmented Reality. Augmented reality helps to change one's perception of the environment, using computer technology, augmented reality enhances the real-world environment in real-time. Technology itself can be used in several ways which includes smartphones, tablet devices, or headphones. In augmented reality what we see is introducing digital segments into reality, rather than replacing reality itself. This is usually done by overlaying information over a live picture of a physical environment. These all are used to superimposed upon the real-life environment.

“Augmented reality and its working” (Vol-3, Issue-2, 2020) by Ms.A. Sushma, Mr. Bivek Kumar Jaiswal, Ms. AranyaSamanta, Mr. Ankit Kumar Singh & Mr. AbhayPratap express the basic idea of augmented reality is to overlay images, graphic, and audio and other intelligence enfacements over a real environment in real time. The system is to grow the user's idea of and interaction with the real world by augmenting the real world with 3D virtual objects that appear to exist in the same space as the real environment.



Augmented Reality: A smart device that shows the digital pathway to the guest in real-time

As a result, augmented reality can be used to add physical graphics to an environment when viewed through a device, alter the appearance of the environment itself, or make the environment more interactive. The pandemic inspires the tourism industry to innovate and provide new and exciting ways of the tourist experience. As the industry seeks to sell, improve its guest experience and service provided to meet demand, Augmented Reality becomes the most important hotel technology during this recovery period. Augmented Reality technology can help solve the hotel industry's challenge of improving the actual environment and conditions of guests without the costly and practical disruption to their operations and facilities. With digital transformation good performance, improving standards being the real time going as a recovery plan for the hotel industry. Augmented Reality could easily disintegration and transform the hotel industry around the world.

An important use of technology is to enrich the guest experience by gathering hotel information for guests before and after their arrival at the hotel. With augmented reality technology we see can make all that information readily available to visitors at any time, making their stay comfortable. In this era of strict travel regulations, pre, post and during covid pandemic travelers will make an extra effort to research travel destinations and accommodations before committing to travel. Information collection becomes an integral part of their shopping journey. These technologies can easily facilitate to hotels meet their guest new needs, demand and trends. For example, a 360° room tour, with information about amenities, availability, and prices can be used by the hotel marketing department to effectively attract direct bookings as Augmented Reality enhances customer booking experience.



Augmented Reality: Demonstrates a 360-degree real-time guest room tour.

Another new feature through augmented reality is to provide a full room experience with another feature where guests get to see their room space transformed into as per their requirement. This is especially important in the current era when visitors are concerned about the health and safety of the new environment, which increases their tendency to stay indoors. Additionally, the

4 **Revolutionizing Trends in Hotel Rooms Division**

increased interactivity and enhancement of in-room experience complements the hotel industry's current trends of offering staycation packages and transforming their rooms into a working space - all activities that appeal to guests who are looking to stay in the room most of the time.

As per the "A Survey of Augmented Reality" by Ronald T Azuma of Hughes Research Laboratories Malibu, CA, Augmented Reality allows the user to see the real world, AR supplements reality, rather than completely replacing it, Ideally it would appear to the user that the virtual and real objects coexisted in the same space, similar to the effects achieved in the picture. While the epidemic has brought an unprecedented challenge to the hotel industry, it has also accelerated the use of disruptive technologies to acquaint people and innovate their current operations. Just as hotels are starting to benefit from the principles of adopting smart technologies such as AI and IoT solutions for recovery, AR provides hotels with a new solution to get back on track and come out stronger and more competitive than ever before.



Augmented Reality: Guest need are taken care with 200% satisfaction level

New guest experience can be created and new revenue streams can be discovered through this technology. Marketing and entertainment are remembered as good start-up point. Now destinations, navigate are already been tried and tested, and of course, F&B can use this technology. Visual menus enhanced cocktails for example are all possible. Hotels that specialize in social media can make a great impression around their product. But really good infrastructure will be essential for this to be successful.

The use full use of Augmented Reality can give a great experience to the food lover of the hotels (guest as well as staff) with the use of AR guest can know the type of food, nutritional content of the food, calorie value and many more things. With the use of augmented reality in food guest himself can customized the like and it will be an add on advantage to the hotel and the kitchen team to prepare the food as per the guest choice by knowing the details through AR. Hospitality Industry guest have more choices of menu with AR rather than the traditional menu card. As the saying says what is seen is served, augmented reality is going to be an revolution in hospitality industry where almost stratification level of guest / customer is taken care.

Augmented Reality Technology

Augmented reality overlays digital information on top of a camera-captured natural environment. For it to work, it needs the following components:

- a) **Deep-sensitive camera:** One needs a camera to record visual information to add to an existing object or location. The said camera should be capable of figuring out the subject's distance and angle from it.
- b) **Registration tools:** These are tools, such as motion sensors and accelerometers, that allow the computer to define a space where they can place or place sensory information or objects that should be around the Augmented Reality user.
- c) **Computer view:** As we use a camera, it takes pictures from the outside world to be interpreted and directed using a machine learning algorithm (ML). For example, when you train a camera to focus on a box, it uses pixels from that image as a reference to seeing objects that look the same. The next time one takes a picture of another box, the algorithm will try to remember this information to guess if the object is a box. The ML algorithm also integrates all the pieces of information and adds artistic touches to it to give the user a solid and convincing AR feel.
- d) **Output device:** This refers to a display device where users can view the resulting image or video, such as a phone or computer monitor etc.

AR is usually accessed through an app on a user's smartphone, tablet, or similar device. The technology adapts to the user's environment in real-time by layering digital elements, such as 3D objects and sound, over the surface to create visual, focused information.

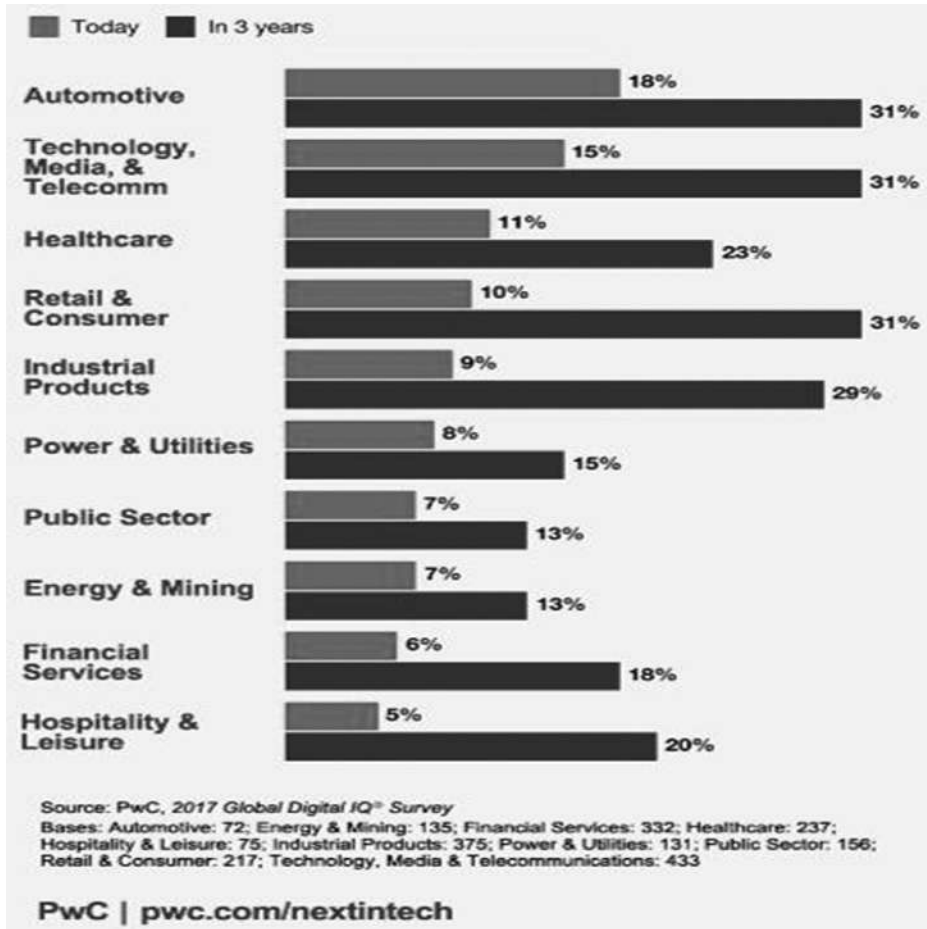
As per "Augmented Reality (Ar) & Virtual Reality (Vr)- Digital Transformation in Industrialisation Fostering Innovation & Entrepreneurship" by Mr. Devesh Rath, Mr. Ipseeta Satpathy & Mr. BCM Patnaik. Essential three classification of Augmented Reality are:-

- a) Blend of genuine world and virtual items in genuine condition.
- b) Synchronize genuine and virtual items with one another.
- c) Very intuitive and keeps running in 3D progressively.

AR has already become an important marketing tool in many industries, providing new ways to communicate and communicate with customers. One example is the IKEA Place app, which allows users to place visual 3D models of their products in their visual environment, showing how the product looks in its intended location in real-time. As a marketing tool, AR has proven to increase customer satisfaction and provide a new customer communication tool. One industry that is starting to use this technology is hospitality.

Evolving Augmented Reality Technology & Application in travel, tourism & Hospitality

*Statics shown below are the Augmented Reality Excepted Growth in all stakes of industries.



As technology continues to evolve at an unstoppable rate, it changes both the expectations of patrons and the processes for hospitality industry. This makes it difficult for hotels, guest houses and restaurants to keep up with current trends in tech, nevertheless look-to future trends. However, the importance of technology within the industry has increased as the demographics change. Millennials are now the dominant consumer and they are more likely to make bookings and purchases through their phones than previous generations. Gone are the days when Wi-Fi was seen as a perk. Nowadays, fast and seamless Wi-Fi is a must-have for hotels and guest houses. Mobile-first websites are fast becoming a necessity as most consumers expect digital experiences to be user-friendly, engaging and accessible through their smartphones. These changes also provide benefits, with many of the recent technology adoptions leading to great improvements and savings for the industry.



Augmented Reality: Real-time displays & information for users.

New technological upgrading is a time-consuming and this incur huge cost accumulation and time-consuming process. Hospitality Industry continues to use the available technology resource effectively, this can open up a variety of opportunities for a better and smoother customer experience. Not just for tourists, this can be a great management tool for augmented reality which can be used by hotels to improve the environment by making them more interactive. They can improve the knowledge of their rooms and the environment. Also augmented reality-based interfaces can provide as much information to guest or staff as possible, making the process as simple as pointing the camera at a real object that may be connected to a related server to download the required information.

Augmented reality places the virtual objects in the real environment in real time which can see through the different display objects and turns the environment around us into a digital interface was from IRJET Journal- Vol 4 issue5, 2017. “A Review: Augmented Reality and Its Working” by Ms.VaishaliArawal and Mr.Jugnesh Patel.

Travel, Tourism & Hospitality companies that get on board quickly with AR reap the benefits sooner, and will not have to rush to find out when AR marketing technology has become so commonplace that their customers even expect it when they book holidays. By accepting Augmented Reality one can turn almost any print media clip into an interactive multimedia catalog, display, or collaboration tool that will drive new and repetitive customers to your website. Increasing user interaction and education through an in-depth AR self-awareness can create excitement with your place (travel, tourism & hospitality industry) which will increase bookings and a variety of marketing opportunities.

One can also incorporate AR into your social media marketing campaigns with a life-like 3D experience that enhances your guest rooms, dining menu, and outdoor beauty. This experience is fully shared through social media user forums, which gives your product unlimited awareness as your message grows. And as things move faster with digital and this generation is looking for faster and more efficient and reliable ways such advanced learning methods can be a savior in the large and diverse travel, tourism & hospitality industry in performing various tasks.

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We see augmented reality has the potential to unleash the full potential of your marketing campaigns to help your guest rooms stay full all-season or throughout the year.

AR Possibilities in the hospitality industry

- a) **Interactive Hotel Rooms:** Hotel rooms can work better with hoteliers using the augmented reality features and techniques. The living rooms can have a 3-dimensional display feature on the portal so that guests can realistically view them when booking a room or want to grab a special service. Not just this, it can also be used to make the customers have a detailed view of the surroundings of the hotels which is obviously shot by a camera and there is extended information provided to them for further detailing enabling them in better choices and decision making by having a 360 degrees of virtual tour before being physically present. Using AR technology guests could get information about the room such as famous celebrities who stayed there, historical facts about the hotel, information about the artwork on the wall, and more.



Augmented Reality: A smart device displays digital element over the real-time environment

- b) **Map Features:** Augmented reality works by adding made-up features to real images that exist in the form of information. Resort AR maps: use of well-placed beacons, large resorts, casinos, meeting hotels, etc., can create an AR resort map app, allowing visitors to navigate the buildings with the AR app on their smartphones. Hotels and resorts around the tourist hub can have this feature where guests can point their cell phones on the map to get an idea of some of the attractions and their times and other details nearby. This can be easily done through applications and portfolios that work by providing connectivity and access. This map feature used with the augmented reality will not only make maps more reliable and informative but will also make travel easier and more informative for customers.



Augmented Reality: Real-time displays map features of the amenities to the users

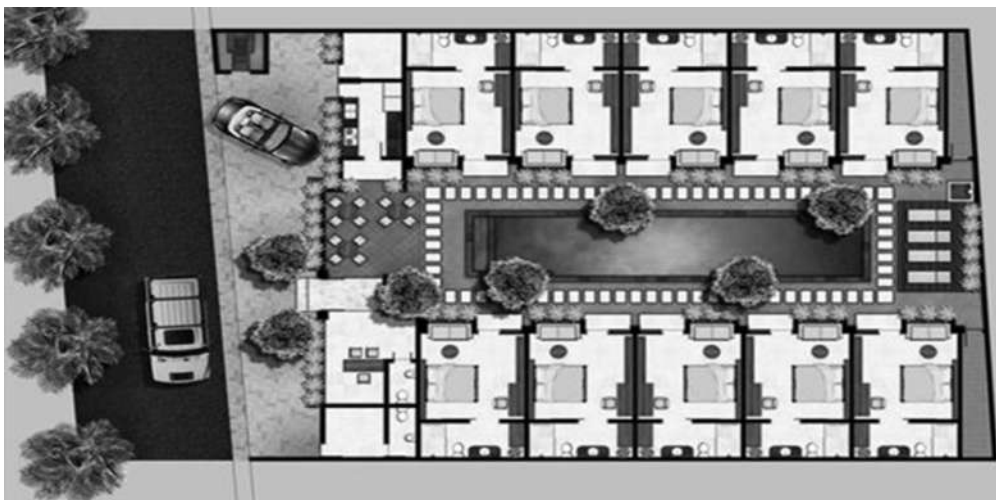
- c) **Development as Games:** Hotels always try to make the holidays for guest's fun and enjoyable with things like hotel spa and pool. But hotels can also offer guests AR games, providing headsets and mobile apps for guests to use while on site. They can be designed for children or adults and can also offer prizes, such as a free drink or an appetizer at a hotel restaurant by completing a level or completing a game. Hotels can enable augmented reality-based games on their premises to keep guests busy and entertained. There are games like PokemonGo that make excellent use of Augmented reality features. Hotels can engage in games such as hunting for gems by taking them to the visual arena, improving features such as their decision that can be played on their premises. This can be done using a lot of technology as IoT-based games are trendy and adding this to their compatible services for their guests which is very fun and exciting.
- d) **Guest Recognition:** Every guest is important in business. However, depending on the popular services and preferences some guests are loyal and often repeat their stay several times. In such a situation, visitor recognition can be the catalyst for providing the best and easiest services to them. Augmented reality-based applications can help in getting details about the guest and their preferences and choices. IoT based cameras can be used in connectivity with the AR setup working by providing the details about the guest and their previous stays, the services they took, room preferences, food preferences, etc. As the image of the guest gets pointed out the details can pop up. This will help in generating a personalized experience for the guest as well as make the process of allotment convenient for the staff.

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- e) **Beacon Technology:** Another technological solution that can be valuable to the hospitality business is beacon technology. The technology is already being used in some hotels and their popularity is expected to grow. One can use beacons to share needed information with guests such as:
 - a) A map of the hotel and surrounding area with information about the sights of the area
 - b) A visible key to lock or unlock the door of their room using their phone or tablet
 - c) A free drink ad or appetizer advertisement at a hotel restaurant, etc.
- f) **Maintenance Information:** If the hotels and restaurants go on to make their application the users (or the repeated users) can get information in a rather handy way. Users can find related information about equipment and repairs and the estimated time taken to restart the facility so that they feel clear enough about the disruption. This can be done by simply pointing their cameras at such locations and letting the information appear and hotels can send them alerts using backup technology in case hotel guest stay in the area while touring and exploring the hotel.
- g) **Translation Services:** Many hotels have foreign visitors who may not be able to communicate well with people of different language backgrounds and remember that they may miss out on some detailed information. These guests may be confused about calling for room services and using instructions related to certain services. In such a case augmented reality can come to the rescue, for instance, the guests can point their smartphones at the various texts and guides or even the hotel menu, for instance, to get the related information with the option to choose from multiple languages. Just like this, they can call for room service or whatever they need in a rather uncomplicated and hassle-free way in the language of their choice.
- h) **Offers and Promotions:** Using beacon technology, placed strategically near the hotel restaurants and spas, the hotel can “beam” special offers, discount vouchers, menu, and reviews via push notifications on guests’ smartphones.
- i) **Tourist maps of the hotel’s surroundings:** Create a large local attractions map in the lobby of the hotel to provide detailed information about the most prominent attractions in the hotel vicinity when viewed through a smartphone or tablet.
- j) **Scavenger hunting games for kids:** Family and beach resorts can develop an interactive scavenger hunt Augmented Reality Application to entertain their young guests and their parents as an entertainment and hotel amenities.
- k) **Hotel Development:** Interior design of the hotel: using AR, the interior designer can visualize and choose shades of paint, as well as size, number of pieces, and placement of the furniture in the lobby, common areas, and hotel rooms.
- l) **Hotel Staff:** Room Readiness, Utilizing AR, a PMS can develop an AR map of the accommodations, visualizing which ones are vacant and ready, vacant in need of service, which ones are occupied, or out of commission. This app can be of great help to over-worked front desk clerks and housekeepers.

Using Augmented Reality to boost hotel booking

Augmented Reality solutions will soon make it possible for consumers to explore the many different rooms offered to your site and get important information about them before booking: such as room size, price, features, etc. Thus improve their knowledge in augmented reality, because they know, what they will get in the future. Augmented Reality allows travelers to visit the hotel and consult with resort professionals before booking their vacation, providing them with an in-depth, personal introduction to the resort and staff who will make their visit memorable.



Augmented Reality: Real-time room displays available to users

In technology driven environment hospitality industry especially hotels are seeing the benefits of using augmented reality to make the 360° view more enjoyable to spend time in. During pandemic hygiene safety which has now become vital for all wherein augmented reality hotel experience. This allows guests to point their smartphone and see realistic virtual discription of room views (See facing, facing towards landscape, swimming pool, waterfall, historical monuments) along with famous celebrities stayed in the hotel using such Augmented Application to allow guest to virtually redecorate them self.

Augmented Reality features specially designed art prints, which make people wonderfully alive. A little look at who they are, what they do, and how they can help travelers to have a lifelong journey while having all the amenities of hotels and resorts. These activities build relationships between the customer and the staff before they meet, unravel the mystery of who will provide them with services during their trip, and create excitement in hotels and resorts, leading to additional benefits and bookings. Investing in AR is just one example of how hotels, resorts, casinos, and other in hospitality can increase brand presence and elevate business using today's advanced technology.

CONCLUSION

The study analyzes the long-term potential effects and impacts on future employees as the industry wins the response to the pandemic. This research also opens up the possibility, methods, use of augmented reality in Travel/Tourists/Hospitality Industry customers who are now coming with more technology and anticipating more powerful shows, the level of travel anxiety and peace of mind is expected with the popular reality experienced through augmented reality.

The importance of technological advancement is evident in almost every business and industry these days. Hospitality is a service-based agreement. So, not just 5 stars or big hotels but local hotels & resorts are also looking forward to expressing themselves by using these options and technologies. The industry is aware of the fact that augmented reality will attract tourists and many more opportunities will come for the better performance and for the better customer satisfaction, in other words in hospitality can increase brand presence and elevate business using today's advanced technology. Augmented reality which can be used in combination with other technologies such as IoT, big data, and virtual reality to maximize usage. This also is not just a tool to provide better customer information, this can be used by managers to take care for the guests and provide accurate instructions and details on the AR-based portal to their staffs for the guests. Hospitality staff can be knowledgeable about, considering the process underlying that started before their service time by using smartphones/tablets for identifying guest requirements in hotel stay, food & beverage service and other hotel amenities.

The use of AR specialists will provide the right insights, strategies, and tips that can work to inspire you, improve your revenue, establish processes and improve customer experience in the hospitality industry. The points covered in this research paper provide a starting point and that there is still much to be learned about the proper use and practical use of augmented reality. It is still a long way off.

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SUSTAINABLE PRACTICES IN THE FIVE STAR HOTELS OF MUMBAI: APPLICATION, BENEFIT & DRAWBACKS - PROSPECTIVE OF THE MANAGEMENT STAFFS

Abhishek Chowdhury

Lecturer,

IHM Mumbai

*SVS Rd, Dadar West, Dadar, Mumbai, Maharashtra - 400028
Ph. No. 9594761361, e-mail ID- abhishek.doctorate@gmail.com*

Chandrokala Biswas

Asst. Lecturer

IHM Mumbai

*SVS Rd, Dadar West, Dadar, Mumbai, Maharashtra - 400028
Ph. No. 8250903558, e-mail ID- chandrokala@gmail.com.*

ABSTRACT

In the time trying times when climate change is threatening the future of the planet, as a luxury industry, hospitality is evolving to provide extravagance while being sustainable. Application, benefit & drawbacks of sustainable practices at hotels have the closest relationship with day to day management operations. This study is focusing on the current state of sustainable practices followed in the hotels. Moreover the pro and cons faced by the management staffs while implementing green practices. A survey on 14 five star hotels of Mumbai was selected through non-probabilistic judgmental sampling, has revealed that the limited awareness, mindset of the guest and cost of implementation are their biggest challenge. However, state laws, cost effectiveness and PR requirement are the driving force towards the correct direction. Most of the hotels in Mumbai has taken significant steps towards sustainability and are certified by external agencies.

Keywords: sustainability, awareness, guest-satisfaction, CSR.

INTRODUCTION

Sustainability developed as a notion in 1960 during the environmental movement to deal with the rapid loss of non-renewable resources (DU PISANI, 2006). Later, this concept was divided into three pillars known as environmental, economic, and social (Purvis et al., 2018). This is also known as the triple bottom approach.

In hotel industry use of the word sustainable, environmental or green have been attached not only to responsibility but also to successful marketing strategy to attract guests (Kumar et al., 2012). So, it is no longer a desired attribute, but a necessary to run a successful operation.

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According to WTO & ITF (International Transport Forum's) landmark report, tourism related transportation contributed about 5% of global CO₂ gas emissions. By 2050 over 80,000 hotels will join the existing inventory at the recent pace (trivago Business Blog, 2019).

As we have only one earth and resources are limited, it is high time to think about sustainability as the only option in hand. Also from revenue point of view, Sustainable practices can result in substantial cost savings. According to LEED, following their certification rules would cost \$4/ sq. foot more than traditional building methods. But, in long run (20 years) it would save between \$48 and \$67 per sq. foot.

Government initiatives to promote sustainable practices in tourism and hospitality industries are on a rise in recent past. UN General Assembly has adopted the 2030 agenda in 2015 including 17 Sustainable Development Goals (SDGs). Also the hotel guests are aware about environment friendly practices in India. However, bearing extra price for it is not a tendency yet (Manaktola, K., Jauhari, V. 2007). As sustainability in hospitality is becoming widespread phenomenon in the industry, clear evidence of green practices has taken president over empty claims & good intentions.

Under the circumstances it has become Important to find out the ground level challenges faced by the hotel management, needs and benefits of the sustainable practices that is observed during regular operation, the potential of sustainable practices from monetary point of view.

In this descriptive research I will try to focus on the above points while examining current level of sustainable practices in and ascertain the challenges and impact of the same on hotel operations.

OBJECTIVES

1. Examine the current state of sustainable practices followed in the hotel industry.
2. Ascertain the challenges faced in the implementation of sustainable practices in the hotel industry.
3. Investigate the impact of sustainable practices on hotels.
4. Formulate certain innovative sustainable practices with the help of professionals in the field.

METHODOLOGY

Research Design

This project is a Descriptive Study that collected data using self-administered standard questionnaires through an online survey.

Research Setting & Sampling Technique

As this study is specific to Mumbai, we used non-probabilistic judgmental sampling method to select managerial level staffs from different hotels in Mumbai. The Primary data collected was use self-administered questionnaires. They were requested to be true to their responses.

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Methods of data collection:

For this survey a questionnaire was constructed, consisting of 11 questions in total, out of which 9 questions would be close ended questions and the remaining 2 are open ended.

Data analysis

The collected primary data was analyzed through both qualitatively and quantitatively method.

Quantitative data analysis maybe done by tabulating and calculating

1. Frequency distribution
2. Percentages
3. Pictorial representation of the above

Qualitative data analysis maybe done by

1. Content analysis

REVIEW OF LITERATURE

With the bigger picture of climate change and global interest in mind hotels often focus on sustainable practices in the very beginning with their design and construction philosophy (Parpairi, 2017). Introduction of glass walls, facades for natural lighting in the common areas, solar panel on roof tops, waste and water recycling, rain water harvesting have some what become mandatory in the industry. LED lights with sensor technology, solar water heater which minimizes the electricity consumption. Black-water, and grey-water are also separated, recycled and used again in the restrooms, landscaping etc. The choice of ozone over chlorine disinfection is becoming popular in swimming pools and laundries increasing the efficiency of reduce, recycle. Vertical gardens and foliage cover walls work very well with recycled water and help to keep the temperature down during the harsh Indian summers, reducing the use of central Air conditioning system, hence decreasing the carbon foot print.

During daily operation sustainable practices inside the hotel play a major role and are applied in the hotels in different ways and means by the core departments.

The framework for studying green practices in the hotel industry was developed by using the basic framework of GSCM proposed by Hervani, Helms and Sarkis (KAFA et al., 2013). They hypothesized that the GSCM elements involve green procurement, green design, green manufacturing, green operations and reverse logistics and waste management (Khan, 2018).

Hotel across India and Sustainable Practices

The Taj Residency, Bangalore – All the serviettes, toilet papers, tissues and paper towels are made from 100%recycled paper. All spa products provided to guests are natural and preservative free. The hotel uses eco-labelled weedicide and fungus, insect and rodent killers.

ITC Chain of Hotels, India – ITC Gardenia & ITC Windsor, Bangalore, ITC Maratha, Mumbai, ITC Rajputana, Jaipur and ITC Grand chola, Chennai operates on wind energy and have the largest self-owned wind farms. LED light fixtures are used for energy efficiency. Low VOC (volatile organic compounds) paints and certified wood are used in all the spaces.

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Lemon Tree Chain of Hotels, India – Uses LED lighting in public areas and energy reducing chillers in air conditioners.

Oberoi Udaivilas, Udaipur – Bottled drinking water is made at a centralised facility for use in all their hotels. The resort's pools are heated using solar energy. Waste heat is recaptured from chillers and is used to heat water for hotel's purposes.

The Park Hotel, Hyderabad – Solar gain, day lighting and local climate were kept in mind when designing the building to maximise light and minimise heat gain.

ITC Grand Chola, Chennai – All electrical energy demands are met through renewable energy resources. Almost 35% use of water is reduced through efficient fixtures. 100% waste is recycled.

Leela Palace, Delhi – It has a Building Management System to reduce energy and wastage. Energy efficient insulation is placed on the roof and walls to reduce cooling requirements inside. The hotel uses CFC-free and ozone- friendly refrigerators and air conditioners.

Green Leaf Hotel, Delhi – No waste in construction of the hotel's building.

The Rain Tree, Chennai – All the hotels of this group are self-sufficient in terms of energy consumption. It produces energy through its own windmills, generating exactly as much as it needs. The group has also reduced its water consumption by half by reducing the flow rate of bathroom fixtures from the standard 12-15 litres per minute to 8-9 litres per minute.

Leela Palace, Delhi – The hotel has an in-house water treatment system which recycles 'grey water' for non-potable needs. The toilets have a flow setting which reduces water consumption while maximising flushing efficiency.

Taj Coromandel, Chennai – The hotel generates energy from windmills and biogas plants which run on biodegradable kitchen waste.

Taj West End, Bangalore – The hotel uses a biogas plant which turns kitchen waste into energy and solar powered water heating systems.

The Rain Tree, Chennai – The hotel has a sewage treatment plant that recycles 'grey water' which is then used for air conditioners. The heat generated by the air conditioners is then used to warm the water in the bathrooms.

The Taj Residency Hotel, Bangalore – The hotel has a heat exchanger to recover heat from the air conditioners' chillers and use the heat to preheat water to feed the hotel's boilers. The hotel's dishwasher collects the final rinse waste to be used in the next load's first wash. The hotel also has a water treatment plant where the backwash water from the pools and effluents are treated to a quality suitable for reuse for non-potable uses.

The Serai, Jaisalmer - The hotel uses wastepaper as fuel to cater to heating requirements, has a modern water recycling and filtration system for swimming pools and practices rainwater harvesting to conserve groundwater.

Lemon Tree Chain of hotels – The hotels have a Sewer Treatment Plant (STP) which recycles water for the flush systems and gardening purposes.

Our Native Village, Bangalore – The hotel has adopted a Zero Waste Policy. There is a biogas plant which turns food waste into energy and compost whereas the paper waste is used up for bonfires. The flush water goes into leech pits that convert wastewater to manure over a period

of time and all grey water from bathrooms goes through reed beds and is used to replenish groundwater.

The Oberoi, Mumbai – All used printed stationery, after being processed and screened, is reused as a notepad for photocopying, printouts, and posters for back area use.

The Leela Palace, Delhi – The kitchen waste is shredded and used for making compost. Polythene bags used for propagation of plants are reused once they are re-planted. Used fuels, furniture parts, old trolleys etc is handed over to a company that builds shelters for poor people.

ITC Grand Central, Mumbai – The hotel has a waste management system called Organic Waste Converter (OWC). Food waste and organic waste are completely processed through the OWC and converted into compost, which is then used by the hotel horticulturists.

DATA AND DATA ANALYSIS/DISCUSSION

Response	Frequency
Limited awareness	08
Mindset of the guest	06
Cost of implementation	05
Limited resources	06
Other	01
Total	26

Table 1: Common challenges faced by the hotel

While enquiring about the most commonly faced challenges while implementing sustainable practices, the most frequent point that came up was limited knowledge of the staff members, where they were unaware of the reasons of their practices. Guest’s willingness to adjust with changing practices was an issue too. Limited resources and variances of expenditure associated with sustainable practices is an issue too.

Response	Frequency
Reduced cost	07
Financial incentives	04
Guest experience	05
Improved goodwill and public relations	12
Other	03
Total	31

Table 2: Benefits of sustainable practices

During the discussion on the benefits of sustainable practices, 50% respondents indicated towards reduction of costs due to reuse and reduced usage of various resources. 28.6% respondents stated that hotel have received certain financial incentives in terms of government subsidies. 35.7% respondents had noticed improvement in guest-experience creating loyal clientele. 85.7% hotels had enjoyed higher goodwill and better public relations. 21.4% respondents mentioned self-satisfaction as a rewarding contributor.

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Response	Frequency	Percentage%
1 (Very important)	08	57.1%
2 (Important)	02	14.3%
3 (Neutral)	02	14.3%
4 (Less important)	02	14.3%
5 (Least important)	00	0%
Total	14	100%

Table 3: Importance of sustainable practices

57.1% recognized implementation of sustainable practices as a very importance task. Though the majority has a positive attitude towards sustainability, every hotel has different priorities regarding the same in their routine.

Response	Frequency	Percentage%
Yes	11	78.6%
No	03	21.4%
Total	14	100%

Table 4: Impact on guest satisfaction

Though majority of the hotels are inclined towards the fact that sustainable practices have a certain impact on guest satisfaction, 21.4% respondents disagreed.

Response	Frequency	Percentage%
1 (Strongly agree)	03	21.4%
2 (Agree)	06	42.9%
3 (Neutral)	04	28.6%
4 (Disagree)	01	7.1%
5 (Strongly Disagree)	00	0%
Total	14	100%

Table 5: Inclination of guest to return to hotels following sustainable practices

21.4% & 42.9% respondents respectively strongly agreed & agreed that guests tends to be loyal after observing hotels following sustainable practices. This also indicates certain amount of elevated guest awareness. 28.6% respondents have given a neutral response and 7.1% respondent declined to accept the contributions of sustainable practices in creating loyal customers.

Response	Frequency	Percentage%
Yes	07	50%
May be	05	35.7%
No	02	14.3%
Total	14	100%

Table 6: Guests' concern towards sustainable practices

50% respondents agreed that the guests that they have in their respective properties show concern regarding the sustainable practices followed by the hotels. This shows that the guests coming in Mumbai do think of sustainable practices as a priority. Respectively 35.7% & 14.3% from the sample indicated that the guests in their hotels are either neutral or completely indifferent about the sustainable practices. It could be considered as lack of awareness or consciousness among the guests.

Response	Frequency	Percentage%
1 (Most likely)	01	7.1%
2 (likely)	04	28.5%
3 (Neutral)	06	42.8%
4 (Less likely)	02	14.2%
5 (Least likely)	01	7.1%
Total	14	100%

Table 7: Willingness of the guests to pay extra

The study shows that clear majority of respondents (35.6%) has felt that the willingness of the guests to pay extra to support sustainable practices is either very likely or likely. Though high no of neutral and negative responses are concerning.

Response	Frequency	Percentage%
Yes	11	78.6%
No	03	21.4%
Total	14	100%

Table 8: Communicating about practices to the guests

As the hotels were asked, whether, they openly communicate about their sustainable practices with their guests or not, the majority of the hotels, 78.6% from the sample gave an affirmative answer because the hotels feel that their guests should be aware of the practices happening in the hotel, which might contribute better PR and public awareness. 21.4% respondents do not communicate about the sustainable practices followed in the hotel, as they don't consider it to be an important marketing strategy.

Response	Frequency	Percentage%
Yes	14	100%
No	00	0%
Total	14	100%

Table 9: Use of environment friendly guest amenities in hotels

All of the hotels in the sample agreed and said that they do provide environmental friendly guest amenities in their guest rooms as recycled paper notepads, biodegradable amenity packaging, zero miles water, etc.

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The sample hotels were asked about different certification programs they were a part of, where 8 of them were part of different certification programs, such as Planet 21, Ecotel Certification, Earth Check- Gold/ Platinum, LEED Platinum Certification and Green Building Certification etc. This leads us to believe that these hotels have specific standards when it comes to following certain practices and have to maintain them. 2 hotels were not part of any of the certifications. 1 hotel was certified internally according to their set standards. 3 hotels were not willing to disclose information regarding their certifications status.

The hotels were asked about common sustainable practices that they follow and implement on a regular basis. One respondent declared that they use bathroom amenities made up of recycled materials. Various water saving measures such as sensor based faucets were used. A utility platform, Known as MESH, has been established in the hotel which helps them to track the consumption by submitting invoices of the same. These invoices include the data from the following metrics: Carbon Intensity, Water Intensity, Energy Intensity and Waste Diversion. This also included a Sustain Responsible Operations (SRO) tracker. One respondent mention the usage of double glazed windows, sensors and aerators, concealed cisterns, sewage treatment plants, usage of natural lights, use “Save our Planet” cards in the guest rooms for the guests to help out their mission, serving fruit platters only on guest requests to prevent wastage, waste segregation bins for easier disposal of waste, usage of eco-friendly pens, green team activities and tying up with NGO’s for reusing of soaps. Maintenance and upkeep of the Gateway of India, recycling of waste water in the form of grey water, reduction of use of plastic products, sourcing of raw materials from the local vendors, training and sharpening skills of the new and young staff, reusing of energy generated and also using of alternate sources of sustainable power. One respondent offered to change the linen every alternate day to reduce water consumption, sensor lights in guest rooms to save electricity, use of LED lights in the entire property, sewage treatment plant is also established which is connected to a rainwater harvesting system. Other respondent mentions about waterless urinals in their public area washrooms, a STP in-house, wet waste converter machines, use of eco-friendly chemicals and also a building management system which helps them to keep track of practices being followed. One respondent eliminated single-use plastic products, have installed “SunyaAqua”- Zero Mile Water policy to eliminate plastic water bottles, food waste management is also followed and various water efficiency initiatives are taken. Other respondent mentioned about water and energy conservation tactics and recycling of products as common practices. Other respondents practiced Plant for Planet, source their raw materials from the locals, use LED lights, organic waste converter machines, in-house STP and WTP, reuse of water in the form of grey water, sensor lights and reduction in emission of carbon. 2 respondents were not willing to reveal their common practices in their respective properties.

FINDINGS

Hotels were asked about the common challenges that they faced while implementing sustainable practices and majority of the respondents mentioned the limited awareness, mindset of the guest and cost of implementation. According to the responses we got, improved goodwill and public relations is the most important benefit of implementing sustainable practices and half of them experienced the benefit of reduced costs. To majority of the hotels, sustainable practices are important. Most of the hotels also feel that sustainable practices have an impact on guest

satisfaction and guests are more inclined to return to hotels that implement sustainable practices. Most hotels feel that guests are neutral about their willingness to pay a higher price for sustainable practices however when asked if guests in Mumbai care about sustainable practices in hotels, half of the hotels said yes and a nominal percentage of hotels were not sure about it. Most hotels feel that green certifications have a positive impact on them and openly communicate about the sustainable practices followed by them with their guests. When asked what green certification programs hotels were a part of, we received a myriad of responses including LEED, Ecotel, Earth Check and Green Building Certification while some hotels were not willing to disclose any information. We also tried to collect information about the common sustainable practices that hotels currently follow. The most common practices were water saving measures, sensor-based electrical appliances, waste management, use of eco-friendly products and reduce, reuse and recycling.

We also kept an open-ended question where the professionals were asked to suggest some innovative sustainable practices that could be implemented in hotels in the future. The most common responses that we received were installation of in-house waste management system, in-house water bottling plant, solar panels, recycling of electrical components, green architecture, donation of old furniture and furnishings to NGOs, use of sustainable accessories and renewable energy sources.

CONCLUSION

The purpose of this research was to provide a holistic view of the sustainable practices followed in the hotel industry in Mumbai. We came across the various sustainable practices wherein there are certain practices which can be easily implemented without much hassle. On the other hand, there are also certain practices which would incur costs but in turn lead to cost saving in the long run. It was observed that hotels normally prefer to openly communicate their sustainable practices to help them promote themselves and improve brand image. It was also observed that sustainable practices, to a great extent, are influenced by the understanding of sustainability by the management. Based on the data analysis, it can be concluded that sustainable development is the way to go for development of the hotel industry. There are challenges and barriers to implementing sustainable practices but by all means, the benefits to the hotels and the environment far outweigh them. While most hotels already have major sustainable practices in place, it is important to formulate and implement more such practices as every small effort on such a large scale counts. With the help of professionals in the field, provides various best possible sustainable practices that could be implemented in the future. This research paper proves, with the help of professionals, businesses and the general public, that it could be highly beneficial for any hotel to have an eco-friendly vision and good communication about their sustainable practices with their guests.

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INVESTIGATING ACCOMMODATION EXPERIENCE IN LUXURY HOTEL- EXPLORING NEGATIVE EXPERIENCES REPORTED BY THE GUEST IN ONLINE REVIEWS

Dr. D. P. Sudhagar

*Associate Professor,
School of Professional Studies,
Garden City University, Bengaluru-49
Email Id: dpsudhagar1986@gmail.com*

ABSTRACT

The study aims to investigate the accommodation experience provided to the guest in a brand-new luxury hotel in India based on the negative online reviews reported by the guest after their stay. The online platform TripAdvisor was used to collect the data for the study, and convenience sampling was applied. A brand-new luxury hotel in Bengaluru city was identified and selected for the study. The average, poor, and terrible reviews were collected and subjected to content analysis. Descriptive statistics were followed to understand the main factors which influenced the negative experience. The study's findings indicate that cleanliness, repair, and infrastructure were the highly cited factors for the negative experience. Service quality is the second factor, bathroom quality, maintenance, noise, room feature, convenience, room quality, security, smell, and temperature were the third set of factors that influenced the negative experience of the guest. The study provides a significant contribution to understanding the negative experiences of the guest in the accommodation sector in the Indian context. The accommodation practitioners and the executive housekeepers should focus on improving the factors such as cleanliness, repair, infrastructure, and service quality as reported in the study to avoid recurrence of the negative experience. The study offers vital implications for the research, practitioners, and policy makers.

Keywords: Accommodation, Experience, Luxury Hotel, Negative Experiences, Guest, Online reviews.

INTRODUCTION

According to the statistics published by Condor ferries for 2020-2021, hotels and resorts worldwide account for 700,000, and the industry displays a business worth of \$570 billion across the world. 16.4 million hotel rooms represent the hotel market globally, and there are over 4,400 4 star and five-star hotels. The report of Market Research.com indicates that the Indian hotel industry is expected to achieve INR. 1210.87 billion towards the end of 2023 with an expanding CAGR (compound annual growth rate of ~13% for the period 2018-2023. This was attributed to the increased arrival of foreign tourists and business delegates. In other statistics published

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by Statista Market Forecast, the hotel industry revenue in India is expected to reach US\$5,411m in 2022, the CAGR for the period 2022-2026 is expected to be 8.78%, and the projected market volume in the year 2026 is US\$7,577m. The number of guests using hotels is expected to reach 59.2m by 2026. In terms of the guest penetration, the year 2022 will be 2.8 %, and the same is expected to be almost double in 2026 to 4.0%.

Interestingly, the average revenue per user is forecasted to be US US\$138.30. It is surprising to note that 57% of the total revenue will be online by 2026. Yet other statistics published by IBEF, the Indian tourism and hospitality industry is expected to have US\$ 50.9 billion visitors when compared to US\$ 28.9 billion in the year 2018. Based on these statistics, it is evident that the hotel industry across the globe is increasing at a rapid pace, and it is important to utilize this opportunity to provide exceptional customer satisfaction leading to revenue maximization and profitability. The popular brands in the Indian Hotel industry include ITC Hotels, Accor Hotels, Marriott International, IHCL, Hyatt Hotels, Sarovar Hotels, Lemon Tree Hotels, Oberoi Hotels and Resorts, Intercontinental Hotel Groups, Radisson group of hotels.

The emergence of the Indian brands and the entry of the international hotel brands have provided a plethora of accommodation choices for domestic and international guests. The expansion also resulted in fierce competition among the brands. Increased room choices enabled the guest to search, screen, and select the accommodation based on their needs and expectations. The demands of the guest staying in the accommodation units are also increasing. The accommodation unit failing to live up to the guest's expectations creates dissatisfaction. The dissatisfaction results in negative word-of-mouth communication (rejecting the brand during the future stay, spreading negative image about the brands to friends and family, and not recommending the brand). In addition, to the negative WOM behavior, guest also shares their experiences on online review websites such as TripAdvisor's to share their negative experiences). The online reviews reach millions of prospective guests searching for accommodation with one click of a button, given the projection by Statista Market Forecast indicating that 57% of the total revenue will be online by the year 2026. (Sahin I et al. 2017) found 82 sub-themes and 11 complaint categories based on the reviews found in TripAdvisor. The study reported that e-complaint was mainly related to food and beverage services, room comfort, and hotel staff. In addition, the study found that dissatisfied tourists were involved in spreading negative e-WOM such as using abusive expressions in the reviews, recommending different hotel brands, not recommending the hotel they had the negative expressing, and making a decision of not returning to the hotel. The accommodation practitioner should strive to provide a positive accommodation experience due to the scenarios such as increasing hotel brands, demanding guests, neck-to-neck competition, the disclosure of the experience in online review websites. Hence, the present study focuses on exploring the guest's negative experiences in online reviews.

REVIEW OF LITERATURE

The present study reviewed the hotel customer-related research and discussed it below. (Tim Lockyer, 2005) investigated the factors that influenced the selection of hotel accommodation through focus group discussion. The study results indicated that location, price, facilities, and cleanliness were the main factors that influenced the selection of hotel accommodation. Gender

and age preference for hotel room design was explored by (Vanja Bogicevic et al ,2018). The study results indicated that gender and age moderated the relationship between hotel guest satisfaction and room design style. Younger guests preferred contemporary design styles, and the older guest displayed satisfaction with traditional and contemporary styles. Male guests preferred room interiors in colors reflecting masculinity, and the women guest preferred feminine and masculine color schemes. (Deniz Kucukusta, 2017) study shed light on Chinese travelers' preferences for hotel amenities. The results indicated that price was most important, followed by the airport, local area shuttles, wireless internet, breakfast, and quality of coffee/tea. Breakfast and quality of coffee/tea were least important when compared to other attributes. (Song Yang, Songshan (Sam), Huang et al, 2017) indicated that location, price, and business function were the main factors that influenced guest choice behavior. Location of the budget hotels in the central business districts and restaurants in the hotel increased the probability of the guest preference to stay in the budget hotels. The demographic characteristics such as occupation, income, and personal characteristics such as personal attitude and behavior such as the purpose of travel and past experience influenced guest choice behavior. (Sebahattin Emre Dilek et al, 2018) discovered the hotel selection factors of vegetarians: the case of turkey. The findings reported three factors. The first factors include eco- friendly hotels, customer requests, and animal-friendly and environmental ethics. The second factor includes comfort and value, facilities and security, the natural environment, and the staff and their services. The third factors identified in the study were standards and sanitation, sensibility, atmosphere, and knowledge. (Ziqiong Zhang et al ,2011) reported that room quality and location were the vital factors that influenced the room price for the industry. The difference was found among hotel segments regarding the attributes that influenced the room price. (Natrawan Amornpornwivat et al, 2018) investigated tourists' Perceptions of and Intentions-to- Stay at a Capsule Hotel in Bangkok. The study results indicate that attributes such as room size, sleep ambient control system, and in-room television positively influenced the decisions to stay in such hotels. Previous experience of the tourist had a significant relationship with the perceptions. Tourists with previous experience displayed positive perceptions regarding room size and intention to stay when compared with a tourist without an experience. The relationship between the hotel amenities such as room size, the servicescape, perceived security, and the intention to stay was weaker for female travelers than male travelers. (Dina Marie V. Zemke et al, 2015) explored the Hotel's cleanliness: will guests pay for enhanced disinfection?" The results indicated that young and female travelers of all age groups were willing to pay a premium price for improved disinfection in hotel guest rooms. (Yaniv Poria et al, 2011) investigated the dimensions of hotel experience of people with disabilities through an exploratory study. Results indicate that the physical design of the environment and staff behaviors were the main challenging factors experienced by people with disabilities. The study found differences in the hotel experiences among different types of disabilities. (Mao-Ying Wu et al, 2017) study reported that the importance of attentive and professional staff, comfort of the room, location, proximity to a shopping area, physical attributes of the hotel, and co-creation opportunities to deliver beautiful experiences towards creating satisfaction of the international tourists visiting Shanghai's superior hotels. The study highlighted those expressive and intangible elements of the hotel, such as service quality created highly satisfied customers.

From the technology side, the following studies have explained the guest purchase decision of hotels and their experience.

(SoYeon Jung, Jungsun (Sunny) Kim et al, (2014) explored the in-room technology trends and their implications for enhancing guest experiences and revenue. The study concluded that installing specific in-room technologies can notably enhance the customer experience and increase revenue. (Anil Bilgihan et al, 2016) investigated the hotel guest preference for in-room technology amenities. Results of the study indicate that high-speed internet access and guest device connectivity were more important to business travelers than leisure travelers. (Anil Bilgihan, 2012) studied the accepted pricing points for in-room technology amenities by the guest. The study results identified that guests preferred the in-room entertainment technology as complimentary.

The following studies provide insights on understanding customer experience and post-experience. (Faranak Memarzadeh, Shane C. Blum et al, (2015) investigated the impact of positive and negative e-comments on business travelers' intention to purchase a hotel room. Findings revealed that behavioral beliefs influenced both positive and negative e-comments. It implies that business travelers preferred to know about the complaints and compliments in e-comments. The moderating effect of gender was analyzed. The female travelers did not respond to e-comments (considering helpful, not intending to purchase). The male travelers found both positive and negative e-comments helpful. The study found that business travelers' intention to purchase a hotel room was positive e-comments. (Bona Kim et al, 2016) analyzed the satisfiers and dissatisfiers in online hotel reviews on social media. The results indicate that staff and their attitude, room cleanliness/dirtiness, bed, bathroom, and room size were the common satisfiers and dissatisfiers in limited-service hotels. In full-service hotels, staff and their attitude and service were the two common factors determining as satisfiers or dissatisfiers.

(Wanna Prayukvong et al, 2007) explored the customers' Satisfaction with Hotel Guestrooms: A Case Study in Ubon Rachathani Province, Thailand. The results of the study indicate that the overall cleanliness of guestrooms was one of the main factors which influenced customer satisfaction. Quality of the equipment in the bathroom was the least influenced the customer satisfaction. The two phenomena were different according to the hotel category. Customer occupation influenced customer satisfaction with the interior decoration of the guest room. Factors such as the overall cleanliness of the guestroom, the cleanliness of the linen sheets, pillow covers, and blankets, the quality of the equipment in the bathroom and bathroom amenities influenced the customer satisfaction differently according to the hotel category.

In summary, based on the literature reported above, it is evident that pre-purchase decision, actual purchasing behavior, hotel room attribute preference, experience patterns while staying in the hotel, and post-experience behavior is different based on the type of the hotel, hotel rooms, type of guest, demographic profile of the respondents and the geographical location. Hence, the need for the present study to understand the accommodation experience in a luxury hotel, explicitly knowing the negative experiences reported by the guest in online reviews, will be helpful to develop significant knowledge in this area.

STUDY OBJECTIVE

(Lu, C et al , 2015) found that managers of the hotels and the guest had used different languages to explain luxury, service quality, and satisfaction. The hotel managers described satisfaction regarding services provided in the hotels, but the guest described satisfaction as value received for the price paid to stay in the hotels. It is evident that what hoteliers feel and the guest experience may differ. Hence, the main objective of the study is to investigate the accommodation experience in luxury hotels based on the negative experiences reported by the guest in online reviews. The study also aimed to understand the important factors which influenced the negative accommodation experience of the guest.

METHODOLOGY

The data for the study was collected from TripAdvisor. TripAdvisor is an American online travel company that mainly provides technology platforms (website or mobile app) to travelers. The travelers can share their experiences and read the experience of fellow travelers across the globe. TripAdvisor also provides online hotel reservations and travel and tourism bookings. TripAdvisor was selected since it provides reviews across the length and breadth of the geographical locations. The luxury hotel brand, which is in the top position in the city, was selected for the study. The hotel is considered brand new in the city, which provides luxurious accommodation. The expectations of the guest staying in the brand-new property are relatively higher when compared to the existing brands. Once the hotel was selected, negative reviews featuring under average, poor and terrible were collected. Content analysis was followed to analyze the reviews. (Lu and Zhu, 2006) described the content analysis as a system that analyzes texts by measuring the specific themes or images. This technique is widely used in hospitality and tourism research (Stringam and Gerdes Jr, 2010). For the present study, Content analysis was based on three steps. The first steps were reading the review and extracting accommodation-related experiences. The second step was refining the review to understand the factors that influenced negative accommodation experiences. The third step was grouping and naming the factors based on the nature of the review.

ANALYSIS

Analysis of negative reviews reported by the guest and grouping factors based on the negative reviews and then providing the themes was performed as part of the analysis. In addition, descriptive statistics were followed to understand the frequently cited factors in the negative accommodation experience.

RESULTS**Table 1: Provides information related to the grouped factors which influenced the negative experience of the guest**

S.No	Factors	Frequency
1	Cleanliness	10
2	Repair	10
3	Infrastructure	4
4	Service Quality	3
5	Bathroom quality	2
6	Maintenance	2
7	Noise	2
8	Room Feature Convenience	2
9	Room Quality	2
10	Security	1
11	Smell	1
12	Temperature	1

While grouping the negative review, twelve factors were identified. The factors were ranked to identify the top factors which influenced the negative review of the guest.

Important factors reported in the negative review

The important factors reported in the negative experience indicate that cleanliness and repair were the top factors, followed by infrastructure and service quality which influenced the negative accommodation experience of the guest. The frequency of other factors such as bathroom quality, maintenance, noise, room feature convenience, room quality, security, smell, and the temperature were cited less. It does not mean that the accommodation practitioners can ignore the less frequently cited factors. All the factors reported in the study are very important. Immediate attention needs to be given to four main factors: cleanliness, repair, infrastructure, and service quality. Other factors can be focused on after resolving the main factors that influenced the negative accommodation experience reported in the study. The results of the same have been given in figure: 1.

Important Factors - Negative accomodation experience

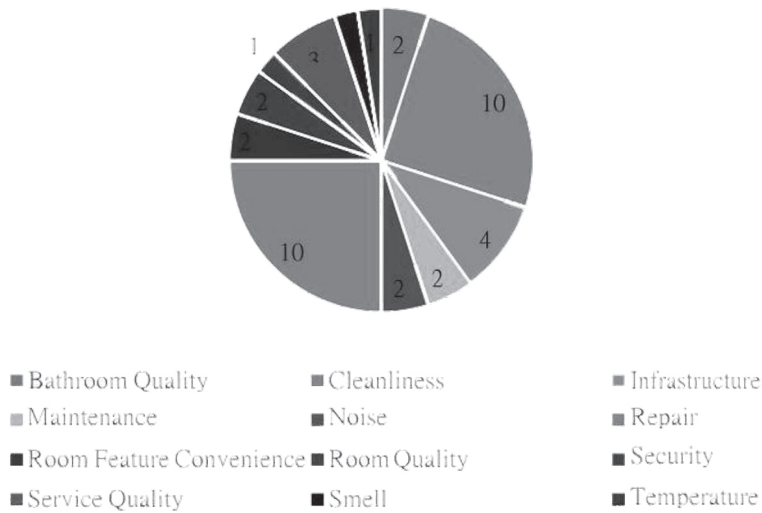


Figure 1: Importance factors contributed to the negative review

DISCUSSION

The study provided an understanding of the negative experience reported by the guest in online reviews. The results of the study helped to know the specific areas which require improvement based on twelve important factors. Correlating with (Barreda, A. and Bilgihan, A, 2013), the study's findings indicate that the cleanliness of the guest room was the topmost factor that influenced the guest's negative review. In addition, (Tim Lockyer, 2005) reported that location, price, facilities, and cleanliness were the main factors that influenced the selection of hotel accommodation. The hotels need to ensure a positive stay experience. Because (Natrawan Amornpornwivat et al, 2018) reported that previous experience of the tourist had a significant relationship with the perceptions. The guest experiencing a lack of cleanliness maintained in the hotel might carry the same perception while revisiting the hotel or recommending it to their friends and family members. In addition, there is a financial advantage for the hotels, which maintains the cleanliness. (Dina Marie V. Zemke et al, 2015) reported that young travelers and female travelers of all age groups were willing to pay a premium price for improved disinfection in hotel guest rooms. The importance of cleanliness is also reported by (Bona Kim et al, 2016) while examining the satisfiers and dissatisfiers in online hotel reviews on social media. Staff and their attitude, room cleanliness/dirtiness, bed, bathroom, and room size were the common satisfiers and dissatisfiers in limited-service hotels. Similarly, (Wanna Prayukvong et al, (2007) reported that the overall cleanliness of guestrooms was one of the main factors which influenced customer satisfaction. Unlike the previous studies, the present study identified two other important factors that influenced the guest's negative review. The factors are related to repair and infrastructure. The hoteliers and the accommodation managers need to ensure that the complete guest rooms are free from any repairs and the infrastructure is well maintained to meet the needs and expectations of the guest and to ensure a positive study experience leading to a positive image and a positive review about the hotel.

RESEARCH IMPLICATIONS

Based on the literature reported in the study, it is evident that studies examining the negative review of the guest in the Indian context are limited. The present study will provide insights into this area and bridge the knowledge gap existing in the literature. In addition, the present study has identified two more critical factors (repair and infrastructure) that influence the guest's negative review. These factors enhance the understanding that cleanliness and service quality are not the only factors influencing the guest's negative reviews.

PRACTICAL IMPLICATIONS

The accommodation practitioners should immediately focus on improving cleanliness, repair, infrastructure, and service quality in the existing operation. Other factors identified in the study should also be investigated to ensure that there is no recurrence. The efforts will help minimize the negative review and maximize the positive reviews. It will also help to enhance the accommodation business of the hotel. The accommodation managers must revisit the standard operating procedures in the room division operations. This can be achieved by conducting internal or external audits. The audit results will provide areas of improvement, and the same can be used for enhancing the operations. In addition, the housekeeping department and the engineering department must work closely to identify any repairs in the guest rooms before their check-in. More emphasis on training will also help ensure the quality of accommodation and service experience provided to the guest.

LIMITATIONS

The present study is not free from limitations. The study was limited to one luxury hotel in Bengaluru city due to the framework of the study. This provides avenues for future research by increasing the sample size. In addition, advanced qualitative analysis can enhance the understanding of the same.

FUTURE RESEARCH DIRECTIONS

Based on the limitations reported in the current study, future studies must focus on enhancing the sample size. In addition, future research should also focus on including different categories of hotels to check the negative experience behavior of the hotel from different cities of India. It also would be interesting to check whether the country of origin of the guest influences the negative experience of the guest. Apart from the negative review, future studies can also examine the positive experience of the guest by analyzing the positive review report by the guest.

CONCLUSION

The current digitalized era has brought transformation in consumer behavior. It is profoundly true with regards to hotel consumer behavior. The availability of smartphones, technology, and the internet connects the consumer, producer, competitors in just a click to make the best choice which is beneficial and profitable. The basic needs and expectations of the consumers will not change. As indicated in the current study, aspects such as cleanliness, repair, infrastructure,

and service should not be compromised under any given circumstances. Hotels must provide a positive accommodation experience to satisfy and retain the guest. The overall quality of the accommodation can be maintained by focusing on employee training and preventive maintenance. From the literature perspective, to provide a positive accommodation experience, the hotels must focus on location (Tim Lockyer, 2005; Ziqiong Zhang et al , 2011; Mao-Ying Wu et al, 2017; Song Yang, Songshan (Sam) Huang et al , 2017), price (Tim Lockyer, 2005 ;Song Yang, Songshan (Sam) Huang et al , 2017) facilities and cleanliness (Tim Lockyer , 2005; Bona Kim et al, 2016; Wanna Prayukvong et al, 2007) room quality (bed, bathroom and room size, comfort of the room, room size, sleep ambient control system and in-room television (Ziqiong Zhang et al, 2011; Natrawan Amornpornwiwat et al, 2018 ;Mao-Ying Wu et al , 2017; Bona Kim et al ,2016) service quality (attentive and professional staff,) staff and their attitude (Mao-Ying Wu et al, 2017; Bona Kim et al , 2016), and other attributes such as business function, proximity to a shopping area, physical attributes of the hotel and co-creation opportunities (Song Yang, Songshan (Sam) Huang et al , 2017 & Mao-Ying Wu et al, 2017) to provide positive accommodation experience to the guest in order to get positive reviews.

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CONSEQUENCES OF COVID-19 ON THE TRAINING SESSION OF HOSPITALITY STUDENT- A STUDY OF NCR-REGION

Renu

Ph. D., Scholar,

Institute of Hotel & Tourism Management, M.D University, Rohtak.

Mob: 07988519310, Email: renu8199@gmail.com

ABSTRACT

As we as a whole know COVID-19 pandemic turned into an issue everywhere on the world. Each nation is attempting to battle with this pandemic infection, because of which numerous nations reported total lockdown in their nation. Schools/universities help in creating social abilities and consciousness of understudies which is intruded on due to lockdown because of COVID-19. Not just examinations are influenced yet it has likewise influenced the mechanical preparing of the understudies. Cordiality understudies must have great correspondence aptitudes, social qualities, cooperation and a lot more characteristics .which are influenced because of pandemic which can't be learned through online classes. A considerable lot of the understudies couldn't go to online classes due to the helpless organization in their district, misfortune of center and interest, some time doesn't get a lot of room in their home for online investigations because of more individuals in the family, now and then they don't have a framework to overabundance online classes. Entry level positions of Hospitality understudies were influenced as their temporary job programs were either decreased or dropped because of this pandemic. The essential target of this exploration is to discover the effect of this pandemic on instruction and temporary positions of friendliness understudies

Keywords: Covid-19, Training Programme, Hospitality Students

INTRODUCTION

The time period of industrial training is considered to be precious as it acts a bridge between the classroom learning and the real practices in Hotel Industry. As per the previous observations it was found that industrial training is a phase the changes that the behaviour of the students, (McClelland 2007). As per the studies of (Sommerville 2007), knowledge and competencies are inculcated in the students during industrial training, which assist them in dealing with working environment. The trainee will have low standard skills in them and they will not perform effectively. Industrial training should be used as tool develop bright and skilful professionals for the future. The foundation of a successful career can be laid if manager/ supervisor help the trainees to enhance and work upon their maximum potential. During the industrial training

students get a chance to showcase their skills and apply their theoretical learnings. However, there are certain factors that also dissatisfies the hospitality students. As per the research carried out by Dutta and Jha (2015), on the phase of industrial training and the results of it on perception of students in making their career choices. It was found in the study that the students are highly by the offers given by industry post their graduation. The success of the hospitality industry lies on providing guest with best services. An understanding needs to be developed in the minds of the hospitality personnel that while providing the services to the guests they have to deal with many tangible and non-tangible aspects of the service area. In the hotel management institutes, students have the facility to work in various departmental labs and kitchen. These labs impart practical knowledge among the students in various departments like Front Office, Housekeeping, F&B Service and Food Production. Training to the students is also given in departments like Human Resource Management, Facility Planning, Sales and Marketing, Financial Analysis and Cost Accounting (Ashaq Hussain Nazar 2011). The choices of hospitality students are highly affected due to covid-19 outbreak. The hotel were shut for long period of time and when the permissions were given by the ministry to re-open the hotel certain restrictions were imposed on them. Is it possible to give the students the same training exposure? Will the students be given equal opportunities to learn?

OBJECTIVES

- To study the importance of industrial training in the course of hospitality students.
- To study the impact of covid-19 on the industrial training session of the students.

LITERATURE REVIEW

(Ross 1994), in his study found out that profession of hospitality is considered to be glamorous and this is the perception that excites students to join the industry. (Purcell and Quinn), stated that it is the perception about the industry are the main factors that attracts the students towards this profession. (Barron and Maxwell 1993), said that hospitality students have a positive attitude towards the industrial training only before it actually starts and afterwards their mindset changes. According to (Barron 1997), who conducted his study on first year students found in the results that according to their perception the personnel of the hospitality industry are well in terms of career advancement, working environment, career opportunity and remuneration from the hotel. (Lewis and Airey 2000), found in their studies that high school students are more attracted towards the hospitality industry and have a positive attitude towards it. It is their perception about the industry as they think they will be paid well, will have a good career opportunity and for them this profession is interesting. (Jenuins 2001), found out that as students progress in the institution their interest in the industry declines and that they are become less keen to work in the industry. (Lu and Alder 2008), stated the unattractive job, lack of career advancement prospects and low pay are some of the reasons why students do not want to join the hospitality industry rather they are moving toward the industries where they can high earnings. Shazaitul Azreen Rodzalam and Maisarah Mohammad Saat (2012) – the study stated that as the time progresses in the industrial training there is an enhancement in the critical thinking of the students as the allotted supervisor will guide and motivate him/her to perform various organizational tasks.

Manoj A S. (2013)- the author concluded in his studies that industrial training is beneficial for the students and the organization. Dutta and Jha (2015) - recommends students to use industrial training as a learning platform to learn all the hotel operations practically, the student become aware about the operational tasks during this tenure which cannot be learned in the classroom. Kumar S (2015)- stated that steps should be taken to ensure the effectiveness of these training programs and vocational centre can be established where training can be given to understand the operations in a better way. Megan Mohd. Nor et al (2015)- the author provides optimistic impact of the industrial training on the overall educational performance of the students which is also beneficial to employers, educators, and relevant government authorities. Samar et al (2016)- concluded that an estimated budget should be allotted so that trainees are not considered as a burden and a proper training can be given to them. Kiran Mayi Immaneni and Vedala Naya Sailaya(2017)-states that during training student get the exposure that they do not have in the institute and they get the opportunity to deal with customers and work in the actual environment. Aini Najua Azmia et al (2019) - described industrial training as a platform to enhance their technical and non- technical skills and knowledge for the future development. These skills can be showcased when they want to apply for jobs in the industry after the completion of their studies.

RESEARCH METHODOLOGY

An explorative examination outlining was followed in order to know the perception of Hospitality Students in regards to know the impact of Covid-19 on their on going training programme as well as the selection of New Training Session in the Hotel. In the questionnaire its been asked about the perception on the Hospitality Students about the Offline and Online Training Sessions. Thus when the questionnaire was formed, this two-part aspect was kept in mind.

Research Design

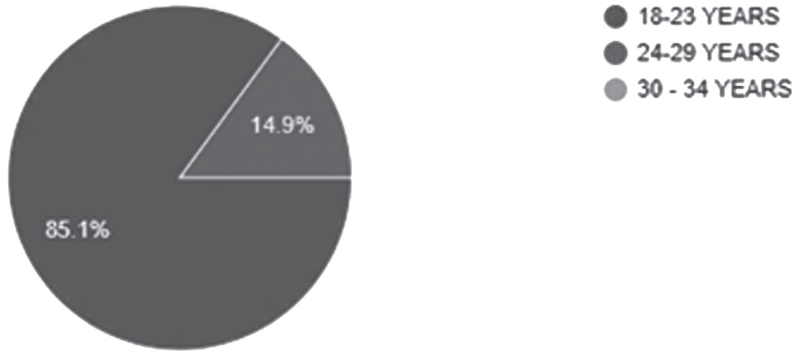
The Research Paper embraced an exploratory investigation strategy in contemplating what kind of discernment was made with respect to manageability uniquely when discussed the latest things. The gathered information was in Qualitative just as Quantitative structure to know the legitimate and proficient result of such information. The Primary Data was gathered through the survey, and the auxiliary Data was got from sources like Magazines and books.

Target Population & Sample Selection

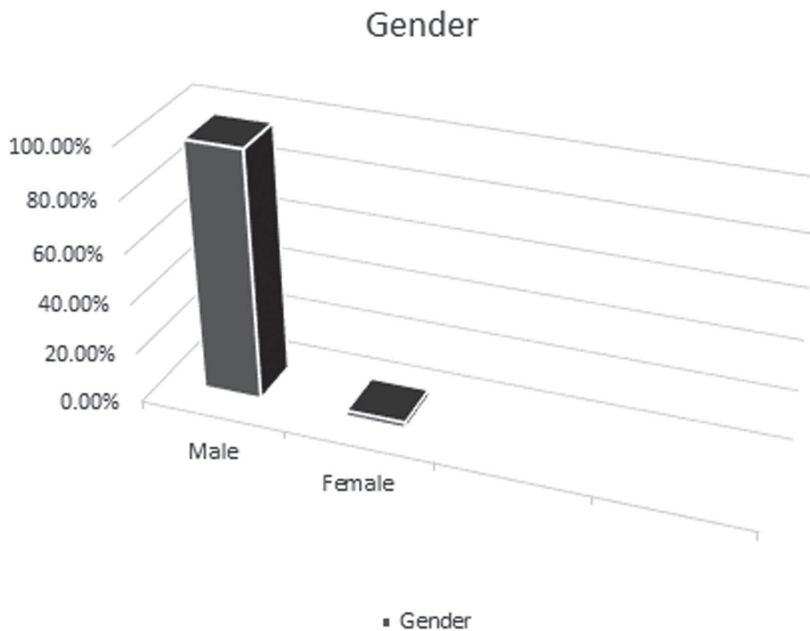
The study focused on Hospitality Students studying in the Area of Delhi-NCR which are supposed to undergo their industrial training post the reopening of the hotel. Hospitality Students of Government and Private University and Private Institution has been targeted and questionnaire has been circulated to collect the data in regards to their perception of Covid-19 Impact over their training sessions. 107 students from these various government and private institutions became are respondents. The type of sampling technique used was simple convenient sampling.

Analysis of Results

Analysis that was done on the perception of Hospitality Students over impact of Covid-19 on their on-going training session and their future decisions for the same. Even with the analysis we get to know about the perception of the students about the Online Training Session.



The first question asked was the age group of the student. This was done to know the majority student, which will help pin-pointing approximations in the later stage. 85.1% of the total samples voted the age group 18-23. 14.9% of the total samples voted the age group 24-29. With the analysis we have identified that respondent ages has limits till 29 years. It was overall mixed gentry of people that were analyzed.



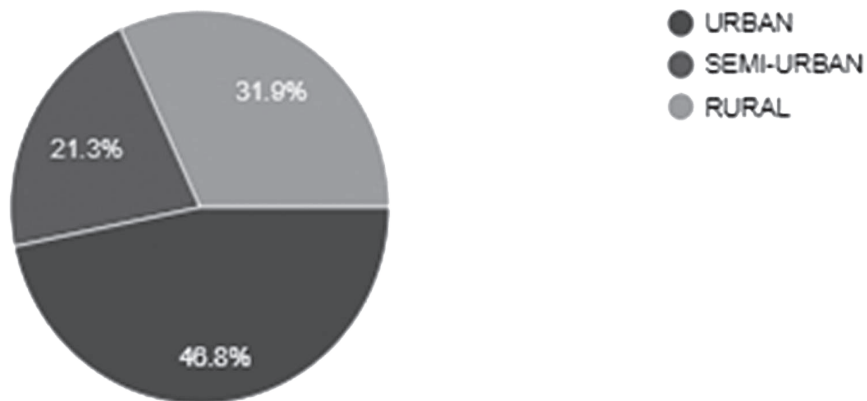
The IInd question was asked the demographic data of the respondents. This was done to know the gender of majority student. 97.9% of the total samples voted the male gender. 2.1% of the total samples voted the Female gender.

LITERACY LEVEL



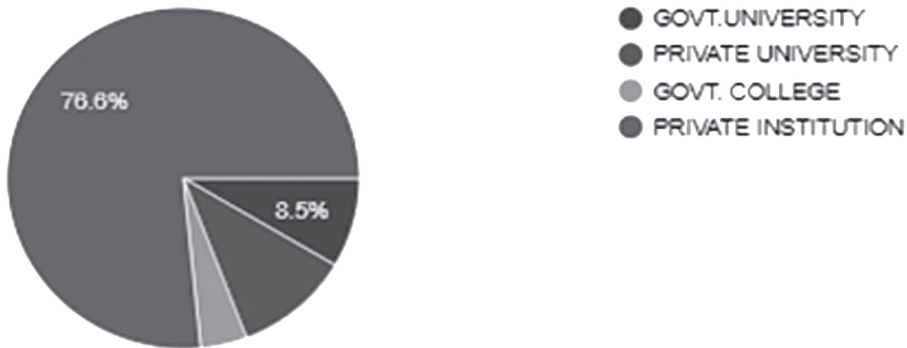
The IIIrd question asked was the Literacy Level of the student. This was done to know the literacy level of majority student. 59.6% of the total samples voted the Graduate Level. 40.4% of the total samples voted the Senior Secondary Level. With the analysis we have identified that majority of Students are already done their graduation and ready to join for any training session and remaining are still in process to complete their higher education and likely to join Industrial Training Sessions.

WHICH AREA YOU BELONG



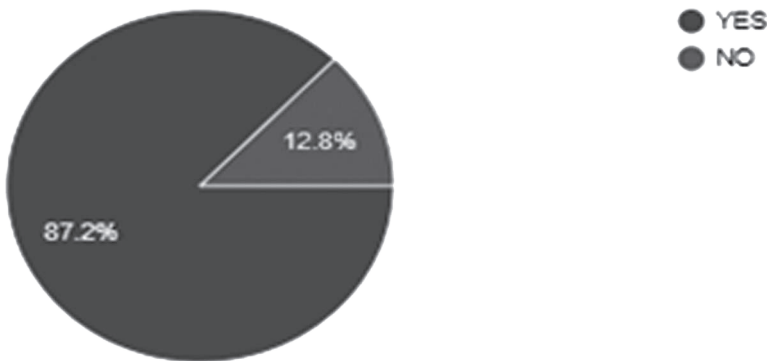
The next question asked was to know the area from which student belongs. This was done to know the area from which the majority student belongs. In that we have identified 46.8% of the total samples voted the Urban Area. 31.9% of the total samples voted the Rural Area and 21.3 % of the total samples voted the Semi-Area. With the analysis we have identified that it was overall mixed gentry area of students that were analyzed.

WHICH TYPE OF EDUCATION INSTITUTION, DO YOU STUDY?



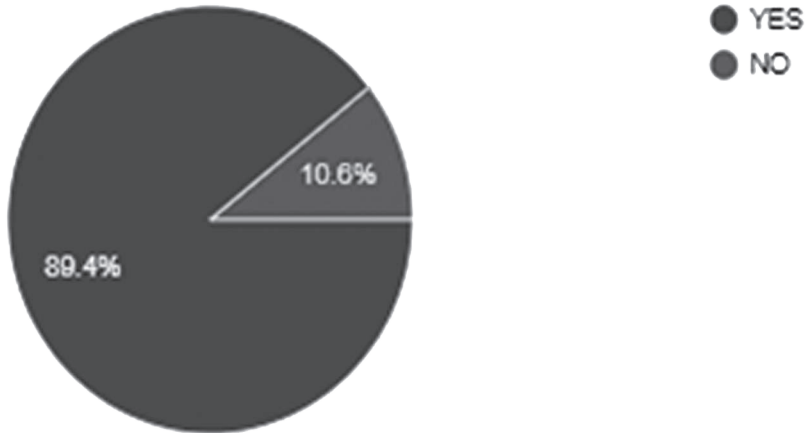
The next question asked was to know that from which institution the students have done the studies or studying. This was done to know the majority of the type of institution where students are studying or already done the studies. In that we have identified 76.6% of the total samples voted the Private Institution. 8.5% of the total samples voted the Government University. 10.6% of the total samples voted the Private University and 4.3% of the total samples voted the Government Colleges. With the analysis we have identified that majority of the students have studies or studying in the Private Institution.

HAVE YOU ATTENDED TRAINING PROGRAM DURING YOUR STUDIES



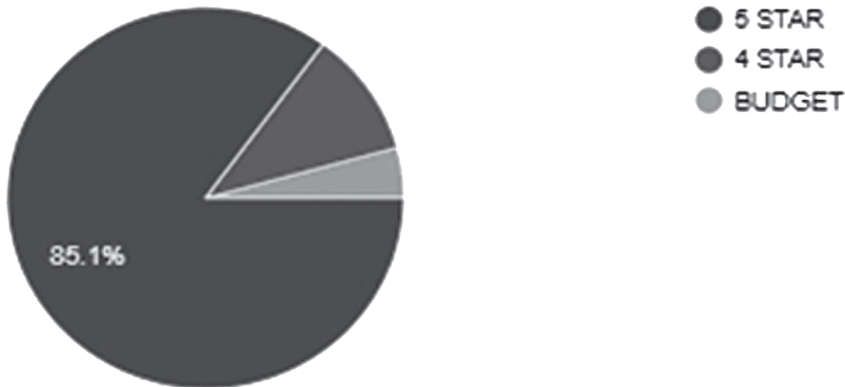
The next question asked was to know that have the students done any training or not? This was done to know the perception of majority of the students regarding training. In that we have identified 87.2% of the total samples voted the Yes and 12.8% of the total samples voted the No. This indicates that majority of students has done the training during their studies and remaining are still in need to do the training.

WAS THAT TRAINING PROGRAM A PART OF YOUR CURRICULUM?



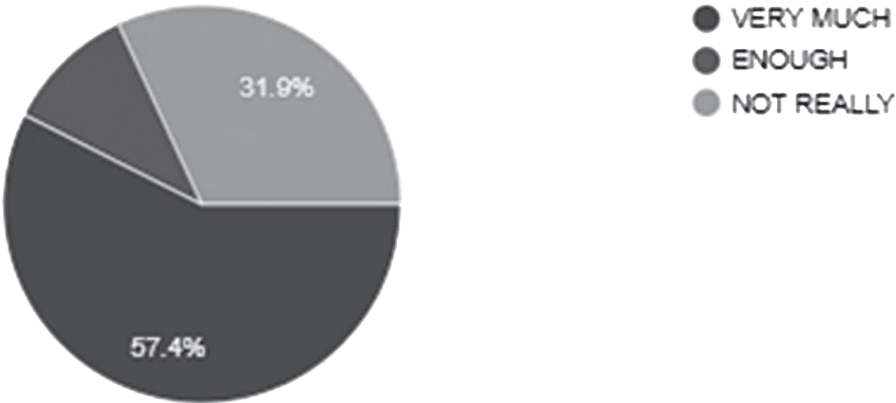
The next question asked was to know that whether the Training Program was a part of the curriculum. In that we have identified 89.4% of the total samples voted the Yes and 10.6% of the total samples voted the No. With indicates that majority of students have done the training as it was the part of their curriculum and 10.6% has joined that with their free will.

FROM WHICH TYPE OF PROPERTY YOU HAVE DONE YOUR TRAINING



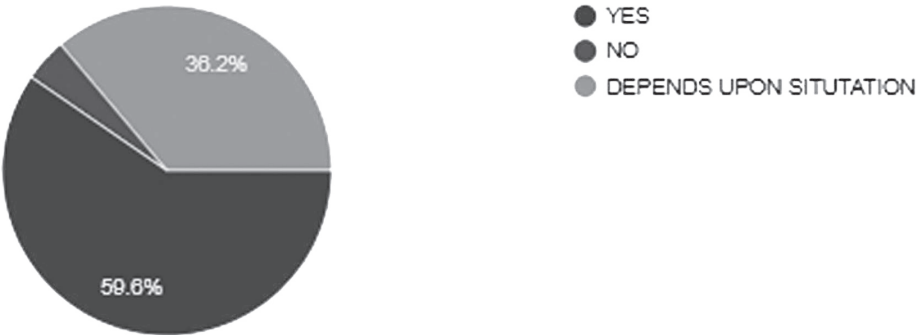
The next question asked was to know that from which property Hospitality students have done their training? In that we have identified 85.1% of the total samples voted for 5 Star Hotel. 10.6% of the total samples voted the 4 Star Hotel and 4.3% have done the training from Budget Hotel. With indicates that majority of students have done the training from the 5 Star Hotels.

HOW MUCH COVID-19 IMPACTED YOUR TRAINING SESSION



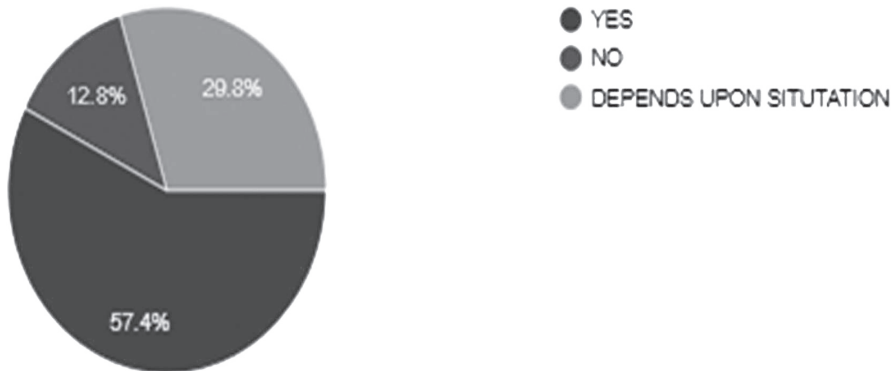
The next question asked was to know that how much COVID-19 impacted the training of Hospitality students? It was observed that 57.4% of the total respondents confessed that corona virus occurrence has impacted their training session very much. 31.9% of the total samples feels that their training session will not be comprised and 10.6% of the students feel that there won't be much effect on the training session.

WOULD YOU LIKE TO JOIN TRAINING POST COVID-19?



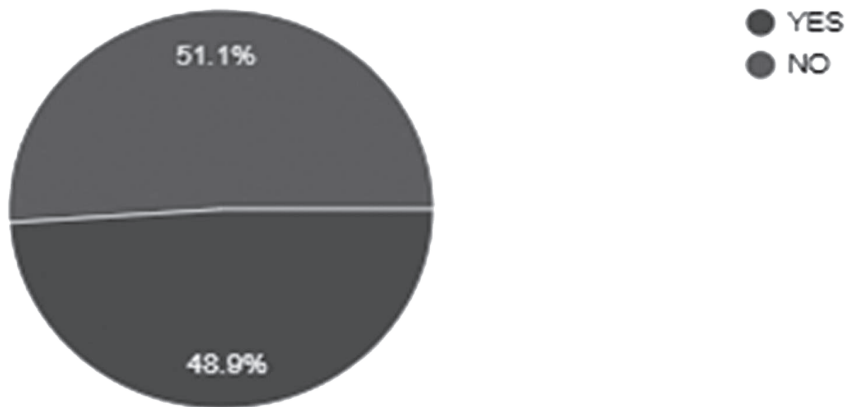
The next question asked was to know that Are the Students ready to join training post COVID-19. In that we have identified 59.6% of the total respondents have responded positively and the pandemic has not affected their choices. 3.6% respondent's decision have been affected by the pandemic and they do not want to join the training session admist the pandemic. But still a major portion of students about 36.2% have left their decision to be taken on the time when their training time will come.

WOULD YOU LIKE TO JOIN ONLINE TRAINING POST COVID-19?



The next question asked was to know that Are the Students ready to join online training post COVID-19. In that we have identified 57.4% of the total samples voted for Yes. 12.8% of the total samples voted for No and 29.8% of the total samples voted for Depends upon situation. The traditional methods have taken a shift overtime because of the covid-19 pandemic. The students want to join the training but we can clearly make out from this pie chart that most of the students want to join the training but online as the pandemic has created a fear in their mind and virtual programmes have become the preference of most of the students.

ACCORDING TO YOUR OPINION, ONLINE TRAINING SESSION ARE MORE EFFECTIVE



The next question asked was to know that whether online training sessions are effective or not. In the results it can be observed that online training programmes are found to be less effective by about 51.1% student. But the margin of majority is very low and still 48.9% are finding online training session effective.

CONCLUSION

This research paper adopted an exploratory study so as to know the importance of training session for the hospitality students and about the perceptions that were in the minds of these Students of Delhi NCR over impact of Covid-19 on their on-going training session and their future decisions for the same. The training session gives a practical exposure to the students and the notions and perceptions of the students change after they undergo training. They can better decide for their future decisions. As per the results, it can be concluded that majority of them said that Covid-19 had a huge Impact on their training sessions. Either the time period of the training sessions have been reduced and due to the ongoing circumstances proper training cannot be provided. Most of the hotels are struggling at this point of time as the number of guests are low and the amount of restrictions on the ongoing function. Though the majority of the students are willing to join the industrial training session but are resistant due to ongoing pandemic. Online training sessions are being adopted but most of them claim it to be less effective. Thus the overall Students perspective was positive about Joining Training Program Post Covid-19 situation. As students who have undergone training programmes in previous sessions, they have identified the changing scenario in the hospitality industry.

Limitations of the Study

- The study was very region specific. The data would have been much more diverse if more regions were taken into for the study.
- Due to Covid situation data collection is done through online mode.

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SOCIAL MEDIA - BOON FOR HOSPITALITY BUSINESS EXCELLENCE IN INDIA

Mohana Rangan. B. H.

*Assistant Lecturer,
Institute of Hotel Management, Bhaijipura, Chokdi,
PDPU road, Airport Gandhinagar Highway, Gandhinagar, Gujarat-382421.*

Pradeep. R

*First Year M.Sc. in Hospitality Administration,
IHMCT & AN, CIT Campus, Taramani, Chennai-600113.*

ABSTRACT

Social media has become the most important advertising agency, and the hospitality industry is no exception. Especially in India, with the development of affordable cellphones, computer skills, and accessible internet connection, social media has reached the hands of everyone. The rise of social media has eventually proven the existence of a direct link between a business and its end user. The face of branding, advertising, and marketing has been completely transformed by social media. No business can escape from the influence of social media in the present time. Communication technology and transportation have changed the hospitality business and the way it interacts with customers in recent years. The widespread use of social media has increased its ferocity. This paper examines the relationship between social media and the hospitality industry in India and its impact in enhancing its overall business critically.

Keywords: social media, Hospitality, Marketing, Hotels, Broadcast, Tourism, Awareness.

INTRODUCTION

Hospitality is one of the world's fastest-growing industries today. India, being a paradise for travelers is no way an exception in it. Previously, people used to travel for religious reasons or to conquer the world, but now they travel for business, education, medical, vacations, tours, and so on. No business can escape from the influence of social media in the present time social media has altered the perspective of guest's view onto tourism industry. Especially in dimensions of booking, communication, and payment methods, social medias like Facebook, Instagram, twitter etc., have been exceedingly accentuating. It can provide enormous benefits if it is handled efficiently and with care, but if not, it can damage or spoil the image in a short period of time. This research aims to gain insight into the relationship between social media and Guests who are the core market in terms of hotel businesses. The following points will also further discuss the research method, the sampling method and the data analysis procedure explaining the relationship between social media and the hospitality industry.

Mohana Rangan & Pradeep

OBJECTIVE

1. To study various social medias majorly used for Business enhancement.
2. To study the relationship between hospitality industry and social medias.
3. To point out some major methods which supports improving hospitality businesses.
4. To list out some suggestive measures to maximize the productivity of promoting businesses via social portals.

METHODOLOGY

Data is the base of any research. In order to collect data pertaining to my topic, both qualitative as well as quantitative data collected from various primary and secondary resources. It provided a better and a clear understanding about the concept of **Social Medias** and its relation with **Hospitality Industry** which was very useful to figure out on where the strengthening of efforts by organizations is required. The data mainly depends on following resources:

- a) Books, official reports, surveys by experts in the field of tourism and social media marketers etc.
- b) Photos and videos related to the topic.

The study has been conducted using primary and secondary sources of data. As a primary data source, a set of well-structured questionnaires was distributed to 150 Public who are keen users of social networking services and also frequent users of hospitality services pan India. Among them, responses were received from 100 of them. The responses were further analyzed to conclude. Different literature reviews about similar research areas were considered and analyzed as secondary data sources. The data analysis has been done with the help of pie charts and linear bar graphs. The study was carried out on the public who reside from different localities including Chennai, Ahmedabad, Bhubaneswar, Kolkata, Noida, Indore, Delhi, Mumbai, Guwahati, and Gandhinagar.

REVIEW OF LITERATURE

Advertising

Advertising is the foundation of all businesses. If you want to reach as many people as possible, you must advertise your business. In late 1980s and 1990s witnessed the emergence of Societal Marketing concept. This concept of Societal Marketing brought new information to general consumers and build social and ethical values into their Marketing practice. It should then deliver high value to customers in a way which maintains or improves the overall wellbeing of the consumer and society.

Many well-known and reputable hotels are very active on social media and stay in touch with their guests on a regular basis. Social media platforms such as Facebook, Instagram, YouTube, LinkedIn, and Twitter are important for reaching your target audience. These websites have a significant impact on the perception of a hotel. Nowadays, even for a small restaurant,

customers consult social media. As a result, creating a social media advertisement for a hotel is unavoidable, and it is also relatively inexpensive. A hotel can easily manage its own Facebook, Instagram, YouTube, LinkedIn, or Twitter account. Advertisement can be placed there for free and tagged to previous or prospective customers as well as the consumer's friends without the need for laborious efforts. Advertisements on social media are more beneficial than those in print or electronic media because they are permanent. It does not have a time constraint like print or electronic media. Furthermore, hotels will not receive feedback if people read or watched the advertisement on the website, but it is possible on social media.

Ads on social media platforms are simple to design, and the bonus is that you can target them to a specific audience. Users respond better to advertising that are personalized to them, according to research, and this typically leads to more interaction.

Marketing

Marketing is essential for selling your product and generating revenue. As a growing number of people rely on social media to obtain valuable information, social media plays a significant role in forming the hotel industry's marketing strategy. They are also interested in reading about promotional pages and ideas. Hotels can encourage people to like their page by offering them rewards in the form of discounts and by running their own promotions. You can target specific individuals for your online marketing campaigns using media marketing. You can target people based on their interests, age, geographic location, and other factors. If your followers enjoy your social media posts, they will become interested in you and visit your website to learn more about your company, resulting in more website traffic and possibly more sales. As a result, the majorities of hotels has their own websites or use other web links to market and sell their business.

Most social media platforms have built-in analytics tools that let you track things like follower counts, engagement rates, and click-through rates. These figures might assist you in determining what types of material your followers prefer and adjusting your marketing plan accordingly. You may utilise social media to stay on top of what your competitors are doing as well as engage with your clients. Keep an eye on your competition to learn what works and what doesn't. Incorporate those findings into your social media marketing plan. Find out how to do a competitive analysis for your company.

Branding

Unless and until your name becomes a brand, your business will not be considered successful. Your hotel will be a brand name only when people are talking good; appreciating your quality services & spreading, sharing information. When people recommend your hotel to their relatives and friends, your name will gradually become a brand. Prior to the arrival of social media, you had to work hard for decades, but with the arrival of social media, the hotel can also become a brand in a few months. A hotel's brand can benefit from social media. Hotels can target specific markets and advertise on their customer's mobile phones. Hotels can also invest in a mobile app to establish a long-term relationship with their customers. Social media is the ideal platform for hotels to promote their brand to their customers.

Every day, billions of people use social media throughout the world, so it makes sense to place your business where your consumers are. Roughly According to Facebook, 60% of Instagram users say the platform helps them discover new products, so it's definitely worth your time.

For businesses, having a distinct voice and engaging with customers on a personal level is more crucial than ever. Social media makes it simple to construct a visual brand, allowing you to establish an identity and a voice to communicate your brand's values and engage with followers.

Relations

In today's world, business is extremely competitive. If hotels fail to maintain relationships with their guests, others will try to entice them. Giving a high-quality service is not the only criterion for attracting guests; you must also stay in touch with them. Many hotels are utilizing the social media platform to maintain their customer relationships. Using social media sites, hotels provide their customers with more up-to-date and personalized information. Even hotels are quick to respond to consumer inquiries on social media. Social media has made it simple to communicate and share information about hotel events with guests. A simple like or other comment can help to strengthen their bond even further.

Reviews

It is convenient for guests to share their truthful feedback on social media. The number of people who share their hotel experience on social media is growing by the day. They share an image, a video, or a brief description of their experience. Positive reviews can generate a lot of revenue because before visiting any new hotel, people search its rating based on the reviews given by its regular or occasional visitors. Celebrities, too, use social media to share their experiences with quality time and services. Hotels can use positive reviews in the form of tweets, photos, and videos to generate their own publicity.

Businesses may use social media to become thought leaders and stand out from the crowd, establishing themselves as industry leaders through interesting and relevant content. This can be accomplished by posting creative content on Instagram, producing intelligent blog entries for LinkedIn, or tweeting with a unique perspective.

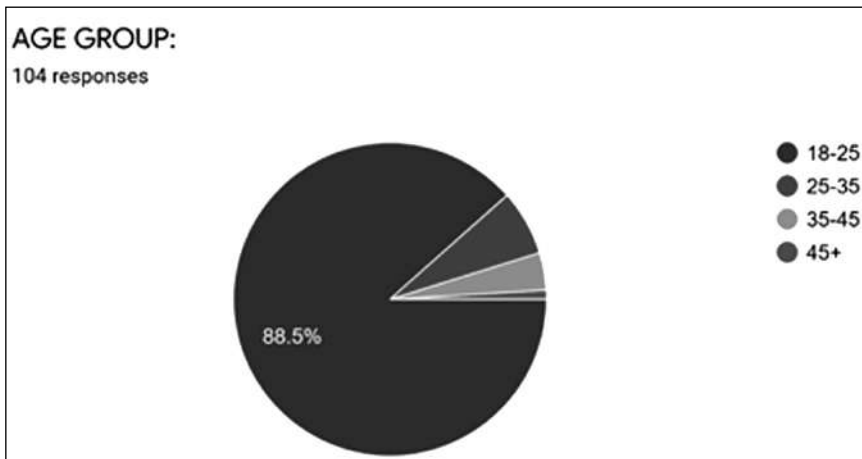
Trust

Many people believe in the recommendations made by random visitors on social media platforms. Under the influence of social media, a number of people book or cancel hotel reservations. Social media is more effective than word of mouth or any other form of advertising. People's opinions are influenced in some ways by social media.

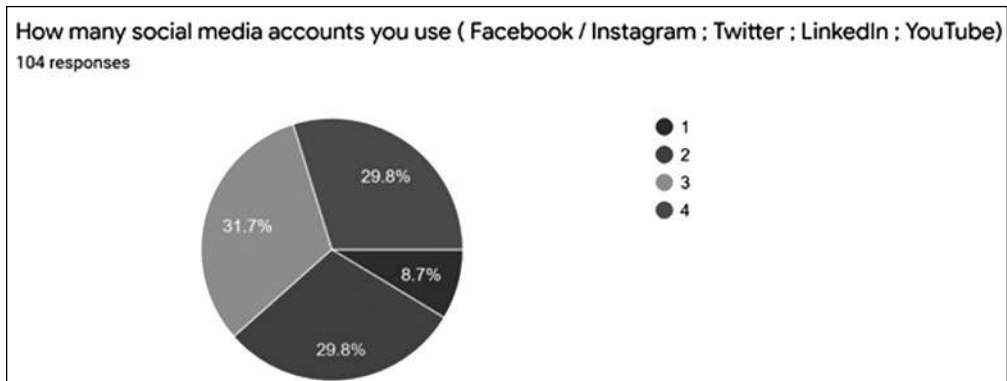
Limitations

Controlling social media is a very real possibility. In a short amount of time, social media can tarnish a hotel's image. It is impossible to quantify the benefits of social media for a hotel. Because social media does not have a face, the hotel cannot be held liable for anyone in a crisis.

FINDINGS

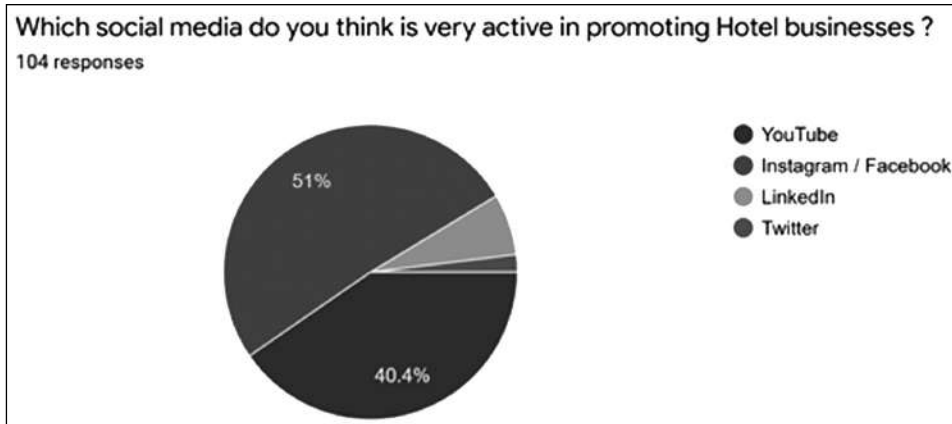


To understand the role of social media – Boon for Hospitality businesses excellence in India, a survey was conducted among different age groups. The response received between the age group of 18 – 25 is 88.5 percent. The response received between the age group of 25 – 35 was 6.7 percent and 3.8 percent of people are between the age 35 – 45. Only 1 percent of response was received from the age group above 45 years. Hence, we come to a conclusion that a large number of people are aware of Hospitality business. Very few i.e., only 1 percent above the age of 45 are interested.

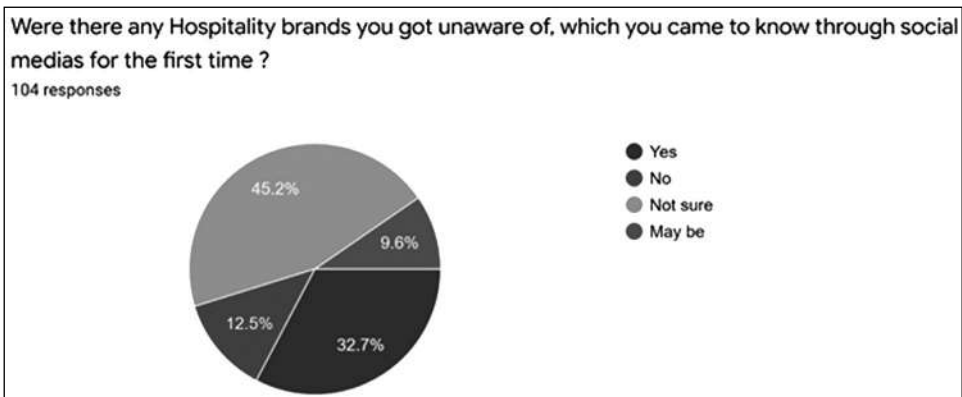


To know the effect of social media on Hospitality business, it was compulsory to know about the active use of social media and the number of accounts people used.

The pie chart clearly shows that around 31.7 percent of people operated three accounts like; Facebook/Instagram, Twitter, LinkedIn, YouTube. It also indicates 29.8 percent of people used two accounts. The graph also made it clear that around 29.8 percent people were operating four accounts. Very few people i.e., people 8.7 percent had used only one account. Hence it shows that, social media definitely plays a great role in promoting in Hospitality industry.



According to the responses, the pie chart shows that the social media platform like Facebook / Instagram plays a major role of 51 percent. The next majority is YouTube which is 40.4 percent. Other social media platform like LinkedIn is 6.7 percent and Twitter is 1.9 percent. Hence it is very obvious that social media like Facebook / Instagram are operated by many people and are aware of Hospitality industry.



The survey done to know about the aware and unawareness of the Hospitality brand through social media was very interesting.

According to the responses, 45.2 percent of people are not sure about the Hospitality rendered by many branded hotels. Around 32.7 percent of people responded positively, whereas 12.5 percent of people gave a negative response. Around 9.6 percent of people were not sure and responded as ‘May be’. The above pie chart clearly indicates that a majority of people get to know about Hospitality industry through social media.

The next most important data that help to know the “effect of social media in Hospitality industry” is to find out which are some of the most popular brands in social media. Though the list is long, hotels like Taj and ITC are in the top priorities. Thus, it is very clear that the most famous or branded hotels like Taj and ITC are popular, no doubt because of social media.

CONCLUSION

With the development of affordable cellphones, computer skills, and accessible internet connection, social media has reached the hands of everyone. The face of branding, advertising, and marketing has been completely transformed by social media. No business can escape from the influence of social media in the present time. This paper examines the relationship between social media and the hospitality industry in India and its impact on the overall business.

Hospitality is one of the world's fastest-growing industries today. No business can escape from the influence of social media in the present time. It can provide enormous benefits if it is handled efficiently and with care, but if not, it can damage or spoil the image in a short period of time. This research aims to gain insight into the relationship between social media and Guests who are the core market for hotel businesses.

The study was carried out on the public who reside from different localities including Chennai, Ahmedabad, Bhubaneswar, Kolkata, Noida, Indore, Delhi, Mumbai, Guwahati, and Gandhinagar. Different literature reviews about similar research areas were considered and analyzed as secondary data sources. The data analysis has been done with the help of pie charts and linear bar graphs.

Social media platforms such as Facebook, Instagram, YouTube, LinkedIn, and Twitter are important for reaching your target audience. These websites have a significant impact on the perception of a hotel. Even for a small restaurant, customers consult social media. Advertisements on social media are more beneficial than those in print or electronic media because they are permanent.

Social media plays a significant role in forming the hotel industry's marketing strategy. A growing number of people rely on social media to obtain valuable information. Hotels can encourage people to like their page by offering them rewards in the form of discounts and by running their own promotions. You can target specific individuals for your online marketing campaigns using media marketing.

Social media is the ideal platform for hotels to promote their brand to their customers. Hotels can use positive reviews in the form of tweets, photos, and videos to generate their own publicity. Using social media sites, hotels provide their customers with more up-to-date and personalized information. A simple like or other comment can help to strengthen their bond even further.

Many people believe in the recommendations made by random visitors on social media platforms. Social media is more effective than word of mouth or any other form of advertising. In a short amount of time, social media can tarnish a hotel's image. Because social media does not have a face, the hotel cannot be held liable for anyone in a crisis. Survey done to know the awareness and unawareness of Hospitality brand through social media was very interesting.

According to the responses, the social media platform like Facebook / Instagram plays a major role of 51 percent. The next majority is YouTube which is 40.4 percent and LinkedIn is 6.7 percent and Twitter is 1.9 percent. It is very clear that most famous or branded hotels like Taj and ITC are popular, no doubt because of social media.

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ECO-FRIENDLY HOUSEKEEPING AS AN EMERGING TREND IN HOTELS

DR. T. Ananthakrishnan

*Senior Lecturer,
Institute of Hotel Management Catering Technology,
C.I.T Campus, Taramani, Chennai-600113.*

Banupriya. R

*Second Year Hospitality Administration,
Institute of Hotel Management Catering Technology,
C.I.T Campus, Taramani, Chennai-600113*

ABSTRACT

Purpose – The aim is to study the various eco-friendly housekeeping practices that are carried out in hotels.

Methodology – The study used data collected through primary and secondary data collection method.

Findings – The results indicate that hotels adapt various eco-friendly practices in guestrooms, laundry, horticulture and other departments. Eco-friendly practices have a significant improvement on the environment as well as for the hotel's natural resource management. Guests do react positively for eco-friendly housekeeping practices.

Keywords: eco-friendly, sustainable, resource, housekeeping, consumption, energy, water, conservation, recycling, guests.

INTRODUCTION

Protecting environment is a concern in today's world. Immense growth in the popularity of ecotels and green housekeeping practices can be witnessed in the hospitality industry. Eco-friendly means being friendly to earth. Thus, eco-friendly practices are those measure which are concerning to the environment. It generally refers to how we use the resources available efficiently. Eco-friendly housekeeping is method of sustainable housekeeping practices that is followed in many institutions including hotel. This is a method in which the organisation tends to minimize the waste and maximise their revenue without affecting the environment. In our day to day life there are many practices which affect our environment adversely. Inorder to protect the environment, hotels regulate many activities to reduce the waste, to recycle as well as they transform wastes into energy. Green housekeeping practices are highly essential as it helps not only the environment but also increases the hotel's profit. Cost control can be done when we try to adapt to eco-friendly practices. Eco friendly chemicals are cheaper as well as safer alternatives which is adapted in many hotels. Eco-friendly practices are not only practised in hotel, it can be seen in many sectors. Guest also react positively for the measures which hotels adapt.

METHODOLOGY

The study is based on primary and secondary data collection. The random sampling approach is performed in this study. A questionnaire was made and was answered by random people. The questionnaire included guest experience on eco-friendly practices and their take on it.

ECO FRIENDLY HOUSEKEEPING

There are many eco-friendly housekeeping practices that are followed

Products which Save Energy

Housekeepers are increasingly on the lookout for energy-saving products and equipment. The jet hand-dryer, for example, creates bi-directional cooling air that works at 68 m/s, leaving wet hands dried quickly, as opposed to the traditional hot-air drying procedure. The dryer is turned on by putting the palms below the dryer, which causes the jet to immediately start up. The main benefit of the device is the significant energy savings it provides when compared to traditional hot-air models: this machine uses 700W, whereas traditional hot-air dryers need 2000W. This results in significant power bill reductions, sometimes that much as 67 percent.

Toiletries

Many hotels are adapting for toiletry developed after extensive research and testing of the profound therapeutic, curative, and healing qualities of herbs, extraction, particularly as spelled forth in Ayurveda. These items are also generally biodegradable and have not been tested on animals. Aloe-vera, citrus fruit, Indian gooseberry, sunflower, pumpkin, basil, cucumber, sandalwood, turmeric, apricot, mace, clove, nutmeg, cilantro, rose, henna, clay (particularly China clay), alum, and honey are some of the herbs and natural substances commonly used in personal care products such as lotions, creams, shampoos and so on. These are natural products that it does not have a negative impact on the environment.

Automatic Faucets in Hotel Washrooms

Water, although being one of our utmost valuable natural resources, is frequently squandered. Touchless faucets make the guest experience easier – and do so more ecologically. Automatic faucets comes along with hand sensor. When we take our hands below the tap it automatically senses our hands and the water is released through the taps. This also saves water to certain extent as it reduces wastage of running water. The water flow stops automatically when the guest takes their hands from under the faucet, saving both water and energy. These faucets not only improve hygiene, but also help save water and energy. By upgrading from traditional faucets to touchless faucets, we may save up to 50% on the water use. This is because the nozzle allows less water to enter through while combining air and water to simulate a bigger volume of water. Whenever the sensor could not recognises the hands, the water flow ceases automatically. Thus, hygiene is also ensured and water consumption is also minimised.

Recycled Water for Horticulture

Water from various areas of the hotels are collected treated and used for horticulture purposes. Horticulture department is one of the major attraction for the guests. Regular irrigation for the plants is essential in a hotel. Using fresh water is not so necessary for the garden. Gardening in hotels require plenty of water for which hotels collect water from kitchens and other departments, they process the water and later use it for horticulture purposes. Thus, water consumption is reduced and recycled water serves the purpose.

Water Bottle Recycling

Many hotels use plastic water bottles in guestrooms. Plenty of plastics comes from these pet bottles. Thus, to reduce the plastic usage bottle recycling act as a good option. Once the guest checkouts, the housekeeping department collects the used water bottles and they recycle them. This is one of the best eco-friendly practice to reduce plastics.

Glass Bottles Usage

Apart from bottle recycling, some hotels adapted the use of glass water bottles as well. They make sure that the glass bottles are sterilised after every checkout and they fill them with drinking water with a new tag. ITC has SUNYAAQUA which is served in glass bottles in their hotel using RO technology.

Changing Linens on Guest Request

Earlier linens are changed in all the occupied rooms. But nowadays, Inorder to reduce the water consumption as well as to improve the life of linens, hotels tend to change linens of the occupied rooms only if the guest request them.

Dual Flush System in Commodes

Guest rooms are designed with dual flush system in toilets. It has two buttons for different levels of water. A lesser quantity of water is used for liquid waste while the large quantity is used for solid wastes. Dual-flush toilets don't utilise a syphoning tube to remove waste; instead, they use a bigger trap. Rather than depending on syphoning, gravity is used to naturally drive the water and trash down. This means that every flush, including the lesser and the maximum flush buttons, uses less water.

Eco-friendly Cleaning Agents in Hotels

Diversey, Ecolab, and other cleaning chemical and equipment companies have developed chemicals that are environmentally friendly. The products are designed to use less water and energy and have been packaged in concentrated form. These green cleaning chemicals are also quite effective for tough cleaning. Here are some of the certifications for eco – friendly cleaning products:

- Green Seal
- UL Environment

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- ECOLOGO
- GREENGUARD
- GREENGUARD GOLD
- USDA (BioPreferred)
- EPA (Safer Choice)
- SWAN/FLOWER/GOOD ENVIRONMENTAL CHOICE AUSTRALIA

Refillable Dispensers for Shampoo, Shower Gel and Body Wash

Dispensers come in a variety of styles. Some may be refilled with refill bulk body wash, shampoo, or conditioner on a regular basis. Single, replaceable, sealed cartridges are used in other variants. Each cartridge will last roughly a month and will replace around 200 amenity bottles.

Dispensers, unlike bottles, do not produce waste since cartridges may be left in place till the shampoo or soap is entirely utilised. A glass in the dispenser allows housekeeping employees to keep track of soap levels. Even though the cartridge seems to be empty, there is a secret reservoir with enough product to last for another 15 showers. Refillable units may be topped up while the room is being cleaned.

Room Key Card

Almost every hotel has a room key card which acts as a power supply button. When a guest enters the room they insert the key card in the wall slot which enables the electric supply in the guest room. And when the guest leaves the room the power supply automatically stops as they remove the key card from the wall slot. When a guest leaves the room, the Hotel Room Key Tag System saves energy by turning down non-essential electrical equipment (such as heater, air conditioning, lighting, radio, and television). This guarantees that only the rooms that are occupied utilise energy.

Newspapers on Request

Some hotels provide with newspaper only on request to save the wastage of papers such that the existing papers would be recycled.

Garbage Disposal

Guestroom attendants are initiated to separate wastages as bio-degradable and non-bio degradable waste. Such that bio-wastes are used for production of bio gas while the non-bio degradable wastes are disposed appropriately. Bio-gas is used as energy in hotels.

A Towel and Linen Programme

A towel and linen programme in hotels helped in significant water savings and reduced energy consumption, detergent and the need for waste water treatment. Thousands of hotels follow this practice and give guests the option to reuse towels and/or bed linen. IHG believes that their towel

re-use programme has saved 199 million litres (52.5 million US gal) of water per year at its 22 US hotels alone. It is also cost-effective. It also means less use on materials, which extends their life and saves time for housekeeping employees.

Some Waste Management Techniques Include

Biomethanation is the process of converting organic matter into gas. Biomethanation If enough space is provided, plants with capacity of 100-500 kg per day is planted in hotel rooms. The gas produced may be utilised in kitchen. Composting/Vermicomposting - Composting/vermicomposting options might be explored.

Preventive Maintenance in Laundry

Every equipment consumes more energy over time. Laundry department uses heavy equipments which should be maintained regularly. Preventive maintenance is one option that is carried out in hotels to maintain the regular energy consumption.

Switching to Environmental-Friendly Lighting

LED (light emitting diode) bulbs does not contain mercury, and thus it is environmental friendly. LED lights have a long life expectancy, lasting up to 15 years* at the same brightness. Unlike traditional lights, LEDs do not fade over time. They can last up to six time longer than regular forms of lighting, eliminating the need for regular replacements and lowering carbon emissions. Because the light is focused in a single direction, LEDs have a higher quality of light dispersion. By light emission in all directions, there is no loss of energy. As a result, LED lights are even more cost-effective and efficient, requiring less lights to reach the same degree of brightness as fluorescent and incandescent lights. Fewer lights will result in lower energy usage and, as a result, will be better for the environment. Because LED bulbs do not contain toxic chemical , they have a far lower environmental effect than incandescent lamps. They also have an advantage over compact fluorescent lights (CFLs), which is projected to expand as LED technology improves. Mercury, a potentially dangerous gas, may be found in traditional lighting. Furthermore, strewing shattered incandescent bulb parts results in dangerous mercury build-up in water, endangering our health and the environment. LED lights are environmentally friendly and easily recyclable since they contain no mercury. Furthermore, because LED lamps do not emit blue waves, they soothe our minds and enhance productivity. LEDs keep their temperature cool and don't generate UV rays like conventional lights. LEDs, unlike conventional fluorescent bulbs, do not generate heat. Other lights' extreme heat and UV radiation can be dangerous to persons and things. LEDs are constructed of recyclable materials and do not contain any hazardous chemicals, therefore recycling them is environmentally friendly. As a result, we may recycle the LED lights securely.

ANALYSIS

India has the third-highest number of LEED-certified hotel (73) in the world, and by far the most LEED Platinum hotel initiatives. Many of the country's existing hotels are undergoing renovations in order to acquire LEED certification. Even hotels that already have achieved LEED

at the design stage, are now going for LEED Operations and Maintenance (O+M) certification to further highlight their efficiencies and demonstrate their continued commitment to sustainable performance.

In 2019, for THE HINDU article, Kuldeep Bhartee, area manager of ITC Hotels and general manager of ITC Grand Chola, stated that the water consumption has reduced due to the optimum utilisation of sewage treatment plant recycled water (STP). In the previous few months, they have closed all fountains and water bodies temporarily (saving five kilolitres per day); 380 kilolitres per day of water was conserved by reusing STP water; and changing their laundry programme saved 35 kilolitres per day. John Paul and Samuel David, directors of engineering at Novotel IBIS Chennai OMR and Novotel Chennai SIPCOT respectively, saw a steady stream of foreign visitors who demand conscious luxury. In response, they have implemented simple solutions. Aerators and filter cartridges in faucets and showers save 2,40,000 litres of water. Venkat Subramaniam Chief Engineer, Holiday Inn, OMR IT Expressway, said that the Sewage treatment plant water is utilised for the garden, cooling tower and guest rooms. It helped to reutilise 70,000 litres of water a day, on average. Down with plastic Unfortunately, most meeting rooms still use 250 and 500 mL water bottles. Plastic bottles that can be used once and thrown away have been utilised. Although totally eliminating them is still a long way off, several hotels in Chennai have already made a shift. Bhartee, general manager of ITC Grand Chola, said that the SunyaAqua is served in glass bottles in our hotel using RO technology. It reduced plastic pollution, since they served 400-600 bottles a day. On OMR, the Novotel chain has shampoo and bath gel dispensers. The Hilton chain has removed plastic straws from its hotel operations, saving over 250 million straws annually; switched from plastic key cards to digital ones at a number of hotels, staving off 40 tonnes. Plastic water bottles have been removed from conferences and conventions at hotels it runs across Asia Pacific, Europe, the Middle East, and Africa, saving 40 tonnes of plastic trash thus far.

Chief engineer Dinesh Kumar opted to make use of the waste steel pipes, rubber tyres, and wood that were laying outside the Courtyard by Marriott Chennai. They created a 25-foot tree out of discarded pipes and tyres with the help of the hotel's housekeeping staff.

They created a sustainable tree to motivate and encourage their visitors.

The InterContinental Chennai Mahabalipuram Resort showcased its sand and seashell-sculpted Christmas tree. The 14-foot tall nautical tree was erected to provide an eco-awareness message about global climate and beach erosion on the east coast of mahabalipuram. Hotels come up with creativity not only to impress the guests but to set up an example for them. Recently, the city's popular ITC Grand Chola luxury hotel announced that it had turned net-carbon zero. The certification implies that both hotels leave no carbon footprint on the environment because of their environmentally friendly activities and long-term strategies.

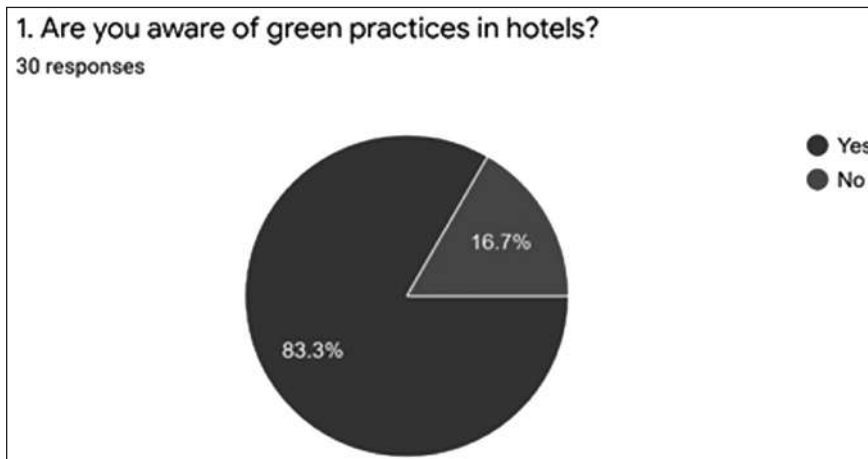
Jossiya joy, housekeeping executive from Taj Wellington Mews responded that they have adapted dual flush system, they adapted water management system and they are treating grey water which is used in toilet flush. They have made many rooms without bathtub so that they would prefer shower over tubs. The housekeeping staffs of their hotel receives regular training regarding the eco-friendly practices in housekeeping department. She also agreed to the fact that

green housekeeping is profitable to their property. To reduce water consumption in the laundry they recycle grey water and they also collect rain water for the usage. Post-covid they started disinfecting the guestrooms with eco – friendly chemicals.

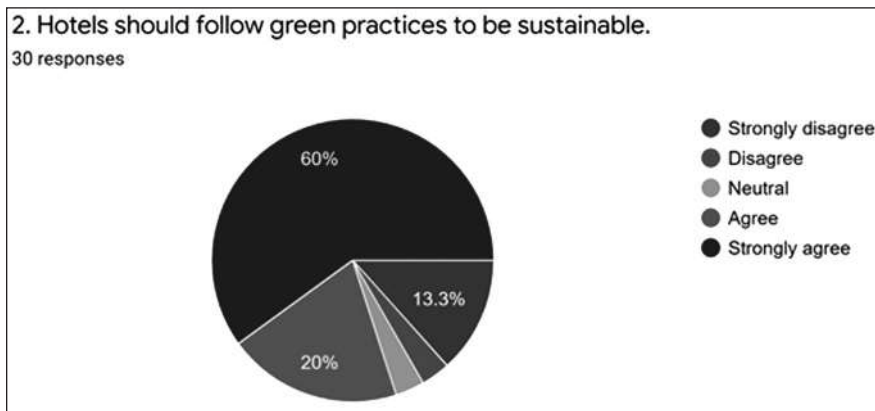
Vijay , housekeeping associate from Taj Connemara responded that the staffs of their hotel receives regular training on eco-friendly housekeeping practices and they have water efficiency system. To conserve energy they have adapted solar panel technology, smart lighting technology in their hotel. Automatic shutdown sockets are also used in their hotel. Green tourism active standard, Green key eco rating are some of the certification in their hotel.

THE PRIMARY DATA ANALYSIS

The following data is collected through random sampling method. There were respondents who responded for the following questions.

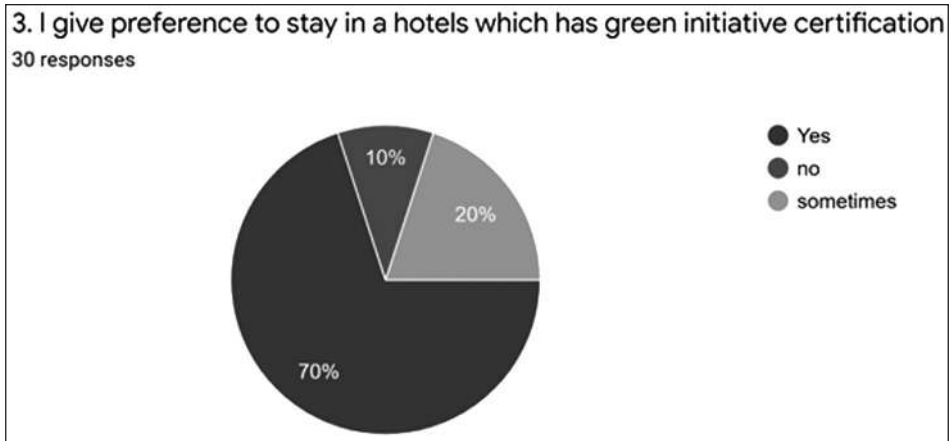


83.3 % of the respondents were aware of eco-friendly practices in hotels. While 16.7 % of them did not know about green practices in hotels.

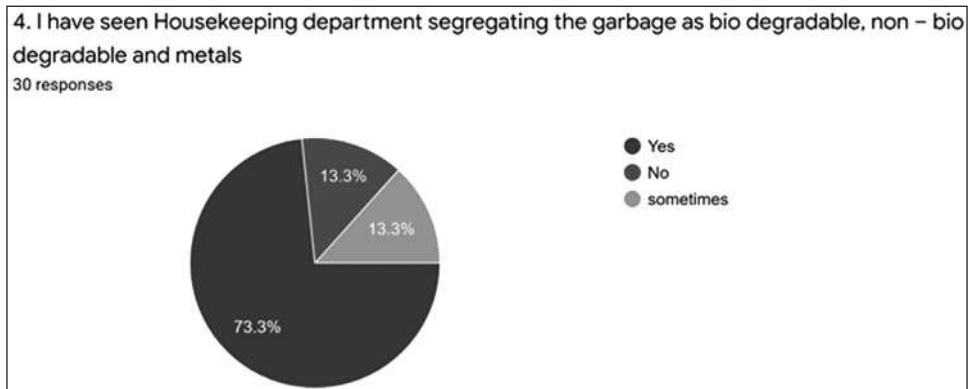


60% of the respondents strongly agree to follow green practices in hotels and 13.3 % of them strongly disagree while 20 % and 3.3 % of them agree and disagree respectively. 3.3 % of the respondents have a neutral opinion.

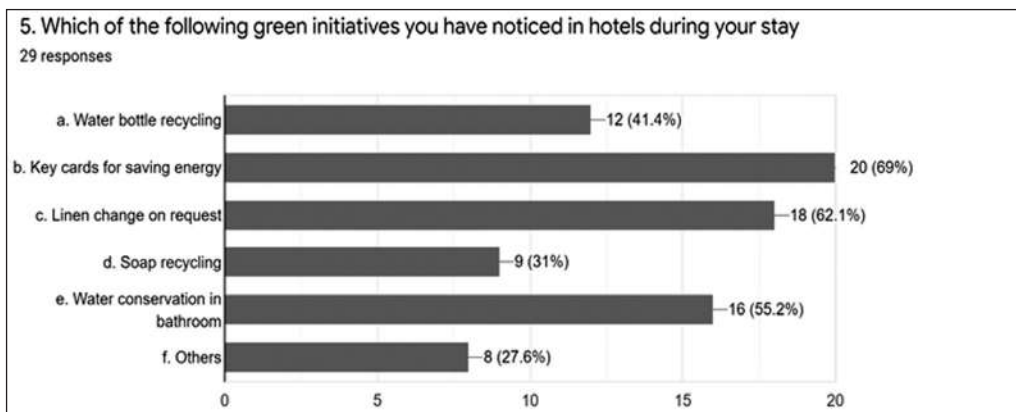
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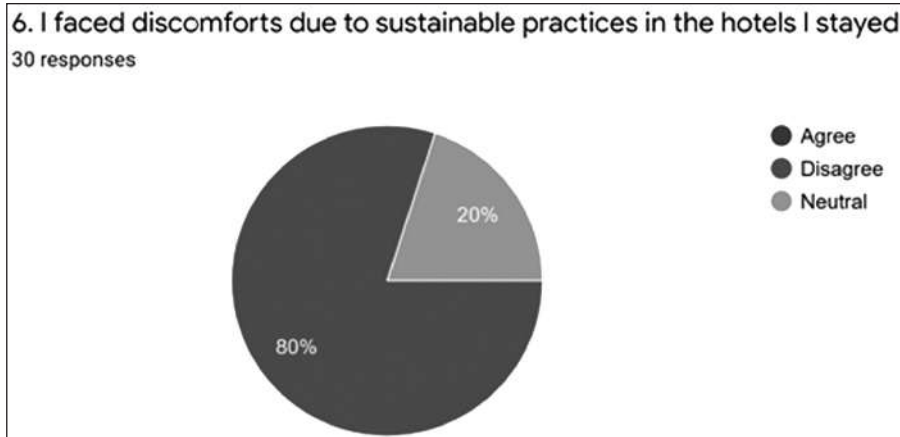
Of 70 % of the respondents say yes while 10 % of them say no and 20 % of them prefer to stay sometimes in the hotels with green initiative certification.



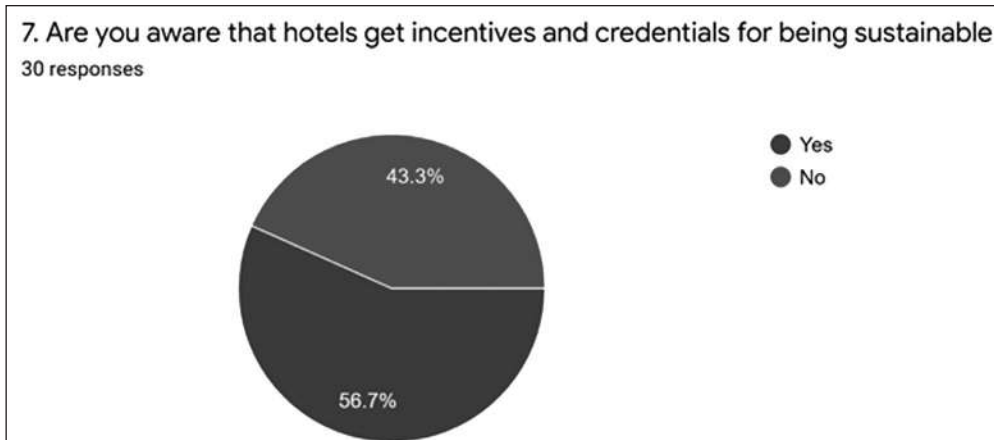
73.3 % of the respondents say yes while 13.3 % of them say no and 13.3 % of them say they see sometimes.



12 respondents were aware of water bottle recycling, 20 respondents were aware on how key card saves energy, 18 respondents knew that linen change on request exist in hotels, while 9 respondents knew about soap recycling, 16 respondents were aware of water conservation in bathrooms while 8 respondents also knew other green initiative in housekeeping department.

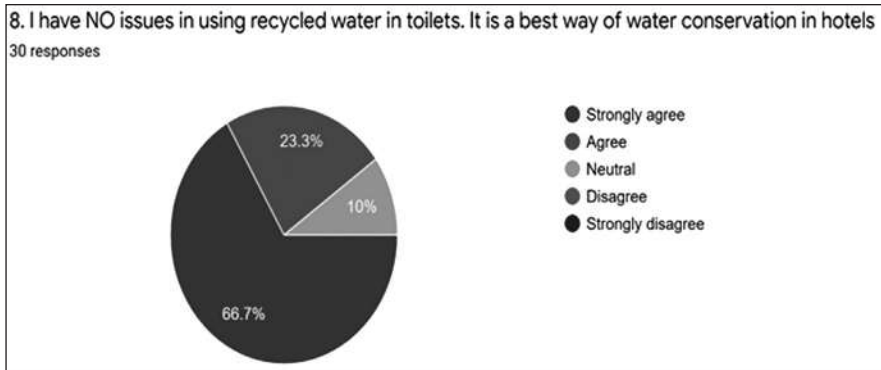


None of the respondents faced discomfort due to sustainable practices in hotels while 80 % of them disagree about facing discomfort during their stay and 20 % of them have a neutral opinion.

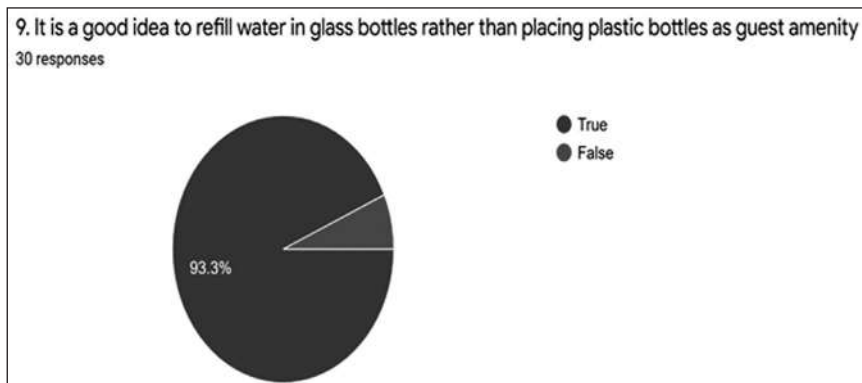


56.7 % of the respondents were aware of the credentials and incentives for green initiative in hotels while 43.4 % of them did not know about it.

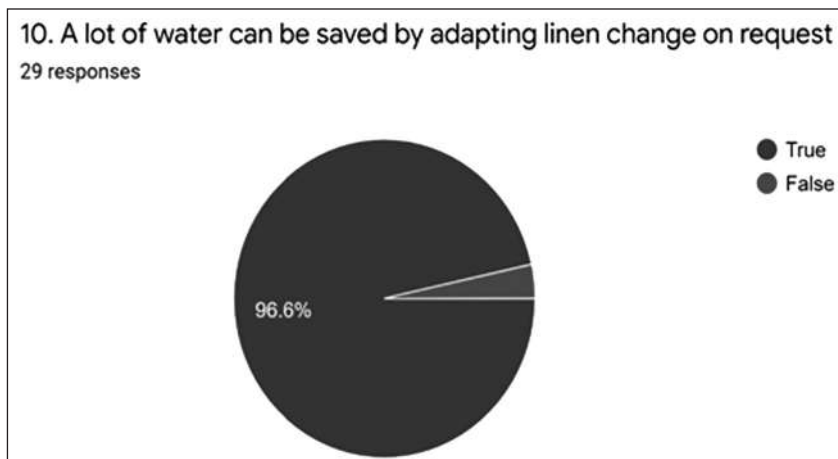
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66.7% of the respondents strongly agree to for recycled water in toilets while 23.3 % agree to it. 10% of them have a neutral opinion while none of the respondents disagreed to using recycled water in toilets.



93.3% of the respondent feels it is better to refill water in glass bottles than placing plastic bottles while 6.7% of them deny the fact.



96.6 % respondents accept the fact that water can be conserved by adapting linen changing only on request while only 3.3 % of them deny it.

From this analysis, it is clear that people now are aware of eco-friendly practices in hotels, particularly in guestrooms. Also, many respondents reacted positively for water recycling and linen change on request.

SUGGESTIONS AND CONCLUSION

In this study, the various housekeeping practices which are environmental friendly have been noted. Hotels make various efforts to reduce the waste, to recycle resources as well. Eco-friendly housekeeping practices not only have significant change in the environment but it is also cost effective and the natural resources are handled in a efficient way. It is also noted that housekeeping department make efforts to involve employee in eco – friendly practices and they conduct regular training on those measure which are followed in their hotel. Through the primary data analysis, it is noted that, the guest also respond positively for the green initiative that are carried out in the hotels. This study lays various suggestion:

- It is suggested that not only in 5 star property but it would create a great impact on the environment if these housekeeping practices are carried out in 3 star and 4 star properties as well.
- It would become even more important if the guest could know about the various eco-friendly practices that are carried out in the hotel premises. It would motivate them to be eco-friendly.
- Government regulations could have more impact on hotels to maintain natural resources like water and energy.

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A STUDY OF EXPECTATIONS BY SINGLE LADY TRAVELLER FOR IN-ROOM AMENITIES IN HOTELS (WITH SPECIAL REFERENCE TO 5-STAR HOTELS IN KOLKATA)

Aalekhya Adhikary

*Assistant Lecturer,
Institute of Hotel Management, Catering Technology and Applied Nutrition, Kolkata,
West Bengal.*

Email: adhikaryaalekhya1991@gmail.com

Deepshikha Dolvi

*Assistant Lecturer,
Institute of Hotel Management, Catering Technology and Applied Nutrition, Kolkata,
West Bengal.*

Email: deepshikha.ihmkolkata@gmail.com

ABSTRACT

It can be stressful and uncomfortable for some women to travel alone. Despite this, a growing number of women are venturing out on their own, even travelling overseas to discover new places. Women's solo travel has become so popular that numerous travel portals around the country are now offering women-only vacations and tours. One of the primary reasons for this growth is that women are becoming increasingly self-sufficient and economically powerful. Several solo travel motives are identified in this conceptual study based on a literature review to discover why women opt to travel alone and their preferences when choosing a hotel to stay in. This article looks at the problems and experiences that lone travellers endure, as well as how they overcome them. A survey of Solo Lady Travellers (SLT) who had stayed hotels of Kolkata on a regular or irregular basis was done. A Questionnaire, which includes both objective and open-ended questions, is the tool for data collecting. The primary data was gathered from 50 SLT who expressed their travel and lodging experiences, preferences, and challenges. For this study, the qualitative data gathering method was employed. This shows the respondents' ideas and opinions on a particular topic. This research also derived safety precautions for persons considering their first solo trip. According to the findings, the only way to feel better while travelling was to do thorough pre-planning, which included background checks, destination information, and understanding of the local language for contact with other travellers and residents. Hygiene and cleanliness, latest technology, services and amenities, ventilation and air quality, bed and linen, hotel room size, and bathroom division are all elements that impact female business customers when choosing a hotel room

Keywords: Amenities, Hotel rooms, Kolkata, Challenges, Hygiene and Cleanliness, Experiences for the Single Lady Traveller (SLT).

Aalekhya Adhikary & Deepshikha Dolvi

INTRODUCTION

Women have held various jobs in the corporate sector in the twenty-first century, including chief executive officers, sales managers, entrepreneurs, cabin crew, hoteliers, teachers, and so on. Women are becoming more prevalent in the customer group, bridging the gender gap. SLT is a rapidly expanding market with huge potential in India. Previously, women were only allowed to travel with their families and were not allowed to leave the house without male family members. This barrier, however, has broken and crumbled over time, and more and more women are emerging as SLT. Women are growing more independent than in the past; they are ambitious and prefer to travel alone, without the company of a male companion, family, or relatives, or in a group. There are periods in a woman's life when her responsibilities are restricted. As a result, solo travel provides them with a respite, which they find handy and relaxing.

Kolkata, as the West Bengal's capital, attracts both business and pleasure travellers. The extraordinary liveliness of its busy streets, mixed with a strong aroma of spices, a sight of historic balconies, the industries in Kolkata, and so on, make Kolkata, like the rest of India, a sea of gorgeous chaos. The safety and security of female travellers has always been a serious concern. This topic has been brought to the forefront by recent media attention and public outrage over horrible atrocities against women. Many measures are recommended, especially for working women who must travel regularly. Women today are fearless aspirants who are well aware of their rights to succeed. The SLT phenomenon is the world's fastest-growing trend, prompting luxury hotels to develop specialised offerings aimed at this audience. The important characteristics that the female guest seeks are comfort, protection, and security. As a result, most hotels have begun to work on earning this possibility from SLT, as they meet all of the basic standards. According to industry analysts, between 10% and 18% of hotel visitors are single female travellers (2). Indian hotels have begun to embrace SLT as a fast-growing concept in India as a result of increased awareness of the concept.

LITERATURE REVIEW

The following are some of the hotel's basic features for single female travellers: Because an SLT chooses to stay at a hotel while travelling nationally or globally, women's safety is a major problem in the hospitality business. Hotels like as Oberoi, ITC, Taj, and Leela have pioneered the lone lady traveller concept. So, in keeping with the single lady notion, hotels have set up an entire floor for SLTs to make them feel pampered. Women like a comfortable, safe, and secure environment, as well as aesthetic care. They are more concerned with cleanliness, service quality, and ambience. Another consideration is the hotel's location, reputation, and proximity to a meeting place (BORKAR, 2013). In the hospitality industry, an SLT is always a top priority. As a result, the hotel took a step forward in creating a comfortable and convenient atmosphere for SLTs, attempting to provide all of the luxury products that an SLT need. Hotels began servicing the SLT in the best possible manner and provided a variety of accommodation amenities. On arrival, hotels provide basic amenities such as a welcome kit, flowers, cakes, cookies, and fruit platter, as well as basic bathroom amenities such as a single lady kit that includes all basic amenities such as a safety pin, sanitary napkin, nail filers, nail paint, essential oil, loofah, and more, kimono in

the bathroom, bed cushion with a name of lady guest, and other security features such as in-room dining provided by female staff, lady concierge, and other security features as well as a lady attendant for room cleaning and telephone video screening.

Safety and security: Due to the rising crime rate, single lady guests are at risk when travelling alone. As a result, an SLT's safety and security is her second most important worry. When going on solo adventures, ladies should adhere to a set of simple criteria. A good location to start is at the hotel, which has proven to be more beneficial for a single lady traveller experience (20 Hotel Safety Tips for Women Traveling Alone, n.d.). The hospitality industry has taken notice of SLTs' concerns and is now taking proactive measures to ensure their safety and security. Hotels have established particular processes or standard operating procedures (SOP) for SLTs, which address all concerns about the safety and security of SLTs, from airport pickup by female chauffeurs to lady porters in the hotel lounge to a lady executive bringing a lady guest to her room. The residential floor devoted to SLTs is supervised by patrolling guards and is under CCTV observation to prevent any unwelcome attention or incident by troublemakers. The hotels provide photo phones with a built-in camera as part of their in-room amenities. Incoming calls are reviewed and screened without revealing the identity of the female guest or her room number. Safety and security are prioritised in single lady guest rooms, according to (Gail Sammons, 2008). The room is extensively checked by housekeeping and maintenance workers before being assigned to the single lady guest to verify that the safety latch, peephole, smoke detector, and other amenities are in working order.

Handle with prudence: Hotels are now taking the lead in providing a wow experience for lone female guests. When an employee understands, anticipates, cares about the minutes, and goes beyond of their way to do it if necessary, they create wow factors. Various facts show that the hospitality business seeks to meet all demands and goes above and beyond to accommodate SLT requests (Chakraborty, 2014). As can be seen, SLT receive special treatment from the hotel; the hotel personnel are put on high alert as soon as an SLT arrives in the city, which includes pick-up services by a lady chauffeur and room cleaning by a lady colleague to assure the SLT's comfort. Most hotels now give SLT rooms a feminine touch, with blue, pink, and violet-based interiors and decorated rooms, especially on floors designated for SLTs. The room also has various magazines, a flower arrangement, a fruit and cookie dish, and a mini-bar with champagne and chocolates, all with the intention of making a thoughtful gesture to the SLT. Hotels offer a variety of packages that include spa treatments with various complementary massages, as well as a silk bathrobe beauty parlour where female travellers can pamper themselves. Most hotels, especially for single female travellers, provide happy hours, which include one hour of free beverages and nibbles in the lounge. Most hotels provide a pillow menu card where a lone woman can order items from the list and make herself comfortable (Navare Prachi, 2015).

OBJECTIVE

1. To investigate the problems and experiences of a solitary female traveller.
2. To research the hotel's solitary female customer's preferences.

SCOPE

1. The purpose of this article is to help hotel owners and management make the required adjustments so that they can focus more on the future and match female consumers' expectations by carefully analysing quality and technology interfaces.
2. Offer suggestions to hotel designers when it comes to in-room amenities.
3. To assist those women in making better plans for their first solo trip to Kolkata.

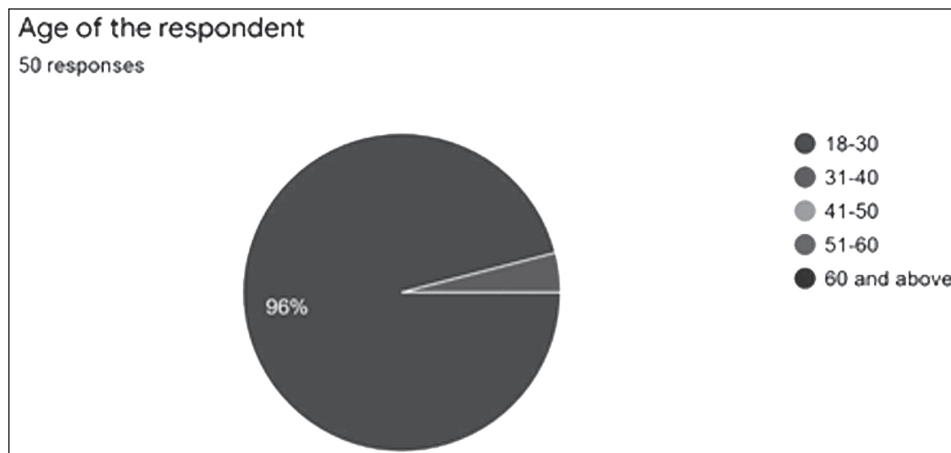
RESEARCH METHODOLOGY

The data for the study was gathered through a survey of Solo Lady Travellers from the pan India who stayed in Kolkata hotels on their occasional or frequent travels.

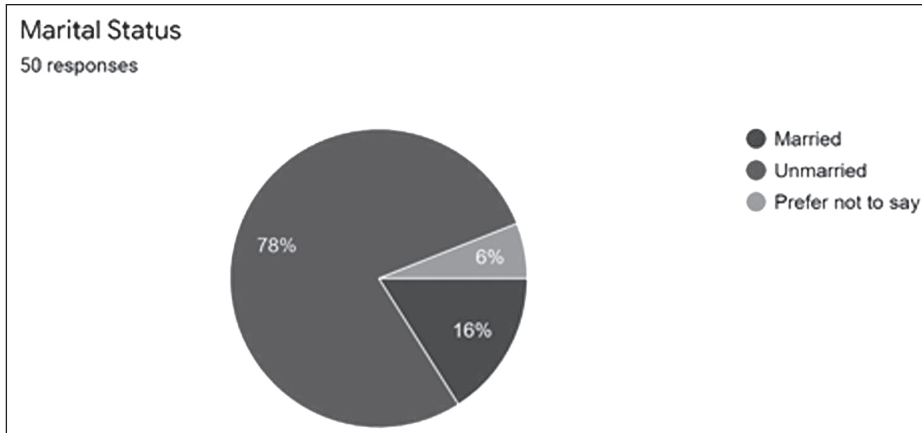
A questionnaire was asked about a lone traveller's experiences and obstacles, as well as how she overcomes them. There were objective and open-ended questions in the survey. The primary data was gathered from 50 SLT who openly revealed their travel and lodging experiences, preferences, and challenges. This study allowed for the development of safety considerations for ladies considering their first solo trip.

RESULT AND DISCUSSION

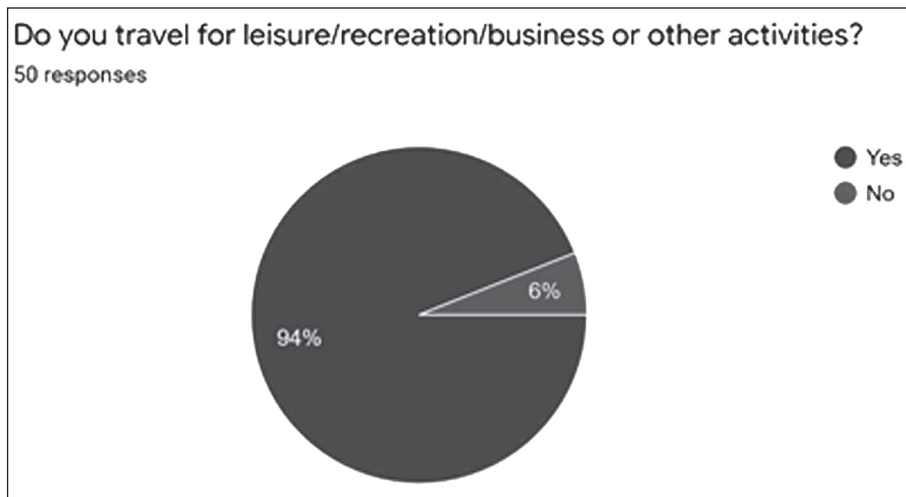
The following results are analysed and debated using a self-made questionnaire that was filled by the SLT of various age group. I received 50 responses in all, from which I have drawn my conclusions.



As per the above pie chart, it is clearly visible that 96% of SLT respondent are from the age group of 18-30, 4% of the SLT respondents are from the age group of 31-40. Due to Covid-19 protocol and restriction in travel, the number of SLT respondents are less in number. It can also be interesting to see that there are more percentage of SLT in the age group of 18-30 than any other age group. It can be due to the fact that SLT are now more confident to travel and explore.

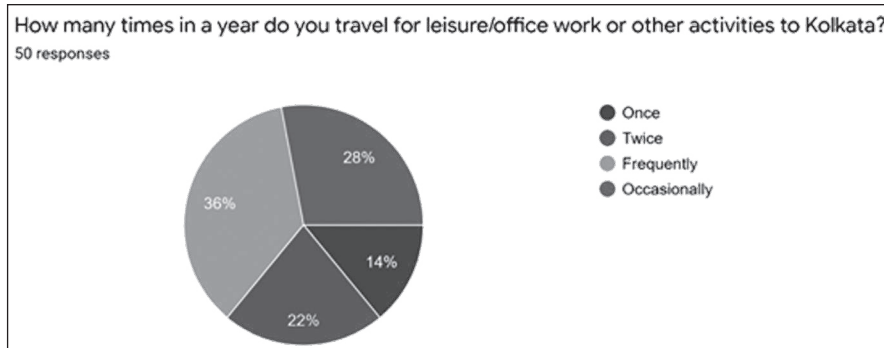


Most women these days are working and are independent. They have choices and most of them have made the choice to keep working even post marriage. Needless to say that we can see from the above survey results that out of the 50 single lady travellers whom we had questioned, 78% were with a marital status.

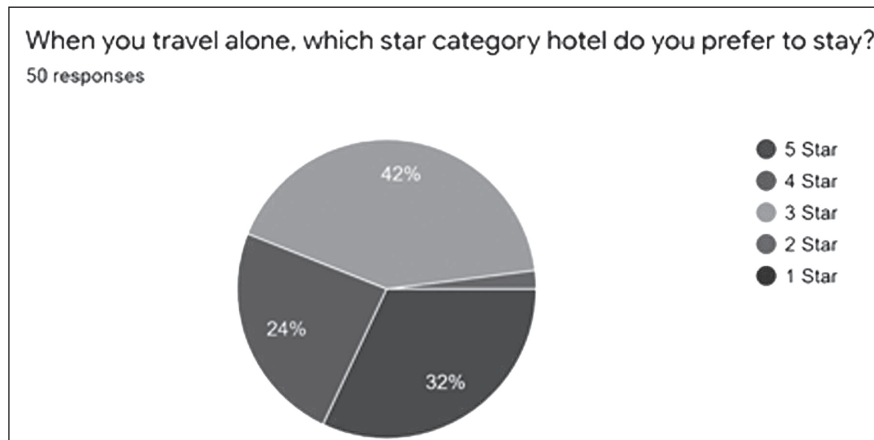


As we can see a clear data above that out of the 50 Single Lady Traveller’s whom we had questioned during our survey are women who do travel frequently. Their reason to travel might vary like leisure, recreation, business etc., thus indicating the righteousness of our data which says 94% of these single lady travellers do travel.

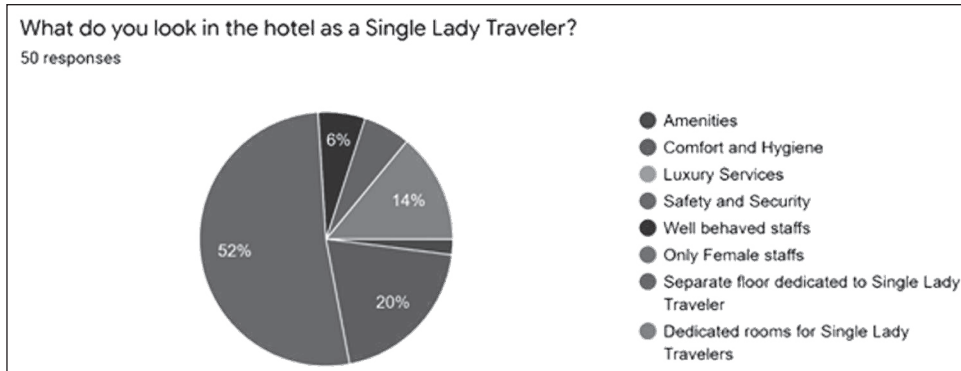
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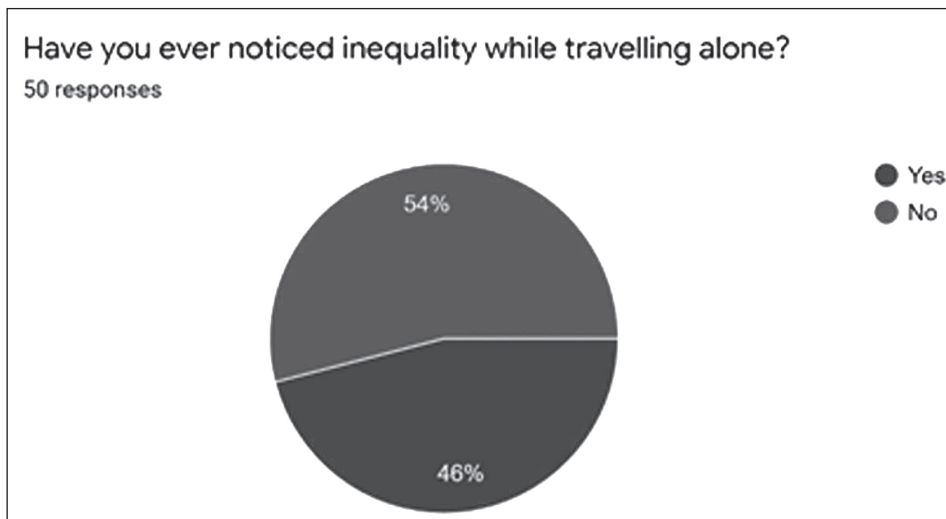
It is essential to also understand the frequency at which the person is travelling. The frequency determines the tourism demand. From the above survey conducted, we can see that almost 36% of the single lady travellers travel quite frequently for their leisure, work or other activities to Kolkata. A total of 50% Single lady travellers travel once or twice a year. And a very small number of 14% traveller who has said to be travelling very occasionally. Our survey was conducted amongst single lady travellers who has to travel quite often and thus marks the authenticity of this data.



It is very important to understand your client's preference before observing and suggesting changes. So via this question we have segregated the preference of the single lady travellers on which category of Hotel they would like to stay while they are travelling or to their destination. As per the above data we can see that 42% of the SLT's would preferably like to stay in a 3star category. Also 32% and 24% of SLT's prefers 5star and 4star categories respectively.



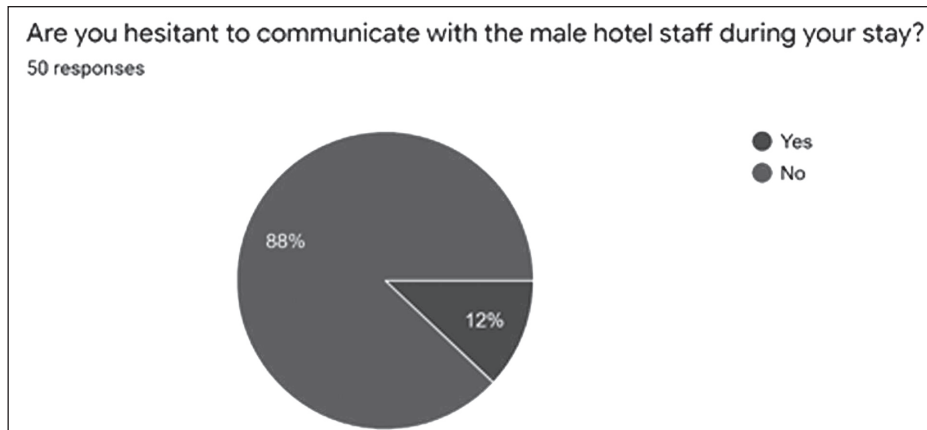
Single lady Travellers are always pampered with special amenities, décor, gifts and hampers. Different hotels have their unique way of making the SLT’s stay much more comfortable and memorable. During our survey we have questioned the travellers that if given an opportunity, which of the one service they would prioritize while staying in a hotel and we have got various responses which we shall be discussing further. A huge percentage of 52 have marked and prioritized the need of Safety and Security. Others have also prioritized comfort and hygiene, well behaved staffs and others.



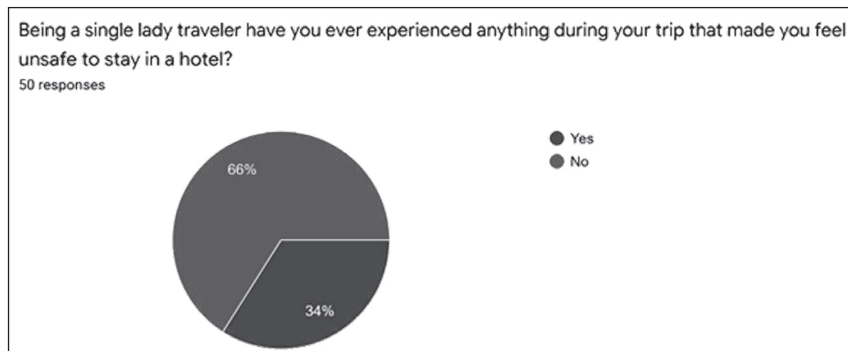
Since our previous question prioritized the need for Safety and Security, we have also questioned them about whether they have faced any kind of inequality while they are travelling. To this the response was almost 50-50. Inequality in terms of behaviour among the hotel staff, lack of communication and other providing amenities which are needed by a Single Lady Traveller, while they are on visit to Kolkata for any purposes like work, leisure, etc.

This can also be possible that the hotel staffs are not very interactive and confident enough to communicate with the Single Lady Traveller. Proper training and educating the employees may turn the image and they will understand how to communicate with Single Lady Traveller.

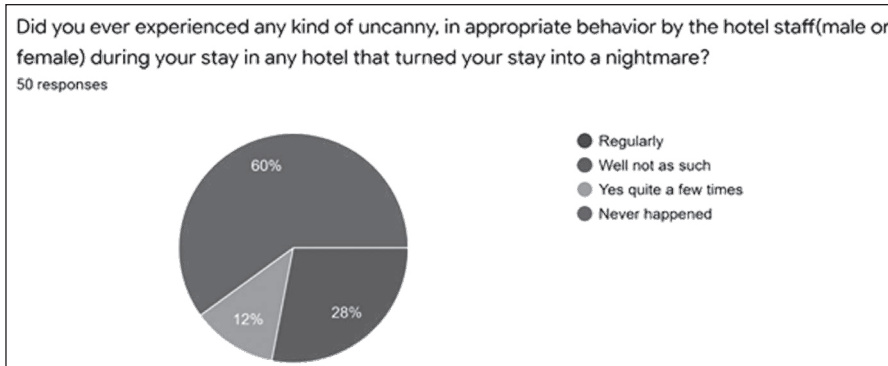
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As there is a myth in the industry that Single Lady are hesitant to interact with the employees of the hotel due to language barrier and sometimes hesitant to talk to stranger. But it's very interesting to see that the thinking has changed. 88% responded said a clear now that they are not hesitant while communicating to the male staff. The majority of Single Lady Traveller are not afraid or hesitant to communicate with the male hotel staffs



As the above analysis of the pie chart, it is clear that most single lady travellers never experienced anything that turned unsafe in hotel. 66% of the respondents said that they never experienced anything to make them feel unsafe inside a hotel. Most of the hotels have upgraded their security systems with CCTV and lady security personals and even have special room and floor for single ladies.



There are situations at times which may not be intentional but has a long term effect in your mind, thus influencing your preference and needs. Things like any uncanny experience or an inappropriate behaviour by the hotel staff are experience which the SLT might face during their travel. Thus we have asked this question to the Single Lady Travellers whom we have surveyed. As per the data above, it can be clearly seen that the majority of 60% have said a clear no and have shared that their travels have been quite smooth whereas around 28% and 12% have indicated that not that much and a few times respectively. And not a single person has voted for regularly or often.

Mention the few of your expectation as a Single Lady Traveller you expect from a 5- Star hotel while your stay.

- It is expected that male employees will be well behaved, the hotel will be clean and hygienic and overall, the hotel premises and indoors should be safe for women.
- Staff members behaviour.
- Safety and security, hygiene, a floor for single lady traveller
- Don't be too formal with us. I notice a lot of times that the staff only mingle with the males but there's no harm in having communication with a female traveller.
- Nothing as such, please keep maintaining the same like separate floors, providing more amenities related to ladies
- It's been quite a journey
- Secure and safe stay, being well catered to comfort over gaudy luxury
- Safety and Hygiene tops preference list.
- Safety, some extra help in case not well, making it a little easier by communicating
- Safety, comfort
- Secure room, hassle free transportation services organized by hotel, availability of menstrual supplies if need be
- Much more safety and single Eva room for ladies in hotel
- No specifications as such

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- Safety
- Proper amenities for lady travellers
- An entire floor dedicated to Single lady guests and serviced by female attendants only
- Fair treatment
- Feel always safe and secure, without any inappropriate behaviour.
- Hygiene and security
- Hygiene, safety
- Safety & security is of the utmost importance
- Safety security
- Hygiene security comfort
- More amenities for women.
- Separate floors for single lady travellers
- Pad facility and lots of snacks
- Safety and security of the lady traveller should be given top most priority, comfortable and hygienic stay, some emergency medical care commodities, etc
- The staff should be friendly and polite. The room should be clean hygienic, and the room service should have a better service.
- Proper security with well-maintained safety measures for single travellers.
- The safety and security being the primary concern. Also, lady staff is preferable.
- Cleanliness and hygiene, safety and security and good quality of the food served
- Transportation system
- A safe and secure environment with minimum disturbance and a phone call to enquire before knocking. That should be good.
- Safe
- Better Security
- 1. Safety and Security 2. separate floor for single ladies and well behaved staff
- With comfort and hygiene, there should be proper safety and security in the hotel which is usually there in 5 star hotels.
- Safety and security is of prime importance, to add on to that is anticipation.
- Hotel must provide a room near to elevator. 2. Utmost priority to every request, 3. Room on DND
- Comfort, hygiene, etc

- Sometimes more attention is harmful.
- Safe and secure
- The locks are in good condition of the room. An interactive door bell.
- Special amenity for the ladies and the unique decor of the room
- Safety best food comfort zone good behaviour
- Safety, good behaviour, no inequality
- My peace of mind and people leaving me alone.
- Staff behaviour, safety and security, comfort
- Special amenities and safety n security

The above are the few expectationsexpressed by the Single Lady Travellers that they want from the hotels during their stay. Most of the hotels are providing all the facilities required by a SLT during their stay in the hotel. It will not only give them the confidence to travel more, but also to break the bottle neck effect that is evident in the industry.

According to the research, SLTs' journeys mostly devolved into a positive and beautiful experience. The hotel rooms were always up to par, which were always felt special by several SLTs. The websites of hotels that claimed to give enough safety and protection in their establishments were they are trying to do so for the SLTs. The accommodations sometimes lacked the amenities that the SLTs expected but they made sure to make it available to the guest whenever they need. As the management now a days are more concerned about the safety and security of the SLTs, so they are going extra miles to ensure the same comfort for them(Phakdon, 2021).

When asked what the most important piece of advice SLT would give to someone planning her first long-term solo journey, some of the respondents suggested that future travellers stay at Kolkata hotels that prioritise women's safety and protection. Some respondents stated that the first and most important thing to do before planning any tour is to research the hotel, the location's travel history, and previous travellers' impressions to get a sense of the area.

CONCLUSION AND RECOMMENDATION

Women are catching up to men in the business sphere, which requires frequent travel to fulfil professional obligations. On the home and social fronts, women also represent the family. As a result, this study focused on lone travellers' experiences and challenges, as well as how to overcome them challenges(Malkani, 2019). According to the survey, women of practically every age group have showed an interest in whether it's for pleasure or work, travel is a must. 94% of SLTs fly only once or twice a year, according to the survey. Every year, I travel to Delhi on a regular basis. Many SLTs prefer star hotels because they value exceptional service, security, and comfort. hygiene. Following a poll, it was shown that SLTs place a high value on safety and protection, comfort and hygiene come next.They will not hesitate to change hotels if the hotel room is not safe or if the hotel personnel does not supply the amenities that were promised or promoted at the time of booking. Many SLTs advise choosing a hotel with a female room service staff. Some respondents stated that they would tour the region or conduct research before

booking a hotel room that would make them happy. Hotel owners should think about how in-room hotel amenities are planned. Future travellers should stay in Kolkata hotels that prioritise women's safety and protection, according to the report. It is even more interesting to see that SLT's now a days are not asking for special floors or EVA floors any more. Before embarking on any journey, the first and most important step is to thoroughly investigate the hotel, the location's travel history, and other travellers' experiences to acquire a sense of the area. The findings revealed that the only way to feel better while travelling is to do thorough research beforehand, such as background checks, location information, and understanding of the local language for interaction with other tourists and residents.

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TRENDS IN THE HOSPITALITY INDUSTRY WITH REFERENCE TO AUGMENTED REALITY

Dr. Sharmila. C

*Lecturer; Computer Department
IHMCT & AN, CIT Campus, Taramani, Chennai-600113.*

Ayoka Emily D'souza

*First Year B.Sc. in Hospitality Administration,
IHMCT & AN, CIT Campus, Taramani, Chennai-600113.*

ABSTRACT

Technological upgrades are forging the improvisations of many fields. In the Hospitality Industry, technology can open up various opportunities for smooth and better customer experience. It plays as a tool of a better handling process for the hosts. Augmented reality enhances the experience and satisfaction of the customers. Technology will reshape the hospitality industry and will help to engage the guests better. Sumesh S. Dadwal (2016) revealed in his research on augmented reality marketing (ARM) as a digital marketing campaign and a strategic trend in tourism and hospitality sector. The main aim of this study is to identify how augmented reality boosts the overall hotel user experience and to create awareness with diverse applications of the interactive technology possible across all manner of properties. The paper also identifies the various technologies involved and various other potential areas for augmented reality to be included.

Keywords: Augmented reality, Technologies, Interactive Assistance.

INTRODUCTION

In this technology enriched world, Augmented reality (AR) is one solution to enable hoteliers to improve the guest experience and to enhance their surroundings. AR alters the way users perceive their surroundings by using virtual elements such as sound and video to augment real-world environments” AR can truly give mark the mechanical edge that will separate them from the numerous properties that exist across the industry” says Rhodes. To create interactive experiences within the hotel setting, AR technology can be used widely.

“[AR] is the direction that I think is far more interesting and promising — for technology and, really, for humanity. AR is designed to add, enhance the things you do as a human being: Being outside, socializing with other people, shopping, playing, having fun. AR can make all those things better.”

— John Hanke

Sharmila & Ayoka Emily D'souza

Augmented Reality (AR) is a view of the physical real-world environment with super imposed computer-generated images, thus changing individual's perception of reality. AR expands our physical world adding technology with digital information. The experience is a mix of the real and virtual world that brings a new level of interaction to the user.

REVIEW OF LITERATURE

1. **Anand Nayyar, Bandana Mahapatra, DacNhuong Le, G. Suseendran (2018)** study explained Virtual Reality and Augmented Reality offering many useful applications which attracts greater attention from tourism researchers and professionals. And also aimed to highlight the top most technologies for Tourism and Hospitality with regards to AR and VR.
2. **Carlos Orús Sergio Ibáñez-Sánchez Carlos Flavián (2021)**, study identified to find out how Virtual and augmented reality change as companies interact with various customers. It also focused on the perceptions of the presence elicited by different types of contents (real or digital) and embodied devices (head-mounted display or smartphone), and the impact it had on user's pre-experiences with hotels. Results from a lab experiment showed that contents with high levels of factual realism (360-degree videos) have a positive influence on perceptions of presence, ease of imagination, and visual appeal, and on booking intentions.
3. **Ioana Simona Ivasciuc (2020)** study quoted how the emerging new technologies, such as AR and facial recognition can contribute to increasing the competitiveness of tourism companies in the context of COVID. Emphasized that the future of tourism around the world is already highly dependent on how we forward innovation in the industry. Further on, the article also stresses on development opportunities for the AR Media Future Web application.
4. **Wei Wei (2019)** study clarified the fundamental improvements of virtual reality (VR) and augmented reality (AR) research in hospitality and tourism and aimed to pinpoint fruitful directions for both tourism and hospitality research on applications of VR and AR. Synthesized the stimuli, dimensions and consequences of VR/AR-related user behavior experience, upon which a theoretical framework was developed. This paper put forward fruitful directions for advancing the current understanding of VR/AR and its management.
5. **Sumesh S. Dadwal (2016)** study investigated augmented reality marketing (ARM) as a digital marketing campaign and a strategic trend in tourism and hospitality. The computer assisted augmenting of perception by means of more interactive information levels in real time. This paper explores the use of technology at different phases of tourism and hospitality marketing, along with the role of technology in enhancing consumer experience and value addition. It further supports the view that technology aids in faster diffusion of tourism products, relates destinations or attractions and thus benefits the entire society. The study discusses ARM as a promising trend in tourism and hospitality and how it will meet the future needs of tourism and hospitality products or offerings.
6. **Angela Mai Chi Chu, Law, Pui Yan Kate, Tse, Po Man Deborah (2020)** study indicated that Augmented Reality technology enhances tourists' experience in museums and theme parks. Despite the potential benefits of creating a better stay for the customers, there are

only a handful of hotels in the world which implemented this technology. This paper aims to explore the senior management's perception to the potential adoption of AR technologies in their establishments. expanded the interdisciplinary point of view for future exploration in AR improvements in the cordiality writings.

7. **Wided Batat (2021)** study derived how many businesses across sectors are using extended reality technologies to enhance the consumer experience. In the restaurant industry, digital technologies are gaining interest among restaurateurs to improve the customers' dining experiences and thus overall food well-being. The finding suggests that AR can influence positively or negatively consumers' perceptions of their restaurant experiences. Furthermore, the results reveal how AR plays a major role in terms of improving overall food well-being of consumers and thus can lead to positive post-consumption behaviors.
8. **FaizanAli (2022)** study investigated on the development of a measurement scale to assess consumer's AR-enhanced experiences in a restaurant setting. The study employed multiple waves of collection of data. This study developed and validated a measurement scale which assessed consumer's AR-enhanced experiences in the hospitality industry.
9. **Emili Koui (2017)** study derived how restaurant businesses come up with ways to increase and maintain their clientele. This investigated how the digitization of a traditional printed menu, can better enhance the customer experience at a fine dining gourmet restaurant. The augmented reality component would give precision in segment size and fixing arrangement. The meals that would be portrayed in the AR feature, would reproduce in 3D with the use of the photogrammetry method. It also wanted to show how by merging technology and culinary arts, it can assist in building trust between customers and restaurateurs.
10. **Ömer Faruk Demir; Enis Karaarslan (2018)** study derived a prototype of mobile application for smart tourism by using AR technology. This application aims to introduce important centers, restaurants, hotels, touristic places and sightseeing places to domestic and foreign tourists. The ratings, intensity, comments, price information and current social media data about these areas will be provided simultaneously on the mobile application. Image processing techniques and location data will be used for implementing the augmented reality technology.

OBJECTIVE

1. To identify how augmented reality enhances the overall guest experience in a hotel/restaurant.
2. To analyze the various technologies involved and various other potential areas for augmented reality to be included.

METHODOLOGY

The study was conducted across various individuals. An attempt was made to collect the data from different age groups towards Augmented Reality. Based on the qualitative data and subsequent validation made, 24 items were included in the questionnaire. The questionnaire was validated by subject experts for assessment and 14 items were then included for the survey.

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A google form was created for the questionnaire with 14 items. A survey was conducted on a sample of 275 respondents irrespective of different age groups, gender, location and educational qualification. The questionnaire was designed to assess the individual's preference toward AR in a hotel/ restaurant. In this research, an analysis was conducted to examine whether augmented reality (AR) technology contributes positively or otherwise to a customer's dining experience.

DATA COLLECTION

PRIMARY DATA – The primary data was collected through structured questionnaire method using google form.

SECONDARY DATA – Secondary data was collected through various sources such as websites, research articles, Journals, etc.

DATA ANALYSIS AND INTERPRETATION

A survey was conducted, wherein a questionnaire was sent to the respondents through google form which consisted of 14 questions. The responses were collected through google form.

QUESTIONS PROVIDED IN THE QUESTIONNAIRE AND THEIR RESPONSES

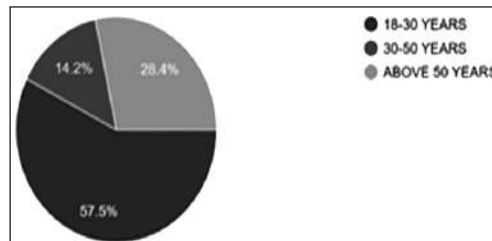


Chart 1: Age Range

As evident from the pie chart above, the respondents' age varies in groups. Most of the people are of the age group 18-30 years which constitutes to 57.5 %, while 28.4% of the sample included people above 50 years, another 14.2% were of the age group between 30-50 years.

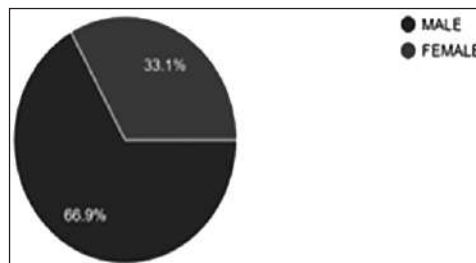


Chart 2: Gender

Respondents were asked to select the gender out of which 66.9% were males and 33.1% were females.

For the further questions, a 7-point Likert scale was used in which 7 indicated ‘strongly agree’ and 1 indicated ‘strongly disagree’.

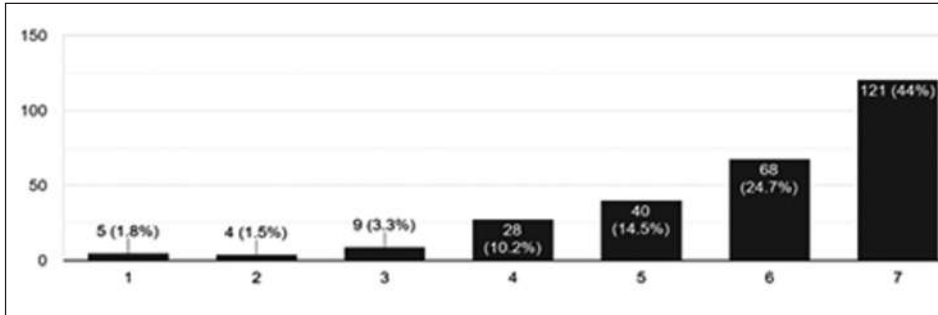


Chart 3: Positive responses for AR experiences

From the accompanying information, 44% might want to encounter AR in a hotel/restaurant while 1.8% don't want to encounter it.

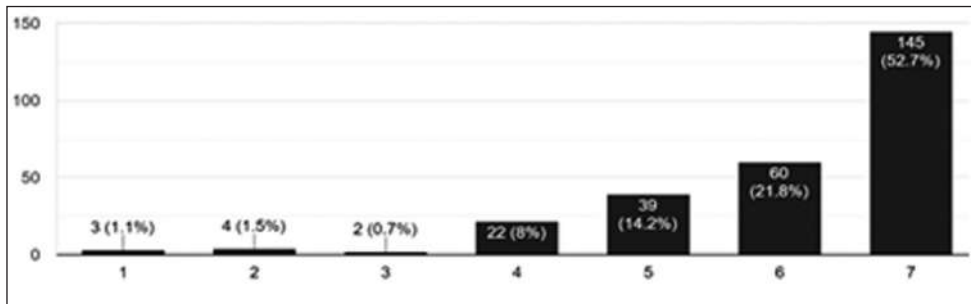


Chart 4: Responses voted in favour of AR that it helps to gain information

52.7% of the respondents felt that AR could assist them with acquiring data of the Hotel/ Restaurant they are going to. Anyway 1.1% didn't feel so.

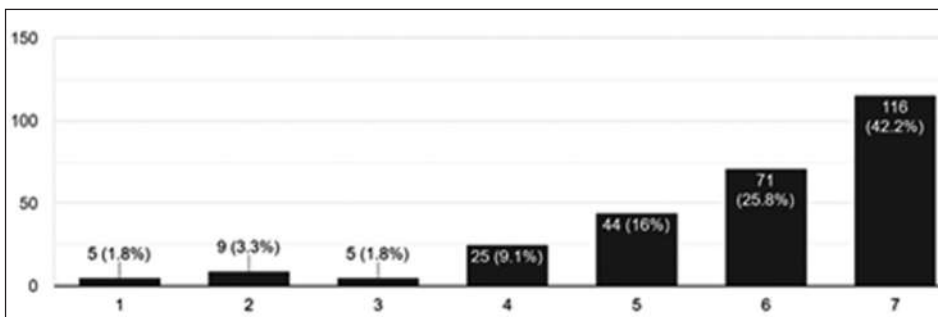


Chart 5: Positive responses for people's perception on AR

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From the responses of this inquiry, we figure out that 42.2% of the respondents imagine that AR can change their perception of the physical environment of the hotel/restaurant while 1.8% disagree.

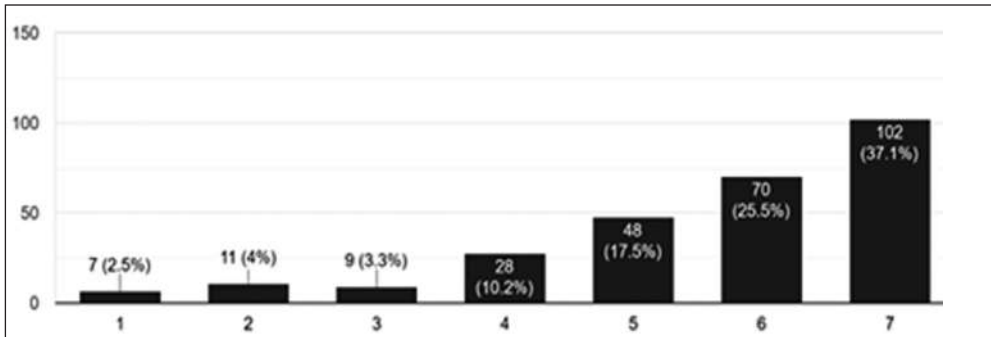


Chart 6: Responses of people's likeliness to purchase a room/meal after an AR Experience

According to the data, the number of respondents who wish to purchase a room/meal after an AR experience was 37.1% and there were 2.5% who didn't wish to purchase it.

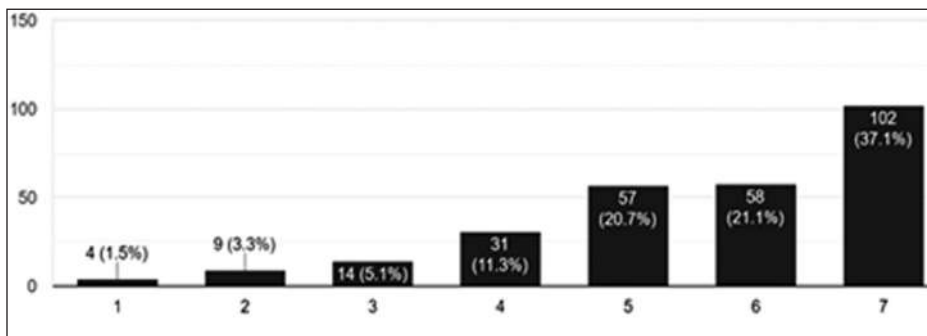


Chart 7: Positive responses of people's willingness to spend extra time for an AR experience before checking in/ordering a meal

From the available data we found out that 37.1% respondents are willing to spend extra time for an AR experience before checking in/ordering a meal. However, 1.5% respondents are not willing to do so.

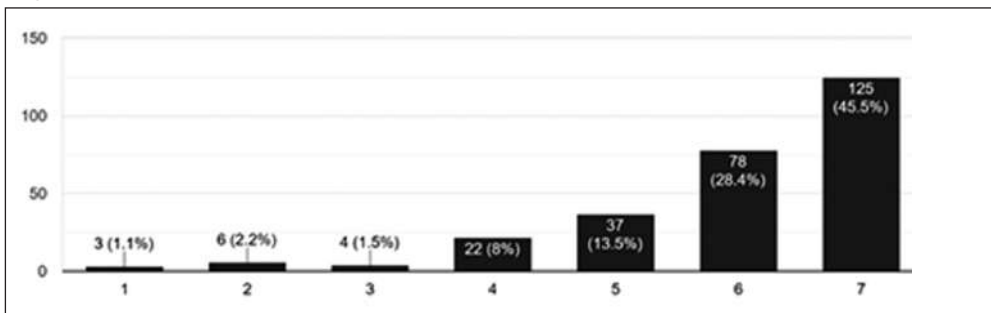


Chart 8: Responses of improving profitability using AR

45.5% respondents firmly concur that AR will assist with drawing in more visitors and further develop benefit in hospitality business. Just 1.1% of the respondents emphatically conflict.

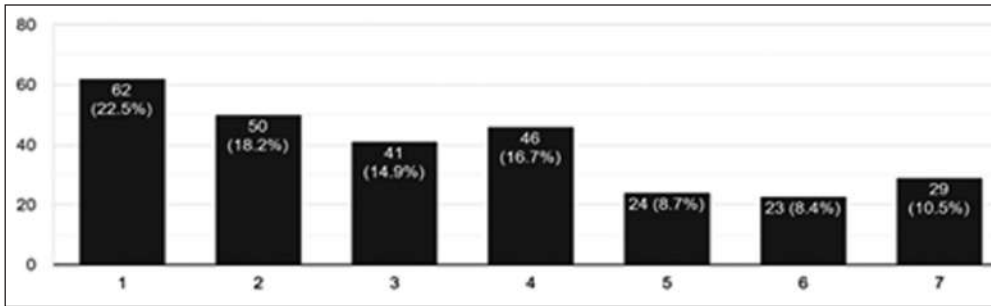


Chart 9: Responses showing individuals' uncertainty on utilizing AR

From the following data, it is driven that there are more respondents who are insecure on their ability to use AR which contributes to 22.5% of the total respondents. While 10.5% respondents are comfortable to use it.

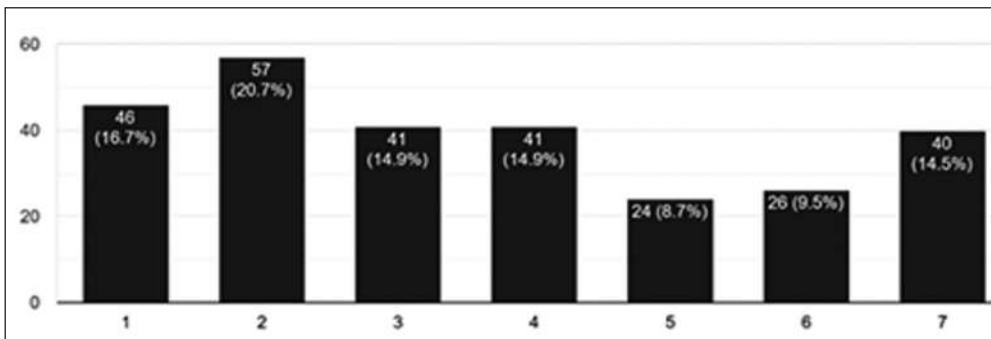


Chart 10: Positive responses for people's skill set on using AR

The responses to this question prove that 20.7% differ that they expect to have additional abilities for utilizing AR, while 16.7% strongly disagree for the same. 14.5% unequivocally concur that they require the additional abilities to utilize AR.

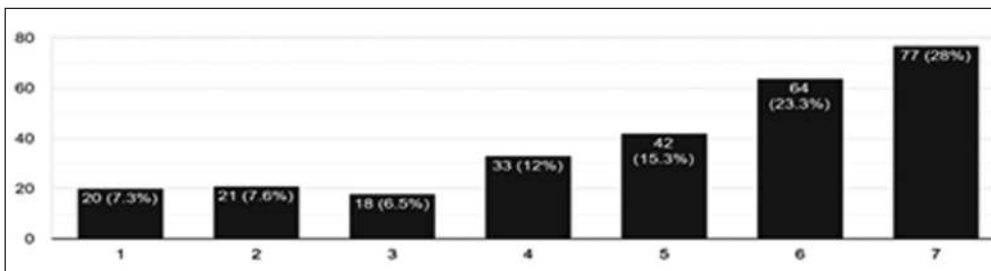


Chart 11: Responses of people's likeliness on using AR if others used AR

Under this criterion, 28% respondents would probably utilize AR assuming that others utilized AR. While 7.3% emphatically differ to utilize AR in the event that others utilized AR.

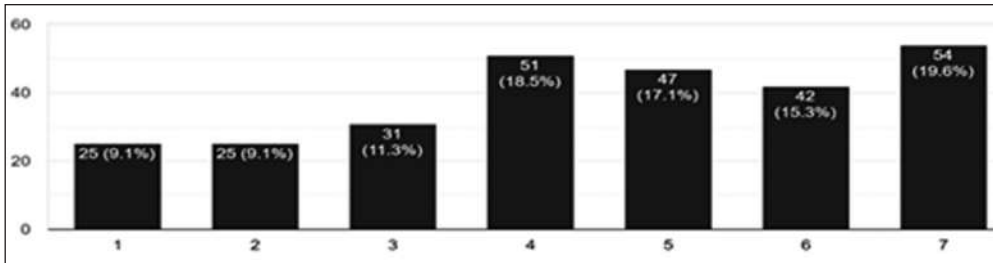


Chart 12: Positive responses about the feel that AR will have acceptability towards low budget and rural hotels/restaurants

19.6% respondents feel that AR will have agreeableness towards low financial plan and rural hotels/restaurants while 18.5% neither concur nor differ on this. Notwithstanding, 9.1% unequivocally differ that AR innovation will be adequate there.

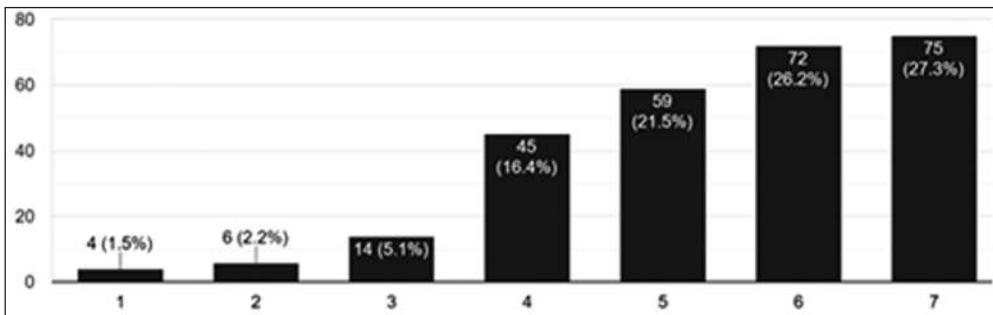


Chart 13: Responses about the trust on AR in hospitality sector

The chart above shows that 27.3% of the respondents trust the information of AR in the hospitality sector to be credible and reliable. Only 1.5 percent strongly disagree with the same.

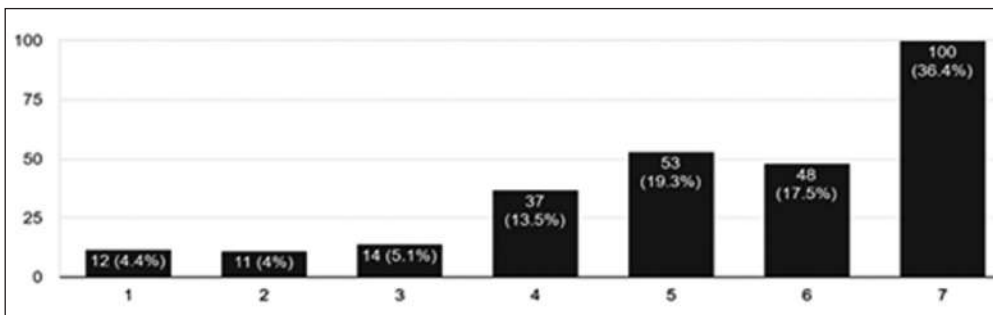


Chart 14: Positive responses of people's preference on AR to traditional methods like menu cards and writeups

As clear from the information above, 36.4% of the respondent's incline towards AR to conventional techniques like menu cards and writeups, while 4.4% don't favor it.

CONCLUSION

Augmented Reality (AR) is an innovation that has grabbed the eye of quite a large number. This can make the visitor's experience much more pleasant in light of the fact that they can look into the region and the city, before they can really encounter it. AR help hotels create an improved vivid encounter for clients with its room, interior décor, amenities, on-site dining, etc. They can additionally incorporate worth add administrations with hotel with accommodation details, prices, information on hotel location, etc. This degree of upgrade has an enormous effect on their minds with bunches of data granted. Thus, AR assists guests with getting to the data they will generally request, both prior to showing up at the hotel. This paper has identified that Hotel industry endurance is on consumer loyalty and invites each idea or innovation that upgrades customer experience. AR incredibly works on the trust between guests (customers) and hosts (hospitality service providers). With interactive assistance of augmented reality, hotel scan reshape the view of their customers of the genuine reality and sell their services all the more actually. Consequently, one can say that AR is changing into the best favored intuitive technology development for hotel industry. They make higher benefit by offering a more intuitive customer experience.

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INTERNET OF THINGS IN HOTEL GUEST ROOMS- EXPLORING CUSTOMER PREFERENCES FOR IOT FEATURES IN HOTEL GUEST ROOMS

Dr. D. P. Sudhagar

*Associate Professor,
Department of Hospitality Management & Catering Technology,
Garden City University, Bangalore-49
Email: sudhagar.dp@gardencity.university*

Prem Kumar

*Assistant Professor,
Department of Tourism, Garden City University, Bangalore-49,
Email: prem.kumar@gardencity.university*

ABSTRACT

The facilities, services, and amenities provided in the hotel guest rooms are changing at a fast pace. One of the recent revolutions in hotel guest room features is the application of the Internet of Things. Introducing Internet of Things (IoT) technologies involves huge investment, and it also determines the overall accommodation experience of the guest. Hence, it is essential to understand the customer's perceptions and preferences for IoT to effectively implement the IoT applications in guest rooms to achieve ROI and enhance the guest experience. The study explores the customer's perceptions and preferences for IoT features in Hotel Guest Room. A focus group discussion was conducted, and 52 variables were identified for questionnaire preparation and data collection through online channels. Convenience sampling method was adopted to collect the response from the customers. Descriptive statistics were employed to analyze the data. The study results identified the list of IoT features in the guest room on three scales: not at all important, somewhat essential, and highly important. Being an exploratory study, it is limited to understanding only the guest's perceptions and preferences about the IoT applications in hotel guest rooms. The findings have important implications for accommodation professionals and IoT developers.

Keywords: Internet of Things (IoT), Hotel Guest Room, Guest preferences, Hotel guest.

INTRODUCTION

The number of hotels operated in the market is increasing day by day across the globe. The size of the global hospitality market is predicted to increase from \$3,952.87 billion in 2021 to \$4,548.42 billion in 2022, with a (CAGR) of 15.1% (The Hospitality Global Market Report, The Business Research Company, 2021). The hotel market comprises over four million rooms worldwide (Condor Ferries, 2020). The factors responsible for the growth of hotels include tourist inflow

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and outflow from the domestic and foreign market along with the positive performance of other sectors such as IT, automobile, manufacturing, etc. Gone are the days when the hotels provided rooms with standard facilities and amenities to the guest. Nowadays, the consumer expects a wide range of contemporary amenities, including unlimited internet access and a range of digitalized services (Bilgihan et al., 2016; Gupta & Dixit, 2022). Consumers' demographic, psychographic factors, and motivations are changing (Amatulli et al., 2022), leading to a relatively new set of behavioral patterns. The behavioral transformation is occurring from consumer homes to hotels.

The concept of the Internet of Things (IoT) is expected to change the accommodation experience of the customers and the way the hotel operates. Usage of IoT technology and devices can facilitate hotels in offering rich guest-hotel interactions (Morosan & DeFranco, 2016), experiences (Bilgihan et al., 2016), and marketing of hospitality services (Kumar, 2021). IoT technology is supposed to be the facilitator for both the hotel and hotel guests, and mobile applications are one such example (Law et al., 2018). Gubbi et al, (2013) define the Internet of Things as: "Interconnection of sensing and actuating devices providing the ability to share information across platforms through a unified framework, developing a common operating picture for enabling innovative applications". Therefore, IoT provides a platform that connects the guests and service providers for the smooth rendering of services.

A recent study conducted by (Bogicevic et al., 2018) found that younger guests preferred contemporary design; older guests opted for traditional and contemporary designs of hotel guest rooms. Male guests preferred rooms decorated with masculine colors. In contrast, women were satisfied with both masculine and feminine color schemes. Similarly, the IoT features are also expected to be perceived differently by the consumer. For example, (Jung S., Kim, & Farrish, 2014) study revealed that In-room IoT facilities significantly enhance the guest experience and increase the revenue. But, the cost of introducing an IoT feature may be higher. Hence, an important analysis needs to be done to understand the needs and expectations of the consumer with regards to IoT features to maximize the return on investment (Bilgihan et al., 2016). It also helps in achieving customer satisfaction leading to positive behavioral intention and retention of the customers. Digital amenities enhance the hotel experience of the guests. (Brochado, Rita, & Margarido, 2016). Hence, changes in the hotel guest preference and technology advancements need to be updated in the industry since travel, tourism, and hospitality are information-intensive industries (Kumar, 2021). The present study is focused on this critical area which is expected to provide beneficial results to all the stakeholders in the accommodation industry.

OBJECTIVES

The study aims to achieve the following objectives:

- To investigate the hotel guests' perceptions and preferences of IoT features in hotel guest rooms.
- To develop a guide for hotel managers seeking IoT technologies in hotel guest rooms.

REVIEW OF LITERATURE

Research on IoT applications has highlighted the implications from several points of view: Guests' ease of use, guests' perception, hotels' competitive advantage, guest-hotel interaction, the ambience of the hotel, and revisiting the hotel. (Chen et al., 2018) have explored a relationship between hotel attributes, demographic characteristics, quality of guest rooms, and travellers' sleep experience. The results indicate that the hotel ambience, noise, and cleanliness affect the sleep quality of the business travellers.

(Bilgihan et al, 2016) have argued over the potential of technology application to improve the guest experience, thereby increasing the revenues from guestrooms and ancillary services. It has been concluded that high-speed internet access is important for business travelers and leisure travelers. The device connectivity is also perceived as essential criterion by the guests. It is highlighted that the right assortment and offering technology amenities (in-room and ancillary services) will induce more guest room sales at higher rates. (Guizzardi et al, 2016) have found that guest rooms are expected to be soundproofed and well connected to the front desk on a 24-hour basis. It is supposed to be a necessary feature of any business hotel. In this context, IoT technology solutions play an important role in establishing a connection between the guests and hotel employees. For example, the concept of the Connected room will help the guest inform the back-end staff of specific needs.

The physical attributes of the hotel can affect the perceived value of the guest, and it can also influence their intention to return. (Worsfold et al., 2016) have reported in their study that these two factors are strongly linked. Guest satisfaction with hotels' physical attributes significantly impacts intention to return. These physical attributes can be empowered by IoT technology and devices. (Morosan, & DeFranco, 2016) have examined the use of mobile applications for guest-hotel interactions, personalization, and providing personal messages. Authors argue that involvement with apps and app-related privacy concerns are a major concern in the application of mobile apps by the guests. Hotel managers can take advantage of IoT technologies to automate such requirements and disseminate information to guests.

(Rauch et al., 2015) suggest that the service environment is a strong predictor of hotels' ability to meet the guests' expectations. The service environment may involve IoT applications in guest rooms and interactive areas between guests and hotel employees. (Zemke et al., 2015) have focused on a niche segment of guests who can afford and are willing to pay a premium price for enhanced disinfection of the guest rooms at the hotel. In this exploratory study, the authors have used the survey method to determine the guests' perception of room cleanliness and willingness to pay a premium price for the enhanced disinfection services. The research instrument was administered via the internet, and hotel brands were not disclosed to the respondents. It was found that young travelers and predominantly female travelers across all age groups are willing to book the hotel guest rooms at a premium price for enhanced disinfection of the hotel rooms.

Technology Acceptance Model (TAM) has been an extensively explored area in the travel, tourism, and service industry. (Kim, & Qu, 2014) have conducted a study that could help hotel managers determine factors that influence travellers' use of hotel self-service kiosks. Results highlight that the compatibility of the travelers was the most crucial factor in influencing them

for technology use, followed by perceived ease of use of technology. Hence, the IoT technologies should be compatible with multiple devices, and they should also be user-friendly. (Kim, & Bernhard, 2014) have further explored the usage of TAM in using fingerprint systems by guests at hotel rooms. The authors have used gender and age as moderating factors to find the influencing factors of fingerprint systems. The findings indicate that gender and age play important moderating roles in using fingerprint systems by the guests at hotels. These IoT facilities can be part of the hotel's marketing campaign to attract young and educated guests.

Table 1: Research articles on IoT

Authors	Key results
(Amatulli et al , 2022)	Openness to changes can motivate the guests for IoT-enabled voice assistant devices.
(Gupta & Dixit ,2022)	Guests look for Wi-Fi services as an important aspect. They are ready to avail luxury services at an extra cost.
(Pelet, J.-É et al., 2021)	Smell, hearing, and sight affect guests' emotions and affective experiences. Sense of smell has a higher correlation of behavioural intensions among female guests.
(Buhalis & Moldavska, 2021)	Virtual Assistance technology helps hotels improve customer service, expand operational capability, and reduce costs. It is also used for optimizing the hotel operations, and Upgrading customer services.
(Mercan et al, 2021)	IoT is helpful in the customization and personalization of the guests' services. Operational processes can be more efficient and work at high speed.
(Bharwani & Mathews, 2021)	IoT can offer co-creation and delivery of expectations for luxury hospitality. It can help cater to the niche segment of luxury hospitality using high-tech and high-touch aspects.
(Yoon, 2021)	Using VR contents (e.g., virtual room tours) is influenced by expected performance, social setup, and hedonic motivations. Guests use VR content only when they perceive it as high-value content.
(Leung ,2021)	IoT applications have triggered the shift of local-based platforms (via server-based and Web-based) to cloud-based platforms. IoT-enabled ambient management response system is more eco-friendly. It can help in space layout by using maximum space and guests' preferences.
(Nadkarni et al, 2020)	IoT and Big Data help create information technology infrastructure and business models. It also offers security and standardization of processes.
(Erdem et al, 2019)	Internet payment methods differ across the demographic classes of the guests.

(Leung, 2019)	Smart hotels with in-room automation. Interconnectivity and interoperability with other stakeholders are missing. The use of social media, AI, and robotics were not reported during interviews.
(Brochado et al, 2016)	Digital amenities add to the hotel experience of the guests. Business travelers and young guests prefer more to avail IoT facilities.
(Jung et al, 2014)	In-room IoT facilities significantly enhance the guest experience and increase revenue.
(Bilgihan ,2012)	Guests prefer to avail in-room entertainment technology as a complimentary service. Few guests are ready to pay extra charges for gaming consoles.

Source: Authors

Based on the above literature, it is evident that studies examining a comprehensive list of IoT features in the hotel guest rooms are limited in the literature. Studies such as (Chen et al., 2018; Guizzardi et al., 2016; Worsfold et al., 2016; Rauch et al., 2015; Zemke et al., 2015; Pelet, J.-É., Lick, & Taieb, 2021) were concentrated on physical room attributes preference, service environments, and price.

Other studies related to technology and IoT (Bilgihan et al.,2016; Morosan and DeFranco, 2016; Kim and Qu, 2014; Kim and Bernhard,2014; Amatulli, Sestino, Peluso, & Guido, 2022; Gupta, & Dixit, 2022; Buhalis, & Moldavska, 2021; Yoon, Erdem, Schuckert, & Lee, 2021; Leung, 2019; Brochado, Rita, & Margarido, 2016; Jung, S., Kim, & Farrish, 2014; Bilgihan, 2012; Mercan, Cain, et al., 2021; Bharwani, & Mathews, 2021) have focused on the internet, mobile Apps, self-service kiosk, fingerprint systems, voice assistant devices, Wi-Fi services, Virtual Assistance technology, virtual room tour, ambient management response system, security and standardization of processes, Internet payment, in-room automation, Digital amenities, IoT and guest experience, in-room entertainment technology, IoT and the concept of customization and personalization of the guests’ services and IoT and co-creation possibilities. In summary, only closer to 11 IoT related features in the guest rooms were investigated in the previous studies. In this context, the present study is the first study that has included 52 IoT-related features in the guest rooms to know the customer’s perception and preferences.

METHODOLOGY

A two-step methodology was developed for the study. A focus group was followed by an online survey from the target respondents. A focus group discussion was conducted to identify the IoT features in the hotel guest rooms. In total, 52 IoT feature was identified for the present study. A 3-point Likert scale was developed to measure the customer perception and preferences of IoT features. (1 denoting not at all important, 2 –somewhat important, and 3- highly important). Large number of scales may bring coarseness in response categories in selective attitude surveys (Green & Rao, 1970).

Further, Jacoby, and Matell (1971) argue that the reliability and validity are independent of the fact that how many number of scale points are being used for the Likert scale. Hence, reliability and validity should limit researchers from using 3 points Likert scale. In the given circumstances, using a 3-point Likert rating scale is based on respondents' limited discrimination abilities (Green & Rao, 1970). Lehmann and Hulbert (1872) have also supported the use of 3 points Likert scale. An online questionnaire was developed and circulated to the target respondents above 18 years of age. Respondents were approached using a convenience sampling method to collect the responses.

RESULTS

The data analysis was done using frequency analysis to explore the preferences of the guests about having IoT technologies in the hotel guest rooms.

Table 2: IoT feature Importance Score in Hotel Guest Rooms

S. No.	Importance of the guest room IoT feature	Frequency	Percentage
	Highly Important	34	65
	Somewhat Important	18	35
	Not at all Important	0	0

Figure 1: Distribution of Important IoT feature

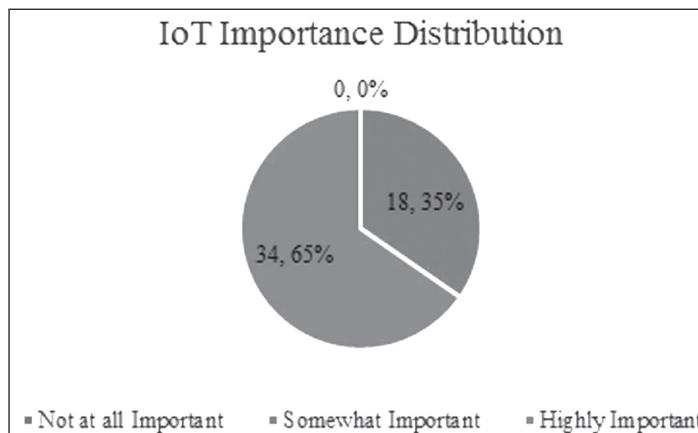


Table: 2 and Figure: 1 provide the results of the guest preference and perception of the IoT features in guest rooms. The study results indicate that 34 IoT features amounting to 65% were considered to be highly important, and only 18 IoT feature representing 35% was considered to be somewhat important. It is interesting to know that not even a single IoT feature was considered as Not at all Important. This phenomenon can be attributed to the positive perception of the guest about the IoT features of the guest room.

DISCUSSION

The list of highly important IoT feature includes (Room Occupancy Sensor, Mobile Check-in, Self-Check-in Kiosk, Remote controlling of the lighting and temperature of the room, Digital room key, Sensor activated thermostats, Face Recognition Check-in and Check-out, Reservation through Hotel App, Ability to view the guest room while making a room booking, Voice-activated automated tea/coffee maker, Voice-activated in-room music system, Health check board in Guest room, Ability to view the guest room when the guest is out of the hotel using their mobile , Ability to know the air and hygiene quality inside the guest room in one click, Viewing and redeeming the loyalty points online, Receiving the promotional messages in mobile, Robot to sanitize and disinfect the bed linen, Robot to fold the clothes, Unlimited access to entertainment portal, linking guests to high-definition content, movies, music without using internet data, Unlimited Internet, Guestroom digital door viewer, Biometrics security door lock, Drug-free relaxation technology for de-stress and sleep better, Mobile as the guest room key, Ability to select a preferred room while checking-in via mobile, Using smartphone to control all the guest room features, Hotels AI (Artificial Intelligence) capturing preferences of guest likes and dislikes, Connected room- Ability to inform the back-end staff for specific guest room needs, Smart Shower/ Faucet , Motion sensor, Smart room features , Smart Bed, Order In-room dining through T.V in the hotel room and Voice-activated Electronic Safe Box. These highly important IoT features are related to safety, security, service delivery time, room accessibility, entertainment and service quality. Accommodation managers should also note that providing the highly important IoT features can enhance the hotel experience of the guest and also the revenue (Brochado, Rita, & Margarido, 2016; Jung, S., Kim, & Farrish, 2014). In addition, it can also help in enhancing the guest service, increasing the operational capacity, and reducing the cost of the operations (Buhalis & Moldavska, 2021)

The list of Somewhat important IoT features of the guest room includes (Soiled linen detection sensor, Room cleaning, and bed-making by Robots, Massaging chair, RFID door lock (Radio-frequency identification), Voice over Internet Protocol Phone, Virtual games, ICE Touch – In-room concierge, Bio-metric bathroom tiles that report on a guest’s health, Automated Early Morning Wake-up call, Greeting message from T.V. located in your hotel room, Voice-activated guest room, Smart Mirrors, Guest information stored in the cloud, Oxygen adjustment Sensor, Wi-Fi-enabled switches, Specialized lighting which changes to the guest preference, Fitness equipment availability checking software and Interactive Wall). These IoT features are considered ancillary services in nature, and hence guests may have viewed these IoT features as Somewhat Important.

Implications

The present research provides insights into understanding IoT’s customer perceptions and preferences in hotel guest rooms. The study results can be used as a guide to select the IoT technologies in hotel guest rooms. The study results provide a checklist for the industry professionals in particular accommodation professionals to understand the IoT feature in hotel guest rooms and check whether the customers will prefer a particular IoT before implementing

the IoT features. Accommodation managers may also apply the latest IoT features for young guests since they are more adaptable and habitual of technology usage (Bogicevic et al., 2018; Kim & Bernhard, 2014). Hotel managers need to be very selective in IoT selection and making an investment decision.

From the research perspective, the present study's results almost match (Kim and Bernhard, 2014) for the Face Recognition Check-in and Check-out. In Kim and Bernhard, 2014, the authors have used fingerprint systems. In addition, the present study is exactly matching with Bilgihan et al, 2016 for internet and (Bilgihan, 2012) for the entertainment technology. Unlimited internet and unlimited access to the Entertainment portal was reported as highly important IoT feature in the hotel guest rooms.

Limitations & Future research

The study is limited to IoT features in hotel guest rooms. Essential details such as demographic and psychographic details of the guest were not collected due to the time taken to complete the survey being longer. Despite the limitations, the present study offers opportunities to conduct future research. Future research should collect information related to the customers' demographic, behavioral, and psychographic profiles to establish a relationship between IoT preference and other variables (Kim and Bernhard, 2014; Chen et al., 2018). A conceptual model can be developed to conduct an empirical study to understand the IoT decision-making behaviour of hotel customers.

CONCLUSION

The power of IoT in terms of optimizing hotel operations and upgrading customer services (Buhalis & Moldavska, 2021) is also continued in the current study. The present study indicated an overall positive outlook for all the stakeholders involved in the guest room-related IoT development and utilization. The study recommends implementing IoT in the best possible manner to optimize customer satisfaction and increase return on investment (Brochado, Rita, & Margarido, 2016; Jung, S., Kim, & Farrish, 2014). In addition, the hotels need to explore the opportunities for co-creation, customization, and personalization of the guest experience (Mercan, Cain, et al., 2021; Bharwani, & Mathews, 2021). Technology is not always considered to be a boon. The hotels also need to consider the potential risk involved in IoT implementation in the guest rooms (Morosan and DeFranco, 2016) to showcase a high value (Yoon, Erdem, Schuckert, & Lee, 2021) for the guest to use the IoT in the meantime ensuring the safety and the security.

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Appendix: 1- IoT Feature Importance in the Guest Rooms

S. No	IoT Feature in Guest Rooms	Response
1	Room Occupancy Sensor- Hotels can know how many guests are present in a guest room.	Highly Important
2	Mobile Check-in- You can check in using your mobile	Highly Important
3	Self-Check-in Kiosk	Highly Important
4	You can remotely control the lighting and temperature of the room	Highly Important
5	Digital room key-Programmed Key Card	Highly Important
6	Sensor activated thermostats- The temperature of the room is adjusted based on the occupancy status	Highly Important
7	Face Recognition Check-in and Check-out	Highly Important
8	Make room reservation through Hotel App	Highly Important
9	Ability to view the guest room while making a room booking	Highly Important
10	Voice-activated automated tea/coffee maker	Highly Important
11	Voice-activated in-room music system	Highly Important
12	Health check board in Guest room- The board scans your body and reports your health status.	Highly Important
13	Ability to view your room when you are out of the hotel using your mobile	Highly Important
14	Ability to know the air and hygiene quality inside your guest room in one click	Highly Important

15	Viewing and redeeming the loyalty points online	Highly Important
16	Receiving the promotional messages on mobile	Highly Important
17	Robot to sanitize and disinfect your bed linen	Highly Important
18	Robot to fold your clothes	Highly Important
19	Unlimited access to an entertainment portal, linking guests to high-definition content, movies, music without using internet data	Highly Important
20	Unlimited Internet	Highly Important
21	Guestroom digital door viewer	Highly Important
22	Biometrics security door lock	Highly Important
23	Drug-free relaxation technology for de-stress and sleep better	Highly Important
24	Mobile as your room key – You can use your mobile to open and lock your hotel room	Highly Important
25	Ability to select your preferred room while checking in via your mobile	Highly Important
26	You can use your smartphone to control all the guest room features	Highly Important
27	Hotels AI (Artificial Intelligence) can capture your preferences, likes, and dislikes.	Highly Important
28	Connected room- Ability to inform the back-end staff for specific guest room needs	Highly Important
29	Smart Shower/ Faucet – You can operate through your voice command	Highly Important
30	Motion sensor lights know when you get up from the bed at night and automatically turn on red light bulbs that guide the path to the bathroom.	Highly Important
31	Control the smart room features are through the TV's remote control	Highly Important
32	Smart Bed- Adjust the bed based on your sleeping postures and patterns	Highly Important
33	Order In-room dining through T.V in your hotel room	Highly Important
34	Voice-activated Electronic Safe Box	Highly Important
35	A sensor which will detect your soiled linen and inform the laundry department to collect	Somewhat Important
36	Room cleaning and bed making by Robots	Somewhat Important
37	Massaging chair	Somewhat Important
38	RFID door lock (Radio-frequency identification)	Somewhat Important
39	Voice over Internet Protocol Phone	Somewhat Important
40	Virtual games	Somewhat Important

41	ICE Touch – In-room concierge	Somewhat Important
42	Bio-metric bathroom tiles that report on a guest’s health	Somewhat Important
43	Automated Early Morning Wake-up call	Somewhat Important
44	Greeting message from T.V. located in your hotel room	Somewhat Important
45	Voice-activated guest room	Somewhat Important
46	Smart Mirrors- a device that functions as a mirror. It also displays multimedia data (e.g., text, images, and videos)	Somewhat Important
47	Your information is stored in the cloud	Somewhat Important
48	Sensor: It can detect the number of persons in the room and automatically adjusts the amount of oxygen in the room	Somewhat Important
49	Wi-Fi-enabled switches	Somewhat Important
50	Specialized lighting which changes based on your preference	Somewhat Important
51	The software which helps you know the type and availability of the fitness equipment without leaving your room	Somewhat Important
52	Interactive Wall – It can interact with you	Somewhat Important

DISCOVERY OF FUTURE IN HOUSEKEEPING DEPARTMENT IN TOURISM AND HOSPITALITY (TRENDS: IN HOUSEKEEPING DEPARTMENT)

Parul Chouhan and R. M. Deepitha

*First Year M.Sc. in Hospitality Administration,
Institute of Hotel Management Catering Technology and Applied Nutrition, Taramani,
Chennai - 600113.*

ABSTRACT

In this contemporary era no other department in hotel industry has evolved as rapidly as housekeeping. Housekeeping department in hotel plays a big role in providing guests a delightful experience by ensuing innovative trends & practices. Same trends & practices will help in creating a niche for hotels in this competitive market of hospitality. In this epoch of high operational cost, it's mandatory to think different and have practices which will aid the hotel towards sustainability of the resources. Transition of housekeeping department cleaning of hotel areas to playing an integral part towards guest comfort is requisite of the hour. This trends & practices in housekeeping department of hotels, a resultant not only of competition in the market, changing need and preferences of the guest but also invention technology. Various categories of green products and supplies are utilized major innovative trends observed in housekeeping department are women floors, design trends, amenity trends, outsourcing of skilled jobs, digitalization of operations, process trends, outsourcing of skilled jobs, total quality management, etc.

These trends are followed by supporting innovative practices like feel the staff valued, training as a mandate, provide checklist & resources, quality control inspections to make a difference in overall guest experience. This research paper showcases the innovative trends & practices which are followed by hotels nationally and globally.

Key Words: Practices, Latest trends in housekeeping department and hotels.

INTRODUCTION

About Housekeeping

The term housekeeping means cleanliness, but it has a broad importance beyond its meaning. Every time we enter a 5-star hotel, reason why it still looks new and the same every time is because of the housekeeping department. Hotel housekeeping is one of the backbones among its four major departments. Department performs detailed work in guest rooms and hotel areas to provide a clean, comfortable environment for hotel guests to enjoy. Department operations are increasingly becoming scientific and mechanized. Effectively managed housekeeping departments ensure the

cleanliness, safeguarding and aesthetic entreat of the hotel. Task performed by housekeeping department are pivotal to the horizontal daily operation of any hotel. In the current scenario competitive and maintaining hotel is very tough and satisfying guest is even tougher.

OBJECTIVES

- Need to study the current trend in housekeeping department
- To identify same upcoming trend in housekeeping department

Trends in Housekeeping Department

In modern-days hotel executive housekeeper is faced with challenges which entail a high degree of professionals. Hotel housekeeping is shifting, earlier, the responsibility of the housekeeping department was to prepare clean guestrooms on a timely basis but now enormous changes have been made in Hotel Housekeeping. This highly fuelled and fastest growing industry needs new trends and technology to strengthen hotel operations. Housekeeping department is responsible for bringing in the largest share of profit to the hotel. Our study examines the trends of housekeeping in hotel industry. In Which article has its focal point on the latest trends that hotels can use to expand revenue from accommodation operations. The progression in time the Hotel Industry follow the trends of Current times, develop the unique commodity value or service mode in order to keep the dominance in the intense competition. Main product of hotel is room sale which expected to clean, comfortable and home environment for guest. In order to compete with challenges hotel housekeeping department must adopt latest trends in the industry.

Some Recent Trends in Housekeeping Department in Hotel Industry

1. Contemporary designs in hotel

Hotels lay an emphasis on simplicity and elegance in design, coupled with maximum practicality. Some of the contemporary hotels are stunningly clean in contour, aesthetic, robust and practical to use. Complemented by an extensive choice of internal fittings, they are guaranteed to match guest needs and demands of in the hotel. Hotel interior design stimulates and satisfies guest expectations of service, quality and comfort; as such, it represents the realisation of hospitality design. All the respect to the enormous investment that goes into creating these environments, successful hotel design, also factors in timelessness and durability to increase. Nowadays bathrooms are furnished with brushed nickel or chrome which is preferred over ornate decorations. Which makes the bathroom vanity look simple and elegant and focuses more on the utility value. All materials used in modern bathroom vanities are either natural, artificial stone or glass work.

2. Go Green

Going green is the latest trend of housekeepers are using eco-friendly amenities, commodities to conserve both water and energy. Focus progressively on responsible tourism and green practices, which is much more to being ecologically friendly than reusing sheets and towels. For example,

the energy management system in the hotel helps to analyse data from major energy-consuming appliances like compact fluorescent lamps and ceiling motion sensors which is used in meeting rooms, conference rooms, and public areas to reduce energy waste.

3. Safety and Security

Hotels offers guests with the opportunity to stay without a worry by ensuring that they are safe from security hazards all times. Individual fire indicators used in outside of each room expedite an emergency response in case a fire emergency and wide angle (110 degrees) peep hole on room entrance doors has become mandatory these days. Some key security features seen today are safety chain.

4. Technology Savvy Housekeeping

Most of hotels are investing in information technology (IT) infrastructure and networking which deploys the latest technical advances for their operations. New technology like Wi-Fi (wireless Fidelity), radio frequency identification, GPS (global positioning system), VOIP (voice over internet protocol), Handheld Communication Devices and WLAN (Wireless local area networks) are Developing rapidly. Also, the adoption of products like air purifiers, remote curtains, 8–10-inch Mattresses for ultimate sleep experience, high thread count linen, plush pillows, shower cubicle, and Bathtub combinations, branded amenities, bath salts, aromatherapy products & aromatiser has accelerated. Many types of software's having comprehensive housekeeping applications are being Used today in the hotels. With the help of technology, the customer's involvement in service delivery was been increased.

5. Ergonomics

Ergonomics deals with body movement in relation to housekeeping profession during Tasks performed which has significant impact on work fatigues. Housekeeping is physically demanding profession and work environment has an impact on efficiency and comfort of the Employees. Ergonomics is a scientific discipline which deals with interaction between employees and elements of their work system.

6. Pest Control

Best practice is to conduct regular service, with an integrated pest management approach. This exercise not only involves the pest management companies, but also the hotel's management, facilities, maintenance and housekeeping staff, and guests as well. The F&B department covers almost every aspect of a hotel or motel's operation. Preventing pest problems in a hotel starts with a brief look at F&B operations.

Review of Literature

G. Raghubalan's book (Hotel housekeeping operations & management, third Edition, 2015) has Mentioned that housekeeping operations are changing rapidly, today every guest look not only for clean hotel areas but also, they emphasize on the hygiene factor in the operations of the hotel. Most of the jobs are given on contract to utilize the expertise of the outsourced firm. Hotel staff

is trained and motivated to handle the operational challenges of the housekeeping department. Eco - friendly cleaning agents, amenities are preferred by the hotel & guest. Housekeeping work is planned with appropriate techniques. Housekeeping is becoming IT savvy for its operation with use of ozone technology for cleaning & laundry operations. Coping with the changes in the pattern of work operation the employees are trained to face the needs of guest by motivating them with employee friendly human resource practices.

Clean India magazine (August 19, 2016) specified that housekeeper task to maintain the hotel areas is Challenging because of architectural designs with specialized task like pest control hard to reach area cleaning onslaught of epidemics across the globe got the focus of maintaining hygienic standards of cleaning in hotel areas. Getting trained manpower or retaining manpower after they get trained is also a task for today's housekeeper. Inventory maintenance should become computerized to avoid the pilferages. Many hotels are Going for eco-friendly measures to function their department.

Safety and Security

Hospitality operations, large and small, are extremely susceptible to security hazards. The very nature of the operation which involves the presence of a wide range of people, most of whom are unknown, poses a considerable threat to the security of a property. Risks of fire are also serious the incidence of hotel fires causing loss of life and serious damage to property has increased in recent years. Key's of security features seen today are safety chain and double lock facility on the main room door and entrance doors lined with an environment seal to minimise noise and protect the room from external smoke in case of a fire; smoke, heat detectors and water sprinkler in each room for enhanced fire safety double locking facility for entrance door and bathroom doors; closed circuit television (CCTV) DTFM Scanning Systems like X-ray machines, electronic locks in-room safes hand metal detectors fire safety system for kitchen hoods and surveillance system for car screening. Safety refers to the physical injury in a work environment and security refers to anticipation of theft, fire and other emergencies. The Occupational Safety & Health Act (OSHA) was enacted in 1970 to protect workers at workplace. OSHA standards covers work areas, sanitation, signs and tags, first aid and blood bone pathogens, listing hazardous chemicals, labelling all chemical containers and developing written hazard communication programme. OSHA assure safe and healthful working conditions for working men and women by setting and enforcing standards and by providing training, outreach, education and assistance. Security in hotels is a broad task of protecting both people and assets. (Mc Millan. & Rossiter, 2006) observed their study that environment, technology, human resource, operations and security are the complex set of challenges which cannot be ignored by manager for being successful.

Ergonomics

Ergonomics deals with the study of Body movement in relation to Housekeeping profession during tasks Performed which has significant impact on work fatigues. Housekeeping is a Physically demanding profession and Work environment has an impact on Efficiency and comfort of the Employees. Ergonomics is a scientific Discipline which deals with interaction Between employees and the elements of Their work system.

Giroti, 2020 Food safety and hygiene standards have become an important selling proposition for hotels and restaurants going forward and it would help them to build higher guests in today's scenario. It is important to create the right and proper kind of hospitality facility. There must be a comforting atmosphere to Work and the main aim should be to reduce the cost of operation and increase efficiency without compromising the hygiene and food safety standards. Being Proactive is the only way to prevent outbreaks before they happen. Success depends on the satisfaction and comfort of every guest.

(Panwar, 2020) In the post-COVID-19 world, the role of hygiene manager would Become even more critical. They will more focus on proactive ideas and measure to make the environment safer and welcoming for the guests. They will work Closely with the training team to ensure that they create substantial awareness and understanding of health and hygiene in daily life amongst the associates.

Research Methodology

Secondary data collection

Our research paper is mostly based on secondary data sources. Secondary data were collected through various sources such as Website reports, journals, etc. We have collected All collected data was analysed with the help of trend line analysis.

Primary data collection

Our half of research collected on Interview based questions through LinkedIn application.

Question

Sample :1

- 1) Is there any new trend that you see in housekeeping dept?
If yes, can you elaborate on a few?
Ans. No
- 2) What are some of the guest expectations especially after pandemic in housekeeping?
Ans. Cleaning hygiene
- 3) Do you find your housekeeping staff emotionally stable?
Ans. Yes they are really satisfied.
- 4) Can you share some technology advancement in housekeeping department?
Ans. Robot facilities for cleaning
- 5) In general, what are the challenge you face in housekeeping department?
Ans. Time management.

110 ***Revolutionizing Trends in Hotel Rooms Division***

Name: - Miss Manu Singh

Designation: - Executive Housekeeper

Organization Name: - Taj hotel

Sample: 2

- 1) Is there any new trend that you see in housekeeping dept?

If yes, can you elaborate on a few?

Robotics, Emphasis on personalized service. Hygienic rooms. Product upliftment, Automated technology

- 2) What are some of the guest expectations especially after pandemic in housekeeping?

Clean and Hygienic rooms and public area No touch service Addon amenities like face masks and sanitizers in rooms Re sanitization of room post arrival in guest presence social distance in public areas to be maintained other guests should also wear masks in Public areas and hotel should make sure they do Team should be aware of chemicals and hygiene standards added in system post covid

- 3) Do you find your housekeeping staff emotionally stable?

It depends on the leadership the kind of work environment they maintain in the department for the team. It's the leadership who plays a vital role in this as their actions will impact the team directly. Certain practices like biased attitude, favoritism, and impolite behavior can pull down the team morale. Where as a leader who focuses on the team development and growth, is fair to all, and recognize the efforts made by its team definitely leads the team to great height.

- 4) Can you share some technology advancement in housekeeping department?

For Hygiene:ULV fogging machine Electrostatic sprayer Swab testing machine Above are certain introductions which have been added post pandemic and you can google to know their usage For Housekeeping Automatic vacuum cleaner Sensor based minibars Room feature controlled by I pad (TV, Shutters, Door Lock Etc) or voice control like Alexa Automatic WCs which have features like lids with sensors and temperature controlled seats and Auto cleaning Robotic cleaners like pool cleaners and window glass cleaners You can google above mentioned features and get in touch if you cant find any detail.

- 5) In general what are the challenge you face in housekeeping department?

Housekeeping is not the first choice of the young generation or fresh graduates. They prefer to take Fnb or FO. Hence we need to showcase the kind the opportunities Housekeeping has to offer. Housekeeping is physically and mentally straining job hence its important to keep the team motivated Housekeeping is not limited to one outlet or section its spread across hotel and in various sub sections like Laundry, Horticulture, Public area and rooms, Hence to maintain the processes across all sections to be efficient is challenging. Due to high attrition training and development of team on the standards.

Name: - Mr, Himanshu Sharma

Designation: - Assistant Executive Housekeeper

Organization Name: - Oberoi Hotels & Resorts.

Sample: 3

1. Yes there has been many new trends introduced in housekeeping department but most visible are now housekeeper are going for eco-friendly & plant base product for department. Eg: Bamboo handle tooth brush, Neem comb, loofa (Natural bathing scrub), bamboo safety razor, recyclable water bottles (inhouse water plants). Helping to create less pollution to some extent.
2. Housekeeping department has come to highlight after COVID pandemic as it is highly involved with cleaning and hygiene.

Now guest is more aware of hygiene and its necessity to keep. Now guest expect each area to be thoroughly cleaned and sanitize. So, maintaining of this all forum is impacting on housekeeping workflow.

3. I believe stability of staff mind may differ from person to person and also on what condition he/she is been working. I personally believe in giving my staff all the possible trainings and exposer to different situations by allocating different KRA and changing them with time.

And also try to maintaining work life balance of all staff in possible manner. So mentally stability of staff totally depends on what environment they have been exposed to.

4. Nowadays communication has been very much easy as compare to early days. Now housekeeper can involve all team member which ever part of building they are about any important announcement and important guest in one go which ultimately helps in saving of time and keeping all on same flow.
5. After the out break of COVID 19 housekeeping department has been highly pressurized on maintenance of hygiene with same number of manpower. This is ultimately putting pressure on staff creating more attrition rate.

Name: - Mr. Rajat Limbo

Designation: - Executive Housekeeper

Organization Name: - Norbu Hotels

CONCLUSION

The Housekeeping department is becoming technologically driven for smooth functioning of the department. It is Adapting the eco-friendly cleaning agents & amenities for sustainable operations of the department. Modern Trends applied by them are use of new LED lighting technology for better sleep experience& to adjust to the mood of the guest use of robot for cleaning of swimming pool in hotels, choice of beds & pillows on offer at the time of Reservation of the guest, introduction of glass panelling in guestroom bathroom, bath tubs are replaced by shower Guestroom are becoming uncluttered by keeping all guest amenities at one point. Dominant use of Smartphones for operations, micro-chips, sensors is giving them a technological edge. More focus is given to employee training & work process to adapt to the changing needs & preference of Guest Identification of common problems so that employees can deal with those with confidence.

It is a do or die situation to be sustainable for the housekeeping department if they don't get accustomed to these new trends and practices or else, they will soon become outdated and remain out of bound to the changing clientele.

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POST PANDEMIC SHIFT IN GUEST EXPECTATIONS FROM THE HOTELS: A STUDY OF VARIOUS GUEST PERCEPTIONS AND GUEST SATISFACTION IN INDIA

Vikram Singh

*Assistant Lecturer,
IHM Guwahati.*

Srijani Chatterjee

*Assistant Lecturer,
IHM Guwahati*

ABSTRACT

The outbreak of COVID-19 crippled most industries, but while many bounced back virtually and used online platforms extensively the Hotel Industry was unable to do the same. However hotels irrespective of their condition financially, opened up their gates for the frontline workers and COVID infected guests who were stranded away from home. The entire room's division now had to change how they worked to ensure maximum comfort to the present clientele. New standards and procedures were implemented overnight to ensure guest and staff safety.

When the first wave subsided and guests were starting to get back to travelling, they were suddenly very concerned regarding the safety and hygiene. The entire outlook towards guest service had to be changed.

The research has been conducted to understand the opinions of people regarding the changes that were observed in the hotel and their changing expectations from the hotel front office and housekeeping. It will also help us in understanding how hotels coped with these changed expectations and whether guest satisfaction was affected.

Through this research we will also be able to understand how the guests thought the change in the policies and procedures affected their experience and how in their opinion the experience could be made better.

INTRODUCTION

During the outbreak of Covid19, the hotel industry was one of those industries whose services could not be taken online and thus suffered hugely. During this time various challenges were there which, through time and effort, were overcome by the efficient management. The biggest challenge was to instill trust in the guests again, to make them feel hotels were safe.

Vikram Singh & Srijani Chatterjee

The procedures, policies, Standard Operating Procedures and even tools went through a great change. When most rented houses and PG accommodations inhumanly refused accommodations to the infected and health workers, the hotels gave them refuge. The hotels around the country became safe houses and quarantine centres. Overnight, hotels were accommodations for doctors and nurses, Covid positive travellers and stranded guests. This huge responsibility to care for the ones unwell and keeping the healthy safe was upon them. On the other hand a huge staff turnover was observed to be one of the major issues faced by the hotels, and a new challenge of retaining the remaining staff and their safety was now what would not only keep the business running but was now a moral responsibility. This scenario was a shift of perspective for the hoteliers. Their actions now could determine life and death, illness and health. This huge amount of pressure forced them to undergo drastic changes for their own safety and of their guests.

These changes were however in accordance with what the guests were apprehensive about, and many leading hotel brands made videos and campaigns promoting their safety measures. But as rosy as it may look on bright videos and stunning banners, the shift was a nightmare for the operations team. They kept on going in a loop with policy and practice change, training execution and evaluation.

Now looking back at those difficult times it seems to be a huge task coming up with new trends, technologies and solutions for endless loopholes, which were faced and handled by the managers and supervisors every day. They went through sleepless nights and endless meetings figuring out how to keep the premises safe without neglecting the unwell.

The room's division staff being those, who were coming in direct contact with guests, guest belongings and requests, and were at highest risk. They met the guests at check in, delivered necessities, cleaned their rooms and used linen. They worked tirelessly in PPE kits and their dedication helped the hotels survive. The linen, garbage and even food trays had to be segregated. Special disposal techniques and high temperature washing were used. All this was done while continuous training was done for the staff. Guest rooms had to leave empty for a stipulated amount of time before cleaning to safeguard the staff in turn losing precious revenue.

However during these challenges enough care was taken so that the guests were given every possible facility in the safest possible environment. The staff had to provide clinically clean rooms instead of aesthetically clean rooms, the frequent touch points had to be sanitised every hour. The staff were wearing protective gears and using various new equipments constantly. These changes however drastic was carried forward by the rooms division team as a collective effort.

The guests who were travelling after the pandemic were observed to be majorly concerned and panicked. They were now inquisitive about the measures taken for their safety. The expectations of guests expecting leisure and luxury now changed to occasional demands of rooms to be sanitised in front of them. The changing expectations also included online check-in into a hotel, minimum staff contact and other measures. In spite of their difficulty to cope with the situation the heroes in the hotels kept putting their guests first. And every change was brought keeping them in mind.

Thus, we are trying to understand the trend of changed guest expectation, which influenced the changed face of hotel operations today, and their level of satisfaction from hotel service. Through that we are trying to assimilate the ways in which hotels could make their experiences better, and comparing their experiences with the pre Covid times so that through changed policies and circumstances hotels may still deliver experiences and not just stays.

OBJECTIVES

1. To analyse the change in guest's expectations from hotels post Pandemic.
2. To analyse the guest perception regarding service standards in room division of hotels post Pandemic.
3. To compare/study the level of guest satisfaction from hotel services post Pandemic

RESEARCH METHODOLOGY

The approach of our research work is of qualitative and quantitative nature which allows us to approach people and tourists to collect the data regarding their opinion towards Post pandemic shift in their expectations from hotel and analyse their opinions. We will statistically analyse their opinions and also try to evaluate their opinions through open ended questions.

Primary data: The primary data required for research was collected by using a questionnaire with a combination of close ended and open ended questions to better evaluate the opinion and implement the 'mixed method'.

A questionnaire was drafted and circulated among various people and tourists to obtain their responses.

Secondary data: Secondary data was collected from journal articles, book articles, websites etc.

REVIEW OF LITERATURE

Demir, 2021: According to the author, the safety is most important factor for tourists while planning their hotel stay. The people are more concerned for their health after Covid-19 pandemic outbreak. The expectation of tourists regarding safety has become prominent. Hotels has taken necessary actions to provide safe environment to their guests. The author investigated the effect of Covid-19 on tourist response towards hotel services. The author also concluded that Covid-19 protocols affected safe tourism services to some extent.

Maraj Rahman Sofi, 2020: The study investigated the effect of four customer relationship management dimensions (Customer orientation, Customer relationship management organization, managing knowledge and customer relationship management based technology) on customer satisfaction in hospitality industry. The study also revealed a relation between customer relationship management dimensions and a positive effect of customer relationship management based technology on customer satisfaction. It means that hotels are using technology as a tool to keep a record of customer information. According to the author, customer relationship management based technology should be used by the hotels to keep guest information and design various products according to guest preferences. This would lead to better guest satisfaction.

Arpitasrivastava, 2021: According to the authors, the importance of hotel attributes for customer satisfaction may change due to the global pandemic outbreak because of the negative health consequences of the disease, the guidelines and advisories issued by health agencies, and wide media coverage of the pandemic. The authors stated that there has been less study analyzing these changes, and their study tried to fill the gap by conducting a structural topic modeling-based analysis of hotel reviews before and during the Covid-19 pandemic. The results of study contributed by identifying new attributes and providing concrete evidence that attribute prevalence has changed in response to the Covid-19 pandemic. The results also led to practical recommendations for increasing customer satisfaction in the hospitality industry during the prevailing situation.

Andre Schimanovich, 2021: The author concluded that Covid-19 pandemic has changed not only the travel behavior of guests but also influenced the hotel industry. The study tried to identify the shift in significance of hotel choice and satisfaction attributes during the Covid-19 pandemic in respect of changes made in the hotel industry. The study stated that due to the pandemic, one hotel choice attribute got significantly more important is safety. Safety is more dominant than ever in the hotel industry in terms of face masks, sanitizers or even wearing gloves while serving guests. Hotels need to convey the newly implemented safety measures to guests prior to their booking in order to gain guest trust.

JinkyungJennyKim, 2021: he study investigated the effect of the COVID-19 pandemic on the hotel selection attributes and customer post-purchase behaviors. The authors tried to explore the hotel selection attributes after the COVID-19 pandemic and uncovers the change of importance of these attributes before and after the outbreak of COVID-19 pandemic. They also identified the importance and the performance level of the hotel selection attributes, and explored the roles of the hotel selection attributes that form the overall image of a hotel and the subsequent intentions to revisit a hotel.

FeiHao, 2020: The study tried to develop a COVID-19 management framework comprising anti-pandemic phases, principles and strategies. The study aimed to enable hotel management reeling under the pandemic to live better for today and plan well for tomorrow. The COVID-19 management framework can be adopted for managing health-related disasters. The study reviewed the overall impacts of COVID-19 pandemic on hotel industry. This study also suggested that COVID-19 will significantly and permanently affect four major aspects of hotel industry that are multi-business and multi-channels, product design and investment preference, digital and intelligent transformation, and market reshuffle.

Soona Park, 2021: According to the authors, Hotels are vulnerable to health-related crises due to their communal nature of living spaces and the unavoidable contact with strangers. Many hotels have set safety measures against COVID-19. The study tried to conduct a discrete choice analysis to reveal the relative importance of safety measures including price per night and further estimate customers' willingness to pay more. This study contributed to the safety literature regarding hotel industry and to the practical knowledge of hotel resiliency planning after Covid-19 Pandemic.

Shaolong Sun, 2021: The purpose of the study was to study how to provide better service to hotel customers during the COVID-19 pandemic. This study focused on understanding the changes in hotel customer satisfaction during the pandemic and formulating effective marketing strategies to satisfy and attract guests. The results of the study suggested that there are significant differences in overall ratings, spatial distribution and ratings of different traveler types before and after the Covid-19 situation. Customers are more inclined to give higher ratings and pay more attention to hotel prevention and control measures to reduce health risks after the COVID-19 pandemic.

Kamakshyaparsadnayak, 2021: According to the authors, COVID-19 has hit the world at the worst which leads to the loss of both life and economy. Though the recovery from the loss due to pandemic is uncertain, but there is a strong belief that the hotel business in the pre and post-pandemic time will be way different as the prioritization of needs of the customers and their characteristics will witness a shift. The objective of this research was to explore the most desired hotel booking attributes for travelers. The factors extracted from this study may assist the management team of the hotels in redefining the hotel booking attributes which will ultimately enhance the guest experience on its implementation in post-COVID-19 pandemic time.

Feng hu, 2021: The authors stated that the hospitality industry is highly vulnerable to pandemic. This study investigated the changes in travellers’ expectations and perceptions of hotel services during different stages of the novel corona virus 2019 (COVID-19) pandemic. The results of this study revealed shift in consumers’ evaluations well beyond hygienic requirements. Insights obtained from this research can guide hospitality industry in organizing its priorities during acute pandemic situations and adjusting to possibly longer-lasting shifts in consumer preferences.

Shin, 2020: The study concluded that technology innovation is likely to play a key role in the hotel industry’s recovery from the corona virus pandemic. The purpose of this research was to examine the impact of expected interaction and expected cleanliness on perceived health risk and hotel booking intention. The study found that low levels of expected interaction through technology-mediated systems lead to low levels of perceived health. According to the authors, the proposed perceived risk mechanism was effective in post-pandemic scenario.

DATA ANALYSIS

A total of 17 questions were there in the questionnaire out of which 15 were close ended and two open ended questions were used to execute the mixed method analysis for the topic.

Table 1: Statistics of travel details of respondents Post Pandemic

	How many times have you travelled since the outbreak of COVID-19 pandemic?		Among your travels mostly it was
0-2	65 (43.9%)	Domestic	143 (96.6%)
3-5	52 (35.1%)	International	5(3.4%)
6-8	10 (6.8%)		
More than 8	21(14.2%)		

N	148	N	148
Mean	37	Mean	74
Standard deviation	22.32	Standard deviation	69

Table 2: Statistics of details of respondents regarding their stay Post Pandemic

	How often during your travels did you stay in Hotels?		While you stayed in hotels which of the following did you prefer?
1-2 times	107 (72.3%)	Guest house, lodges or Homestays	44(29.7%)
3-4 times	26 (17.6%)	Hotels without any star category	26(17.6%)
5-6 times	7 (4.7%)	2-3 star hotels	33(22.3%)
Everytime	8(5.4%)	4-5 star hotels	40(27%)
		5 star deluxe hotels	5(3.4%)
N	148	N	148
Mean	37	Mean	29.6
Standard deviation	41.11	Standard deviation	13.74

Table 3. Statistics of perception of respondents regarding hotel services Post Pandemic

	While your stays in hotels, hygiene was your primary concern	A major change came in hotel services after the breakout of COVID-19	The change that came in hotel rooms was the need of the hour.	Guest satisfaction was hampered due to the change in hotel rooms and services
Strongly disagree	4(2.7%)	2(1.4%)	4(2.7%)	13(8.8%)
Disagree	2(1.4%)	9(6.1%)	12(8.1%)	26(17.6%)
Agree	26(17.6%)	37(25%)	54(36.5%)	55(37.2%)
Strongly agree	116(78.4%)	100(67.6%)	78(52.7%)	54(36.5%)
N	148	148	148	148
Mean	37	37	37	37
Standard deviation	46.57	38.65	30.34	18.09

Table 4: Statistics of perception of respondents regarding their satisfaction level post Pandemic

	Do you feel contactless services made the guests feel ignored?	Do you feel wearing of protective gear affected the service quality in pandemic time.	Was the hotel staff able to assure you regarding your safety during your stay in pandemic time.	Did you feel welcomed during your stay during pandemic time?
Yes	51(34.5)	77(52%)	133(89.9%)	122(82.4%)
No	97(65.5%)	71(48%)	15(10.1%)	26(17.6%)
N	148	148	148	148
Mean	74	74	74	74
Standard deviation	23	3	59	48

Table 5: Statistics of perception of respondents regarding their experience post Pandemic

	Which of the exclusions was the hardest for the guests to adapt to in hotel services post Pandemic.		Which COVID protocol impacted guest safety the most during the Pandemic
Lack of Single use amenities	92(62%)	Sanitization of Public Area Touch points	102(69%)
Lack of human interactions	56(38%)	Room sanitization	46(31%)
N	148	N	148
Mean	74	Mean	74
Standard deviation	18	Standard deviation	28

In the first open ended question respondents were asked about various ways in which better guest satisfaction could be ensured after the pandemic. There were diverse opinions from our 148 respondents. However the few common ones are discussed here. Some respondents mention that better guest interactions while following Covid-19 protocols, may enhance guest satisfaction further. Some respondents mentioned that flexible dates option and personalised plans may also help in a better experience. Many respondents also responded saying that better experiences can be executed with better use of AI and other technologies.

Our second open ended question asked about three things which are expected from the hotel post pandemic, which was not expected before. We have found varied responses from the responses. Most of the respondents commented that their priority is changed to COVID related protocols. Many respondents also mentioned that they would prefer hotels which are better equipped with technology. Another relevant point found to be a very popular criteria now, is connectivity that is internet services, Wireless Fidelity, etc.

DISCUSSION AND FINDINGS

Through this research we found that the focus of guests shifted from all the focal areas hotels concentrated on before the pandemic. In our research across India states that the guests staying in hotels post pandemic felt safe with the precautions taken and that it played a great role in their selection of hotels as well. Guests also extensively focused on the ease on booking, flexibility of date and cancellation policies. Respondents also mentioned that they would prefer a hotel with better internet services. This proves that the focus on polite staff, comfortable bed, clean bathroom and the presence of amenities has taken a backseat and now safety and hygiene are the aspects which respondents are more concerned about.

Respondents in their opinion mentioned that guest satisfaction is hampered due to protocol changes but they also expressed in their opinion that hotels gave them assurance and they were happy with the changes brought along as they were necessary during that time. The respondents also expressed that the service performance was not hampered due to use of protective gear and their comfort was well taken care of. The opinions of the respondents express appreciation for the workers in the hotel in general and they especially felt that the public area sanitization may have a great impact on guest safety. In regards to reduction of guest amenities the responses mentioned it was a challenge for them to adjust without them.

On analysing the diverse opinions it may be said that the guests and their demands from the hotels changed and hotels changed their policies as per guest needs and government protocols. Though this change may have caused some minor difficulties for the hotel guests but they understand that what was done was for their best and that guest satisfaction and its definition will change with time. After the pandemic though some guests will enjoy their interactions with the staff the mode and intensity may differ. The expectations and experiences before pandemic and after, when compared, guests as well as the industry has gone through a huge storm and they both see things in different light, though guest satisfaction may not be at its best at the moment but it is a constant process of trial and error to find the best fit policies and procedures for the new normal we are in. The efforts, adaptability and innovative attitude is helping gain back guest confidence on hotels and above all the guests travelling feel assured about the hygiene standards. At present situation we may conclude that the guests' expectations are well addressed and their comfort is well taken care of by the hotels and their expectations have surely seen a great transformation.

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AIR QUALITY INNOVATION IN- REMODELLING AND REDESIGNING FOR SUSTAINABLE QUALITY OF AIR INDEX

Soumyak Bhattacharjee

*Assistant Lecturer,
Institute of Hotel Management Catering Technology,
C.I.T Campus, Taramani, Chennai – 600113.*

Akash Halder

*Student, M.Sc,
Institute Of Hotel Management Catering Technology,
C.I.T Campus, Taramani, Chennai – 600113.*

ABSTRACT

Air quality has become a major health risk all over the world which causes deadly diseases such as stroke and lung diseases there are many methods and equipment present which use one common method which includes passing the air through the membrane which is basic and is being used commonly in all devices. The new data further reveals the link between outdoor air and indoor air pollution exposure While both indoor and outdoor pollution affect health, recent statistics on the impact of household indoor pollutants (HAP) are alarming. Innovative use of Air filtration designee is highly in demand for commercial Hotel business, where the equipment used and applicable over some time in hotels have been same old conventional, but now there has been a paradigm shift in its usage and energy efficiency technique Underlaid to reduce cost and energy consumed.

For the sake of sustainability where we force the innovative measures preferably profitable for organizations and guests because it's easy to handle and maintain.

INTRODUCTION

Air quality depends from place to place generally air quality index below 100 is considered satisfactory for humans, it depends on various factors which include the climate condition on that place, population, number of vehicles and industries in that area moreover of the major cause of air pollution is the number of particles present and harmful bacteria and viruses are present in the air.

To extract 420 liters of oxygen that is crucial for human survival and function, a total of 10,000 liters of air enters the lungs every day. The quality of the air decides the health of the lungs as well as other organs. The World Health Organization (WHO) reports that in 2012 around 7 million people died as a result of air pollution exposure confirming that air pollution is now the world's largest single environmental health risk.

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The quality of air where people spend a large part of their life is an essential determinant of healthy life and people's well-being says the WHO Guidelines for Indoor Air Quality. Hazardous substances emitted from buildings, construction materials, and indoor equipment or due to human activities lead to a broad range of health problems.

THE EFFECTS OF AIR POLLUTION

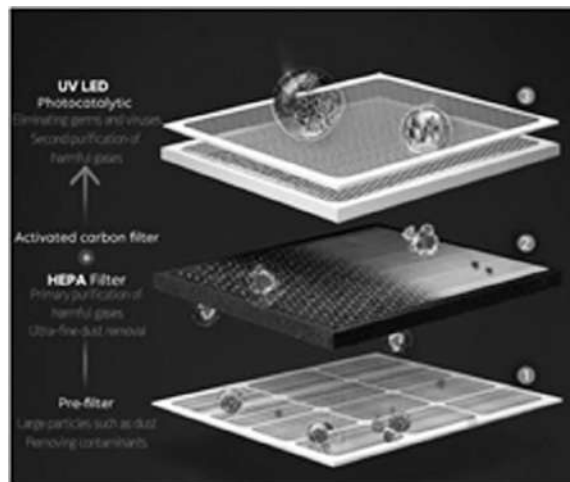
Exposure to air pollution can lead to a wide range of short- and long-term effects. Temporary short-term effects include discomforts such as irritation to the nose, throat, eyes, or skin or headaches, dizziness, and nausea.

Long-term effects of air include heart disease, lung cancer, and respiratory diseases. That air pollution can cause exacerbations of pre-existing asthma is supported by accumulating evidence over several decades. Particulate matter in air pollutants causes oxidative injury to the airways, leading to inflammation, remodeling, and increased risk of sensitization.

Types of Air Purification Systems Present in the Market

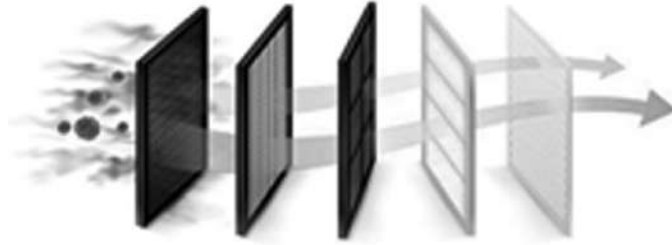
Ultraviolet Air Purifiers

Ultraviolet (UV) air purifiers use ultraviolet light to remove potentially harmful viruses, bacteria, and pathogens from your home. The thought for UV air purifiers came from hospitals. UV air purifiers are small, that filter the air in your home through a chamber filled with UV light. The UV light breaks molecular bonds in their DNA.



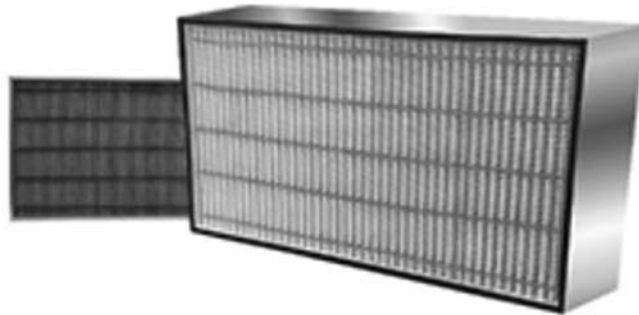
HEPA Air Purifiers

HEPA air purifiers remove 99.0% of all particles larger than 0.2 microns from the air. it means HEPA air purifiers are highly effective at removing pollutants like pollen, dander, mold, and dust from the air



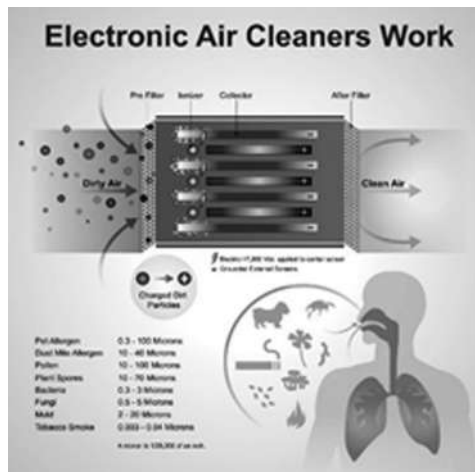
Activated Carbon Air Purifiers

Activated carbon air purifiers are effective at removing smoke, odors, fumes, and gasses from the air inside your home. People who don't like odors like smoke or natural gas should consider an activated carbon air purifier.



Ionic Air Purifiers

Ionic air purifiers are quiet. They emit negative ions into the air, airborne particles like dust, making these particles so heavy that they eventually fall out of the air. Ionic air purifiers have electrostatic precipitators that trap positively charged particles to a metal plate inside the air purifier.



INSPIRATION

These are the types of air purification systems that are generally used in commercial or personal use but there is a change in the innovation we have developed a new type of device which has been inspired from the nature as when there is too much dust or hot weather condition in the environment it creates a low-pressure area that the cold air rushes to fill up the low-pressure area and precipitation happens in the form of rain which collects all the suspended dust and polluted particles from the surrounding atmosphere and results in a clean and clear environment.

This type of air purification system is naturally inspired by natural phenomena thus it is very cost-effective and required very less or negligible maintenance cost which is very efficient, cost-effective and environment friendly which benefits the organization and guest.

POPULATED INDOOR AIR

Indoor air pollution is a mixture of pollutants from outdoor air and pollutants generated by indoor sources.

Documented evidence on indoor pollutants in the urban Indian environment is somewhat limited. It is, however, very apparent that there has been a continuous deterioration of ambient air and human health with the increase in population, industrialization, and urbanization. Improper management of transport, primitive roads, high construction activity, and unplanned distribution of industries –all have led to an increase in pollution levels. Residential complexes adjacent to industries related to dyes, textiles, timber and furniture, handicrafts, metals, chemicals, sandstone quarries, steel rolling mills, guar gum, pulses, oil mills, etc., are responsible for a rise in a variety of indoor pollutants. Increasing emission of toxic pollutants such as particulate matter ($PM_{2.5}$, PM_{10}) and greenhouse gases like ozone (O_3), sulfur dioxide (SO_2), nitrous oxide (NO_2), etc., have been reported from various cities. The burning of fossil fuels by humans also adds up to polluting the atmosphere. Tobacco smoke has been well recognized as an indoor pollutant, with severe health risks to children and the elderly. There are also high levels of indoor pollutants in residential areas including emissions from cooking (biomass fuels), smoking, burning of mosquito coils, cigarettes, incense sticks, etc. During festivals, extensive burning of firecrackers takes place, especially in the evening hours, constituting a significant source of aerosols, black carbon (BC), organics, and trace gases. Allergens from dust mites, cockroaches, fungi, pollens, pets' cats/dogs, rodents are common in households.

HYPOTHESIS

AIR Quality index varies from climate to climate how Robust is your designed that can acclimatize with different AIR Quality conditions.

OBJECTIVE

- Listing of the latest sustainable AIR Quality devices used in hotel premises
- Evaluate the AIR Quality index as per the cost reduction measures.
- Comparative study on efficient use of the redesigned economical device as a substitute to present AIR Quality.

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REVIEW OF LITERATURE

Indoor air purification technology is mainly divided into two types: capture type and reactive type. The capture type separates the contaminants from the air-fluid by filtration or adsorption, leaving the contaminants in the air purifier. The reaction type principle mainly removes gaseous pollutants (molecular type pollutants) in the air by chemical reaction or ionization. Common reaction mechanisms are UV sterilization, photocatalysis and chemical catalysis, room temperature thermal catalysis, plasma, and ozone oxidation. However, this purification method is easy to causes secondary pollution. There are three common capture air cleaning systems: mechanical filtration, electrostatic precipitator (ESP), and hybrid air purifiers (Chan et al., 2015). In 1963, the German Hammer brothers developed the first indoor mechanical filter to remove soot from indoor air. The main components of mechanical filtration (also known as fiber filtration) are fans and filter dust collectors (Klepeis et al., 2017). The built-in fan draws indoor air into the purifier. The particulate pollutants in the air are filtered by diffusion, interception, impact, or inertial force. Its filtration efficiency is affected by the structure of the air purifier, the nature of the filter material, and the power of the fan. This type of purifier uses a wide variety of filter materials, and the filtration function depends mainly on the nature of the material. Porous filter materials such as nonwovens, filter paper, and fibrous materials are most commonly used. The air filter for filtering PM_{2.5} is usually made of high-efficiency air filter material (HEPA: High-Efficiency Particulate Air), and the material is ultra-fine glass fiber or synthetic fiber, which is often processed into paper.

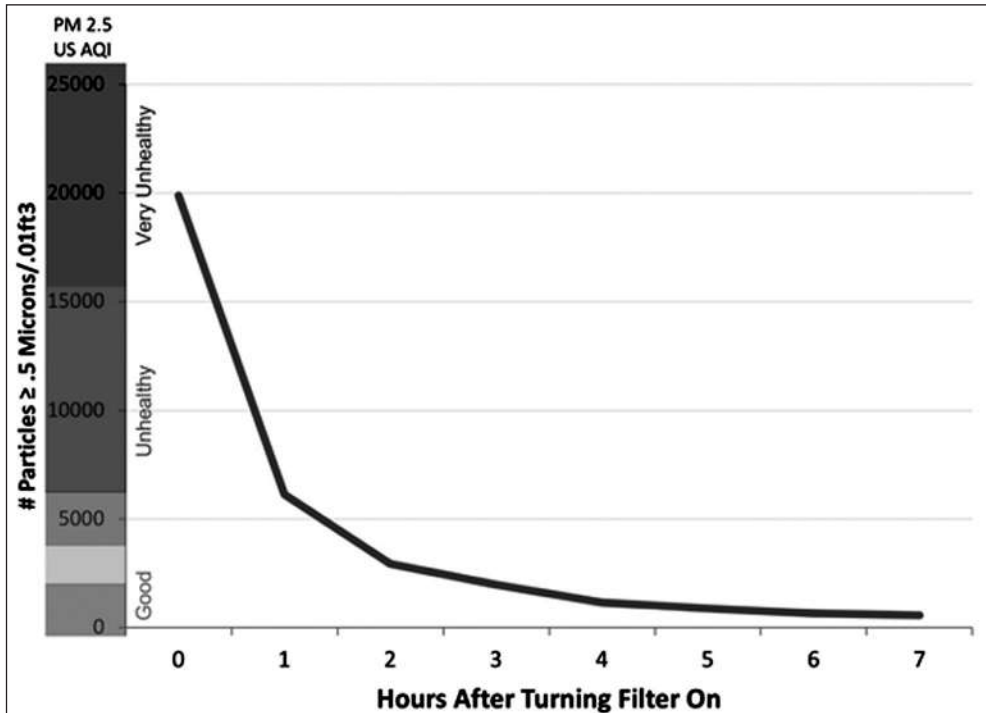
METHODOLOGY

This experiment was carried out in a sealed chamber of 2m × 2m × 1m. The sealing chamber was mainly composed of double-layer glassone fan was turned on to mix the polluted air in the sealed chamber. Each of the glass plates was illuminated by a UV lamp, the lamp is turned on which kills the bacteria and virus as UV light break down the molecular structure of the pathogen in this process Ozone is created as a by-product. The joint was connected by aluminum material, and the hole was arranged on the left side for the mist of cold water to be sprayed in an even manner, the pressure pipe was connected to the pressure pump at 60psi output this mist of water attached with the suspended particles in the polluted air making it heavier and it also absorbs the ozone gas created in the process. The mixture is further cooled down to the condensation temperature of the water resulting in the cleaner Air Quality Index. Polluted water is further passed through the water filtration method and can be reused again which further reduces the maintenance of the Air purification system.

Simple background reduction method: After pollutants are released in a relatively clean environment, the concentration of pollutants is tested before the purifier starts, and then the concentration of pollutants at different times is determined when the purifier is started. According to the formula, the purification effect can be determined when the air purifier is turned on for an i-hour. The formula is: purification rate $i(\%) = (\text{contaminant concentration before start-up} - \text{Contaminant concentration after start-up}) / \text{pollutant concentration before start-up} \times 100\%$. This method hasn't taken the natural attenuation characteristics of pollutants and the effects of temperature and humidity during testing into consideration, with large limitations, although it is relatively simple in use.

RESULT AND ANALYSIS

During the experiment, purifier A was placed in the sealed chamber, polluted air was released and the fan was open to mix the polluted evenly in the sealed chamber. When the concentration value was stable, the purifier was started through remote control and timed, and the data was recorded every 2 minutes.



FINDING

This model is well suited to any Hotel and is a benchmark for a competitor in terms of usage efficiency and maintenance.

LIMITATION

1. Air purifiers are not entirely quiet.
2. Water needs to be filtered.
3. It does not solve all indoor air quality problems.
4. Pressure control can be tricky sometimes.

GUEST SATISFACTION

Guest find it comfortable and very easy to breathe and feels very natural as he/she is in nature and at ease, its components are recyclable, reusable and its energy consumption is low so guest feels like they are contributing for the nature which reduces the carbon footprint.

CONCLUSION

Children, the elderly, and women are most vulnerable to potential indoor air pollution health effects because they spend more time in the home environment. There are many sources of indoor air pollution. Air pollution inside homes is a complex mixture of agents penetrating from ambient (outdoor) air and agents generated by indoor sources. Indoor air quality can vary in health effects and intensity, as well as in their distribution across geographic areas, cultural backgrounds, and socioeconomic status. Indoor air pollutants can cause health effects like sneezing and coughing to exacerbate chronic respiratory disorders.

Studies appear to suggest, that reduction in particulate matter and allergens results in reducing symptoms and in certain cases, preventing disease progression across all age groups, including the elderly and children. The evidence is apparent, in chronic respiratory diseases, such as asthma and cardiovascular health.

Reduction in air quality index is achieved successfully through efficient air filters. The British Guideline on Asthma Management from the British Thoracic Society recommends the use of air filters for the removal of pets and other allergens.

Technologically advanced air filter systems are now available that efficiently remove particulate matter, resulting in significant health benefits to patients with asthma and cardiovascular disease.

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“CLEANER TODAY FOR A BETTER TOMORROW: ZERO WASTE” - A STEP TOWARDS SUSTAINABLE HOUSEKEEPING

Sudipta Saha Gure

*Senior Lecturer,
Institute of Hotel Management, Catering Technology and Applied Nutrition,
Kolkata
Email: sudiptasaha123@rediffmail.com*

Pooja Biswas

*Lecturer,
Institute of Hotel Management, Catering Technology and Applied Nutrition,
Kolkata
Email: poojaray678@gmail.com*

ABSTRACT

In earlier days, the amount of waste generated and the environmental impacts were insignificant. But with every year full of inventions and new modernizations, the waste is generated on a huge amount and thus, it needs to be taken care of India, as the second largest populated country in the world, it faces various problems to its development regarding sustainable waste management solutions. The major problems affecting waste management are unscientific treatment, improper methods of collection of waste and ethical problems.

This will help to identify any potential environmental impacts from the waste generated.

Zero waste refers to the conservation of all resources through responsible production, consumption, reuse and recovery of all products; without burning or discharging them to the land, water, or air that threaten the environment and human health. With this initiative, we can ensure that no human health, or organism, or our environment is harmed by such wastes, to live a sustainable and safe life. Also, one of the primary benefits of waste management is that it will preserve natural resources and also prevent unnecessary use and wastage of such resources

Keywords: Modernizations, waste management, environmental impacts.

INTRODUCTION

Waste is created when a product loses its utility. These are substances which are discarded after primary use, and/or is worthless, defective and of no use. As we have studied in schools that, **“matter can neither be created, nor be destroyed; it can be changed from one form to another.”** In the same way, in nature, there is no waste as dead matter is broken down by

Sudipta Saha Gure & Pooja Biswas

microorganisms in the soil to become food for the next cycle of production. However, most technology employed today generates waste in terms of creation of products that have limited use and mostly neither recyclable nor biodegradable. These result in **large landfills** and consequently emissions of **greenhouse gases and chemicals** that pose environmental, and health hazards to people exposed to them. In addition, waste leads to ground water pollution as well as that of the oceans, which in turn creates hazards not only to marine life but also to the entire food chain. A substantial increase in volume of wastes generation began in the sixteenth century when people began to move from rural areas to cities as a result of industrial revolution. (Wilson, 2007) The basic mantra of waste management for years has been “**The 3R strategy**”. That is, **REDUCE-REUSE-RECYCLE**. But for more hazardous wastes, waste management should be done more carefully. That is the reason, most hotels are trying to achieve zero waste target. Although, waste is an essential product of human activities, it is also the result of inefficient production processes whose continuous generation is a loss of vital resources (Cheremisinoff, 2003).

And not just in India, other countries also produced ample amounts of solid wastes in the last decade. And every country is striving to reduce the production and the negative impacts of waste to the world. Demirbas (2011) describes waste management as a process by which wastes are gathered, transported and processed before disposal of any remaining residues. Different wastes and waste management activities have varying impacts on **energy consumptions, methane emissions, carbon storage, ecological and human health**. For example, recycling reduces greenhouse gas emissions by preventing methane emissions from landfills or open dumps and preventing the consumption of energy for extracting and processing raw materials.

A substance regarded as a waste to one individual, may be a resource to another. Therefore, a material can only be regarded as a waste when the owner labels it as such (Dijkema et al, 2000). Despite this subjective nature of wastes, it is important to describe clearly, what constitutes a waste because the classification of a material as a waste will form the foundation for the regulations required to safeguard the populace and the environment where the wastes are being processed or disposed of (DEFRA 2009).

Improper Waste Management is one of the main causes of environmental pollution. The **World Health Organization (WHO)** estimates that about a quarter of the diseases faced by mankind today occur due to prolonged exposure to environmental pollution. Millions of **wastepickers** are exposed to hazardous substances as they try to secure their and their families’ survival.

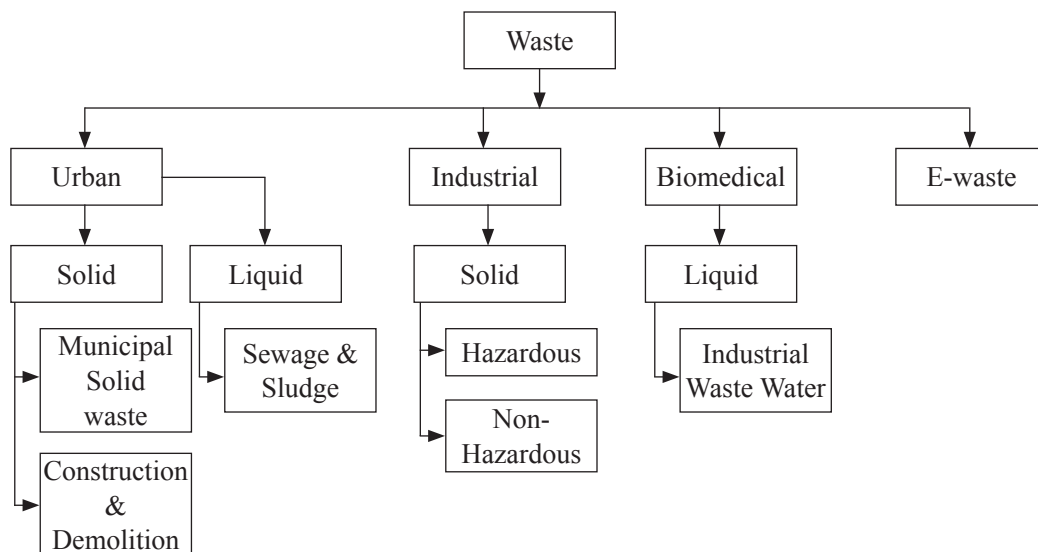
With growing public awareness about waste related problems and with increasing pressure on the government and urban local bodies to manage waste more efficiently the concept of waste as “**a material which has no use**” is changing to “**a resource at a wrong place**”.

CLASSIFICATION OF WASTE

Managing waste in an environmentally sound, socially satisfactory and a techno-economically viable manner is **Sustainable Waste Management**. It is achieved through **strategic planning, institutional capacity building, fiscal incentives, techno-economically viable technologies, public-private partnerships, and community participation**. Waste management approaches

differ for different types of wastes and also for wastes in different geographical locations such as rural, urban and hilly areas. While there are many ways to classify waste, here the classification is based on its source stream. Wastes such as domestic and industrial ones can be classified under the heads of urban, industrial, biomedical and e-waste as shown below.

These are generated during the extraction of raw materials, manufacturing and processing of raw materials into intermediate and final products, the consumption of final products, and other human activities.



E-WASTE

In the modern times, one major part of the waste produced throughout the world, is e-waste. **E-waste** or **electronic waste**, broadly describes loosely discarded, surplus, obsolete, broken electrical or electronic **devices**. The problem of e-waste has become an immediate and long-term concern as it can lead to major environmental problems endangering human health. The **Information Technology** industry in India has witnessed unprecedented growth in recent years and has revolutionized the way we live, work and communicate bringing countless benefits and wealth to all its users. It has also led to **unrestrained resource consumption** and an **alarming waste generation**.

Both developed countries and developing countries like India face the problem of e-waste management. The rapid growth of technology, up-gradation of technical innovations and a high rate of obsolescence in the electronics industry have led to one of the fastest growing waste streams in the world which consist of end of life electrical and electronic equipment products. It comprises a whole range of electrical and electronic items such as **refrigerators, washing machines, computers and printers, televisions, mobiles, i-pods etc.**, many of which contain toxic materials. (2014, p. 8; Waste to Resources: A waste management handbook, 2014)

WASTE FROM THE HOSPITALITY INDUSTRY

Generally speaking, waste from the hospitality industry consists of both **wet (organic/biodegradable)** and **dry waste**. The wet waste consists primarily of food waste, which can account for more than **50%** of the hospitality waste and up to one third of all the food served within the hospitality sector.

The expansion in hospitality sector operations is complemented by an expansion in its waste management operations. More waste usually translates into a greater environmental footprint and therefore more harm to the ecosystem. For example, a hotel guest is estimated to generate up to **1 kg of waste per day on average** (International Hotel Environmental Initiative, 2002), and this amounts to millions of tons of waste being generated worldwide annually. Therefore, the importance of studying the hotel management in order to minimize the waste cannot be overemphasized.

Thus, it is very important to have a proper waste management system in the hotel industry to save our planet from further harm.

The hotel industry can negatively impact on the environment due to the large volume of solid waste they produce (Scanlon, 2007). A survey of solid waste management practice of small hotels in the UK (Radwan et al., 2010), revealed that most hotel operators are not environmentally conscious; the survey showed that most of the hotels do not reuse their waste

OBJECTIVES

The overall objectives of the waste management project are:

- To assess the activities involved for the proposed and **determine the type, nature and estimated volumes of waste generated**.
- To identify any **potential environmental impacts** from the generation of waste at the site.
- To analyze appropriate waste **handling and disposal measures** in accordance with the current administrative requirements.
- To **categorize waste material** where practicable for disposal considerations.
- To **analyze the waste management practices** done in smaller levels.

RESEARCH METHODOLOGY

Research design: **Quantitative method** as well as Qualitative method as it takes into account the structured orientation of the Primary data collected through mailed **questionnaire**, which determines its impact on the environment.

Locale: The research has been carried out in the city of Kolkata as it is one of the most popular tourist destination of India. As per NIDHI, there are 60 classified hotels in West Bengal and 40 unclassified star hotels.

Sampling Design: Primary Data was collected from 14 nos. 5 star hotels and total 13 nos. 4 star hotels.

REVIEW OF LITERATURE

Waste is the symbol of inefficiency of any modern society and a representation of misallocated resources. Significant progress has been achieved in reducing waste but it varies from city to city. Currently, cities use their waste diversion rate as a tool to measure the performance of their waste management systems. However, diversion of waste from landfill does not give a holistic picture of zero waste performance.

DEVELOPMENT OF THE ZERO WASTE CONCEPTS

In 1962 it took 0.7 years for the earth's annual biological harvest to regenerate and now it takes 1.25 years. Global ecosystem services have been over-used significantly in parallel with world economic growth. Global economic growth has increased 5 times since the mid-twentieth century and 60% of the world's ecosystem services have been degraded during the same period. It is estimated that by 2050 we will have 9 billion people on earth. If every person achieved affluence similar to the OECD nations then the global economy would need to be 40 times bigger than it is today (and 200 times bigger than in 1950) by the end of this century. Global non-renewable resources are depleted as a result of overconsumption. Continuous depletion of natural finite resources by urban populations is leading to an uncertain future. Therefore, to prevent further depletion of global resources, we need sustainable consumption and strategic waste management systems based on:

1. Waste avoidance,
2. Material efficiency and
3. Resource recovery.

The products that we consume every day are primarily produced using virgin materials, energy and water. From resources extraction to waste generation, consumption depletes the environment by contributing greenhouse gases (GHG) to the atmosphere.



Fig 1: Drivers for transforming current cities into zero waste cities (Allam, 2018).

MATERIALS AND METHODS

There are many ways to measure the waste management systems in a city. Decision makers and waste experts use various indicators such as the per capita generation rate, collection rate and recycling rate to measure the performance of the waste management systems. In the last decade, the waste diversion rate has been used as an important indicator to measure the performance of a city.



Fig 2: Material flow in a zero waste city (adapted from Girardet, 1992, 1999)

Characterization and quantification of waste in the hospitality industry

Various studies have showed some light on the typical waste types generated at hotels. For instance, aluminum, plastics, glass, steel, cardboard and food waste were cited as being the main components of hotel waste in some studies. As per another study, the components of hotel waste along with their sources are shown in Tables 1, which show non-hazardous types of waste.

Table 1: Types of non-hazardous waste in the hotel industry

Non-hazardous Waste Type	Components	Source
Household wastes	Food/kitchen waste, used or dirty paper and wrapping, plastic wrapping or bags, composted wrappers	Hotel’s different departments
Cardboard	Packing	Hotel’s purchasing and other departments
Paper	Printed documents, brochures, menus, maps, magazines, newspaper	Administration, reception, guests room, restaurants
Plastic	Bags, bottles (that did not contain hazardous material), household goods, individual portion wrappers for various products	Kitchen, restaurants, bars, guest room, Administration
Metal	Tin cans, jar lids, soda cans, food containers, mayonnaise, mustard and tomato puree tubes, aluminum packing	Kitchen, restaurants, bars, guest room
Glass	Bottles, jars, flasks	Kitchen, restaurants, bars, guests rooms
Cloth	Table cloth, bed-linen, napkins, clothes, rags	Kitchen, restaurants, bars, bathrooms, guests rooms
Wood	Wooden packing pallets	Purchasing department
Organic waste	Fruit and vegetables peelings, flowers and plants, branches, leaves, grass	Kitchen, restaurants, bars, guests rooms, gardens

SOLID WASTE MANAGEMENT IN THE HOSPITALITY INDUSTRY

Solid waste is a key concern in the hospitality industry. Typically, a hotel guest can produce 1 kg of waste a day that accumulates to thousands of tonnes of waste annually (IHEI, 2002). Many small hotel operators have very little interest in reducing and/or recycling waste, believing that such activities are too expensive and time-consuming. For a hotel business, the cost of solid waste is not only the cost of disposal but includes other hidden costs, i.e., staff, resources and energy.

Cummings (1997) developed a hierarchy model of hospitality SWM. The model introduces five levels for waste minimization including commit to waste minimization, purchase with eco-intelligence, use efficiently to generate less waste, reuse waste materials and segregate and recycle waste. However, Cummings's model will not be applicable to hoteliers who have negative attitudes towards the implementation of more sustainable SWM practices as the model does not have any system of motivation and/or pressure to influence hoteliers' behavioral intentions in relation to SWM. It is essential to educate and train staff about waste minimization practices, along with providing incentives to enhance their commitment to the programme (Cummings, 1997; Trung & Kumar, 2005). Cummings (1997) indicated that customers can play an important role in a hotel's waste recycling programme by not contaminating waste with food. A range of methods can be used to encourage customers to segregate their recyclable materials, i.e., providing another bin in the room or near lifts for recyclable materials. Hayward (1994) indicated that customers' attitudes towards the environmental issues had changed positively. Many hotels reported high customer participation rates in hotel waste recycling programmes, e.g. Disney land resort in Anaheim and Disney World.

NEED OF WASTE MANAGEMENT IN HOTEL INDUSTRIES

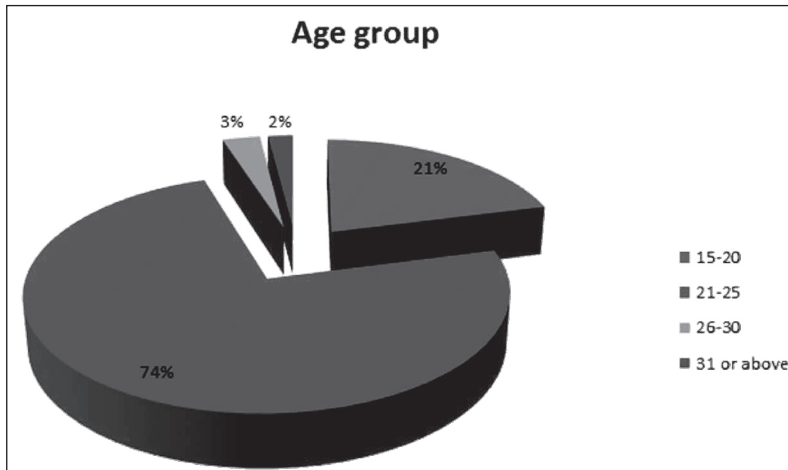
Waste management programme would help in reducing the level of waste generation and increase efficient utilization of materials, energy and water resources. In hotels, owners often pay twice for the waste; firstly in the form of packaging and secondly for their disposal. On an average, a hotel generates approximately 1kg of waste per night per guest (International Tourism Partnership Report, 2008). Therefore, disposal of waste of a year is costly and required a lot of money due to diminishing landfill capacity and high cost of waste collection. Waste rules and regulation on households and business is becoming very stringent, especially in the European Union countries (International Tourism Partnership Report, 2008).

Many stuffs/items of waste are also valuable in nature, can be recycled into other items. Hotel owners may be made money from their generated wastes. Around 30% of a hotel's solid waste can be sorted, reused, recycled and recoverable in nature (International Tourism Partnership Report, 2008). Therefore, it's a need of an hour to manage the waste of a hotel industry for protecting and conserving natural resources and the environment. For small scale hoteliers, there are three major options are available for assessing the solid waste generating in the business reducing, restore, recycling and reusing waste and also provides a list of guidelines on implementation.

DATA ANALYSIS

Question 1-

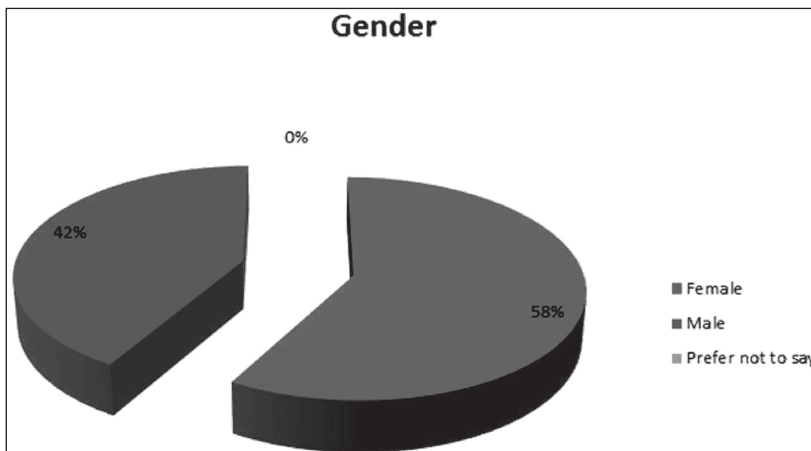
Please select the age group you belong to



During the survey conducted while fulfilling the project, I observed that youngsters from the age of 21 to 25 years of age took the survey. And a considerable percentage of participants are of age 15 to 20 years of age. Very less amount of participants was of age 26 or above.

Question 2-

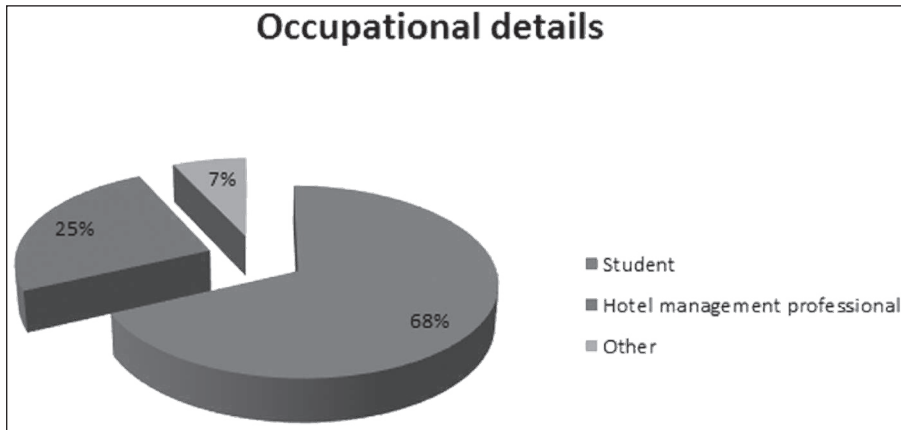
Please select your gender



During the survey while fulfilling the project of which I spoke to the participants of the survey, 58% of the participants are male, and the rest 42% of the participants are female. None of the participants preferred to not say their gender.

Question 3

Please select your occupational details



During the survey conducted while fulfilling the project, I spoke to the participants of the survey, and I analyzed that most of them, i.e. 68% are students from various Hotel Management institutions like, IHM Kolkata, IHM Bhubaneswar, etc. Some of the students are from other institutions of other courses such as civil engineering, marine engineering, botany, etc.

About 25% of the participants are hotel management professionals, working in various departments in various hotels.

Around 7% of the participants are professionals from other industries such as facility management, civil engineers, Indian railways, HR professional, and technical professionals.

Question 4

Are you aware of zero waste management?



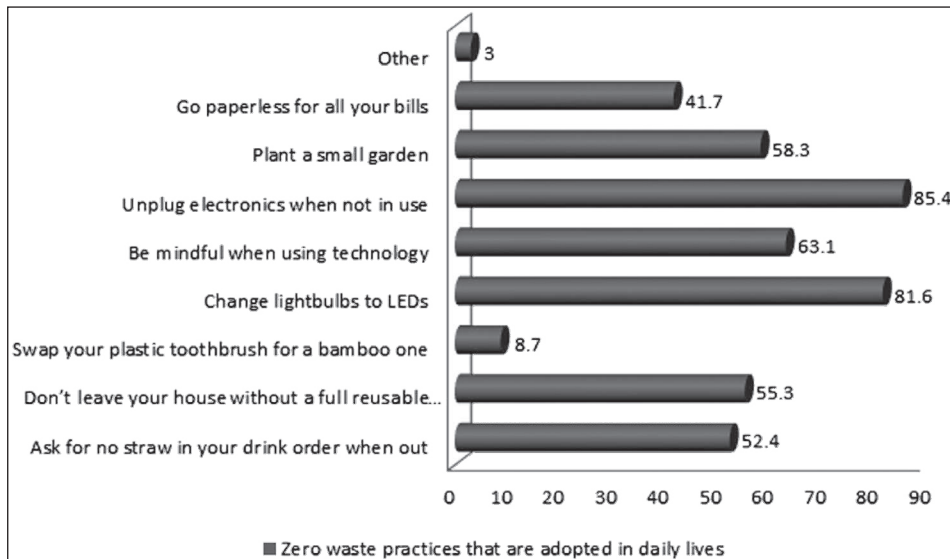
During the survey conducted while fulfilling the project, out of all the participants of the survey, almost everyone is aware of the concept of zero waste management. Those comprise of around 87.4% of the total sample participants.

About 4% of the sample population said that they are not at all aware about the zero waste practices and zero waste management which is done around the globe. This shows the percentage of people who needs to be educated about the concept, its benefits and how to adopt them in our daily lives.

Some people, approximately, 9% of the sample population said that they are not sure whether they know enough about zero waste management, and thus, they have confusions regarding the idea. Thus, they needed some education which will clear their confusions and make them aware about the situation of the planet, and understand how to protect our mother Earth from further degradation.

Question 5

What are the zero waste practices you adopted to save the environment?



During the survey conducted while fulfilling the project, out of all the participants of the survey, almost everyone follows some or other ways to save the planet from further damage.

52.4% people don't take straws in their drink when they are out. 55.3% said they don't leave their houses without a full reusable water bottle. 8.7% of the sample population swapped their plastic toothbrush for a bamboo one. 81.6% changed their light bulbs to energy efficient LEDs. 63.1% are mindful while using technology. 58.3% planted a small garden to maintain the ecosystem. 41.7% use paperless methods to pay their bills.

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Some other unique methods are also adopted by 3% people, such as:

- Carrying your own cloth bag to the market
- Composting
- Reusing air conditioner water to clean household
- Reusing most of the wastes in making useful crafts

Question 6

What do you think is hardest to practice to achieve Zero Waste lifestyle?



During the survey conducted while fulfilling the project, out of all the participants of the survey, 81.6% said it is hard to avoid packaged foods; 41.7% said its not always possible to refuse straws and plastic bags. 35% said saving water and electricity is a bit tough at times; 25.2% said carrying reusable bags with oneself is not always feasible; and 18.4% agreed to the same about carrying own water bottle.

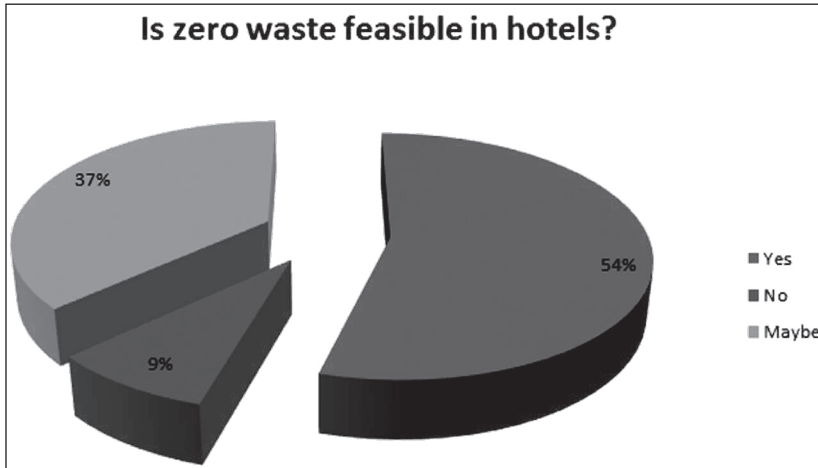
Some other difficulties also surfaced during the survey, such as

- Markets or shops which often uses plastic packaging instead of papers
- Most products come in plastic packaging
- None of these

So, we can conclude that for some, these practices are not hard to follow at all. On the other hand, the societal behavior which is being followed for years is the reason people cannot switch to complete zero waste lifestyle.

Question 7

Do you think Zero Waste is feasible in hotels?



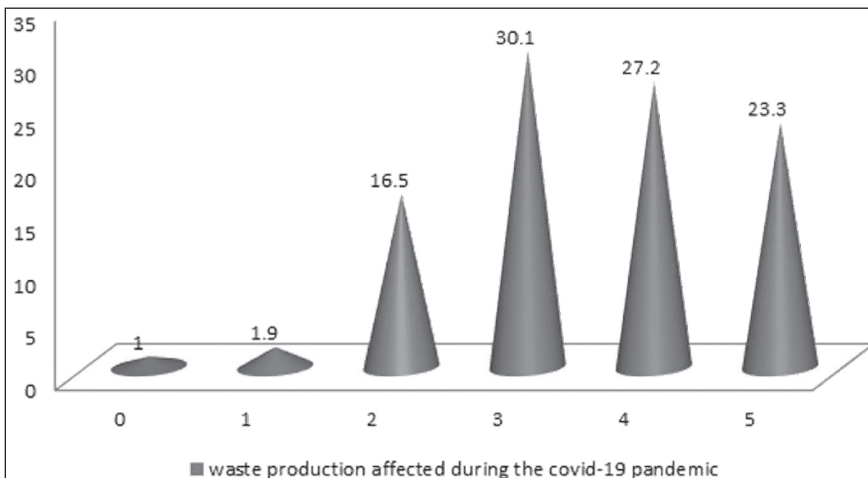
During the survey conducted while fulfilling the project, I conversed with many people, about their thoughts regarding zero waste in hotels. 54% of them said it is feasible in hotels. 9% of them said it is not feasible in hotels, whereas, 37% of them said it might be feasible or it might not be.

We can conclude from this, that since it is a new concept, people are not sure how much it will be possible in various industries.

On the other hand, people who work in hospitality industry, says that zero waste management is feasible in the industry.

Question 8

In this adverse situation of Covid-19 pandemic, how do you think the waste production has affected?



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During the survey conducted while fulfilling the project, I conversed with many people, about what they think about how much the waste production has affected due to the covid-19 pandemic, and they were asked to rate it on a scale of 0-5, where, 0 being least affected and, 5 being most affected.

1% said it affected the least, i.e. 0.

1.9% said it affected a little, i.e. 1.

16.5% voted 2, i.e. it affected a little more.

30.1% said it affected somewhat, and voted 3 out of 5.

27.2% said it affected a lot, and opted for 4 out of 5.

23.3% said it affected the most, and voted option 5.

Question 9

Has social media helped you learn about zero waste management?



During the survey conducted while fulfilling the project, I conversed with many people, and asked them how much they think they've learnt about zero waste management from the social media.

62% of them said, they learnt a lot about zero waste management from the social media. 15% said they did not learn anything about zero waste management from the social media. 23% said maybe at some point they learnt something about zero waste management from the social media.

RESULTS AND FINDINGS

Upon analyzing the sample, the data collected clearly shows-

1. **Most of the youngsters, i.e. 87% of them, who are a student, a hotel management professional, or a professional from other industries, are aware about the concept of zero waste.**

This shows this generation keeps themselves updated about the world.

2. **Only a fraction of people, i.e. 13% are not sure about the concept.**

This shows, some part of the society still needs to be educated about a lot of things to make a change in the world.

3. **Majority of people, i.e. 15% follow zero waste practices in their daily lives.**

This shows the change in human nature, and the eagerness to help the world be a better place to live in.

4. **Some of them follow it sometimes, i.e. 68%, as it is not always possible to keep up with it.**

For them, we need to come up with easier ideas so that they would want to follow them, without it hampering their daily life schedules.

5. **16-17% people never follow zero waste practices in their lives.**

For them, we need to organize more campaigns, and aware them about the harmful effects of huge wastes going into the landfills.

6. **Around 60-70% people adopted at least 2-3 measures to save the earth. Some of them even go out of their way to contribute more.**

This shows people's growing concern for the environment, and shows that they are responsible citizens of the country.

7. **50% of them consider making homemade products rather than buying it will reduce waste production to a certain level.**

Which clearly depicts that despite high price, and availability issues, people are willing to make a change.

8. **To successfully achieve that, people started to switch into a zero waste or little to no waste lifestyle, will small baby steps. For many of them, the reasons for switching are their education from their parents, schools, and the society.**

One's mind is shaped by their family, teachers, and the society. Teaching them at an early age will help them pickup good habits easily.

9. **Most of the sample participants, rounding off to almost 93%, think it is advantageous for the society and the environment to follow zero waste measures.**

This shows that people are studying about what is good for the environment and what not, which is why they are able to come at a conclusion.

10. Many people, i.e. 54% consider following zero waste practices in hotels, and think that it will be feasible.

Most professionals working in the hotel industry know that zero waste is possible to follow if we start adopting small habits.

11. However, a fraction of people think it will not be feasible in hotels.

This means the people outside the hotel industry have no idea as such regarding what will happen if zero waste is followed there, and whether it will be a success or not.

12. The overall score upon the effect of covid-19 pandemic on waste production is, 4 out of 5.

Because of the lockdowns, a lot of waste was prevented, as people stopped eating out, and using disposable food n beverage wrappings. But on the other hand, due to the spread of corona virus, the use of PPE kits and disposable masks increased heavily, and are daily ending up in the landfills.

13. 62% participants learnt about zero waste management from the social media.

As said earlier, social media has a great impact on our lives. We learn a lot of things from them, and in a similar way, learnt about zero waste management.

14. Majority participants proposed the idea of social media awareness, to educate people about the zero waste concepts.

Majority of youngsters use digital apps of newspapers rather than reading a hardcopy one. They prefer reading PDF format books than reading a paperback one. So, to spread awareness about anything, social media is a better option.

From the overall results, it can be seen that **social media, advertisements, and school teaching** plays an important role in spreading awareness about **zero waste**. Also, government plays an important role in educating their citizens to achieve **zero waste targets**.

Organizing campaigns and teaching methods to practice zero waste at homes can play a vital role in reducing waste and preventing all that going into the landfills and water bodies.

Once the waste and improperly treated water stops going into the landfills and water bodies, innumerable number of **terrestrial and aquatic life** can be saved.

By working step by step, we can make the world a cleaner and pollution free place.

SUMMARY AND CONCLUSION

This research project was aimed at understanding the waste management system followed and its consequences, i.e. its impact on the environment, and ways to improve the quality of life with better disposal system.

The research as formulated with various objectives in mind which focuses waste disposal systems, categories of wastes generated and its impact on the environment. It also focuses on the waste management practices that people follow in their daily lives.

All the objectives in this research have been done with a thorough and accurate quantitative and qualitative analysis of survey to deliver the results which are perfectly in line with the set objectives and hypothesis of the research.

All in all, this study would help anyone who wants to enhance their knowledge on this topic and act as a source of useful information for anyone looking to use this for future reference.

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A STUDY ON EXPECTATIONS AND PREFERENCES OF SINGLE LADY TRAVELERS IN CHENNAI

Aparna. K. P.

*Second Year M.Sc. in Hospitality Administration,
Institute of Hotel Management Catering Technology,
C.I.T Campus, Taramani, Chennai-600113.*

Varsha Chhabria

*Second Year M.Sc. in Hospitality Administration
Institute of Hotel Management Catering Technology,
C.I.T Campus, Taramani, Chennai-600113.*

ABSTRACT

As women are becoming more self-sufficient and economically powerful, more and more women travel on work within India and also abroad. Their choices remain a strong deciding factor for hotels and travel agencies to make customized packages. This trend of solo woman travels and group tours for Indian women has been showing encouraging numbers and the hotel industry should be taking note of this. This study helps to identify their preferences and expectations while choosing a hotel to stay and talks about challenges during the stay. To identify the above, an online survey was conducted among single lady travelers who has stayed at various hotels in Chennai. The tool for data collection was Questionnaire. Likert's 5-point rating numeric scale was used for the research, (where 1 = Least important & 5 = Most important). Primary data was collected from SLTs who have visited various hotels in Chennai city. No. of Samples collected was 61 single lady Travelers. Secondary data was collected from various research papers, journals, trade magazines, books, and other relevant records. Various hotel selection factors related to choose of hotel room, safety security, in-room facilities and its amenities were considered for the study. The result revealed the expectations and preferences of a single lady traveler while choosing a hotel in Chennai and how safety and security played a key role in making the decision.

Keywords: SLT, Expectations, Preferences, Safety and Security, Accommodation, Chennai.

INTRODUCTION

In the 21st century, women have taken up different corporate world positions as chief executive officers, sales managers, entrepreneurs, cabin crew, hoteliers, teachers, etc. Customer segment is witnessing increasing women count and bridging men-women disparity. The SLT is a fast-growing market and has an enormous potential in India.

Chennai, the capital City of Tamil Nadu is the fourth largest Metropolitan City in India which experiences a lot of business, leisure, educational, religious travelers alike. Most of the domestic as well as international hotel chains have their properties in Chennai city.

Aparna & Varsha Chhabria

Nearly a quarter of India's women professionals (23%) travel at least once a month for business, compared to just 7% who travel solely for leisure with the same frequency, according to new research from Indian Hotels Company (IHCL).

According to the research amongst over 1000 regular women travelers in India and overseas, safety and security topped the list whilst selecting a hotel. The findings reinforce that women are looking at hotels supporting and facilitating a seamless stay experience through a more thoughtful service approach. Besides these reassurances, 78% of women travelers prioritize local cuisines when travelling, while 69% expect healthier dining options and 61% would prefer smaller, 'tasting' portions. While other services such as women butler options (for 61%) and women personal shoppers (69%) could also influence their choice of hotels, as per the findings.

As per industry experts, 10-18 per cent of their guest comprise of single women travelers. Indian hotels have begun understanding that the single women traveler is a fast growing, niche market and has tremendous potential in India.

Today hotels vie with each other to offer the most personalized services possible and they feel that the feature is specially to make them feel secure.

Hotels are also making an extra effort to sensitize their staff when it comes to dealing with single female guests, some also conduct special training to cater to this segment. The staff is sensitized through training to the needs of all guests, particularly single lady travelers. This training involves making the staff aware of all the facilities offered and all procedures to be followed in case of a single female guest. The staff is trained in terms of eye contact maintaining business gaze, 2 feet distance, positive body language, to address guests by their last name and salutation, empathetic concierge and prompt service to women guests.

Hotels in India have now begun taking the Single Lady Traveler concept seriously and have introduced amenities to make their stay safe and comfortable like offering them rooms next to or near the elevator or stairway. With all the requisites in place for ensuring safety of women, have Indian hotels progressed in providing better women safety measures compared to hotels abroad the general consensus among the industry is that as all hotels are getting increasingly aware of this fact, and in the future, there will be a positive stride in this direction. Lift access control, CCTV surveillance on each floors such technology has made women feel very safe at hotels in India, states Sable. Many hotels now have defined procedures in place to handle the specific travel needs of single lady travelers.

OBJECTIVES

- To study the expectations of single lady travelers in hotels in Chennai.
- To identify the preferences of single lady travelers while choosing a hotel in Chennai.

LITERATURE REVIEW

- The single lady traveler or customer is a major market segment for the hoteliers and hence their needs should be taken care of. The single lady traveler is a fast growing, niche market and has tremendous potential in India. The female customers are slowly

replacing the valued male guest and this can be seen in the hotels globally. Indian Tobacco Company (ITC Hotels) has 10 percent of their clientele as domestic or foreign women travelers. The most significant gender differences were with men scoring higher “Room Rate,” “Location,” “Reputation,” and “Complementary Breakfast,” and women scoring higher “Convenient Front Desk System,” “Amenities,” and “Health Facilities,” (Philips ,2013)

- An interesting study by (Judi Brownell, 2011) suggests that managers should focus on the combinations of services, amenities, and facilities to contribute to the desired experience by women traveler rather than focusing on individual aspect.
- The results of a study of hotels in Malaysia suggest that women travelers placed importance on ‘Cleanliness of hotel’ and ‘Friendly services of hotel staff’ as well as ‘Bathrobes and towels in bathroom’ and ‘In room temperature control’ during hotel selection (Azizan Marzuki, 2012). The study also suggests that women travelers prefer staying at hotels that provide quality services and facilities where the guests’ comfort and safety were of top priority.
- Hotels are catering to the female clientele by providing various women friendly services and facilities, (Sourav Sarkar, 2007).
- The article by (Alanna Peet, 2006) states that Women travelers have specific amenities in their minds when they are travelling and the hotels are changing and updating in order to attract more women travelers. The study indicates that women business travelers’ value security and luxury above all the other factors while selecting the hotel, even though they appreciate all the feminine services offered to them in the hotels.
- (Kahini Chakraborty, 2014), mentions in her article that, as per industry experts, 10-18 per cent of their guest comprise of single women travelers. Indian hotels have begun understanding that the single women traveler is a fast growing, niche market and has tremendous potential in India.
- So how are our hotels making women’s stay safer and more comfortable Starting off with, JW Marriott has a separate/ quite section on a particular floor in the hotel dedicated to single women travelers.
- DoubleTree Suites by Hilton Bangalore provides two-tiered security checks at the entrance to enhance safety and security. Raghu Sapra, general manager, Double Tree suites by Hilton Bangalore points out, Single lady travelers are allocated rooms closer to the elevator and in one specific wing of the hotel.
- (Kahini Chakraborty,2014) in her article also states that, apart from choosing rooms closer to the elevators, single women travelers also prefer to opt for lower floors.
- (Brownell ,2011) argues that one of the most important female solo travelers’ selection criteria is safety. The author suggests that the safer the female solo travelers perceived, the more comfortable, empowered, and indulged they felt.
- In a different study, (Williams-Knight ,2013) notes that female travelers are concerned with their mental and physical health, and consequently, female travelers tend to select a hotel with a gym and relaxation facility.

- In addition, (Marzuki et al. ,2012) noted that female solo travelers are price-sensitive customers. Therefore, a competitive room price is considered an important hotel selection criterion.

METHODOLOGY

Type of Research: In this study researcher was interested in knowing the expectations and preferences of single lady travelers staying in the hotels of Chennai. Descriptive research was used to study the preferences of single lady travelers while choosing a hotel for accommodation and their expectations regarding the safety, security and services offered by the hotels and included survey.

Research Methodology: The instrument for data collection was self-structured questionnaire. Google form was used to create and questionnaire and to collect the responses. Likert’s 5-point rating numeric scale was used for the research, (where 1 = Least important & 5 = Most important), along with a set of objective questions. Primary data was collected from single lady travelers who have visited various hotels and other accommodations in Chennai and a sample of 61 single lady travelers was collected. Secondary data was collected from various research papers, journals, trade magazines, books, and other relevant records. Preferences of single lady travelers related to choose of hotel room, safety and security, services and amenities offered by the hotels were considered for the study.

DATA ANALYSIS

The research was carried out with the help of a questionnaire and all the closed ended responses that were gathered through the survey is converted into graphical representations.

Discussion and Interpretations

The responses to the survey of 61 SLT from Chennai were analyzed to present its salient features as given below:

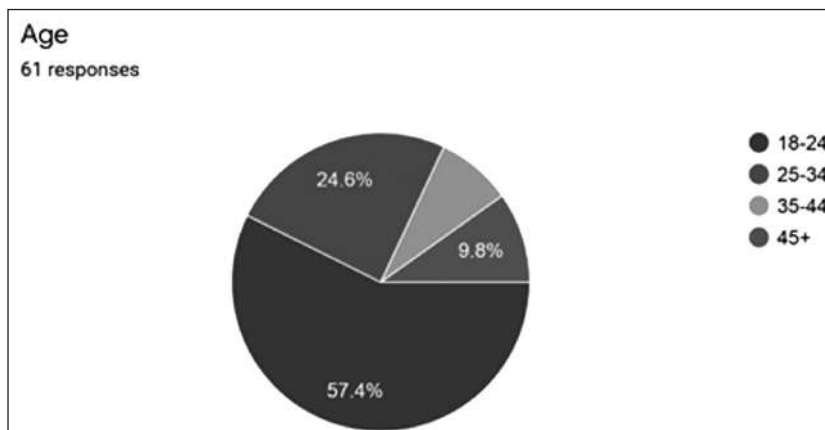


Figure 1

Figure 1 shows that almost all age groups have participated in this survey. SLT from the age group of 18-24 covered maximum of this survey i.e., 57.4%, followed by those from age group of 25-34 which is 24.6%. The rest were ladies above 35yrs.

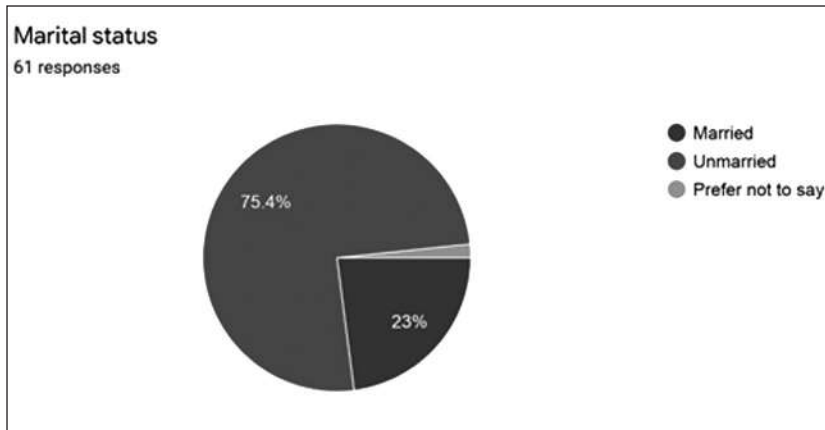


Figure 2

Figure 2 shows that maximum of the SLT respondents were unmarried and constitutes 75.4 % and there were 23% of married SLT.

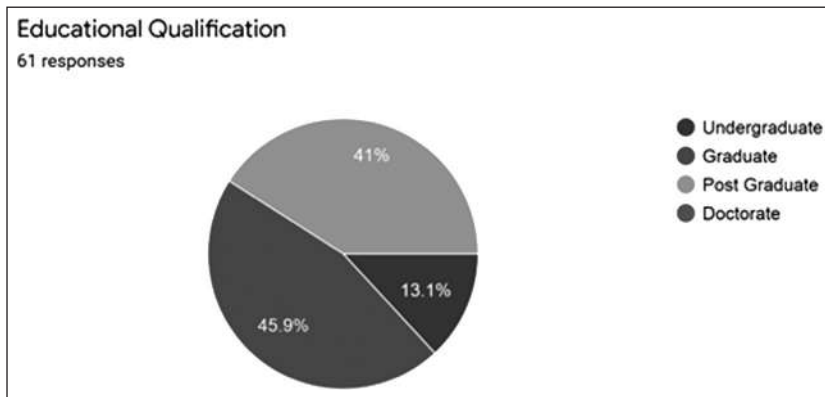


Figure 3

Figure 3 represents that 45.9% of SLT who participated in the survey are graduates and 41% are post graduates. 13.1% of respondents were under graduated SLT.

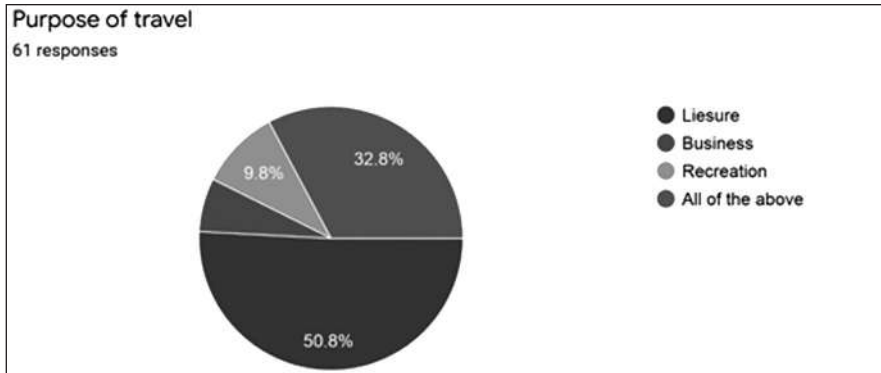


Figure 4

According to Figure 4, 50.8% of SLT travel for leisure, 9.8% travel for recreation and 6.6% for business. The chart also shows that 32.8% of SLT travel for all of the above.



Figure 5

77% of the SLT occasionally stays in a hotel while they are travelling in Chennai. While 13.1% of SLT always stays in a hotel and 9.8% of SLT frequently stays in a hotel while travelling in Chennai.

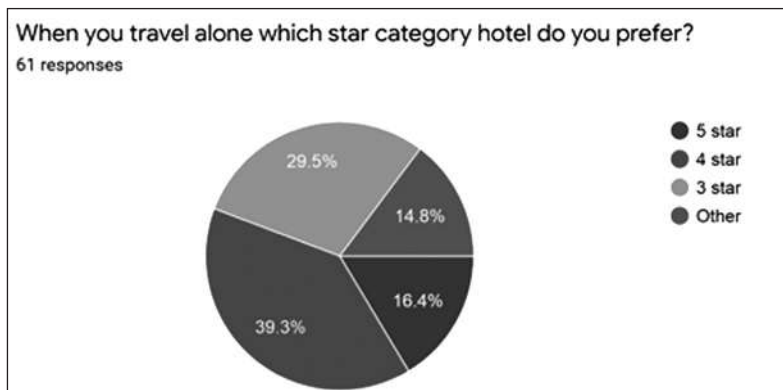


Figure 6

Figure 6 shows that 39.3% of SLT prefer to stay in a 4-star hotel, while 29.5% prefer to stay in 3 star and 16.4% prefer to stays in a 5-star hotel.

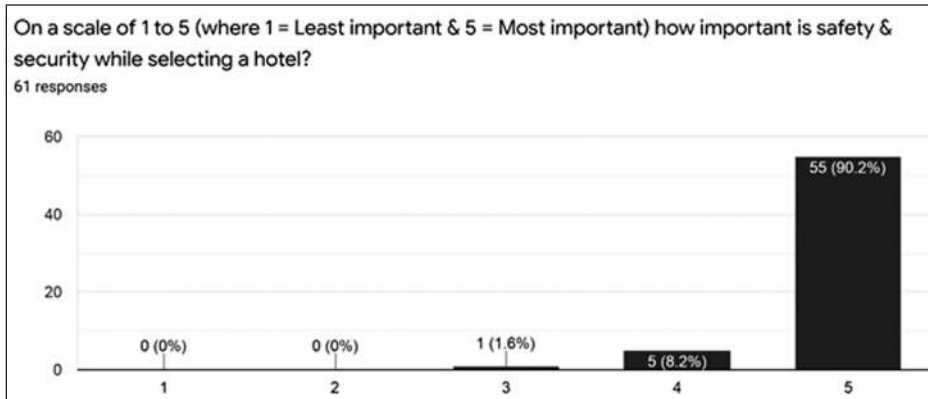


Figure 7

According to the above graph for 90.2% of SLT, safety and security is the most important factor while selecting a hotel for stay. 8.2% of SLT consider safety and security as important and for the rest SLT it's somewhat important.

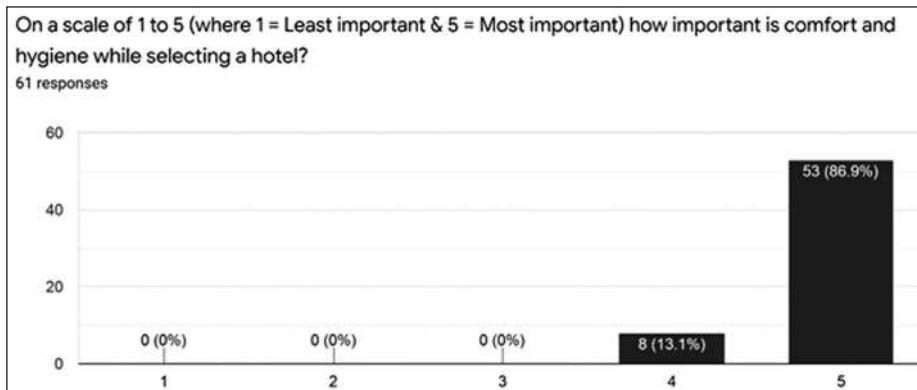


Figure 8

The above graph proclaims 86.9% of SLT finds comfort and hygiene as a most important factor and the rest 13.1% also believes comfort and hygiene as important.

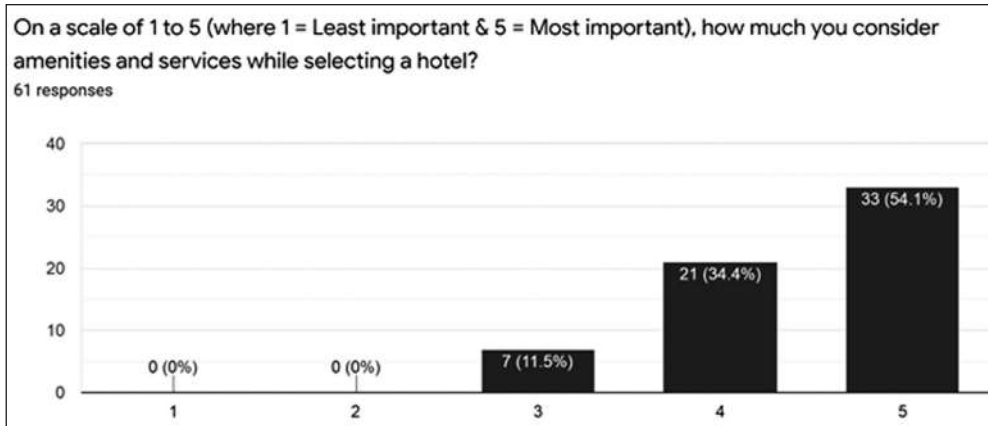


Figure 9

The above graph is expressing that 61.1% of SLT appraises the amenities and services are most important while selecting a hotel and the rest of the SLT finds in important.

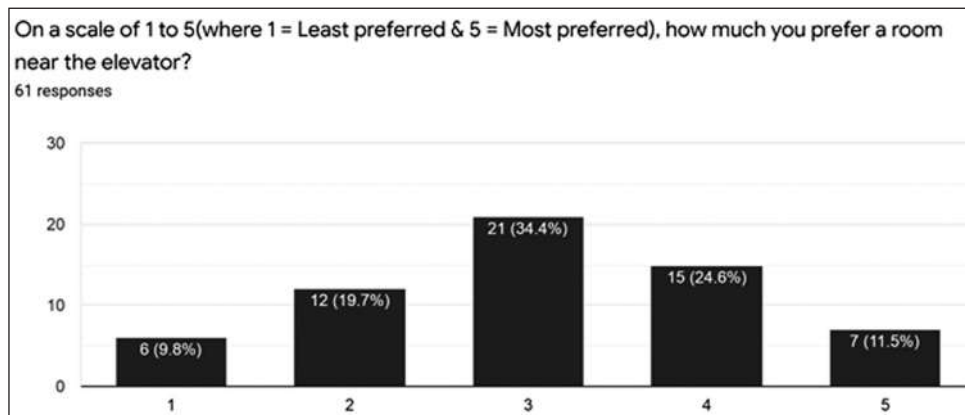


Figure 10

In the above statistical representation 34.4% of SLT more or less prefer a room near the elevator and 24.6% of SLT prefers a room near the elevator. On other hand 19.7% of doesn't really prefers a room near the elevator and 11.5% of SLT highly prefers a room near the elevator.

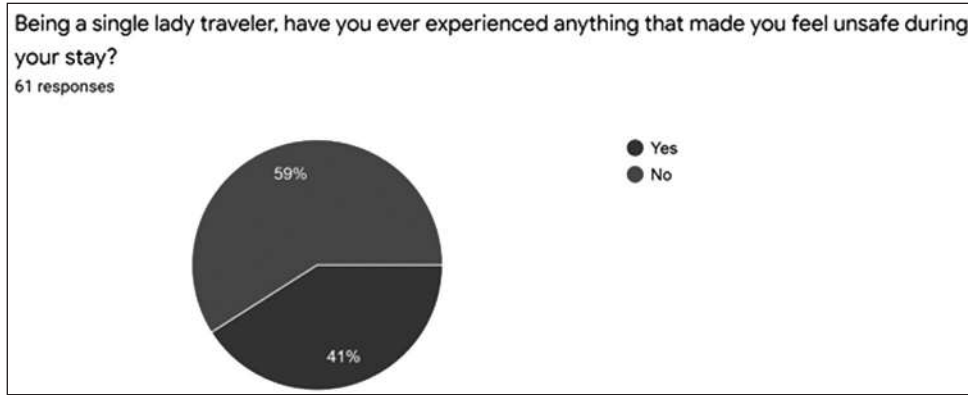


Figure 11

The above pie chart reveals that even though 59% of our respondents felt safe during their stay, 41% of SLT have felt unsafe during the stay.

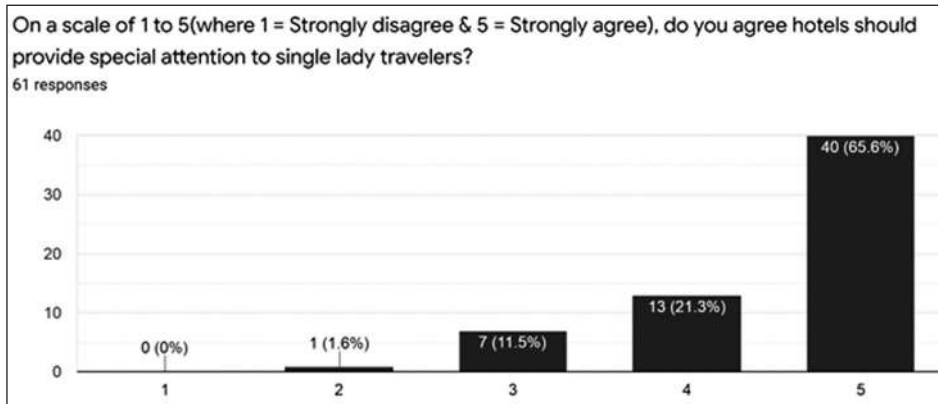


Figure 12

The above bar chart is conveying that 65.6% of respondents strongly agree the hotels should provide special attention to SLT. 21.3% of respondents also agrees for the same.

CONCLUSION

The raising number of women travelers around the world have made single lady traveler a major market segment itself. The SLT is huge, fast moving, niche market and it has enormous potential in India. This study has tried to put spotlight on the preferences and expectations of SLT, strictly focusing on the city of Chennai.

With more and more women perusing their career they are being more independent and financially stable, this study witnesses that SLTs are travelling more for leisure, recreation and business.

The results of the study unfold that safety and security was the top priority for the SLT while choosing a stay, it also reveals that comfort, hygiene, amenities and services also plays a major role. It also shows us the SLT slightly prefers a room near the elevator.

As Some SLTs have indicated their concerns about feeling unsafe during the stay. Hotels should give priority to ensuring that their SLT guests feels safe and comfortable.

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TOWEL ART-LIVE OR LET DIE

Yashowardhan Chandak

*First Year M.Sc. in Hospitality Administration,
IHMCT & AN, CIT Campus, Taramani, Chennai-600113.*

Parveen Kumar Sharma

*Lecturer,
IHMCT & AN, CIT Campus, Taramani, Chennai-600113.*

ABSTRACT

Innovation, creativity and lateral thinking are the ways to stay ahead in this competitive and ever-changing hospitality industry. Every detail should be minutely investigated and every effort which can enhance guest experience with minimal effort (financial or physical) should be incorporated. This is not only to support higher revenue generation but also to inculcate the entire concept of hospitality. Towel art or towel origami is the child of this ideology. Towels are a part of room amenities and presenting them in a specialised or innovative way creates an impression of warmth and welcome. The weary traveller, after a long travel gets the first impression of how their stay would feel. Sometimes “FIRST IMPRESSIONS ARE LAST IMPRESSIONS”...sometimes only.

Keywords:

1. Towel origami: also called towel sculpture or towel art, is the art of folding towels to create impressive sculptures like swans elephants, etc.
2. Room Amenities: the objects that are placed in the room besides the furniture and fixtures, like towels, soaps. Tea bags, etc.
3. Cruise Liner: they are large ships carrying passengers mainly for vacation, like Royal Caribbean , Carnival cruise, etc.
4. GRA: Guest Room Attendant who takes care of room cleaning.

INTRODUCTION

The study of Towel art in the hospitality industry, is basically an effort to create a better ambience for the guest and extend warmth and welcome in the best way possible. This can be vast, covering various aspects of the topic.

The idea of Towel origami, and its true origin are faint and many ideas are proposed. One of them being that, Queen Cleopatra bathed in a milk tub. While she nourished her body the attendants entertained her, by creatively using the cloth towels to manifest various shapes.

Another story claims, that the cruise passengers were entertained by towel sculptures during their long travel periods. Carnival Cruises claim to be the first to invent towel art in the 1980's. They even published a book which could be pre-ordered. Each artist has to be trained for 10 hours is what the Carnival Cruise claims.

Towel art is very different from paper folding or Origami, which has its origin in Japan. Paper is crisp and takes shape easily, but towel requires certain finesse to get it right- if it has to be truly impressive. To enhance the towel art housekeepers use felt pieces, flowers or maybe palm leaves.

The hotel industry is constantly haunted by the idea of staying ahead, retaining guests and indulging their intrigues and fancies. Towel origami was inculcated with the idea of “WOW” factor. It has managed to be on the “to have” list for a very long period. However, it may not be able to survive there unless creativity is enhanced. The thought of seeing the same swan or the same elephant may not be as interesting an idea. The indulgence is debatable. Moreover it doesn't really give a competitive edge as all the competitors are also having towel origami as part of their “WOW”-list.

In fact in 2019 April, the Norwegian Cruise Line cut back on their signature-towel art, turndown service. This was a management decision and obviously may have been affected by the Covid losses. However they claim that their cruise has 1000 rooms and every towel art requires at least 2 towels. These towels had to be washed even if the guest did not use it, causing a great burden on the laundry and the environment. Water wastage and release of soap effluents affecting the ecosystem. The sustainability element did question the purpose of towel art. However, having said that Carnival cruise and The Royal Caribbean have made no such claims and in fact they think that the Norwegian cruise lines are trying to save a “buck” under the pretext of sustainability. There is some truth to both maybe. On the other hand Norwegian Cruise line has welcomed the idea of creating Towel origami for any guests who, request or demand it.

In fact, some researchers in 2010 presented a paper wherein, they had researched a regular robot detecting the towel edges based on “multiple –view geometric cues” with application to robotic towel folding. They reported to have hundred percent accuracy in the folding.

Many institutes have inculcated Towel Origami in their course and many have taken this opportunity to enhance their skills and eventually their pay packages. The hotels also get positive publicity when the pictures of this art form are posted on Twitter, Tripadvisor or any social media platform. They get recognition and popularity. It may remotely be considered as an advertisement cost.

The journey of towel origami is intriguing and how it travels will be interesting to follow.

OBJECTIVES

1. To study the choices of guests with relation to towel origami..
2. To study the outlook of hoteliers towards towel art.
3. To understand the economy versus the emotion aspect of towel sculpture.

PURPOSE

1. The purpose of this study is to help hoteliers see the guest point of view with regards to towel origami.
2. New organisations considering this art form can take a look at the perspective of the guests and the hoteliers.
3. Weigh the costs and the benefits and all the other pros and cons of sustaining or initiating this art form in their organisations.

LITERATURE REVIEW

There is not much literature pertaining to the origin or the history of towel art.

There are a few theories. Some people say, Cleopatras’ servants entertained her during her long milk baths with towel art (Alison Jenkins- the lost art of towel origami. Ivy Press).

It originated on the Caribbean cruise ships in the 1980s. Carnival Cruises claims to be the first company to have towel-folding staff and have even published books with pictures of some of the best creations (Samantha Shankman –Skift)

There are many Youtube pictures and articles by writers and towel origami artists displaying or appreciating the towel sculpture. Guests and hoteliers displaying their towel art on the websites or blogs to receive acclamation and appreciations. Some have even called it a one- time pleasure. At first, I must confess I found these swan or peacock-shaped towels exotic and amusing. Now, it is beginning to seem plain silly and a waste of time of hotel staff. If you want to draw attention to the bed, are there better ways to do it? My vote goes to ITC Grand Bharat which has personalised pillow covers embroidered with guest names–(Chitra Narayanan The Suite Life Travel –Towel art and other Fads.)

Beaches Negril Executive Housekeeper Novelette Whyte said a special ‘wow set-up’ is done for guests celebrating special occasions such as birthdays, anniversaries or honeymoons. The resort also has weekly competitions for its housekeeping team members with first and second place winners receiving prizes.!” -(Jamaica observer by Tambola Thursday February 24 2022)

“Many of the housekeepers see it as a chance to connect with the guests and show their appreciation for them having chosen this resort, so they will go beyond their duties to ensure the room is enhanced through these designs and the guests love it!” -(Jamaica observer by Tambola Thursday February 24 2022)

A lot has been said and talked about how Towel art is impressive but none of them discuss all the factors that would and should be considered while taking up this art.

SCOPE

The scope of this study extends both ways: the guest perspective and the Housekeepers perspective.

1. The Guest perspective explores how effective is towel art , how long is the effect and whether they feel it is worthwhile to continue towel art .
2. On the other hand the housekeeper's point of view manages to understand briefly the effects of creating the art form; the economic facets of towel art and how the housekeepers can enjoy the attention and praise from the guests. The recognition they get and in a small way the publicity the hotel receives when posted on social media.

LIMITATIONS

1. This study does not indicate the exact cost to benefit ratios of creating towel art.
2. The history and origin is not definitive, it is indicative.
3. It leaves the reader the choice to weigh-in the consequences of initiating towel art according to their need and their policies. It does not give a rule of thumb.
4. Housekeepers are themselves uncertain as every guest does not respond or appreciate them. Some do and some do not mention unless asked. Some guest are on tour and come late night and leave early ,so decision is not entirely accurate.
5. The exact contribution of social media in publicity and eventual revenue generation is also uncertain.
6. Another limitation is that usually on a vacation guests come as a couple or a family and while one may not enjoy it the other members might relish the towel art.

RESEARCH DESIGN

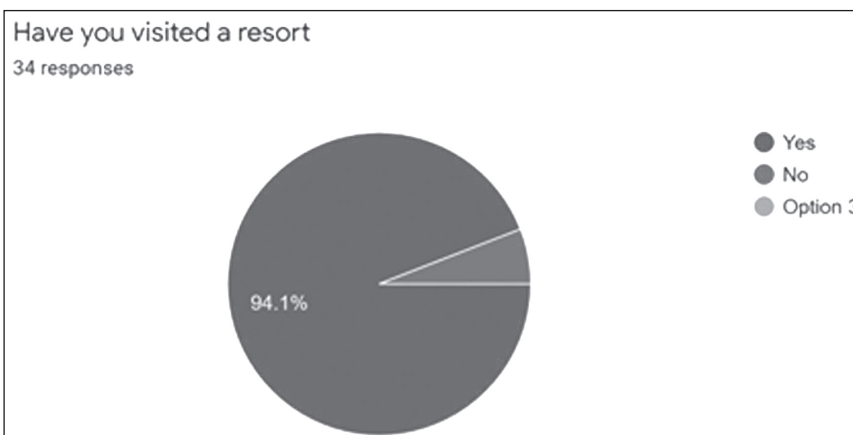
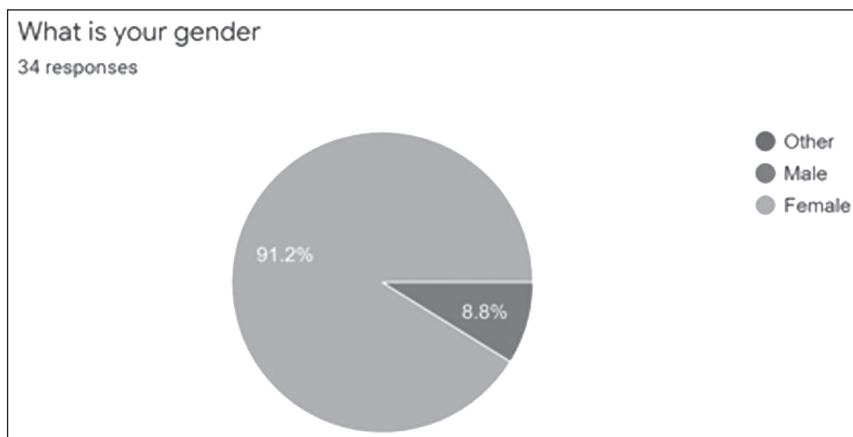
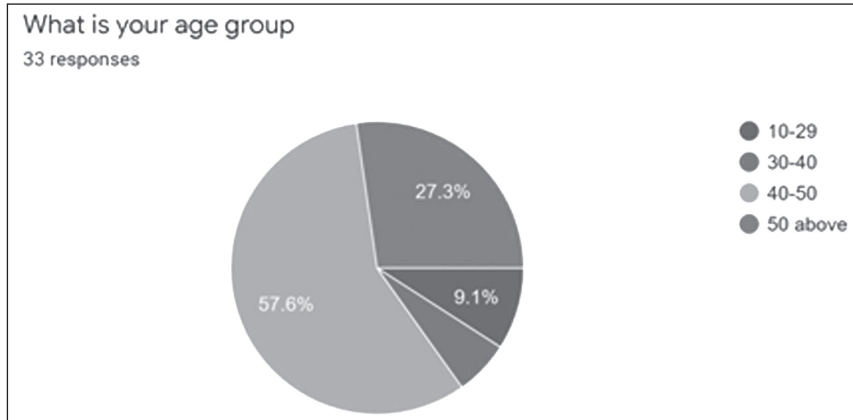
Type of Research: The research was designed with the idea of finding out whether guests appreciate and enjoy towel art and how long does their interest last. It was also designed to find out the GRAs point of view how they felt about the art form and whether they felt it was worthwhile. This helps hoteliers to take a decision whether Towel art is an art worth investing time and effort on.

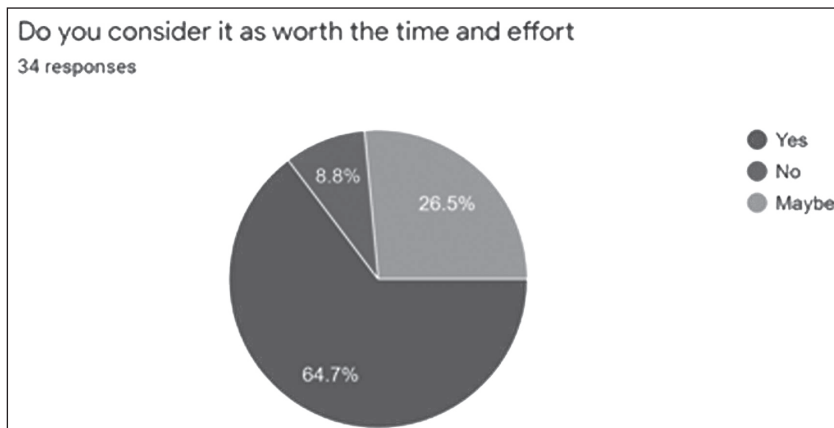
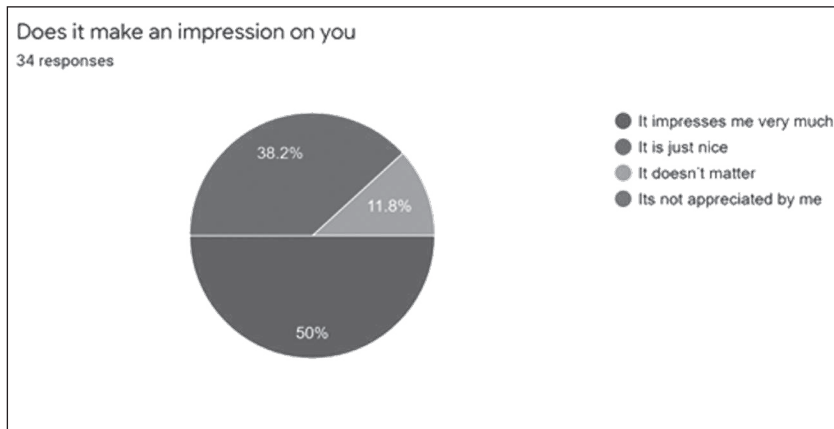
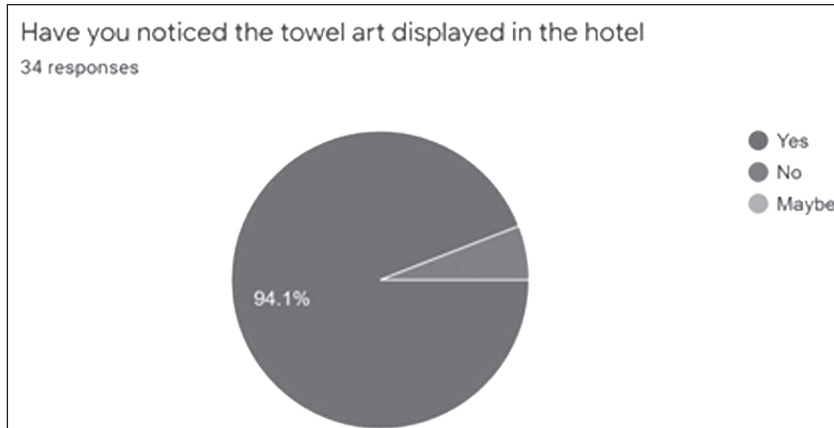
Research Methodology

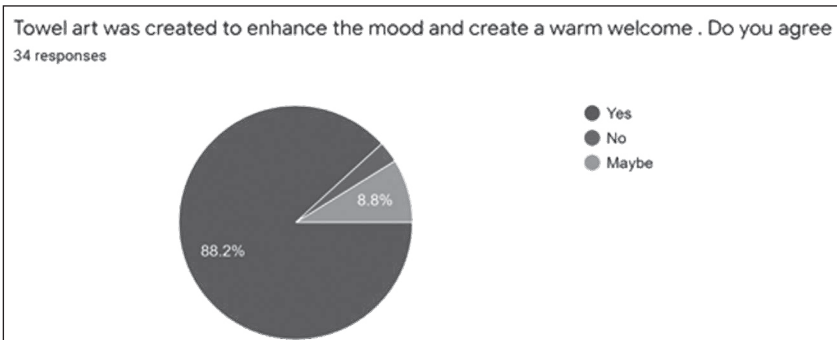
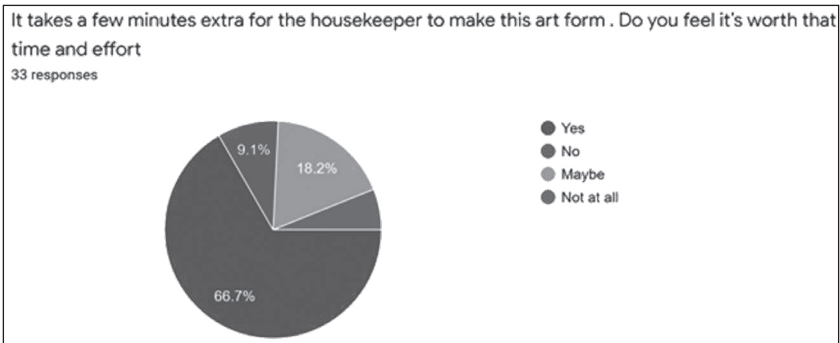
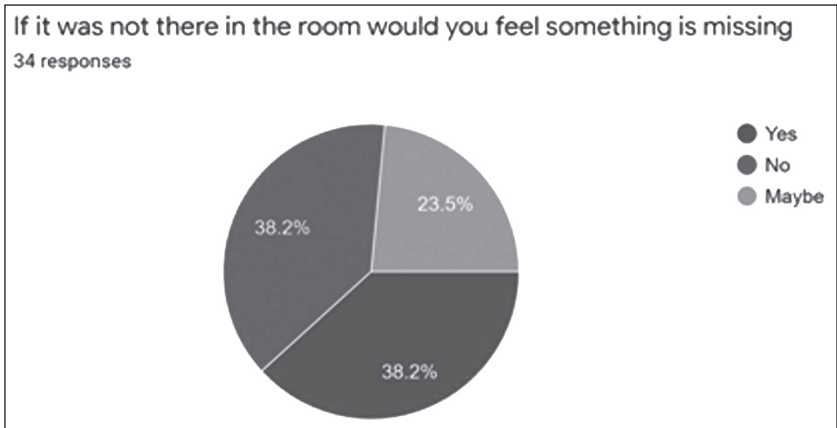
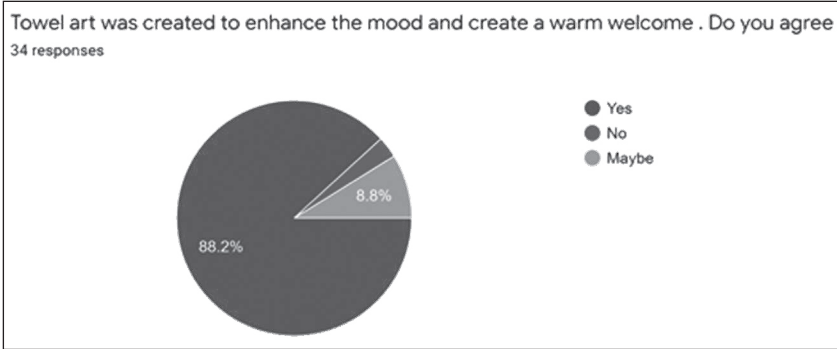
- We have used quantitative research methodology to get the perspective of guests who frequent resorts and have seen towel art. The google form with MCQ was used.
- We have used google form questionnaire with very short answers and personal interview to get the management and housekeepers perspective.
- Physical training and demonstration were also taken to see the exact time taken for a simple towel art of elephant by the GRA at TajSamudra Colombo.

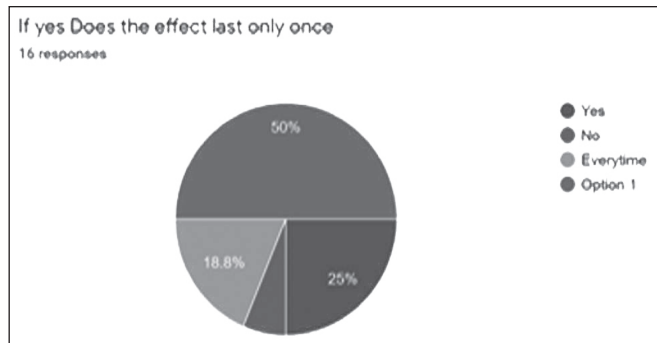
- The interview was taken of supervisor at TajBentota(Sri Lanka) and Mr Gayan of TajSamudra in Colombo.

PREFERENCES OF THE GUESTS AND THEIR DEMOGRAPHICS









Findings of Guest Survey

1. Sample data is collected from mostly age group of 40-50 years and 50 above. Very few are in the age group of 10-40.
2. The maximum sample is females and most of them have visited a resort and noticed towel art.
3. While only fifty percent were impressed around twelve percent didn't care much for it
4. Many people consider it worth the time most agree that it enhances mood and creates a warm welcoming feeling. There is almost a mixed feeling with regards to its presence.
5. Most feel that it is worth the time and effort but around 50 percent feel that the effects last only one time.

Findings of Housekeepers Survey

1. Housekeepers felt it was simple artistic way of "wow" factor and hospitality.
2. Our personal demonstration and interview with the GRA, concluded in a simple sculpture being created in less than a minute while the managers felt it took somewhere around 10 minutes.
3. The managers said they do train their employees, but when we spoke to the GRA, he says he keeps updating by watching Youtube videos and his own creativity. An initial training was given 6 years ago but now they are experts and innovate on their own.
4. None of the managers felt that it had any financial benefits but it was part of hospitality. They would rather eliminate this as it is done by hands and may be infectious and leads to damage of linen.
5. On the other hand an interview with the GRA conveyed that he felt recognition and appreciation in the form of smiles and sometimes even tips.
6. Managers and GRAs did not think that it was a burden to the laundry and water consumption as towels were part of room amenities.
7. Every manager and GRA said they had received appreciation and posts on social media creating more acknowledgement.

Yashowardhan Chandak & Parveen Kumar Sharma

CONCLUSION

Towel art is definitely an exotic experience and its presence is impressive in the eyes of most guests. A vast population of guests seem to enjoy it and they do cherish its presence. Even the GRAs who make the towel sculpture seem to be looking forward to making them. They do enjoy the recognition and visibility that is so lacking in the housekeeping department as they are not always visible. But somehow the management feels that it is not really worth the effort and would gladly eliminate the art form. However when it was pulled away by the Norwegian cruise, the guests missed towel art. The company, then decided to make them if there was a guest request. It does have the “wow”- factor.

SUGGESTIONS AND RECOMMENDATIONS

A thorough study with a feedback form in every guest room may help the management decide on Towel arts, utility and success -perhaps on demand.

Another option would be to take in requests at the time of bookings by making it as a choice and recording the requests.

A balance could be achieved by making towel origami for those who enjoy it eliminating it for those who don't.

Art forms are cultural heritages and losing them is similar to losing our heritage.

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AUTONOMOUS HOTEL TECH & GUEST SATISFACTION IN PRESENT SCENARIO

Saravanan. G

Institute of Hotel Management and Catering Technology, Kovalam.

Aravind Jyothish Kumar

Institute of Hotel Management and Catering Technology, Kovalam.

ABSTRACT

During the pandemic guest took a long break from visiting hotels. Hotel industry fundamentally needs to change itself for the post-pandemic situation. Even before the pandemic guest expectations were never less and satisfying them needs a complete effort from the entire hotel. This study helps to balance both situations, by modifying the hotel itself for the present and future needs by updating their technology and service procedure. Hotel's autonomous tech can be paired with the guest smartphones in order to customise the service as per guest preference and to create touchless environments to avoid virus infections. Also this tech will create a secure atmosphere for single ladies and other guests from strangers by allocating dedicated floors for single ladies or family, restricting access for non-resident guests & visitors to guest's area, monitoring everyone's movements in the public area through motion sensors, etc. Hotel staff can have a personalised touch with the guest with the help of this autonomous tech when one can't have direct contact with guests in order to meet their expectations. And the findings indicate that Tech and human interactions are interlooped with each other.

Keywords: Guest Expectations, Guest Satisfactions, Autonomous Tech, Touchless Environment, Personalised Service.

INTRODUCTION

Guests' services have been frequently analysed by many professionals and researchers throughout history since the modern ages of Hotel. But the scenario today is a whole lot different from before and we need to understand its intensity to survive the current situation. In the present stage as the whole planet is in a changing face, our hospitality and leisure industry is also on a global change. New technologies are coming into the play due to the special needs required in the hotel sector. We are starting to fundamentally reshape the way in which we travel, eat, stay and explore. In this study, we intervene in the current trends and advancements of the hospitality sector and how they are improving the guest experiences and changes in the hospitality platform. Technology, facilities and new service methods as a growing factor the focus had already imprinted in the hotel sector as well as any other organisation in the adoption of new changes for pleasing the guest. So the guests Perceptions and expectations in the hotel field are also improved by such fundamental advancements which we need to focus on.

Saravanan & Aravind Jyothish Kumar

OBJECTIVES

- Focusing on the needs of guest's from the current and future Hotel Industry.
- Exploring current and nearby future's technological and service advancement in the Hotel Industry for serving guests.
- Hotel's Contribution for satisfying the guest's expectations.
- Finding Guest's perception about the current Hotel Industry after the pandemic.

METHODOLOGY

Primary Source: Open Interview from various people

Secondary Source: Articles, Magazines, Research paper, Hotel Websites, Travel Agents Website, Online Booking Company's Websites, Other Public Websites, Books, Newspapers, Newsletters.

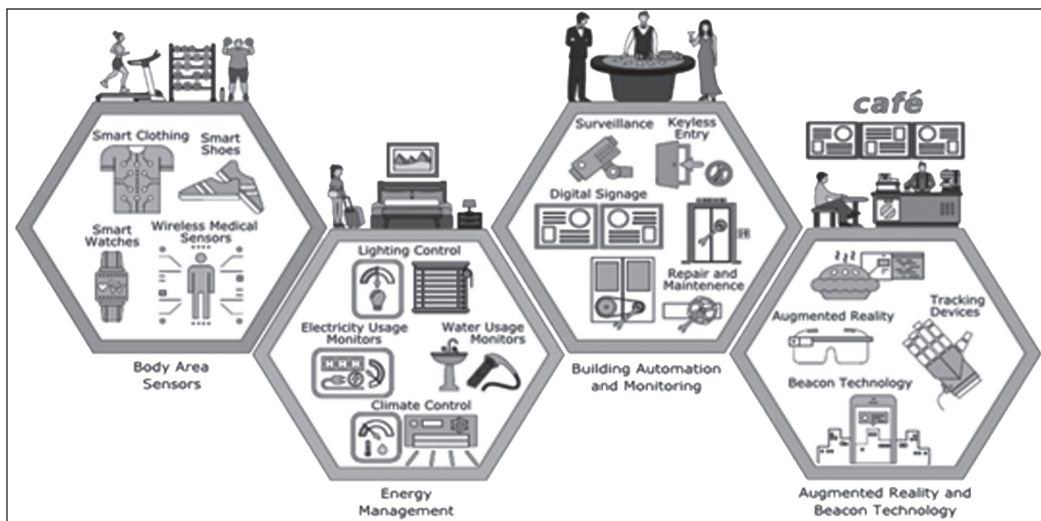
GUEST'S PERCEPTIONS AND EXPECTATIONS IN THE CURRENT HOTEL INDUSTRY

Since the Modern age it's not just the hotel which undergoes changes it's also the guest who is becoming more and more demanding for the quality of the products and services offered. As per Dr. Azmi and Ms.Maghzi(2012), guest expectations were determined by personal reasons like their gender, financial status, nationality, purpose of visit, even by the hotel's star ratings, facilities and service offered. And the current pandemic made the situation even more challenging for achieving the complete satisfaction of the guest. Guest's may look so complicated and diverse. But if we segment the guest according to the market such as age wise, nation wise, purpose wise, etc., we can predict the guest's perceptions and expectations towards the hotel industry. The technological advancement will give us the upper hand to serve guest according to their different needs to meet their expectations. Due to technological improvement guests were well aware of the exact situation of the property from the other half of the globe. They can filter the properties in a particular location according to their expectations. So hotels have to focus on the guest's perception of the hotel to avoid being left out. And due to the COVID the system of the hotel needs to be completely touch free to attract health conscious guests. Guests will prefer the same for their safety and ease of stay experience. As O'Neil et al., (1994) suggested guest's demand for the products and services no longer happens automatically; it needs to be created. And the guest's demands and expectations can serve as a benchmark for the performance of the hotel (Zeithaml et al., 2006). Fortunately the above guest's demands can be met with the help of the advancement of the technologies and improved service methods which have been implemented in recent years. Every step in the hotel procedure of guest's reservation till the departure has been improved drastically due to technological advancement. The questions we have to ask ourselves are - Do we have enough technology to meet diversity of guest's expectations? Do we need to change our entire hotel system after a pandemic? And how to convince guest to select our property while they are searching online? To answer all the questions first we have to go through the present technological and service advancement which is already implemented in the hotels around the world.

Reservations: Guest expectations start with first interactions with the hotel and it determines the mood of the entire stay of the guest. Instead of having an intermediate agent, the hotel can use personalised IT enabled service for the guest in order to give enhanced service and control revenue (Piccoli, et al., 2017). One of the guest's expectations is to have a seamless and personalised service from the hotel, which can be possible with cloud migration technique. Cloud migration acts as a key for back office efficiency with low technology costs as well as on the bottom line to software integrations options. Cloud communication offers new innovation for emerging technology to get all the guest information prior to arrival. It also helps to keep a track of all the information that the guests input to the cloud mainframe, which in the time of arrival can be used effectively to maximise the quality and easiness upon arrival of the guest to the hotel. In the present situation, the hotel needs to get the information to make sure the guests' needs are kept available throughout their stay. So investing in cloud technology as a background to make sure the guests feel more welcomed at the same time the hotel is well aware of the guests needs and the same can be used for a lifetime. Also the changes that the guests make in future can be also updated on to the guest cloud profile. In modern hotels links will be sent to guests directly for registration of a pre-arrival, where the check-in process to be done online. Hotel websites can be used to pin the information from arrival date till check-out & all other details or requirements for his/her stay with the hotel. In the course of time it has also come into being the facility of number coding each guest in order to secure the checking process by adding the code number to the guest accrued from the registration process to help in a faster check-in to avoid any formalities at the time of arrival. In the hotel, now it is only to make sure the guest seen physically to just get the code and the Id proof at the time of registration, in case the guest feels insecure to upload it online or Id proof can also be scanned & send to the hotel system by e-mail or by using hotel apps, which again makes it a touchless and fast process of check-in upon arrival.

Hotel System: Even before the pandemic the hotels were planning to make changes in the hotel system to attract more guests by providing seamless services and introducing innovative techs in the premises. But after the pandemic it became the mandate change required to a hotel to create a safe and secure environment in concern. Hotel system made their changes from the pickup procedure itself as it will be the first impression of the guest who is experiencing the hotel by himself/herself. So these systems need to be appropriate to impress them. Instead of using a third party app, hotels use their own apps to send pickup to the destinations where guests can check the vehicle's details, driver's details and vehicle's location too which gives an exact solution to miscommunication. Where again the guest in present scenario rather than talking face to face will rely on the apps which are provided by the hotel or even affiliated with the hotel. At present, even some airline companies give transportation needs to the guest by affiliating with the hotels. This is also a key factor in the guest experience before the physical arrival of the guests. In the present style of self-service and it is rather than calling for the hotel staff to assist, the guests can be seen or making use of the hotel Wi-Fi with the app for self-check-in or check-out {Mohanty, July 2016}. And these mobile apps can also provide confidentiality & security of their own account, providing accurate information of the property and flexibilities in their needs and demands which results in satisfying guest expectations. Monitoring and building automation has a key factor in both guests and services provided in the hotel premises. The benefit from the building automation leads to efficiency of HSP (Hotel Standard Procedures) development

and improvement. By advanced automation techs like motion sensors, we can surveillance the room occupancy and plan the maintenance work in advance. Automated door handles or door mechanics, made the guest experience easier to know whether their rooms were locked, replacing amenities and cleaning rooms while they are going out as these doors have sensor registration so the hotel employees will replace the amenities or clean the room while guests are not staying inside. In nearby future fully automated techs will be available in public areas as well as in rooms through voice recognition option in TV, AC or even in ordering room service. {Shallcross, 2016}. The new moto is to use its vast applications to motor, control and improve the way in which the guests can feel more safe and relaxed at the same time in control. As it is most common to be online, it has also been a part of the hotel design to make sure the firewall or server /software protection measures are taken into action not only to safeguard the hotel properties but also the guest details and information. In addition to that some of the innovative hotels techs are:

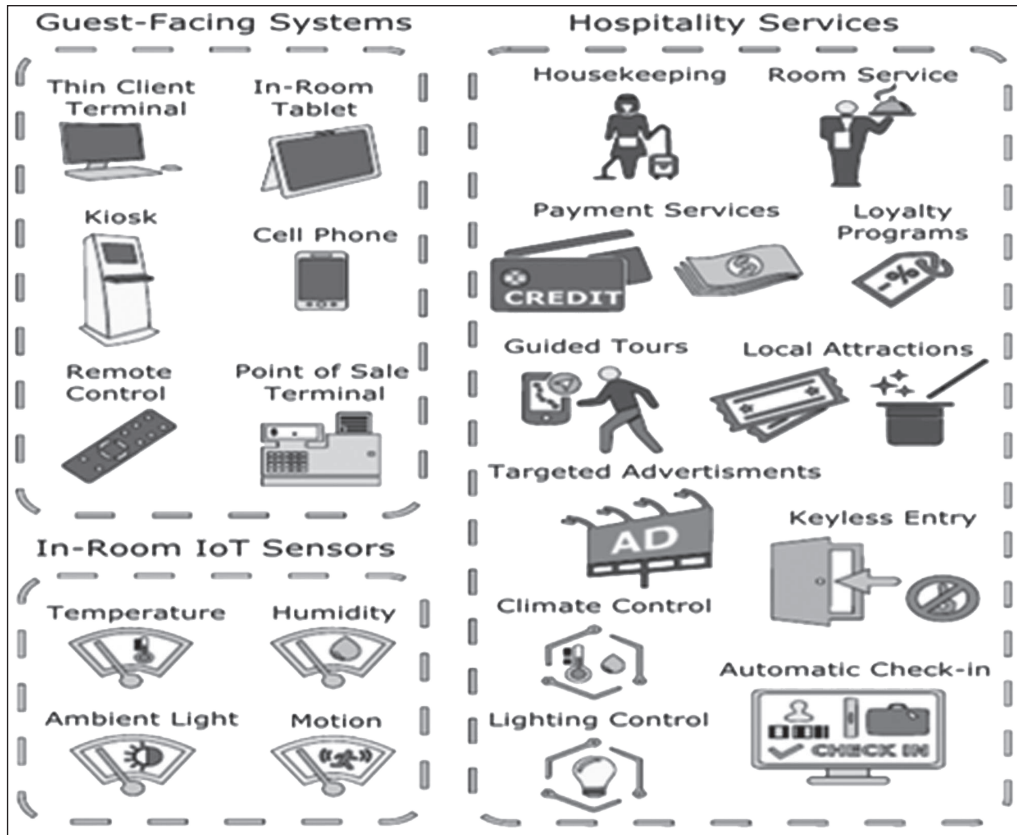


Picture: - Benno Rothstein - 2021 - Control energy in hotels: Investigation of electricity consumption

- *SMART MIRRORS:* (Murphy, 2015) - Mirror Televisions, where guests can watch high-definition TV in mirrors. A smart mirror embedded with a customised touchscreen designed to replace the full-length mirrors in rooms
- *ROBOTIC BUTLERS:* (Ekstein, 2015) - Perform tasks in the front of the house and the back of the house with a combination of sensors and WIFI/4G connectivity and the elevator software.

In the present smart-tech-device the technology to make the necessary guest needs like lock and unlock the respective guest room in their own mobile devices is much preferred. {Lee & Jeong, 2014}. Because it is readily available in the guests' hands and at the same time it can be used by them to track the access points. Also it regulates the hotel's energy consumption, gives access to rooms & other facilities to guests, billing & payments and saves time of guests as well as to hotel employees. The guests and service providers with innovations in smart devices are

driving the reform of technology used in hospitality service platforms to a much higher level. Guest interactions are being migrated towards on screen and online interfaces through guest facing systems which is apart from being convenient for guest doubles as an opportunity for service providers to collect valuable data and feedback. Digitalization implemented on the back of the office house management systems, has helped to improve operational efficiency. Guest facing systems include mobile applications, point of sale terminals, hand held devices, thin client terminals, etc.



Picture: - Diana Foris& Cristina Alexanderea - 2021
 Exploring solution and role of GDS Technology in current pandemic}

AI features (Service Automation tool AI): In changing the hotel system, the guests are served through advancements in Artificial Intelligence (AI). As per Bisoy, et al., (2020), applications with AI-backed virtual colleagues can make guests more inviting and fulfil their requirements and communicate more actively to guests by adapting to modern gadgets. Modern hotels are looking for new ways to interact and give services through leading companies' AI facilities for satisfying guest expectations and giving guests other than regular traditional services. By accompanying digitally, only a little man power is required to handle a large group of guests while others can focus on personalised services as even in fully automated hotels human interactions plays a bigger part in satisfying guests which we can't deny. AI can handle the different languages and

autonomous needs of the guest simultaneously and ensure clear communication. AI for hotels in fact is a reality for many leading brands today. Including everything from robotic servers to intelligent computer systems will reduce miscommunication and increase accurate calculation which results in the guest satisfaction by meeting their expectations. AI is also linked to more tools that streamline check in, monitor and adjust in room technology and personalise the stays. If the guest receives up to date service in time without requesting it then that will be a pleasant stay for the guest.

Technology installed in Rooms: After the pandemic guest's perception toward approaching the room has been changed differently and the hotel needs to reconsider the way the guests interact with their room. From motion sensors that turn on lights, to voice activated control appliances and natural language processing the toolkit to test these technological advancements will boost the present hotel infrastructure. It not only maximises the hotel's need but also gets the guests better means of safety from the present and future threats like virus or any other infections. Some of the example techs are fixing automated coffee machine's time through the guest mobile, advance request of check out date and billing updates, automatic hand detectors for hand wash tapes, shampoo dispensers, water stopper, hand sign swishes, etc. Rooms Necessities (Integrated Guest application) like room landline and mobile synchronisation is the next level tech which allows you to attend the calls of a hotel's room landline from the guest's mobile phone itself with the help of the hotel's app. Tab which is placed in the room will give automatic calls/notifications to let guests know the events or meetings happening in the hotel as well as to notify guest's day to day daily schedule needs with the hotel like meetings, parties, car pickup to office, evening spa reservation, etc. Room's tab will have the NFC (Near-Field Communication) facilities which personalise the food choices of the guest, synchronising the AC settings, amenities to be placed in the room like bath room amenities, mini bar amenities and even the channel selection package in guest room television. Even guests can select their bed height & length and the softness of mattress & pillow. Synchronising guest's mobile to the room is not only a means to save energy but also to minimise the touch to avoid at the present pandemic stage as one's own health is considered a far higher case. In the hospitality and tourism industry, repeat business is possible only when guests feel comfortable like their home by customising the room devices according to their preference (Ivypananda, 2019).

Safety & Security: NLP – Natural Language processing is used to activate controls on amenities or devices in the guest rooms for a touchless mode. In the present pandemic, the guests are more likely to be comfortable to have physical contact with their own travel kit than others. As a result, a new process has been followed in the modern hotels. Guest's mobile will act as a key card for touch-less access to their rooms in order to minimise contact with public areas. This mobile key card will not allow access to other floors of the building for security reasons so only the guest who is staying in the particular floor can only access that floor. Creating a secure environment for single lady travellers is another important expectation from the guest which can be satisfied by the modern techs by providing enough information about hotel premises with the help of the hotel's app, allotting rooms in a special floor where only the single ladies can access. Even single lady rooms need to have a tab which will have options like lady upon call, lady service kits, emergency security calls, hotel lift maps, hotel help desk or even a hotel emergency authority official call list, etc. Some of the branded hotels make a mandate of giving single ladies

rooms which have video doorbell facilities. For guest safety techs like motion sensors need to be fixed in the hotel premises especially in the restricted or accident prone area to avoid any future incidents and also to track the movements of guests by connecting it to a centralised security system. Panic buttons can be installed in the guest room as well as in the public areas in order to call for help in emergency situations or to report any incidents in a particular area of the hotel. This entire hotel tech was not only to create a safe & secure environment but also to create a safe feeling for guests towards the hotel which lacks these days. As per Anichiti, et al.,(2021) words, in the tourism industry safety and security of the tourists can't be compromised by unfortunate events especially when it can be prevented.

Facilities: When it comes to the guest expectations it extends to the facilities of the hotel with the varieties and ease in approach with them. By transforming the public places into digital and stylish lounges can engage guests like Technogym, access to free Wi-Fi with high surfing speed, hotel digital boards with cuisine updates, etc. Public areas can have virtual assistants which are smart, intuitive and able to suggest guests about different services and facilities which can be accessed. Tech equipped meeting zones in which the guest can easily access those meeting spaces according to their demand. Like flawless multimedia presentations setup in meeting halls with mobile and laptop synchronisation, video conferring with remote participants etc. Also as a part of all these facilities tech lounges will help the guest take time to relax and energise them. Automated infinity pools and Jacuzzi in the hotel are other attractive facilities which will make a great deal for the guest. Spa treatments which include steam bath and extra can also be individualised by the guests by accessing the hotel app through their mobile.

Departures: All the guest experience with the hotel can be peacefully concluded only when they have a flawless check-out procedure and personalised service procedure is to be carried out for a warm send off. As Baker et al. (1995) said the hotel can buy a loyal guest by providing an individual approach, comfortable environment and additional services. Hotel rooms tab or the guest mobile apps will make the procedure easy as they will show the complete breakdown of the bill and even the payment can be done without going to the reception. The bills can be sent online to the registered e-mail or if needed the bill will come to the room with a robot assistant. Departure time and date can also be fixed with the tab or guest's mobile so the bell boy or automated baggage carrying robot can arrive at the doorstep at the exact time the guest mentioned. And one of the special things is that one can track the location of the robot and the estimated waiting time to arrive at the guest room which creates a smooth and accurate checkout procedure. As vasadze et al., (2018) expressed this is the last phase to create a positive approach in the guest mind so guests can make loyal bonds and a repeat business with the hotel. All this information can be updated into the AI mainframe to track the guest record and will be used in the future visits.

RESULTS AND FINDINGS

As for the primary source we did a personal interview internally (Inside the Institute) to know the Guest's perception and expectations in the current scenario. We done some open interview questions to know more about their views & expectations towards hotel and we got some interesting answers:

Participants Details
Location: Trivandrum
Date: 10.02.2022
No. of Male: 10
No. of Female: 5
Interview Type: Open Interview
Topics: Their expectations and perceptions of the hotel during pandemic & their attractions towards the modern hotel

Table 1 - Interview participant's details

Guest Major Expectations in the Hotel	No. of agreeable people	Percentage (%)
Hygiene Measures	15	100
Technological Advancements	11	73
Eco Friendly	10	66
Security Measures	14	93
Staff Interactions	8	53
Ease And Clarity in Billing And Payments	10	66
Ease Of Communication	7	47
Value For Money	14	93
Service Speed and Quality	9	60
Hotel Attractions (Events, new techs, facilities)	9	60

Table 2 - Most Essential Expectations from Hotels)

For satisfying guest expectations there are different solutions to follow and technology is one of them. Current technology can satisfy the guest's needs and solve the current problem but it is always better for the hotels to update the technology and service procedures to its future versions if the hotel doesn't want to be left out in the competition. After this pandemic it is very hard to follow the same traditional way of service and it is not wise either. So guests expect to have easy procedures from booking till departure in the hotel. Guests are well aware of the new tech and expect the same in the hotel they are going to stay in as it saves time and majorly prevents them from getting infected. COVID has made a deep impact in our industry and it can be handled only if we update our entire hotel serving system to a post-pandemic situation. Even WHO still warning the pandemic has not completely stopped and warning for new variants of viruses in the future. So we don't have any other choice than to update the hotel procedures and adapt new safety protocols to meet guest expectations. As it is not just about our hotel it is also about our guest who trusts us. Also not to forget as some guests wanted to have a minimum interaction with staff instead of completely surrounding themselves with the robots, as one of the main reasons for guests to come to hotels is to meet new faces instead of regular people.

CONCLUSION

Guests were more actively participating in the hotel activities in the past few decades. Even though the pandemic stopped them from visiting hotels more often like before, guests were still travelling to hotels with much more carefulness. COVID can't be completely erased from the earth and hotels make the necessary moves to create a secure environment. As the haywood(2020) suggests, hotels can't go back to their normal condition like pre-COVID but they can follow the protocols, social distancing, hygiene factors and local municipal instructions. Guests were well aware of the hotel's effort to create a touch free environment which makes them more likely to visit those hotels to experience a hassle free check-in and check-out due to the techs updated in the premises. Guest perception toward the hotel became clearer and good and the hotel industry is having a very bright future ahead. Hotel's advancement and steady service improvements have impressed many people around the globe and it made them want to visit the hotel at least once in their lifetime. And technology played a major role in this decision by providing them with the right information at the right time. Also it is the key to provide a touch free environment for safe travel during the pandemic. So modifying our hotel system to new & updated versions of techs will satisfy the guest and give a safe and comfortable atmosphere. This work is not about how many staffs were replaced with the robots but about how the hotel is going to ease the guest's procedure and satisfy the guest with the help of staff and autonomous techs. Because at the end of the day guests were coming to the hotel to meet new people and experience new things in order to escape from their regular machine life.

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A FEASIBILITY STUDY ON RECENT TRENDS IN HOSPITALITY EVENTS IN CHENNAI

Sudhan. S. J

*Second Year M.Sc. in Hospitality Administration,
Institute of Hotel Management Catering Technology and Applied Nutrition, Taramani,
Chennai-600113.*

Karan. N

*Second Year M.Sc. in Hospitality Administration,
Institute of Hotel Management Catering Technology and Applied Nutrition, Taramani,
Chennai-600113.*

ABSTRACT

In this changing environment, specialisation has become the most important word to perform any activity. From Human Resources to Hotel Management, from Catering to Consulting, and from Merchandise to Real Estate.

A similar new field is emerging known as Event Management Services, and the company providing these services is known as Event Management Company (EMC). Recently, as a result of the opening up of many sectors and the rapid growth of the economy, this sector has evolved into a full-fledged industry, primarily operating in an unorganised manner.

Objectives: To determine whether or not these Event management companies are worth a shot, Event Management's Future Prospects in India, The types of events in which these companies specialise, as well as their future plans, Identifying potential clients for event management companies, To learn about people's attitudes toward Event Management Companies in India.

INTRODUCTION

RESEARCH DESIGN AND METHODOLOGY

Conclusive research will be conducted in both structured and unstructured formats. This formal descriptive survey will include a large and representative sample of both event management companies and the general public.

Sudhan & Karan

Primary Research

- **Event Management Companies**

A general unstructured questionnaire was created for all of the companies, and research was conducted. In addition, some informal personal interviews were conducted. Electronic questionnaires and other tools were also used. This aided in determining their experiences with their clients as well as their future course of action.

The general public who have not outsourced events To collect the data, a structured questionnaire was created. In addition, some informal personal interviews with corporate executives were conducted.

EMCs' current clients, which include corporations

A structured questionnaire was employed.

TIME BREAKUP

The project took about 5 weeks to complete. It all began with conceptualising the idea and progressed to the preparation of the structure. When the field survey began, everything changed. There was a shift in our perception of Event Management Companies. The completed survey was accompanied by relevant secondary information gathered side by side and from various Event Management Companies.

After the field survey, the time had come to shape the project report, and thus the analysis and interpretation phase began. Finally, after a month of hard and smart work, the project report is completed.

The following is a breakdown of the tasks in 5 weeks:

Week 1: During the first week of the project, which ran from September 27th to October 3rd, 2006,

Week 2: During the second week, from the 4th to the 10th of October, 2006, some informal interviews with employees working in EMCs were conducted based on secondary information gathered and general know-how. Taking into account their perspectives as well as the information, separate questionnaires were created for the Event Management Company and the general audience, and additional research was conducted. A pilot test of the questionnaires was conducted at the end of the week.

Week 3: During the third week, from the 11th to the 17th of October, two separate teams worked on the filed survey covering Event Management. Companies, Corporates (actual clients), and the general public. This field survey lasted the entire week, along with the collection of secondary data.

Week 4: During the fourth week, from the 18th to the 24th of October 2006, the field survey was conducted until half of the week and then the questionnaires were scrutinised for the remainder of the week. All questionnaires were thoroughly reviewed, and only valid and authentic questionnaires were considered.

Week 5: The entire fifth week, from October 25th to October 30th, was set aside for analysing and interpreting the entire project. It entailed employing a variety of comparative tools while taking into account each and every valid questionnaire. Following the analysis, interpretation was completed, and recommendations were made. Finally, the presentation of the project was emphasised.

EVENT MANAGEMENT VISION IN INDIA

"It was the liberation of the economy and its reopening back in 1992, which provided the much-needed momentum in the event management industry," he said. Brian Tellis, director and founding member of Fountainhead Promotions & Events. Event management companies first entered India when the economy began to open up i.e. in the early 90s, it was then that a large number of international people came to the country and came up with the tradition of marketing their products and products through events and programs. Soon the Indian product managers looked around and followed the same thing and the trend really took place. The advantage of this is that the way events and programs are organized is something that has always been lacking.

Today the industry is considered a critical business, with huge profits following anything between 15 and 20 percent. Projects are not long-term and returns and results are almost instantaneous.

Realising the potential of events for exposing and promoting their products More and more brands are entering the country, and many of them are working one-on-one with target audiences. Brand custodians are realising that if they have Rs 100 to promote their products, some of it must be set aside for events in addition to print and television media.

But what are the figures that are causing the industry to take notice?

Companies are increasingly focusing on events because the returns are more predictable than in other areas. Nothing like events to give a boost and not weigh down the purse in a competitive environment. Another factor contributing to the rise in events and the money they generate is live entertainment. Television channels are looking for programmes based on live events, such as award shows, pageants, rock shows, musical shows based on Bollywood churn-outs, and so on, to boost ratings and increase as spends.

SHOW TIME

Showtime is a live brand communications agency with a lot of energy. It was first released eight years ago. Since then, it has blazed a trail of compelling engaging experiences that have helped to drive home brand remember.

Showtime has always pushed the envelope to predict the next frontier of entertaining experiences since its debut. They have consistently raised the standard for the Indian events industry in their pursuit of excellence. They have forecast and conquered new vistas, from being the pioneers in laser technology to stepping into the field of television technology. Showtime helps leading organisations establish brands by exciting their employee, corporate, consumer, and public audiences as a leading experiential marketing agency. Showtime builds and integrates live settings and other experiences that hit the correct notes in order to leave a lasting impression on the proper target audience and prompt relevant brand recall.

Agility: Passion, and Respect characterise Showtime's culture. Showtime believes that motivating people—their coworkers, clients, and audiences—will always result in results.

Showtime has never been a company that has stood still. Showtime's ability to shift rapidly and adjust elegantly ensures its value to clients and its long-term leadership position.

Passion: Since its inception, being successful has necessitated a distinct passion for one's vocation. Whether it's a 56-city road tour or a big concert, its people find delight and fulfilment in what they do.

Respect: In Showtime's unique collaborative atmosphere, respect is a core element. It values its customers, viewers, brands, and the faith they have in the organisation.

PROMOTIONS

Encompass has an army at its disposal, and the medium becomes the message. An army that is street smart and sophisticated, that knows the length and width of the country and can do promotions in many cities and locations for its clients.

A revenue stream that has doubled year over year and gained clients who have turned into life mates.

Encompass has worked with the following clients on promotions:

Nokia, Discovery, Touchtel, Hungama, and the Hindustan Times

EVENTS

The Event's spirit lies beyond the realms of light, sound, stage, and performers. It has long been an Encompass practise to breathe new life into this soul. Every event has its own own personality, which can only be exposed via meticulous execution. At Encompass, we believe in imbuing each event with its own distinct mantle of perfection, ensuring that it stands out in every way.

Encompass has staged some of the country's most renowned events, and its roster of prestigious clientele is extensive. The following are a few of them:

- Air Sahara
- Business Today
- Lufthansa
- Reckitt Benckiser
- Asian paint
- JK Tyre

EXHIBITIONS & SPECIAL EVENTS

We've created a name for ourselves in the realm of special events as well, with some truly amazing undertakings. Encompass has also proven its experience in the field of exhibitions over the years.

The following companies have used Encompass to host events and exhibitions:

- Minda
- Zee Alpha Awards
- Canon
- Toyota Innova
- Zee Cinema
- Indian Marketing Awards
- Nokia
- Opel

CONFERENCES & CONVENTIONS

We've had a long relationship with the corporate sector, not just as an entertainment partner, but also as a thought partner. Whether it's a product launch or a sales conference, all of our corporate events are intended to complement the brand and the company.

CONTENT FOR RADIO AND MOBILE DEVICES

The content section, a new Encompass project, intends to provide interesting TV, radio, and mobile voice portal content.

Prioritizing fresh ideas and excellence over all else. Our motto is to keep the 'content' in context at all times.

Encompass has hosted events for the following brands and celebrities on radio and television:

- Toyota innova
- hungama tv
- sonunigam
- temptation 2004
- voice portal
- radio

EVENT MANAGEMENT AS A DISCIPLINE AND VARIOUS EVENTS MANAGEMENT INSTITUTES

In recent years, event management has become increasingly professional. This has been fueled by a rise in the number and complexity of events held in India and overseas, as well as a recognition by businesses that events are effective communication tools.

The Education business has seen an aftereffect of the Event Management industry's meteoric rise in recent years. Event Management institutes are sprouting up all over, and the courses they offer are quickly gaining traction among the younger population.

Indian Institute of Event Management, Amity Institute of Event Management, Event Management Development Institute, IES Management College

The following are some of the most well-known institutions: - The National Institute of Event Management is a non-profit organisation dedicated to event planning and management

AMITY INSTITUTE OF EVENT MANAGEMENT

Amity Institute of Event Management offers Event management Programmes in three tiers i.e. Post Graduate, Diploma and Certificate courses. The Programs are designed for beginners as well as experienced event managers.

The program ensures that you are prepared for the changes occurring within this complex and competitive industry.

The programme provides a comprehensive education in the essentials of event management. In addition to the core courses, the program offers a variety of electives, allowing you to specialize in specific areas of interest.

AIEM'S AIM

Amity Institute of Event Management's mission is to acquire knowledge, awareness, and professional management skills related to the organisation, strategic planning, marketing, and execution of many types of public and corporate events in India and beyond.

The overall goal of the event management programme is to build knowledge, understanding, and professional management abilities that are relevant to the organisation. Graduates of this programme will improve their professional competence, personal development, and critical thinking capacity.

COURSES

The courses will give students with a thorough understanding of event management requirements as well as an awareness of a number of management difficulties spanning the arts, business, entertainment sector, sports, and tourism industries.

The event management programme includes key disciplines such as event development, event management, venue management, event marketing, legislation, and accounting, as well as subjects that provide a theoretical grasp of the environment in which event managers work.

Elective subjects give participants in this programme the option to study areas of particular interest.

• Event Concepts and Context • Event Management • Event Creation Workshop • Event Marketing • Graduate Certificate Course in Event Management

NATIONAL INSTITUTE OF EVENT MANAGEMENT

There was no institutionalised schooling to teach Event Management, according to research. Event management firms discovered that they needed to devote a significant amount of time to training staff, and that they would lose a perfectly trained employee to a rival for better bait. Companies discovered that their leaders lacked the necessary skills to handle events, resulting in an increasing demand for institutionalised event management training. Why not Event Management 2 if it could be done in Advertising and Marketing, Communications and Public Relations? But it wasn't easy since Event Management comprises everything; it includes organisational skills, technical and production knowledge, and public relations. R. Marketing, Advertising, Catering Logistics, Decor, Glamour Industry, Human Relations, Law and Licenses, Risk Management, Budgeting, research into related fields such as television and other media, and the list goes on and on. So it took Dr. Hoshi Bhiwandiwalla and his team three years of hard research to establish a course on Event Management.

The course was started with an aim to -

1. 1. Develop a workforce that is well-trained and qualified for the event and entertainment industries.
2. 2. Create a new event management, event coordination, and consulting class.
3. 3. To elevate India's position in the events industry.
4. 4. To put our children's abilities to good use in one of the most rapidly rising industries (it grows at 300 percent)

This resulted in the establishment of the National Institute of Event Management (NIEM), an autonomous college dedicated to teaching event management, which had widespread support from the media (print and satellite), the entertainment industry, and students.

Since June 2005, the National Institute of Event Management (NIEM) has been in existence for six years. NIEM has come a long way in five short years, aside from being the first institute in Asia to offer Event Management as a programme. The National Institute of Event Management was established in April 2000, following a four-year study by Dr. Hoshi Bhiwandiwalla, a recipient of the Rajiv Gandhi Rashtriya Ekta Award for Excellence in Education (a national honour for introducing Event Management as a study in India), and a slew of other state and national researchers.

The Institute's major credentials are that it has a credible brand name in event and educational circles all over the world, and it has solid foundations founded on honest research and interaction with the Event business.

Every year, the institute takes its students to over 700 events for training, including the glamorous Femina, Filmfare, Zee Cine Awards, Gladrags, Screen, Ceat Cricket Rating, Ad Asia, Bombay Times Bash, Femina Bridal Show, and so on. If that's not enough, NIEM hosts seven internal events: a seminar, a sports meet, a World Aids Day function, a roaring party, Annual Day, Josh — an intercity Youth Extravaganza, and the Event Manager of the Year Award, which is co-sponsored by the respected Education Times.

It has affiliations with and memberships in prestigious organisations such as the CII, EMAT, FICCI, and the Ad Club, and is the only one in the country to be recognised by the International Special Events Society (ISES) and the International Festival and Events Association (IFEA), as well as the only one to teach international events. It is India's sole institute to be listed on a foreign website for international events rankings.

Event Management Development Institute

The programme at EMDI includes every facet of below-the-line marketing. The three courses on offer: Post Graduate Diploma in Event Management and Public Relations, Post Graduate Diploma in Event Management, and Diploma in Event Management, are bolstering the portfolios of young graduates and undergraduates.

More than 70% of the faculty at EDIM comes from the industry; they are practitioners, not thinkers, of below-the-line marketing. The majority of classroom lectures are based on real-life examples and case studies, allowing students to virtually "be" at the events and promotions. EMDI places a strong emphasis on giving students with "on-the-ground" experience. This enables classroom sessions to be transformed into hands-on training. Most importantly, it allows business to interact with students and observe what they have learned first-hand.

The Event Management Association of India (EMAI) is a member of the Public Relations Council of India (PRCI) (EMAI).

Students from EMDI are employed in some of India's most famous firms

. Some examples of the above are:

- ♦ 360 Degrees
- ♦ Midas Events
- ♦ Brilliant Entertainment
- ♦ Citibank
- ♦ Business India Coca Cola

RECENT TRENDS IN EVENT MANAGEMENT AFTER COVID PANDEMIC

Many people expect various efforts to be implemented to help the meetings industry recover as quickly as possible, such as providing face masks or establishing contactless sanitising stations. However, it is more important to recognise which patterns exist prior to COVID-19 that will be accelerated by current events in order to develop long-term strategies for hotel meeting facilities and conference centres. Hotels can only properly prepare themselves for COVID-19 recovery

and the potential threats beyond by taking a step back and determining what was essential to consumers prior to the epidemic. We'll go through three major themes that will become increasingly important when the meetings and events industry recovers, and that are critical for maintaining a long-term competitive advantage.

New patterns & Smaller meetings and events

To build reliable estimates, asset managers and operators must first understand what to expect once meetings and activities resume. According to data from Knowland, a provider of meeting industry analytics, the rebound will most likely follow the pattern seen after previous recessions: smaller groups with fewer budgets will book locally. This pattern is all the more likely when you consider the recession's travel restrictions and hygiene-related concerns.

1. Safety and Security

For event planners and spectators alike, the safety of both the host country and the site has long been a major worry. Terrorist attacks have increased in frequency in the twenty-first century, forcing venues to implement robust security and crisis communication procedures. Then came the digital age, which brought with it a slew of new privacy and data security concerns, requiring venues to adapt and implement new legislation as well as adhere to stringent data processes. Now, the term "safety" is being redefined to include steps intended to prevent the transmission of viruses and diseases. With new safety protocols, venues will need to be as flexible as they are strict.

2. Hybrid Technology

Due to rising globalisation, decreased finances, busy attendee lifestyles, and technical improvements mixed with improved internet speeds, hybrid events (where both real and virtual elements are present) were already on the rise before COVID-19. The efficient use of virtual events has been demonstrated by the swift transfer of numerous Q2 events in the wake of the epidemic.

3. Rethinking F&B Service

The future of the meeting and event sector cannot be considered without taking into account the food and beverage catering aspect. F&B service at events creates several sanitary hazards that most bookers and attendees will be unwilling to bear during recuperation, from buffets to busy coffee machines. Still, from a risk-management standpoint, it's critical to discover solutions to this problem that the hotel or convention centre can incorporate into its SOPs in the long run to better prepare for any future black swan situations.

Gist on recent trends after Covid-19 pandemic

While the meetings and events sector has a plethora of ideas and potential solutions, few are looking beyond the next year or two. Once their initial anxieties about the present pandemic have passed, customers will not quickly forget requirements and trends that were well on their way to

becoming permanent. While other trends, such as isolated, outdoor venues for wellness-focused events, are better positioned to deal with the pandemic's effects than city-center locales, most hotels, particularly convention centres, do not have this option. Hotels and conference centres can position themselves for long-term recovery by reflecting and reacting strategically.

FINDINGS AND CONCLUSION

The following conclusions can be drawn from this study after evaluating each and every question of the Event Management Company and through personal informal discussions with various employees working in the Event Management Companies surveyed:

1. In India, the event management business is in the Introduction phase of its industrial Life Cycle, which means it still has a lot of work to do to develop and flourish.
2. In India, the event management industry as a whole has been on the rise for the past 5 years. This indicates that the industry's boom phase has only just begun.
3. According to the information available, the majority of EMCs have been in business for less than 12 years and have established themselves as major players.
4. Currently, EMCs are primarily focused on Seminars/Conferences, Road Shows, Product Launches, and Exhibitions/Expos. They have yet to specialise in the wedding and domestic market. Some, however, specialise in Page 3 P, Award Ceremonies – a unique type of event.
5. One of the study's most notable findings was that the majority of EMCs target Corporates as potential clients, followed by Page 3 Parties / Personalities. Households (cultural functions and weddings) are ranked third on the list, and they have the potential to become these enterprises' primary source of revenue in India. Tax payment is one of the reasons for not pursuing households more aggressively, as is the low scale of events.
6. Despite the fact that the industry is still in its infancy, practically all event management companies believe that India's event management industry has a bright future ahead of it. This also means that the entertainment industry will contribute more to the economy. This means that, in the future, Event Management Companies will face increased competition and the sector will become more competitive on a large scale.

QUESTIONNAIRE

1. Since when do you think Event Management Industry in India started facing an upcoming trend? (Please tick the right option)

From last year

From last 2-3 years

From last 5 years

From last 10 year

This question will help to gauge the mindset of the EMC employee in respect to his organization as well when the Event Management Industry as a whole is facing an upcoming trend in the Indian context. Suitable options were given in terms of years.

The following observations were noted:

Year	From last Year	From the last 2-3 years	From last 5 Years	From last 10 Years
Response	2	8	13	2
Percentage	8%	32%	52%	8%

From the foregoing comments, it can be deduced that big business activity have only begun in the previous five years, according to EMC employees. Only in India, 52 percent of respondents say that the event management industry has been on the rise for the past five years.

However, the answer rate to this question was extremely varied. Instead of a 5-year prospective trend, 32% of respondents say that the Event Management Industry in India has only been on the rise for the previous 2-3 years.

2. Since when has your company been present in the industry? (Please write the year)

This is a subjective question for the respondent as it requires the respondent to fill in the details in the provided space which does not have any options to help the respondents. This question was used as a filler question to make him shift from general perspective to specific points further. To start with, this question asks the respondents to give detail of their company itself to make the respondent at ease.

The following is the response of the respondents: Taking only major players:

- Wizcraft started its business in the year - 1988
- Showtime Events - 1998
- Percept V Mark - 1994
- 360 Degrees - 2003
- Encompass Events - 1998
- Candid Marketing - 1995

Taking only the above significant players into account, it can be seen that, with the exception of Wiz Craft International, the most of them have been in business for less than 12 years.

Most of these companies have grown into mammoths capable of managing billions of rupees in commerce and a wide range of events for both Indian corporations and individuals.

3. What all properties your company owns right now?

This question helps in the survey to get information on how big is the company and what is all projects it has in its kitty forever. Properties of a company here mean that this EMC has the sole right to organize a particular event whenever and wherever it happens. Obtaining properties is one of the most difficult tasks in Event Management Industry. Owning a property also means that the company will be having minimum that much business in a particular year if that property (event) is an annual feature.

Following are the observations:

COMPANY	PROPERTIES
Wizcraft	IIFA Awards, F Awards
360 Degrees	Film fare Awards, Brand Equity
Sunstar Events	Bikex India
Encompass	Indian Marketing Awards
Percept D Mark	Miss World

There are plenty others...

The table above illustrates that the market's top players already own some or all of the properties listed above, which has resulted in a significant increase in business for these EMCs. EMCs that do not have qualities are functional, but they seek to have one. To get an advantage and exhibit their best talent and resources application, several EMCs designate special teams to manage these qualities in their work group.

4. What future prospects Event management companies hold in India?

Bright

Can't Say

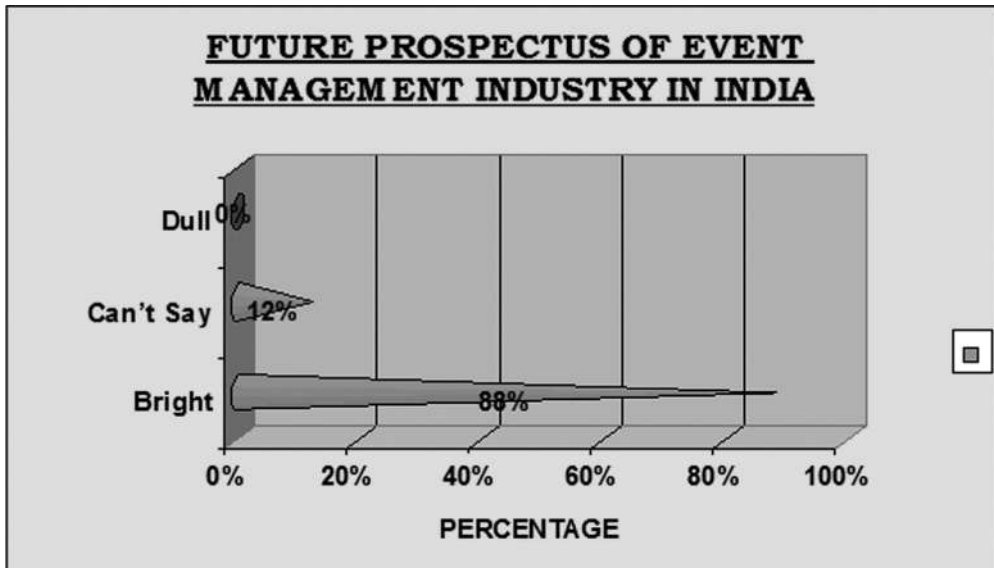
Dull

This question reveals the EMC's attitude toward the prospects they are pursuing for the future course of action and prospects of the •Event Management Industry in India. This question implicitly double-checks the first one, which is on the Industry Life Cycle. This question was picked to close the questionnaire since it is more generic in character, and after particular points, it can put the responder at rest again because no specific information is required.

The following are the responses received:

Prospectus	Response	Percentage
Bright	22	88%
Can't Say	3	12%
Dull	0	0%

According to the following table, the majority of respondents from the Event Management Company believe that the Event Management Industry's future prospects are excellent. This indicates that they expect increased business, which will result in increased profit and industry expansion.



The 3-D Clustered Bar Chart helps you visualise the above mentioned truth. The Event Management Industry in India has a bright future, according to 88 percent of respondents, while 12 percent are unable to comment on the subject and are doubtful of the future course of action

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NEW TRENDS IN INTERIOR DESIGNING {CHANGE THE THEME ACCORDING TO YOUR MOOD}

Akash Halder

*First Year M.Sc. in Hospitality Administration,
Institute of Hotel Management Catering Technology,
C.I.T Campus, Taramani, Chennai – 600113.*

N. Sai Manogna

*First Year M.Sc. in Hospitality Administration,
Institute Of Hotel Management Catering Technology,
C.I.T Campus, Taramani, Chennai – 600113.*

ABSTRACT

Innovation in interior designing of a hotel is in high demand, where the present technology is skilled labour are very expensive or hard to find. And still to do any kind of interior decoration whether it is landscaping or painting, its very time consuming and expensive at the same time. But now through innovation we have found a technique which will reduce the cost, energy consumption and time and will create a new category of hotels in the upcoming era,. Where this innovation will help in creating a different type of hotel which will be profitable for the organisation and preferred by the guest. This introduces a new and interesting trend in designing.

HYPOTHESIS

There are different hotels and restaurants which uses the conventional method of painting in the walls but now our design which is fast efficient and cost effective that can change the design of a particular wall of a room in an efficient manner.

OBJECTIVE

- Transformation of wall art.
- Easy interior decoration, with different designs related to different themes, without any limitations like time, cost, etc
- Comparison between the conventional techniques and methods used to design a wall to the innovative method and equipment developed by us.
- Introducing new trendy arts in the theme-based designing in hotel industry.

Akash Halder & Sai Manogna

REVIEW OF LITERATURE

Previously there are many methods, ideas and practices followed to improve a hotel's interior decoration. Some of them include themed rooms, decorated rooms, specially decorated rooms and many more. All these are adopted to drag a new change in the segment of interior decorations in order to update the beauty, popularity and profit. Many of the decorators till now concentrated on the amenities to be used and the complicated and costly things that should be updated for a change in the interior. But the simple thought of how an easy and a minute space of idea can drag us into a huge trend change in the interior decoration can be explained in a deep and understandable manner.

Commonly the interior decoration part of the hotels or any particular space is concentrated on flooring, the wood work, which is stated as the furniture, the walls, the colours used for paintings, curtains, the different styles of lights, and many appliances. Now when it comes to the changing of the interior part, is a very terrific decision to be taken which involves a very huge amount of investment, time, and many more. It is not related to one particular pattern or thing but a whole project to be taken up with lots of risks. Changing of interior after every time one get bored is literally not possible for any property where there starts a thought of raising a new method of changing the interior design without any budgetary risk and time limit. Now talking about one of the main parts of interior designing, the walls, every time we decide to change the theme, practically it could not be possible to repaint the costly paints, give them a new wall look and finishing, the materials used in this to be separately indented, a specific labour is needed to do the work so, a particular time period should be blocked for the sales of particular guestrooms, this at times pauses the revenue too. Keeping all these practical situations in mind, we had stared developing an idea that can satisfy all the loss formats of this designing which can be more and more budget friendly, very less time consuming, and can say no labour or man power needed specifically.

Day by day there are many innovations taking birth in the world of designing, one such idea is presented by us taking the wall and painting the main idea and with a motive of low cost, time, manpower as much as we can. Walls are considered as one of the main parts of interior decoration, which gives almost more than a have feeling of the theme, the colour we select to paint, the design we include, the pattern we put, the shades we try, all these matters for the final product. Including with these the paint we use, the quality of materials we include, the professionals we keep to make the work, the perfections that we specify and concentrate all these also equally matters for a final design of the wall.

Walls are the areas which will get grime, and sometimes the colour or the shade may get dull, or look old. And sometimes seeing the wall same for many months or more will make us bored or used to it and will lose the freshness and the wow feeling of the beauty even if it is made out of the best. As the change is needed at some intervals so as the keep the freshness and newness in the designing sector, to give an eye appealing look the idea is generated with the main motive of giving the design or pattern a uniqueness which can be changed according to the mood, or the theme at desired time interval.

INTRODUCTION

Each design we give form is a practical experiment that we try to invent or present a new and unique beauty of the art. Many artists might be finding it difficult to present their design because, much of the design process is intuitive, relying on implied knowledge but not the logical thinking. Now a days customers or the guests show more interest in something novel, which is not seen before and they anticipate many new things from the property when they select one. At the same time the staff of the property are dragged into the responsibility of satisfying your guest in the stay, and make them happy so that we can expect a revisit, all these include in the business statistics. One such area which easily attract a human's eye is the decoration, interior and the beauty of a place. The first eye of any person goes on hoe beautiful and eye appealing it looks.

Concentrating on the hotel guestrooms, this is the area in the hotel where the guest spends maximum of his time. And it is specifically given to a specific guest. The choices of the guest and his impression and attraction towards the property is more needed. Any guest expects a very new ideas, and they easily start the comparison with other properties. So, we have to give them such a experience that they would have ever seen till now. Adding to this motive, we should also consider the budgetary needs, time needs, labour needs in doing so. Keeping all these points in mind, one such idea generated is the CUSTOMISED THEME ACCORDING TO THE MOOD.

For one to change the theme of any place, many things need to be invested. Generally, the change of the theme includes the change of lights, paints, walls, patterns, furniture, highlighted colours everywhere, the extra amenities or the things we place and many more according top the ideas and innovations we do in the decoration part. Now separately focusing on one of the most important parts of interior decoration, the part which covers most of the space in an area, which is easily eye catchy, is 'the wall' of the particular area. Walls are the places which cover most of the space in other words they give us more space to give a beautiful output of so-called Theme. Even how beautiful we design a wall, no matter what paint we used, what quality of paint used, what pattern is used, what colours are includes, what shades are shining, what cost is invested, how professional had made it, seeing the same wall with the same design for many days will make us feel very casual about it. As the common human tendency, people get used to see it and they will lose the newfangledness of the wall. Apart from this, as the time passes, the wall cast a shadow over, loose the original shade, the brightnessand muck settled in the most used area of the wall. So, it is mandatory to change the look of the wall at times. Now calculating the general needs of the equipment included in an idea of painting or changing the design of the wall. This includes the main base of all the works, the cost, each and every individual property have different budgetary limits and boundaries for all kind of works. The cost of the paints we use, the painting tools we need for that, the labour cost to do so, the time we require with in which we can't generate the revenue of the particular room. All these problems are thought and tried to put the solution which will not get these issues. Next important aspect to be considered is, the time, for any design to be made on the wall with each and every detailing and finishing, it is a very time-consuming process, as the paint require particular amount of time to set dry and give its original look.

And next considered point is the manpower, the labour, to the required work of painting the wall, every time we need to change the theme or the colour of the wall, one has to include an artist or a professional person to do the work. Where again expenditure takes place. Depending on an artist to do the work or change the design is a place where we completely lag in. Keeping all these points as the main issue, the main idea of our research is generated to introduce the new innovation of changing the design of the wall without any help of an artist, labour, very less time consumption and in a very budget friendly manner. The idea developed is completely relayed on the wall and the design we make on the wall according to the specific theme and decoration we do so as to give a complete and easy theme feeling to the area.

METHODOLOGY

Gathering the ideas and focusing on the wall, to customize the design on the wall according to the theme or design that is going to be produced in the area is the main idea and concept of this research paper. Hence, the method of doing so is as goes,

Whenever there is an idea to change the theme related to any occasions, fest, or any personal request, there will be a process followed to change the art on the wall in as simplest way as we can. This concept may lead to a question of easily buying the 3D or any kind of wall painting machines that are already proposed and available in the market, on explanation to this they are very expensive to buy for a property, but the machine we do is a short investment, and will also consume less cost in its maintenance. We now do not concentrate on the 3D paintings or picture paintings, the form of art we use is a very unique and very popular now a days in the arts, which is specified as DOODLE ART which is a drawing, also can be explained as simple drawings that can have concentrate representational meaning or may just be composed of random and abstract lines, generally these are drawn without more colours (generally can be of made by one main colour and a second or third supporting or highlighting colour), and also generally without ever lifting the drawing device from the paper, in which it is usually called “scribble”. Now this art is modified and updated to many different forms which results in a more and clear detailed art. The same concept is applied to the walls which can be calculated as a huge paper and the pen as a machine that holds the marker or the ink device that draw constantly till the design completes without lifting or stopping once started. This do also include the arts like mandalas, sketches, gesture drawings and many more which will be included in the machine as a programming option, which we can opt before setting the machine to start the art on the wall.

How it works

The machine is designed and programmed in such a manner, where it will be having the options of selecting the design to be drawn on the surface of the wall, with the specific fixed ink, or the marker set at the front drawing side of the machine, with the pressure adjusting feature of holding the marker, sketch or pen with particular pascal of pressure on it. All these some detailing in adjusting the process of the device is very important to give a good detailed result of art. Just as the wall painting machine, it will be having the movable frames which are adjusting according to the art design and movement need to draw it. And it will be including the feature of selecting the design or the art that is needed to be drawn according to the themes selected. As we need

more and more new designs, we can add them in the programme without any limited options. For example, if the theme is the festival Holi, then the art related to Holi, with colours, and people playing with them, drums in middle, adding all these as particular pictures can be created and given as a command to the device, then it will be processed and the same will be drawn on the wall in such a way that the whole wall is filled with the theme of Holi. The markers or the inks used in the device will be erasable (not permanent) which can be easily erased with a duster and (an alcohol-based solution) cleaning agent. The wall will be painted with a washable paint which are easily available now a days, before all these designing starts, i.e., when the painting of the area is done.



And the next day if in the same room wall, a new guest is checking in and he wanted a fully birthday theme or any other in the room, then with a very short interval, may be in between the room cleaning or other, the wall will be wiped regularly with a staff assigned for this and then the person appointed for the using of the machine will programme and set the machine for the art after the wall dries, which hardly takes 5-10 minutes. Then the art will be done automatically, where the rest decorations can be done by the staff normally as they do, also some themed coloured lights, etc can also be added according to the budget and the availability of the amenities needed to do so. But the wall will be covering the maximum part of the theme. This process we follow does not need any kind of paints, brushes, etc., it only need the device that is made with the programmes as we need.

This process does not have any limit of number of times the art can be changed. It can be followed and managed for many days, and many themes. The theme may be requested by the guest or related to any kind of the fest or festival theme of the property. This utmost will include the cost of markers/ ink to be used for a particular sketch, apart from the machine cost. The other cleaning costs are normally included, which comprise the cleaning agents, water, sponge or the dusters used. In this way we can propose this idea which needs a very least budget, time and labour.

RESULT

The transformation of the wall arts, to a part of easy interior decoration, with different designs related to different themes, without any limitations like time, cost, etc., can definitely bring a vast changing trend in the interior designing era, for the reason that the demand for something new is always there in the market, which attract the people to see and experience a new for arts. Inventing a new form of automatic art drawing machine in a huge space with personal design selecting options can give a very vast change in the sector as the guests tend to check in the rooms which are specially designed por themed for them. This cannot only be used in the hotel guestrooms but also in the areas which a theme is needed, may also be in the lobbies, restaurants etc.

Adding on to this wall art, one can also add many decorative ideas related to the theme which give a complete feel and appeal of the theme. These could be lights (of different colours and types as chandelier etc), curtains of related colours, and may be some more add-ons accordingly. Example, To the example of Holi design we can add on the things like, keeping some colours, in the guestroom, on a table set near the designed wall, with a note of a special wishes of the festival. And the day before the festival, we can design the wall with a small story kind of drawing which include, the story of Holi, like “Holika Dahan” a mythological story which is generally known in India. With this the guest or anyone who look at this may feel a unique attention of the very special designs and along with this they get to know something too. And immediately the next day, the wall design is changed to the Holi celebration’s theme, with colours, joy and more. This is how the idea works, and the further study may be taken ahead for the implementation of the idea which may give a drastic positive result. The machine or the device we use can be made taking the idea as the base and the technology we have. Once it is made, the rest will be handled without a pause.

With this we can state that - “Innovation Starts with the Thought of a Novel Idea”.

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The picture used as the example taken from

<https://www.vectorstock.com/royalty-free-vector/happy-holi-doodle-background-for-festival-vector-19859785>

SMART ROOM CUSTOMIZATION: USING IOT IN HOTELS MANAGEMENT

Anshu

*Assistant Professor,
Department of Computer Science,
Patna Women's College.*

Dr. Aprajita Krishna

*Head, Department of Physics,
Patna Women's College.*

ABSTRACT

In today's world where we consider time as money and want to exclude each and every seconds of our life, we require some devices or helping hands in order to save time. The aim of the paper is to make the hotels management automatic by using IOT.

IOT aptitudes to make hotels management services smarter, more successful and more resourceful. It offers opportunities for the hospitality industry to better serve customers, increase the efficiency of operations and provide innumerable services.

IOT is becoming a popular technology having varied applications in various fields. It can play a vital role in the field of hotels management in the context of improving the guest services and experiences.

The main aim of research paper is to explore the potential of IOT technology in hotels management and provide the guest with greater control over the environment and use all the smart facilities provided by IOT as well as to propose the usage of advanced and efficient technologies used globally.

Keywords: IOT, Hotels Management, sensor devices, BSHMA, Smart devices.

INTRODUCTION

IoT that is **Internet of Things** refers to a worldwide network of interconnected objects having unique identity and communicating using standard protocols.

Several hotels have already incorporated the Internet of Things (IoT) in their operations, owing to the hotel-centric advantages and benefits offered by the technology. These advantages can range from offering an advanced customer experience to saving on energy expenses.

Also, in terms of customer experience, IoT technology enables hotel owners to improve hotel conditions and offer a comfortable and customized experience to their guests while also cutting on their waiting times.

Objective of the Study

To explore the use of IoT technology in the field of hotel management to enhance operational efficiency.

Execution of IoT induced solutions allows owners to improve their services for area such as concierge, front desk, or room services.

Hotels induced with IoT technology will be able to have loyal customers, as customer service is one aspect which is always given priority when it comes to service industry.

HYPOTHESIS

IOT isn't an entirely new concept for the hospitality industry. Many owners have already incorporated IOT into their business.

Hotel Industry is well aware about how application of IOT can allow them to top into high-tech functionality and luxury that was not possible in the past.

Some of the Smart Hotels that present their innovative amenities and the modern technological environment they use in their premises are

The Arad Hotel Amsterdam

Marriot Hotel Irvine California

Park Inn in India.

BHMA (Bihar Hotel Management Authority) can make use of IOT technology for providing greater convenience and comfort to their guests. Hotel owners and operators benefits from increase efficiency, cost savings and guest satisfactions.

INTERNET OF THINGS

The Internet of Things (IOT) is the network of physical devices, vehicles, home appliances and other items embedded with electronics, software, sensors, actuators and connectivity which enables those things to connect, collect and exchange data, creating opportunities for more direct integration of physical world into computer based systems resulting in efficiency improvements, economic benefits and reduce human exertions.

IOT includes a range of other devices which are generally not considered as internet enabled devices, which, means even everyday devices can be enabled with the internet to work together for exchanging information for interaction and communication .These devices can be remotely monitored and controlled.

IOT devices can be divided into several categories based on the kind of application such as consumer applications, commercial applications and industrial applications. Smart homes or automated homes, Cochlear implants worn by hearing impaired users are some consumer applications.

Commercial applications include use of this technology in medical and healthcare fields such as for enabling remote health monitoring and emergency notification systems.

These health and emergency notification systems. These health monitoring devices can range from blood pressure and heart rate monitors to advance devices which can monitor specialised implants. Fit bit electronic wrist bands and advance hearing aids also come under this range.

IOT can also be employed in the transportation Systems. It can be used in vehicles for inter or intra vehicular communications. It can also be employed in smart parking and electronic toll collection systems.

Industrial application of IOT include integration of various manufacturing devices which can be equipped with sensing, identification, processing, communication, actuation and networking capabilities. Digital control systems can also automatic process controls.

HOTELS MANAGEMENT

Hotel management is an area of the hospitality industry that involves supervising the operations of a hotel location. When working as a hotel manager, you may manage the operations of a motel, resort or another similar establishment that provides lodging and other services for guests.

The size and complexity of a hotel management varies considerably depending upon the size, features, and function of the hotels. A small hotel operation normally consist of a small management team consisting of a Hotel Manager and a few key department supervisors who directly handle day-to-day operations.

On the other hand, a large full-service hotel or resort complex cannot work properly with few key department supervisors so it become necessary for large hotel to work efficiently by using IoT which provide integrated services such as devices driven through applications and automated devices such as automated electric blinds, telephones etc..

Sensors can be integrated into the properties of hospitality businesses, such as enterprises for bed and breakfast, food and beverage, hotels, travel and tourism, offering additional advantages to their managements.

IoT for different types of enhancements in Smart Room Customization

IoT technology provides a wide range of options to make hotel room lodging more convenient and comfortable for guests. With the set and connection of appropriate IoT devices customers can avail smart facilities such as:

- **Lighting** – This technology helps the guests to switch between colors of light, shifting colors and modifying hue and light temperature of the room, hence contributing in the increase of the luxury of the services.

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- **Room temperature:** This technology ensures the comfortability of the guests in their rooms by inducing smart thermostats while avoiding the inconvenience of out of date window A/C units. It permits them to set the temperature of their rooms according to their choice.
- **Controlling water temperature:** With IoT technology, valves and sensors are induced, which helps the guests to control and maintain a satisfying temperature of the water, hence providing them easy services.
- **Adjusting windows:** With the help of IoT technology, automated window treatments can be induced the customer service, which will allow the guests to have complete control over drapes of their hotel room windows by merely pressing a button or through use of applications. It helps in the sunlight adjustments in the room, providing a whole new level of luxury, thereby a positive feedback.
- **Smart TVs:** In today's times, smart TVs are an essential luxury in the hotel rooms. It is something that customers look forward to, therefore, enhancement in its service is highly important.
- **Digitized Food Menus:** With the help of this technology, guests will be able to access the food menu on a smart TV or a phone application. Moreover, these menus allow the preferences of the guest to be recorded for any future stays.

Scope in BIHAR

The hospitality industry generates billions of moneys of revenue annually, with hotels alone accounting for more than half a *trillion* moneys. A hotel management in system, or HMS, helps ensure that all operations run smoothly to provide guests with the best possible experience.

- The Rajgir Wildlife Safari has been developed by the Ministry of Environment ,Forest and Climate Change and it has attracted a maximum 1,000 daily visitor capacity. For this special arrangement is needed so IoT would be great help in managing this visitors.

OBJECTIVES

The aims and objects of the hotels management are as follows:-

- a) to establish and carry on the administration and management of the Institute of Hotel Management, Bihar.
- b) to impart instruction and training in modern and scientific techniques of management of modern hotels, resorts, hostels and institutions.
- c) to build, construct and maintain quarters and hostels and alter, extend, improve, repair, or modify the same including any existing building and to provide and equip the same with light, water, drainage, furniture, fittings, instruments, apparatus and appliances and other things for the use to which such buildings are to be put up or held;

MISSION OF HOTELS MANAGEMENT USING IOT

- To provide assistance in management system as a thinking body.
- Many new IOT trends in hospitality will be emerging in the coming years to further improve technology in the hospitality industry.
- It will practicalities the government in various ways ;
- Increase the revenue fund for the government
- Make Bihar as a smart city
- Open the new paradigm for the tourism

Methodology used Area of Study

A Survey was conducted among the employees of Bihar State Hotel Management Authority and some common people. Some data were taken from different research papers ,videos of hotel management that have available on social sites, website related to the uses of IOT in Smart room customization in HOTEL management, etc.

IOT in HOTEL Management

Sample size and sampling method:

Data was collected through Questionnaires and personal interviews from employees in the BSHMA. People reviews were also considered in the survey.

Tools and Techniques for data collection

Questionnaires, People reviews ,collecting reports from websites, You tube, etc.

Method of Data Analysis

Data was compiled using MS Word

Future Scope

Yes, it is true that at present, most of the hotels have not incorporated IoT technology in their business, but it is progressing rapidly. In the future it has enormous scope, as through its implementation Hotel management will reach new heights. It will also enhance tourism, which will benefit the state financially. The upcoming time is all about dealing with things efficiently and IoT technology will contribute in it by proving easy services.

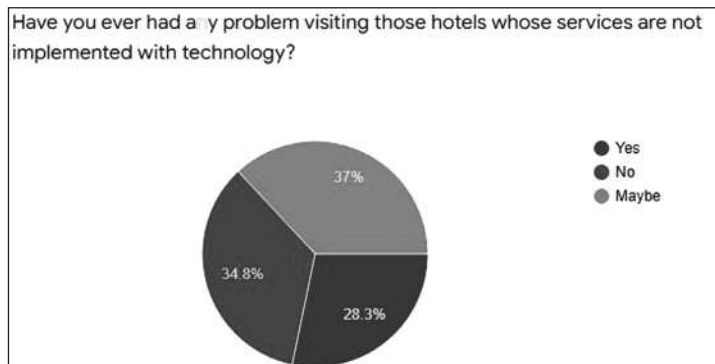
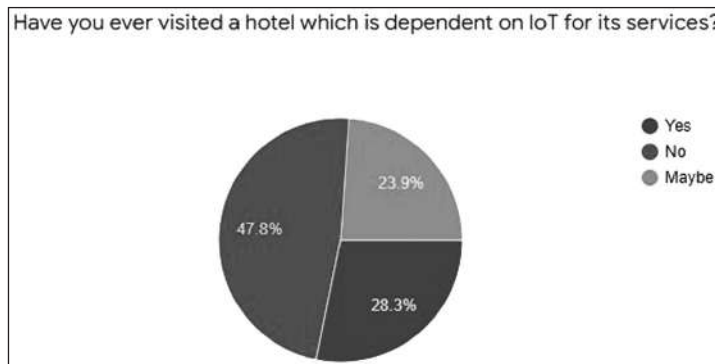
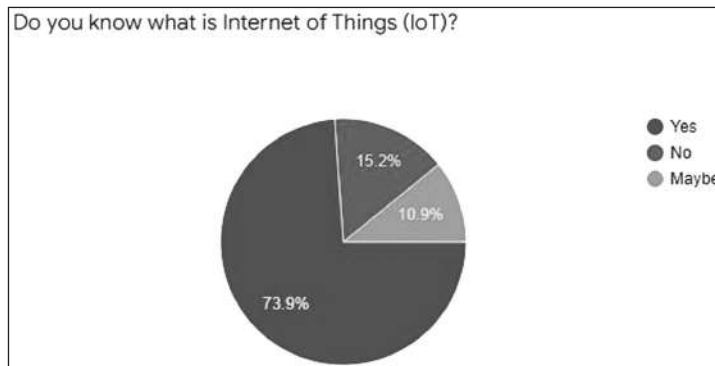
CONCLUSION

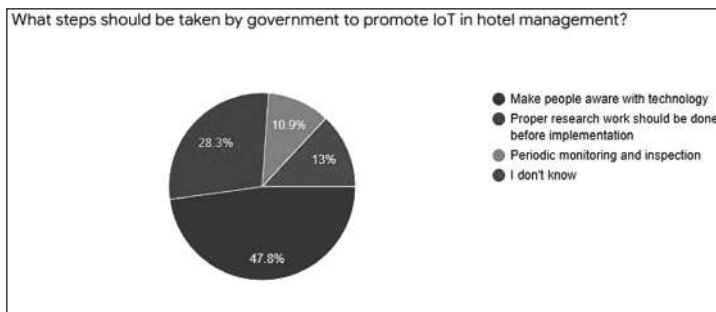
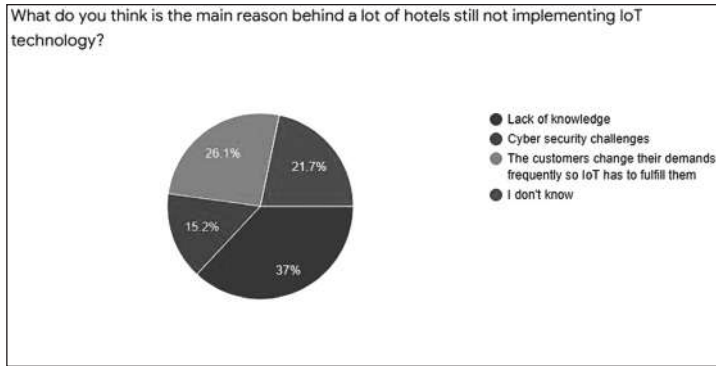
It is very evident that most of the hotels are still not dependent on IoT for their services, but as these technologies are new to people, it will take time for them to fully depend on it to get their work done efficiently.

Its implementation will not only provide comfort to the customers but also increase the income of the hoteliers to a great extent. It satisfies the customers by providing them a new level of luxury as well as help the owners to cut down other unnecessary expenses.

In today's era, where people are trying to avoid the physical contact as much as possible, technologies like IoT are soaring heights.

LIST OF GRAPHS





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A STUDY ON LATEST TECHNOLOGY IN HOSPITALITY INDUSTRY AND ITS ACCEPTANCE AMONG CUSTOMERS OF HOTELS IN CHENNAI

Pradeep Singh

*Second Year M.Sc. in Hospitality Administration,
IHMCT & AN, CIT Campus, Taramani, Chennai-600113.*

Akshay Krishna. P. V

*Second Year M.Sc. in Hospitality Administration,
IHMCT & AN, CIT Campus, Taramani, Chennai-600113.*

ABSTRACT

In terms of hotel discovery, information accessibility, and booking convenience, the overall hotel booking experience has become significantly more convenient and accessible. With the advancement of technology, operations in the hospitality industry have not only made company simpler to manage, but also deliver services in a variety of ways, regardless of where the benefiter is located in the globe. Intelligent hoteliers are constantly using integrated hospitality management systems that leverage predictive analytics to price hospitality products and services and market a diverse variety of services through numerous channels. Because of the extensive amount of information hotels can get about their customers from various sources such as demographics, prior purchasing habits, and other behavioural indicators, they are able to better target and promote to a wide range of different types of customers.

A significant advantage of utilising digital technology is that they generate a massive amount of data for travel firms. Numerous businesses are incorporating data-driven technologies and sophisticated analytics into their corporate solutions in order to get contextual insights from their interactions with existing and prospective consumers. These tools may be critical in assisting companies in providing a good experience to their customers, particularly when it comes to reserving hotel rooms or leisure services.

The goal of this study is to conduct a critical analysis of technology deployment from the standpoints of guest services, innovation, and visitor experiences. The article discusses the benefits of robotics, service automation, and artificial intelligence in the hotel industry, as well as their impact on service quality.

Objective: To study the challenges of Artificial Intelligence on Hospitality Industry, to know the areas where the Artificial Intelligence gadgets can be used in Hospitality Industry.

Design/methodology/approach: This research provides a critical and conceptual review of the evolution and deployment of robotics, service automation, and artificial intelligence in hospitality, with a particular emphasis on service, service quality, and visitor experience. A thorough review of the academic literature on customer service and guest experience is paired with industry examples from a variety of service operations in hospitality to analyse the application of raise in the hotel sector from both academic and practical perspectives.

Keywords: booking convenience, leverage predictive, prospective consumers, innovation, leisure services, service automation.

LATEST TECHNOLOGY IN HOTEL INDUSTRY

Since its development among which information technology revolution have influenced Human Resources Management in several ways. Since the inception of computers, human resource management strategies have evolved to make use of these electronic tools in order to improve the efficiency of business processes. So, the concept of Human Resources Information System has evolved rapidly gaining organizations and HR leaders interest for its confirmed contribution in competitive advantage and cost saving

Our daily lives have been shaped through the digital transformation. Nowadays applications are widely use in the public sector; transportation, law enforcement, armed forces, and health care industries have long adopted robotics and artificial intelligence and such as this development has also impacted the hospitality industry

Lets define the word intelligence. Intelligence can be defined as a series of capabilities: the ability to understand the environment and the phenomena that occur, the ability to take advantage of past experiences, and the ability to combine the knowledge available to respond appropriately to new challenges. These characteristics are described as follows: intelligent systems are able to perceive their surroundings, learn from their experiences, and apply what they have learnt in future scenarios.

Artificial intelligence has adopted by many companies like Google, IBM, Amazon, Tesla, and also in many car companies like TATA, MG and many more, artificial intelligence helps to solve the problem without wasting time. By using artificial intelligence in HR can also solve the problems of the employees within the time. (Aspan, 2020).

In Hospitality the artificial intelligence made the work so fluently specially for the international chains like Hilto, Starwood, Marriott and many more. After artificial intelligence it's very easy to book or cancel the rooms from anywhere in the world nowadays. On the other hand, businesses functioning as marketing, finance and other organizations are adopting it by their own will (Brin & Nehme, 2019)

Ambient intelligence (AMI) is the type of intelligence which about sensitive, adaptive electronic environment that can be used according to the action of guest and object and cater for their needs (Aarts & Wichert, 2009). For example the music, temperature, and light in the hotel rooms can be used by the guest according to their desire by adapting ambient intelligence. If we talk about lighting, intelligence in this the sensors are used to sense the requirement of light

according to day or night and also can sense the lights function according to the guests activities for example if a guest is waking in a corridor of a hotel in that light will work according to the guest steps and also patterns can be recognized to guide the guest (Basiri et al., 2018).

Natural Language Processing (NLP) and Facial Recognition this helps computer to process in natural language. With the help of NLP inputs can be given through the text or voice. Natural language, generation is the part of NLP. This can be installed in systems to maintain conversation with the costumers. NLP plays important role in tourism, it enables virtual travel assistants, conversational systems, and robots (Tussyadiah & Miller, 2019). Face recognition is very useful in hotel industry for example its help in check-in check-out process in the rooms to recognition guest face of the hotels and also maintain the security of the rooms. However it not only help to recognition a specific guest but also count the number of guest in a particular area. This also help in detecting the emotions of the people or guest for example happiness those who are living lunch buffet.

Conversational systems are intelligent machines that can understand language and conduct a written or verbal conversation with a customer. chatbots and voice assistance helps in engaging customers with the relevant information search. These conversations can span a long period of time and involve several processes (Gretzel, 2011). Sometimes this system also referred as chatbots or virtual agents (Buhalis et al., 2019).

Forecasting is a technique that uses historical and contextual data to make future predictions based on current trends. It is used in all types of industries and businesses to make decisions that require a forecast of what will happen. Forecasting is an excellent application for AI algorithms (Claveria et al., 2015), particularly in the presence of big data (Gunter & Onder, 2016). Artificial Intelligence's Impact on Travel, Tourism, and Hospitality There are five types of forecasting intelligence methods: grey theory, fuzzy time series, rough sets approach, support vector machines (SVMs), and ANNs (Claveria et al., 2015). Forecasting can be used in the tourism sector to understand tourist demand (Buhalis & Leung, 2018), to develop marketing strategies, for financial management and human resource allocation (Huang, 2014; Claveria et al., 2015), to detect restaurant scams (Stalidis et al., 2015), and to support facility management and maintenance needs (Buhalis & Leung, 2018). However, since the outcomes of AI technologies have been inconsistent, the employment of AI must be treated with caution. On the one hand, Yu & Schwartz (2006) discovered that complicated models do not outperform basic, conventional models. Claveria & Torra (2014) produced more promising findings, however the degree of preprocessing had a significant impact on the quality of the predicting outcomes using neural networks. Several research, on the other hand, have revealed that AI approaches have higher prediction accuracy. Sun et al. (2019), for example, employed machine learning to estimate tourist arrivals, Law & Au (1999) used neural networks for a similar purpose, and Huang (2014) used neural networks to forecast resort demand.

AI's Impact on Hospitality

Since tourism is one of the main industries, we decided to dig deeper into the impact of AI on hospitality by focusing on the technologies and applications mentioned previously. To review the AI applications currently being used, developed, or planned for the hospitality industry, we

divided it into two main areas: operations and marketing. Operating AI helps allocate rooms and resources based on guest value, helps preventive maintenance, adapts the menu to existing customers' preferences, enables room-cleaning robots, assists in selecting the right employee for the facilities and products offered, and helps intelligent systems by enabling natural conversation. The hotel sector has been separated into two major categories: operations and marketing. AI helps allocate rooms and resources based on guest value, helps preventive maintenance, adapts the menu to existing customers' preferences, enables room-cleaning robots, assists in selecting the right employee for the facilities and products offered, and helps intelligent systems by enabling natural conversation. In marketing and sales, AI helps develop personalised services and experiences through mass customization, allows the deployment of intelligent marketing, supports agents and smart sales assistants, creates real-time offers that are sent to us. Big data is one of the foundations of AI deployment, which hotels must face. However, the data sets available to hotels are not big data. While hotels have access to a lot of data, it is usually limited to the guest's interaction with the hotel's website before the trip and their behaviour in the hotel. There is a scarcity of information on hotel customers' identities, hobbies, desired destinations, and behaviour outside of the hotel. This implies that hotels can only obtain large amounts of data about their guests by collaborating with other businesses. When AI is fully developed and implemented in the hospitality industry, and all systems are integrated and interoperable, robots, AI, and natural language systems will be able to perform almost all tasks currently performed by humans. But that doesn't mean robots will take over the hospitality industry. Humans will still have two main roles. First, humans will develop a small set of tasks that are difficult to automate, even with robotics and AI. Second, the presence of humans will be a factor of distinction and luxury. In other words, if humans are inefficient economically, their presence will be justified by differentiation or quality, as in gas stations today. Figure 3 depicts the hotel continuum. The efficient hotel on one end of the continuum fully utilises technology, automation, robots, and AI. Its operation requires the participation of a small number of humans. Due to the fact that they can save the majority of the hospitality industry's costs, these cost-effective hotels will appeal to budget-conscious travellers (Bowen & Morosan, 2018). On the other end of the spectrum is the distinguished hotel, which will employ humans to differentiate itself at various touch points. Even in these opulent hotels, guests will have the option of self-service technologies powered by AI. In the interim, there will be a variety of hotel types with varying degrees of human and technological interaction.

1. Revenue Management

When it comes to pricing and availability, revenue management (RM) is the application of data and analytics. This means that a revenue management specialist is interested in finding the most cost-effective methods of selling a ready-to-buy product (such as a hotel) to an eager customer.

In order to assess a property's success in comparison to similar properties in the same price range and kind located in the same location, experts keep track of a variety of measures. The range of performance measurements includes ADR, RevPAR, occupancy rate, GOP, and GOP per available room (GOPPAR).

Revenue managers can estimate demand for rooms and customer behaviour to adjust hotel costs by calculating and analysing these performance metrics data. Dynamic pricing is the name given to this strategy.

Dynamic pricing automation

Using data science, hotels can better anticipate client demand and patterns of activity. Data scientists and analysts are employed by big hotel chains such as Marriott International and AccorHotels because of this. These experts use hotel and competition data to design and apply pricing models.

Revenue management (RM) is used by some hotels to keep track of their profits. Real-time pricing is determined using machine learning in this programme. Consolidation and analysis of vast amounts of data from numerous sources is done automatically by these RM systems.

There are a number of hotel chains that use an OTA Insight platform like as Carlson Rezidor, AccorHotels, Fusion Hotels, Sydell Group... and many others.

It has three components, each of which addresses a specific revenue management issue.

Management may determine appropriate room rates utilising real-time data on previous, current and future rival pricing to estimate regional demand for rooms using Rate Insight. Rate Insight For experts, the website gives information on property ranking and rating performance. Event metrics are also provided.

In order to determine if there are any issues with parity, Parity Insight checks the rates on the leading OTAs and metasearch engines with those on a hotel brand's own website. For example, hotels that have the same pricing on both their own website and an online travel agency can lessen their dependence on the latter and avoid confusion for their guests.

Revenue Insight provides "smarter hotel analytics" by combining past and future performance. A year-over-year comparison of hotel KPIs is possible because to the platform's consolidation of reporting.

2. Operational Analytics

There is no such thing as a "day off" or a "holiday" in the hospitality sector, and hotel software systems work around the clock, generating an enormous amount of customer and operational data. It is a property management system that captures this information, whether it is a reservation for a hotel room or an order for a Caesar salad at a restaurant, an alarm from a housekeeper about a scarcity of cleaning supplies, or a reservation for a conference space.

Hotels that utilise operational analytics to examine internal processes in real time may be able to spot problems and possibilities for improvement as they go about their business. A competitiveresearch, an estimation of client behaviour for each season, tracking brand mentions and reputation on social media by monitoring comments, and determining why website users start reservations but do not complete them are all examples of what businesses could wish to perform (churn analysis). The availability of information technology infrastructure and the competence of data science application developers are major variables in determining the number of data science applications generated.

3. Hotel energy consumption management and predictive maintenance with IoT solutions

Hotels are among the top five facilities in the tertiary building sector in terms of energy use since they operate annually. Utility expenses account for roughly 6% of total operational expenditures in hotels in the United States. The good news is that energy costs can be managed through energy management. Installation of energy-saving lighting systems, changes in construction regulations, and the usage of information cards in toilets are all examples of modern approaches to energy use.

Management of Consumption

Hotels are using cloud-based tools to improve their energy efficiency. IoT-enabled smart energy management technologies collect real-time energy use data and monitor temperature, humidity, air pressure, and air quality within the building. Weather data and utility rates may be tracked, and occupancy can be monitored to alter the work of HVAC (heating, ventilation, and air conditioning) and lighting systems. As a result, these systems give energy usage patterns – energy profiles – to property owners. Hoteliers may utilise the information to figure out where they can save money by using less resources to meet their energy efficiency targets. Data may frequently be accessed from both a desktop and a mobile device.

Predictive maintenance using sensor data

Predictive (condition-based) maintenance is possible using software for energy consumption control. This sort of technical assistance comprises keeping an eye on machinery during regular operations in order to predict when it may break down. Systems automatically broadcast alerts when irregularities are identified, letting personnel to fix equipment such as a room air conditioning system before it completely fails and a guest becomes aware of a problem. Staff may also plan maintenance more effectively with these systems because they are aware of the technical status of each equipment. As a result, energy management systems can assist extend the life of equipment while lowering maintenance expenses.

4. Customer experience improvement

While on vacation, individuals want their concerns to be resolved as quickly as possible to provide them a respite from their hectic life back home. Travelers want to be able to have a comfortable stay while still being able to take use of all the amenities that a hotel has to offer without any hassle.

Texting is preferred by 64 percent of customers who may select between texting and voice as a customer care channel, according to a Harris Interactive study on behalf of one reach. The 44 people who had texting skills preferred to start a conversation immediately rather than wait for an agent to answer.

Customers that have the option to pick between texting and calling as a customer service channel prefer the former, according to a Harris Interactive market research poll conducted on behalf of One Reach. Furthermore, 44 percent of respondents with texting capability would rather push a button to begin communicating immediately rather than wait for a customer support employee to react.

CONCLUSION

In the 21st century, people's daily activities have been greatly enhanced by the massive development in invention. Even in the hospitality business, AI techniques have consistently shown to be beneficial to customers since they are uncommonly focused on identifying job success and increasing organisational productivity. It's not just that AI has been used in the hotel business to reduce customer dissatisfaction, but that it has also been used to provide new and innovative services in an age of development.

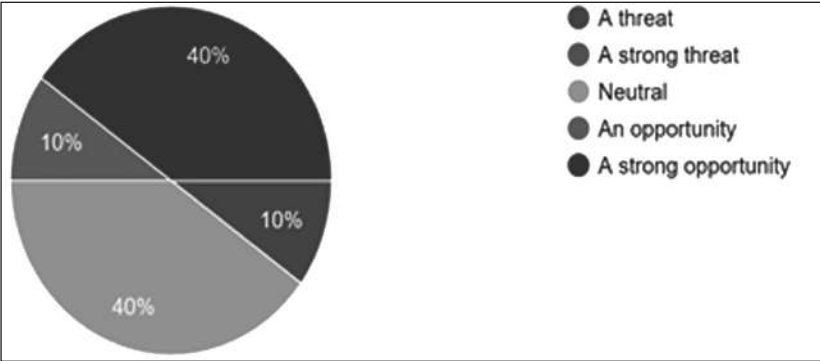
Respondents said that providing better service, rapid response, and improved security, as well as cleanliness of the property, are among the most important considerations. Some factors may make it difficult to implement AI-based solutions, such as the financial capacity and estimation of companies, in hospitality. A rudimentary kind of AI system, such as Chatbots, may be implemented by small and medium-sized businesses to provide better customer service and faster response times.

There is no question that some firms have already adopted and implemented an AI-based system, while others are increasingly embracing it. In order to achieve the goal of AI-based systems to benefit both enterprises and clients, further progress should be arranged. Artificial intelligence (AI) systems may be a viable technology for the hotel sector to use to increase productivity and improve customer satisfaction, according to research findings. Customers and the organisations they represent stand to gain from the use of AI-based technologies in the hotel business.

Analysis

- Is the hotel industry more at risk from artificial intelligence (AI) than it is at opportunity?

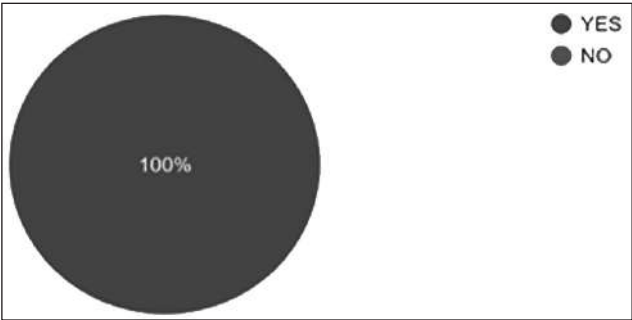
No of respondent	A threat	A strong threat	Neutral	A strong opportunity	An opportunity
200	20	20	80	80	20



Majority of people thinks that artificial intelligence is a risk for hotel industry

- The use of artificial intelligence (AI) reduces the time it takes to get services.

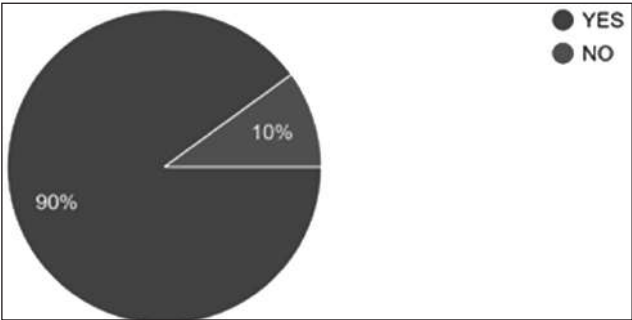
No of respondent	Yes	No
100	200	0



Customers are fully agreed that it reduces the service time.

- Do guests like hotel chatbots?

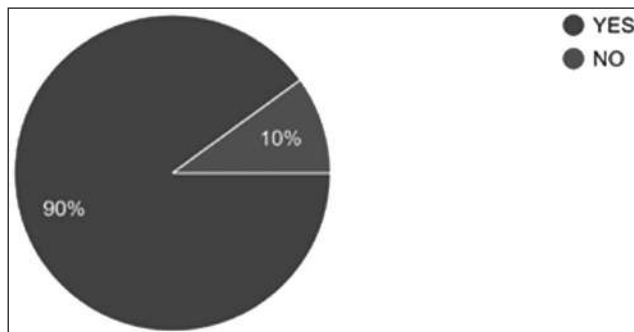
No of respondent	Yes	No
200	180	20



Basically customers are satisfied with the chatbots because of time saving and quick response.

- Human workers is more likely to deliver substandard service to hotel visitors than artificial intelligence machines.

No of respondent	Yes	No
200	180	20



Customers like the human workers service than artificial intelligence

Utilizing AI is a contemporary trend worth following. Artificial intelligence is more effective than humans.

No of respondent	Yes	No
200	180	20

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TOTAL AIR QUALITY CONTROL IN HOTELS

D. Elangovan

*Senior Lecturer,
IHMCT & AN, CIT Campus, Taramani, Chennai-600113.*

M. Manikantan

*Lecturer - Contract,
IHMCT & AN, CIT Campus, Taramani, Chennai-600113.*

ABSTRACT

When it comes to indoor air quality in business situations, the quality of the air in the hotel industry is frequently a hot issue of discussion. Because competition is fierce and customer experience is everything, the hotel sector has a very high standard to meet when it comes to the whole experience of customers that walk in and out of their premises. The key things that are considered in the total Customer experience in a hotel are cleanliness, service, ambiance, and environmental quality - including the indoor air quality that is present in this area where people are occupiers for a period of time throughout their stay.

OBJECTIVES

The main goals of the research are:

- Grasp on air quality control in hotels
- To understand importance of air quality controlling hotels
- To elaborate on preventions and precautions taken
- Aspects that are effected due to air quality variations

INTRODUCTION

Indoor air quality is critical in the hotel sector since bad indoor air can have a negative influence on the workers, guests, and customers that visit these establishments and stay for days on end. In some severe circumstances, the hotel(s) may face legal implications if they fail to ensure that the environment is both safe for employees and Customers while they are residing in this interior space. Proper ventilation, boiler and heating system maintenance, and the integration of air quality solutions to help mitigate those potential airborne pollutants present are the major components within this environment that must be paid close attention to when it comes to the indoor air quality within a hotel.

Elangovan & Manikantan

LITERARY REVIEW

In order to acquire loyal customers and obtain favorable feedback and referrals, each hotelier must ensure that his guests are entirely satisfied. Hoteliers in the European and American markets can obtain a competitive advantage by installing air filtration systems. Hotels can express a sense of security by providing clean air, especially during COVID-19, when the problem of clean air became even more prominent. As a side benefit, hotels should consider that dusting takes less time, which can result in cost savings.

The first impression and how you feel after leaving the hotel are crucial. Even though the rooms were spotless, aromas of smoking or cleaners lingered. In their indoor air, they not only look after the apparent aspects of a great hotel experience, such as the décor, service, and food quality, but they also look after their visitors' general health.

IMPORTANCE OF AIR QUALITY CONTROL

All hotels strive to make their guests happy, and they put in a lot of effort to provide a one-of-a-kind guest experience. Hotels are required to provide a pleasant and safe atmosphere for customers and staff as a “home away from home.” Good indoor air quality* is part of that. Something essential to our health and happiness.

The pandemic has raised awareness of the necessity of good indoor air quality.. Prior to COVID-19, most people used the word air quality to refer to difficulties with outdoor air quality, such as smog or haze⁵. As a result of the epidemic, indoor air quality and its potential negative health impacts have become a hot topic among many individuals. Only 5% of business travellers selected health and safety as the most essential concern when arranging a trip before the COVID-19 pandemic, compared to 40% during the pandemic¹.

This rising awareness of airborne transmissions of SARS-CoV-2, as well as the potential risk of airborne transmissions of SARS-CoV-2 due to aerosols and unhealthy CO₂ levels, has highlighted the necessity for indoor conditions that are closely monitored. To keep the spread of airborne transmissions under control, it is vital to improve and especially monitor interior air quality.

What does this mean for hotels, though? Hoteliers are required to make their visitors feel comfortable and cared for in their “home away from home.” Many visitors are hesitant to return to this location. 73 percent of business travellers show reservations about returning to their previous destination¹. To ensure good air quality, several hotels have already invested significant sums in air purification equipment. Even so, only a tiny percentage of them will be able to exploit these improvements to reassure customers and increase bookings.

So, what if hotels could monitor and report the air quality in their rooms to convince guests that they are secure in their “home away from home”?

Here are some important points to consider:-

Improved Guest Experience

Hotel guests spend the majority of their time in their rooms sleeping or otherwise occupying them. Air quality in hotels encompasses more than just temperature and humidity; it also includes interior toxins that can cause discomfort such as sleepiness and have major health consequences.

As previously stated, there has been a huge increase in public awareness of the negative impacts of poor indoor air quality. While pre-COVID-19 visitors who experienced poor indoor air quality during their stay may have decided not to return or left a negative online review, post-COVID-19 customers want to know that the air they breathe is safe for them and does not raise their chance of becoming contaminated.

The capacity to demonstrate to visitors that the air they breathe is healthy can boost the hotel's image in the business and among potential guests, as well as encourage them to return.

Increase Operating Efficiency

Have you ever been in a hotel room that reeked of stale air? Because of the excessive humidity and little air ventilation in that room, mould may have grown within the enclosed environment. This demonstrates how poor air quality can affect the guest experience and increase renovation and reactive maintenance costs.

Hoteliers must check the air quality in those rooms, especially given that many rooms are under used for lengthy periods of time, to avoid losing value and incurring harm from mould, for example. A centralised air quality monitoring system can save hotels money and resources by improving the quality of manual room inspections performed by hotel maintenance crews.

Facility managers can take proactive measures by monitoring and assessing the hotel's air quality before problems with air quality result in costly property damage and lower building quality.

Staff Productivity

Poor indoor air quality can have the same negative impact on hotel staff as it does on visitors. Cleaning supplies and solvents from recently painted walls and furniture, for example, can raise the levels of volatile organic compounds (VOC), which can have negative health impacts if employees are exposed to this air for an extended period of time.

They will be unable to operate efficiently and effectively if they are uncomfortable. It may interfere with their concentration and productivity, resulting in a negative guest experience. Headaches, dry eyes and throats, dizziness, and exhaustion are all symptoms of poor air quality. In addition, as we will see in a later essay, poor air quality might increase the chance of virus contamination, such as SARS-CoV-2.

AGENTS THAT EFFECT AIR QUALITY CONTROL

Pollutants

Indoor air quality is often 2 to 5 times more polluted than outdoor air, according to the Environmental Protection Agency (EPA), and this pollution includes a variety of pollutants such as carbon monoxide, formaldehyde, and other volatile organic compounds (VOCs), as well as indoor particulate matter.

These airborne contaminants can be released into the atmosphere from a variety of sources inside a hotel room, including the furniture, cleaning agents used to disinfect the surroundings, and even inhabitants' clothing, baggage, and other items.

When these pollutants are taken into the human body, they can have a negative impact on human health — symptoms can range from mild to severe, depending on the quantity of exposure.

Humidity

Humidity refers to the amount of moisture or water vapour in the air and is measured in percent relative humidity in an indoor environment. The humidity that is present in a hotel room is greatly influenced by the ambient temperature in the area.

Interior humidity levels should typically range from 30 to 50 percent, and when they fall outside of these ranges, the indoor air will have a high or low humidity level.

Humidity can also influence the possibility for mildew and mould growth in a room; when moisture and humidity levels are high, mildew/mold growth is exacerbated in the environment.

Renovations

When renovations are taking place in an interior area where you are exposed, the risk of airborne contaminants hanging in the air is higher than when renovations are not taking place.

Dust, chemicals, and a range of other pollutants are released into the air during hotel renovations, which can contaminate the indoor air quality.

Chemicals such as volatile organic compounds like formaldehyde are employed in the fabrication of construction materials.

These chemicals will begin to off-gas into the air when employed in building materials placed during renovations, resulting in a volatile indoor air space in the environment.

Mold in Hotel Rooms

If you've ever stepped into a hotel room and noticed an unpleasant level of humidity and wetness in the air, it's probable that mould has grown in this hotel's room. As we previously explained, when humidity levels in a hotel room's internal space are high, mould growth on the surfaces in this environment is exacerbated.

The temperature in the hotel room can have a significant impact on mould growth.

Because the walls and surfaces in this setting are constantly exposed to fluctuating temperatures, mould will continue to grow on the hotel's surfaces.

When mould grows in this indoor environment, it can have a substantial impact on the health of those who are exposed to the mould and its spores – and it can even lead to specific health difficulties and ailments down the future as a result of continued exposure to this indoor fungus.

“70 million replacing items have been damaged by mold and mildew.” (American Gas, Jul 1999)

Conditions

- Temperature range above 40 °F and below 100 ° F
- Mold spores
- Nutrient base (most surfaces contain nutrients)
- Moisture RH>70%

Health Impact

- Allergies
- Asthmatic reactions
- Skin Disease
- Parasite in lungs

Controls

- Reduce the moisture content (vapor pressure) of the air
- Increase air movement at the surface
- Increase the air temperature (either the general space temperature or the temperature at building surfaces).
- Wash mold off hard surfaces and dry completely. •Absorbent materials, such as ceiling tiles and carpet, with mold may need to be replaced.

(EPA, Moisture, Mold and Mildew141 Appendix C)

“THE CARPETS”

Interior products in the home have the potential to impact the indoor air because they emit volatile organic compounds (VOCs) into the air.

Health Impact

- Eye and respiratory tract irritation
- Headache
- Dizziness
- Memory impairment
- Neurotoxicity
- Cancer

Controls

- Look for the Carpet and Rug Institute (CRI) Indoor Air Quality Testing label on a carpet, cushion, or floor-covering adhesive and buy it.
- Tests have shown that, with sufficient ventilation, carpet emissions created during installation will diminish in 48-72 hours.

The current criteria for the program are based on a maximum emission factor measured in mg/m-2 hr as follows:

Total Volatile Organic Compounds	0.5
4-PC (4-Phenylcyclohexene)	0.05
Formaldehyde (to prove that none is used)	0.05
Styrene	0.4

(CRI/IAQ Carpet Testing Program, 1992)

LEGIONNAIRE’S DISEASE

Conditions

- Ubiquitous
- Many bacteria are ~1 μ m
- Ventilation duct dust can contain up to 50,000 bacteria per gram of dust.
- Dirty HVAC filters can contain up to 6,700 bacteria per gram of dust.
- Bacteria need 95% RH to survive

Health Impact

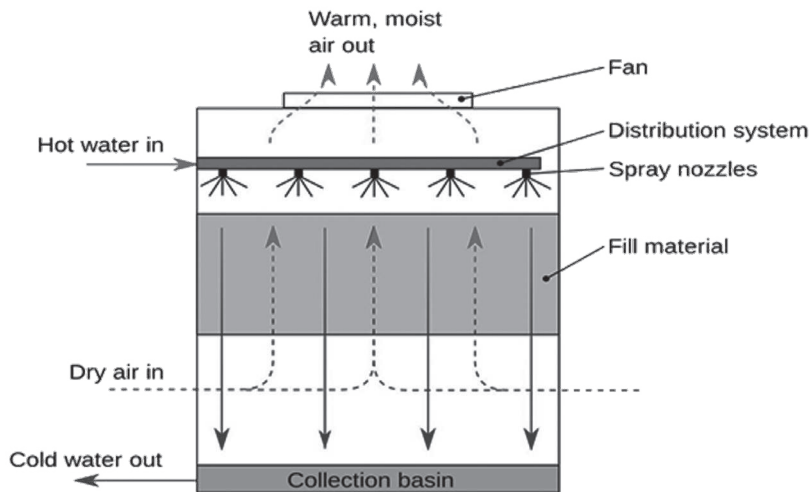
- Legionella pneumophila can thrive in cooling towers and the cooling tower mist can be reentrained into the HVAC system.
- Symptoms - malaise, headache, high fever, gastro-intestinal symptoms, respiratory failure, death.

- Legionnaire's disease mainly fatal for elderly and immune-suppressed (e.g. AIDS patients).
- > 600 deaths per year.

Controlling Conditions

- Lower water temperature by installing cooling towers. Optimal growth temperature ~35 °C in water (~95 °F). (Issues on Prevention of Nosocomial Pneumonia, 1994)
- Bacterium killed in 8 minutes at 58 °C (136 °F).
- Bacterium killed in 4 minutes at 60 °C (140 °F).
- Killed by chlorination.
- Killed by UV light.

HOW COOLING TOWERS WORK



HEATING, VENTILATION & AIR-CONDITIONS (HVAC)

Hotels usually use three types of HVAC systems:

Heating, ventilation, and air conditioning (HVAC) is a term used to describe the technology that provides indoor or automotive environmental comfort (Wikipedia) Interior temperature, humidity, air flow, and air quality are all controlled by HVAC systems in hospitality facilities (Hotel Mule Wiki).

Boilers, chillers, centralized and decentralized guestroom HVAC systems, massive roof mounted PTAC units, air handling units, and cooling towers are all components of a well-designed HVAC system.

Because service is at the heart of the hospitality sector, an HVAC system has a direct impact on visitor happiness and so plays a critical role in a hotel's success.

- **Packaged Terminal Air Conditioners (PTAC)**

These self-contained A/C units are used in hotel rooms. PTAC units are typically placed beneath a window or against a wall, and they do not use outside air to cool or heat the room. Standard PTAC units, on the other hand, only recycle air from within the room. 3

You might be wondering how PTAC units work at this point. First, refrigerant is pumped to the coils by the compressor in the HVAC unit. The air passes over the coils, cools, and is then blown into the room to cool it. The external grille blows the heat and humidity the coils extract from the air outside. 3

The procedure outlined above is for cold air. PTAC units can be used to heat a space in one of two ways:

1. Heat Pump: a reverse of the PTAC cooling process, which uses refrigerant to heat coils.
2. Electric Heat: near the unit's vents is an electric heating element that heats air as it travels over it.

- **Vertical Terminal Air Conditioners (VTAC)**

VTAC units are small, wall-mounted air conditioning units. They can heat and cool a large number of rooms. VTAC units are usually put in a closet-like corner and take in air from below before discharging it through a top-duct to heat or cool the space (s). They employ the same cooling and heating methods as PTAC systems. A standard VTAC closet measures 30” by 30” when the clearance necessary is factored in..

- **Variable Refrigerant Flow (VRF)**

For variable refrigerant flow (VRF) systems, a central outdoor condensing unit can be easily placed on the roof or at ground level. Up to 24 fan coils are attached to the outside unit in each room. Because they give quick access to duct connections and maintenance, entry foyers and restrooms are suitable sites for fan coils.

Cooling is provided by the VRF condensers, which feed cold refrigerant to each fan coil unit. After passing through the coils, the air sends frigid air via the ducts.

To heat rooms, the VRF condenser works as a heat pump, creating hot refrigerant that is delivered to each fan coil. As it passes over the coils, the air blasts heat through the ducts..

Recovering the heat Heating and cooling are both possible with VRF systems. Heat could be diverted to other rooms rather than being rejected. This implies that heat can be transmitted from one room to another without the need for the main condenser to be used.

BENEFITS OF USING HVAC SYSTEMS

Heating, ventilation, and air conditioning, or HVAC, is a system that cleans your air and distributes cool or warm air based on your climate needs. Certified professionals install HVAC systems, which are appreciated for their energy-saving principles. To regulate dirty air, an increasing number of homes are installing an HVAC system.

Indoor Air Quality

Indoor air quality is two to five times worse than outdoor air, according to the EPA, owing to crowded airflow. Colds can last longer and allergies can be more severe due to the filthy air in your home. By regularly exchanging indoor air with fresh, outdoor air that is likewise filtered for the best quality possible, an HVAC system can improve air quality.

Energy Conservation

Although the initial cost of an HVAC system is more than that of a standard gas furnace, the long-term energy savings are visible month after month. The heating and cooling functions are combined in the HVAC system. This alone saves building space, installation time and expenses, and the amount of electricity required. Renewable energy, sometimes in the form of solar panels, is also used to power the system. Because the coolant is non-chlorine-based, which depletes the ozone layer, energy conservation is even better.

Moisture Consistency

Your home is always prone to moisture retention, whether you live in a climate that varies dramatically every three to four months or in a climate that remains stable. Because the air within your home does not circulate properly and is rarely exchanged with cooler, drier air outside when necessary, mould and mildew can quickly grow inside walls and under floors. The HVAC system constantly pushes warm, moist air out and delivers dry, chilly air inside in an exchange to limit the risks of mould formation, which can cause health problems and structural damage over time.

CONCLUSION

One of the 5 elementals, Air'. We are gifted with free Air from nature, as its supposed to be . We as a hotelier are bound to keep that the same way for our guests and we have to make sure those qualities of fresh, safe and clean air is always available. We literally know the first breath of a child and the last breadth of an elder is priceless. With help of science we need to make sure the intermediate time we need to keep our guests healthy and safe . Different machines, different processes are been developed to put the best use of our intellectual minds for the betterment of humankind and with a robust health and peaceful mind ,the lifetime of human lives are extended. With references to various related articles in comparison effective scenarios that precisely include causes, pathogens, machinery involved, percussions and necessary preventive measures, the report is concluded with all these concepts kept in mind.

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A STUDY ON THE FEASIBILITY OF KHADI LINEN IN THE HOSPITALITY HOUSEKEEPING SECTOR

Banani Mondal

*Senior Lecturer,
SIHM, Durgapur;*

Mob: 8143581305, Email: banani.sihmd@gmail.com

Suman Ghosh

*Senior Lecturer,
SIHM, Durgapur;*

Mob: 7059633131, Email: sg221995@gmail.com

ABSTRACT

Hotel housekeeping is the backbone of the hotel and plays an important role to run a hotel business. Hotel housekeeping need to meet prominent challenges like, trends and best practices as eco-friendly practices, cost effectiveness, and local promotions. As we know this industry is very dynamic and the property has to upgrade its functioning as per the comfort of the guest and at the same point of time help to promote local goods and culture. As now a days the hotel industry is very competitive and dynamic and the guest are too much conscious about the services, it is very effective to promote local goods and culture and at the same time create a different experience for the guest.

The Khadi and Village Industry (KVI) sector has evolved significantly from the pre-independence era to the current stage indicative of the immense potential, both at the domestic and international markets. Popularizing Khadi through tourism and hospitality can be best achieved through the use of Khadi based linen in hotels. It can help in the improvement of the sector and creating new job opportunities.

This research paper aims to promote the Khadi sector through hotel housekeeping department and at the same time create an awareness of the Indian culture.

Keywords: Khadi, Hotel, Housekeeping, linen, Promotion.

INTRODUCTION

Khadi sector of India is of great importance as it generates livelihood and employment opportunities at the grass root level in the nation. When promoted in a sustainable manner, khadi and village industries may lead to rural development with industrialization leading to economic growth. This sector has evolved a lot from the pre- historic period.

Khadi is an Indian fabric also known by another name ‘khaddar’. It is made by spinning the threads on an instrument known as ‘Charkha’. The fabric is known for its rugged texture, comfortable feel and ability to keep people warm in winter and cool during the summer.

The concept of Khadi was developed by Mahatma Gandhi as a symbol of political agendas during the fight for Independence. It was primarily meant to provide employment to the rural population of India at that time and is since then considered as the national fabric of India.

Prior to the independence Khadi was considered to be used only by the political leaders but now it has found its way as a fashionable fabric and likeable by the masses. After the establishment of Khadi and Village Industries Commission (KVIC) variety of handmade products like Khadi silk, wool, leather products, herbal products, honey, phenyl, washing powder, etc., have been marketed by its sales outlets throughout the country (Padmasani, Muruganandan S. and Yazhini M., 2012)

The Indian textile industry is one of the oldest and largest sectors in the country and among the most important sector in the economy in terms of output, investment and employment. The sector employs around 35 million people and after agriculture, is the second-highest employer in the country. It accounts for around 4 per cent of GDP, 14 per cent of industrial production, 9 per cent of excise collections, 18 per cent of employment in the industrial sector, and 16 per cent of the country’s total exports earnings. With direct linkages to the rural economy and the agriculture sector, it has been estimated that one of every six households in the country depends on this sector, either directly or indirectly, for its livelihood. (Varghese A., 2019)

In the present economic climate where dependency on foreign capital and know-how is increasing all round, the Handloom and Khadi industry presents a sustainable model of economic activity that is not energy intensive and has low capital costs, as well as an extensive skill base.

OBJECTIVE OF THE STUDY

- To have a brief insight into the Khadi textiles
- To study the awareness of the textiles among consumers and hoteliers
- To access the feasibility of incorporating this textile in the hospitality sector.

REVIEW OF LITERATURE

Khadi is mainly manufactured in the rural parts of India. The khadi garments are worn by almost every section of the society and it is considered as one of the most beautiful Indian fabric. It gives the wearer a feeling of royalty, luxury and uniqueness due to its fall and style. The khadi fabric gives a warm feeling during winters and cool feeling during summers. The more the fabric is

washed the more it looks better and feels better. Khadi is not just a fabric but a way of life and stands for independence and going back to the basics.

Khadi is known to be a sentimental value for the Indians and is often associated with Mahatma Gandhi who started the movement in 1918. It was said that the first true designer was Mohandas Karamchand Gandhi because of his appeal to Indians to wear Khadi garments. The appeal was necessitated because of the need to create self – resilience and providing unity of Indians against the British rule. It symbolized the need and importance of indigenous manufactured goods. (Padole. H.A. , 2017)

The fabric has a course structure and easily gets crumpled. Starch is to be added in order to keep the fabric stiff and firm. Khadi is not worn out for at least 4 to 5 years. During the spinning of khadi the threads are inter woven in such a way that it provides passage for air circulation.

Efforts Taken for Revival of Khadi

In 1985 the Swadeshi label of khadi was brought forward by designer Devika Bhojwani and in the year 1989 a fashion show was organized by Khadi and Village Industries Commission displaying the Khadi garments created by Devika Bhojwani. In the year 2000, Vasundhara Raja, the then minister for small scale industries initiated the movement to revive all 7000 shops of KVIC in India and in May 2001 KVIC set up their first air – conditioned shop in New Delhi. The production of Khadi grew by about 6% in 2014 – 2015. With the collective effort of the government, KVIC and Independent Labels Gaurang Shah, Sabyasachi, Fayakun, Red Sister Blue and many others Khadi garments were given a contemporary style with international quality standards. In December, 2015 Air India placed an order of Rupees 1.25 crore for their uniforms. (Ambre, P.P. and Lad. S. , 2017). The Ministry of Tourism is looking to promote Khadi products like towels, curtains, sofa covers in some of the hotels run under ITDC.

Khadi and Economic Development

The production of Khadi involves not just production but also includes self – sustained growth. It not only creates employment but also purchasing power for the community (Koulangi, 2015). The production of Khadi was meant to provide employment to the rural community and it continues even today. The production of Khadi is also suitable in a country where capital is scarce because of a positive relationship between labour productivity, employment and output (Keynes, 1936). The Khadi Industry is known to be the People’s Industry. It stands for all that is local and sustainable to the society, environment and economy. (Bhatt 2015) (Ahemad and Pandey , 2015)

Advantages of Khadi

One of the only fabric which is said to be “eco-friendly” is Khadi which increases its extent in fashion world. Nowadays Khadi is considered an exquisite, heritage item, which is “ethnic “as well as “ethical”. It is a natural fibre and is handcrafted, which brings uniqueness to the product helping the fashion designers to create new fashion trends. It carries a brand image and has great potential to grab the international market which would be further helpful to the employment of

the rural India. Khadi is a media for building rural community spirit and rural industrialisation. The raw material of Khadi is grown in non agricultural land thus, keeping the fertile land safe. Khadi's unique thermal effect lends warmth in winter and makes it a cool summer fabric. Government also supports Khadi enterprises which is a big plus point.

Weaknesses

The main reasons for the poor performance in Khadi production as listed out by Tenth Five Year Plan Document (2002) still hold good today, they are uncertainty over the continuation of the rebate policy for Khadi, which upset the production schedule and output of khadi producers. High stock of unsold Khadi and mismatch in Khadi production there was a shortfall in availing funds from banks and budgetary resources. The other reasons for the poor performance of Khadi are Khadi industries rely extremely on subsidies and budgetary supports. Lack of adopting new market techniques Unable to reduce the cost of production Lack of product innovation and Could not market the brand image utilizing the Indian's national heritage. Less awareness and preference to foreign brands. Lack of artisans. Lack of promotional activities. Lack of funds Low wages to artisans and weavers

Opportunities

Gandhi's many noble principles are buried with him. If properly utilized Khadi industries will uplift the face of rural India into a vibrant dynamic economy. The report of the working group on MSMEs growth for 12th Five year plan (2012-17) highlights the major area of value addition in Khadi. Khadi is focusing on eco-friendly and natural products. Integrated inputs relating to credit, technology, marketing intervention, capacity building, innovations, skill development, infrastructure support, etc., to be provided under cluster approach. Spotting of excess land with KVIC and KVI institutions and calculate action plan for effective utilization of land. Modifications in design, technology product development and processes are ways for growth in this arena.

The other opportunities are New technologies like DCY technology and ambar charkha (e-charkha) is followed be adopted. All age group people can use Khadi products to provide more employment opportunity for rural mass. Making departmental sales outlets and Central Sliver Plants vibrant and centers for generating surplus of the product. Khadi has a great potential in export market. Khadi can generate huge employment especially in rural India. Khadi is a source of rural industrialization which is very important for eradicating poverty.

Challenges

Preparation of Khadi is a costly procedure that engulfs the funds and reduces the scope of its popularity. Khadi has not entered into online sale whereas, other textile products are easily available online. Huge competition has come up due to globalization. Inadequate and irregular supply of raw material is another problem. Obsolete technologies, lack of entrepreneurial talent, unstructured infrastructural facilities, corruption (World Bank India Enterprise Surveys of Micro Manufacturing, 2006), lack of knowledge regarding marketing and lack of IT support are restricted.

RESEARCH METHODOLOGY

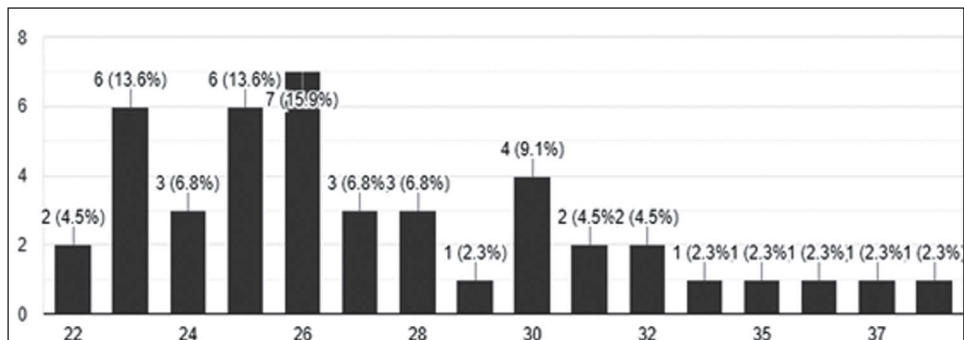
The research design involves both quantitative and qualitative research methodology. The qualitative research study was conducted through the analysis of various research paper in this area.

The quantitative research study was conducted through the assessment of a structured questionnaire for the hotel and guest using the convenience – sampling technique. The questionnaire was framed on some closed ended questions and some on likert scale of 1 to 5.

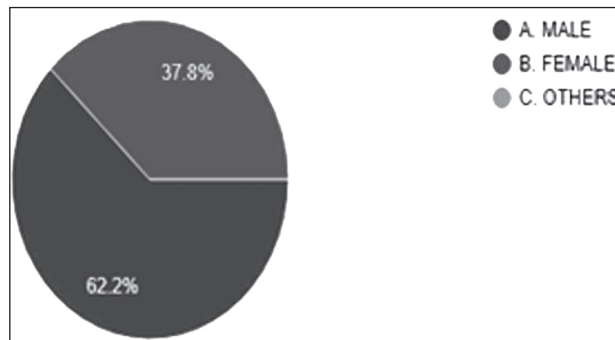
DATA COLLECTION

To be filled by Housekeeping Personnel

Age of the Respondents



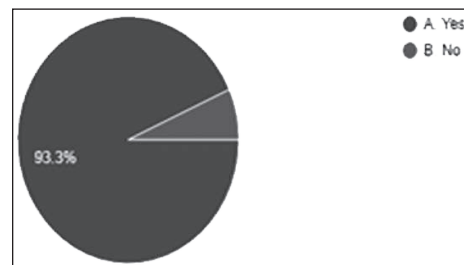
Gender of the Respondents



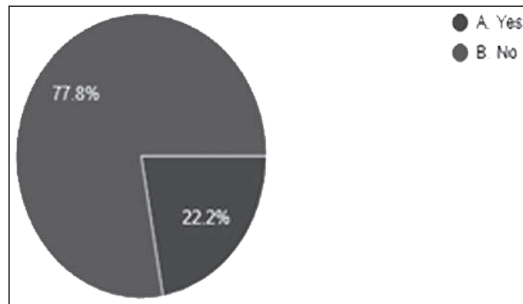
Awareness of Khadi Textile



Do you find Khadi textile cost effective?

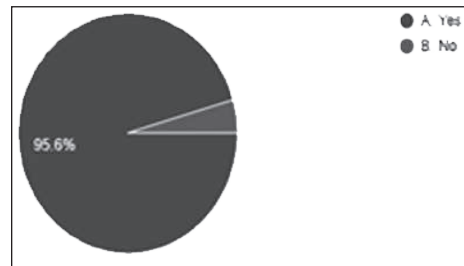
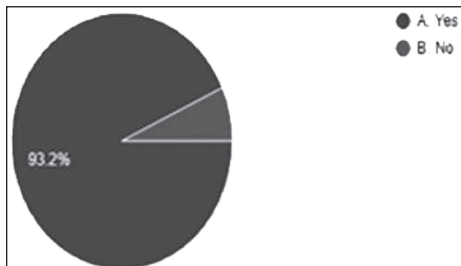


Well trained Housekeeping Staffs for cleaning and maintenance of Khadi Linen



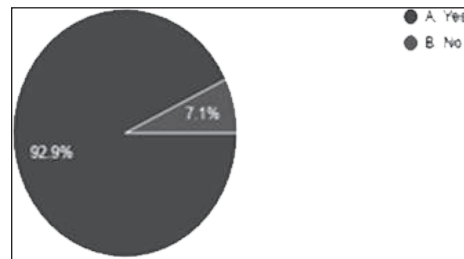
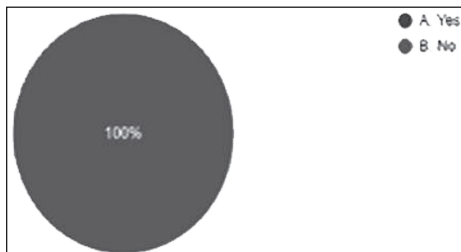
Will Khadi textile enhance the guest room decor?

Will Khadi Linen increase the cultural value in Hotels?



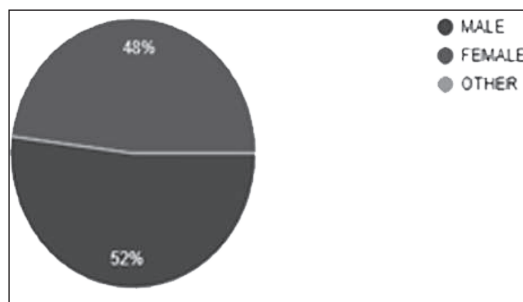
Is Khadi being used in the Hotel?

Do you like to use Khadi in future?

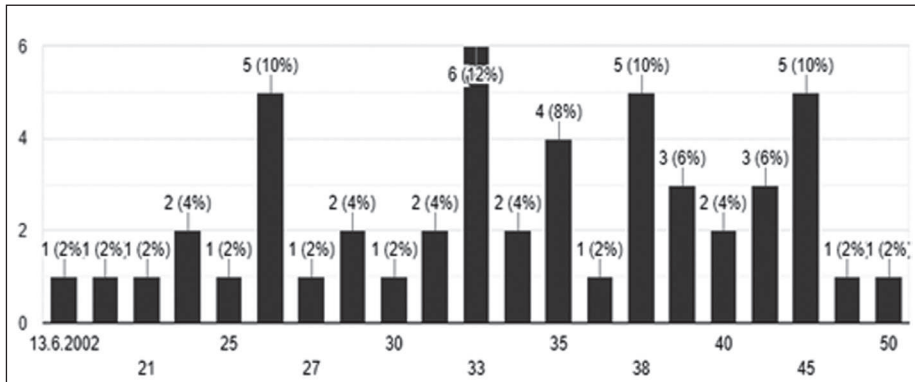


To be filled by Guest

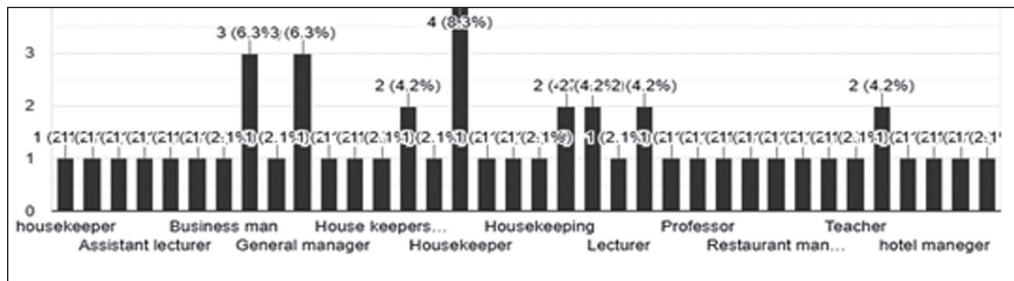
Gender of the respondents



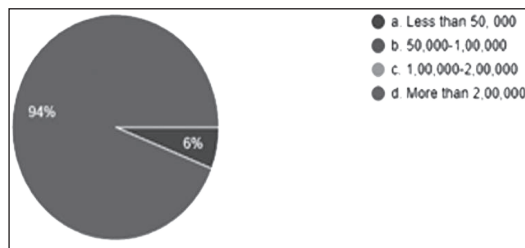
Age of the Respondents



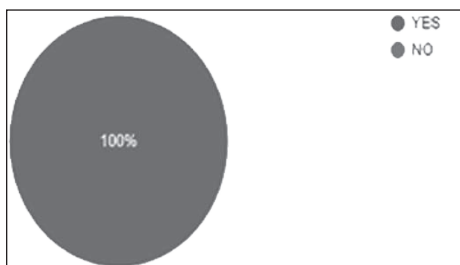
Designation of the respondents



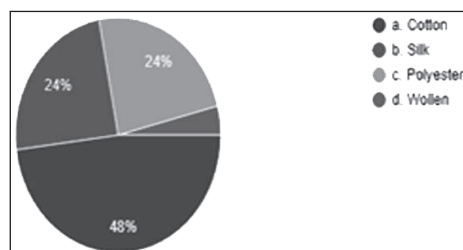
Income of the respondents



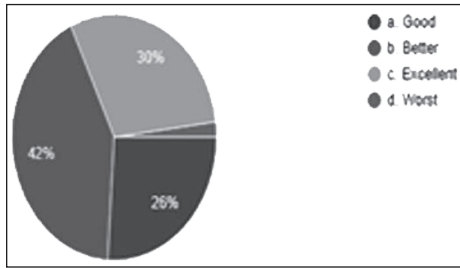
Knowledge of Khadi Textile



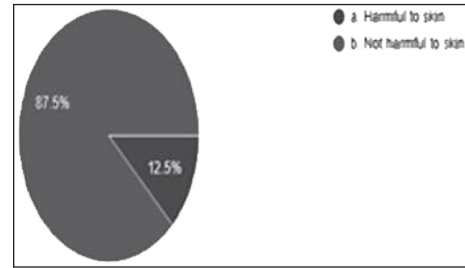
Fabric liked among the Khadi materials



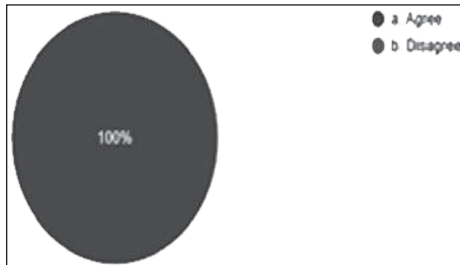
Fondness towards Khadi



Khadi – Harmful or non- harmful to skin



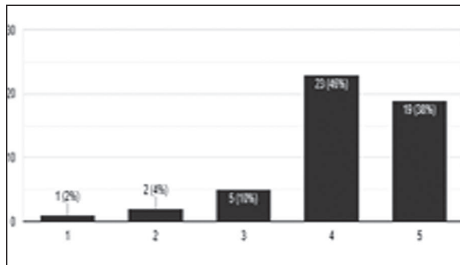
Increase in National Income for use of Khadi



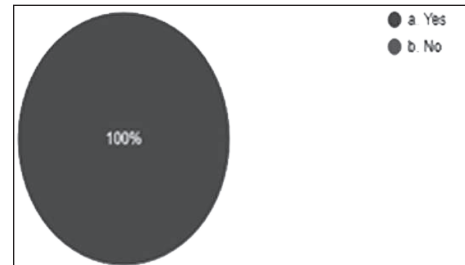
Use of Khadi can wipe unemployment



Satisfaction level for the Khadi textile



Is Khadi the most beautiful Indian Fabrics?



DATA ANALYSIS

There were two questionnaires – one was for the Housekeeping Personnel and the other was for the guest. According to the Housekeeping specialist of age group 22 to 37 said that they know that Khadi is a fabric which is cost effective material. They projected that although they know about Khadi, training is still required for cleaning and maintenance of the same material. They also agree that the Guest room décor would get better with Khadi material. Khadi, which is also associated with cultural aspect, would boost up the aesthetic value of the hotel. Khadi is not used in the hotels now but it can come as a bang in the hotels in future.

The guest responded that they know about the Khadi material. Most of them liked the cotton khadi among all the materials. They liked the material very much as it is not harmful to the skin. Use of Khadi can increase in the national income also which would give boost to our economy. It can also eradicate unemployment. Khadi is considered to be the most satisfying beautiful Indian fabric.

CONCLUSION

Handloom/Khadi is a significant sector in the textile industry in India. Unique hand-crafted, skin-friendly and eco-friendly nature; and employment generation capacity of Handloom/Khadi sector demands more attention to improve its marketing practices to ensure more satisfaction and loyalty among its customers. Hand-woven characteristics of the Handloom/Khadi sector is a highlighting feature which needs keen attention in developing its marketing practices.

The research study aims to observe how linen made out of Khadi could be incorporated into the hospitality sector and if they can turn out to be feasible. The finding of the study points out that there is some sort of awareness about Khadi and handloom products among customers. Since it is a handloom product it turns out to be eco-friendly and the industry is also a great source of employment. The use of this linen in hotels can turn out to be ethnic and at the same time sustainable.

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THE IMPACT AND COPING STRATEGIES FOR TOURISM AND HOTEL INDUSTRY POST COVID-19 IN INDIA

Aakansha. J

*Second Year M.Sc. in Hospitality Administration,
Institute of Hotel Management Catering Technology,
C.I.T Campus, Taramani, Chennai-600113.
Email: aakanshajuturu@gmail.com*

Shwetha Mudagandur

*Second Year M.Sc. in Hospitality Administration,
Institute of Hotel Management Catering Technology,
C.I.T Campus, Taramani, Chennai-600113.
Email: shwetha799m@gmail.com*

ABSTRACT

SARS-CoV-2 pandemic was a shocker situation for all of them across the globe, which had disrupted almost all aspects of life and brought the entire world to a standstill. In this novel global crisis, the tourism and hospitality sector had collapsed world-wide, and the same is true for India. Therefore, this paper aims to look into the impact of Covid-19 on the Indian hotel & tourism industry.

The Indian tourism and hospitality industry together are considered to be the key drivers of growth among the services sectors in India. There is high potential for tourism in India considering its rich cultural and historical heritage, varied ecology & landscapes spread across the country. During 2019, the GDP contribution from travel & tourism was 6.8% of the entire economy, which came up to Rs.13,68,100 crore (US\$ 194.30 billion).

In India tourism is considered to be a crucial source of exchange. The exchange earnings from 2016 to 2019 grew at a CAGR of 7% & sunk in 2020, all thanks to COVID-19 pandemic. As the effects of COVID-19 spread across the country world-wide, the primary focus for the governments were the safety of their citizens. Decisions had been made to shut down hotels, restaurants, theme parks & other recreational places thereby causing a disruptive effect of the travel ecosystem. The other component of Tourism industry also faced huge loss due to pandemic like-Airline industry, Railways, Sea transport, Road ways, Travel Destinations, Travel agents, Travel companies like international travel house Ltd, Coxs & Kings Ltd, Mahindra holidays & resorts Ltd, Thomas cook, and even online travel companies like Expedia, Booking.com, cleartrip.com, Easemytrip.com, Yatra.com, etc., this is not the case just in India but worldwide. So now that there is relaxation and almost everything is sort of getting back to normal it is important that the tourism and Hotel sector people look into the strategies for recovery. The most important task for the industry is to gain its customers confidence by ensuring high grade safety and Hygiene measures & practices.

Aakansha & Shwetha Mudagandur

INTRODUCTION

These two years have been quite a year due to COVID-19. Governments all across the globe have responded to the pandemic first with closure of offices and educational institutions, halting of interstate transport, railways, prohibition of mass gatherings, cancellation of sporting and cultural events. Next came the restrictions with both inbound and outbound across all hospitality verticals: leisure, entertainment, adventure, legacy, meetings, incentives and conference, cruise ship, corporate. And other measures were undertaken to enforce lockdowns in their respective nations. The restrictions were gradually lifted within the curbed environment. Different countries adopted different practices based on their infrastructural feasibility, number of cases that's been reported and political consensus, but they all followed a fundamental approach in unison with regard to social distancing, wearing a mask and hygiene. The pandemic and the consequent back-to-back lockdowns had an immediate impact on most industries and sectors, leading to a decline in the GDP of most countries. Several industries had to reconsider and recreate new operating model and distribution system to adapt to innovative ways of working. Several organisations have asked their employees to work from home on grounds of safety and health. Many organisations have restricted travel, conferences, events in view of cost reduction to protect their own cash flows and profitability.

This pandemic has adversely affected the travel and tourism globally, causing the industry an approx. loss of US\$ 4.5 trillion. Domestic visitor spending decreased by 45% while international visitor spending decreased by 69.4% compared to 2019. With this impact the hospitality industry for its survival started exploring new ways for revenue optimizing. This pandemic also led to a series of job losses, creating temporary & permanent unemployment scenario. However, this did not prevent the industry from supporting the government and medical fraternity in every possible way that they could during the pandemic. Also, services were extended to their guests despite the challenges in full compliance with the covid regulations and by ensuring the highest hygiene and safety standards.

Even though the world has seen many other Natural Calamities and other novel disease spreads SARS-COVID was one of a kind that completely shook the entire globe and need less to say it affected the tourism and hotel industry adversely all across the globe. Here we would like to put forward few ideas that could help the industry cope with this crisis and recover at a much faster pace.

OBJECTIVES

The purpose of the study is to investigate on the effect, efficiency, and effectiveness of Hospitality and encourage tourism and grow the tourism market in India.

- To discuss and examine the study of local domestic tourism and hospitality growth before the post - pandemic.
- To study and bring light on current crisis COVID-19 faced by tourism and hospitality sectors.
- To project and analyse the future with few measures that will assist and overcome the problems in tourism sectors.

IMPACT OF COVID-19 ON TOURISM & HOTEL SECTOR IN INDIA

Month	2019	2020	Difference	Percentage Loss
April	774651	470	774181	99.94
May	615136	1329	613807	99.78
June	726446	4480	721966	99.38
July	818125	6503	811622	99.21
August	800837	11619	789218	98.55
September	751513	18469	733044	97.54
October	945017	30917	914100	96.73
November	1092440	60156	1032284	94.49
December	1226398	79910	1146488	93.48

Table 1: Comparison of Tourism Loss During April–December (2019–2020)

From the aforementioned table it can be seen that there is a huge percentage loss that the tourism industry has undergone with due to the pandemic.

- The No. Of FTA’s in the year 2019 were 10.93 million, whereas in the year 2020 the No.Of FTA’s were 2.74 million having an annual growth rate of -74.9%. This steep in the numbers can be seen due to the restrictions that had been imposed due to the prevailing novel corona virus.
- The SARS-COVID 19 had an adverse effect on domestic tourism as well.

In India, the summers are known for their vacation period, this is the period where the industry would be booming as it is at its peak. It’s at this period that most of the household travellers travel for leisure. The travel companies in India had seen a drastic decline in domestic travel by at least 30%. The places which had the highest impacts during this time were the warm weather location - Leh, Shillong, Kerala, Coimbatore, Amritsar, Manali, Shimla, Ooty, kodaikanal.

- India’s Archaeological Survey (ASI) has 3,691 registration sites, out of which 38 are historic buildings. According to the information produced by ASI, the total revenue earned just by issuing tickets to visit the monuments was 277.78 crores in the fiscal year 2020 (FY20 APR-JAN) whereas in the fiscal year 2019 it was 302.34 crores.

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- The entire hospitality industry also suffered; they had seen a 50% decline in reservations inside India, due to the cancellations of India's national and international flight, train cancellations etc. Hotels had stopped accepting group bookings in view of the pandemic to restrict the gathering at common areas. As on December 2020 most of the hotels were not opened. The vice president of HAI had quoted that around 40 million people affiliated with the hospitality industry might lose their job due to Covid (the Indian express 2020), the iconic Taj Brand had incurred a loss of US \$51 million

Impact on the airline sector

- The Indian airline service had also succumbed to loss and saw a decline in business due to corona virus the airline services were riotous during the lockdown period as they were dealing with low profits, liquidity crisis and increasing fixed costs and raising debts. The Indian aviation sector was facing a net loss of US \$ 9-12 million on daily basis during the lockdown period. To top it all off the airline industry's employees were facing a huge issue of job loss. According to the PTI 2020 The Air India company had withdrawn the job offers for over 180 cabin crew trainees. One of the most prestigious airlines of India and the one that's termed to be the largest Indian airlines – INDIGO had suspended its services for several months during the lockdown.

RECOVERING STRATEGIES FOR TOURISM AND HOTEL INDUSTRY POST COVID - 19 IN INDIA

• Safety and Health Standards

The first and foremost important practice is social distancing and wearing of masks. The hotel owners must ensure that all the key entry points and frequently touched points are disinfected on regular basis. The air quality in the properties is to be monitored closely. The temperature of the staffs to be recorded and tracked and checked on a daily basis. Contactless service to be extended to the guests and services. Only by putting the safety and hygiene standards at first the hospitality and tourism industry will be able to gain the confidence of their guests/customers. Guests or customers are to be requested with their travel history and results of their covid tests and their vaccination certificates. Also, to ensure the well-being of their guests and their staffs the hotel must ensure availability of medical assistance if required.

• Adaptation of Digital Technology

By adopting smart technology, the hotel industry would be able to overcome the barriers that related with the covid regulations. One of the major concerns would be the crowding scenerio of guests at the reception area for their check-In and Check-Out process, this problem can be sorted by adopting an integrated online check in and check out that would be a hassle-free procedure at a single touch via the use of technology.

Similarly, hoteliers can make use of apps to track the guest movements in the public or common areas which thereby later on can be disinfected. The technology can also be used as a communication medium, two-way communication: related to cleaning and sanitation and other

specification at a single touch from the place where you are residing. Adopting of e- cash can be one of the major evictions for contactless payment.

- **Pricing Offers**

Allowing guests to book hotels in modified dates with flexibility with flexible-rates and may change dates with key strategy to urge hotel bookings and even allow modification of cancellation in emergencies. Hotels and other companies related to tourism and hotel industry should reduce the price and give them an attractive offers. This will induce the people to travel and use of the services offered by them. Particularly the branded companies should give attractive packages to draw in the people.

DOMESTIC TRAVEL WILL BE KEY TO THE REVIVAL

Due to the present situation of Covid-19, it shows fear of traveling in city limits needs to attract people with remote places and accommodation centres which will be a good strategy to attract tourists like resorts or eco-hotels. All the supply segments like MICE, industry, sports, and social activities were cancelled or postponed indefinitely. The silver lining to this destruction would be that it took many representative bodies, including Travel, Tourism, and hotel rooms, to represent the state collectively. As we go to press, the policy should, in all likelihood, announce steps to restore and help the sectors under distress, including a particular focus on the hospitality industry, among many others. We first need to increase local travel already when humans start a foreign trip.

- **Media in Promoting the Industry**

Over the years media have contributed towards shaping tourism into a responsible industry by promoting the subsequent good practices-

1. It protects the environment and minimizes the negative social impact of tourism.
2. It generates greater economic benefits for local people and enhances the well-being of host communities.
3. It makes positive contributions to the conservation of natural and cultural heritage and promotes the world's diversity.
4. It provides more enjoyable experiences for tourists through more meaningful connections with local people.
5. It helps to know the local cultural, social and environmental issues.

As a summary, all stakeholders should pay attention on following necessities.

- Sharing of knowledge and continuing to work with the relevant parts regionally and abroad
- Understand the customer reaction after the disease outbreak, as demand patterns and product line customer behaviour, will demonstrate significant changes.

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- Rebranding of locations is very important after the situation underlines the good aspects of the epidemic.
- Highlight key incidents throughout India within the recent tragedies linked to tourists and international visitors.
- Throughout the outbreak, hotel owners, tour operators, and other government agencies must be in constant contact with the key customer base and test their safety while retaining a clear connection.
- Various sorts of camera help by specialist television channels, reporting by respected journalists, and fantastic coverage by trade journals affect Indian tourist visitors and student union. All these media slowly create positive and image of tourism in perceptions, minds, interpretation, psychology, behaviour, or the final site selection (inbound and outbound tourist)

CONCLUSION

COVID-19 pandemic has dealt the hospitality industry with uncharted challenges, This pandemic had devastating effects on operations, employees, and customers when compared to previous crises. Though learnings from the past crisis can be put to use in some way or the other it is hard to generate new knowledge that can provide insight to the industry about how to transform their operations according to new customers' needs and wants due to COVID-19 pandemic. This made the entire world realize that its not about the Survival of the fittest but its all about the "SURVIVAL OF THE ADAPTABLE" it's the adaptability that enabled the hospitality to get back on its toes, at least bear minimum to survive.

There can be seen a drastic shift in the importance that's being given to the hygiene and sanitation. Thereby by taking this as the focal point the industry has worked on in developing new standard operating procedures, conditioning to strict hygiene and sanitation practices at their organizations.

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ROOM MAKING WITH NANO-TECHNOLOGY AS AN EFFECTIVE ALTERNATIVE

Dineswaran. M

*Second Year M.sc. in Hospitality Administration,
Institute of Hotel Management Catering Technology and Applied Nutrition, Taramani,
Chennai-600113.*

Uma. P

*Second Year M.sc. in Hospitality Administration,
Institute of Hotel Management Catering Technology and Applied Nutrition, Taramani,
Chennai-600113.*

ABSTRACT

The use of nanomaterials - and nanotechnology-based tactics is developing at a remarkable rate in all fields of science and technology. Nanotechnology (NT) deals with materials one to one hundred nanometre in length. On the national Nanotechnology Initiative (NNI), nanotechnology is described as the understanding, manipulation, and control of matter at the above-said length, such that the physical, chemical, and biological properties of the materials (individual atoms, molecules, and bulk matter) can be engineered, synthesised, and altered to expand the following era of improved materials, devices, structures, and systems. The hospitality industry is likewise experiencing the advantages of nanotechnology in its numerous areas of applications. Nanoparticle application in the course of conventional room making techniques enhances the overall housekeeping performance manifold and imparts hitherto unachieved functionality. Nanotechnology has versatile applications in fabric and chemicals enterprise in manufacturing nanoparticle compounds for self-cleansing surfaces, glasses, lavatories, vanity units and also in manufacturing of housekeeping linens with stain resistance, flame retardant finishes, wrinkle resistance finishes, moisture control, antimicrobial characteristics, UV protection, and soil release properties. Nanotechnology has additionally made a tremendous impact on functionality and performance. Nano-treated rooms may result in many innovations as the technological know-how develops in future. Indeed, advances in nanotechnology have created widespread possibilities and challenges for the hospitality industry. the focal point of this paper is to summarise current applications of nanotechnology as they relate to room making in hospitality enterprise.

Key words: nanotechnology, nanoparticle, nanomaterials, housekeeping, room making, hospitality.

INTRODUCTION

Nanotechnology is science and engineering at the size of atoms and molecules. It is the manipulation and use of substances and gadgets so tiny that not anything can be built any smaller. Nanomaterials are normally between zero.1 and a hundred nanometres (nm) in length – with 1 nm being equivalent to one billionth of a metre (10^{-9} m). that is the dimensions at which the basic capabilities of the biological world operate – and substances of this size display uncommon physical and chemical properties. These profoundly one-of-a-kind properties are due to a boom in surface area compared to volume as particles get smaller – and also the grip of weird quantum effects on the atomic scale. If 1 nanometre was more or less the width of a pinhead, then 1 metre on this scale might stretch the complete distance from Washington, DC to Atlanta – around one thousand kilometres. However a pinhead is clearly one million nanometres extensive. maximum atoms are 0.1 to 0.2 nm huge, strands of DNA around 2 nm wide, purple blood cells are around 7000 nm in diameter, while human hairs are commonly 80,000 nm throughout.

However, experimental nanotechnology did no longer come into its personal until 1981, when IBM scientists in Zurich, Switzerland, constructed the primary scanning tunnelling microscope (STM). This allows us to see single atoms through scanning a tiny probe over the surface of a silicon crystal. In 1990, IBM scientists found a way to use an STM to transport single xenon atoms around on a nickel surface – in an iconic experiment, with an stimulated eye for advertising, they moved 35 atoms to spell out “IBM”. In addition, strategies when you consider that being advanced to seize pix at the atomic scale, these include the atomic force microscope (AFM), magnetic resonance imaging (MRI) and even a sort of modified light microscope.

Other sizeable advances were made in 1985, when chemists found how to create a football-ball-shaped molecule of 60 carbon atoms, which they referred to as buckminsterfullerene (also referred to as C60 or buckyballs). And in 1991, tiny, extraordinarily-robust rolls of carbon atoms called carbon nanotubes were created. Those are six times lighter, yet 100 times stronger than steel.

Each material has crucial applications as nanoscale building blocks. Nanotubes were made into fibres, lengthy threads and fabrics, and used to create hard plastics, computer chips, toxic gasoline detectors, and numerous other novel materials.

OBJECTIVES

The objective of this research is to provide a perception into the cutting-edge traits of using nanotechnology inside the hospitality industry and to inspire and anticipate further studies in this subject. This evaluation presents a top level view of the maximum contemporary advances concerning on- efficient room making research and the wonders which can be found out by using nanomaterials in modern-day linens and chemical compounds in terms of total power and time saving works.

1. To study about the applications of nanomaterials in room making.
2. To study how nanotechnology can be used to provide customer satisfaction in comfort.
3. To study how nanotechnology can be used to minimise the resources in the hospitality field.

METHODOLOGY

Qualitative research methodology

Data collection

1. Documents and records
2. Case studies

Data analysis

1. content analysis
2. Thematic analysis
3. Discourse analysis

DISCUSSION

Over many years advanced Technology has been used in various parts of the Hospitality Industry. Right from point of room making By using nanotechnology the efficiency will go a step ahead in both smooth working of management and customer comfort. The use of nanotechnology in linens and cleaning agents can allow for the control of crystal structure, improved mechanical properties, improved resistance to chemicals, microbes, flame, and heat, improved electrical properties, improved coloration ability, and self-cleaning clothing. Producing films that can be applied to surfaces such as countertops or windows that make it much easier to keep those surfaces clean Using nanoparticles in soap that make it work better while producing less environmentally harmful by products. Nanoparticle Cosmeceuticals are the cosmetic products which contain biologically energetic elements having healing benefits at the surface applied. Those are applied as cosmetics as they declare to beautify the look . Cosmeceuticals are chasm among pharmaceuticals and private care products. Cosmeceutical products have measurable healing efficacy at the skin, as capsules and formulations have assorted from pores and skin to frame to hair and they're used for the remedy of numerous situations like hair damage, wrinkles, photoaging, pores and skin dryness, darkish spots, choppy complexion, hyper pigmentation, and so forth.

Advantages of nano-tech linens

1. Water repellency

Water repellency The water-repellent property of fabric created by using nano-whiskers, which are hydrocarbons and 1/a thousand of the scale of a standard cotton fibre, while brought to the fabric creates a peach fuzz impact without lowering the electricity of cotton. The areas between the whiskers on the fabric are smaller than the standard drop of water, however still larger than water molecules; water therefore, stays at the top of the whiskers and above the surface of the material. But, liquid can nonetheless bypass through the cloth, if stress is applied to it. Nanosphere impregnation concerning a three-dimensional surface shape with gel forming

additives which repel water and save you dust particles from attaching themselves also are used. as soon as water droplets fall onto them, water droplets bead up and, if the floor slopes barely, will roll off. As a result, the surfaces stay dry even all through a heavy shower. Moreover, the droplets select up small particles of dirt as they roll, and so the leaves of the lotus plant hold easy even during light rain. By altering the micro and nano-scale surface capabilities on a material surface, a greater strong manage of wetting conduct can be attained. It has been verified that by means of combining the nanoparticles of hydroxyapatite, TiO₂, ZnO and Fe₇O₃ with different natural and inorganic materials, the audio frequency plasma of fluorocarbon chemical turned into carried out to deposit a nanoparticulate hydrophobic movie onto a cotton fabric surface to improve its water repellent assets. This kind of floor engineering, that's capable of replicating hydrophobic behaviour, may be utilised in growing unique chemical finishes for generating water-and/or stain- resistant fabrics at the same time as complementing the other acceptable cloth attributes, including breathability, softness and comfort. The surfaces of the fabric fabric may be substantially modified to attain appreciably extra abrasion resistance, ultraviolet (UV) resistance, electromagnetic and infrared protection

2. UV-protection

Inorganic UV blockers are greater ideal to natural UV blockers as they are non-toxic and chemically solid underneath publicity to each excessive temperatures and UV. Inorganic UV blockers are normally sure of semiconductor oxides inclusive of TiO₂, ZnO, SiO₂ and Al₂O₃. Among those semiconductor oxides, titanium dioxide (TiO₂) and zinc oxide (ZnO) are usually used. It has been determined that nano-sized titanium dioxide and zinc oxide are extra green at soaking up and scattering UV radiation than the traditional length, and are as a consequence higher to offer protection against UV rays. This is because of the reality that nano-particles have a bigger floor location in step with unit mass and extent than the conventional substances, leading to the increase of the effectiveness of blocking UV radiation (Kathiavelu, 2003; Yang et al., 2003). Various researchers have worked at the software of UV blocking remedy to materialise the use of nanotechnology. UV blockading treatments for cotton fabric are evolved using the sol-gel approach. A skinny layer of titanium dioxide is shaped at the floor of the treated cotton material which affords top notch UV safety; the impact can be maintained after 50 domestic laundeurings. Apart from titanium dioxide, zinc oxide nanorods of 10 to 50 nm in period are also implemented into cotton material to provide UV safety. In line with the research at the UV blockading impact, the material handled with zinc oxide nanorods have been located to have validated an wonderful UV protecting element (UPF) score. This effect can be in addition greater via the usage of a unique system for the utility of nanoparticles on the fabric floor. When the system of padding is used for making use of the nanoparticles on to the material, the nanoparticles get carried out not only on the surface on my own but additionally penetrates into the interstices of the yarns and the fabric, i.e. a few portion of the nanoparticles get penetrate into the fabric shape. Such Nanoparticles which do not now stay on the floor may additionally not be very effective in protecting the UV rays. It is profitable that handiest the proper (face) aspect of the material receives exposed to the rays and therefore, this floor alone needs to be covered with the nanoparticles for higher UV protection. Spraying (the use of compressed air and spray gun) the cloth floor with the nanoparticles can be a method of making use of the nanoparticles.

3. Antimicrobial

Although many antimicrobial marketers are already in use for fabric, the foremost training of antimicrobial for fabric include organo-silicones, organo-metallics, phenols and quaternary ammonium salts. The bis-phenolic compounds are well-known and show a wide spectrum of antimicrobial activity. For presenting antibacterial houses, nano-sized silver, titanium dioxide, zinc oxide, triclosan and chitosan are used. Nano-silver particles have an extraordinarily large relative floor location, consequently growing their touch with bacteria or fungi and massively improving their bactericidal and fungicidal effectiveness. Nano-silver is very reactive with protein and shows antimicrobial homes at concentrations as low as 0.0003 to zero.0005%. When contacting microorganisms and fungi, it'll adversely have an effect on cell metabolism and inhibit mobile increase. It also suppresses respiratory, the basal metabolism of the electron switch gadget, and the delivery of the substrate into the microbial cell membrane. Moreover, it inhibits the multiplication and increase of these microorganisms and fungi which cause infection, odour, itchiness and sores. Some synthetic antimicrobial nanoparticles which are used in textiles are as follows. Triclosan, a chlorinated bis-phenol, is an artificial, non-ionic and broad spectrum antimicrobial agent possessing usually antibacterial on my own with some antifungal and antiviral residences. Chitosan, a herbal biopolymer, is correctly used as antibacterial, antifungal, antiviral, non-allergic and biocompatible. ZnO nanoparticles have been broadly used for his or her antibacterial and UV-blocking homes.

4. Antistatic

An antistatic agent is a compound used for treatment of materials or their surfaces in order to reduce or do away with buildup of static strength commonly induced by the triboelectric effect. The molecules of an antistatic agent regularly have each hydrophilic and hydrophobic areas, similar to those of a surfactant; the hydrophobic aspect interacts with the floor of the cloth, while the hydrophilic side interacts with the air moisture and binds the water molecules. As synthetic fibres provide poor anti-static properties, studies concerning the improvement of the anti-static homes of textiles with the aid of the usage of nanotechnology has been at massive. It changed into decided that nano-sized debris like titanium dioxide, zinc oxide whiskers, nano antimony-doped tin oxide (ATO) and silanenanosol may want to impart anti-static residues to artificial fibres. Such fabric facilitates to correctly burn up the static charge which is amassed on the material. On the opposite hand, silanenanosol improves anti-static residences, as the silica gel debris on fibre absorb water and moisture in the air with the aid of amino and hydroxyl organisations and certain water. Electrically conductive nano-particles are durably anchored inside the fibrils of the membrane of teflon, creating an electrically conductive network that stops the formation of remoted chargeable regions and voltage peaks normally determined in conventional anti-static materials.

5. Wrinkle resistance

To impart wrinkle resistance to fabric, resin is commonly used in conventional techniques. however, there are barriers to making use of resin, consisting of a decrease in the tensile power of fibre, abrasion resistance, water absorbency and dye-capability, as well as breathability. to

triumph over the limitations of the use of resin, some researchers hired nano-titanium dioxide and nano-silica to enhance the wrinkle resistance of cotton and silk respectively. Nano-titanium dioxide is hired with carboxylic acid as a catalyst underneath UV irradiation to catalyse the move-linking reaction between the cellulose molecule and the acid. On the other hand, nano-silica whilst applied with maleic anhydride as a catalyst should effectively enhance the wrinkle resistance of silk. Moreover, the wrinkle restoration of the fabric also can be improved to a tremendous volume via offering strategies like padding and exhaustion beside the use of nano-materials to the fabric. Studies additionally have endorse that remedy of fabrics with microwaves are extra wrinkle resistant as corresponding to oven curing, because it generates better frequency and volumetric heating which minimises the damage from over drying.

6. Odour free

Software of silver nanoparticles on fabrics save you the nasty smell brought about because of the microbial pastime. Many agencies use fabric covered with silver nanoparticles to increase scent-loose garb, inclusive of stockings, socks, and undergarments. Korean-primarily based Hyosung develops nylon fibres containing silver nanoparticles that reduce 99.nine% boom of numerous dangerous bacteria.

Application of nano-tech in cleaning products

Nanotechnology businesses are finding methods to make the arena a purifier place by way of exploring 3 methods for enhancing cleansing merchandise, those strategies are:

1. producing movies that may be carried out to surfaces which includes counter tops or home windows that make it a great deal easier to hold those surfaces easily.
2. the usage of nanoparticles in cleaning soap that make it paintings better whilst producing less environmentally dangerous byproducts.
3. the usage of materials inside the cleaning manner which can be antibacterial, together with silver nanoparticles. word that there is interest in regulating the usage of silver nanoparticles due to situation that they'll damage beneficial bacteria in groundwater, which include lakes, whilst released

Titanium oxide nanoparticles as part of a film that uses the strength in light to kill bacteria on surfaces. Titanium oxide nanoparticles are known as photocatalysts because of their capacity to apply strength in mild to begin the chemical response that kills the microorganism. Customising the residences of skinny polymer layers that you could wipe onto glass to make an extended lasting, water repellent movie. This generation could make it less complicated to keep your automobile's windshield smooth and improve visibility.

Self cleaning nano-tech

Nanotechnology and its future prospects

With the growing life-style and growing demands of the developing country- India, nano science and nano generation can also considerably alternate the functioning of the construction enterprise in the close to destiny. For the cause, the generation offers longer lifestyles and sustainability to any product with much less effort and coffee preservation price. While washrooms stay the most crucial part of any commercial or residential region its hygiene and maintenance requires unique interest. But with the use of nano merchandise like water sealers, scratch resistant coatings on vinyl or showers enclosures, insulation coatings, etc., upkeep troubles may be resolved without difficulty. Moreover, nanotechnology primarily based coatings which allow self-cleansing surfaces are already being embedded into window glasses and plumbing fixtures.

Nanotechnology and bathe enclosures

Easy-to-smooth nanotechnology products together with toilet tiles, scratch-unfastened coatings for timber, plastics, steel amongst many more are already broadly used. Except this technology is great used in cleaning bathe enclosures. Currently, those enclosures are an imperative part of all current washrooms which affords a separate moist region in the toilet leaving the relaxation of it dry. Also, these bathe enclosures are crafted from glass which calls for maximal protection. The reason for its reputation is, it gives out a sparkling clean look from inner as well as the outside. And this is a end result of the protective coating that now not most effectively improves however also protects the surface of the bathe enclosures. Furthermore, the technology makes the enclosures water repellent which helps in making them proof against micro organism, stain, electric powered, scratch, and heavy effect as well as repellent to grease.

Use of Nano generation in public locations

Remedy of key surfaces with Nano-Fluids can cause principal blessings for the hygiene and cleanliness of public conveniences. Further, these improvements bring environmental and cost savings blessings like

- reduced danger of public go-infection the use of best in elegance hygiene techniques
- reducing carbon emissions the usage of energy green, cost powerful products
- smooth-clean technique decreasing labour time in excess of forty per to 60 per cent
- Water- utilisation reduction by means of 30 in step with cent to forty in line with cent which is the most essential environmental benefit

CONCLUSION

The following have been covered in this research paper:

- An introduction to nanotechnology.
- Different applications of nanotechnology in room making.

- The Role of nanotechnology in hospitality enterprise
- Efficient and time saving advantages of nanotechnology
 - 1) Advantages of nano-tech lines
 - 2) Advantages of nano-tech housekeeping amenities
 - 3) Advantages of self cleaning bathrooms and bathroom appliances
 - 4) Advantages of self cleaning room surfaces
 - 5) Advantages of self cleaning and scratch proof glasses

Nano finishes being developed for the whole lot of substrates are at their infantile stage. The simple mechanisms and the logic of a number of these finishes has been explained by using the inventors. The opportunity of the kind of business completing packages included in this text going on inside the next few years is pretty excessive. Nano finishing can change the traditional finishing technique of each merchandise with lower production charges. In characteristic, it is possible to assume many greater developments in hospitality enterprises primarily based on Nano technology.

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INTERPRETATION OF AUGMENTED REALITY (AR) AND VIRTUAL REALITY (VR) IN STAR HOTELS

Sathish Kumar. E. T

*Assistant Professor,
School of Hotel and Tourism Management,
Vellore Institute of Technology, Vellore: Tamil Nadu, India.
Mob: 9629937357
Email: sathishkumar.et@vit.ac.in, violet.sathish@gmail.com*

ABSTRACT

Augmented Reality (AR) created new guest experience, is influence many aidful requests that is attracting greater consideration from tourism sectors, researchers and professionals. As, AR technologies are evolving, the number of scientific applications is also at growth AR are proving their value especially when planning, marketing, education, tourist and sport. The technology will lead and guide all aspects of the sectors similarly in hotel industry. The range of applications for augmented reality is very wide since it can be applied in entertainment, education, communication, medicine, military, and many other industries. The aim of this research paper is to highlight top technologies for Tourism and Hospitality with regard to Augmented Reality.

Keywords: Augmented Reality (AR), Virtual Environment, Display Technologies, Sensors, Room division, Hotel, front office, hospitality industry.

Guest specs – virtual interaction @ hotel lobby



Source: Hotelier Web

Sathish kumar

Synopsis

- Abstract
- Introduction
- Objectives of the study
- Examples of Augmented reality
- AR in Hotel
- AR in Front office
- AR in Sales and Marketing
- AR in House keeping
- AR in Food and Beverage service
- Technology Trends in front office
- AR vs VR vs MR
- Conclusion
- List of abbreviation
- Key Terms
- References

INTRODUCTION

Augmented reality (AR) is an **interactive experience** of a **real-world environment** with the help of the computer software, application and different sensors **modalities** (Human computer interaction) it includes **audio, video, haptic** (grasping something like moving object), **somatosensory** (the brain and body had a perception of touch) and **olfaction** (sense of smell).

Augmented reality is a know how that the whole thing on computer vision-based acknowledgement algorithms to augment **sound, video, graphics and other sensor-based inputs on real world objects** using the camera of your device.

“Enhance Physical Environment

Digital Transformation - Experience

Improving standard hotel operation”

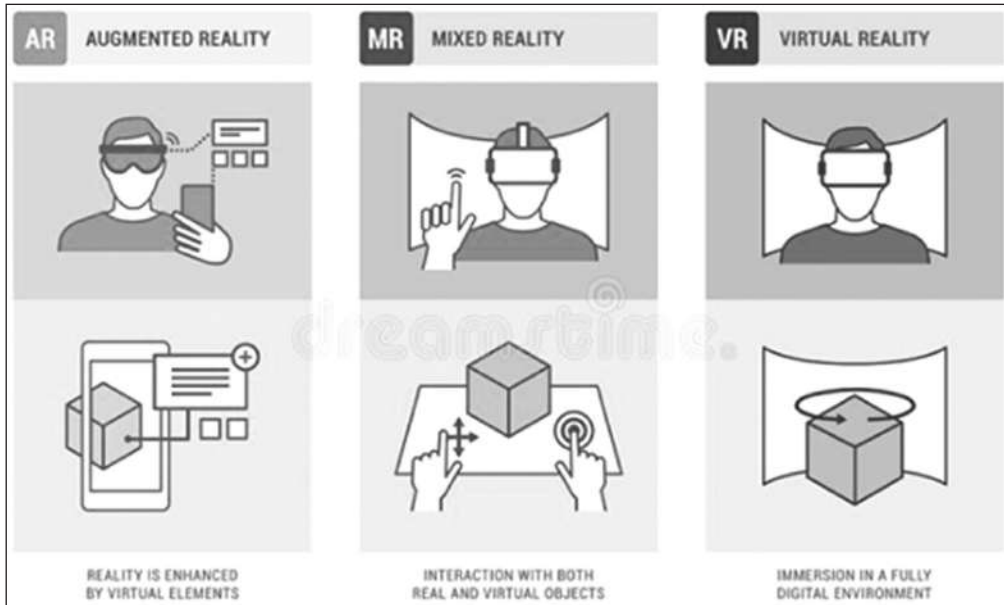
Let we can see how the AR play role in hotel industry and change the best experience to the guest right form reservation, arrival, stay, departure and post departure.

Objectives of the study

- To find the technology help for the guest to choose the hotel
- To Create awareness of technology and rapid growth in hotel industry

Sathish kumar

- To find out the invention technology aid the guest service in hospitality industry
- To discover the virtual experience of guest
- The ultimate goal of AR is that the user can't tell the difference between the real world and the virtual data that is superimposing it.



Source: Dreams time

Examples of Augmented reality

- Google Glass - Product
- Snapchat – app
- Pokémon Go – Game – highly addicted game all over the world

AR in HOTEL

“Enrich the guest experience”

In room guest experience is outstanding, this technology takes to the next level of interacting with guest with more information with digital experience. Where guest can choose what they want. Where possible to use the technology. However, the **guest is God**, the management first focus on the guest experience like choose the hotel, see the hotel facilities, etc...

The author lists out of the department in the hotel:

- a) Front office
- b) House keeping
- c) Food and beverage service

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- d) Kitchen
- e) Purchase
- f) Stores
- g) Finance
- h) Engineering and maintenance
- i) Human Resource
- j) Security
- k) Sales and marketing.

“Augmented reality is transformed the hospitality industry”

AR In Front office

“AR is readily available all the information on time before the guest arrival”

- a) Reservation – Pre arrival
 - To help the guest to choose the hotel
 - To read previous customer reviews
 - To can see all the information about the hotel
 - The digital board will interact with the guest
 - To book the rooms
 - To feel the real, enrich experience of hotel
- b) Arrival
 - To real time (eye) seeing experience
 - With help of AR can get lot of information
 - To Map features
 - Guest Recognition

Note: Marriott hotels uses the augmented reality by launched an app, where guest can check-in through mobile

- c) Stay
 - Interactive hotel rooms
 - Translation facilities

AR glass Provide information to the guest @ the hotel



Source: Hotelier Web

AR in sales and marketing

- It permits brands to give customers unique experiences with just a click into their mobile devices. Brands can use AR to let consumers to try products and service before they buy them, with augmented decision experiences becoming increasingly popular.
- AR advertising is a mobile ad unit which uses the smartphone camera to superimpose 3D assets, such as game characters and scenarios from the advertised game, onto the user's real-world surroundings.

AR in House keeping

Hotelier view

- To aid the room attendant to clean the room
- To help refill the room amenities faster
- To do self-inspect the rooms before cleaning
- To help to find the guest articles – like lost and found
- To aid in taking inventory in laundry and the list go on.

Guest view

- Without opening cupboard guest can see what is inside
- Guest can see the things inside the minibar without opening a mini fridge
- It helps in avoid charge to guest folio
- To feel real in-room guest experience
- In batch AR help the guest to show diverter usage give information – avoid complain about hot water

“Lot more research needs to do in every sub section of department with help of experts can make it”



Source: Appville software

AR in food and beverage service

- To digital menu
- Guest can see the dish before the dish is served
- Guest can be entertained with the TABLE – TOP TECHNOLOGY
- To help the waiter and the guest – to buy a time – guest won't feel that they are waiting for the dish,

Display technologies of augmented reality



Source: Hotelier Web

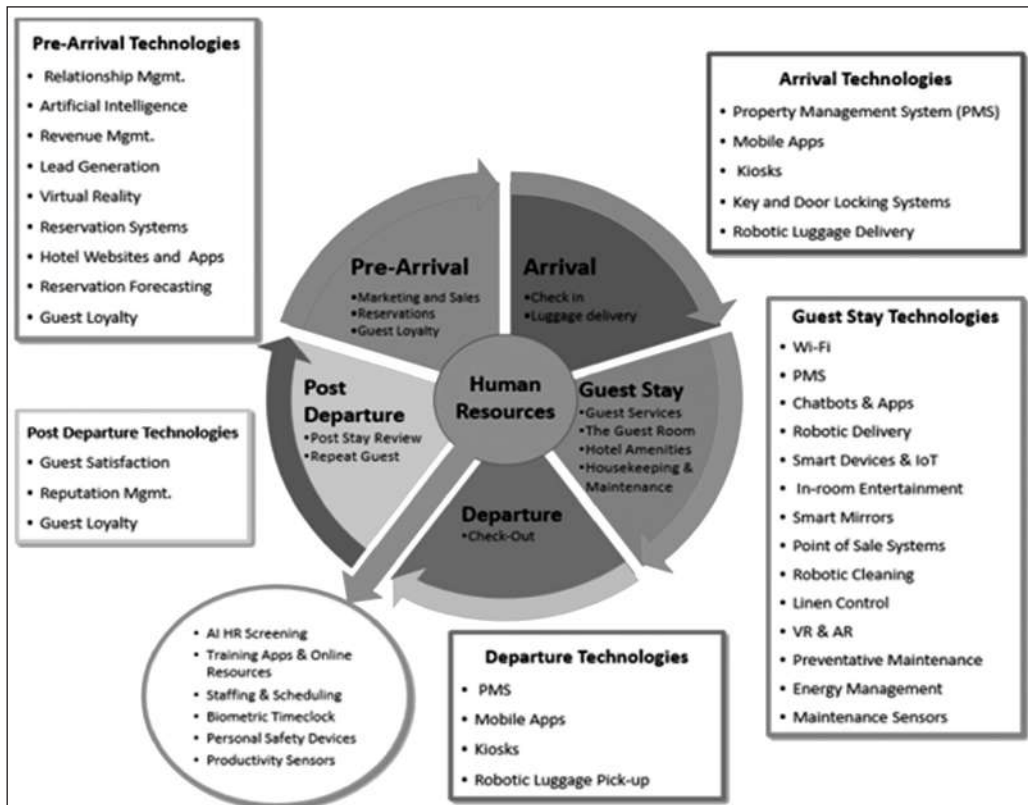
“Where Technology will help both hotelier and guest”

Front Office:

- The front office is focal point of the hotel.
- To helps in brand building
- To guest trusts on throughout their stay for information and service.
- Departments: Front Desk, Reservations, bell desk, Concierge, Guest Services, Front desk, Cashier, telephone, door man, and valet parking attendant.
- Main functions: to sell rooms, greet guest, get payment, deliver information to guest.

For example: Holiday Inn created an augmented reality hotel experience, which allowed guests to point their smartphone and see realistic virtual depictions of famous celebrities in the hotel.

Guest cycle with Technologies



Source: Book- Hotel and Guest Room Technology Page No 10.

Front Office Technology

Computerized front desk technology enables the agent to perform check-in duties ranging from room availability and reservations, to inventory, pricing and guest data capture. On checkout, the guest’s billing is integrated with phone accounting, in-room entertainment costs and point of sale purchases.

“First impressions are critical to the successful guest experience”

Technology Trends in Front Office Operations:

1. Mobile Apps for easy access
2. Self-Check in or Recognition Technology
3. Robots
4. Chatbots
5. Artificial Intelligence
6. Big Data

7. Digitized Room Keys
8. Virtual Reality
9. Augmented Reality
10. Innovative Hotel Technology Solutions
11. Instant Messages for Direct Communication
12. Social Media for Promotion

AR vs VR vs MR

AR vs VR vs MR			
Characteristics	VR	AR	MR
Is user aware about real world ?	NO	YES	YES
Can user interact with Real and Virtual world in real-time ?	NO	YES	YES
Can Real and Virtual contents interact with each other in real time ?	NO	NO	YES

Augmented Reality Systems have the following characteristics:

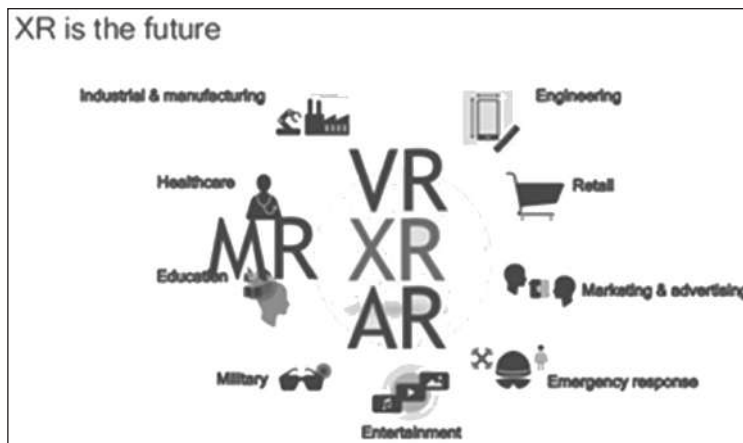
- Mix of real world and virtual objects in real environment.
- Synchronize real and virtual objects with each other.
- Highly interactive and runs in 3D in real time.

CONCLUSION

- The import of technological up-gradation can be seen in almost all trades and industries these days. Hospitality is a service-based deal. So, not just the 5 star or vast chain hotels but the local stays are also looking forward to displaying themselves using such options and technologies.
- As this industry is not unaware of the fact that how much of attraction this can bring to the guests and how many opportunities of better performance and better customer satisfaction augmented reality technology-based improvisations can unleash.

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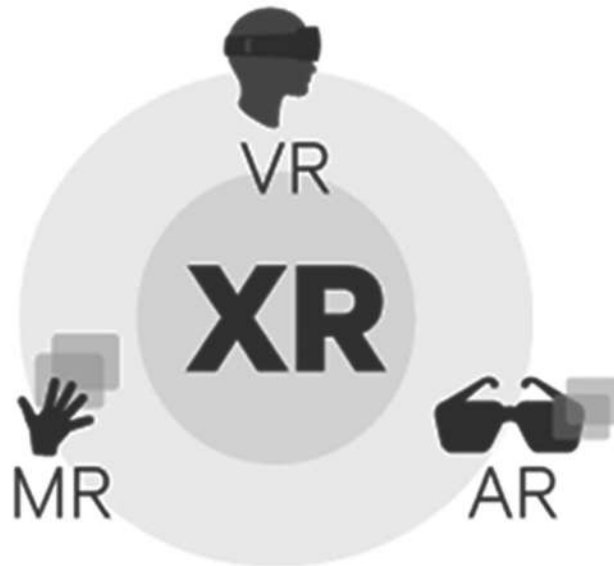
- Technology is used across the entire hotel guest cycle. Hotel technologies run with chatbots, robots, IoT, sensors, application and other technologies helping hotel guests throughout the hotel during guest cycle right from pre-arrival, arrival, stay, departure and post departure.
- Mobile devices have become a central part of hotel technologies, often providing the channel through which the guest interacts with the hotel. Guest is using apps to make a room reservation, check-in and out of the hotel, demand services, control devices in their hotel room, order food and beverages and enhance their recreation activities
- Technology has helped reduce costs, enhance operational efficiency, and improve services and customer experience. Both customers and businesses can benefit from improved communication, reservations, and guest service systems. Finally, more opportunities for future research in this XR technology.



List of abbreviation

- AR = Augmented Reality
- VR = Virtual Reality
- MR = Mixed Reality
- XR = Extended Reality
- AI = Artificial Intelligence
- HMD = Head-Mounted Display
- DOF = Degrees of freedom
- CPU = Central processing unit
- FIVR = Full immersion virtual reality
- FOV = Field of view
- FPS = Frames per second

- GPU = Graphics processing unit
- HPU = Holographic processing unit
- IMU = Inertial measuring unit
- IoT = Internet of things
- IPD = Interpupillary distance
- LoS = Line of sight
- MR = Mixed Reality
- OHMD = optical head-mounted display
- PSVR = PlayStation VR
- VRMMO(RPG) = virtual reality massive multiplayer online (role-playing game).



Key Terms

- **Virtual Reality (VR) & Augmented Reality (AR)** – Virtual Reality refers to an artificial or simulated environment. Two technologies exist, one that can be viewed on traditional computers and mobile devices, and a more immersive experience that requires the use of specialized headsets (immersive VR). The immersive VR technology allows the user to interact with the environment. In contrast, Augmented Reality overlays the display of the physical environment with additional content or information
- **Guest Data Platform** – An independent system that collects data from existing hotel systems (PMS, POS, IoT, Website Analytics, and others), harmonizes and connects it to provide usable data

- **Cloud Computing** – Using a network of remote servers hosted on the internet to store, manage, and process data. This is an alternative to the traditional approach of using a local server or a personal computer to manage and process the data
- **Beacon Technology** – A device that broadcasts a signal that can be received on a smartphone indicating the geographic proximity to an item of interest, such as a hotel restaurant or shop. This can be accompanied with special incentives or other useful information.
- **AI (Artificial Intelligence)** – The simulation of human intelligence and behavior in machines that are programmed to learn and adapt, to think like humans, and mimic their actions
- **Wi-Fi 6** – Next generation of Wi-Fi, providing faster performance, and significant performance improvements over current Wi-Fi standard.

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GUEST'S PERCEPTION TOWARDS ADVANCEMENT OF TECHNOLOGY IN HOTEL INDUSTRY

Priya Harit

Lecturer,

IHMCT & AN, CIT Campus, Taramani, Chennai-600113.

Chandan Kumar

Assistant Lecturer,

IHMCT & AN, CIT Campus, Taramani, Chennai-600113.

ABSTRACT

Objectives: The main objective of the study is to determine that what influences the guest behavior and perception towards the technology in hotels. Through this we will be able to understand the difference between the guests experiences in the hotels where new technologies have been implemented with the one where not implemented.

The purpose of the paper is to enhance knowledge about technology, trends and artificial intelligence in hotels in India. It helps to evaluate the role of technology and its impact on repeat business by improving service quality and customer satisfaction.

Design/Methodology/Approach: The paper is based on a summarized review of previous theoretical contribution. It is based on the exploration of relevant literature and various theoretical frameworks which contributed hotel industry in relation with technological advancement.

Findings: The paper has expressed the thought on the influences on technological advancement in hotel industry which includes the various service areas that has determined on the premise on the guest cycle model. The influences divide into customer behavior, various technologies and employee engagement in those technologies. The current study helps in promoting the much of affective technological advancement to increase the acceptance level of technological models concerning data technology by the hotels.

Genuinity of the research: This paper makes an important contribution to hospitality and tourism literature, as it explores how technologies implemented to improve service quality and customer satisfaction, and develops analytical tools by which this may be evaluated.

Keywords: Guest perception, technology, advancement, hotel industry.

INTRODUCTION

In this fast-changing world of technology, it's a new challenge every day to manage the time with minimization on physical efforts on enhancement of technologies which will provide the satisfactory service level. Theodore Levit says– “Creativity is about thinking of new things where as innovation is doing new things”. In order to enhance the work services and to extend the standard of the hotel services we would like to pioneer the new technology within the welcome trade. Through the new technologies guest will book the space attendant for the services and may management the sunshine operates the curtains every and each factor will be done from one device.

Technological innovation is known wide currently days within the building trade and hospital industry additionally in the term of work department it will prove that new technology within the work department will increase the standards and standards of the work and same time block the price and increase the value of the department additionally.

Once implementation and innovation of the new technologies within the word department all the workers of the building and therefore the same time the guest is additionally going the face the heap of downside however, we've got the overcome those problems by giving the right coaching to the employee and educate the guest regarding the technology . So as to beat the all difficulties we have got to reviews on numerous influences and that we ought to take the feedback additionally from the guest.

The motive for the publication is to understand the perception of guest in regards of technology advancement in the hotels. We will see and understand the difference in the level of services among the hotels where technologies are practiced and where it not practiced in respect to the customer. To know the guest's acceptance in terms of technologies advancement.

Pros and Cons of Technology used in hotels

PROS	CONS
Guest room automation	Set up cost is high
Predictive maintenance	Limited range of products
Mobile engagement	Cyber attacks
Hyper Personalization	Need Expertise
Cost saving in Long Run	Lack of human touch
APIs and third-party integration	Location is an issue
Sustainable development	Availability of technology
Less Effect on non renewable resources	High use of electricity

Common Technologies followed by Hotels

Coming to the use of technologies there are immense variety of technologies available in the market which are being used in the hotels to make life easier.

Some Examples of technologies which are being used in the hotels are:

Mobile Communication and Automation:

In many airports mobile automation services has been started where customer has need to stand in lines for hours for their check ins and same has been implemented in hotels as well.

NFC Technology

Near-field communication (NFC) describes a technology which is used for contactless exchange of data over short distances. Two NFC-capable devices are connected via a point-to-point contact over a distance of 0 to 2 cm. This connection can be used to make safe transaction, exchange digital content, exchange data (such as process data and maintenance and service information) between the devices. This interface can also be used for parameterization of the component .

Robot and sensors

Robots have been slowly taking over in few countries for some time now. There is a human kind of robot in a branch of the Bank of Tokyo-Mitsubishi. Robots are able to sell coffee makers in stores across Japan. Robot act as tour guides in the National Museum of Emerging Science and Innovation.

Smart room Keys

Now a days in hotel no need to wait for room key in lobby, with the help of smart phone and by using hotel app guest can open the door and can access many services.

Entertainment on tap

This is an in room technology where guests are able to control the room tv and music system with the help of on one tap of their mobile phones. It will too convenient for the guest where the guest has no need to search for different remotes to operate different gadgets.

Cloud Services

The moment there will be introduction of entertainment on tap there will be requirements of cloud storage where all the data will be stored. Even same cloud storage system will be used to store individual guest preferences for the next visit of the guest.

Feedback on social media

Technology has infiltrated almost every aspect of our lives and hotel developers need to realize that almost any person checking in the hotel resort, spa or lodge will have a smart phone in their pocket.

Voice search and voice control

Now a days people are searching their requirement with the help of voice search and voice control. Typing takes time and it need concentration while in voice search one can do it by walking also. People are searching hotel, restaurant, café, etc with voice search. To capitalize this opportunity one should design the website in such a way that it is capable and supportive with voice search.

Guest Perception towards technology Experience

Guest or customer is satisfied when post-purchase evaluation reveals service quality higher than guests' expected service quality.

Different studies have investigated the relationship between service quality, satisfaction, and customer loyalty. Even when high service quality is provided and a customer is satisfied, it does not necessarily mean that this customer will come back.

There can be different reasons why a customer would not come back to a property where he or she received high quality service and was satisfied. One reason could be that a customer does not want to travel to the same area, but prefers to explore something different. Another possibility is the customer's willingness to try something new even if the customer returns to the area; and finally, a customer can be influenced by a better deal offered in another hotel.

Research objective of this paper concentrates on the hotel guest satisfaction with technology services and amenities, thus the following sections will present the review of technologies implemented in hotels and studies which focused on satisfaction of guest.

Review of Literature

A user's behavioral readiness to adopt a technology is upon their perception on technology usefulness and ease of use. A person is ready to use technology once he or she believes that by using a particular system would enhance the job performance or it will provide usefulness in the work. So, in hospitality the usefulness of technology is in many areas for example online booking, room management travel bookings, easy communication, on time handling of the guest request, easy access of old data and records.

Technology has been proved as an important aspect in the many industries as it helps a company enhance its profit and also satisfy and retain the customers. Technological advancement is needed for business to become prevalence, there for research on the measurement and improvement of service quality has become essential. Numerous studies of technology in hotel industry and its consequences have been done since it is a way to build and create a competitive advantage for a company.

To accept any technology also depends upon the ease of use which is defined as the degree to which a person feels that using a particular system would be effort less. It has been supported by number of studies found significant positive relationship between employee perception on the ease of use of technology and its effect on quality of services provided to the guest which in return provides higher level of customer satisfaction and repeat business.

Technology plays a great role in displaying innovativeness. A product innovativeness is identified as customer perception if newness and uniqueness of a product. This helps guest to differentiate between a new offering and previous one.

The hospitality industry has full of options for adding innovativeness for products since customized and personalized services to customer has emerged as a Major practice towards innovation for example launching the scan and order menus in restaurant is becoming popular because of the unique and safe idea during the pandemic which is playing a great role in

maintaining social distancing in the tough time. Innovativeness is an important factor that is positively related to acceptance of a technology.

Attitude is an individual feeling of the favoring or not favoring of something which is new to their knowledge. So guest and employees, both attitude plays important role towards accepting the new technology in hotel industry.

METHODOLOGY

The questionnaire comprised 20 questions. The survey was done to examine the knowledge of advance technology methods and openness to them, and to study the guest's response to their use in the hotel industry. The respondents have different ages, they live in towns and villages of different population. Each of the respondents completed the questionnaire individually at their own. With the help of Google Forms questionnaire data were collected. The link was sent via e-mail to the interested users. In total, 156 responses were recorded, and were subjected to further analysis.

Data Collection and Analysis

Data was collected from a convenience sample participant in Tamil Nadu with the help of research assistants/mentees. By using the Statistical Package for Social Sciences (SPSS) version 17.0 for Windows, a product of SPSS, Inc. data was analyzed. Descriptive statistics (e.g., mean) were used to analyze (1) the importance of the technology in hotel concepts to consumers, (2) explore what consumers were willing to endure to advance technology in hotels, and (3) explore technology in practices.

Result and Discussion

Out of 241 respondents who participated in this study, 36.10% were male and 63.90% were female. The age of the respondents ranked from less than 20 years to above 40 years of age, 30.71% were less than 20 years, 26.56% were between 21 and 25 years, 9.13% were 26 to 30 years, 11.62% were 31 to 40 years, and 21.4% were above 40 years old (see Table 1). The first objective of this study was to explore consumers' perceptions of the importance of the actions taken by hotels to be considered for technology upgradation. The perception of consumers when it came to the general importance of technology in hotel practices was that about 88% of those surveyed felt it was "somewhat to very important." In some situation, about 12% felt that it was "rarely important" to "not important at all."

According to this study, 69.71% of the consumers felt that water conservation was "somewhat to very important", 30.29% of the consumers felt that water conservation was "rarely important," to "not important" in terms of technology requirement.

Finding and discussion

The rapid development in technology in hospitality industry the future seems to be advance with more of mechanism providing hassle free services to then guest which will reach up to the creating a long lasting impact on guest experience. The result of this study was to give the

reflection about the various technological advancement are taking place in hotel industry and how it is changing the perception of guest in accepting the advancement of technology in service industry.

The current covid-19 pandemic situation expects more of contactless services which requires less of human contact. Also the behavioral pattern of guest is ever evolving and one needs to update their knowledge regarding the usage of latest gadgets. This is the hotels needs to keep a track on upcoming trends. The future industry will be leading towards the technological advancement and innovation in rooms to enhance And create guest experience from simple to wow moments. The hoteliers requires to utilized technological advances so that standards of the organization.

This paper analyses the need for personalization and customization which has been esteemed lined by the advancement in technology. Adapting the latest innovation helps in enhancing the hospitality industry at its best. It also helps in smoothen the operational activity and will increase reliability in the brand. Also there will be any operational glitches which has to be adjusted after accepting the advance technology.

CONCLUSION

Orientation on supporting customers through offering different services using intelligent technologies seems to be very obvious. The implementation of innovations in the hotel sector can also attract customers and be helpful for the staff. Customers are different and sometimes don't want to change their habits staying in hotels. Our research was performed during the pandemic period, so for current clients it was definitely a non typical time, but applied technologies become relatively helpful.

We can summaries our finding as follows: In hotel industry only there are few elements of research concerned with the implementation of technology . Secondly the level of technology solution in hospitality. Finally according to the customer opinions, automation of physical work and services connected with leisure are the most expected, rest process are important.

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SERVICE QUALITIES OF A FIVE STAR HOTEL BASED ON GUEST SATISFACTION

Vipin Balakrishnan

*Teaching Associate,
Institute of Hotel Management Catering Technology and Applied Nutrition,
Taramani, Chennai-600113.*

Shubham Singh

*First Year M.Sc. in Hospitality Administration,
Institute of Hotel Management Catering Technology and Applied Nutrition,
Taramani, Chennai-600113.*

ABSTRACT

It has been discovered that the role of service quality management in hotels is both effective and long-term for the business. The service quality management tool also aids in increasing guest satisfaction and making hotel operations smooth, focused, and reliable in order to meet customer expectations.

In the hotel industry, a descriptive research design is used to determine the parameters of a service quality tool. Because the hotel is constantly striving to improve its services in order to meet the expectations of its guests.

Keywords: Guest Satisfaction, Service Quality, Hotel Services

INTRODUCTION

The service industry, which is viewed as a measure for advertise modernization, has recently seen rapid growth. Aside from the vast market of the service industry, government support ensures consistent and long-term growth. The administration clearly recommended that the large city provide a need for the improvement of the service industry in order to frame a service-focused industry structure. As a traditional service industry, the hotel industry, which has benefited from the expanding travel industry, is currently booming on a large scale. In any case, this enticing business sector attracts an incredible number of hotels both domestically and internationally, offering ascent to tremendous challenge pressure. This is the most important test in maintaining or improving a high level of service quality. Studies focusing on service quality apparatus and proposed that administration foundation spend little effort on making service quality arrangements. The costs of poor assistance quality planning take away profit, which is a component of service disappointments. Stuart F. et al. (1996) It is critical to understand that visitor service improvement involves two primary measurements: product conveyance and quality result (Mattila, 1999).

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According to research, how the service was delivered (seen practical quality) is more important than the outcome of the administration procedure (specialized quality). Hotel with poor administrations face issues in the promotion zone regardless of how appealing their publicising is or how many offers call their business work Force may be used. Forceful publicising and sales advancements simply persuade more people to encounter poor service and figure out how to avoid the lodging in the future. Many hoteliers have recognised this reality, and as a result, they have discovered that providing high-quality service is increasingly seen as a deciding factor in the success of their properties. As a result, the purpose of this investigation is to analyse the hotel service quality desires of global tourists using the SERVQUAL instrument's desire size. The investigation's research question is: do travellers from various social backgrounds have vastly different expectations for hotel service quality?

Quality in the business is trying to survey in view of three highlights that are special to administrations - immaterialness, heterogeneity and connection of creation and utilisation.' Every one of these characteristics can be found in the inn business. The exceptional challenge of the 1980s compelled numerous lodging organisations to look for ways to benefitably differentiate themselves from their competitors. One such method is the provision of excellent assistance.' As a result, quality assurance programmes are becoming increasingly important in the cabin industry. The estimation of saw administration quality can be traced back to the study of Parasuraman et al. SERVQUAL⁹, which recasts the ten determinants into five explicit measurements: effects, dependability, responsiveness, confirmation, and compassion, was born as a result.

EXPECTATION AND HOTEL SERVICE QUALITY

Many studies have shown that service quality observations obtained reliably and precisely is the primary result in meeting guest expectations. The other four metrics, which relate to conveying quality in a friendly, productive, and mindful manner, are important in exceeding guest expectations. In terms of hotel service quality, unwavering quality refers to the extent to which the property and its representatives perform benefits effectively and reliably; physical assets refer to the property's outward appearance and usefulness; responsiveness refers to the capacity of workers to respond expeditiously and proficiently to visitors' solicitations; and confirmation refers to the information and affability of representatives as well as their capacity to motivate and compassion is communicated through a sense that the hotel and its employees are concerned about the needs of the guests.

SERVICE RECOVERY

Because of the exclusive requirement that guests have for unwavering quality, the significance of conveying product correctly the first time was emphasised. Playing out the service consistently and precisely is at the heart of quality promoting greatness. Many client-arranged organisations have focused on achieving zero flaws in quality conveyance. As a result, hotel service quality, as seen by guests, is what the hotel should offer with their view of the presentation of the hotel giving the complimentary against service glitch.

CONCEPTUAL FRAMEWORK

This investigation of Service quality management in the hospitality industry is an attempt to comprehend the proximity of the value improvement process in the hospitality industry and its adequacy in making it a practical business venture. It is a review of the directly adopted quality management apparatuses that make hotel tasks more secure, engaged, and solid, as well as meet client desires.

As the hospitality industry becomes increasingly competitive, there is an undeniable need to maintain customer base while expanding productivity, and thus the board experts endeavour to improve visitor fulfilment and incomes. However, the management experts who are working toward these outcomes frequently have a limited understanding of research encompassing the best models of visitor fulfilment and devotion, as well as financial execution. This research paper will elucidate some of the factors and significant realities of administration quality that lead to guest satisfaction.

REVIEW OF LITERATURE

When confronted with their erroneous choice, guests routinely denounce themselves. Staff must understand that perplexed customers are unlikely to make a fuss, so they must be alert to guest dissatisfaction and work to resolve it. (V. Zeithaml, 1981, pp.186-190) It is said that service quality is what separates the sincerity section, but there is no agreed-upon definition of what service quality is. In any case, there are a few different approaches to portraying service quality. Isolating it into specific, useful, and picture parts; (Greenrooms C., 1982) another is that service quality is determined by its ability to be used by both internal and external customers. It is acknowledged that quality is determined by the needs and desires of the guests. The significance of quality expresses that quality is the only thing that matters Conformance to conclusions, which would imply that positive quality is the time when a thing or unequivocal quality meets or outperforms predetermined rules or certifications. In any case, this appears to be a fundamental viewpoint inside the benevolence business. The alternative definitions are as follows: seeks after: 1) Quality is immensity; 2) Quality is a financial impetus; 3) Quality is meeting or outperforming desires. This appears to be more in line with musings found within kind disposition management than with the main referenced shallow methodology. Quality and worth are genuinely difficult to determine; thus, associations should rely on guests' quality acknowledgments and desires to get solid results, which is best practised by representing guests' requests related to wants and their perspective on the quality, which can effectively be cultivated through intentionally planned audits. This is a critical test in terms of improving or maintaining service quality. (Tigineh M. et al 1992) Service quality management studies suggest that service firms expend insufficient effort in preparing for service quality. As a result of the service disappointments, the resulting expenses of poor service quality lead to lower productivity. Stuart F. et al. When discussing satisfaction, keep in mind that visitor evaluations of management include two basic unmistakable measurements: service conveyance and service result (Mattila, 1999). According to research, how management was conveyed (seen useful quality) takes precedence over the outcome of the management procedure (specialized quality). This study unequivocally shows that staff exertion has a significant impact on visitor fulfilment decisions. Organizations that provide services must broaden their efficiency

assessment to help resolve conflicts - the influence collaborations - between improving service quality and increasing administration profitability. A. Parasuraman, 2002 A critical step is to direct a routinely planned survey of progress by a quality chamber or working gathering, and the board must establish a framework to identify areas for future improvement and to monitor execution with regard to internal and external clients. They should also adapt to changing client preferences. Constant improvement entails more than simply being satisfied with one's work or process. It is practised by combining process estimation, group critical thinking, and all-work exercises. Association should continue to strive for greatness by reducing multifaceted nature, variety, and wild procedure. The Plan-Do-Study-Act (PDSA) method, developed by Shewhart and later modified by Deming, is a viable improvement strategy. Plan cautiously first, then design, analyse the outcomes, and check whether the arrangement worked precisely as expected, and follow up on results by distinguishing what worked as planned and what didn't. The goal is continuous procedure improvement, and these PDSA periods are the framework for getting there. D. Besterfield et al., 2003.

RESEARCH METHODOLOGY

The study's objectives are as follows: It is an attempt to comprehend the role of service quality in the advancement of consumer loyalty in today's competitive neighbourliness industry. However, the specific goals of the studies are as follows:

1. To comprehend the impact of service quality management on the advancement of consumer loyalty.
2. To understand the benefits of rehearsing a continuous improvement programme in hotel activities.

Design Example: The investigation into service quality management in the friendliness industry necessitated the use of various information sourcing strategies. Different assets contributed in various ways to the collection and breakdown of information for the exploration paper. This investigation is being directed using an effective examining strategy.

Data Collection Methods: Primary Information Sources- The investigation necessitated a review of the current quality management approaches used in the lodging industry. It also included consistent discussions with specialist co-ops and engineers of various standard operating systems. The hotel visit proved to be a valuable source of information. For this investigation, a perception strategy and a poll study were chosen to collect essential information. Respondents are important sources of vital information, as are hoteliers, cutting-edge staff, and board level officials. Respondents were shown multivariate questions, and their responses shaped the fundamental piece of information. This study employs a purposeful example technique with over 50 respondents from various driving inns. Each time a client visits a hotel, they bring with them a different perception of value, making it difficult to characterise and quantify quality. It is expected that the inn will constantly come close to their recognition against guest discernment in terms of fulfilment estimation with execution estimation. The investigation has revealed the compelling instruments that the executives of various lodgings use for continuous improvement

and how it is distributed among all partners. In discussions with hoteliers, it was also discovered that quality has a direct impact on the item or management execution. It is inextricably linked to consumer loyalty and worth. Quality can be defined as 'opportunity from surrenders,' but client-located inns have moved beyond this limited definition of value.

Continuous Improvement Deming's outstanding PDSA cycle is used to actualize the process. It has been changed to certain appropriate advances, namely Defining and categorising quality characteristics and factors: The properties refer to discrete qualities, such as the proximity or absence of the ability to fulfil specific obligations. Factors represent quantitative information, such as the cost of goods and services. Measure: Critical to quality attributes are established, and factors contributing to fortunate or unlucky assistance are identified. Break down: Attributes and factors are estimated in order to identify any potential reasons for abscond or poor administration. Improve: The impact of the causes of deserts and poor quality is measured, and acceptable benchmarks for the equivalent are defined.

The specialised structure that quality affirmation frameworks create is highly visible. Similarly, despite the fact that it is not widely recognised, the non-specialized structure that influences quality affirmation frameworks is an important component to be observed. While there may be some attention to the specialised and non-specialized interface in quality affirmation frameworks, it is frequently not recognised and, at best, treated as independent. This paper contends that in order to achieve successful quality administration, the interface between specialised and non-specialized structures must be recognised unequivocally. In general, the fundamental view that connects these two structures must be perceived in order to oversee complete help quality.

With the increasing competition in the hotel industry, quality has become a top priority in terms of customer satisfaction. This poll was given to 30 respondents from various lodgings in order to comprehend the presentation of their foundations on various traits, factors, and are estimated using multivariate inquiries.

CONCLUSION

It is possible that the investigation will lead to the hotel implementing a consistent improvement procedure and quality service devices in order to remain competitive in the market. The constantly changing client impression for the hotel industry necessitates the hotel coordinating the client view by conveying quality management. This results in higher levels of consumer loyalty and guest satisfaction. The investigation includes a hotel exceptionally focused market with a predetermined number of respondents. This limits the investigation to the hotel industry and has the potential to include other management specialist organisations as well. The direct response from hotel guests could not be gathered because it was not available to the general public.

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CHANGES IN HOSPITALITY INDUSTRY POST COVID - 19 PANDEMIC IN 5 - STAR HOTEL BRANDS

Sanket Gupta

*MBA Student,
HP University – Institute of Management Studies,
Shimla, Himachal Pradesh,
Mob: 7397265234, Email: gupta.sanket3204@outlook.com*

Aniket S. Ghorpade

*Research Scholar,
Mob: 9168728555, Email: aniketghorpade420@gmail.com.*

ABSTRACT

Corona Virus Disease (COVID - 19) is an infectious disease caused by a newly discovered species of corona virus. Most people who suffer from this infectious disease experience mild or moderate symptoms. Most common symptoms are high fever, dry cough, tiredness, shortness of breath etc. Some of the symptoms which can also be found are aches and pains, sore throat, diarrhea, conjunctivitis, headache, loss of taste or smell, rashes on skin or discoloration of toes or fingers, etc. The virus that causes COVID - 19 is mainly transmitted through droplets generated when an infected person coughs, sneezes, or exhales. These droplets are too heavy to hang in air, quickly fall on floors or surfaces. An individual can be infected by breathing in the virus if he/she is within a close proximity of someone who has tested COVID - 19 positive, or by touching a contaminated surface and then delicate organs such as eyes, nose or mouth. COVID - 19 is a widespread disease which soon transformed into a deadly pandemic throughout the world. With constantly evolving trends in the virus structure the spread of this deadly virus is constantly increases. COVID -19 may also spread from inhaling the small droplets of infectious saliva excreted out by an infected person while sneezing or coughing.

INTRODUCTION

Corona Virus Disease (COVID - 19) is an infectious disease caused by a newly discovered species of corona virus. Most people who suffer from this infectious disease experience mild or moderate symptoms. Most common symptoms are high fever, dry cough, tiredness, shortness of breath etc. Some of the symptoms which can also be found are aches and pains, sore throat, diarrhea, conjunctivitis, headache, loss of taste or smell, rashes on skin or discoloration of toes or fingers etc. The virus that causes COVID – 19 is mainly transmitted through droplets generated when an infected person coughs, sneezes, or exhales. These droplets are too heavy to hang in air, quickly fall on floors or surfaces.

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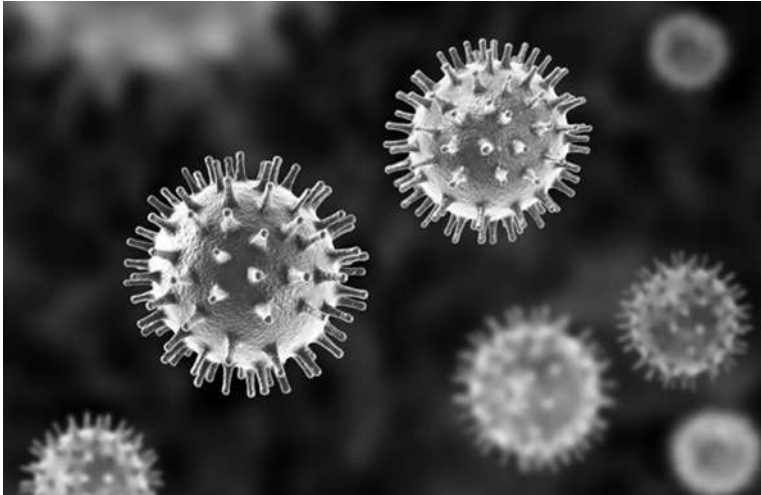


Figure 1: Assumed Structure of a Virus Molecule

(Source: Google Images)

An individual can be infected by breathing in the virus if he/she is within a close proximity of someone who has tested COVID - 19 positive, or by touching a contaminated surface and then delicate organs such as eyes, nose or mouth. COVID - 19 is a widespread disease which soon transformed into a deadly pandemic throughout the world. With constantly evolving trends in the virus structure the spread of this deadly virus is constantly increases. COVID -19 may also spread from inhaling the small droplets of infectious saliva excreted out by an infected person while sneezing or coughing.

What is COVID-19 and how is it passed on?

COVID-19 is a new infectious disease that affects your lungs and airways.
It's caused by a virus that's spread in droplets from the mouth and nose when you cough, breathe, speak or sing.

You can get the virus by:

- 1.** Having close contact with someone with COVID-19 and breathing in droplets exhaled by them.
- 2.** Touching contaminated surfaces and then touching your face.

The complex block contains text and three illustrations. The first illustration shows a person's head and shoulders with arrows pointing from their mouth and nose, indicating the release of droplets. The second illustration shows two people standing close together; one is coughing into their elbow, and droplets are shown moving towards the other person. The third illustration shows a person's hand touching a door handle, with a virus particle icon on the handle, and another hand touching their face.

Figure 2: Picture depicts ways of transmission of COVID – 19 Virus

(Source: Google Images)

The first officially reported COVID - 19 case dates back to November, 2019 and some weeks after the initial call for attention, the World Health Organization decided to declare the global pandemic alert in March, 2020. The world experienced a strictest lockdown of its history. All the financial activities came to a halt. The market thrashed to its all-time low. The tourism and the hospitality sector also came to a halt. The industry suffered huge losses and thus went through hard times. But the spirit of hospitality never dies. Hospitality industry started their institutions with high standards of safety and security parameters. The industry extended their hands towards serving the front-line corona warriors such as doctors, police men, etc., and provided them a safe place of isolation after the day's hectic job.

Soon condition improved and the states started to withdraw the lockdown restrictions but under some limitations. The isolations were lifted off, and now a major challenge was to deep clean the entire property and prepare it for guest arrivals. The industry took it as a deadline and started to work over designing and planning the SOP's required for the re-establishment of the proceedings of the industry. Various plans and programmes were devised out to tackle this challenge. Staff was provided with adequate training's and equipment's and the industry started again to provide a home away from home to all the guests. All the leading chains devised out special programmes to meet this challenge. Each and every leading brand devised a particular set of guidelines and SOP's for each and every task for the day's proceedings. Each had its own impact on the quality and quantity of the productivity. It even changed the guest's perspective towards seeing the room in cases of cleanliness, sanitization, etc.

To name some of the specific programmes started by the organizations in order to specifically tackle the changes for the COVID-19 are

- ITC's, **WE ASSURE** Programme,
- Accor's **ALL SAFE** Programme,
- IHG's **CLEAN PROMISE** Programme, and
- IHCL's **PROMISE OF TAJNESS** Programme.



Figure 3: Picture depicts the new normal in the hospitality industry

(Source: Google Images)

This research is done to analyses all these changes which were brought in the daily tasking of the departments. This study aims to analyses the changes which came in the working style of the department and thus, bring the hard work of the industry forth the society.

This research shall stress out over questions such as:

- ◆ What changes were brought to the work style of the department?
- ◆ How these changes were to implement in the firm?
- ◆ What all training's are required to make these changes successful?
- ◆ Do these changes have an extra staff requirement?

This study shall also focus over the question that, are these changes sustainable in the society? This study shall analyse the success of these programmes as well. It shall also find out the preferences of the guests towards such programmes. This research will also suggest the changes which came over in the industry to make this mission successful.

REVIEW OF LITERATURE

Reports are evident that the outbreak of the pandemic had an association with a seafood market in Wuhan, a city in Hubei province of China. The first known case dates back to December, 2019 but by the start of March, 2020 the disease had covered a major part of the world. This happened due to virus's higher tendency of getting transmitted along the human population. Thus, analysing the seriousness of the spread, WHO declared novel Corona Virus as a pandemic.

The Travel and Tourism Industry has a share of 9.2% in country's GDP and employs nearly 8.1% of the country's population. The industry has an immutable emphasis in growth of the country as it provides a considerable percentage of employment to Indian population. The corona virus pandemic is the worst crises to hit the Indian tourism industry and almost all its segments. The entire value chain linked to Travel and Tourism is expected to lose nearly a business of 5 Lakh Crore. The industry experienced an average of 32% occupancy instead of an average of 68%.

Since the pandemic from 2019 a lot changed for the hospitality industry, hence numerous changes came in the hospitality industry. Thus, a viable study was required in this field. Hence the study was conducted over the kind of changes which were necessary to be inculcated in the industry so as to provide a safe hospitable atmosphere for the guests. Each leading hotel brand had a set of SOP's set for the general proceedings of the day's tasks, with a particular individuality maintained.

This study presents to you the recent changes which were brought up in hospitality industry so as to bear with the ongoing deadly pandemic.

RESEARCH METHODOLOGY

Various strategies undertaken by the leading hospitality brands are compiled by carrying out rigorous surveys. These strategies were floated in the form of questionnaires and the feedback was collected on the basis of the survey. This questionnaire was circulated amongst mixed

sample of the people utilizing these services. The sample was also circulated among the people extending out the services such as the managerial and the other staff levels. This study was specifically carried out to outline what all changes were undertaken in the industry and what affect did these changes caused to normal working of the industry. A descriptive research was carried out in order to figure out even the pin point alterations which were brought to the normal operating procedure of the firms.

Primary Data

It was collected from the locals working in the hospitality sector at different levels of work profiles. It also included a sample from people taking the services. Primary Data was collected through surveys in following ways:

1. Personal Interviews: A sample size was interviewed about the topic with a set of pre – set questions and the data was hence, collected in an organized way.
2. Questionnaires: Considering the reviews and the additional inputs, a schedule (questionnaire) was prepared and circulated among the sample size which included the provider as well as the benefiter of the services.

Secondary Data

It was collected from various journals, publications, newspapers, training reports, brand websites, news articles and Standard Operating Procedures etc.

Sampling Techniques

For this study different employees from various star hotels were questioned. The sample also included some of the guests who took over the hospitality services in the stipulated period of the transmission of the disease.

Limitations of Study

1. The study was purely based on the information received through the limited scope and purview of survey.
2. The study was relevant to the existing industry scenario and predictions of the respondents which may differ accordingly with time, geographical zones and status of spread of disease.

DATA ANALYSIS AND INTERPRETATION

World Health Organization declared novel corona virus (COVID – 19) as a pandemic on 11th March, 2020. Many emerging and developing economies were already experiencing weaker growth before the crisis; and further the shock of COVID – 19 gave an additional pull back to them, therefore, igniting a serious economic disaster. In order to limit the spread of this deadly virus, counties across the world implemented stringent measures such as mandatory national lockdown and border closures. But, like a coin has two sides, these measures also had a negative impact i.e., these measures shattered up the core sustaining pillars of the emerging economies.

Though, these measures also caused a positive impact on the environment and natural ecosystems.

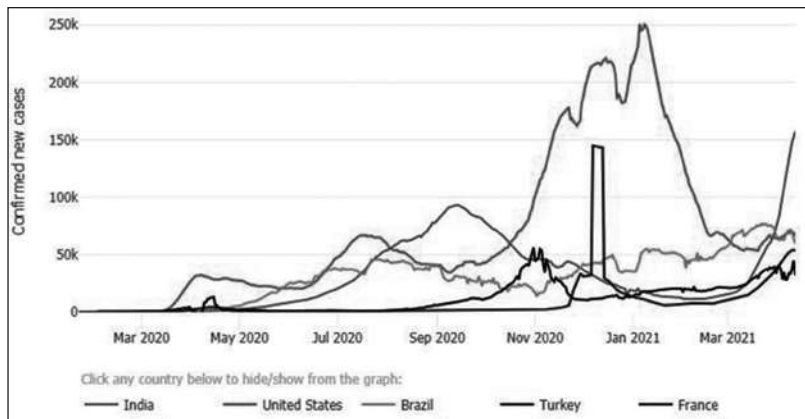
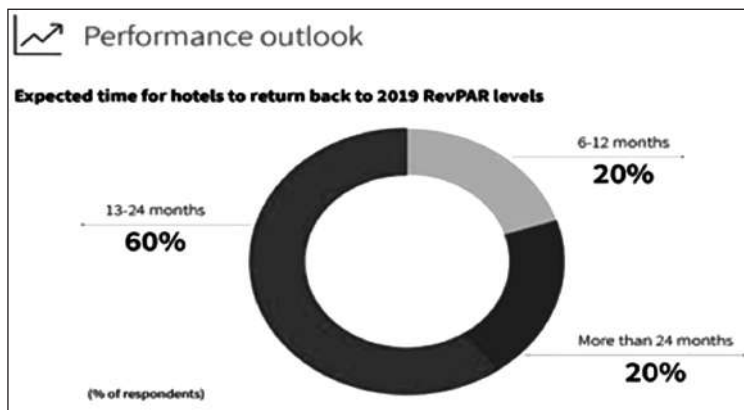


Figure 4: Rise of confirmed cases in various countries from March 2020 to March 2021

(Source: <https://coronavirus.jhu.edu/data/new-cases>)

India emerged as a most affected country due to Corona Virus Pandemic. There was a great rise of COVID – 19 cases in the country as a result of which the Government of India ordered a nationwide lockdown on 24th March, 2020. The country came to a still. The GDP as well experienced a deep fall hence, affecting the economy seriously. In the first quarter of fiscal year 2021 India’s GDP collapsed by nearly 23.9 % . All financial activities came to halt and so was the condition of hospitality industry. Some hotels even had to be converted into temporary COVID facility centers so as to control the on-going situation.



Handling the COVID patients was again a great challenge for the industry, but the industry took it positively and worked over the SOP’s and thus, managed successfully. Time went through and soon unlock phase was announced by the government. So to start the services again the managements of each and every leading hotel brand started working and drafting the Standard Operating Procedures (SOP’s) so as to comply with the on-going pandemic and at the same time

extending the best in class services also. So, something had to be done, thus, numerous standard operating procedures were worked out and a final draft was prepared by each leading brand respectively. Since the disease was contagious and was making repeated occurrences technically termed as “waves”, proper measures and adherence to the SOP’s developed by the Ministry of Health and Family Welfare, WHO, and the parent brands for the organizations was necessary. In this study I shall discuss about these SOP’s which were introduced in the industry and what was their effect over the working of the industry.

First, I shall discuss about a common SOP which was given by the Ministry of Health and Family Welfare applicable to all the hotels functioning in the country.

All Hotels shall ensure the following arrangements:

- 1) Entrance to have mandatory hand hygiene (sanitizer dispenser) and thermal screening provisors.
- 2) Only asymptomatic staff and guest shall be allowed.
- 3) All staff and guests to be allowed entry only if using face cover/masks. Thee face cover/ masks has to be wom at all times inside the hotel.
- 4) Adequate manpower shall be deployed by hotel management for ensuring physical distancing norms.
- 5) All employees who are at higher risk i.e., older employees, pregnant employees and employees who have underlying medical conditions, to take extra precautions. They should preferably not be exposed to any front-line work requiring direct contact with the public.
- 6) Proper crowd management in the hotel as well as in outside premises like parking lots—duly following physical distancing norms shall be ensured by the management/any out-sourced agencies. Gatherings/congregation should be in accordance with the SOPs of the State/UT concerned.
- 7) Valet parking, if available, shall be operational with operating staff wearing face covers/ masks and gloves as appropriate. A proper disinfection of steering, door hand., keys, etc., of the vehicles should be taken up.
- 8) Preferably separate entry and exits for guests, staff and goods/supplies shall be organized. Maintaining physical distancing of a minimum of 6 feet, when queuing up for entry and inside the hotel as far as feasible. Specific markings may be made with sufficient distance to manage the queue and ensure physical distancing in the premises.
- 9) Number of people in the elevators shall be restricted, duly maintaining physical distancing norms. Use of escalators with one person on alternate steps may be encouraged.
- 10) Details of the guest (travel history, medical condition, etc) along with ID and self-declaration form must be provided by the guest at the reception.
- 11) Posters/standees/AV media on preventive measures about COVID-19 to be displayed prominently.
- 12) Hand sanitizers must be kept at the reception for guests to use. Guests to sanitize hands before and after filling relevant forms including A&D register.

- 13) Hotels must adopt contactless processes like QR code, online forms, digital payments like e-wallet etc for both check-in and check-out.
- 14) Luggage should be disinfected before sending the luggage to rooms.
- 15) Guests who are at higher risk i.e., those who are older, pregnant or those who have underlying medical conditions are advised to take extra precautions.
- 16) Guest should be advised not to visit areas falling within containment zone.
- 17) Required precautions while handling supplies, inventories and goods in the hotel shall be ensured. Proper queue management and disinfection shall be organized.
- 18) Appropriate personal protection gears like face covers/masks, gloves and hand sanitizers etc., shall be made available by hotel to the staff as well as the guests.
- 19) Room service or takeaways to be encouraged, instead of dine-in. Food delivery personnel should leave the packet at guest or customer's door and not handed directly to the receiver. The staff for home deliveries shall be screened thermally by the hotel authorities prior to allowing home deliveries.
- 20) For room service, communication between guests and in-house staff should be through intercom/mobile phone and room service (if any) should be provided while maintaining adequate physical distance.
- 21) Gaming Arcades/Children play areas (wherever applicable shall function in accordance with the SOPs of the State/UT concerned.
- 22) For air-conditioning/ventilation, the guidelines of CPWD shall be followed which mentions that the temperature setting of all air conditioning devices should be in the range of 24-30°C, relative humidity should be in the range of 40-70%, intake of fresh air should be as much as possible and cross ventilation should be adequate.
- 23) Effective and frequent sanitation within the premises shall be maintained with particular focus on lavatories, drinking and hand washing stations/areas.
- 24) Cleaning and regular disinfection (using 1% sodium hypochlorite) of frequently touched surfaces (door knobs, elevator buttons, hand rails, benches, washroom fixtures, etc) to be made mandatory in all guest service area and common areas.
- 25) Proper disposal of face covers/masks/gloves left over by guests and/or staff in covered bins should be ensured.
- 26) Deep cleaning of all washrooms shall be ensured at regular intervals.
- 27) In the kitchen, the staff should follow physical distancing norms at workplace. Kitchens are must be sanitized at regular intervals.
- 28) In case of a suspect or confirmed case in the premises:
 - a) Place the ill person in a room or area where they are isolated from others.
 - b) Provide a mask/face cover till such time he/she is examined by a doctor.
 - c) Immediately inform the nearest medical facility (hospital/clinic) or call the state or district help line.

- d) A risk assessment will be undertaken by the designated public health authority (district RRT/treating physician) and accordingly further action be initiated regarding management of case, his/her contacts and need for disinfection.
- e) Disinfection of the premises to be taken up if the person is found positive.

Figure 5 and 6: SOP's issued by MOHFW for Hotels

(Source: <https://www.mohfw.gov.in/pdf/5SoPstobefollowedinHotelsandotherunits.pdf>)

These SOPs are nothing but some of the preventive measures which are to be taken care in the day-to-day proceedings of various departments of the hotel. Included were basically the general precautions and actions which shall be inculcated to prevent the spread of disease such as maintaining 6 feet social distancing, placing sanitizer dispensers at all point of contacts, maintaining air conditioning temperatures in a range of 24 - 30° C, etc. These gave a primary direction on how to go further with drafting of individual SOPs for daily tasking of individual departments. These guidelines acted as a basis for the process of drafting the required SOPs for the departments. Each leading hotel brand came up with a set of instructions for its staff to follow during their day-to-day chores. Let us discuss them.

ITC Group came in a close association with the medical professionals, leading certification bodies and disinfection experts like DNV GL (Det Norske Veritas; Germanischer Lloyd) and Savlon to devise out a comprehensive health and safety initiative geared towards assuring the health and safety of their guests as well as their employees. The organization struck to its credo of RESPONSIBLE LUXURY to navigate the waters of post – COVID World. In a first for the hospitality industry, ITC Hotels was accredited by the National Accreditation Board for Hospitals & Healthcare Providers (NABH) – the nation’s leading standards organization for sanitation, hygiene, safety and infection control practices. ‘WeAssure’ is a unique programme designed in collaboration with medical professionals and disinfection experts to enhance the existing hygiene and cleaning protocols. The stringent programme specifications reassure guests of visibly stringent cleanliness and disinfection processes which benchmark clinically hygienic standards, offering guests’ unparalleled comfort with peace of mind.

DNV GL Business Assurance, a body that helps businesses assure the performance of their organization evaluated a model, built around the three pillars — health, hygiene and safety. These assurance certifications stood testimony to the rigorous hygiene protocol being put in place to ensure the safety of guests and associates at ITC Hotels, across India. ‘WeAssure’ a holistic programme that addressed all facets of hotel operations, from revised protocols for back of the house activity at the receiving store, back offices, laundry to the public areas with heightened sanitization measures for guest luggage, elevators to roomservice.



Figure 7: Sign Board placed in the reception area giving details about the Cleanliness and the Sanitization programme in this case ITC's WeAssure

(Source: cnbctv18.com)

Accor has been prioritizing the safety of its guests on a daily basis for more than 50 years. The ALLSAFE global cleanliness & prevention standards have been developed with and vetted by Bureau Veritas, a world leader in testing, inspections and certification. Accor launched its crafted ALLSAFE Programme to tackle the challenges raised due to COVID – 19 outbreak. The organization introduced elevated hygiene & prevention measures to ensure guest's safety.



Figure 8: Accor's ALLSAFE Programme

(Source: hospitalitynet.org)

The ALLSAFE label certification represents its new cleanliness & prevention standards and provides assurance that these standards have been met in its hotels. With its partnership with AXA, a worldwide leader in insurance and assistance, Accor provides its guests medical professionals and tele – medical support as well.

IHG has a long-standing commitment to rigorous cleaning procedures and launched its IHG Way of Clean program in 2015 – developed in partnership with Ecolab and Diversy – both world leaders in hygiene and cleaning technologies and services. This program was then expanded with additional COVID-19 protocols and best practices – many of which are already in place – to reflect the advice of regional and global health authorities, including the World Health Organization, Centers for Disease Control & Prevention, European Centre for Disease Prevention and Control, and local public health authorities in markets around the world. Enabling the personal wellbeing of guests and colleagues is the primary mission. IHG is working closely with a team of medical experts at the world-renowned Cleveland Clinic to develop guidance and resources for hotel teams on returning to work and incorporating appropriate measures to enhance guest confidence and trust in its cleanliness, hygiene and safety practices in this new environment.

IHG partnered with the owner of the InterContinental Houston – Medical Center to install IVP Air technology to combat COVID-19 transmission. Innovative air protection filtration system developed by Houston-based entrepreneur and hotel owner Mr. Monzer Hourani supplements IHG’s COVID-19 protocols. InterContinental Hotels & Resorts (IHG) is redefining cleanliness and supporting guests’ personal well-being throughout their stay by partnering with Cleveland Clinic, Ecolab and Diversy, to launch a global IHG Clean Promise. The strengthened measures aim to give guests greater confidence, and hotel teams the protection needed.



Figure 9: IHG Group enhanced its IHG Clean Promise programme to support the COVID – 19 Protocols (Source: <https://www.laingbuissonnews.com>)

The Indian Hotels Company Limited (IHCL) has revisited the ways they have lived their promise of Tajness, a hallmark of their impeccable hospitality through their journey of over 116 years. Developed with support from its partners, some of the leading names in the world of safety and hygiene, this framework was a mark of IHCL’s heightened safety, hygiene and

physical distancing protocols. Created in accordance with the norms laid down by the World Health Organization (WHO), Food Safety and Standards Authority of India (FSSAI) and the Government of India, Tajness – A Commitment Restrengthened is reflection of their assurance of safety and comfort for their guests and is ingrained in their associates. Indian Hotels Company (IHCL), South Asia’s largest hospitality company, also announced the launch and implementation of I-ZEST: IHCL’s Zero-Touch Service Transformation - a suite of digital solutions across its hotels under its brands - Taj, Vivanta and SeleQtions.

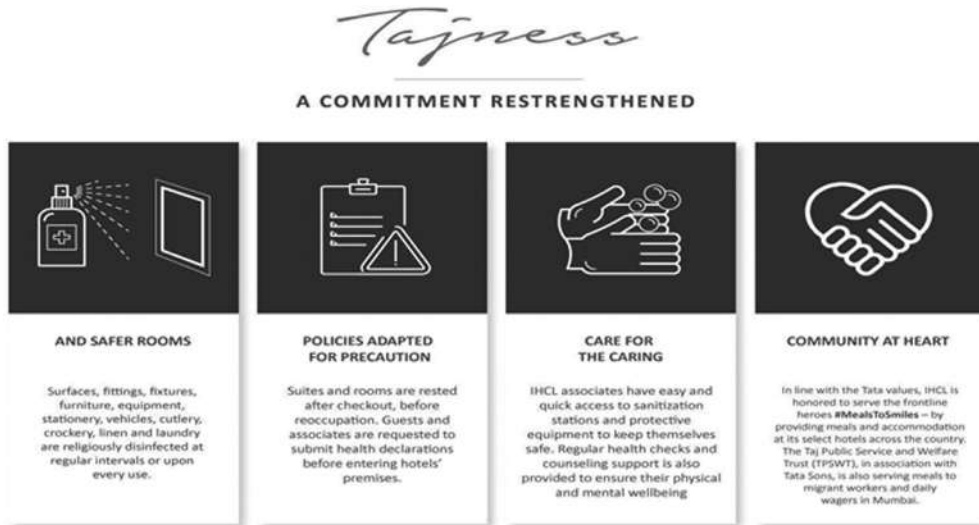


Figure 10: Tajness – A Commitment Restrengthened: A Programme strengthened by IHCL against COVID-19 outburst

(Source: Google Images)

From zero-touch check-in’s and check-out’s, digital invoicing, online payment options and QR codes to digital menus in restaurants, I-ZEST’s digital features will further ensure social distancing for both, guests and associates, while maintaining secure and seamless services.

Oberoi Hotels & Resorts, for over 80 years, has always practised being open and transparent with its guests and colleagues. Its hotels have always placed the highest emphasis on the safety and wellbeing of its guests with exacting standards of cleanliness and hygiene. With the risks associated with COVID 19, and in keeping with World Health Organization and Ministry of Tourism guidelines, they have implemented a number of additional measures across their hotels. Taking this commitment, a step further, they have partnered with Bureau Veritas, the world leader in testing, inspection and certification services, to validate and review their safety and hygiene programme.

Starting with the guest’s arrival at the entrance gates, the cars arriving as well as the hotel owned cars are stringently sanitised according to the set protocols. The cars are well equipped with the required equipment’s such as surface disinfectants, sanitizers, disposable masks, latex gloves etc. Even in the car partitions are divided using protective shields in order to maintain physical distancing in the car as well.

There are QR codes installed to ensure the cleaning process was undertaken in the prescribed way and with utmost care also displaying the name of the sanitizing and passing authorities. These also impart details about the concerned cleanliness and sanitation Programmes.



Figure 11: Picture displays the car owned by an ITC Hotel driven by a chauffeur for a guest

(Source: cnbctv18.com)

As shown in figure 8, on arrival at the entrance gates, the luggage's of the guests are thoroughly sanitized and Sani tagged – a token of sanitization. For the guests, the vestibule has numerous sanitization equipment's installed, such as, the foot disinfectant mats, hand sanitizers, etc.



Figure 12: Pictures depict the welcome at the hotel keeping in mind the COVID protocols ongoing luggage sanitization process

(Source: cnbctv18.com)

Security procedures are carried out keeping physical distancing and all other protocols in mind. The temperature readings are taken and Arogya Setu App is checked. Figure 9 depicts the same procedure.



Figure 13: Picture depicts the protocol followed at the arrival of the guest

(Source: cnbctv18.com)

On arriving at the reception area, utmost protection is ensured by taking all preventive measures such as installation of protective shields to maintain distance between the hotel executives and guests, pre-filled registration forms are provided for the final signatures using sanitized pens. The forms are then placed in the UV Cabinets as a measure of prevention of any type of transmission. The room keys are also stored in the UV cabinets and taken out in the guest's presence to support sanitization and transparency. The reception counters are sanitized every two hours. The furniture in the reception area is usually sanitized either after each use or once in every two hours with prescribed solutions. Some organizations even provide a safety kit including disposable masks, sanitizers, shields and wipes etc. Guests are encouraged to use electronic modes of payment so as to reduce any sought of personal contact.



Figure 14: Pictures Depict the Container with Sanitized Pens and Placement of Registration Forms in UV Cabinet

(Source: cnbctv18.com)

The guest rooms are carefully misted, steamed, ozonized, cleaned and sanitised offering guests' unparalleled peace with comfort of mind. Once inspected the room is sealed for guest's assurance over commitment towards cleanliness and sanitization. The seal assures that once the room was sanitised no human interference was made in the room. Once the guest arrives at the room, observing the seal is satisfied about the cleanliness.



Figure 15: Pictures depict the rooms being sealed and carefully cleaned

(Source: cnbctv18.com)

Once the guest checks out the room is left for isolation for at least 24 hours for the environment to become germ free. Then, the room is carefully misted, ionized, smoked and then cleaned and again sanitized. All the linen items are sent to the laundry for washing after each use. The ironing board covers are also sent for washing after each use. The face masks and gloves of the team members shall be replaced on regular intervals. Post departure all the glassware present in the room shall be sent for the cleaning process whether used or not. All the guest amenities requested by the guests shall be cleaned and sanitised before giving to the guest preferably within a wrapper. Once again the room is sanitised, the supervisor inspects the room and seals it for guest's use.



Figure 16: Picture depicts misting of the room

(Source: cnbctv18.com)

Guests are usually directed to express check out directly by settling the bills rose in the online platforms and just dropping in the keys at the reception counter. The room keys are stored in a container and further placed in UV cabinets so as to sanitize them. All places of high contact intensity are periodically sanitised and are equipped with sanitizer dispensers. Railings, Counters, Public Telephones are cleansed on hourly basis. Elevators are equipped with disposable twisters to refrain any physical contact between the guests or the staff and thus, contamination. They also have marks to maintain social distancing. The cars for the guests are well equipped with the required equipment's such as surface disinfectants, sanitizers, disposable masks, latex gloves etc. Even in the car, partitions are divided using protective shields in order to maintain physical distancing in the car as well. At all places bins shall be placed specially to collect the bio – hazard waste such as masks, gloves etc. since they require proper disposal.



Figure 17: Picture depicts cleaning of critical touch points

(Source: cnbctv18.com)

The furniture in the corridors, all fire hydrant doors, fire extinguishers handle, light fixtures and artworks are to be cleaned using the recommended cleansing solutions. Even the guest corridor carpet, landing rugs, dhurrie etc., shall be sprayed with sanitizing solutions on regular basis. Even in the dinning spaces strict measures were being followed so as to deal utmost protection and prevention towards the guest as well as the team members. All the team members in the area are to wear the disposable masks, face shields and gloves at all times. On entering the outlet, itself the guests are screened for their temperatures and are provided with sanitizers and wipes once seated on the table. With the notion of discouraging any sought of physical contact, the tables are equipped with QR enable menu holders such that the guest can scan the code through their devices and order accordingly. This reduces any chances of physical contact between guests or the team members. Covers are also laid keeping in mind the protocols of social distancing i.e., not laid on the adjacent tables.

The server/waiter ensures maintaining proper distancing from the guests. The protocols even prohibit the usage of water jugs especially without lids. Bottled water is highly recommended in such situation. All the payments in such outlets also were preferably accepted through online modes only. The waiters maintained social distancing as much as possible. Once the guests left the table the time was for working on clearance. The waiter clears everything from the table and then sanitizes the table. Some hotels even remove the cleared tables as available. After each clearance the waiter has to dispose of the gloves at right place and wear new ones. The entire cutlery and the crockery were carefully cleaned with all the stringent SOPs as a consideration. Separate bins shall be placed for collecting all the bio – hazard wastes such as masks, gloves, shields, PPE Kits etc., as they require proper disposal procedure.



Figure 18: Picture depicts the new COVID normal in the restaurants

(Source: GoogleImages.com)

For the Food Production / Kitchen department as well a lot of stringent measures were to be undertaken. The uniform was included with hairnets, gloves, and masks which were to be replaced either when it gets wet or after every 3 to 4 hours. The hands should be washed with appropriate soap solution at regular intervals, when reporting to and off the shift hours or whenever changing the gloves. In order to maintain safe distancing norms, zones should be designated within each section to avoid cross movement. All work sections and table tops shall be cleaned and sanitised keeping in mind the norms laid by the organisation before and after the shifts or as prescribed in the SOP prepared. For all the testing purposes disposable spoons shall be used. All the equipments, utensils, cutlery and crockery shall be cleaned and sanitised with care. The hotels have started a new trend of only day stays so as to increase the revenue earned in some ways and attract more and more guests.

These are some common SOP's which are undertaken by various leading brands in the hospitality industry. Further I will discuss about the changes which these alterations have caused in the industry.

These changes proved both positive as well as negative for the industry. These changes in the industry made the sanitization protocols quite effective and a part of the SOP. At the same time these changes increased the amount of trash which was given out by the organization. More specifically these increased the amount of bio – hazard waste and a major problem was their safe and separate disposal. The disposal of bio hazard waste is a task of great skills as an inappropriate disposal of this waste may lead to unwanted contamination across the area. Let us have a look at the ways of proper disposal of bio hazardous wastes.

Bio Hazardous Waste is waste that is contaminated with blood or other infectious materials. The infectious materials pose a risk of spreading disease in humans, animals and the environment. Biohazard waste is typically treated in an autoclave process which renders the waste harmless and then it is disposed of. Separate bins shall be placed for collecting all the bio – hazard wastes such as masks, gloves, shields, PPE Kits etc., as they require proper disposal procedure.

1. Apply any necessary medical PPE, including nitrile gloves and/or face mask.
2. Place the biohazard waste in a designated biohazard container. Specific biohazard container designs will vary by application and state. In most states, you'll use a thick plastic biohazard bag, coloured red or yellow, with the biohazard symbol markings. For sharps, you'll use a rigid plastic box with a plastic liner and biohazard symbol markings.
3. Apply any required labels, such as a U.N. Hazard Class 6 label, to the biohazard waste container. Other required labels may include contact information for the waste's facility of origin.



Figure 19: Picture depicts the symbol for bio hazard wastes

(Source: GoogleImages.com)

4. Place the packaged waste at dedicated waste accumulation sites where you can deposit packaged biohazard waste. This site should be secure and have regularly scheduled pickups from a licensed biohazard disposal company. Make sure to note your facility's maximum storage time for biohazard waste, as many require waste disposal within a certain time limit.
5. Your licensed medical waste disposal company will collect the biohazard waste and transport it to its waste disposal facility for sterilization and/or incineration. Contact medical waste disposal companies in your area to learn which types of waste they can process.

These changes also affected the quality and quantity of the work in the hotels. Some hotels have turned vacant rooms into home offices. As the significant drop in travellers has left hotels with many empty rooms, some hotels have come up with the idea of converting rooms to other purposes to attract different patrons. The idea was born after many people, having worked from home for long periods, reported a hunger to change their work environment. The COVID-19 outbreak has disrupted the functioning and even survival of hotels around the world. It is time for scholars and practitioners to carefully examine the impacts of this crisis and seek to enhance industry practices. Empirical data collected from key stakeholders could assist scholars in exploring and critiquing phenomena of interest to make predictions accordingly. In order to gather data to address the issues raised in this article, future research may include focus-group discussions, in-depth interviews, surveys, scenario-based experiments, digital analytics, or a mixed-methods approach, depending on a study's research objectives.

Due to the global health crisis caused by COVID-19, travellers are now likely to pay more attention to the availability and quality of medical facilities when making travel decisions. This consumption need is especially pertinent for hotel properties in gateway cities, particularly those receiving frequent convention businesses. In this sense, key areas to be addressed by future research include how hoteliers should design marketing communication content and employ marketing communication tactics to showcase their abilities to protect guests from public health crises, assure guests of health and safety during their stay, and make them feel more at ease following the COVID-19 outbreak. Additionally, in a public health crisis like the COVID-19 pandemic, the virus is transmitted not only between guests and hotel service employees but also between guests themselves. Hence, a future research direction centers around whether and why technology such as AI and AI-driven robotics could guarantee social distancing among hotel guests in times of epidemics, as well as how hotels could institute effective physical distancing measures among guests.

CONCLUSIONS AND RECOMMENDATIONS

Certainly, the survey indicates that the hospitality industry has very well adapted with the ongoing pandemic situation. The industry has taken all those required steps so as to win over the guests 100 % trust and aims to provide a safe and secure environment for its guests. Finally, after a rigorous study over the trends and the surveys, we can land into a conclusion that hospitality industry had experienced a major effect of this out bursting pandemic. The pandemic had left a deep impact over the entire economy of the country. Each industry had to suffer and manage their ways to cope up with the building strain. Some of the organisations could find a way to escape out the strain but, many could not. Some of the industries were even swept off the market. Though, this pandemic also proved out a positive aspect for some industries such as the industries dealing with the medical supplies. But these were not the time for the business, hence the productivity changed but the revenues didn't.

The pandemic made a lot of people jobless, hence, struggling for their survival. Similarly, in the Tourism and Hospitality industry also it had a wrecking effect. Being a professional and a practical industry, it came to a halt due to this pandemic. Due to the worldwide travel restrains the tourism industry was the worst affected. Since no one was up for the leisure activities, the

people involved in the transportation and the people at the tourist spots were very much affected. The people who were totally dependent for their survival on the business they do at the tourist sites were struggling hard to this pandemic so as to earn for themselves and their families. Since their existence was totally dependent on the sales generated at such sites by selling services such as local artefacts to the people visiting them. A good example for this case can be the house boat owners at the Dal Lake, Srinagar. Since their business is seasonal and that too was shut down due to the lockdown extended against the transmission of this deadly disease. They were facing a very hard time to earn their livelihood. Some even had to mortgage or sell their houseboats so as to earn for themselves and their families.

Similarly, the hospitality industry also faced hard times fighting this pandemic. Since the tourism activity was restrained the hospitality industry also could not get over. The occupancy percentage had even dropped to nearly 10 – 20 % only which made it very difficult to keep the organisation working in these hard times. The industry leaders could afford on cutting down some services or even the working staff and survive this pandemic. But the organisations such as 1 Star or 2 Star hotels, lodges, home stays, B&B's were finding it difficult to survive to reserved market share. Hence, led to many of them quitting over such businesses. As discussed earlier also this pandemic has also affected the environment. The change in the working style has resulted in a greater Trash values, addition of bio – hazardous wastes, and depletion of air and surface quality due to extensive use of chemicals and other toxic materials. The change in the working procedures of the hotel and paying extensive care towards cleaning and sanitizing the area and decreasing the physical contact to almost zero has made the trash generation values to increase manifolds. These changes have also affected the quality and the quantity of the work being done at the organizations, but this can also be a resultant of cut down in the no. of staff. Whatever it is, all things have pros and cons. Thus, analysing the results of the survey and the study, I am surely very much convinced with the effectiveness of these small changes in the SOP's and I am definitely in favour of continuing these changes in the further proceedings as well. Though, these changes might increase the budgets for the departments but analysing the reverts from the sample the guests are pretty much happy to pay slightly inflated tariffs as well when it comes to their safety and security. So, there are many changes in the hospitality industry post COVID -19 Pandemic some of which I have mentioned in my study, there are many more of such changes which are being implemented are implemented at the ground level but still remain hidden from the eyes of the public.

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GUEST'S PERCEPTION AND EXPECTATIONS IN THE HOTEL INDUSTRY IN PRESENT SCENARIO

Shreyas Anand Walankikar

3rd year student, B.Sc. in Hospitality and Hotel Administration,

IHMCT & AN, CIT Campus, Taramani, Chennai-600113.

Mob: 8855050151, Email: shreyaswalankikar@gmail.com

(An autonomous Institute under Ministry of Tourism, Government of India)

ABSTRACT

Covid-19 pandemic brought all the world to face a sudden halt in all the economies. Because of this pandemic there was implementation of lockdown and restrictions for travel which had a very adverse effect on the Hospitality and Hotel Industry. Before pandemic this industry was believed to be the most booming industry but covid-19 led towards a sudden downfall. As the world is adopting the new conditions and bringing life to normal there must be some additional expectations of guests and this study is dedicated towards that. The following data was collected by researching about opinions of different persons of different background to draw meaningful responses. The findings revealed that travelers would consider using hotels for their accommodation purpose during travel, but guests have a few presumptions and suggestions regarding their stay at the hotels. The research has revealed preferences for hotel categories for stay considering COVID-19 preparedness. The guests expect the hotels to ensure complete safety measures from different departments of hotels elaborated in this paper. The study proposes several practical suggestions for managers to adapt for the COVID-19 recovery.

Keywords: Pandemic, hospitality, lockdown, economic crisis, hotels.

INTRODUCTION

Because of the pandemic the world faced in the form of COVID-19 all the world economy faced a downfall. The first confirmed human infections were in Wuhan, Hubei, China reported in the month of December 2019 and within months it got spread across the globe due to its high spread potential. As it was spreading rapidly throughout the world the only thing to stop its spread was to end the physical contact between the human beings because of which there were many specific guidelines followed like social distancing, self-isolation because of which lockdown was imposed throughout the countries imposing various directives.

Almost every industry, organization and business have been affected by this global epidemic; tourism and the hospitality sector are the worst hit. Limitations in air travel across the world have led to numerous cancellations across hotels in India, thereby bringing about considerable losses to the hotel sector. According to Khanna of 2020, hotels across India will have to bear a drop-down in the occupancy rate by a percentage of 18 to 20%, with the mean daily room rates

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dropping by 12 to 14%. Till date lockdown has been imposed many times in partial forms like night curfew and restrictions in public gatherings. Due to which the hotels had and may have to bear significant losses at the moment. But as the conditions are recurring and the pace of vaccination throughout the world is certainly high hotels are getting back on the track. It may take a while for the hotel industry to regain. The sector will salvage over time because of its zestful character and the ability to make timely policies and schemes.

LITERATURE VIEW

Hotel industry of India

The Tourism and hospitality industry of India has emerged as one of the main factors of growth among the service sectors in India. Indian Tourism has considerable future in the view of the rich in culture and rich historical heritage, diversity in languages, territory and places of natural beauty spread across the country. Tourism Industry of India is an important source of foreign exchange in country which is almost similar to many other nations. The foreign exchange earnings of India from 2016 to 2019 grew at a CAGR (Compound Annual Growth Rate) of 7% but in 2020 it went due to the COVID-19 pandemic.

The staying and accommodation facilities in India comprises of hotels, motels, and resorts. Further, the hotels are classified in two segments – the first category is basically the star hotels and the second category is the heritage hotels. The star hotels are also categorized into 5 Star Deluxe, 5 Star, 5 Star Ecohotel, 4 Star, 3 Star, 2 Star, and 1 Star. The Heritage category in hotel comprises of - the Heritage Grand Hotels, Heritage Classic Hotels and Heritage Basic Hotels. Before the pandemic Covid-19 came, India's overall hospitality and hotel industry was predicted to reach over Rs.1,200 billion by the year of 2023. The following are the leading hotel companies in India - Taj Hotels, Resorts & Palaces (IHCL), The Hyatt Hotels Corporation, Marriott International India Pvt Ltd., Radisson Blu Hotels, The Oberoi Group, The Park Hotels, ITC Group of Hotels, Lalit Hotels, The Leela Palace, and Shangri-La Hotels & Resorts. Our country India is one of the most digitally advanced and friendly traveller nation in terms of digital technologies being used for booking, experiencing, and planning a journey for travellers. The countries rising middle class is increasing disposable income which has supported the growth of domestic tourism and industries related to it.

By the year 2028, Indian tourism and hospitality is highly predicted to earn US\$ 50.9 billion as visitor exports compared with the year 2018 that is US\$ 28.9 billion.

The tourism market in India is projected to reach the target of US\$ 125 billion by the year 2027 from an estimated US\$ 75 billion in the year 2020.

The Indian hotel industry includes domestic, inbound and outbound that was estimated at ~US\$ 32 billion in year 2020 and is predicted to reach ~US\$ 52 billion by the year 2027, estimated by the surging demand from travelers and sustained efforts of travel agents to boost the travel industry.

Effect of Covid-19 on Tourism & Hospitality Industry

Travel, tourism and hospitality industry are among the worst-affected industries, with worldwide demand abating as a result of worldwide travel restrictions, including the closing of several borders of countries to control the infection caused due to pandemic. International tourist visitors (overnight visitors) fell by almost 72 percent in January-December 2020 compared to the same period of last year, according to the latest UNWTO's World Tourism Barometer, it continues to decline, hampered by the slow virus containment, low traveler confidence, and significant restrictions imposed on travelling still in place due to the COVID-19 pandemic. If we compare to the same period in 2019, there were about 900 million less international tourist arrivals in the first ten months of the year 2020, resulting in a loss of US\$ 935 billion in international tourism export revenues, which is more than ten times the loss experienced in 2009 because of the raise of worldwide economic crisis. During the period of January and December 2020, arrivals of tourists in Asia and the Pacific fell by 82 percentage. This ten-month period showed 73 percent low tourists in the Middle East and 69 percent low in Africa continent. International arrivals in both Europe and the America fell by 68 percent.

Hotel Guest Expectations

It's really very hard to predict exactly how fast the hotel occupancy levels will bounce back as it will only happen when COVID-19 cases drops and travel restrictions lift around the globe. The main question arises is that "Will travel consumers, confined at home for so long, burst out of the gates as soon as borders reopen?" Or "Will they cautiously boom back, waiting to be sure that it's all safe to get out into the world again?" Either way, travel demand is resilient and occupancy will recover, but uncertainty and fear of reoccurring outbreaks is likely to inhibit consumer confidence and encourage them for a while.

In order to maximize occupancy and revenue in a post-COVID-19 world, it's important for hotels to get prepared for evolving and enriching demand and guest expectations.

Health and safety concerns and financial hardship caused because of the pandemic will deter many travelers from air travel even when the international borders open. In short even after the decline of the crisis, a large number of travelers will try to avoid airports and crowded urban areas, in favor of cheap and safe domestic trips to less-populated, drive-to destinations.

Large hotel chains and convention hotels that target international travelers will probably undergo a longer path to recovery, however luxury resorts situated off the main path may see a near-term resurgence in bookings of international guests, especially those located in regions less affected by the surge of COVID-19.

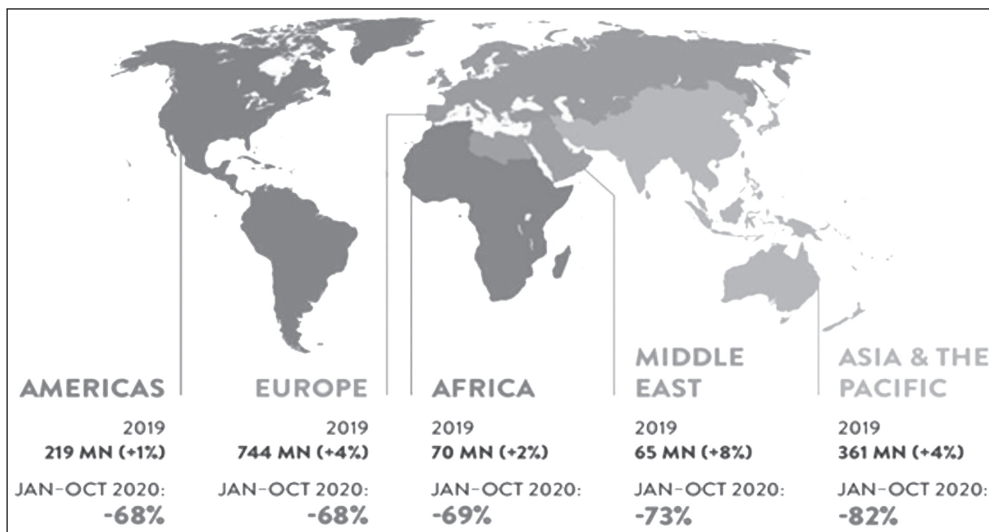
Hotels must have advanced facilities such as a doctor on call and ambulance facilities to nearby hospitals. It was also found that more than 80 per cent of the respondents were willing to travel by air (livemint.com, 2020). As per the report of Hussain (2017) the factors that hotel guests consider the most while selecting the hotel are Furnishing, Cleanliness, Furnishing, and Comfort of the Room. Therefore, during such a contagion, the importance of 'cleanliness' would be more than ever.

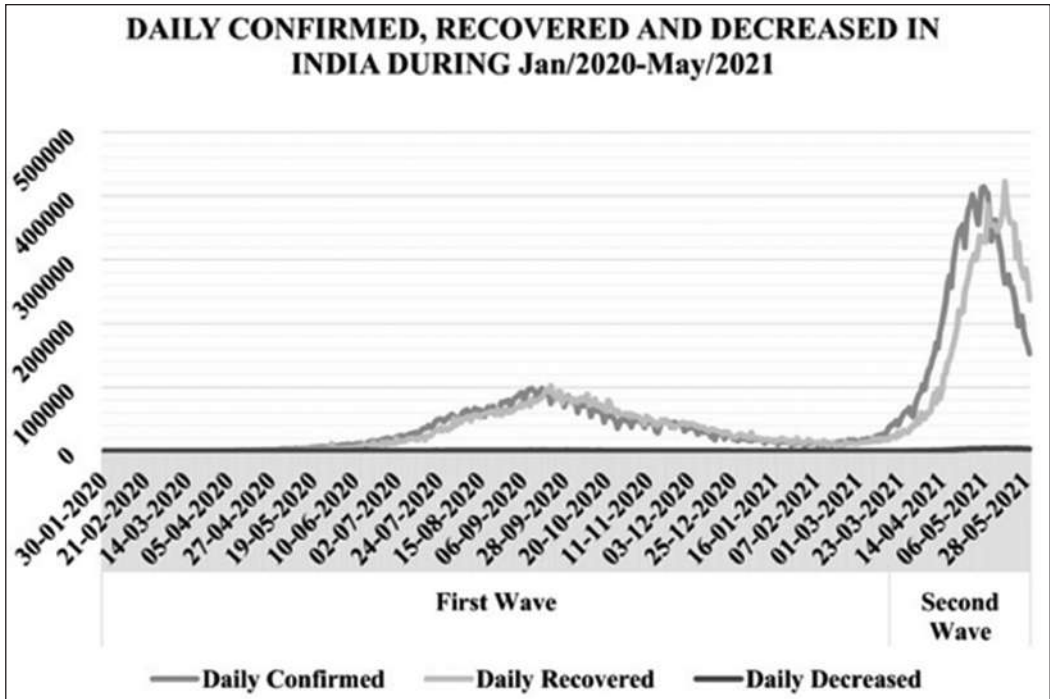
OBJECTIVES

To study the guest’s perception and expectations in the hotel industry in present scenario because of COVID- 19, effect of COVID-19 on tourism& hospitality industry.

HOTELS’ PREPAREDNESS FOR PANDEMIC

During this pandemic, the hotels should learn about health and safety precautions from health care services. The investors must envision their organizations primarily as safety providers and after that, as hotel and hospitality establishments. The hotels must first take care of their staff’s well-being and health protocols. Hotels should initiate new cleaning techniques using antiviral cleaners on hard surfaces or usage of UV light; PPE kit for housekeeping attendants; sanitizer installed within and outside guest-rooms; cleaning supplies in the guest room so that guests can clean the frequently touched surfaces by themselves; cleaning procedure followed at the hotel should be kept at a visible place in the guest room so that it boosts guest’s confidence related to safety procedures during his stay; updating intervals in which cleaning is performed and method of cleaning on a mobile app or hotel’s official website. The hotels should also aspire to go as contactless as possible that is allowing mobile check-ins and check-outs. The Federation of Hotel & Restaurant Associations of India (FHRAI), in alliance with the Food Safety and Standards Authority of India (FSSAI), has declared the "COVID-19 Awareness Training Program" for hospitality employees of India, which will teach in order that the guests and employees have a safe exposure. The Ministry of Health and Family Welfare India has provided Standard Operating Procedures (SOP) on preventive measures in hotels and other hospitality units to stop the spread of COVID-19.





CONCLUSION

Hotel industry will take time to boom back and the guest coming to the hotels will have a lot of safety related queries which needs to be undertaken by the entire industry. Hotels need to follow the SOP's and provide a hygienic stay to the guests that is ensuring the cleanliness and working according to Covid protocols. Hotels should promote contactless check-ins and check-outs. Hotels should have the medical assistance services such as doctor, ambulance and medicines. This will help the hotels to build back the trusts for their guests and as the conditions are getting better the industry will rise again.

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WORK ALLOCATION IN HOUSEKEEPING DEPARTMENT

Aathira Nandakumar

*First Year M.Sc. in Hospitality Administration,
IHMCT & AN, CIT Campus, Taramani, Chennai-600113.*

R. Aradhana

*Lecturer,
IHMCT & AN, CIT Campus, Taramani, Chennai-600113.*

ABSTRACT

Planning is presumably the Administrative Housekeepers most important operation function. Without proper planning each day may present one problem after another. Since the Housekeeping is responsible for drawing & maintaining so numerous different areas of the hotel. Planning should be accepted in a methodical manner in order to gain set objects. The step by step planning process may differ slightly from one hotel's housekeeping department to another and different languages may be in use across companies, but basically the sub-processes and tasks are the same.

Keywords: Planning, Staffing, Job Allocation, Work Scheduling, Staff Strength.

INTRODUCTION

A housekeeper is someone who manages a household and its domestic staff. Mrs. Beeton's Book of Household Management, published in the 1861 Victorian era, ranks the housekeeper second in charge of the house, and "unless in large enterprises where there is a house steward, the housekeeper must consider himself/herself as the mistress's personal representative."

The third sequential function of management is staffing. Until now, the executive housekeeper has been focused with planning and organizing the housekeeping department in preparation for the upcoming opening and operations (Anne, 2019). Now the executive housekeeper must consider hiring people in a timely manner so that three of the staffing activities—selection (including interviews), orientation, and training—can be accomplished before the opening.

RESEARCH OBJECTIVES

Among the concrete goals of this research are:

- To grasp the concept of staffing;
- To understand the significance of staffing in the housekeeping department;

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- To generate a concept for work allocation;
- To investigate the relationship between task allocation and employee performance;
- To solve the problem of worker allocation in a stochastic setting.

RESEARCH METHODOLOGY

The process of gathering information and data for the goal of making business decisions is referred to as research methodology. The approach could involve published research, interviews, surveys, and so on, and it could contain both current and historical data.

The study presented here is primarily descriptive in nature. Descriptive research designs can help provide answers to the issues of who, when, and how they are related to a certain research topic; but, a descriptive study cannot provide conclusive answers to why. Descriptive research is employed to get information concerning the present status of the phenomenon and to explain “what exists” with reference to variables or conditions during a situation.

LITERARY REVIEW

Housekeeping should offer a safe and healthy atmosphere for inhabitants and guests, and cleaning common areas is essential. Cleaning is defined as the removal of undesired matter, dust, filth, and pollutants, as well as the prevention of soiling. One of the main conditions for a satisfied visitor to return to a hotel is the proverbial godliness related to cleanliness. A professional and well-managed housekeeping department is critical to the profitability of a hotel organization. Cleanliness is crucial for a variety of reasons, not the least of which is the impact it has on guests, as well as the ability to save long-term maintenance expenses.

Housekeeping workers have the most direct contact with the visitors’ rooms and hence play a critical role in ensuring that the guests have a comfortable and enjoyable stay. The value of the housekeeping department in attracting repeat customers cannot be overstated (K M Rose, 2016). Three of the most important criteria of the travelling public are cleanliness, safety, and security.

The goal of this research is to solve the problem of worker allocation in an unpredictable setting. This study presents a thorough overview of previous studies in the topic of labor allocation in order to gain a clear knowledge of the problem. Worker allocation can be defined as assigning the best worker to a process in order to improve the system’s performance (L Kumar, M Bansal, S Goyal, 2012). Worker allocation must be done based on worker productivity in order to optimize the system’s performance. In terms of labor allocation, processing time and worker quality are the most important productivity indicators.

Work or job allocation is a crucial activity for achieving excellent performance in housekeeping as well as the hotel’s general operation. Researchers have created a variety of strategies and algorithms in a variety of circumstances utilizing a variety of mathematical models (S. Yadav, R. Mohan, P K. Yadav and G. Verma, 2019).

The Department Staffing Guide is created as a result of the formulation of the Area Responsibility Plan and the House Breakout Plan prior to the opening, and it will be a key instrument in establishing the requirement for staff in various categories (Angela, 2010). The housekeeping and laundry managers should be on board and assisting with the creation of job descriptions. The human resources staff at the hotel have to gear up for the hiring event. They will announce a mass hiring for all kinds of staff to begin two weeks before the launch date if the property is pre-opening.

WORK ALLOCATION OR WORK SCHEDULE

A work schedule is a document that details the specific tasks that an employee must complete during a certain shift, as well as the time limit in which each activity must be completed. The following are included in the document:

- Employee's job description
- The operational area
- The amount of time the employee has to complete the assigned assignment.
- Meal and break schedules, as well as any special jobs
- It's time to clean up the equipment and wrap things up.

Work schedules should be written in plain English and in a compact format. Because the quantity of work in a day may exceed the duration of a single shift, many work schedules must be produced for use in a single day. The number of schedules created for a certain area indicates the number of employees required to clean that area on a given day. When employees arrive at work, they should be given their schedules.

Calculating staff strength: In most hotels, the cleaning department employs the largest workforce when compared to other hotel departments. As a result, manpower becomes a significant operating expense. Achieving a balance between workload and employee strength is critical to good housekeeping department management. When estimating staffing levels, keep in mind that each property will have its own set of requirements. Here are some things to think about:

- It's what kind of hotel it is.
- The hotel's location Traditions and customs in the area
- The hotel's dimensions (in terms of number of rooms)
- The hotel's occupancy rate.
- Management is required.
- Policies of the company
- The amount of work that needs to be completed
- The expected level of work quality, or the standards to be met
- The amount of time required to complete the work

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- The frequency with which the job must be completed
- The period when the work area is accessible
- The volume of traffic in the neighborhood

The size and structure of the hotel, that is, whether it has a compact structure with clusters of rooms, the number of rooms per cluster or floor, the expanse of the public areas and landscaped areas, and so on, all influence the personnel strength of the housekeeping department (Herawati, Yuniartha, Purnama and Dewi, 2018). The following is a basic rule of thumb for determining personnel strength in the housekeeping department.

THUMB RULE FOR DETERMINING STAFF STRENGTH

Work Position	Estimated Strength Need
Executive Housekeeper	1 for a 300 room property
Assistant Housekeeper	2 (1 per morning and evening shift)
Floor Supervisor	1 per 60 rooms for the morning shift; 1 for the evening shift; 1 for the night shift
Public Area Supervisor	1 for each shift
Linen/Uniform Room Supervisor	1
Room Attendants	1 per 16 rooms for the morning shift; 1 per 30 rooms for the evening shift (if turndown service is provided)
Linen and Uniform Room Attendants	1 per 30 rooms for the evening shift (if turndown service is provided)
2 Housemen	Depends on the public areas and functions expected; 1 per 60 rooms
Desk Attendants	1 per shift
Tailors/Upholsters	2 (may differ depending on the size of the hotel)
Horticulturists	1
Head Gardeners	1 per 20 gardeners
Gardeners	1 per 4500sq.ft of landscaped area

Table 1: Thumb Rule of Determining Staff Strength

IMPORTANCE OF PLANNING OR WORK ALLOCATION IN HOUSEKEEPING

Planning is most likely the most significant management role of the Executive Housekeeper. Without good planning, each day may provide a new set of problems. Because Housekeeping is in charge of cleaning and maintaining so many different sections of the hotel. Planning should be done in a systematic manner in order to achieve the goals that have been stated (Raghubalan and Smritee, 2015). The step-by-step planning process may alter slightly from one hotel's housekeeping department to the next, and different language may be used across organizations, but the sub-processes and tasks are generally the same. Housekeeping planning should be done

Cleaning Schedule

NB- Please initial relevant box when cleaning has taken place

Week Commencing: _____

Location / Area: **Main Kitchen**

Item to be cleaned	Cleaning Agents	Personal Protective Equipment	Frequency							Signature
			Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	
			Twice Weekly							
			Three times per week							
			As Required							
			Daily							

Figure 2: Frequency Schedule

Performance Standard: They are required standards of performance that establish the quality of work that must be completed in accordance with the property’s expectations. The Executive Housekeeper’s performance requirements, daily inspections, and periodic performance are critical to service consistency. Following the evaluation, specific on-the-job mentoring and re-training should be provided.



**DEPARTMENT OF PERSONNEL
EMPLOYEE WORK PERFORMANCE
STANDARDS FORM**

Supervisors are responsible for establishing the initial standards and standards must be reviewed annually and modified when appropriate. The employee must be given an opportunity to comment when the standards are revised HRAC 200.0001.

Employee Name	LAST	FIRST	M.I.	Employee ID #
Class				Date Standard
Yield				Set/Rev.
Department/Division:		Home Org # (4 digits)		Position
Agency # (4 digits)				Standard #
I have read and understand the work performance standards for this position. I understand these standards may be modified after discussion with my immediate supervisor and with the concurrence of the appointing authority.				
Employee Signature:			Date:	
Supervisor Title & Signature:			Date:	
Reviewing Officer Title & Signature:			Date:	
Appointing Authority Title & Signature:			Date:	

Job Elements <small>(Listed as principal assignments, major responsibilities and/or related duties)</small>	Weighted Value	Performance Standards
Job Element #1:		
Job Element #2:		
Job Element #3:		
Job Element #4:		
Job Element #5:		
Job Element #6:		
Job Element #7:		
Job Element #8:		

*If a weighted value is not designated, each job element has an equal weight.

Distribution: Original to Agency; Copy to Employee; Copy to Supervisor

HRAC 200.0001, 1/03
Revised 02/1/07

Figure 3: Performance Standard

Productivity Standard: It establishes the amount of work that department employees must complete. Productivity requirements must be established in order to staff the department within the confines of the hotel's operational budget. Housekeeping Managers must understand how long it should take a room attendant to complete the primary cleaning chores listed on cleaning frequency schedules, such as guestroom cleaning.

An example of a useful standard worksheet:

Total Shift Time = 9 hours x 60 minutes = 540 minutes

20 minutes at the start of the morning shift

10 minutes for a tea break

30 minutes for lunch

Afternoon Tea Break = 10 minutes

20 minutes at the end of the morning shift (handover)

As a result, the room attendant is in the guest room for 450 minutes (540-90), and each room requires 30 minutes to clean (Bohle, Quinlan, Kennedy, Williamson, 2004). As a result, in 450 minutes, the attendant can clean 15 rooms.

TECHNIQUES USED IN WORK ALLOCATION

Work allocation techniques include:

- Different levels of workers
- Managerial
- Supervising
- Skilled vs. unskilled
- Staff knowledge and consideration
- Expertise
- Capability
- Ability
- Competent in practical ability
- Punctuality
- Tactical
- Respectable

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- Adaptability
- Dependable
- Observant, etc.

Allocation methods primarily used:

1. **Traditional Method (unit method):** Each part of the building is assigned a member or members of staff who always work on that area and complete all tasks. In a residential facility, for example, a cleaner may be assigned 15 rooms to service within a specific section of the establishment. As a result, the crew is multi-talented. This strategy allows employees to be more adaptable.
2. **Team Method (Function Method):** The workforce is divided into teams, with each team specializing in a specific type of cleaning job. For example, floor care, bathroom cleaning, and general cleaning.

PLANNING WORK ROASTERS

Work roasters are used to plan the allocation of duties, hours of duty, and days off for each member of the staff. The roaster should be rotated every five weeks to ensure an even distribution of responsibilities (Yuniartha, Purnama and Dewi, 2016). Work roasters must be basic in structure, easy to understand, properly written, and posted on the staff notice board at least a week ahead of time. Benefits of working as a roaster: Planning ahead of time for a work roaster helps to ensure:

- The correct amount of employees necessary to be on duty at any given occupancy.
- That employees' working hours are in accordance with their employment contract.
- That regular off-days are available to boost production; and
- Knowledge of which staff are present on the premises in the event of an emergency and the attendance and paycheck reports must be accurate.

Steps to make a Work Roaster

The following are the steps in making a work roaster:

- Step 1:** Determine the projected occupancy levels and events at the hotel. The sales and marketing department provides this information at the start of the fiscal year. More specific occupancy reports are accessible on a daily and weekly basis through interaction with the front office department (Hunter and Powell, 2006). Before scheduling employees' yearly leave, overall occupancy projections must be considered. These estimates also assist the executive housekeeper in monitoring staffing to provide adequate staffing during peak periods and avoid surplus labor during quiet periods.
- Step 2:** Determine whether the duty roaster's duty hours will be spread out across 12 hours, 16 hours, or 24 hours. Determine if the employment will be available 5 or 7 days a week.
- Step 3:** Determine the type of shift to be employed (straight shift, break shift, rotating shift, or any other alternative scheduling).

Step 4: Determine the number of full-time and part-time employees on the payroll.

Step 5: Determine the amount of labor hours required per day and per week for various positions.

Step 6: Plan for coffee breaks and mealtimes in the roster.

Step 7: Ensure that each employee has a weekly off day after six working days. Allow for compensatory trade-offs. Schedule one reliever for every six employees.

Step 8: Determine closed days and restricted holidays, as well as any necessary contingency preparation.

WORK STUDY

For proper Work Allocation, Work Study or Task Study is important. Task study is one of the management approaches that may be used to make the best use of the resources available to an organization for the completion of the work that it is engaged in.

Work study is divided into two parts:

- a) Methodological Investigation (to improve ways of doing tasks)
- b) Work Evaluation (to establish the time required for the task)

The goal of job study is to:

1. *Improved working conditions for employees*
 - Improved workplace layout
 - The working environment has improved.
2. *The most cost-effective and efficient utilization of plant machinery and stores*
 - Equipment design advances
3. *Efficient utilization of human labor*
 - Placing the appropriate person in the right place
 - Better planning and control
 - More control data is now available.
4. *Human work evaluation*
 - Improved visitor, staff, and resident health and safety

This will result in:

- Less tiredness; and
- More cost-effective utilization of manpower, materials, and equipment.

METHOD STUDY

This is a careful examination of the current or prospective technique of carrying out a task as a foundation for improvement. It is concerned with discovering or developing better ways of accomplishing the work, and it adds to increased efficiency and morale.

The following are the goals of the method study:

- i) Work circumstances (improved workplace layout)
- ii) Plant and workspace layout and installation
- iii) Method of operation (improve process and methods)
- iv) Improve resource utilization (material, plant, equipment, and people)
- v) Design of plant or equipment or final product
- vi) Improve the working environment
- vii) Reduce unneeded weariness by lowering human effort.

Method Study Chart

The figure process map provides a high- position overview by recording only the most important processes and examinations. As a result, the only symbols used are u and o. Along with each symbol, a brief description of each step in the sequence is handed. The time it takes to complete each step is also recorded if it's known.

The inflow process map employs all five symbols and records the order of the operation and product's inflow.

The multiple exertion map is a map that records the conditioning of further than one subject, similar as an operative, machine, or outfit, on a common time scale and is used to demonstrate their commerce.

WORK MEASUREMENT

Work measurement is the assessment of a job's work content by measuring the time it takes to complete it. The work study must be completed at a given level of performance by a person competent for the job.

Work measurement is concerned with the examination, reduction, and elimination of ineffective time, i.e., time when no beneficial work is being carried out (K Meara, 2019). Work measurement, as the name implies, is concerned with measuring the time required to accomplish tasks or sections of tasks in order to distinguish between inefficient and effective time.

The stages of work measurement are as follows:

- Measurement of work;
- Select the objective to be measured;
- Define the methodology for completing the task;

- Break down into elements;
- Estimate the work involved;

The following are the most common methods for determining how much work has to be done:

1. Time study;
2. Activity sampling;
3. Motion time systems that are predetermined;
4. Compilation of data from a variety of sources;
5. Calculation;
6. Analytical estimating;
7. Estimation through comparison;

CONCLUSION

In general, the housekeeping role is in charge of cleaning public areas (lobbies, corridors, and meeting rooms), private bedrooms, and public restrooms on a daily basis. It also takes care of linen laundering and, in some cases, guest laundry. Housekeeping also serves a modest security function by offering a “first alert” to prospective visitor concerns as staff cleans guest bedrooms on a daily basis.

Working for a favorable project outcome is primarily about two things: carefully managing tasks and the people who are expected to do the work. When jobs are allocated and done within a specified time frame, businesses can generate additional cash. Allocating resources correctly becomes the foundation for a successful accomplishment. Otherwise, meeting targets becomes impossible.

Starting with a good plan, team leaders have a clear picture of what it will take to complete the project. This strategy also serves as a guide for deploying the appropriate resources in the appropriate location. Even with a limited budget, team leaders may effectively manage their teams when the correct people are taught and skilled to accomplish certain duties. Planning allocations prior to the start of work means that half of the work has already been completed.

All that remains is for team leaders to explain, encourage, and include team members in final choices. This reduces the possibility of misuse or waste. Instead, leaders can choose who the best fit is. Small budgets can grow to be sufficient to execute projects without cost overruns. When team members sense their abilities and experience are respected, they are more driven. Most importantly, the entire team works together to achieve success.

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A CONCEPTUAL STUDY ON NEW TECHNOLOGIES IN HOTELS

K. Nazni

*Assistant Professor,
SRM IHM.*

S. Jacqueline Martina

*Assistant Professor,
SRM IHM.*

Affiliation: SRM IHM

ABSTRACT

With the fast improvement of AI innovation as of late, the concern that AI and robots utilizing it will supplant people has turned into a reality. It is basic to foresee how robot innovation, carried to society with the improvement of AI innovation, will be acknowledged. Accordingly, it is important to examine such itemized substitutions. As the accommodation business battles for endurance in the wake of experiencing tremendous misfortunes because of COVID-19 last year, lodgings are fusing a mix of state-of-the-art innovations to further develop guest certainty, and alleviate misfortunes caused during the pandemic. Reception and execution of robots in the travel industry and accommodation are muddled. Robots can be utilized to make encounters for customers.

Keywords: AI, Robots, Innovations, COVID-19.

INTRODUCTION

From the beginning of the human era, cleaning was one of the monotonous and tedious undertakings. Innovations are part of human existence and help them to finish their assignments. With the fast improvement of AI innovation as of late, the concern that AI and robots utilizing it will supplant people has turned into a reality. It is basic to foresee how robot innovation, carried to society with the improvement of AI innovation, will be acknowledged. Different associations are researching how AI and future social orders utilizing robot innovation will come to fruition. In the US, the National Robotics Initiative (NRI) has sent off a program to help automated advancement (Hitotsubashi, Chiyoda-ku, Tokyo 2017). There are a few preliminaries to make security principles for programmed driving vehicles (Yamazato-cho, Showa-ku, Nagoy). A study by Oxford University proposes that normal errands are simple to robotize and supplant (Noji-Higashi, Kusatsu, Shiga,). There are likewise reviews that show how substitution occurs by subbing task units rather than work units (Komaba, Tokyo, 153-8902, Japan). Every one of the

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above examinations thinks about how current errands will be subbed. In any case, supplanting genuine work with robots is comparable to the circumstance where new connections (like human-robot association; HRI) are imagined at the worksite, notwithstanding supplanting part of the current casing. Accordingly, it is important to examine such itemized substitutions. As the accommodation business battles for endurance in the wake of experiencing tremendous misfortunes because of COVID-19 last year, lodgings are fusing a mix of state-of-the-art innovations to further develop guest certainty, and alleviate misfortunes caused during the pandemic. A review distributed in November by specialists at Stanford University and Northwestern University, US, expressed that resuming cafes, exercise centers, and lodgings conveys the most elevated gamble of additional spreading COVID-19 (The Economic Times). Technology progressions can set quick help on the right track into guest hands without the need to encounter hotel staffs.

OBJECTIVES

- To assess perceptions regarding the advantages and disadvantages of robots, AI compared to human employees.
- To identify the tasks that are suitable for robotisation post COVID 19.

REVIEW OF LITERATURE

Reception and execution of robots in the travel industry and accommodation are muddled (Dogan and Vatan 2019; Kuo et al. 2017; Lee et al. 2018). To make an informed choice, proprietors and directors need an unmistakable point of view of administration robots' benefits and disservices comparative with human workers. Getting robots' likely applications and effects on their organizations' practical regions (for example operations, safety and security, marketing, human resource management, and financial management) is basic. The ascent of robots, a decades-in length process all through numerous areas, has at long last arrived at administration businesses. Progressed advanced mechanics, man-made brainpower (AI), and AI innovation empower suppliers to offer their administrations with more noteworthy usefulness, adequacy, and productivity (Wirtz et al., 2018). Deals of administration robots develop, at yearly paces of more prominent than 30%, and the International Federation of Robotics (2018) expects much more noteworthy extensions in the utilization of administration robots for expert and individual purposes in the following ten years. Robots acquainted with perform public connections are acquiring specific unmistakable quality (Belanche D, Casaló LV, Flavián C, Schepers J, 2020). Earlier examinations (for example Dogan and Vatan 2019; Ivanov 2019; Ivanov and Webster 2019c) enjoy showed different benefits and burdens of administration robots compared to human representatives. The accompanying benefits have been illustrated in the literature: robots' capacity to work all day, every day, the capacity to execute their work accurately what's more on schedule, simple development of the extent of their undertakings through programming and hardware overhauls, arrangement of unsurprising assistance quality. Additionally, robots don't get exhausted and can play out similar assignments various times without grumblings, and they don't go on strikes or get sick. A portion of their weaknesses include: robots can work in organized circumstances just, and they can't carry out undertakings they were not modified/prepared for or

come up short on separate equipment. For example, a robot such as Pepper, planned for social collaborations with people, can't be utilized for room administration conveyance since it comes up short on compartment for the things and has restricted versatility. Robots additionally need innovative and individual methodology in their co-operations with visitors what's more workers, since they are deadpan (Dogan and Vatan 2019) and might be seen as a danger by clients, workers and worker's guilds (Kazandzhieva what's more Filipova 2019; Li et al. 2019), which might ruin their execution by tourism and neighborliness organizations. All things considered, the advances in artificial insight also mechanical technology will work on the specialized capacities of administration robots, will diminish furthermore even dispose of a portion of their drawbacks, and will reinforce their advantages contrasted with workers. Combined with dropping costs, the change yet to be determined towards the benefits of administration robots will animate their more extensive execution in the business. Robots have different likely headings for application in the travel industry and hospitality. The robotisation of administrations is carried out on errands level-for example moving things, giving data, printing a report (for example a voucher, a money receipt), taking a selfie with a visitor, playing out a prearranged dance, vacuuming the cover, cleaning the floor, sanitizing the premises, flipping burgers, and so on In that setting, the writing demonstrates that robots are for the most part reasonable for monotonous, filthy, dull, and perilous assignments, which not many individuals need to do. For instance, Ivanov also Webster (2019a) observed that travel industry experts considered as generally reasonable for robotisation errands connected with data arrangement, housekeeping, cleaning, trash assortment, gear conveying, and handling records. Undertakings that elaborate the subjection of a human to a robot, either actually or inwardly, were not considered as proper for robotisation for example babysitting, styling, hitting the dance floor with visitors, or robot-conveyed kneads.

The execution of administration robots in a neighborliness organization would affect its business. From a human asset the executives point of view, each occupation position comprises of different assignments, some of which are more suitable for robotization than others. Thus, the utilization of robots might change the composition of assignments performed by each occupation position (Osawa et al. 2017). Practically speaking, the execution of administration robots would have at the same time a replacement also an upgrade effect on the travel industry and friendliness occupations (Ivanov and Webster 2019e). Through the replacement effect, administration robots computerize a large portion of the errands creating a task position prompting the disposal of the entire work position. Through the improvement effect, robots don't supplant the representatives, however assist them with performing should (be more effective, efficient, and useful) on their work position. In that sense, robotisation and robotisation might assist lodgings with giving all the more respectable work for their representatives (Tuomi et al. 2020a). Inside the setting of the innovation acknowledgment models (Davis 1989; Venkatesh and Davis 2000), the upgrade effect may further develop robots' work importance and saw value, also animate their execution in the travel industry and cordiality industry. The balance between the replacement and improvement effects relies upon the specificerrands that establish a specific work position and will be specific in each company. In any case, representatives might be apprehensive for their positions and see robots as a danger (Li et al. 2019), in spite of the fact that reviews have shown that the inn supervisors imagine robots as help for representatives rather than as their substitutes (Dogan also Vatan 2019). Moreover, representatives would have to have different jobs in respect to the

robotized administration experiences in their organizations like organizer, empowering influence, differentiate, pioneer, and instructor (Tuomi et al. 2019), which would expect preparing to acquire new information and abilities to use the maximum capacity of administration robots in their work.

According to an activities viewpoint, robots increment the help limit of the company, permitting it to serve more visitors with similar number of human representatives

(Ivanov 2019). It likewise makes the preparation of tasks more straightforward due to the predict able help execution of robots. Simultaneously, the utilization of versatile robots (for example for tidying up or room administration conveyance) expects that lodgings have robot-accommodating offices that permit robots' versatility which might require some extra speculation in the structure (Ivanov and Webster 2017; Tan et al. 2016). Also, lodgings need to guarantee legitimate robot fix/upkeep is given either by recruiting prepared personnel or by re-appropriating it to another organization. Moreover, lodgings might confront a merchant lock-in circumstance when they depend on one specific robot provider/producer and can't change to another (Farrell and Klemperer 2007) because of the inconsistency of the advancements of the providers. This implies that hoteliers can not recharge their robots frequently and may utilize obsolete models. Renting robots (robot-as-a-administration) will dispense with a portion of these functional burdens in light of the fact that the robot proprietor will hotel chiefs' insights towards the use of robots: deal with the support, programming updates, and model re establishments (Ivanov and Webster 2019d, e).

According to a showcasing point of view, robots can be utilized to make encounters for customers (Choi et al. 2020; Qiu et al. 2020; Tung and Law 2017). Through giving an extraordinary and critical experience (Chan and Tung 2019) the utilization of robots in lodgings may empower the return to goal and positive verbal exchange of visitors through posting in web-based media and inn audit locales (Choi et al. 2020). Be that as it may, visitors don't need to choose the property due to the robots-area, administration esteem, lodging configuration, costs, and so forth, are deciding elements for clients' lodgings decision also (Yadegaridehkordi et al. 2018).

According to a financial point of view, robots check out in the event that they work on the financial performance of the organization by lessening functional expenses or potentially producing extra incomes (Ivanov and Webster 2019d). Expenses can be diminished straightforwardly through the disposal of some work positions, or in a roundabout way by upgrading representatives and allowing them to perform all the more effectively and efficiently. The extra incomes can be an after effect of broad development (for example through extra room administration deals conveyed by a robot), concentrated development (for example more exorbitant costs for automated encounters for sightseers), or then again they can be created by implication (for example via mechanizing assignments and liberating time for workers to zero in on more income producing exercises). As interest in assistance robots requires significant financial assets (buy/lease, staff preparing, operating costs, protections, power, fix/upkeep, and so on), organizations need to implement an intensive expense benefit examination prior to choosing to put resources into robots. They need to consider the non-financial costs and benefits examined above too in light of the fact that they may offset the financial ones. For instance, from a well being and security perspective,

the COVID-19 pandemic showed that robots can be utilized for UV sanitization of offices, and for giving the essential physical separating among customers and administration representatives (Seyitoğlu and Ivanov 2020), which might animate their reception later on (Zeng et al. 2020).

RESULT/DISCUSSION

While thinking about the expected expenses and advantages of the reception of robots, AI in lodging administration processes, and the need to track down the 'right' balance, customer mentalities towards the suitability of its fuse, and where it is most/least proper across tasks, has likewise been explored in a progression of papers (Ivanov et al. 2018a, Ivanov et al. 2018b, Ivanov and Webster 2019b, Ivanov and Webster 2019a). These papers comprehensively see that the most elevated paces of acknowledgment by respondents to the three investigations incorporate exercises, for example, data arrangement, accessibility, estimating, installment, cleaning normal regions, trash assortment, gear conveying and the conveyance of things, for example, clothing, material and towels. The regions considered the most un-fitting for robots, AI application were looking after children, hitting the dance floor with visitors and back rub. They recommend that the assignments with high adequacy (data arrangement and housekeeping) originate from respondents previously being utilized to self-administration stands (data arrangement) or are viewed as dull, messy or perilous (housekeeping). The undertakings where respondents would have to subordinate their bodies to robots, AI were considered least satisfactory (rubs, looking after children styling). Ongoing statistical surveying from Mintel (2019a) further substantiates these discoveries in their report on Eating Out: the dynamic cycle where they home in on the potential for AI and robots in cafes. These studies are of specific significance to this postulation and all the more explicitly where clients may be most (and least) open to associating with robots, AI as taken on in the lodging administration process. The comprehension of what/where/how robots, AI ought to be planned into administration frameworks is a main inquiry in much contemporary examination (Webster and Ivanov 2020, Belanche et al. 2020, Tuomi et al. 2020b). While Ivanov et al. (2017) guarantee that "as an intriguing and creative innovation, robots might wow lodging visitors and invigorate client amuse", Ivanov and Webster (2017) recognize that the reception of these advances depends partially on the clients' status and eagerness to be served by robots. As a somewhat clever region in the accommodation area, different researchers have examined these thoughts further with worry over how purchasers will obviously, answer and associate with robots, AI: for example human-robot cooperations (HRI) to ensure future fruitful broad reception of these advancements (Tung and Law 2017). Tussyadiah and Park (2018) directed two investigations pointed toward getting purchaser reactions to the qualities (humanoid attribution, animacy, agreeability, seen knowledge, and saw security) of two distinct robots in lodging administration settings (gathering and room administration); they tracked down that apparent security, human qualities, usefulness and saw insight were immensely significant attributes in deciding reception goal of lodging administration robots. Trust and an inclination for connecting with people were the significant obstructions to acknowledgment. Other writing in human robot connections has additionally stressed the basic job of confidence in impacting acknowledgment what's more, use of innovation (Tussyadiah et al. 2020). Tussyadiah et al. (2020) researched trust in shrewd robots in accommodation and the travel industry, its client related precursors and its impacts on

confiding in aim; this exploration was prompted by the development of robots to incorporate socially determined associations with people furthermore, along these lines the job of human-robot trust turning out to be more unmistakable in impacting by and large acknowledgment and utilization of independent innovation. They tracked down trust in insightful robots is impacted by inspirational perspectives towards innovation and inclination to trust innovation all the more by and large. The actual types of the robots didn't influence trust in this study. Tussyadiah et al. (2020) explored trust comparable to shrewd help robots. The results were comparable, observing that believing convictions significantly affected trusting expectation and robot structure having no impact on confiding in goal. Diverse confidence in the travel industry administration robots has likewise been examined by Park (2020) where across two examinations, trust in help robots was investigated with regards to eateries and convenience. Research plays showed the significant part of administration robots in drawing in customers on a social level, further impacting their encounters (Van Doorn et al. 2017). They proposed 'computerized social presence' (presented prior on in the Definitions segment, the idea of how much machines (robots) can cause the inclination that a human shopper is in the organization of another social substance. This is seen of developing significance as innovation further injects administration co-operations and with a speculation that future help experience fulfillment will be separated by the degree to which the innovation can draw in purchasers on a social level.

CONCLUSION

Innovation has been utilized ridiculously in various fields. Hotel industry as a clear illustration of advantage from involving brilliant innovation in various viewpoints, after-deal support, plan, showcasing, HR, and security. This report center around how lodging firms utilizing shrewd innovation and issues on the plan, promoting, and after-deal support separately. Albeit brilliant innovation makes a major commitment on the change of inn industry it additionally contains issues and issue. While, lodging organizations would think about the outcomes and viability of speculation on savvy innovation. It is no question that the approach to presenting and working the shrewd innovation is a refined issue for neighborliness organizations.

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EVOLVING SUSTAINABLE TRENDS OF INTERIOR DECORATION & DESIGN IN HOTELS – “AN OUTLOOK THAT COMFORTS THE GUEST”

T. Jayitri

*First Year M.Sc. in Hospitality Administration,
IHMCT & AN, CIT Campus, Taramani, Chennai-600113.*

Soumyak Bhattacharjee

*Assistant Lecturer-cum-Asst- Instructor,
IHMCT & AN, CIT Campus, Taramani, Chennai-600113.*

ABSTRACT

Interior decoration is all about involving the use of decorative articles to make guests comfortable and relaxful and it plays a very important role in providing the space and improves the overall experience of the guests. It entails in creating a aesthetically peaceful environment. The color ,the space ,the light ,the texture and the pattern defines up the elements of the interior decoration and using the elements in a balancing wiseful way marks the interior décor to be more attractive and magnificent. All these elements along with floor coverings, ceilings are the most important tools used for decorating various areas of the hotel by giving a distinctive style to the hotel areas .Guests obviously expects for the best quality stay along with value for money and hence hotels are revolutionising with more of eco-friendly and ecologically sound practices of interior decorations by updating themselves to satisfy the guests to the fullest .Innovative, contemporary interior not only appeals to the eye and provides a positive experience, comfortable stay to the guest , but it also increases the efficiency of hotel's operations by increasing profitability.

Keywords: Interior Decoration, Eco-friendly, Sustainability, cost-effective, profitability.

INTRODUCTION

Sustainability entails striking a balance with the environment and providing our own needs without interfering with future generations' ability to meet their own. In an era when the world is coping with global warming, environmental degradation, and a terrible pandemic, it is critical that we recognise the gravity of the situation and take consistent steps toward a sustainable, environmentally friendly future. Around the globe, every hotels and the guests have become much aware of the necessity of sustainability .Hotel management too have a huge impact on the hotel's long-term viability as we can choose out which materials and goods will be used, which can help

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guests form a favourable bond with the hotel's décor. This encompasses all aspect of a hotel's operation with sustainability as a primary goal. Consumers want to see businesses engaged in sustainable management and investing in real-world solutions that will benefit the planet's future. Thus hotels are planning out most sustainable interior decorations by reusing materials ,using regional materials and green furniture .Here are the principles and the elements of Interior Décor,

The Principles and the elements of the Interior Decoration

The 7 design components are intended to assist in balancing an interior plan so that the final look is both aesthetically pleasant and useful. Design is both an art and a science.

Each of the aspects that make up a design can be used to emphasise a room's greatest characteristics, compensate for any defects, and create an interior that is pleasing to the eye, tactile, and functional.

1. SPACE

The distance between objects and surrounding furniture ,as well as their proportions inside a room, is referred to as'space.' Getting the correct balance in a room necessitates judicious use of both 'positive' and 'negative' space.

Positive space refers to the regions where sofa and armchairs like the room's objects are being placed,whereas negative space refers to the gaps in between, and includes circulation area for moving around the room, as well as sections kept open to keep the room from seeming congested.

A good balance between the two is necessary for a room to feel well-designed. Negative space makes a room feel more spacious, larger, and possibly bigger, but too much negative space can make a room feel under-furnished and impersonal.

2. LINES

Line is another tool used by interior designers to influence how our brain sees space. Lines are divided into three sub categories:

- Horizontal
- Vertical
- Dynamic

Horizontal linesgivesa more earthy, comfortable, snug, and stable atmosphere where as, Vertical lines, on the other hand, give a room a light and airy feel.

Horizontal Lines

Use horizontal lines to give a room a more quiet and peaceful feel. They anchor the area and give it a larger, more spacious vibe. However, if this design feature is used too often the area will become dull and lack the visual attractiveness that comes with vertical and dynamic lines.

Vertical Lines

Verticals, which are perpendicular to horizontal lines, attract the attention upward. For instance, if the guest house has fantastic views.

Dynamic Lines

These lines imply activity and stimulation. They're active, encouraging you to "move" your eyes in the direction of the line or notice the pattern.

This category includes zigzag, angular, and curved lines, as each provides a different movement or effect on a room's vibe. Smooth and curving lines provide softness, smoothness, and harmony, whereas zigzag and angular lines add energy and life to a room.

3. FORM or SHAPE

A form is a group of lines that together form a shape. Lines, whether horizontal, vertical, or dynamic, help to construct shapes. Natural or geometric (angular) shapes can be utilised (curved). They could also be open or closed. When the interior designer understands one's personal style, they mix and match forms to create any mood you desire in our home, whether it's earthy, modern, warm, chilly, or anything else.

4. PATTERN

A pattern is made up of lines and forms, and thus belongs to the same "line" family of elements as form. Patterns, like shapes, draw attention to a certain area of home, such as the ceiling, stairwell, or walls. This effect can be achieved with a bold statement wallpaper or a bright colour pop on a wall.

Patterns don't have to be bound by the confines of the walls. One can use them on everything from wood grain to picture frames, draperies, and cushions. The possibilities for incorporating patterns into our home are numerous.

5. LIGHT

As different types of light evoke different emotions, light may help to set the mood in any space. Natural light can represent warmth and cheerfulness, whereas artificial fluorescent lighting can make a room feel cold and still.

Natural Lighting

Natural light may bring out the best in your paint colours or draw attention to a piece of furniture longing to show off. The interior designer can exactly place the windows and doors in a fully personalised home to allow the right quantity of natural light to flow onto any interior room. Designers can also control the light by using curtains, shades, and drapes.

Artificial Lighting

Task lighting

Itaids in the completion of duties, such as desk lighting, kitchen overhead lighting, and so on.

Accent Lighting

This type of lighting designates a focal point in your home and might include art, sculptures, chandeliers, or even home's architecture.

Ambient Lighting

Rather than spotlighting or assisting with duties, ambient lighting adds to the overall aesthetic of the room. It's the "mood lighting" we mentioned before.

6. COLOUR

Color is significant not just because it sets an atmosphere in a space, but also because it has the ability to make a space appear larger, lighter, or cosier. Of course, it's critical that the chosen colour blends well with the rest of the room's decor, whether it's in a bedroom or a home or a office.

OBJECTIVES

1. To list out the interior decoration samples available in the market.
2. To find out the cost-effective interior decors with eco-friendly practices.
3. To gauge the customer satisfaction level.
4. To emphasize on sustainable interior decoration trends.

REVIEW OF LITERATURE

The art and science of improving the interior of a room in order to produce a polished and aesthetically acceptable atmosphere is known as interior design. An interior designer is someone who has been taught to carry out plans, do research, organise projects, and manage them with authority. The interior design profession include space planning, programming, research, conceptual development, site inspections, client communication, project and construction management, and, of course, the execution of the planned design.

Before it became a profession, interior design arose from an instinct to carefully synchronise with building architecture. During the industrial revolution, the rise of middle-class living and the allure of sophisticated architecture ushered in the profession of interior design.

The pursuit of the optimal use of space, as well as a focus on human well-being and functional design, continues to drive the evolution and life-enhancing potential of today's interior design profession. However, the work of an interior decorator is not the same as that of an interior designer.

Architects have been as interior designers as well since ancient India to fully realise their concept. This is evident from allusions to architect “Vishwakarma”, who is one of the gods of Indian mythology. Sculptures depicting old literature and events can be found in palaces built in 17th-century India, according to these references.

Interior decorating was consigned to the homemaker or a professional upholsterer or artisan who could safely advise based on their aesthetic sense for a home's interior design throughout the 17th and 18th centuries and into the first half of the 19th century. Architects would, incidentally, enlist the help of artisans and craftsmen to design the interiors of their structures.

Interior Decoration - The Past to The Contemporary

1. Around the Stone age period 2000 BC

Prehistoric homes with plants and fauna showed the first signs of an approach to interior design. Mud, animal skins, and sticks were used to construct the homes.

2. The Greek Period

For the first time in history, citizens were able to decorate their homes in their own unique style, with wealthier Greeks possessing furnishings inlaid with exquisite ivory and silver embellishments. During this time, iconic and statement-making pillars and columns were popular, and the Greeks also established regular building norms and methods.

3. The Renaissance Period 1600 BC

Grand furnishings and paintings were created in vivid hues and sumptuous textiles like silk and velvet, coupled with marble surfaces, making interior design a key aspect during the Renaissance period. Because carpets were too valuable and expensive for even the most affluent consumers, they were often employed as wall art.

4. The Traditional Period 1700

Traditional interior design, embodied by a formal style, is still a mainstay to this day. Traditional interior design is a broad phrase that encompasses a wide range of design styles and movements that aren't tied to a single spirit or direction.

Traditional design honours the past's famous, rich history by balancing it with distinctively modern aspects, resulting in an elegant take on beautiful design that highlights 18th and 19th-century European decor. It's a classic design style that conveys easy splendour and comfort, and it's a great approach for those who value antiques, classic art, symmetry, and historically significant design.

5. Industrial Period

Interior design was more readily available to the general people than it had ever been before throughout the Industrial Revolution. This is mostly due to advancements in printing technology, which have resulted in a greater distribution of lifestyle and fashion magazines, and the fact that luxury goods have become more inexpensive.

6. Art Deco 1920's to 1960

Constructivism, Modernism, Art Nouveau, Cubism, Bauhaus, and Futurism are just a handful of the early twentieth-century design ideas that were represented in this movement. Art Deco was a prominent interior design style in the 1920s and 1930s that emphasised modernity, everyday splendour, aesthetic elegance. The era was dominated by clean lines, fuss-free angular forms, brilliant colour, and stylized motifs like zig-zags and optic figures. For added glamour, the era was marked by ornate decoration and gleaming surfaces.

Art deco interior design elements are shiny and reflective for everyday opulence in the home. Gold, silver, stainless steel, and chrome are among the metallics used in this look. They give every area a gorgeous and sumptuous feel, and they may be used anywhere.

RESEARCH METHODOLOGY

This study is based on the Qualitative method. The research is based on both the primary and secondary sources. For primary source the observation has played the major role. Secondary resource is based on journals ,edited books, Magazines etc.

Only observation method is used for sampling and Multivariate Analysis has been conducted. Chi square test performed Sample size - 30.

ANALYSIS

To Attain Sustainability Goals! An Eco-Friendly Makeover is the Need of the Hour!

Sustainability has long been a primary priority for every organisations across the nation. The hospitality industry is no different, and it was one of the first to adopt sustainability.

Everyone is exceedingly cautious and attentive to environmental protection, whether industrials or consumers. Hence the industry has already been putting in a lot of efforts to protect Mother Nature, and one such realistic answer has been the adoption of sustainable methods in the interior decorations .

While sustainability was once considered an option, it has become a pressing necessity. The key motivation for this shift is to safeguard the environment while also gaining a competitive advantage in the market and attracting tourists. As a result, players in the hotel industry are devising measures to lower the industry's carbon footprint.

They plan to redesign its interiors to safeguard the environment by making sustainability a central part of its operations. Following this strategy will indeed help you save money on operations, but it will also improve your brand's image and increase foot traffic! As a result, hotels are experimenting with numerous solutions to make their interiors more environmentally friendly.

Sustainable Interior Green Features being practices In Hotels

Oversized windows providing natural daylight, natural building supplies, green walls and green roofs, guest recycling bins, digital water faucets, locally grown food for cooking, and gray water recycling are just a few of the green hotel trends.

“More colour and texture, less pattern!” is the New Mantra followed now

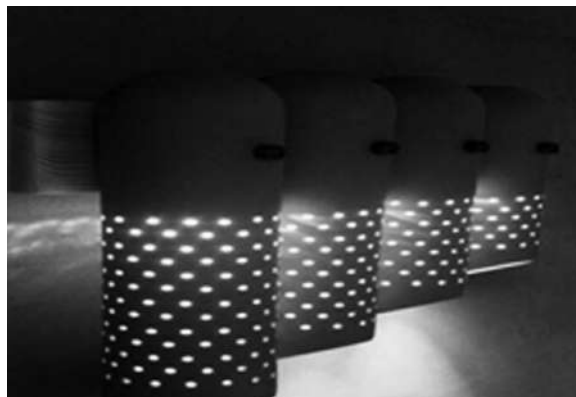
Generally there is more time to experiment with senses,when staying in guest rooms,this is likely why hotels are quickly moving away from visually startling patterns and toward texture.. Giving guests something to feel and perhaps lose themselves in can to create a memorable experience that the hotel want to repeat. Adding a few vibrant colors to busy rooms creates a peaceful, happy atmosphere.

1. HAND CARVED WOODEN TABLE LAMP



This wooden hand-carved table lamp is a work of art, perfect for bedside reading or simply to add to the warm, cosy ambiance of the living area. It will appeal to individuals who value a sustainable approach, and it is also manufactured by local artisans in Uttar Pradesh, who earn a living from the sale of their wares.

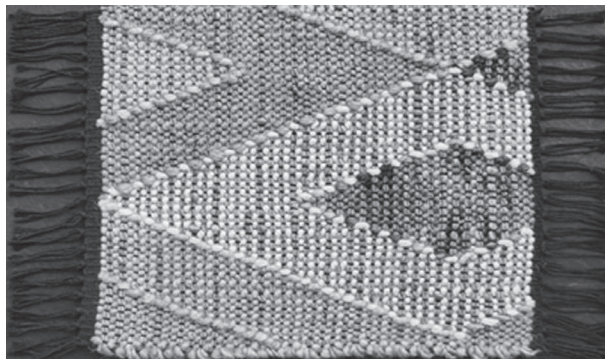
2. FLUTE WALL LIGHT



Jayitri & Soumyak Bhattacharjee

Completely plastic-free and made of natural materials such as pinewood and terracotta, the wall light is just right to add a touch of retro look to the guest area. It is handmade by trained artisans, comes with 3W LED light fittings and is easy to mount. These cylindrical lights can be installed in guest living area, dining area and even bedrooms.

3. INSIGNE CARPETS



Insigne Carpets is producing a selection of organic rugs indigenous to the Indian subcontinent as a result of continued development for manufacturing and encouraging "sustainable living". The authenticity of the company's decades-old method has been preserved. The sole aim to "create a constructional beauty by utilising the natural colour of the fibre in its raw form braided meticulously, since most of the carpets are largely design and colour driven. Before the advent of plastic, India had a long history using jute. It took years to recognise the harm caused by plastic and other artificial fibres that are not changed through a thorough manufacturing process to ensure long-term sustainability. The concept behind this carpet is to bring beauty into the area of sustainability and eco-friendly practices. Taj Group, Hyatt, Marriott, Hilton and other industry giants collaborate with the brand. Furthermore, the company has provided carpets to projects such as the MGM Grand Casino, Salalah International Airport, and a number of landmark palaces around the world.

4. TERRACOTTA TILES



Terracotta flooring tiles, which are made from clay and other natural elements, are an environmentally responsible and long-lasting flooring alternative. These offer a rich colour pallet and a warm, earthy tone. Terracotta flooring is not only warm and inviting, but it also embodies our rich history and culture. It is also efficient and long-lasting. Despite the fact that this is a

softer material, it can sustain heavy traffic. It helps to keep your home , guest rooms cool and is more comfortable to walk on than other types of tiles. It's suitable for usage in the kitchen, living room, and bedroom. Because they are permeable, they should not be used in the bathroom or on the balcony of the rooms.

5 SOLAR REFLECTANCE INDEX ROOF

Most of the Hotels and especially The Leela Palace, New Delhi is known for its sustainable design and world class green practices. The hotel's roof uses vegetation and high solar reflective index paint material that allows it to reject sunlight and greatly reduces its surface from heating up. This maximises energy savings and keeps the heat island effect that heats up the building in check. The hotel has also ensured the reduction of indoor air contaminants that are harmful and irritating by making use of low-emitting adhesives, sealants, paints and composite wood.

FINDINGS

1. Hotels are now focussing on Interior Design Ideas that are both Minimalistic and Eco-Friendly.
2. Making Distressed Industrial Bedroom Design that can be also eco-friendly
3. Using Bamboos to decorate guest room interiors.
4. Utilising one of the most eco-friendly flooring options that is “concrete flooring”.
5. Wooden false ceiling is being used which is excellent heat insulator, eco-friendly and can keep room cooler for a long time

CONCLUSION

The need of environmentally friendly building and interior design is being increasingly recognised in society. As a result, an increasing number of hotels are looking for ways to incorporate sustainability ideas into their interior design. Interior designers have a significant impact on environmental sustainability since they are the ones who decide which materials. In the year we are in i.e 2022, sustainable experiences is being observed as a significant trend in the hospitality industry. Consumers are being very well aware about the sustainability as a result of global protests and debates on the subject. And hence every guests are welcoming more of eco-friendly practices and decors and the Hotels are also witnessing good profits by using plastic free and nature products to construct. So hence forth lets hope the industry continues to use more innovative ,eco-friendly ideas as discussed in this research to lead the way towards A SUSTAINABLE NATION.

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TO STUDY SINGLE WOMAN TRAVELLER COULD BE POTENTIAL REVENUE PRODUCER FOR LODGING INDUSTRY IN CHENNAI

Sonal Shrivastava

*First Year M.Sc. in Hospitality Administration,
IHMCT & AN, CIT Campus, Taramani, Chennai-600113.*

Parveen kumar sharma

*Lecturer,
IHMCT & AN, CIT Campus, Taramani, Chennai-600113.*

ABSTRACT

The hotel & lodging industry has a wide range of accommodation type which include hotels, resorts, motels, hostel, Sarai, circuit house, time share, capsule hotels & B&B. It is place which provide overnight stay along with shelter & most of the time food & beverage service to general traveller. As we all know lodging now days operates 24*7*365 days depends on establishment. Through this we can easily determine the demand for better quality product & services mainly regarding accommodation & simultaneously we can easily project how it consistently produce its revenue.

For improving its consistency hotel & hospitality industry constantly intend to approach & strategies' new marketing ideas, invention, innovation & trends so, that maximum customer they can achieve.

People travel for different purpose, it can be for business, educational, medical, recreational, cultural exchange, and they have refine taste, disposable income & oriented motives. As we are developing with upcoming technology & lifestyle, we can easily find out female tourist or traveller everywhere. Before decade & half single women use to travel with stereotype mind-set which involves either one male person of her family or community should be present at the time of their travelling, but now days the scenario is completely change, single Woman travels along with her preference, needs & motives. An increase awareness by hospitality and lodging industry toward single Woman traveller as they could be potential target market to boost their revenue generation

Key words:

Sarai: it is a place in a rural area for traveler for rest and overnight stay.

Motels: a hotel located on highway, providing moderate lodging to highway traveller.

Resort: a hotel located at destination of tourist attractions such as hill station, sea beaches.

Recreational: it is donating activity done for enjoyment when one is not working.

Stereotype: it is a type of person or a thing which has been orthodox vibes

INTRODUCTION

Historically women are considered only to be perform household work & that's how they grow, nurture and adapt themselves in order to fulfill their destiny to become wife & mother. These are two major roles in which they explore themselves. Later in early 19th century when first feminist wave movement began & lasted until mid 19th century which gave women right to vote. This brings the drastic change in women's perspective, they get the knowledge of their rights, they became more educated ;they learn how to read and write & allow themselves to involve various activities in different fields like medical, political, educational, sports, law & social welfare.

In order to develop themselves as expertise in their interested field, they face many challenges & downfalls which not only came from society but came from their own families. After the long struggle and commitment toward their passion now-days women not only equally participating but are more progressive than men. Women contributing everywhere. Whether home or any professional space they maintain astonishing balance and become successful.

As modernization came into existence women are also in demand of representative in various places & fields. People are more convinced and motivated through women ideologies & participation not only this they also considered them in tertiary sector like entertainment, vehicle driving, hospitality and business start-ups. This also gave the opportunity where we can understand women in a better way rather than consider them as only sister, mother and wife.

“solo travel not only pushes out of your comfort zone, it also pushes you out of the zone of others expectation”.

- Suzy Strutner

With constant competition & development women travelling also come into fast forward manner. There are different policies and reservation for women travelling so, that any female woman can travel conveniently anywhere & everywhere. In year 2020-21 female travel statistics tell us 230% increased customer by travel companies. In every three there is one woman who went on travelling for various purposes once in a year. In recent research by Condo Ferries UK found that women are taking 80% decision of travelling. & alone female travel increased by 59%. 86 percent of women are not afraid to travel, 65% of women are travel without their partner, 75% of women travel for adventure, cultural & nature trips, 46% of the women are aged between 25-39.

The above data shows how women travelling is increasing day by day for different purposes. With this hospitality, travel & lodging industry finds that women could contribute on their revenue generation & through this they can expand their business.

A hotel & lodges survive on room sale & the other half of their revenue comes either from food & beverage service or other point of sale like gym, spa, banquet, exhibition. They also know how to retain their customer. They produce certain packages and provide different types of tariff plans. Along with this to increase its occupancy they target MICE (Meeting, incentives, conference & exhibition) especially this segment covers most of the revenue in Indian tourism industry & it contributes large extend toward lodging & hotel business. With proper observation and efficient management one organization can have good record for maintaining, retaining &

targeting its customer. To ensure its customer & revenue generation frequency hotels & lodges have different tools which they apply on their customer like providing transportation service, business amenities, trained service team & conferencing venue, cuisines & technology. Due to past trends & change in travel preference lodging industry equally focuses on female traveler their needs, demand, preferences & motive for travelling, whether its luxury brand hotel, boutique hotel or any simple lodge or guest house owner provide special attention when its comes to Woman guest, especially single Woman guest who is travelling alone.

In Chennai city most of the lodges & other hotel chain has been tremendously modify them selves in-order to welcome single Woman guest, they have separate guideline & polices for female guest. Chennai is known as the hub of education, technology, automobile, medical, tourism & include other sector as well. With this growth in infrastructure & development their is huge rise in female travelling for different reason, based on this hotel & lodging industry consider single Woman guest or traveller could be potential revenue producer in Chennai.

OBJECTIVES:

- To study that single Woman traveller could be potential revenue producer of hotel & lodging industry in Chennai.
- To study the various facilities offered by hotels & lodging industry in Chennai.

PURPOSE

1. There are different type of single Woman traveller with different age group & purpose. Understanding the increase number of single Woman traveller that could lead as optimum revenue producer for lodging industry like hotels, motels, resort, etc.
2. Other facilities & service provide by hotels & lodges in order to retain its single Woman guest so that they can come their property on repeat basis & attract more females towards their business.
3. Hotels and lodges modify themselves in the competitive business. It can be differentiator to improve its brand value with other competitors.

METHODOLOGY

- In this research , the primary data is gathered by questionnaire which are given to different revenue managers of hotel & lodges in Chennai & the secondary data is collected from various journal, book & other sources like internet.

LITERATURE REVIEW

1. As mentioned by Dr. Rasika R. Gumaste february 2019 (ISSN 2349-5138) that hoteliers should formulate appropriate business strategies to attract female clientele. Single Woman traveller is important segment for the hoteliers & hence special attention needs to be given towards their needs & preference.

2. As it mentioned by ASEAN JOURNAL & HOSPITALITY & TOURISM vol 18, no.02 December 2022, pp58-73 that solo travelling female have unique selection consideration which includes hotel amenities like cell phone programmed in such way which have all emergency contacts, information of near by or on premises automated machine. Study also tells about personalized service who go extra mile for the sake of their guest convenient.
3. A 2016 maiden voyage report of women in business travel have given wonderful aspects in relation to single Woman traveler, female preferences in travelling, the actual glance about meeting their needs by hospitality & tourism industry, their perception, their orientation and motives towards right directions, what type of mind set with the accommodation facilities they have & their treatment in comparison to male traveller guest.

The idea behind to conduct this research came through the above author's published journal & report which encourages to study more about single Woman traveller & especially from hospitality & lodging industry perspectives. As we all know hotel always try to make its efficient & effective profits for their business, they constantly approach towards new idea trends in order to maintain its consistent income. They always target maximum all type of consumer for the product they have in order to fulfill this, they use its all different type of POS (Point of Sale) like restaurant, banquet, gym, summing pool, spa, etc. They have the keen observation on their customer preference, needs & greed's. Now-days each every type of lodging & hospitality industry ask for feedback through telecalling or through some online website like trip advisor , make my trip or some reputed hotel have their online survey which they send to client through email or cell phone to get feedback. Based on their survey they rectify or modify themselves to provide efficient & smooth service simultaneously they compete with their competitors .

If we look into previous market studies & research over 5 to 7 years we found that their is increase number of female traveller every year they are consider to be potential consumer for their product & consider to be major market segment for lodges owner & hoteliers hence it is important to consider their demands in order make them permanent client of their individual business. City like Chennai which is consider as the hub of education, technology, & other private business, with respect to this , they fairly contribute to our country's economy. According to Tamil Nadu policies which aims to bring women into work force says urban & rural female professional is 35.1% & 23.6% respectively which is higher than the national average . based on this survey we can easily said that their is increase number of female demand for different occupation which has give the glance of increase female travelling for domestic & international purpose. Another example with this regard is Indian tobacco company (ITC Hotels) has 10 percent of their clients are domestic & foreigner women travelers. This rising number of female traveller made lodging industry to put more focus on their female guest, especially those who travel solo for various purpose.

When it comes to maintains its reputation & intend to earn more profit hotels & lodges equally welcome more female guest & especially, single Woman guest with certain policies & norms like upon check in the information of Woman guest is kept discreet, their rooms should be located near elevators, there should be personalized Woman like GRA (guest service associate)

service for escorting & other service. They have special eyes or provisions for their safety & security, they understand the criticality when it comes to health so they have provision of Woman doctor, they engineered. There menu in such a way that cover the health & taste aspects because major amount of women are health conscious. They trained the staff in such way that they aware of the body language, eye contact, posture & gesture toward female guest so, that they feel comfortable. There is mix staff working in different departments for efficient functioning. They have taken single Woman concept as serious have consider them as one of the major revenue producer that's why progressed in proving better safety measure and now they are competing with abroad. Not only this they are more upgraded in terms of automation & technology like they have express check-in machines, vending machines sensor doors & window, booking apps, etc. For commercial activity like marketing they constantly strategies with new trends, packages & eye catching offers in all point of sale. When it comes to women preference they have certain marketing activity in spa, gym, banquets & food & beverage outlets. For example park Hyatt Chennai offers complimentary shorts for women on Wednesday and also they drink more pay less concepts on weekends. ITC Grand Chola organize pool party for all female guest for indulging them into their preferring leisure activities. They provide internet & WiFi facilities in their property to understand need for information axis. The study of Sourav sarkar in 2007 shown us the comparison of hotel in attributes preferred by male & female customers. They find out women traveller value security more than luxury while choosing hotel. The hotels & lodges modifies themselves based on their **valued female client by creating exceptional loyalty, brand value & environment**. These study have shown that logging industry is considering single Woman guest as one of the consider that leads to certain scope.

SCOPE

1. Hotels and other lodging organization targeting single Woman guest or women as their one of the distinguished clients who can contribute in their profit earnings for their business.
2. They give utmost importance towards female needs & preference while planning their facilities & service.

LIMITATIONS

- Due to present scenario one on one interaction is not possible so, the data collection is done by questionnaire by phone calling & emails.
- Due to lack of time & current condition of the area this study is conducted in Chennai thus, the wider spread of sample is not taken.
- Questionnaire is designed formal structure manner so could get response on descriptive manner.
- Secondary data is limited for the subject, the secondary data is taken from journals & news articles & magazine reports.

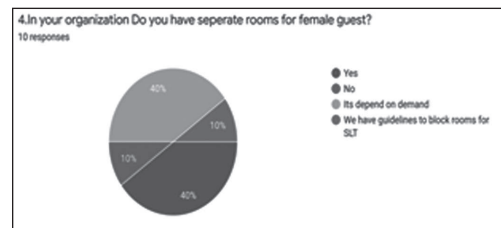
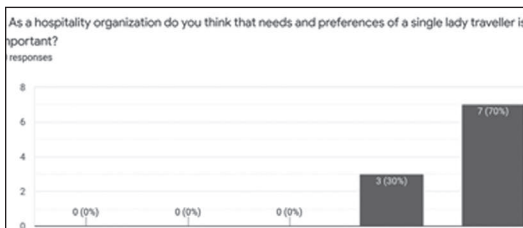
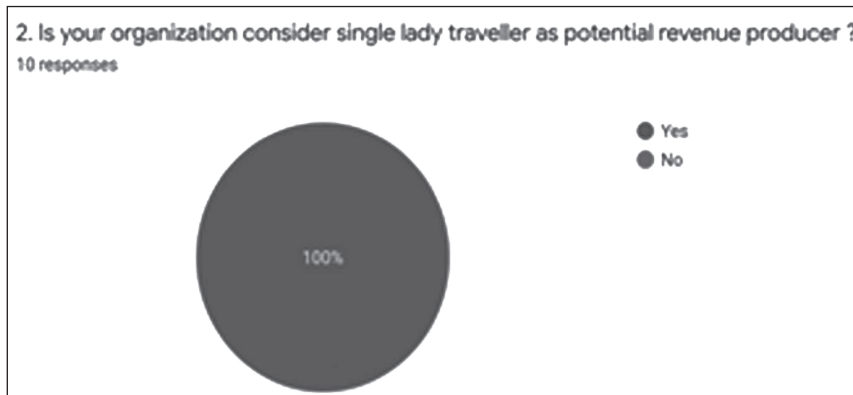
To overcome this challenge to finish this study genuine efforts & timely follow-ups have been taken.

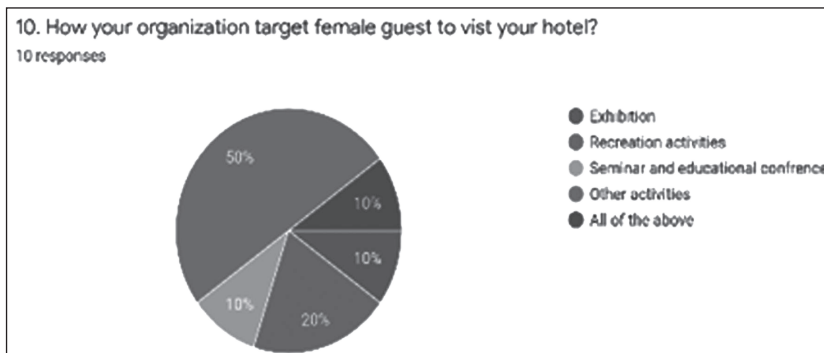
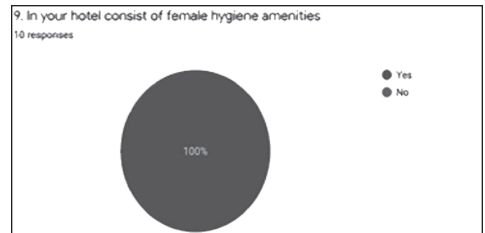
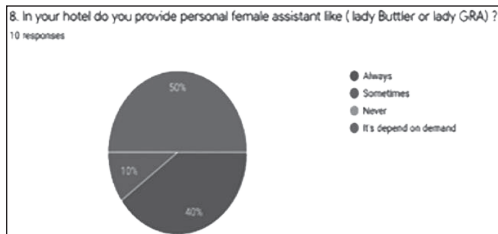
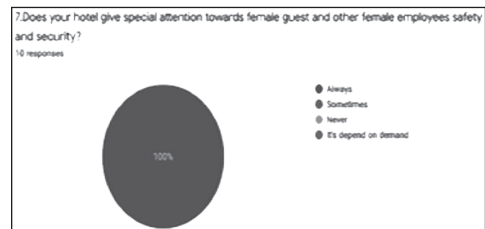
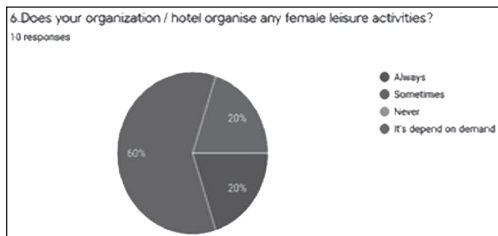
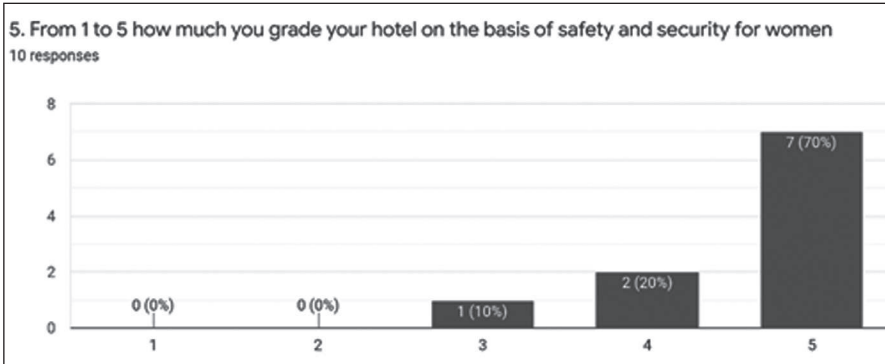
RESEARCH DESIGN

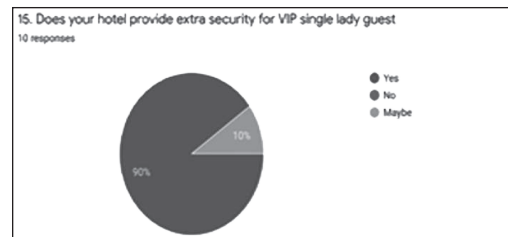
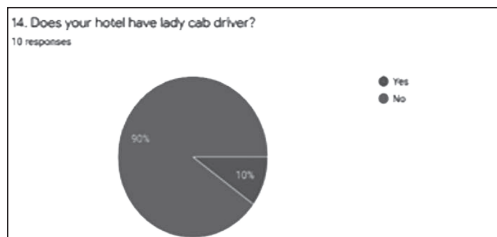
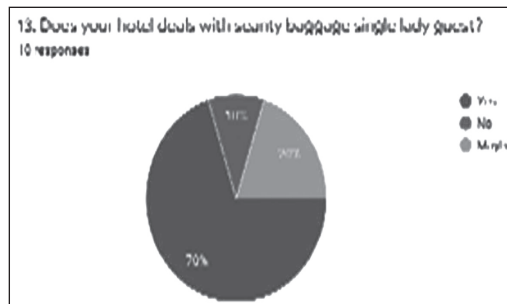
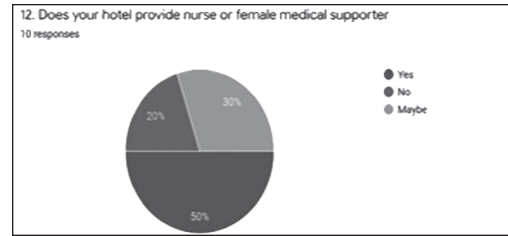
Type of Research: This is type of descriptive research in which researcher is interested in finding out that the hotel & lodging industry in Chennai consider single female Woman guest as potential revenue producer. In this study hotels point of view is important for getting good revenue generation from female guest or single Woman guest, questionnaire are formed in structure manner on the basis of facilities offered by hotel to its female clients.

Research Methodology: In this research the primary data is collected through questionnaire in the form of likert's scale rating 5 numeric scale was used for this research. Where 1 is least & 5 is more important & some question are formed in structured close-ended to know the answers from revenue manager of the hotel. Samples are collected from ten different hotels in Chennai which includes ITC Grand chola, Park hyatt Chennai (PKC), Leela place Chennai(LPC), Turyaa chennai (TC), Taj wellington (TW), Novotel (NC), Sheraton grand Chennai (SGC), Lemon tree(LT), Rain tree (RT), Ramada Chennai (RC). The sample is sended to 16 hotels in chennai the response we got from 10 hotels.

Secondary data was collected by various magazine, books ,internet, some published journal. Other activities like exhibition & other recreational provided by hotel to female guest are also consider as revenue generation technique for the study. **Below data is gives the data analysis which we got through our sample.**







FINDINGS

- Single Woman traveller as potential revenue producer is considered by hotels & lodges in Chennai followed by its importance, with the increase demand of SLT (Single Woman traveller) every year.
- The factor like safety & security is considered to be most important factor in today scenario for female employees & female guest of the hotel. 70% of the sample are constantly upgrading or modify themselves for better safety security.
- The separate room facilities are only provide by 40% of the response, another 40% is have this facilities on the basis of demand, 10% response says they have separate guide lines for single Woman traveler & remaining 10% says they don't have such facilities.
- Female preference & needs are consider to be vital role in order to attract more female traveler & most of hotels have female hygiene amenities as one the tool for personalized service which can leads to a comfortable experience during their stay in their property. Also some of the hotels also have Woman cab driver, Woman GRA (Guest service associate) & Woman butler for female guest convenience.

- 70% of the respondent says they welcome scanty baggage single female traveler with proper guide line. They provide certain packages or discount for women in order to earn profit for their business & sometimes they organize events like exhibition , seminars, recreational activities, etc. Sometimes or may be upon demand they organize leisure activities so they can provide them pleasurable experience.

Safety and security measures taken by hotels and tourism board for women.

Hotel introduces certain packages in policy is for women travelers through this they stress more on safety security measures for women travelers.

For instance lets just take example of The Leela palace Delhi they have a certain package call KAMAL. They involved dedicated oriented females service staff or lady GRA and butler to provide special room service it elevates the new level of hospitality experience. And another good example is provided by ITC hotels where ITC Maurya they give the entire floor to women known as Eva rooms or Eva floors. If we check beyond the area there are many more examples through which we can identify that hotels take appropriate measures in order to make proper safety and security measures for women.

The following safety security measured followed by hotel are as follows:

- They provide separate security check in for women along with female security guard.
- They have specific area for women in lobby, restaurant and all other public areas.
- Hotels like Leela and ITC they have separate valet service for women for parking their vehicles.
- They have separate floors for women with proper CCTV surveillance and other security devices installed.
- They have face scanner keys control system in there guest rooms door so that it can identify that particular lady guest to open their guest room.
- They have enormous amount of women staff in order to provide best service and increase the best experience . Also works for round the clock service to provide the maximum security.
- They have made women's belong floor area near to lobby swimming pool and elevator.
- They providing lady valet for dressing, shopping and baggage handling assistance.
- They have different sets of conscious and butlers for their convenience.
- They also provide electric pagers to all the women guest in the hotel in order to track them all to get message from them.
- They also provide female security kit which includes sanitary napkin, some first aid, Swiss knife and black pepper spray.
- They give certain travel allowances like pick and drop service and other travel package to their lady guest they also provide lady cab driver.

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- They provide female doctor and female medical amenities in the guest room along with emergency call list.
- For certain VIP lady guest they take extra precaution by providing bouncers, bodyguards and on duty lady supervisor to the female guest.

CONCLUSION

1. The result which is presented by this study is that hotel consider single Woman guest as potential revenue producer as they are fairly spread in growing market & hotelier & lodges owners in Chennai are using effective tool for considerable revenue generation.
2. The study also shown various events, service & facilities are provided by lodging industry in Chennai in order to achieve ladies preference while travelling and making them as their permanent or repetitive client.

SUGGESTION & RECOMMENDATION

- There are different type of female traveler that could be single or in a group, some travels for educational purpose, some are for solo trips, some are travel for their own personal reason. Some are consider as normal background females and some belongs to high standard background. Every female has different needs and choices in order to retain them in their business hotels & lodges can bring option for customized service as key strategies
- This study could be broad on the basis of area and study could be conducted not only in lodging industry but covers the entire hospitality industry like railways, airlines and cruises, etc.

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DIGITALIZATION OF ROOM SERVICE AND AMENITIES AND THEIR IMPACT ON CONSUMER BEHAVIOR

Vivekanand Rajgopal

*Founder and Program Lead,
One Step Closer League.*

ABSTRACT

We live in a technology aided environment. In the recent years, the field of hospitality use modern concepts to ease the process for their guest and employees. One such technical advancement is the Digitalization of Room service and in room amenities. This particular concept has gained attention for the remarkable use of artificial intelligence and the unique experience guests had witnessed. The Digitalization makes the process of room service a smooth transaction, a hassle free communication and to serve the guest needs on time. In the post-pandemic era, this use of technology has enabled safe stay and safe working environment. This article explains the advantages of using Digitalization and the impact on behaviour of consumers towards use of said concept. The survey was conducted to understand the behaviour of the consumers towards digitalization and Artificial intelligence equipped rooms during their stay.

INTRODUCTION

The world is progressing in a fast pace with the aid of technology. Every industry we know, have started using digital and virtual medium over the last ten years. This way led people to conserve energy, time and connect on a better scale. The field of hospitality used the digitalization in the earlier days for reservations. Later on, the idea was implemented in accounting and billing, recording of amenities and services ordered and to maintain purchase and storage. One of the latest use of the digitalization is to incorporate artificial intelligence in room service and creation of Smart room. This has enabled guest to have a relaxing and uplifting experience over the course of their stay. Consequently, this technology has created an impact on the guest to share the experience and wanting to retry for themselves.

OBJECTIVES

- Assimilating and explaining the use of digitalization in room division
- Identification of consumer behaviour with and without the aid of digitalization
- Creating awareness of the upcoming technology

METHODOLOGY

Primary Research - Exploratory data collection through survey. The participants are of probability sampling. The survey took the responses from 103 respondents.

Secondary Research - To support and enable the article, various quotes has been absorbed.

REVIEW OF LITERATURE

Digitalization In 21st Century

One of the articles published by Ruth Harrison, clearly explains the digital transformation in the 21st century being accelerated in the post pandemic era. She explains that the change is inevitable and that all citizens of the world has been affected in various way by the modern technology. “There has been more innovation in the last few months than over the last several years. Recent global events have made every business reassess their strategic approach to digital transformation. The application of digital technologies to create new or enhance existing customer experiences, as well as business processes and models, had already separated last century’s winners from the losers. The winners were ahead of the game in using digital systems and tools to meet rapidly evolving, technology-enabled demand and fuelling market disruption by harnessing innovation.” (Ruth Harrison, 2020) The reducing of human contact should not be a compromise in the quality of service provided. The digital aid also ensured a human-like experience with the use of artificial intelligence. It is evident that more advancements can be expected to create an effective business model and enriched guest satisfaction.

Use of Digital Aids in the Hospitality Industry

The use of digital aids started since early 2000’s. Initially it was used in the process of reservation and later in the accounting and book keeping process. As years passed by, there was a gradual increase in all the departments for various purpose. At a point, a new IT (Information technology) department was created to maintain and advance the digital process. One of the key development is the implementation of Artificial Intelligence to extend the gesture of hospitality and warmth. The Boston hospitality review has mentioned in one of their articles that “In the service delivery process, service robots assist frontline staff in a sequence of service encounters. For instance, the robot concierges assist employees with guest greetings upon arrival, transporting luggage, guiding guests, and delivering room service. Empowered by the pre-programmed AI and machine learning systems, service robots can effectively respond and interact with guests, even in multiple languages.”(Boston Review-2021) The review also quoted a notable work of Jorchen Wirtz, Professor of marketing at National University of Singapore which said Service robots are “system-based autonomous and adaptable interfaces that interact, communicate, and deliver service to an organization’s customer” (Wirtz et al., 2018, p. 109).

One of the key highlights of the review is the usage of Augmented Reality (AR) and Virtual Reality (VR) which are the hot-shot topics of all the tech enthusiasts. “Through the digitally accommodated environment, customers can have a much clearer sense of what they are expecting, thus attracting more prospective customers. One example of VR application is the virtual tour

video, which offers guests a first-person point of view of the property. By simply clicking the mouse or wearing a headset, guests can experience a digital walkthrough with a 360-degree view and even see the layout of the rooms in a hotel. The current applications of AR in hospitality are largely for entertainment and practical purposes. The first is about creating enjoyable guest experiences in an interactive environment on-site.” (Boston review-2021)

ASPECT OF ARTIFICIAL INTELLIGENCE

Artificial intelligence (AI) is upending many industries and transforming everything around us. Self-driving cars, drones that deliver packages and AI assistants that provide instant and accurate responses to your questions would have been considered science fiction just a few years ago. Now, they are a reality, thanks to advances in AI and machine learning. (Mitul Tiwari, 2019, Forbes Tech council)

1.	Staying connected from start to finish
2.	Breaking down Language barriers
3.	Personalising stays for every guest
4.	Upgrading room services
5.	Ensuring Return visits

Table 1: Implementation of AI in Guest rooms (Forbes Tech Council,2019)

RESEARCH FINDINGS

Digital Services Offered in Hotel Rooms

Over the years of technical advancement, the hospitality sector has gradually increased the usage of digital services and amenities. One of the first few initiatives was the magnetic strip cards which enabled the guests to have ease in carrying the room keys. This particular feature also provides safe stay to guests and prevention of mishaps to the hotel’s property. Later the introduction of online ordering of services before and after the arrival of the guests. This was enabled through the availability of free and centralized WIFI connection. Towards the end of the past decade, the concept of installing Smart Television took place. This feature gave a personalized touch to guest by picking their favourites and preferences. An addition to this was the beginning of Digital AI Assistants of various software. They made life easier and relaxing which achieved the purpose of a holiday stay. One of the most commendable features being launched in the guest rooms are the AI enabled tablets that are helpful in controlling almost all activities in a room. These rooms are now colloquially termed as “Smart rooms” owing to the exemplary work it gets done. In our survey for the primary research, we found out that the Smart Televisions and magnetic strip cards are found commonly in the guest room. **(Survey Report)** The AI enabled tablets and Digital assistants are seldom found due to its availability in luxury rooms of premium properties only. Though available less in numbers, they are significantly improving because of their attractive features and the “No touch required” safety norms it provides. Post pandemic, the number of rooms having these features has significantly risen. This particular advancement in use of Digital technology is used as both a safety measure and also a marketing tool to attract the Tech savvy and the Generation Z category guests.

Features of Smart Room

One of the biggest achievements of the digital advancement in guest rooms is the introduction of “Smart rooms”. Though the application of this feature is limited and mostly seen in the luxury rooms of the premium properties, the work done by this room is very much appreciable and liked by the guests. In addition to being a commendable feature in a guest’s stay, it has made the work of the hotel staff far more easily, organised and avoid miscommunications. This room has several features which is not only astonishing to watch, but also reduces the energy spent by the guest. Every guest during their work / vacation stay either gets tired or wants to relax. Both equating themselves to spend less energy. This AI enabled smart room, allows them to control the room’s operations limited to electronic and electrical gadgets, ordering for services and asking for help from a single location. The table below is to showcase the time taken for a particular activity in a smart room versus a room without the feature.

S. No.	Activity	Time Taken in Non-Smart Room (In Seconds)	Time Taken in Smart Room (In Seconds)
1	Adjusting Thermostat’s temperature	>30	<10
2	Switching off bathroom light from bed	>30	<10
3	Opening door for a staff/visitor	60	<15
4	Ordering food and services with special instructions	~180	60
5	Reaching for a TV Remote	>20	<10
6	Adjusting the room lighting	>30	<10

Table 2: Time taken for an activity in a non-smart and smart room

Uses Achieved Through Digitalization

The digitalization has made several uses for both the staff and the guests who are using the features. The idea of the digitalization and technical advancements is to reduce human effort. This is the motto for all the creative minds who find us apt solutions.

In hotel’s perspective, the first and foremost use of the digitalization is to reduce the number of mishaps happening through miscommunication. Often, the orders and services rendered by the guest are miscommunicated through a phone call or even in person. The digitalization allows for hassle free and clear communication. One of the other uses is the up-keeping of digital records which can be used for review and maintaining guest preferences. Post-pandemic, the number of guests staying in the hotel has become fickle. The main reason is the spread of the disease through touch. The digitalization along with proper safety norms makes a pleasant stay for the guests and also ensures the wellbeing of the employees.

In the view of a guest, the digitalization makes their stay more welcoming, living in the future and most importantly a relaxing one. The guest can get their preferred services and amenities scheduled ahead of time with special instructions delivered promptly. The concept of AI and smart rooms becomes a haven for those guests who are unable to leave the premises and yet can enjoy their time by exploring all the avenues provided to them. Having mentioned all the advantages, it is also to be noted that this features will take enough time for a guest who is less tech oriented and new to technology to enjoy the experience.

Impact on Consumer Behavior

All these technical advancements are made, keeping their guest's reaction and experience in mind. Hence it is very vital to observe and analyse the behaviour of consumers for making amends necessary. In the survey conducted, the respondents were asked their approach in experiencing Artificial intelligence in their rooms during their stay. Almost 70% of the respondents, are welcoming the approach with much higher remarks. **(Survey Report)** The idea of a tech based reality, makes a guest experience "Living in the future". This is mostly because, most of the guests do not experience the same on a day to day basis.

Almost every hotels in the country or in the world for that matter, are offering same services in different degrees of luxury. The guests, at a point are affected by this monotonous pattern and are wanting to try something new. The Idea of AI and smart rooms offer the same service with a different mode of operation. The hotel's reputation is grossly affected not only by the quality of service but also by the promptness which is provided. A guest becomes a happy one, if they don't have to wait long for a service. Since the digitalization advancements ensure speedy service, the guests are more probable to repeat their stay either in the same hotel or the same brand in a different location.

As mentioned earlier, these advanced features are available only in luxury rooms owing to its expensive nature. The respond were asked for their willingness to pay for such an experience. Almost 50% of the respondents were ready to pay the cost, whereas 30% answered maybe due to the lack of awareness and 20% were completely hesitant owing to many factors including less tech-oriented, financial dilemma or even bad experience. **(Survey Report)**. This puts the hotel in a position where they need to do their best in making sure the technical advancements are in the favour of guest satisfaction.

Limitations of Digital Advancement

The digital advancement though proving tremendously useful, also has its own limitations. One of the notable ones is the limited availability of the options which are being found in luxury rooms in premium properties that is not afforded by all. This would be mostly resolved in a span of 3 to 5 years given the growth rate and people's acceptance towards it. The major concern is the non-adaptability of the feature by several guests for various reasons such as hatred towards technology, less oriented to technology, wanting to use conventional means etc. Other key cause of guest's hesitation is the reduction of human touch. The guest in the hotel

rooms feel privileged when they are being taken care of. This brings a sense of self-honour. Because of the digital aids replacing the human touch, many tend to avert and not entertain the option of technical advancement and digitalization. In the survey, the respondents were asked their opinion if these advancements will reduce the human touch. Close to 55% percent agreed and 35% has voted for maybe expressing a minute concern. (Survey Report).

Though all the amenities and features provided by the digitalization and AI sounds reasonable, like any other commodity, it will be forced for wear and tear. Only through constant maintenance, the hotel can achieve zero error system.

SURVEY REPORT

The survey was conducted with a random sampling of 103 respondents from various age and demographic backgrounds. The respondents were also asked, if they had stayed in hotel rooms since COVID-19 pandemic in order to understand their involvement in latest digitalized room service features.

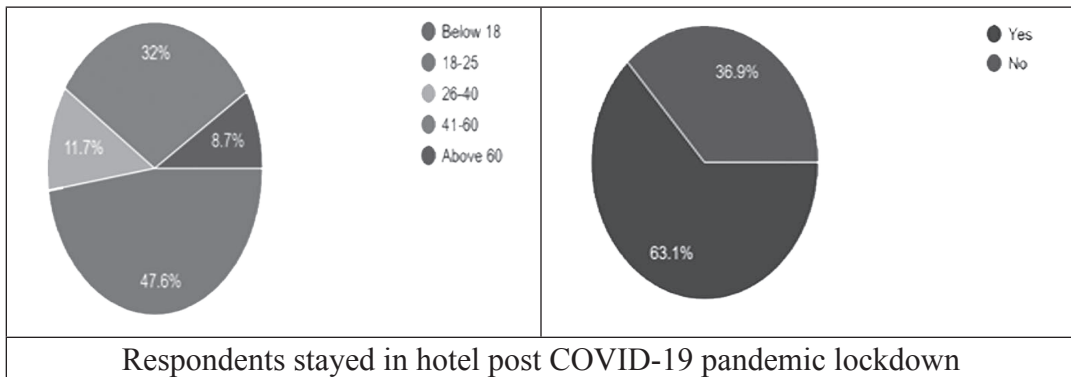
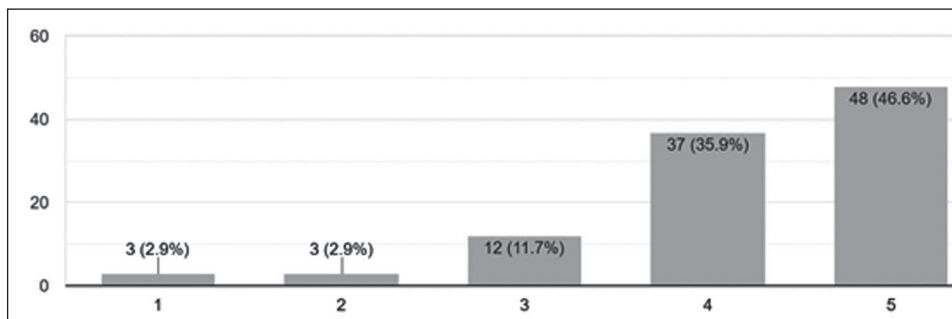


Table 3: Survey report age group of the survey respondents

In order to understand the consumer behaviour towards sharing their experience with AI and digitalization, the respondents were asked to rate their likeliness of sharing.



Scale 1- Will not share; 5- Will surely share

Table 4: Likelihood of sharing experience (Survey report)

CONCLUSION

The world as we see is inclining towards technical advancements for ease in work, entertainment and some cases, a way of life. The hospitality industry is stepping yet ahead in making the stay more amicable and pleasant for the guests. The guest can carry these memories for eternity. The hotel will have ease in operations and increased sales which makes an effective business model. The aim of this research is to create an awareness in order to move towards a unique and digital stay in hotels.

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BEST PEST CONTROL PRACTICES FOR EFFECTIVE KITCHEN MANAGEMENT

Akshay Sundar and M. Thennarasu

*Second Year M.Sc. in Hospitality Administration,
Teaching Associate, IHM, CTAN, CIT Campus, Taramani, Chennai-600113.*

ABSTRACT

Humans are at odds with pests since they are always regarded as unwelcome guests. Pests cause significant damage and economic loss to the hospitality industry, as well as serious health consequences by spreading disease-causing microorganisms. One can't keep these uninvited guests away, no matter how clean the place is. It will not only reflect poorly on the hotel but will also embarrass the guests who use the facility. As a result, pest control is a critical function of the housekeeping department. Using pesticides may provide a solution to the problem, but keep in mind that 'What is toxic to pests is also toxic to humans and other living and nonliving things.

Keywords: Pests, Food Industry, Manufacturing Practices, Food Processing, Hotels, Preventive Methods, Contamination, Infestation, Sporadic, Poisoning, Eradication, Suppression, Crevices, Sanitation, Resistant, Pesticide, Fumigation, Treatment, Kitchen Management.

OBJECTIVES FOR LEARNING

Pests typically enter buildings in search of food, shelter, and the ideal temperature and humidity. Good housekeeping personnel should be vigilant in detecting signs of infestation and immediately reporting them to the housekeeping manager so that appropriate action can be taken. You may encounter a variety of pests, but the majority of them will be drawn to the food premises. The following are the objectives of research

- To understand the pest in food production premises
- To understand the various methods used for pest eradication

METHODOLOGY

The process of gathering information and data for the goal of making business decisions is referred to as research methodology. The approach could involve published research, interviews, surveys, and so on, and it could contain both current and historical data.

The study presented here is primarily descriptive in nature. Descriptive research designs can help provide answers to the issues of who, when, and how they are related to a certain research topic; but, a descriptive study cannot provide conclusive answers to why. Descriptive research

is employed to get information concerning the present status of the phenomenon and to explain “what exists” with reference to variables or conditions during a situation.

The purpose of the investigation is to identify the pest control inside Kitchen and couple this with information concerning the available methods of pest control management to describe the preventive methods in appropriate detail. Many different sources of facts must be investigated to put together a coherent, logical and defensible scenario for the eradication.

The overall way to deal with examinations is to have a group of experienced Investigation individuals. The tasks of the specific investigation are logically divided into the areas such as butchery, storage area, food production area etc. Contingent upon the conditions and the accessibility of witnesses, it could be alluring to have a couple of colleagues do all the suitable interviewing.

INTRODUCTION

Pest management is the regulation or management of a tormentor species, a member of the kingdom that incorporates a negative impact on human activities. The human response can vary looking at the severity of the harm and can vary from tolerance to deterrence and management to try to utterly eradicate the pest. Pest management measures may be doled out as a part of an integrated tormentor management strategy. Pests in homes and concrete environments square measure rodents, birds, insects, and alternative organisms that share the surroundings with humans and take advantage of and destroy possessions. Management of those pests is tried through exclusion, repulsion, physical removal, or chemical suggestions or else, biological management strategies like sterilization programmes may be used.

PEST CONTROL AIMS

The three major goals of pest control are as follows:

A. Prevention: Prevention is the process of preventing a pest from becoming a problem.

When the existence or quantity of a pest is foreseen ahead of time, prevention should be the primary focus. Prevention may be accomplished by taking simple precautions such as

- a) Sealing any wall and floor gaps or fissures;
- b) Ensuring that all doors and windows are firmly fitted;
- c) Rodent proofing doors, windows, pipes, and ducts; and
- d) Fly screen doors and windows.
- e) Thoroughly clean the store, preparation, and service areas after each working day.

Constant pests may be easily predicted. Sporadic and prospective pests can be predicted if you understand the settings or factors that promote their growth and development. During the summer, for example, flies are common.

B. Suppression: Reducing the number of pests to a tolerable level.

The goal of suppression is to minimize the number of pests after they have been detected. The aims of prevention and repression are intertwined. This will assist to control the pests that are currently present and prevent them from resurfacing in the environment.

C. Eradication: Eradication entails eliminating the whole pest population from the premises.

Eradication is an uncommon occurrence since it is difficult to achieve. When a foreign pest enters the establishment, this procedure is typically utilized. These kinds of methods are frequently backed by the government.

As a result, because interior habitats are smaller, less complicated, and easier to regulate than outside ones, they may be better protected against pests. For example, schools, workplaces, kitchens, and so on.

COMMON PESTS AND WAYS TO CONTROL THEM

A. Ants: In general, these insects invade in large numbers in search of food, particularly sweets. They enter through crevices, following a predetermined path, and can be systematically trapped where they enter the establishment. Vulnerable areas must be emptied, thoroughly cleaned, and borax (which repels them) spread over the shelf until it stops coming. If a nest is discovered, it can be destroyed by placing 2 tbsp of carbon bi-sulphide at the entrance (the vapor kills ants), but it is highly flammable and should be used with extreme caution. Boiling water poured repeatedly over the nest kills ants as well.

B. Flies: Filthy insects contaminate food and are extremely dangerous to one's health. It causes diseases such as typhoid, cholera, and dysentery. It also carries disease germs on its legs and saliva, which it transfers to the food on which it sits. Attempt to eliminate all potential breeding grounds before egg-laying begins. All garbage should be burned. Cover the trash cans. Maintain a high level of cleanliness in your surroundings. Fly poison made from 3 teaspoons of formal in 1 pint of milk/water with sugar added in saucers should be kept in vulnerable areas to trap and kill flies. Fly killer aerosol sprays are also effective.

C. Cockroaches: An insect that is active at night. They can be found in drains and other dark, isolated areas.

- (a) **German cockroaches:** 10- 15mm long, lighter yellowish-brown, can climb smooth vertical surfaces, and prefers warm and humid conditions
- (b) **Oriental Cockroaches:** 20-22mm long, dark brown, found in cooler, less humid areas such as drains.

Dysentery and gastroenteritis are common diseases caused by them. Eats feces and food. The most difficult pest to eliminate. Infested areas can benefit from the use of proprietary cockroach killer preparations. If the problem persists, pest control professionals should be contacted.

D. Mosquitoes: Diseases such as malaria, filariasis, and yellow fever are transmitted. Water is the starting point for the life cycle. Allowing water to stagnate in and around the hotel is not a good idea. All holes and puddles should be repaired and filled. Cover drains with kerosene to

prevent larvae from surviving and developing into adult mosquitoes. Place water around the property in an environmentally responsible manner. Allow mosquitoes to deposit their eggs. Remove the water before the eggs hatch.

E. Rats and mice: They are possibly dangerous. Mice are tiny, slender, and have large ears in comparison to their bodies. They are brown with grey underbellies and have a thin tail that is the same length as their head and body. Food poisoning, illness, jaundice, and other factors are possible causes. Nibbles on and contaminates food, utensils, and work surfaces with urine, droppings, and fur, which transmits illness and some of which are lethal to people. Droppings are black and resemble apple pips but are smaller. They also like to bite on things like electrical equipment and flooring.

Common prevention methods are:

- a) Trapping
- b) Poisoning
- c) Fumigating
- d) Building rat-proofing
- e) An infestation that is proprietary

F. Silverfish: The silvery grey bug resembles a little fish without fins. Nocturnal, 1cm long, found in wet regions. Consumes cellulosic materials (paper and fabrics). It is necessary to keep damp regions clean. Insecticide application Pyrethrum and sodium fluoride crystals work well.

G. Termites: Insects that interact socially. White ants are another name for them. There are two kinds of termites: dry wood termites and ground termites. For sustenance, both rely on cellulose contained in wood and wood products. Ground termites do greater damage by developing mud tubes from the earth to the wooden section of the building. It might get in through construction joints, cracks, pipes, electrical joints, and so on. Build with treated timber. Insecticides should be applied to any untreated exposed wood. Fill in any gaps and fissures. In the event of an infestation, kick out the holes, inject with an insecticide (ortho dichlorobenzene), and lastly wax, varnish, and coat with linseed oil to conceal the pores.

SIGNS OF RODENTS IN HOTELS

For an effective pest management programme, accurate identification of pests is required. Never attempt a pest control programme unless you know what you're doing. If you understand the pest, its growth and development, and how it spreads, pest control will be easier and more cost-effective.

To identify and control pests, you must understand the following: the physical characteristics of the pests, the characteristics of damage, their development, whether they are continuous, sporadic, or potential pests, and your control objectives. Control a pest only if it is causing more harm than is reasonable, and use a control strategy that reduces the number of pests while causing the least amount of harm.

Droppings: Rodent droppings are a sure sign that rats or mice are present, and they will indicate the type of rodent, the size of the infestation, and where they are most active. Mouse droppings are small, less than a quarter-inch in diameter, and pointed on both ends. Rat droppings are half an inch or larger. Norway rat droppings have blunt ends on both ends, whereas Roof Rat droppings have pointed ends. New droppings are shiny and putty-like in texture, whereas old ones are hard and crumbly. Variable feces sizes indicate the presence of juveniles and adults, and a large number of droppings may indicate a large infestation. The location of the droppings indicates active areas where you should place bait or a trap.

Urine Odor: The odor of rodent urine is strongly musky. Large infestations are easily detectable. Gnawed mouse holes are small, clear-cut holes about the size of a dime. Gnawed rat holes are roughly the size of a quarter and have rough torn edges.

Rub and Gnaw Marks: Oily rub marks are left where rodents travel along walls. If the rub marks smear, you know they are new. Gnaw marks on the wood around the house are also a sign. Rats typically have tooth marks about an eighth of an inch long, while mice have small scratch marks.

Runways: The most common rodent pathways are along interior walls, building foundations, ledges, pipes, electrical wires, conduits, tree branches, and fence rails.

Nests: Mice will shred paper, string, and other pliable materials to build their nests indoors. Norway rats nest outdoors in burrows dug deep into the ground. Roof rats typically nest above ground in attics, trees, or dense vegetation.

Noises: Rodents are nocturnal. They frequently make scratching noises at night.

- a) Rodent-Infested Areas
- b) Food storage areas
- c) Hotel kitchens
- d) Storage and supply closets
- e) Loading docks
- f) Waste disposal areas (Six Hotel Hotspots for Rats & Mice)

Risks Associated with Rodent Infestation

- a) Food contamination and disease transmission are risks associated with rodent infestations.
- b) Threats to the health of hotel employees and visitors
- c) Inadequate inspections, which could result in a temporary or permanent closure
- d) Impairment of the hotel's reputation
- e) The hotel's structure, wiring, and furnishings have been damaged.
- f) Financial loss as a result of property and reputational damage to the hotel. (3)

PESTICIDES

Pesticides are classified into three types. They come in the form of solids (powder, crystals, and granules), liquids (milky water), or aerosols (sprayed out in a fine mist). Pesticides are classed according to the pest that they control. They differ in terms of how they affect diverse creatures. Some are specifically poisonous to the pests in question. They do not affect other creatures. As a result, hotel companies prefer certain forms of pests. Non-selective insecticides, which typically affect other creatures, should be avoided to the greatest extent feasible. Pesticides that are regularly used in the kitchen include:

Insecticides: Insecticides are chemicals that are used to protect plants against insect damage. Mosquitoes, ants, flies, termites, and so forth.

Fungicides: These are sprayed or dusted to destroy pathogenic fungi that can infect humans, plants, and animals. For example, smuts, mildews, moulds, and so on. The majority of hotel disinfectants are fungicides.

Rodenticides: Rats are known to bring illnesses such as rabies, fever, tularemia, and typhus. They also ruin dry storage facilities and rodenticides aid in the elimination of such critters in places like the kitchen and storage.

Common Pesticides Used

- a) Chlordane: household pest, termites and cockroaches.
- b) Diazinon cockroaches, ticks, ants, silverfish spider, etc
- c) DDVP- cockroaches, houseflies, etc
- d) Malathion- household pests, centipede, millipede
- e) Methoxychlor - Silverfish
- f) Gamma HCH - Wood boring insects
- g) Dimethoate - Flying insects
- h) Warfarin - rats and mice
- i) Methyl bromide - for fumigants
- j) Permethrin, dieldrin - for textile pests
- k) DDT (Dichloro Diphenyl Trichloroethane) - for various household insects.

The Benefits of Using Pesticides

- a) Modern insecticides are quite efficient.
- b) Quick results;
- c) Cost-effective insect management method
- d) It is inexpensive and does not need a large amount of labour.

Disadvantages

- a) If pesticides are not handled properly, they can harm human health and result in serious damage or death.
- b) It has the potential to directly damage non-target animals. For example, using a certain insecticide to kill caterpillars may also kill other innocuous insects such as ladybirds.
- c) If not disposed of appropriately, it may pollute or poison the water beds and soil.
- d) Pesticides can also make their way into the food chain.

Importance of Pest Control Infestation

- a) To prevent the transmission of illnesses;
- b) To avoid loss of business due to contaminated food;
- c) To avoid safety hazards caused by damage to electrical lines, pipes, and so on;
- d) To avoid overall spoiling and wasting of foods.
- e) To adhere to local hygiene requirements

FAILURE IN PEST CONTROL

Even after using insecticides, the bug may not be completely eradicated. To discover what went wrong, the scenario should be evaluated. Chemical pesticide failure can be caused by several factors, including

- (a) **Pest resistance:** Pests can become resistant to specific insecticides. When a pesticide is applied, it selectively kills the most vulnerable bugs. Some bugs are resistant to pesticides. Others can tolerate the impacts and pass on their characteristics to their offspring, allowing them to live. When the same insecticide is applied repeatedly, the possibility of resistance increases. Using diverse insecticides (rotating pesticides) will assist to decrease pest resistance development.
- (b) **Other causes for failure:** In certain cases, failure can be attributed to the use of the incorrect pesticide, the incorrect dose, or the incorrect application. It might not be used at the right time or in the right place.

CONTRACT FOR PEST CONTROL

We now understand that pests are an annoyance to the hotel. As a result, before providing the contract outdoors, a housekeeper should take the following precautions.

- (a) Ensure that all areas, including gardens and lawns, are covered in the contract agreement.
- (b) Verify that the contractor only uses pesticides that are grade 1 or ISI certified.
- (c) Ensure that he adheres to the timetable and appoints efficient and well-groomed workers.

- (d) Ensure that the pest control activity causes as little disruption and trouble to the visitors as possible.
- (e) Sanitation and pest-control methods in food-processing facilities

Pests are drawn to most structures for three reasons: refuge, food, and warmth. It is normally accepted that more established structures are more inclined to invasion, however, new structures with encased rooftop spaces, suspended roofs, divider cavities, framing, raised floors, service ducts, and lift shafts provide a large number of harborages – with many interconnections – allowing pests a wide range of internal movement. Most pests require relatively little amounts of food — an adult mouse, for example, may survive on as little as 3 grams of food every day. A few degrees of temperature rise may be enough to enhance infestation, especially during the winter months. A master sanitation schedule is an important component that might influence pest management in food industries. Sanitation initiatives, as well as employee training to execute sanitation standards, are critical.

Cleaning and hygiene maintenance: Large vacuum cleaners are now utilized to remove collected dust; brooms and pressure cleaners must be prohibited. Debris clearance is more effective than any targeted chemical therapy. Only by controlling the whole manufacturing cycle, from raw material purchasing to finished product distribution, can the danger of infestation be reduced. Nowadays, relatively few food industry quality managers regard the problem of maintaining proper sanitary conditions to be particularly significant, even though it is the first step in preventing insect infestations. In many cases, however, regular cleaning techniques must be modified and staff must be educated to clean the least accessible regions. These places are often neglected and hence certain sources of infection and are thus regarded as a possible crucial control point. The most susceptible sites can be identified by visual examination by skilled employees or, better still, through an external audit conducted by sanitation professional. All employees should be reminded of the significance of cleanliness and their responsibility to follow these instructions.

Controlling One's Physical State has an Impact

Design of the site's location and structure: An important aspect of an IPM programme is the preservation of pest-free conditions across the site. Given that certain pest infestation hazards might arise from the immediate surroundings of any food plant, the perimeter around all structures and between structures should be kept clear of vegetation and, preferably, with a concrete surface at least one meter wide. This is because concrete is easier to clean and weeds cannot grow on it. The basement walls of food factory buildings should be "insect resistant" where they meet the building wall's steel coating. Impacts from pallet stacker trucks may block this connector from within the building, allowing pests access to the food plant. Any damage that generates key access sites for pests must be fixed as soon as possible, and the whole outside of the structures should be visually inspected. When considering new development, an assessment of activities and the environment around the planned site must be undertaken. Landfills, watercourses, marshlands, abandoned areas, and farms are all examples of activities that create pest activity regularly. When reusing a historic industrial facility, the former usage of the property and its history must be taken into account. When renovating an existing structure, it is necessary to evaluate what the building

was originally used for, as pests may still be there. Buildings that have previously been utilized in the food sector, for example, are more likely to have a history. Before formal reception of a new building or extension, a snagging list should be established and addressed. Retrospective repair is far more difficult to undertake once production has begun and is operating, and the building firm has left the site. As a general rule, no food should be permitted on the construction site.

The exterior of food industry buildings: Perimeter security fences are often made of chain-link, wire mesh, weld mesh, or metal railing. These should be installed on concrete footings to prevent animals from getting through the fence. Concrete paths are preferred to gravel pathways in the near building perimeter because gravel can be burrowed into by rats despite the capacity of gravel to backfill on itself. Paving slabs are frequently put on sand, which encourages ant infestation and enables mole gallery digging.

Water drainage: Pooling water from overflow attracts a variety of pests, mainly flies. A conveniently available source of water is also required for rat colonies to thrive. To avoid soggy soil, the land must be well-drained. Certain insect pests (for example, cockroaches) require a water supply to reproduce. Grids should be built in such a way that waste materials may readily travel through and be quickly removed for cleaning.

Increased risk of infestation due to the exterior environment: It is not recommended to plant trees or bushes near a food facility, and direct contact of tree leaves and branches with the facility's exterior wall should be systematically avoided because foliage provides excellent harborage for many pest species. Plants that drop the fewest seeds and fruits should be preferred at a reasonable distance from the walls. Insects, rats, mice, and numerous pest birds may be attracted to and supported by seeds and fruit at first. Coniferous shrubs and trees should be used (releasing odor repulsive for a range of food industry- related insects). Leaf fall from deciduous trees that collects in guttering can reduce rainfall run-off and may give birth to localized infestations of insects that reproduce in standing water, such as midges and mosquitoes. Leaves that pile around foundations provide a haven for rats and mice. Tree limbs and branches should be at least 2 meters away from the exteriors of buildings (3 m if squirrels are a problem). Plants should not be placed in too close quarters. Rodent pests will be able to hide and breed in dense ground cover. Access in between bushes is essential for insect control. Vegetation shall not encroach within 5 m of any building's outer wall. Both rodent and insect infestations can be aggravated by rural vegetation. Climbing plants should not be placed against building walls. These might provide access points for pest rodents, nesting sites for problematic bird species, and entry points for some insect pests. Grass should be kept as short as possible at all times. Long grass provides cover and a haven for rodent pests. Rain-water downpipes provide simple access for rats to climb towards the roofs of buildings to reach the area between the roof and the wall that exists in many structures.

Food product chain organization: The main premise of product flow organization in a food processing facility is that raw materials and processed or finished products should not be nearby. To avoid contamination of any form, raw and processed products must be strictly separated. The GMP recommendation for product flow direction in the process area adheres to the "go ahead" concept, ensuring that raw materials never cross the processed or semi-processed food line. Because insect pest growth can be finished in one month under indoor settings, raw food commodities should not be stored for a short amount of time. Subsequently, the item stream in all

extra spaces should stick to the "earliest in, earliest out" way to deal with keeping stock turn as fast as achievable. There is a critical necessity to guarantee a hygienic environment throughout the dry food product production chain.

Isolation and treatment of infected goods and waste materials: It is recommended that a quarantine structure be built for the isolation of infected goods or commodities purchased from a suspicious supplier. Returned items should be kept in their quarantine area, apart from ingredients, packaging, and finished goods - preferably in a separate building unconnected to the main production and storage facilities.

When food processing or packaging equipment is not in use, the food product or food dust deposits within makes it attractive to flying pests. This "out-of-service" equipment should be removed as soon as possible from workshops storing raw materials or processed food.

Packaging flaws (poor insect proofing): If the packing material is porous to a food odor, finished food produced in food processing factories is prone to rapid infection through the marketing channels. This permeability to food odor is a frequent shortcoming of many low-cost packaging films used to package finished food goods. As a result of such permeability, flying insects or rats may quickly locate adequate meal substrate. Furthermore, certain types of packages (cardboard cassettes and boxes with flexible pouring spouts or bags with broad apertures that cannot reseal) can no longer prevent insect access after the first opening.

Improving Pest Monitoring Programs for the Food Industry: The success of an IPM programmed in the food industry is heavily reliant on an effective monitoring system that provides information useful for translating the number and type of insect catches in traps into practical knowledge about population changes over time, the location of foci of infestation, and the routes of entry (Campbell JF, Mullen MA, 2002). Insect surveillance is thus an essential component of pest management in food processing industries (Fleurat- Lessard F, 2011). Economic losses and unnecessary pest management expenses can be avoided by using insect monitoring and decision-making tools related to risk prediction by assessing EDT, using predictive models of pest population density changes over time, and feeding expert systems to determine the best time and method to suppress pest populations (Arthur F, Phillips TW;2003 Adam BD, Phillips TW,2006). Computer simulation models may be used to assess the efficacy of various pest control approaches for stored-product insects, either alone or in combination. These models may also be used to assess the efficacy of various implementation strategies and to optimize the timing of pest control programmes for stored-product insects (Troller JA, 1963; Arthur F, Phillips TW, 2003). Computer simulation models are now available mostly for insect pests of stored grain, but such models could be especially beneficial in decision-making for pest control techniques in dry food processing and marketing chains in the future.

FINDINGS & SUGGESTIONS

Makers of dry food items have a genuine test to avoid bugs wherever along with the well-established order of things in light of the exceptionally intricate and divergent conditions of food industry structures. Current practices that impudence bug presence and advancement in food industry offices have been identified in the phases of food plant development, food fixing

gathering and capacity, handling or molding of finished food, and advertising. The preventive irritation control measures in the food industry might be ineffective due to non-recognition of straightforward principles of good assembling practice (GMP, for example, permanent control and observing of basic places or risky practices great for bug section and pervasion in food plants. The under utilization of techniques for quick evaluation of vermin presence and development inside food industry offices, as well as the powerlessness to depend on bug checking information for the financial harm limit (EDT), are additionally underlined.

Reasonable devices for handling information from bug observing frameworks ought to further develop bother presence discovery and alarm. More reasonable EDTs should be proposed with direct connections to dynamic help. More viable prescient models are likewise expected for anticipating the drawn-out efficacy and versatility of remedial control strategies in food handling structures, which should deliver the execution of mind-boggling IPM programs more straightforward.

CONCLUSION

Examination ought to enhance or further create other semi chemicals (attractants and anti-agents) to help with the observing of some put-away item bugs and to give new biocontrol instruments. In such a manner, future put away item security blends of repellents and attractants may likewise find use in push-pull strategies [Cook SM, Khan,2007]. Push-pull methodologies include the social control of bug bothers and their regular foes utilizing the combination of improvements that demonstrate to make the safeguarded asset ugly or inadmissible to the vermin (push) while drawing them towards an appealing source (pull) from where the bugs are hence taken out. Obstacle or repellent semi-chemicals can be utilized to deter bothers from entering a site, while simultaneously, attractants or energizers can urge vermin to gather in a nearby region where they can be controlled all the more effectively and securely by compound pesticides or biocontrol specialists. PC, cell phone and touchpad applications according a commonsense and easy to understand support in building IPM specific programs and online guidance for hazard provision and counteraction ought to become available to food industry quality directors soon.

As expressed by Adam et al. [Arbogast RT, Kendra PE,2002] on account of the execution of IPM input away grain, numerous quality directors of food plants have not yet taken on IPM rehearses for some reasons: extra expense or individual suggestion, least required information, difficulty taking on another innovation, strain of pesticide provider or fumigation organization, and so on Restricted acknowledgement of IPM in food offices can be to some degree clarified by a mix of the expenses of remedial nuisance control intercessions, difficulties in inspecting appropriately, temperamental information, and difficulties experienced in the estimation of significant EDT.

By and by, a large portion of the dangers of infestation of food industry plants by toxic irritations recorded above might be constrained by modified use of IPM programs covering the four parts of dry Food Quality and Safety Assurance from crude items to finished food items

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RECENT TRENDS IN ROOM DIVISION MANAGEMENT

Salvi Chetana Ramesh Rajani

*First Year M.Sc. in Hospitality Administration,
IHMCT & AN, CIT Campus, Taramani, Chennai-600113.*

Anuradha Nagarkoti

*First Year M.Sc. in Hospitality Administration,
IHMCT & AN, CIT Campus, Taramani, Chennai-600113.*

ABSTRACT

In present era, room division is not confined to clean and maintain the various surfaces or booking of rooms but much more beyond that. Room Division Management is responsible for overseeing the operations of several departments such as the front desk, room reservations, housekeeping, concierge and guest services, security, communications, and associated services. Room division management is crucial to the success of a hotel. As we all are familiar that the hospitality sector is fast-paced one, guests are quite concerned about the services they receive, so the property must constantly modernise its operations to ensure the comfort of its guests. As a result, it is critical to upgrade the hotel to reflect current trends in the room division's area and introduce new trends to meet the expectations of guests.

Keywords: Front Desk, Housekeeping, Trends, Hospitality, Room Division Management.

INTRODUCTION

The hospitality industry's major goal is to supply consumers with lodging and dining service while also ensuring complete customer happiness. Room division management is one of the most significant aspects of the hospitality sector. The primary goal of room division management is to provide a clean and pleasant environment for clients while also ensuring that they are completely satisfied with the hotel's services. It's a tendency in and of itself to talk about trends, try to predict them, and try to foretell the future. Advances in technology have always inspired the development of several industries, including the hotel business. Since technological organizations develop new gadgets and software to help guests feel more at ease and to provide world-class services at the touch of a button, the hospitality sector must prepare to adopt these technological devices in their operations. The new technological upgrade of the hospitality the industry should create a platform that beneficial for both guest and hotel by facilitating the partnership between

Salvi Chetana Ramesh Rajani & Anuradha Nagarkoti

them. The platform should ensure that guests are treated to an outstanding travel experience while also improving the operational and managerial efficiency for hotel. The current issues and best practices in room division management are rising trends that can lead to better growth by incorporating cost-effective tools for the hotel sector. Hotel room divisions must address key difficulties in an orderly manner, which can lead to hotel expansion and long-term profitability.

RESEARCH OBJECTIVE

Some of the concrete objectives of this research are:

- To understand room division management
- To know about various departments in room division's
- To learn about the new trends followed in room division's

REVIEW OF LITERATURE

Room Division Management is one the most important department in hotel. It is considered as the heartbeat of the hotel. Hotel Room Division Management is changing rapidly; earlier, this department was simply responsible for the front desk and housekeeping, but today there have been significant changes.

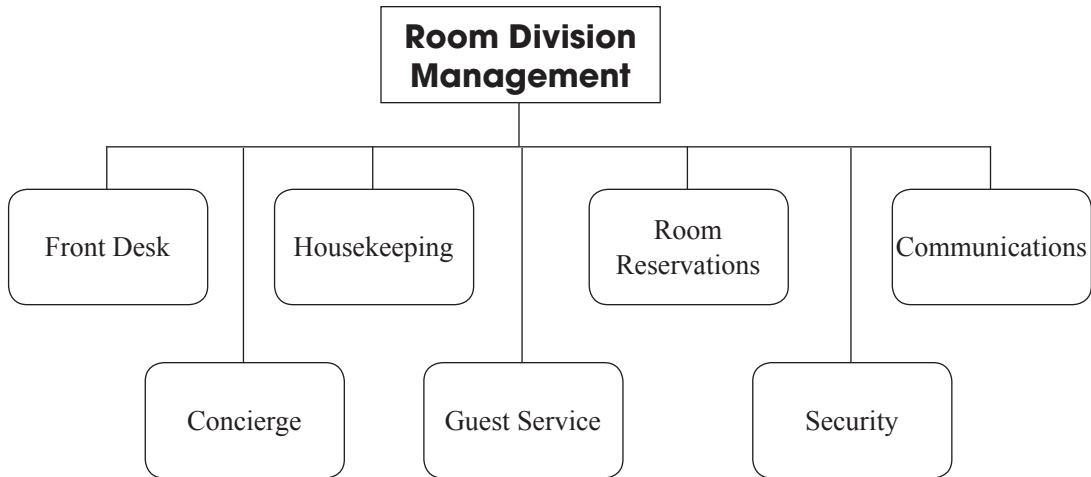
To boost hotel operations, this industry need new trends and technologies. After all, the Room Division department takes care of bringing in the majority of the hotel's profit. As a result, the trends in room division management in the hotel business are examined in this paper. The emphasis of this paper is on the most recent trends in room divisions that hotels can use to increase revenue from their operations. In order to sustain dominance in the severe competition, the Hotel must follow the trends of the times, generate distinctive commodity values, or service modes. The majority of a hotel's revenue is generated from room sales, which are intended to be clean, comfortable, and welcoming to guests. In order to compete with the latest industry trends, the hotel room division's department must adopt them.

RESEARCH METHODOLOGY

This research is based on secondary research. The purpose of the research is to understand recent trends followed by hotels in room division's department. Secondary information was gathered from a variety of sources, including website reports, hotel brochures, essays, news sources, policy documents, and research papers published in various journals articles.

What do you understand by Room Division Management?

The hospitality industry's typical terminology for combining the coordinated efforts of the front office and housekeeping departments is Rooms Division Management. Room Division Management is responsible for managing the operations of several departments such as the front desk, room reservations, housekeeping, concierge and guest services, security, communications, and associated services.



Rooms Division Management, in general, is responsible for the planning, regulating, directing, and organising of resources within various divisions. It is the area that helps hotel management in creating a positive image in the mind of the customers. People, materials, capital, and equipment are examples of such resources.

The Front Desk, Guest Services, and Housekeeping departments are led, controlled, and overseen by Rooms Division Managers. They collaborate closely with Reservations to ensure that occupancy rates and income are maximised, and they are also responsible for delivering the essential forecasts.

What does Trend means?

The term "trend" describes change in behaviour or a more generalised change in circumstance. Keeping this in mind, hospitality trends could include shifts in customer behaviour, new ways of providing hospitality services, or a general push to adopt new hospitality technology. A variety of factors can influence trends

Why keeping up with the trend is important in hospitality industry?

The most successful companies in the hospitality industry are constantly evolving, but to achieve this they must always keep up with the latest trends in the hospitality industry. This includes everything from marketing activities and hospitality processes to leveraging the latest technologies and responding to global events. By following the latest trends in marketing, you will be able to reach your target audience and say what you want them to say. On the other hand, the introduction of new technologies will help the make your business more efficient, and on the other hand, it will help improve the overall experience of the guest.

The hospitality industry is diverse and includes everything from hotels and other types of accommodation to restaurants, bars, travel agencies and travel agencies. Embracing the latest hospitality trends is essential to respond to changing customer behaviour due to the pandemic.

However, most trends appear as a result of more general changes in consumer behaviour.

Further in this paper we will see detailed information various departments in Room Division Management.

Front Office Department

The front office is the first department of the hotel with which guests come in contact at the time of their arrival and is also the last department they interact with when they depart from the hotel. (Jatashankar R. Tewari, 2016)

Hotel reception agents are at the forefront of customer care in the hospitality industry. They greet customers, allocate rooms, schedule meeting spaces, receive payments, distribute room keys, and make sure guests have everything they need for a comfortable vacation. Over the years, hotel record keeping has evolved from paper-based systems to complex computerized technologies that help hotels maximize profits while providing a seamless guest experiences. Front desk technology provides agents with real-time information to increase efficiency and minimize latency. Technology is evolving rapidly and for many facilities the future will be a faceless reception. Automatic check-in technology has already been implemented in some hotel chains. Functions such as smartphone access to the room can eliminate the procedure that appears at the front desk. Hotel front desk technology provides hotel owners with the tools to serve guests most effectively and increase revenue. Benefits include improved customer service, efficient internal operations, and financial data management. There are hundreds of systems tailored to the size of your business.

Housekeeping Department

The housekeeping department is the operational department responsible for the cleanliness, maintenance, and aesthetic upkeep of rooms, public areas, back areas, and surroundings in a hotel. (G. Raghubalan and Smritee Raghubalan, 2015)

The housekeeping department is critical to a hotel's overall performance since it not only enhances every aspect of the hotel's 'face,' but it also generates the most money. The face of housekeeping has evolved as a result of technological improvements and modernization, and it is no longer regarded a hotel's back-of-the-house service. The housekeeping department is responsible for the hotel's cleanliness, security, and aesthetic appeal. With the passage of time, however, housekeeping services have become increasingly scientific and mechanised, and technology has resulted in a significant shift in efficiency and product quality in the housekeeping sector, as it reduces labour and time. Previously, the housekeeping crew was simply expected to maintain the property's basic cleanliness and upkeep. However, in recent years, the housekeeping industry has placed a strong emphasis on creativity, innovation, training, and the use of cutting-edge equipment, technologies, and software.

Room Reservations

Reservation in the hotel industry is defined as 'blocking a particular type of guest room (e.g., single room, double room, deluxe room, executive room, and suite), for a definite duration of time (i.e., number of days of stay), for a particular guest'. (Jatashankar R. Tewari, 2016)

One of the most important responsibilities of the front office department is to make reservations for hotel accommodations. An interested guest wants to know about the hotel's availability of the desired type of room and any related services. Guests' inquiries must be responded to by the front office department.

A guest's chances of getting a better rate for guaranteed room on arrival improve when they make a reservation. Reservations allow a hotel to better manage the guest experience during both regular and peak seasons. The reservation process differs depending on the hotel's size, brand, and reservation system.

Concierge

Concierges in hotels are noted for their emotional intelligence, attentiveness, and proactive behaviour. They exist solely to make a hotel guest's stay as enjoyable as possible, frequently by anticipating their needs, providing recommendations, hotel customers see the concierge as a trusted advisor who can propose restaurants, tourist attractions, and other services to make their stay more amusing. Personal concierges who manage the errands of private clients have used the notion in a broader sense in different hospitality situations.

Guest Service

The guest service department is a back office department in hotel which assists guests with check-in and check-out procedures, provides hotel service information, and provides attentive, courteous, and friendly service to guests throughout their stay. In order to provide exceptional guest services, the department resolve all visitor concerns, complaints, or suggestions. To guarantee that guests' expectations are exceeded, communicate with all departments. Oversee Front Desk and Valet operations on a daily basis. Assist each guest with their specific needs and wishes. Ensure that guests' requests are met in a timely and effective manner. Always keep the privacy of your guests in mind. During all guest interactions, be friendly and attentive.

Communication

Effective communication is vital in any workplace, but some say it is even more so in the hospitality industry. It is critical for a hotel manager to be able to communicate effectively with both visitors and other employees. We must not ignore the value of well-executed verbal and non-verbal communication skills in the hospitality sector, even in this day of internet communication. Whether it's a face-to-face chat in the hotel lobby, an email to a visitor, or a phone call with a potential guest

Excellent communication skills may improve a guest's experience by demonstrating that you are paying attention to them, value their input, and communicate clearly. Customers will be more loyal, business will rise, and the hotel will become more successful as a result. Pay attention to your personnel; they're the ones that interact with customers on a daily basis. It is simple to hear yet difficult to listen. When we pay attention to what the other person is saying, we are able to comprehend what they are saying and respond in a meaningful way.

Security

A hotel's security department is in charge of the building's general security, as well as the security of in-house guests, visitors, day users, and workers, as well as their valuables. In-house security workers and contracted security officers may be included in the security team. Security professionals are responsible for monitoring the property and its grounds, checking surveillance equipment and assuring the safety and security of guests, visitors, and employees. The efficiency of the security department is reliant on the participation and help of local law enforcement officials to some extent. Security employees should be trained to deal with vandalism, thefts, terrorist attacks, bomb threats, and fire prevention and suppression.

Recent Trends followed in Room Division Management

Mobile application

Mobile apps and contactless technology work together. However, mobile apps are not entirely new to the hospitality industry.

The hotel mobile app allows you to:

Use your smart room key to access your room, Order room service or takeout, Request more at front desk ... All without physical contact.

Indoor Fitness

Hotels had to adapt for adaptation and have had to change how many objects are working. In many places in the gym in 2021, more creative underwater conformance occurs and meet customer's needs for implementation and exercise. Digital assistant and mobile applications can be used to order hygiene movement and lead him right into the room. Video contents can be transferred to the TV and watch management training or yoga class. Some hotels make personal intervals in unused rooms.

Chatbot

A chatbot is available to assist you 24 hours a day, seven days a week. With the help of digital platforms, hotels are finding it increasingly difficult to respond quickly to customers' enquiries across all channels, potentially resulting in revenue loss. As a result, hotel chatbots are one of the most recent technologies being deployed to improve customer experiences. In other words, all customer inquiries related to reservations, hotel rooms, hotel amenities, discounts and promotions, check-in/out, etc. will be managed in the future chatbot.

Self-check In

Self-register to minimize customer waiting time. It is clear that hotels cannot ignore the modern needs of customers. Therefore, hotels must provide modern services to remain competitive in the industry. In the age of mobile technology, hotels can improve both their operations and the guest experience by doing a few simple things in their premises. Today, our customers no longer want to wait at your front desk. As the Internet has become an integral part of their lives, hotel guests are now expecting everything to be digital, which is part of a recent trend in the hospitality industry.

Self-service check-in through mobile self-service portals for guests is gaining popularity among key trends in the hospitality industry. With the implementation of such services in hotels, guests can easily find out if their room is ready, can make amenity request, check bill, and update preferences and more.

Smart hotel

A smart hotel, in simple words, is one that uses internet-connected gadgets that can communicate with one another. Since smart speakers and smart hubs become popular consumer items, smart hotel designs have become more popular. For example, a smart hotel may allow visitors to manage the heating and air conditioning from their phone, or switch on the TV with a voice command via a smart speaker. In many situations, smart rooms will also change things like light bulb brightness or radiator temperature to maintain ideal circumstances.

Workforce diversification

It enables personnel in different job positions or with different job responsibilities to rotate between them. Management of human resources becomes more flexible as a result of it. More importantly, staff have a better understanding of the hotel's entire operations. The front desk employees, for example, can perform functions other than check-in and check-out, such as payment processing and concierge tasks.

Personalized service for guests

Personalization refers to customizing a service to the specific needs of individual guests. Hotels may offer a variety of morning newspapers, bath product lines, and beautifully decorated rooms. Staff may also be trained to recall the name and preferences of guests. For e.g. a hotel may provide babysitting service with extra charges applicable.

Environmental education for guests

To save water and cleaning supplies, hotels encourage guests to reuse towels until they are filthy and need to be replaced. Also, whether guests check out or request it, hotels are not required to refill bath products (shampoo, shower gel). These measures contribute to increasing customers' environmental awareness and reducing hotel trash.

(Vidya Jyoti Eduversity, April 2020)

Contactless payments

Contactless payments have been one of the most prominent instances of how to reduce friction in the hospitality industry. Customers save time by not having to sort cash or enter their PIN when contactless payments are accepted. Apple Pay and Google Pay, for example, have eliminated the need to carry a wallet altogether.

Voice Control and Voice Search

Guests searching for and booking hotels and restaurants are increasingly using voice search, so you must adapt to this change in behaviour and make a real effort to attract these customers. This entails, among other things, clearly arranging your website content so that it appears in voice

search results. Voice control can also be utilized to control electronics in hotel rooms, improving the guest experience.

Use Management & Mobility to create better processes

A successful housekeeping operation requires efficiency. Making the most of your time is critical if you want to set the proper tone and provide the best possible guest experience - mobility technology is the way to go. Your staff will have a clear picture of progress wherever they are in the building using their cell phones (or even wearable's). They'll be able to tell which visitors have left and which rooms require new washing. They'll be able to tell which rooms are already finished since they'll be able to press a button and alert the rest of the crew. You'll be able to provide your visitors with a digital 'do not disturb' sign, and housekeepers will be instantly informed of which rooms to avoid.

Use of artificial intelligent

Front-desk tasks like digital check-in and chatbots have dominated the debate around artificial intelligence (AI) in hotels and hospitality. However, there are a variety of ways that technology might assist your housekeeping personnel in their work. Consider how much time housekeepers spend knocking on doors to see if visitors are in or out each day or week. Each incident will not amount to much, but when added together, it would appear that time would be better spent on genuine cleaning activities. This is where artificial intelligence (AI) combined with the Internet of Things (IoT) may make a difference.

Smart sensors placed throughout the hotel can alert your personnel when guests have checked out, and this information may be shared with your Management & Mobility system. This saves time, effort, and money by reducing the number of rooms available throughout a whole hotel, but that's not all. You may also utilise technology to notify teams when room service carts are empty and ready to be collected, as well as keep track of maintenance concerns.

Virtual reality

Virtual reality is one of the most intriguing hospitality technology innovations, as it allows potential hotel guests or restaurant diners to virtually experience their surroundings from the comfort of their own homes. This can be key in getting these folks to commit to a visit from the planning stage. Some clients may benefit from virtual tours or 360-degree films to better comprehend the services supplied. Offering this service provides you a distinct advantage over competitors who have yet to capitalise on this specific hospitality trend, and because current VR tours are web-based, they should be available on a variety of devices, even without a VR headset.

Cyber Security

The hotel technology system today includes a variety of procedures and services to manage. It is also more data-driven than ever before. So, if this system isn't well-protected, anyone may quickly disable it, causing havoc with the entire operation. The system defending against cybercrimes, fraud assaults, distributed denial-of-service attacks, and human error within the

firm are among the key targets of cyber security. Furthermore, the cyber security enhancements will keep customer data safe, backed up, and recoverable, so you won't have to worry about process vulnerability.

Smart Amenities

The modern facilities situated around the room allow guests to completely customize their experience and make the stay as comfortable as possible. Guests at some hotels are given a Mood Pad tablet that allows them to control the temperature, TV, window blinds, alarm, and lighting all from one place. Smart shower doors are available in some hotels, allowing guests to scribble notes while in the shower and then email the image to themselves for later use.

Generating hotel profit and revenue through the use of social media

The hotel will use social media to generate money and bookings because of its popularity. This channel will surpass traditional channels like SEO in importance (search engine optimization). It will also function as one of the marketing mix's tools.

Staff education on new technologies

Without a thorough understanding of technology, it is difficult to maintain a positive guest experience these days. The state of technology is ever changing. The majority of hotel technology vendors are keeping up with these demands and changes. As a result, these hotel industry trends must be followed by the hotel and its employees.

However, it is critical to provide the appropriate training to the appropriate individuals, particularly your hotel staff, who will be engaging with visitors. Hence, it is important for the hotel staffs to learn about the new technology and that too effectively.

Revenue management is becoming more prominent

Selling the appropriate room to the right customer at the right price

Increasing hotel room revenue through supply and demand management

Pricing techniques

Selling the appropriate room to the right customer at the right price

(Dr. Atul Ramgade, June 2019)

CONCLUSION

Hospitality is not only about ensuring comfortable stay in the hotel but also consistently maintaining the upkeep of the hotel by adopting innovative trends and practices in hotel. Therefore, to stay ahead of the curve, unique and advanced technologies must be implemented and incorporated in hotel.

To become more energetic & innovative, new trends must be implemented and incorporated in room division management through new trends and demand of hospitality sector. use of various technologies to generate optimum output in hotels but there is a strong need of optimum utilization of resources available, manpower, supplies and new scientific trends like cyber security, online check in and online check out, eco-friendly products, and smart amenities that help ensuring guest comfortable stay. Many cost-effective innovations have been made, as well as new practices that have received positive feedback from guests. For the department's smooth operation, the room division's department is becoming increasingly digitally driven. To ensure the maximum degree of client pleasure, it is important to maintain high standards in terms of safety, security, health, and hygiene. And this places a significant amount of duty on the shoulders of hotel room division's.

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A STUDY ON DYNAMICS OF REVENUE MANAGEMENT IN THE HOTEL INDUSTRY

Sathish Kumar. E. T.

*Assistant Professor,
School of Hotel and Tourism Management,
Vellore Institute of Technology, Vellore, Tamil Nadu, India.
Mob: 9629937357,
Email: sathishkumar.et@vit.ac.in, violet.sathish@gmail.com*

ABSTRACT

The revenue management is the science of ultimate hotel success.

Businesses face significant decisions regarding **what to sell, when to sell, to whom to sell, and for how much**. Revenue management uses **data-driven tactics** and strategy to response these questions in order to **growth income**. This consolidative framework of hotel revenue management. It elaborates the fundamental academic concepts in the field of hotel revenue management like the revenue management system, process, metrics, analysis, budgeting, forecasting, segmentation and execution. Distinct attention is paid on the pricing and non-pricing revenue organization gears used by hoteliers to maximize their revenues, reducing the operation cost, better utilize the accessible fund, where it can give a compound growth and gross operating profit to the organization.

Keywords: Revenue Management (RM), sell smart, hotel, forecasting, strategy, Technology, Software, competition, yield management, Royalty points, OTA, law of demand and supply, Forecasting.

SYNOPSIS

- Abstract
- Introduction
- Objectives of the study
- Origin of Revenue Management
- Revenue Management
- Why need Revenue Management?
- Revenue Management in other industries
- Importance of Revenue Management

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380 *Revolutionizing Trends in Hotel Rooms Division*

- Role of Revenue managers
- Revenue Management Process
- Marketing Strategies of Revenue Management
- Role of software and List of software's company name
- Conclusion.
- List of abbreviation
- Key terms
- Reference and Bibliography.

INTRODUCTION

Sell Smart

Revenue management involves the use of analytics and performance data to help those in the hotel industry **predict their customers' behavior**. The data is then utilized to **make appropriate decisions in regards to pricing and distribution strategies**. **The ultimate goal of revenue management is to have the right room for the right person at the right price at the right channel at the right time and place**. When this occurs, you will be more likely to maximize your revenue, and in turn, your revenue.

The quality of using money and other resources carefully and not wastefully.

The **concept was originally designed** for the **airline industry** so that the different companies could find ways to **antedate their customers' needs, wants and demands**, and then **create dynamic pricing**. Once discovered, it was soon considered, applicable and **helpful to any type of business** that involves customers who are willing to pay different prices for the same end product, when there is only a certain amount of that item to be sold, and it must be sold during a certain time, such as a hotel room inventory.

OBJECTIVES OF THE STUDY

- To know about revenue management
- To identify the importance of revenue management
- To recognize the strategy to grow in the competition
- To better utilize of room inventory
- To build better customer relationship
- To maximize hotel room revenue.

ORIGIN OF REVENUE MANAGEMENT

- In 1980's airline industry introduced with dynamic pricing.
- It was introduced by **British airways like Early bird offer** introduce. That will attract lot of customers those times.
- Rather than **fly empty** makes better use of it.
- American airlines CEO Mr. Robert Crandall legend in yield management, Low cost and low fare airlines introduce, Example: "**People Express**"
- DINAMO (Dynamic Inventory Optimization and Maintenance Optimizer)
- When airlines have **surplus seat offer discount** to hold the customer, due to those three times their revenue increased.
- Similar this system adopts by J.W. Bill Marriott Jr. He is the CEO of Marriott International.
- Demand forecast system – DFS: was built to forecast guest booking patterns and optimize room availability by **price and length of stay**.
- Marriott implement this system in their 1.6 lakhs rooms inventory across the globe, due to that their annual revenue rose from \$150 million to \$200 million.

REVENUE MANAGEMENT

Definition: Within the hotel industry, the widely accepted definition is: "*Selling the right room, to the right client, at the right moment, for the right price, through the right distribution channel, with the best cost efficiency*".

Yield management is just a small part of Revenue Management.

The information gained on how your customers think and perceive value will be ultimately used to **match your supply to their demand**. This will help you determine when it is best to hold onto a room until you can achieve a higher price and **how to recognize a drop in demand, signaling the time for discounted rates**.

"Discount availability and Duration control

Cash flow is the king

The values of economy and self-reliance"

Why need Revenue Management?

- **Hotel rooms is perishable**
- Basically, revenue management does a **difficult job of matching supply and demand** or selling the right room to the right client at the right moment at the right price on the right distribution channel with the best commission.
- **Reduce hotel expenses:** like a. salaries, b. Utility bills, c. Marketing Expenses.

382 **Revolutionizing Trends in Hotel Rooms Division**

- **RM is art and science of predicting real-time customer demand**
- **Optimizing the price and availability of products to match that demand.**
- **To Create active pricing.**
- **Analytical based inventory control**
- **It is a yield management's forecasting, inventory control and overbooking capabilities.**

Revenue Management in Others industries:

- Airlines industry – British Airways and American airways
- Car rental
- Television – Canadian broadcast corporation, ABC and NBC – introduce automated ad
- Sales – Ford motors
- Hotel industry – Marriott International, IHG – Inter Continental Hotels Group
- Cruise lines
- Finance service – Bank – based on the project.

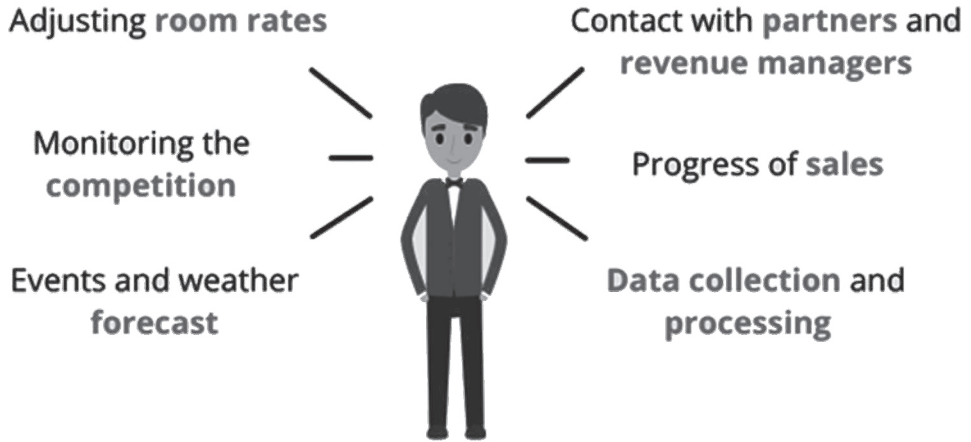
Importance of Revenue Management

- At the core of revenue management's existence is the law of demand and supply.
- Let's look at each component separately & how they interact with each other.
- **The Law of Demand**
- Demand is going to decrease as the prices increases.
- It represents how guests react to price changes.
- Think about it from a brand perspective.

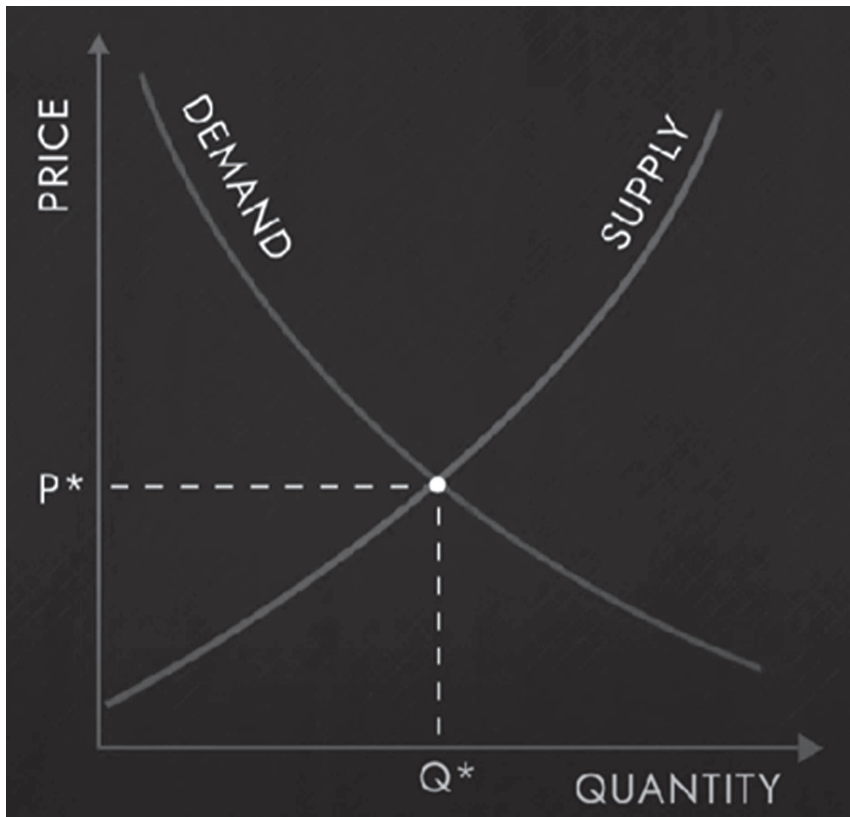
The Law of Supply

“Change in price leads to change in supply”

Hotel Demand, Supply and Maximum Revenue Zone.



Source: Google: *The benefits of revenue Management*



Source: Altex soft

Role of Hotel Revenue Managers

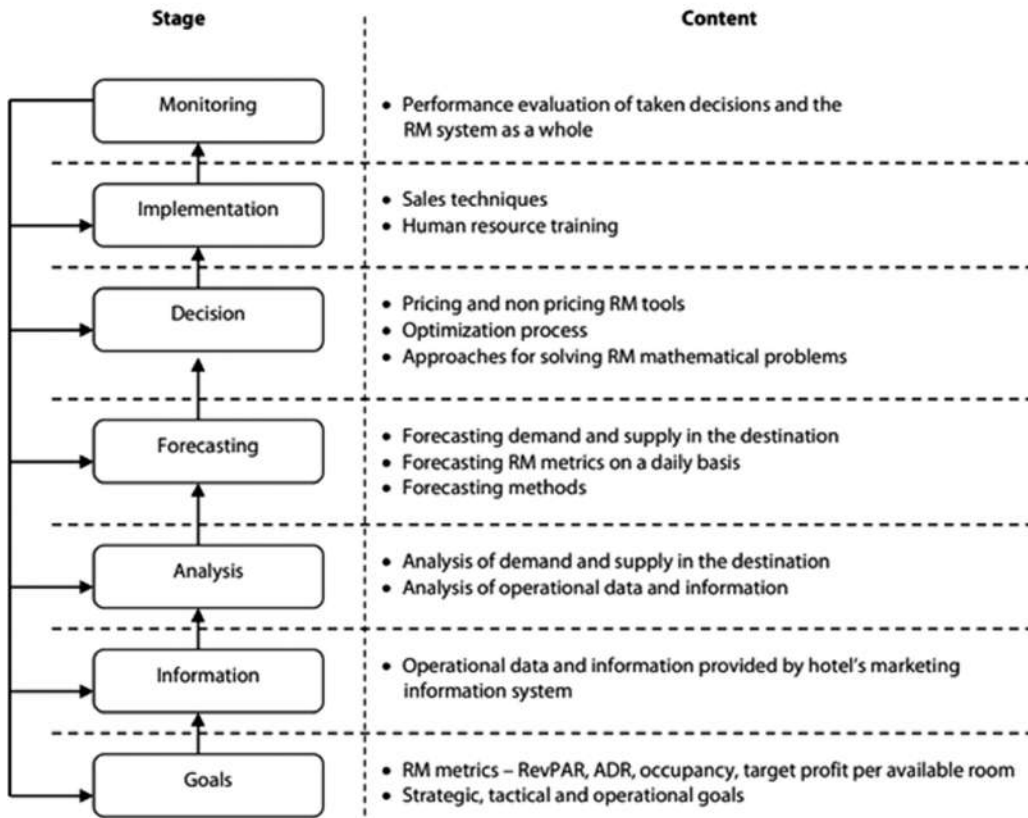
Title : Hotel Revenue Manager
Report to : General Manager / Corporate Zone office
Department : Sales and Marketing
Area : Reservation Agent

Duties and Responsibilities of Revenue Manager

Main Job role:

- To maximize the hotel profit and revenue
- To sale rooms, conference, and banquets
- To implementation of new strategies, pricing combos, revised plan, with analyzing of previous data
- To increase the hotel room occupancy percentage
- To maintain the room inventory management
- To coordinate with third party distribution channels for price fixing
- To maintain CRM – customer relationship management
- To analysis and tracking of revenue in the hotel operations
- To make strategic plan – consider corporate companies, city events, new companies.
- To support duty manager in shift if required
- To coordinate with the management
- To attend the meetings as management insisted.
- To analysis regularly to the competitor prices for rooms, conference and Exhibition
- To updates in the daily meeting sheets whoever, you meet the customers
- To follow the management plan.
- To follow and implement the credit policy of the hotel within the constraints all the time.

Hotel revenue management process



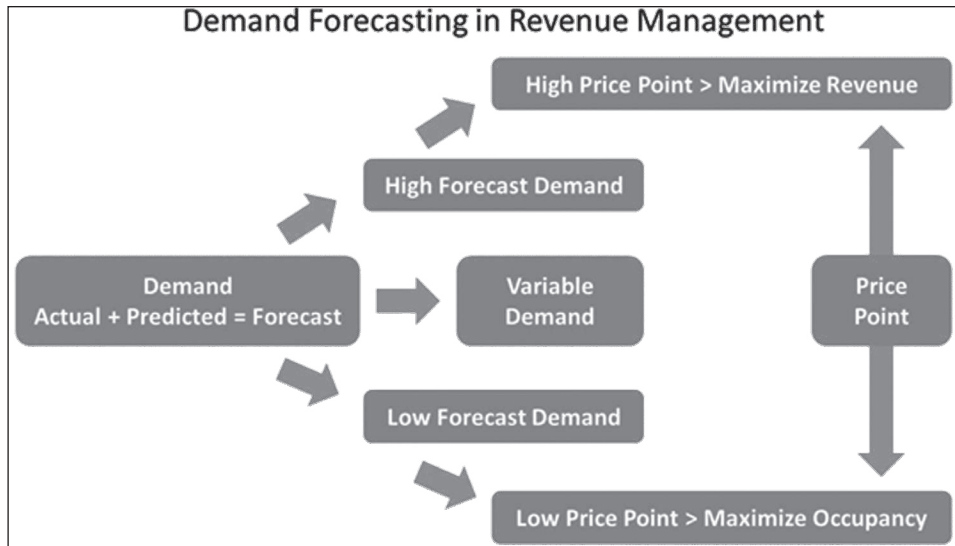
Source: Adapted from Ivanov & Zhechev (2011)

HOTEL REVENUE MANAGEMENT PROCESS



Source: Altex soft

Sathish kumar



Revenue Management Strategies

*Revenue management is also known as yield management.
It is the combination of pricing and strategies to increase production*

Revenue management is defined by unified gears, which are

- a) Customer segmentation,
- b) Demand forecasting,
- c) Inventory management,
- d) Yield management, and
- e) Dynamic Pricing.

Each plays a crucial role and greatly impacts the ultimate financial result of a hotel.

- Driving direct booking
- Interpretating with AI and Chatbots
- Dynamic packaging
- Utilizing Loyalty programs
- Recognize Your Market
- Segmentation and Price Optimization
- Work Closely with Other Departments
- Forecasting Strategies
- Embrace Search Engine Optimization (SEO)

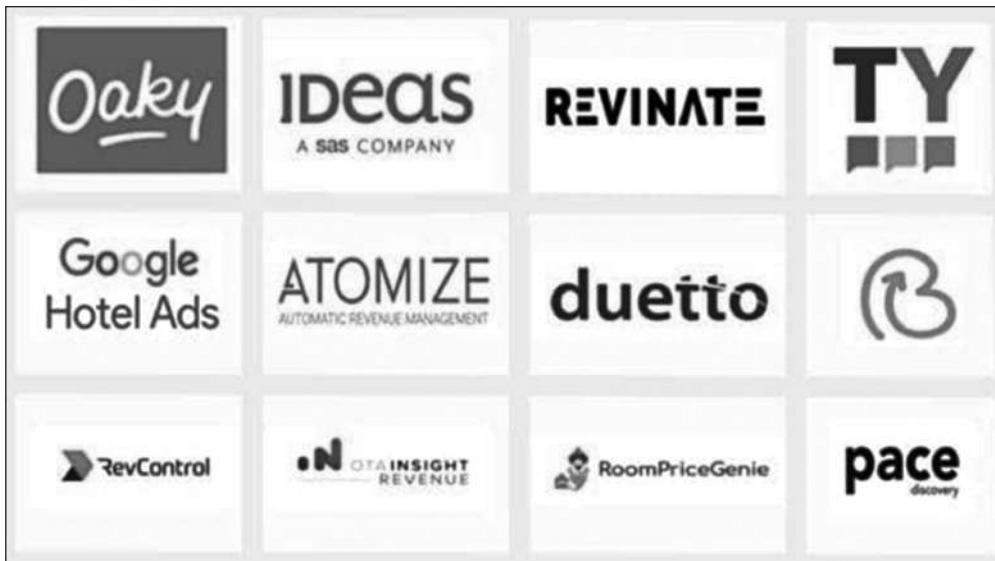
- Manage sales channels
- Update to digital trends
- Choose the Right Pricing Strategy
- Incentives For Direct Bookings
- Concentration on Mobile Optimization
- Work With a Freelance Revenue Manager
- Coordinate with other departments

Role of software's

- Daily or week-based performance analysis
- Noticing the most gainful pricing choices
- Demand forecasting
- Analysis of lost revenue due to overbooking or cancellations
- Revenue reports by KPIs
- Collection of historical inventory data
- Channel- and segment-based revenue analysis

List of software's Companies

- Altex soft
- Duetto
- IDeaS
- Travel Click
- Kepion
- RateBoard
- Revpar Guru
- ResNexus
- Maestro
- Oracle PMS
- Iqware



Source: Google

CONCLUSION

To some extent this is a result of the hotel companies' market requirements to stay competitive and constantly improve their marketing activities. Additionally, many issues in (RM) Revenue Management practice - forecasting remain proprietary knowledge of hotel chains and software developers, which hinders the theoretical advancement in the field. Nevertheless, regression models and neural networks could be adjusted to account for special events. In this direction for future research practice is again ahead of theory, as special events are already incorporated in RM software. Future needs more research concern in the Revenue management area.

List of Abbreviation

- RM : Revenue Management
- LP : Loyalty Points
- YM : Yield Management
- OTA : Online Travel Agency
- ADR : Average daily rate
- RevPAR : Revenue per Available Room
- KPI : Key Performance Indicator
- TrevPAR : Total revenue per available room
- SEO : Search Engine Optimization

- DINAMO : Dynamic Inventory Optimization and Maintenance Optimizer
- DFS : Demand Forecast System
- CRS : Central reservation system
- ALOS : Average length of stay
- PMS : Property Management System

Key terms

- **Revenue Management:** The *art and science of predicting real-time customer demand* and optimizing the price and availability of products to match that demand.
- **Leveraging price:** It means that as *market price falls*, leverage goes up in relation to the revised equity value, multiplying losses as *prices continue to go down*.
- **ADR:** Average daily rate, formula: **total revenue / total rooms sold**. We can know the average of money we sold per room
- **Unconstrained Demand:** The forecast of how many rooms could be sold if rooms were unlimited.
- **TrevPAR:** Total revenue per available room, formula to calculate = revenue / available rooms
- **SEO:** It help the customer to view the better visible of various website in a single view.
- **OTA:** Online Travel agency, customers can book the hotel room by online portal, Multiple hotels can book in one place. Example: Expedia, Booking.com, Agoda, make my trip.
- **CRS:** Central reservation system: A system used by multiple hotels in a chain to maintain hotel information, inventories, rates and facilitate reservations.
- **Channel Management:** Hotel use to update latest room rates and inventory in all their distribution channels.
- **ALOS:** formula = Total occupied room nights / total booking
- **Pace/ Pick up:** Reservations are done at a certain date
- **Price Elasticity:** It is an economic measure for a product demand on a change in its price.
- **Shoulder Rate:** The days next to busy days.

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ROLE OF TOWEL ORIGAMI IN GUEST DELIGHT EXPERIENCE

R. Shweta Verma

*First Year M Sc. HA,
Institute of Hotel Management Catering Technology, Applied Nutrition,
C.I.T Campus, Taramani, Chennai – 600 113.*

Gaurav Juneja

*Teaching Associate on Contract,
IHM, CTAN CIT Campus, Taramani, Chennai-600113.*



ABSTRACT

Origami, Japanese word which has “ori” meaning “folding”, and kami meaning “paper” is the art of paper folding, which is often associated with Japanese culture. The Japanese culture been ancient and traditional has seem to have its origins in China 2000 years ago. But the south pacific asia has indeed adopted paper and incorporated it in its lifestyle. From decorations to food, from room dividers to origami. Origami is made initially with paper during earlier times but then it seems, the art form has started evolving more and more.

As the new world started to come out of its pupal stage, the world travellers and the hotels have literally been in synchrony. The hotels have been trying new and unique styles of work to mainly catch these global travellers. Starting from different styles of cooking food to preparation and service of varieties of mock tails, cocktails and beverages. As per different departments which directly handle guests, the concept of guest satisfaction and appeasement is been seen at utmost importance, as a happy guest brings in more business. The rooms division has its most unique ways and styles and one of the most artistic one is the art of towel origami.

Shweta Verma & Gaurav Juneja

The towel origami concepts has its sister varieties of folds, in f&b departments as napkin /serviette folding . The origins of this started with carnival cruises at 1990s and still has given the eye appealing effects among the hotel and cruise line guests.

In today's hospitality industry, displaying towel art in the guest room is becoming increasingly popular. The addition of a towel arrangement/towel art to the guest room adds a personal touch. It is a sort of folding that is created by folding towels in an artistic manner. Several towels, as well as a face towel or hand towel, are required for some of the designs. Some of the sculptures can also include flowers or flower petals to make them more appealing

Keywords: eco-friendly, sustainable, resource, housekeeping, consumption, energy, water, conservation, recycling, guests.

INTRODUCTION

The world has been evolving from with time ,People are modifying their way of lifestyle. The concept of travellers have been happening and hence place for stay concept for them came into play. The hotelier world grew along with need and wants of customers and they have always have one important work, i.e., to attract customers / guest either for restaurant or room stays. Eye appeal and glamour has always been a element of repeat business in hotel industry, but never has quality and hygiene been compromised at all aspects.

In this paper we are going to see one element in rooms division which has been a small but beautiful concept of attraction and guest delight moment for the guests, It is a moment of happiness and delight despite whatever age, sex, career see it.

Yes it is the concept of “Towel origami”. This is a technique where washed sterilised body towels are folded/ twisted to create small figurines. The shapes maybe anything as its upto the room attendant or management creativity whatever it is do-able on the towel.

LITERARY REVIEW

Towel art, also known as towel origami, is the folding of towels into various shapes to create imaginative depictions of objects or creatures such as monkeys, elephants, swans, hearts, or flowers.

In many hotels, resorts, and cruise ships across the world, towel art has become fairly popular. It’s fun to come back to your room and see what extra touches housekeeping has done to make you feel at ease.

Who’d have guessed that a simple towel for rubbing wet droplets off your skin or patting your hair dry would garner so much attention? It is impossible to deny that the trend of creative towel art appeals to everyone.

The housekeeping department is sometimes referred to as the hotel’s backbone and nerve. The backbone stabilises your body, while the nerves ensure that all of your body’s functions run smoothly. Though their functions are not visible, they are quite noticeable when they are

not working properly. The same is true for the housekeeping service, which plays a critical role in giving guests and visitors a positive first and lasting impression of the hotel. Housekeeping's responsibilities have expanded beyond maintaining the hotel's cleanliness and upkeep. Let's concentrate on one of the most crucial areas of housekeeping: assuring the guests' satisfaction.

The goal of guest pleasure is to elicit a positive emotional response from the guest by surprise them and exceeding their expectations. A delighted and happy guest will not only return to the hotel, but will also spread the information about it through word of mouth. This will boost the hotel's earnings by attracting more guests. Guest joy is one effective method for creating a hotel's brand in today's competitive market, where brand building is delicate. If this is not properly planned and implemented, it might have negative consequences, including irreversible damage to the hotel's reputation.

In today's hospitality industry, displaying towel art in the guest room is becoming increasingly popular. The addition of a towel arrangement/towel art to the guest room adds a personal touch. It is a sort of folding that is created by folding towels in an artistic manner. Several towels, as well as a face towel or hand towel, are required for some of the designs. Some of the sculptures can also include flowers or flower petals to make them more appealing.

In the sense that not all hotels provide folding towel service in their rooms, each hotel has a standard operating procedure (SOP) for delivering services to customers. There are hotels that only give this folding towel service to suite types, some that only do it when there are honeymooners, VIP visitors, or return guests, and yet others that provide it to all rooms in the hotel, depending on the policy and SOP regulations of each hotel.

Housekeepers leave towel art, often known as towel sculptures or towel origami, for hotel visitors. Elephants, swans, puppies, and bunnies are among the most popular animal towel designs.

The tendency is especially prevalent in resorts in popular vacation spots and aboard cruise ships.

Some of the Towel Art that are used in Hotels are:

- Lotus flower towel design
- Flower in vase towel design
- Peacock towel design
- Bird towel design
- Elephant towel design
- Towel flower basket design
- Towel swans
- Swan basket towel design
- Towel heart & swans design

Hotels are now putting a greater emphasis on customer satisfaction and providing employee training to help them succeed. Guest joy is a policy that many hotels follow. Housekeeping workers must read the guest's mind by observing and reading their clues in order to ensure guest satisfaction.

In many hotels, towel art, also known as towel origami, has become a popular way to wow guests. Though origami crafts are generally employed in resorts and cruises, they can be fun for visitors of a commercial 5-star hotel on special occasions such as their birthdays, anniversaries, or honeymoons.

A jewellery box on the side table will not only arrange the guest's valuables, such as rings, bracelets, and watches, but it will also reduce the number of lost and found cases. If the guest is staying at the hotel for the first time, a pillow menu can be placed on the side table, allowing him to select the pillow that best suits his needs. A repeat guest's likes and dislikes, as well as comforts and discomforts, are well documented in his history, making it very simple to provide him with a pleasant stay. To woo guests, the hotel must not only know its guests, but also be abreast of the current trends in the hospitality sector.

The marketing expenditures of hotels are in the billions of dollars, with the goal of attracting more customers. In comparison, the housekeeping expenditure for a pleasant visitor experience is lower, but nevertheless significant. These joys may be well documented by the visitor in the age of social media, and publishing them on Instagram, Facebook, Twitter, or Pinterest can help the hotel brand reach a wider audience.

Extra facilities should be regarded more care rather than extra costs.

Hotel management should do a visitor profile assessment before establishing a guest delights policy. EVA FLOOR, which is specifically for women travellers, may be incorporated into a hotel with a higher number of single lady passengers.

SHAPES OF TOWEL ORIGAMI

Elephants, dogs, cats, snakes, squid, rabbits, turtles, lobsters, monkeys, crabs, ducks, dinosaurs, mice, bats, geese, love, flowers, cakes, and other towel decorations can be produced, depending on the Room Attendant's ingenuity. Of course, you're interested in the unusual and amusing forms that I mentioned before.

On YouTube, you may learn about the shape of towel decorating and how to manufacture it. A Room Attendant's distinctiveness is that, in addition to cleaning hotel rooms and rearranging all of the belongings, they also make the bed. The same may be said about towels that have been used by visitors. By adding embellishments such as eyes, ribbons, or buttons, the towel is transformed into a lovely doll.

For example, for honeymooners, folding towel guests (2 love-shaped swans complete with a sprinkling of red rose petals) can be arranged on the mattress, can add a greeting card on the table with a bottle of champagne and ice bucket, and there are also those who adjust to the type of guests, for example, for honeymooners folding towel guests (2 love-shaped swans complete with a sprinkling of red rose petals) can be arranged on the mattress, can (for champagne it is usually a request from the guest or indeed policy from the hotel itself to provide). The lighting in the room may be adjusted to create a lovely, relaxing, and romantic atmosphere.

Shweta Verma & Gaurav Juneja

DIFFERENT TOWEL ORIGAMI ARTS FROM ACROSS THE WORLD

1. THE BIRTHDAY CAKE



2. THE HEART SHAPED



3. THE MONKEY



4. THE BEAR



5. THE RABBIT



6. THE PEACOCK



7. THE CRAB



8. THE LOTUS



7. THE SWANS



10. HONEYMOON SPECIAL



METHODOLOGY

Sample

Total 68 respondents participated in this survey. The survey was conducted by random sampling method and questionnaire was filled by people who have visited star hotels at least once to stay.

Questionnaire

We have used an objective questionnaire that allows us to obtain detailed & illustrative data which has been used as an aspect of quantitative assessment based on various personal opinions of a group of people.

Secondary Data : The secondary data collected by magazines and books and research papers, online.

The questionnaire is as posted below:

Email *

Your email address


Kindly State your profession *

Student

Hotelier

IT employee

Others



Have you visited the rooms sections in Star hotels ? *

yes

No

Please select your age from below list of options *

18-25

26-40

41-60

Above 60

Have you seen the Towel origamis in these rooms? *

yes

no

Which varieties of rooms have you seen these Origamis? *

Standard rooms

Deluxe rooms

Honey moon themed rooms

VIP suites & Presidential suites

Do you feel that Towel Origamis are a requirement among the evolving world ? *

Yes

No

Maybe

As a Guest do you feel overwhelmed while seeing these Towel origamis *

Yes

No

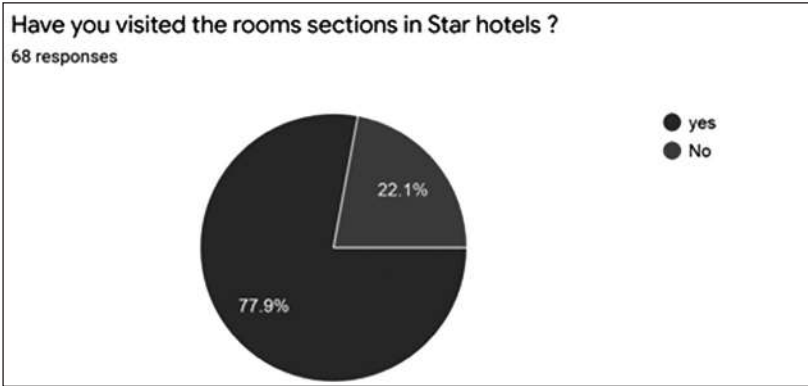
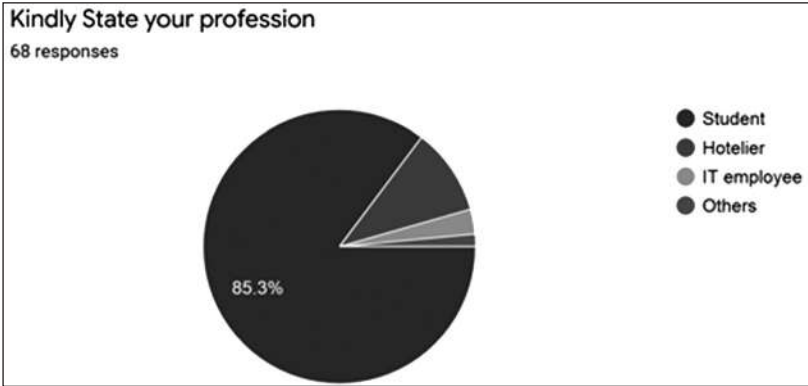
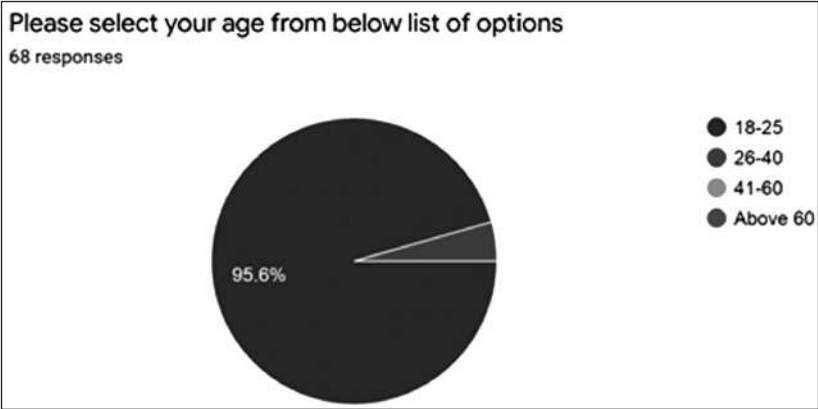
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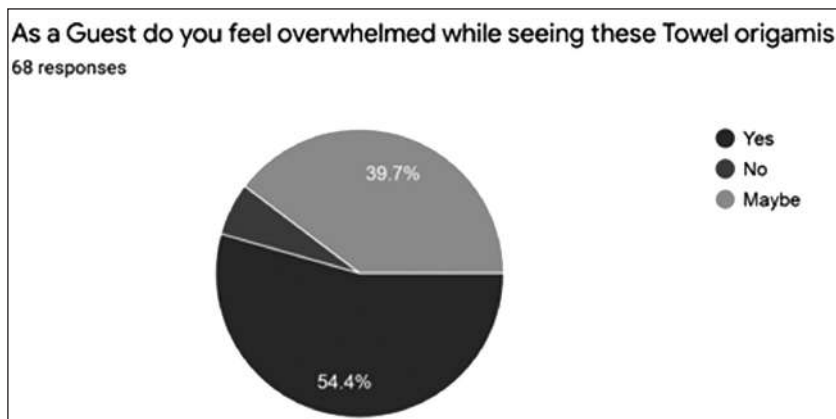
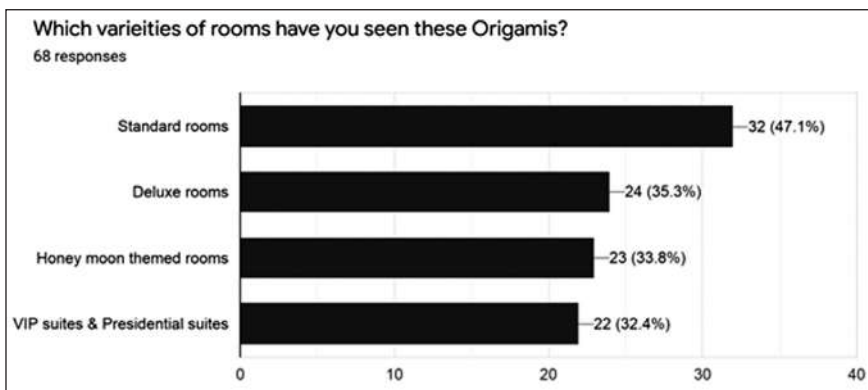
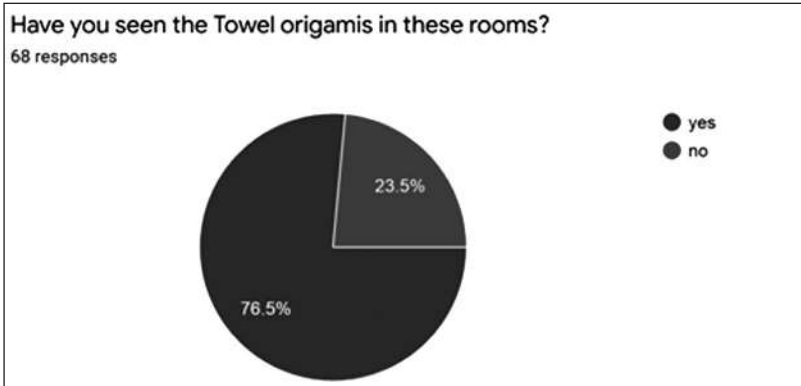
As a Guest do you feel it creates a impact on you when you see these Towel Origamis while entering the room ? *

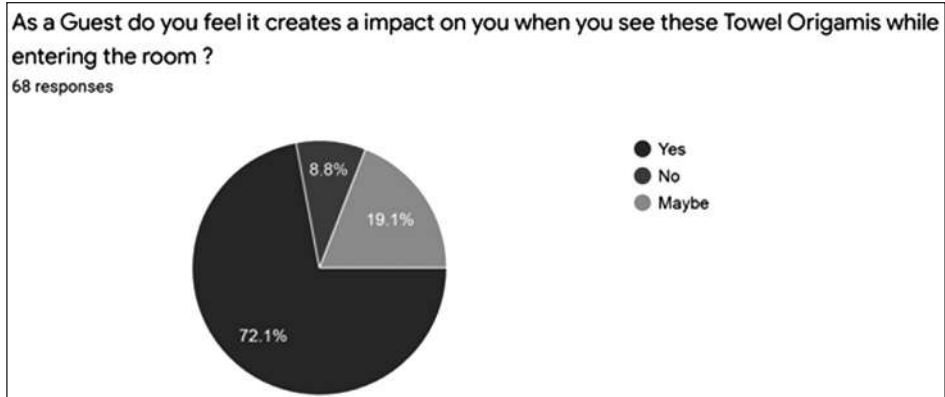
DATA ANALYSIS

Demographic profile of respondents is shown through pie diagram below:

Here are the results as responses in the form of pie charts:







CONCLUSION

Hotel phones may be replaced by apps, walls may be transformed into displays, and room service may be brought by a robot in the near future. However, removing the human element from hotel towel art will be extremely difficult.

From the above research analysis, we have identified that the Towel origami art does introduce a sense of Awe and guest delight and it enhances the mood of the guest and increases the stay period considerably. This being a form of contemporary art style, should be encouraged and kept alive in hotel industry as this also a unique marketing tool for hotels. This a very cost efficient tool of eye appeal and should be encouraged between the housekeeping personnel.

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AESTHETICS IN HOTEL CUSTOMER'S SATISFACTION WITH HOTEL GUESTROOMS A CASE STUDY IN HYATT REGENCY CHENNAI

Nihil Thomas

*First Year M.Sc. in Hospitality Administration,
IHMCT & AN, CIT Campus, Taramani, Chennai-600113.*

Raghavendra Rao

*First Year M.Sc. in Hospitality Administration,
IHMCT & AN, CIT Campus, Taramani, Chennai-600113.*

ABSTRACT

This study was to identify Customer's satisfaction with in the hotel guestrooms under province of Hyatt Regency, Chennai and to determine the factors that affected this satisfaction.

Data has been collected from 96 customers by the completion of a questionnaire.

Most of the customer's were male, under 25 and 35 years, with an income level of 10,000–20,000 per month. The majority was government officers. Highest mean of most customer's satisfaction was overall cleanliness in guestrooms.

Lowest mean of customer's satisfaction was the quality of equipment in the bathroom. However, results were different in each hotel category. Factors were affecting the customer's satisfaction with the interior decoration in the guestroom which was customer's occupation.

The hotel category was affected by the overall cleanliness of the guestroom, the cleanliness of linens, pillow covers and blankets, the quality of equipment in the bathroom and bathroom amenities offered.

Key Words: Technology, Guest Satisfaction, Hyatt Regency, Chennai.

INTRODUCTION

Hotels respond to tourists' needs for accommodation and food and beverage services, and can be considered one of the most crucial components of the tourism industry. The number of hotels acts as an indicator of a location's tourism development, popular destinations offering many hotels and other kinds of accommodation services.

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Hyatt Regency is an important province in Chennai India. It is a major business and administrative centre of the region. It is also a leading tourist destination due to a number of natural and historical attractions, has an interesting culture expressed in food, handicrafts such as silk and bronze products and basketry, and hosts the famous traditional Festivals. Every month represents the high season for hotels, with rooms being fully booked by tourists.

There are 29 hotels in Chennai India. Under the Foundation for Standard and Human Resource Development in the Hospitality Industry (Hotel Standard) system, these can be grouped into three categories, 1–2-star, 3 star and 4–5 star, based on the following criteria used by this system.

1. Physical environment: location and hotel environment.
2. Construction: hotel architecture, hotel mechanical and electrical system, materials used and security.
3. Hotel facilities: rooms, bathroom amenities and room decoration.
4. Quality of service: staff, cleanliness, hygiene and hotel reputation.
5. Hotel maintenance.

An investigation of customers' satisfaction with hotel guestrooms is an important contribution to the tourism industry in Hyatt Regency Chennai. Customer's perceptions of satisfaction are mostly dependent on the factors of room quality, hotel facilities, room amenities and quality of staff service, resulting in repeat customers. This makes it crucial for hotel operators to provide high-quality facilities and service to ensure Customer's satisfaction. To complete this investigation, this study aimed to: identify Customer's satisfaction with hotel guestrooms in Hyatt Regency; and determine the factors that affect this satisfaction.

Literature Review

In a study of levels of satisfaction of hotel customers in Indian context, generally found a more positive response from non-Asian than Asian travellers. Both regarded the quality of hotel service as the most significant factor in determining satisfaction. More specifically, Asians were concerned with value for money during their hotel stays, while non-Asians considered security, safety and food and beverages as important aspects.

Tourism Ministry studied the relative importance of factors in relation to hotel Customer's satisfaction India and the likelihood of repeat patronage. They identified seven factors likely to influence Customer's satisfaction, involving quality of staff service, quality of rooms, general amenities, business services, value, security and hotel facilities. The study showed that quality of staff service, quality of rooms and value were the three most influential factors in determining Customer's overall satisfaction levels and their likelihood of returning to the same hotels.

Research about hotel Customer's levels of satisfaction in Chennai is very Unlimited. Researchers in India, Taj Connemara (1854) investigated the factors influencing Customer's decisions to use a small hotel. The study showed that Indian considered the room rate to be the most important factor when they chose a hotel, while non-Indians considered the room condition to be the most significant.

METHODOLOGY

Instrument

A questionnaire instrument was designed to measure the Customer's satisfaction Downloaded by [New York University] at 18:23 16 April 2015 guestrooms provided by five hotels in Chennai. Two hotels were included from the 4–5-star category, two hotels from the 3- star category and one hotel from the 1–2- star category. The questionnaire consisted of three sections. The first section was designed to collect data regarding the types of hotels and the Customers' demographic characteristics. The second section asked the customers to rate their satisfaction (“least satisfactory (1)” to “most satisfactory (5)”) with a range of features of the guestrooms. This range of features included: 1. Room cleanliness (walls, floors ceilings). 2. Cleanliness of sheets, pillow covers and blankets. 3. Quality of electronic equipment such as TV, mini-bar, telephone, hair dryer. 4. Room decoration and atmosphere. 5. Bedroom lights. 6. Bathroom cleanliness. 7. Quality of bathroom equipment. 8. Bathroom lights. 9. Bathroom amenities.

Participants

The participants in the study were guests who stayed in the five hotels in Hyatt Regency in the period from 15 August to 30 August 2021 and voluntarily completed the questionnaire upon checking out.

Data Collection

Using a convenient sampling method, 60 questionnaires were provided for each hotel. A total of 96 questionnaires were collected, which represented 32% of customers at the five hotels for the designated period. The questionnaires were collected by fourth-year hospitality management students enrolled on the Research Methods for Hospitality course as part of the assignment-based learning methods in the Faculty of IHM CHENNAI.

Data Analysis

A descriptive statistical method including means and standard deviations was used. Data were analysed using SPSS software by employing sampling mean distribution. Pearson's IIT and significance level (two-tailed test) at 0.01 were used to test the hypothesis of correlating factors of the Customers' satisfaction levels. Independent variables in this study were the demographic characteristics of the respondents and the hotel categories.

The hypotheses were:

- ✓ Null hypothesis or H0: Independent variables were not associated with the customers' satisfaction levels (dependent variable).
- ✓ Rejected hypothesis or H1: Independent variables were associated with customers' satisfaction levels.

- ✓ Significance or observed significance levels less than 0.01 indicated rejection of the null hypothesis (H₀) – that is, the independent variables of Customers' demographic characteristics and hotel categories and the dependent variable of Customers' satisfaction levels were associated. Levels of greater than 0.01 meant acceptance of the null hypothesis that is, the independent variables and Customers' satisfaction levels were not associated.

Results and Discussion

Demographic Characteristics of the Respondents

Fifty-six males (58.9%) and 39 females (41.1%) participated in the study. The distribution of the respondents between the hotel categories was reasonably even (1–2 star – 29; 3 star – 37; 4–5 star – 29). More than half (55.2%; 16) of the participants in the 4–5-star hotel category was female. The largest age group was 25–35 (58.5%). Government officers constituted 41.7% (40 number) of the participants in the study. Seventy per cent (21) of the participants who stayed in 1–2-star hotels were private sector officers, while more than 40% of the participants who stayed in 3- and 4–5-star hotels were government officers. Thirty-nine (41.9%) of the participants earned between 10,001 and 20,000 baht per month.

Customers' Levels of Satisfaction

The study showed generally high levels of customer satisfaction across the categories of hotels, especially in the 3-star hotels. The highest mean response was for room decoration and atmosphere in the 3-star category (4.19). The lowest mean response was for bathroom amenities in the 1–2-star category (3.03).

Factors Influencing Customer's Levels of Satisfaction

The study showed that the observed significant level of age and bathroom's light system was less than 0.05, which led us to reject the null hypothesis and accept the rejected hypothesis. It meant that the respondents who were older were more satisfied with a bathroom's light system, whereas the other factors of demographic characteristic did not associate with hotel guests' satisfaction levels because the observed significant level was more than 0.05. The observed significant level was less than 0.01, which led us to reject the null hypothesis (H₀) that only hotel category and every dimension of guests' satisfaction levels except bathroom's light system were independent; and to accept that hotel category and every dimension of guests' satisfaction levels except bathroom's light system were dependent. It meant that hotels with different star ratings offered different levels of hotel service quality regarding room cleanliness and room qualities. Consequently, 3-star and 1–2-star hotel operators should realize that getting cost reductions by offering below-standard service quality may affect levels of guest satisfaction.

Limitations of the Study

There are a number of limitations of the study that need to be acknowledged. The questionnaires were collected in five hotels from 15 August to 30 August 2021. To provide a more extensive collection of data, the number of hotels and the period of collection need to be increased. To improve the response rate of completed questionnaires, the forms should be placed in the Customers' guestrooms, instead of at the checkout desk, to make it more convenient to the participants.

CONCLUSION

The result of the study showed that the majority of respondents were male, with age between 25 and 35 years old. Their major occupation was government officers, with monthly income of 10,000–20,000 baht. The mean score for the highest satisfaction levels was room cleanliness, whilst the mean score for the lowest satisfaction levels was the quality of bathroom equipment. This varied with the category of the hotel. Occupation influenced levels of satisfaction with regards to room decoration and atmosphere. The category of hotel affected levels of satisfaction in respect of room cleanliness, linen sheets, pillow covers as well as blanket cleanliness, quality of bathroom equipment and bathroom amenities offered. Our findings are considered useful as levels of guest satisfaction can indicate level of service quality offered by a hotel. Therefore, this study provides useful information for hotel managers to improve their service quality standards in order to enhance customer's satisfaction in the future.

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FUTURE TRENDS AND CONCEPTS IN HOSPITALITY INDUSTRY FROM DIGITALIZATION TO AUTOMATION

Aadityaa. R

*Corporate H.R. Executive,
Sterling Holiday Resorts,
Mob: 9566206478, Email: raadityaa97@gmail.com*

Sai Prasad

*Teaching Associate,
IHMCT & AN, CIT Campus, Taramani, Chennai-600113*

ABSTRACT

In most nations, the hospitality business is unquestionably an evergreen industry and a steady source of revenue. The technology in the sector changes as client demands change and industry specialists come up with new ideas. Guests nowadays are more interested in new experiences and the level of comfort provided by the hotel. When it comes to the future, automation technologies will become more prevalent in the approaching decade. Already, hotels in China, Japan, the United States, and other wealthy countries are implementing automation technologies. The primary goal of this research is to identify growing trends and new ideas in the hospitality industry that have been proposed thus far, as well as to determine their practical usefulness in the future. In this paper, the novel theoretical concepts proposed are examined, as well as its limitations and practical obstacles, are reviewed. To get a clear picture, the study used secondary data from books, journals, industry experts' perspectives, and papers published on the issue.

Keywords: Implementing of new concepts in hotel, automation, degree of effectiveness, new innovations, and practical limitations.

INTRODUCTION

In the last few decades, the tourism, hospitality, travel, and event management landscapes have all changed dramatically. Tourism, which is today the most popular type of leisure and amusement, is extending its wings over the world and taking on new forms such as space, ice, medical, leisure, and business tourism. Sustainable tourist development attempts to have a good environmental impact. People can go to new areas, have fresh experiences, and enjoy nature because to tourism's economic benefits. With the influence of automation, technology has just begun to play a big role in the sector. The hospitality services provided by the hotel sector are well-known around the world. With the increased rivalry in the market, new technologies and forthcoming trends are emerging to attract guests. The business began to flower in the early twentieth century with the

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concept of digitalization, which included the use of computers, property management systems, centralised reservation systems, and global distribution systems. Robots, Artificial Intelligence, and automated services are becoming more common as technology advances.

OBJECTIVE

The study's major goal is to look at how technology has evolved and going forward how it will be implemented.

- Understand the significance of emerging technology in the hospitality industry.
- Research the technology's influence in the field.
- Examine its practical limitations and implementation issues.

RESEARCH METHODOLOGY

The study examines the evolution of automation from several perspectives in order to identify both benefits and difficulties. This is a mixed approach research article. The study entails a concept analysis and description based on the data gathered. The research is based on a combination of primary and secondary data gathered from a variety of sources.

Primary data

- Direct data collection from various industry experts

Tools used

- Structured Questionnaire was prepared and survey was taken

Secondary data

- Data collection from various articles, magazines and internet

Sample unit

Responses and samples were collected from various hotel department heads in Chennai, as well as other hoteliers that work with star hotels and retail enterprises in the hospitality industry.

REVIEW OF LITERATURE

Science fiction publications from the 1800s and street plays from the early 1900s provided the foundation for the modern concept of robots. In 1921, the Czech playwright Karel apek created the term "robot" with his play Rossum's Universal Robots. Andrew encouraged hospitality professors to include robots in their lectures more than three decades ago (Charles Hofacker, 2017, p. 105).

"The ultra-intelligent agent is coming to us rapidly," adds Burrus, "the screen-less smartphone" (CarikeLoretz, 2017).

"The intelligent Web," according to scientists, will exist between 2020 and 2030, and some predict it will be as intelligent as the human brain (Digital evolution, 2018).

In terms of the hotel business, we may expect to see hotels with automated technology and hotels without working people by 2030. According to author Isaac Asimov (Asimov, 1941) in his novel I, Robot, human-robot interaction is a separate problem. The Three Laws of Robotics are as follows:

1. A robot may not injure a human being or allow a human being to come to harm as a result of its inaction.
2. Except when such orders conflict with the First Law, a robot shall obey any directions given to it by humans.
3. A robot must defend its own existence as long as this does not contradict the First or Second Laws.

According to a survey done in 2017, more than 60% of respondents stated they would be happy being served by a robot at a hotel (Verma, 2018). This is due to a lack of human touch, interactions, emotions, and problem-solving skills. This problem can also be solved by using cutting-edge technology to imbue robots with emotional intelligence, allowing them to engage with guests and manage people. Technology can also be used to overcome the limitations that are slowing down the automation process.

DATA ANALYSIS AND DISCUSSIONS

The data analysis and discussions are based on a poll of hoteliers from several areas, including food production, housekeeping, food and beverage service, and the front desk. The questionnaire responses are evaluated and discussed further down.

Extended support for the automation by the industry experts

Despite the fact that automation technology is pricey and difficult to adopt, it is estimated that 90 percent of people favour its development in the industry.

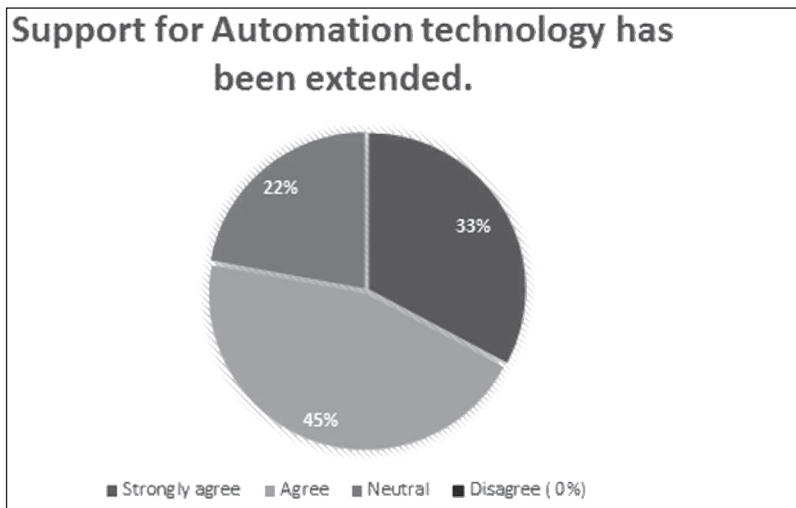


Figure 1: Extended support for the automation by the industry experts

Positive promotions are possible with automation technology

Using technology to implement a new strategy will always boost business. A poll was conducted based on management's perceptions about automation technology. It supports business, technology development, and less physical labour, among other things.

Automation's advantages include

Reduces labour costs: Using machines instead of humans lowers the company's long-term labour costs. Wages, employee salaries, housing, and other fringe perks are lowered, resulting in a profit for the company.

Less manual labour

In hotel operations, heavy-duty tasks such as pot washing, carrying big objects, and other cleaning tasks are undertaken by the employees.

Increased work perfection

The modern period of progress proclaims, "Machines are more perfect than humans." As a result, machines work faster, more precisely, and more efficiently.

Business is aided by technology and creativity: In light of the recent increase in market competitiveness, a fresh concept, originality, and a piece of technology are required to attract individuals to do business. In Nungambakkam, for example, a vehicle-themed restaurant has opened (a place in Chennai). There are many new restaurants opening in Chennai, but this one drew attention and was widely discussed among locals because of its unique service of meals in Ferrari car & Bullet Train.

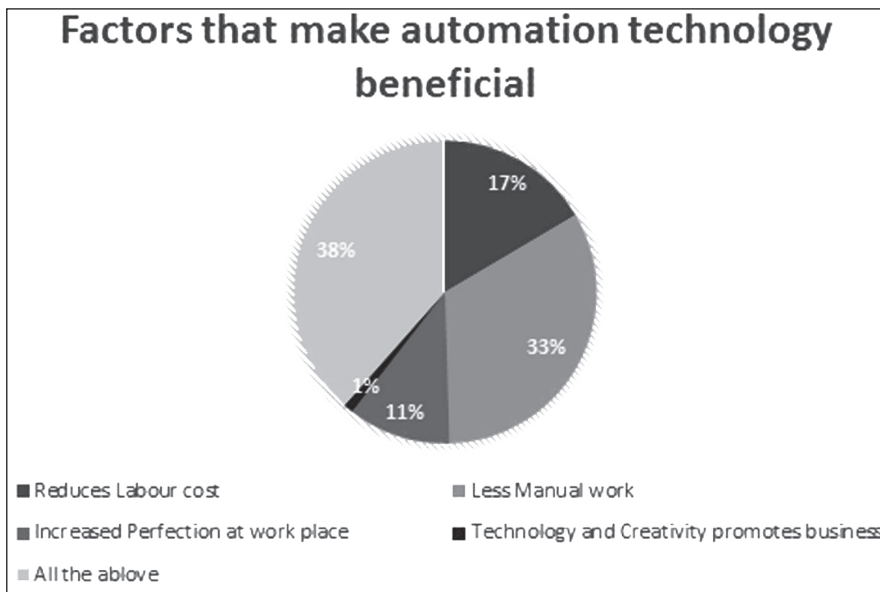


Figure 2: With automation technologies, positive promotions are possible

The following are some of the difficulties encountered when introducing automation: The actual deployment of the emerging technology is influenced by three key elements.

Budget

Automated technologies and the use of robots instead of humans in the hotel business will necessitate a large initial capital investment. As a result, some hotels may view this issue as a danger in investing such a large number of money in a technology, knowing that if the systems fail, they could lose a significant amount of money. The main aim of the hotel is to attain guest satisfaction, there is a disturbance factor faced in the implementation of this technology.

Reduced visitor satisfaction

Communication and interaction skills are one of the most important talents to have when working in a hotel. As a result, the basic relationship between the guest and the hotel is formed by guest handling, situation management, and engagement. The interaction, on the other hand, becomes undetectable with the concept of automation. There is a disruption component in the adoption of this technology because the hotel's main goal is to achieve client contentment.

Issues of law

Consider the case of a new incoming restaurant that plans to use robots to manage its service departments. The management is unable to produce all of the robots and operating parts in Chennai. They must obtain it from developed countries. As a result, the legal concerns of bringing robots into the site arise during this period. As a result, government regulations and laws play a significant role in implementation.

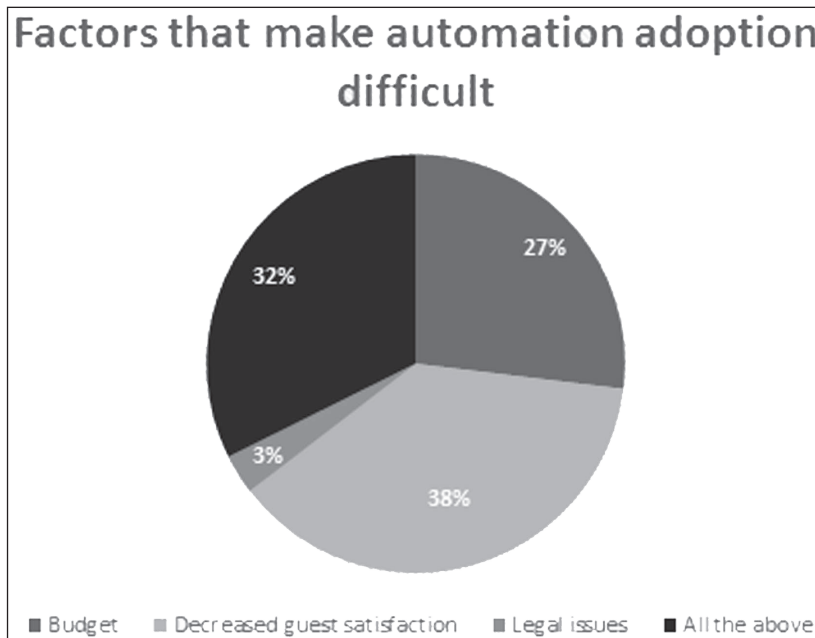


Figure 3: Implementing automation has posed a number of challenges

Impact of technology on hotel profit: The majority of respondents believed that implementing the automation concept will boost the hotel’s profit and business.

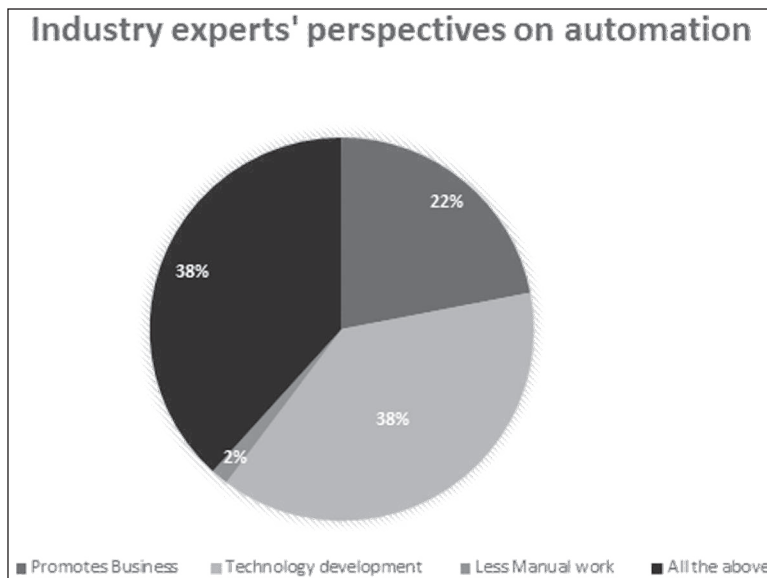


Figure 4: Technology’s impact on hotel profits

Human-robot interaction: The level of communication between a human and a machine/robot is known as human-robot interaction. The acceptability of personal service robots, a robot category with social contact, has diverse and complex associations with socio-demographics such as age, gender, and education, according to Human Robot Interaction research. P107 (Charles Hofacker, 2017).

Guest experience vs. automation: There are numerous variations between guest experience and guest satisfaction. Guest satisfaction refers to a guest's level of contentment as a result of the hotel's service, of which the guest experience is only a minor part. Under normal circumstances, robots can provide good facilities and experience. However, in the instance of a guest with a vision or hearing disability, an older guest with physical challenges, or emergency scenarios at a hotel, a robot may be unable to handle the situation and make quick decisions. Humans want emotional relationships with other humans, especially in high-stress situations that force us to deal with customer service and ultimately result in customer pleasure.

Factors that could cause a fully automated system with robots to fail include:

- Hotel fires
- Bomb threats
- Medical emergencies
- Guests who understand the local language
- Guests with visual and hearing impairments
- Interacting with and resolving guest issues

Preference of technology in hotels: There have been technological shifts in the hotel sector in the past, from manual to digital, and now from digital to automation. Everything was done by hand, using paper and pen records and reservations. Then came the computer revolution, which revolutionised everything by introducing computer-based records and property management systems for reservations, as well as a centralised reservation system for guest convenience. At this time, robots are being used to completely replace humans and computers in the manufacturing industry.

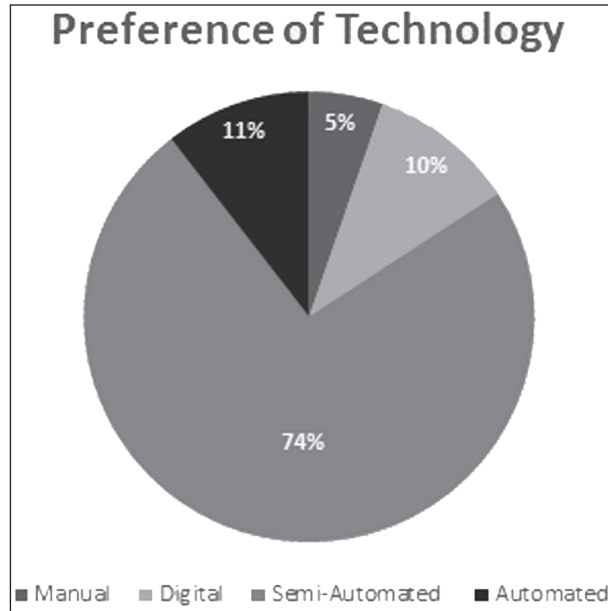
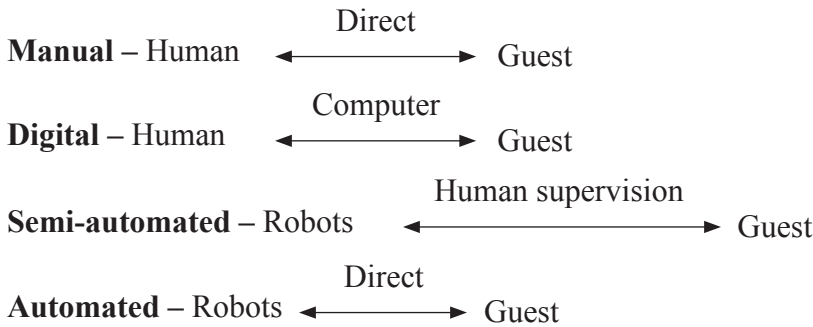


Figure 5: Preference of technology in hotels

In response to figure 5, industry experts clearly declare that the semi-automated idea, which involves robots in service under the supervision of managers and supervisors, is currently well preferred in the business. The hotel and restaurant sector must be proactive in implementing technological improvements while also aiming to maintain high levels of service quality and visitor loyalty (Magnini, Honeycutt, & Hodge, 2003). Fully automated systems will be preferable in hotels in the future, but the industry is still in the early stages of developing automation concepts. As a result, at this early level, robots under human supervision will pave the road for progress. The constraints and limitations of technology should be noted, and they should be addressed in the future. With the advancement of technology, hotels with fewer employees will become more common in the coming decades, which will appeal to travellers seeking a relaxing experience. (Micah Friedman, p. 14, June 2017).

Stages of development



The impact of technology on the hotel's many services

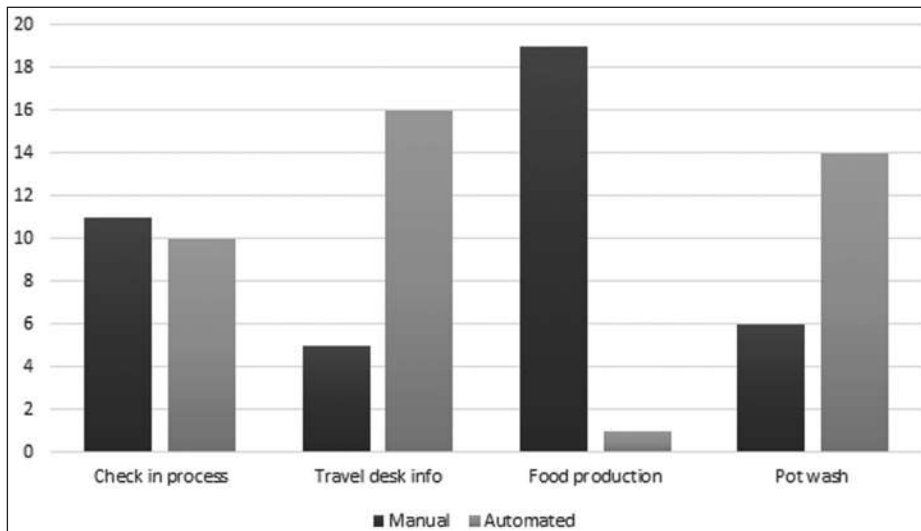


Figure 6: The impact of technology on the hotel's numerous services

Check-in process: This procedure necessitates crisis management and appropriate guest engagement at the front desk. Some business class hotels can automate this procedure because guests have lower expectations and are more focused on their jobs. In the beginning, this may not be valid in tourist resorts and premium hotels. A viable approach is to use trained robots for interaction under the supervision of back office workers.

Travel desk info: Information at the travel desk can be automated with tablet screens with installed applications offered at the office, allowing the guest to arrange according to his own schedule rather than that of a person employed for that specific task. In the event that the guest need assistance, they can contact online agents for more information.

Food production: The hotel sector relies heavily on food manufacturing. The kitchen is an important aspect in many restaurants, cafés, and even five-star hotels. A chef's preference for food preparation is for a precise flavour and combination of components that results in a delectable dish

delivered to a guest. Automated kitchen concepts can be used in any industry that has a model for automated kitchens. The world's first automated kitchen with a completely autonomous system is the Moley Robotics Kitchen (a business that has created robotic kitchen models and has begun selling automated kitchens for hotels). A pair of fully articulated robotic hands is now being developed to mimic human hands' entire function with the same speed, sensitivity, and mobility. Master Chef Tim Anderson, the BBC Master Chef winner, has his cooking talents and techniques recorded on the system, which are subsequently recreated as exact movements by robotic hands (Oleynik, 2017).

Pot wash: To lessen human labour load at the workplace, pot washing, heavy lifting, and other manual tasks can be mechanised. Employers and employees will be safer as a result of fewer unintentional accidents and physical stress.

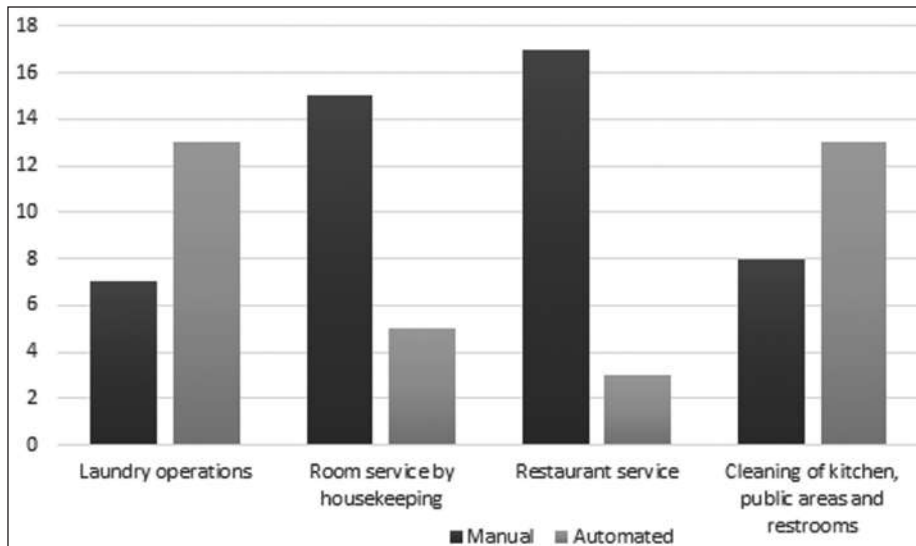


Figure 7: The impact of technology on the hotel's numerous services

Laundry operations: Guest laundry and other linens used in guest accommodations are included in laundry operations. An automated system for the entire laundry process, from washing to ironing, would be extremely useful and minimise labour costs in that sector. In order to keep track of numbers and offer quality guest laundry, human monitoring is sometimes required.

Room service: Manual room service is preferable because it allows for direct guest engagement in the room. A robot could generate confusion at work if the guest asks a question or gives instructions. As a result, having a housekeeper for in-house guests' room service is recommended.

Restaurant service: Personal preference is for restaurant service in order to ensure good service flow and client happiness. However, the usage of service robots can sometimes attract customers who are looking for a unique experience.

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Cleaning of kitchen, public areas and restrooms: Cleaning the kitchen and public rooms involves a lot of hard labour. So, based on the standard operating procedures, frequency schedule, and level of sanity to be maintained, this can be done utilising machines and trained automated systems.

Hoteliers have noticed the following recent technological advancements in the hospitality industry:

- Introducing robots for service
- Robot waiters
- RFID (Radio Frequency Identification), Billing
- Tablets in rooms for room service orders
- Automated check in and check out
- Biometric authentication
- Remote Control in the Room With free companion apps, you can now control your room remotely through your phone or tablet to turn on the TV, browse and order food, and so on. Concierge Apps for Android and iOS now allow visitors to access a variety of services such as arranging spa appointments, setting wake-up calls, ordering a taxi, and more.
- Smart rooms
- Key management
- Systemized monitoring and control
- The concept of IP-based TVs in guestrooms
- Smart rooms
- There's no need to keep track of VCD players or a VCD library. Guests can simply view movies on demand via the internet.

SWOT Analysis on Digitalisation to Automation

SWOT Analysis is developed for the notion of hotels transitioning from digitalization to automation in a better way based on the main and secondary data collected. (2017, Alamdari) (October 2017; Craig Webster) (2018, Sentence)

Strength	Weakness
<ul style="list-style-type: none">• Innovation in technology• Lower labor costs• Higher profits• Higher quality of life	<ul style="list-style-type: none">• High initial outlay• System failure can result in financial losses.• Government policy and licenses.

Opportunities	Threats
<ul style="list-style-type: none"> • Increases business • Attracts new company • New innovation and creativity • Hospitality industry's next age 	<ul style="list-style-type: none"> • Could have an impact on guest satisfaction (lack of human touch) • Technology may not be appropriate in all situations. • Competitive

CONCLUSION

Hospitality isn't a one-dimensional industry. It is a combination of the hotel's lodging, dining, spa, and other amenities. In the commercial world, technological advancements are constantly welcomed. A shift in the labour force will be regarded as a higher degree of automation in the area, requiring fewer personnel, such as low-skilled workers like drivers and cleaners, who will be laid off. On the other hand, there will be a greater demand for high-skilled individuals, particularly software engineers and programmers. However, the technology should be created in such a way that it decreases risks while still addressing the hotel industry's other constraints and issues. Web developments such as 5.0, which aims to instil emotional intelligence in robots, can be a solution to the problems that AI (artificial intelligence) robots face. Robots should be trained for situation handling, emergencies, and the proper handling of human emotions in order to connect with guests in an efficient manner. Another alternative is to use semi-automated systems in the hotel, which are operated by robots under the supervision of people, and which work in accordance with the managers' instructions so that in the event of an emergency, they can handle it.

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A REVIEW IN IMPACT OF ROOM INTERIOR DESIGN ON GUEST EXPERIENCE IN THE STAR HOTELS

Sai Prasad

*Teaching Associate,
Institute of Hotel Management Catering Technology,
C.I.T Campus, Taramani, Chennai – 600 113.*

M. Manikantan

*Lecturer Contract,
Institute of Hotel Management Catering Technology,
C.I.T Campus, Taramani, Chennai – 600 113.*

ABSTRACT

When we talk about interior design and decoration at five star hotels, we're talking about picking a theme, style, color scheme, top quality furniture, flooring, window coverings, artwork, and lighting. It also encompasses the hotel's location, structure, layout, and functional characteristics, as well as making the area accessible to persons with special needs. Hotel interior design and décor is the most significant aspect of five-star hotels since hotel interiors provide the first impression on guests when they walk into the hotel. Interior design is divided into two categories: exterior and internal. The parking space, garden, building design, and structure are all part of the external design. Hotel lobby, rooms, stairways, elevators, restaurant, coffee shops, bar, health club, swimming pool, and kitchens are all examples of internal design. Many Hotels such as the Burj Al Arab in Dubai, The TajMahal Palace in Mumbai, and Raas Devigarh in Udaipur are known for their architectural design.

Interior decoration allows for the use of a variety of materials, depending on the hotel's concept and theme. In addition, the interior designer can use eco-friendly designs in the hotel lobby. Natural light has been shown in studies to improve the guest experience. A good design and a good atmosphere go hand in hand. Ambience was defined as the overall feeling of atmosphere that a person gets when sitting in a space or being in surroundings of a specific design or decor. It is caused by quality, the right colour combination, good lighting, and high-quality finishes.

The main attraction is the guest room. The hotel's product Different types of rooms are decorated differently. Guest rooms are tastefully decorated while adhering to design principles and elements, making them functional and packed with guest amenities and facilities.

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Hotels have been severely impacted by the COVID-19 pandemic, necessitating extensive rethinking of design, decoration, and space planning. These include public areas and restaurants, which must be redesigned for safety and social distancing due to seating restrictions. This is an exploratory study to determine the impact of guest room interior design and decoration on customer experience. The design and décor are the first things that a guest notices as soon as he or she enters the hotel grounds. His or her room is his or her home away from home, and its interior must be designed for maximum comfort, functionality, and expressiveness. The researcher intends to conduct additional research in this area because the guest will be spending a significant amount of time there. The amount of time spent in the room, The researcher wants to know if these factors improve the guest experience when they stay in hotels.

INTRODUCTION

The Critical Importance of Interior Design

The guest room is the main product of any hotel. The primary goal is to make a profit by selling this product. Guests pay more than half of the total cost to make their stay more comfortable and to gain a unique experience. Guests may choose to stay in a hotel for pleasure, convenience, or necessity.

Whatever the reason for the visit, the guest will always expect a certain level of service and value for money in terms of various aspects of the room. It also includes the interior of the room. The interior design and decoration of the room have a direct impact on the guest's stay. When guests enter the room, the first thing they notice is the room design, which has a certain wow factor due to the first impression.

The way the room is dressed makes an impression on the guest.

It is critical to comprehend a visitor's expectations. The guest room should be designed in such a way that when a guest enters the room, he or she can easily use all of the room's equipment. As a result, the guest feels at ease in the room.

People nowadays visit hotels to relax, so they require comfortable bedding and ergonomically designed furniture in their rooms. Like at home, guests expect their rooms to be clean, sanitary, comfortable, private, and secure. A beautiful room that is neat and clean is a basic expectation of any guest. In this case, the last impression has to be the best.

Interior Design and Decoration Goals

Beauty: In this context, beauty refers to a guestroom's aesthetic value and appeal, as well as how a hotel can achieve it. The execution is effective if the vision of the finished product is well decided and everything is planned on paper.

Example: A contemporary modern hotel will go with an accented neutral colour scheme, whereas a heritage hotel may go with color variety.

Functionality: Functionality is concerned with the product we sell the most, the guest room. By functional, we mean that all of the items in the room should be simple to use and clean.

Maintain for housekeeping personnel the space, including furniture and accessories, should not interfere with the movement of the guest and should be clutter-free.

For instance, social space in a room must be planned for proper integration. Guests should be able to sit comfortably and comfortably.

Expressiveness: When a guest sees an interior element, it must portray a design with a definite idea or theme.

The following themes are possible:

Nature, heritage, and geometric, Abstract.

COASTAL INTERIOR DESIGN IS ONE OF THE MOST COMMON TYPES OF INTERIOR DESIGN AND DECORATION

- Decorative Style.
- Interior Design for Today.
- Interior Design in a Contemporary Style.
- Interior Design for Nautical Environments:

Examples of nautical décor can be found in cottage or coastal style décor.

The designers used a sand or white colour for the foundation. The experts also added a splash of blue. The theme is coastal, and the decorative materials are simply ropes, sailboats, seashells in a clear jar, a navigation map, and so on. To create a natural look, the designer uses unfinished wood.

Decorative Design: This refers to the surface enrichment of architecturally designed surfaces. These include all design elements in conjunction with design principles.

Modern Style: However, the designers use both modern and contemporary styles in a reversible pattern. The modern designs are more fluid in nature. This can be changed based on the seeker's preferences.

Natural light, open spaces, natural textured fabrics, either very dark or very light wood tones, neutral colours, and an abundance of metal accent pieces are all elements of contemporary design.

Design in a modern style: Glass and steel are the most commonly used materials in this type of design. This appears to be simple, but it fits in with the rest of the décor.

Bold colours, contrasts or neutral with primary colours, plain area rugs or geometric pattern are all elements of modern interior design. Open floor plans, furniture with clean lines and a smooth and sleek surface, and an asymmetric design made of

The goal is to attract the attention of the guests while also achieving an artistic look with accessories.

Elements of modern interior design include bold colours, contrasts or neutral with primary colours, plain area rugs or geometric pattern, open floor plans, furniture with clean lines and a smooth and sleek surface, asymmetric design made with the intention of attracting the attention of the guests, and an artistic look with accessories.

ELEMENTS OF DESIGN

1. **Lines:** Lines can be seen in the room as vertical, horizontal, or curved diagonal lines, to name a few vertical lines that are commonly seen in walls. Horizontal lines can be seen in windows or as curtain rods, while curved lines can be seen in arches and stair handles.
2. **Form:** Any object with a two-dimensional or three-dimensional angle is referred to as the form or object in the room. These include furniture, accessories, and art objects.
3. **Texture:** Texture provides a much-needed break from monotony in the room. Texture is classified into two types: tactile and visual. Tactile texture, such as cloth or linen, can be felt with the hand and can be soft or coarse. A textured wall in a guest room is an example of visual texture.
4. **Color:** It is necessary for the room to have an immediate positive appeal. Colors determine the mood that must be established in the décor of a room or public area. Guests react to colours in a variety of ways, both positively and negatively, which must be determined based on the function and use of the space.
5. **Design:** Floral, geometric, plain, lines, and checks are just a few examples of patterns that can be found in a room. Upholstery, curtains, furniture, and carpets all have patterns. A larger room can support larger patterns, whereas a smaller room can only support 14th of the design. The pattern can be introduced in the form of a plain carpet, patterned curtains, or a very small pattern on upholstery. Patterns must be followed.
6. **Space:** This is a premium resource that must be used wisely and in accordance with its function. Before it can be carried out, it must first be planned on paper, with dimensions, adequate aisle space, and furniture placement. The room can then be optimised in this manner.

DESIGN ELEMENTS

Themes in a room are represented by design units. In the eyes of the guest, these define the appearance of the room or public area.

1. **Naturalistic:** This theme represents nature, and it may include floral landscaped gardens, as seen in resorts or hill station hotels. The main focus is to see these from the window where the focus is on nature, and the guest has an abundance of views of this in the hotel. Small porches, fountains, and waterfalls, for example, should be incorporated into the hotel to represent continuity and life.
2. **Geometric:** This is based on pure forms such as circles, triangles, rectangles, and so on. This would take the form of motifs found on carpets and upholstery.

Furniture motifs can take the form of dots, stripes, or checks.

3. **Abstract:** This implies/suggests independence from a standard theme. The interior designer is free to use his or her imagination. This theme suggests one specific idea that guests may not understand the inspiration for, but if asked for an explanation, this idea has its own interpretation.
4. **Stylized/Contemporary/Modern:** Unconventional shapes, sizes, and patterns can be found in areas such as furniture, fittings, shapes, and patterns in a room. These themes may give a room a refined, elegant look and feel, making it one-of-a-kind.
5. **Heritage:** These themes are usually related with the city's or province's rich culture and heritage, or with a specific type of ethos that the city is known for, etc. These themes may be found in the hotel's penthouse suites, food and beverage restaurants, and signature suites.

GUESTROOM INTERIOR DESIGN AND DECOR INCLUDE FURNITURE, FIXTURE, AND FITTINGS

Furniture and fixtures include all hardware items present in the guestroom that cannot or are difficult to move because they are fixed in position. The following items are always present in the guest room: main door, windows, locks, telephone, television, minibar, heating equipment, guestroom safe, bed, wardrobe, sanitary fittings, lighting fixtures.

Beds and Bedding: These are an essential part of any guestroom. Beds and mattresses are critical for a good night's sleep. Hotels use beds not only for sleeping or comfort, but also to attract guests with their design. Bedding includes all of the items placed on the bed, such as bed linen and pillow

Soft Furnishings: Various types of soft furnishings are used in guestrooms. Some of them are used for decoration, adding colour, pattern, and texture to the room. Some may be able to provide warmth and comfort. Cushions, curtains, bolsters, duvet covers, and quilts are examples of soft furnishings.

Guest Room Accessories: These are the items that are used to embellish the guestroom. Accessories are chosen based on the subject of the room or the colour scheme of the room. Accessories are chosen not only for their aesthetic value, but also to enhance the overall aspect of a room. Accessories should be put in all significant parts of the room since they serve as focal points, providing a pleasing resting spot for the eyes and capturing the attention of the guests.

Pictures on the wall, various colour and size vases, various shape and size lamps, brass articles and artefacts are some examples of guestroom accessories. Mosaic tiles, stone sculptures, wall hangings, ornamental mirrors, and crystal artefacts are some of the items available

GUEST ROOM INTERIOR DESIGN COMPONENTS

There are various design elements that combine to make a room attractive and functional.

Color Scheme: The designer chooses the colour scheme for the guest room based on the theme and category of the room. Color is an important part of design since it impacts the guest's mood.

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In terms of interior décor and design, there are two types of colour schemes.

- 1) Color scheme with related colours: In this colour scheme, each colour on the colour wheel is related to the others.
- 2) Contrasting Color Schemes: Colors from the opposing side of the colour wheel are used in this colour scheme.
- 3) The purpose of the room should be considered while choosing a colour scheme for the guest room.
- 4) Dimensions and proportions
- 5) A room's size and proportion.
- 6) The amount of light that reaches the region.
- 7) The area's or rooms' relationship to other rooms on the same floor, as well as the corridor.
- 8) Use dark colours in larger spaces to make them appear smaller visually, and lighter colours in smaller areas to make them appear larger visually, creating an illusion.

Lighting

Lighting is an undeniably important aspect of room design and décor. With the help of light, the designer can draw attention to specific areas. Interior lighting has an emotional impact. Light connotes activity, whereas darkness connotes depression. Lighting is necessary in a hotel for the following reasons: • It is functional • It beautifies the area • Light sources can be beautifully expressed by a variety of lampshades

Lighting must also be controlled because too much bright light is tiring and too little dim light is exhausting. As a result, light plays an important aesthetically and functional role in planning.

The amount of natural light that enters rooms through windows should be considered when deciding on lighting. Artificial lighting is required at night. The effects of natural daylight.

A person's happy hormones and solar energy for the hotel It is controlled in a guest room by curtains, sheer curtains, and tinted glass or film.

Window sets

Windows are an essential part of any space and play an important role in guest rooms and other public areas. Hotel sections Windows has four practical and functional applications. They let in natural light, both the room and the public area

- a) These provide a view and a vision of the surroundings outside the room.
- b) They promote fresh air and ventilation in windows that can be opened.
- c) If a guest does not have a terrace as part of his room, he can find an extension through a window.

Window Treatments

Window treatments are applied to windows to make them more ornamental and to limit the amount of light that comes in, as well as to add beauty and character. Soft window treatments and stiff window treatments are the two types of window treatments.

Carpets

Carpets are an element of interior design as well. Carpets are employed in many hotels because they have both functional and aesthetic value.

Flooring

Flooring is an important component of any interior design. The hotel's flooring is used in all areas. It is critical to consider the functionality of the surface when choosing floor surfaces. Hard flooring is long-lasting and dependable. It is also fire retardant and easy to clean. Hard flooring is classified into two types: resilient flooring and non-resilient flooring. Wood flooring, asphalt flooring, and bit mastic flooring are examples of resilient flooring. Stone, concrete, ceramic, and resin flooring are examples of non-resilient flooring. Semi-hard flooring: This type of flooring is less durable than hard flooring and includes linoleum flooring, cork flooring, rubber flooring, and plastic flooring. Soft flooring: This type of flooring is quite warm and slip resistant, and it is available in a wide range of colors, patterns, and textures.

Bathroom in the Guestroom

The bathroom is an important aspect of the guestroom design. The bathroom is divided from the bedroom by sliding panels or a glass divider and is designed according to the room size and type. Vanity counter, make-up area, compartmentalized toilets, and shower area are all included in the guestroom bathroom.

NEED FOR THE STUDY

In today's world, the hotel industry is extremely sensitive to change, customer-centric, and the entire foundation of the business is heavily based on guest likes and dislikes. A first impression is often the last impression in a hotel. This aspect is heavily influenced by the property's design and décor. The purpose of this exploratory study is to determine the impact of the decorative and design aspects on customer experience and whether they enhance or detract from it. Hotels invest heavily in the appearance of their properties and have the most recent design trends incorporated into their structures on a regular basis.

This keeps the hotel looking current, inviting, and competitive. A first impression is usually the last impression in a hotel. The property's design and décor are important considerations in this regard. This exploratory study seeks to determine the impact of decorative and design elements on customer experience and whether they enhance or detract from it.

Hotels spend a lot of money on the appearance of their properties and have the most recent design trends incorporated into their buildings on a regular basis. This ensures that the hotel looks current, inviting, and competitive.

Covid-19

The covid19 pandemic has put hotel businesses all over the world in jeopardy.

The ‘New Normal’ causes a significant shift in the design and décor sensibilities of guests, interior designers, architects, and hotel management.

In the future, innovation, new design, and technology will take centre stage in the interior and exterior of hotel properties.

OBJECTIVES OF THE STUDY

1. To comprehend the significance of hotel interior design and decoration in high-end hotels.
2. To comprehend the effects of various elements of room interior design and decoration on the customer experience.
3. Research current trends in interior design and decoration in five-star hotels during and after the COVID-19 pandemic.

LITERATURE REVIEW

This study focuses on two different types of interior design. SID (structural interior design) and CID (complete interior design) are two types of interior design (CID). Building-related design, such as building plan, wall, ceiling, and floor, is included in SID, whereas furniture, fixtures, and equipment design is included in CID. If the hotel interior design is appealing and guests feel at ease in this atmosphere, they may return to the hotel or demand for the hotel may increase, since the guest should experience a positive emotion toward the hotel’s design. Every category of hotel design and structure, according to the report, is unique. The hotel entry, hotel lobby, furniture arrangement, wall colour, receptionist area, guest room décor, artwork, lighting, carpet, flooring, and so on are the most appealing areas in the hotel. This accounts to most of the area covered under décor and design which is important.

This study examines how hotel guest room design and decorating influenced guest stay or experience, as well as which factors influenced or extended guest stay the most. Two categories of guest personalities in this research paper: ‘upstairs’ and ‘downstairs’ personalities. Introverted people who prefer to spend much of their time alone in their room are described as having an upstairs personality. People with a downstairs personality spend the most of their time in public spaces. Guests’ pleasure is influenced by their guest room experience, according to this research report, because the interior design of the guest room makes them feel relaxed and comfortable. When it comes to evaluating their hotel stay, business traveller’s employ a variety of criteria. It contains information such as the location, price, and look of the product.

Focuses on broad modern hotel interior design theory that may be applied to the creation of new hotels. Each hotel is designed around a single concept and makes advantage of its own geographical context. There are three types of perceptual levels, visual, space-time, and logical perception. We record visual perception by viewing a place for the first time with our eyes and experiencing awe. This is how we react when we come across a unique and amazing

design. When we have a dynamic experience as a result of a design, this is referred to as space-time perception. And rational perception entails creating the hotel based on our own personal experiences. Successful hotel design, according to the researcher, should take advantage of the local surroundings. i.e., space and regional cultural themes.

Hotel interior design components such as scale, final material, furniture, and its organization. Interior design is both an art and a science for improving the interior space. The mood and design of a physical place, according to the researcher, are generally attractive to guests. Also, socio-demographic characteristics such as age, gender, marital status, and economic level influence home design and décor.

We all know that hotel interior design influences the guest experience and first impression. The floor, ceiling, walls, windows, doorways, and stairways are all included in this research paper's discussion of interior space within buildings and architectural features. Depending on the subject and location, each hotel has a unique design. Depending on the sort of room, there are several layout options.

We know that because of covid -19 situation there are lots of changes in hotel design. According this article previously hotel spend more money on artificial design but because of this pandemic situation whole scenario is changed now most of the guests are preferred nature oriented place.

That in this covid-19 situation interior designers are work so hard to create hotel common spaces has been extinguished by new physical distancing requirements. Now designers are work on immediate fixes like six foot spaced tape on the floor and acrylic panels at check in counters.

Interior designers are designed air quality control panels inside the guestroom. It is a neutral and slightly positive compared to the corridor, with low volumes of outside air and exhaust air. Rest room exhaust systems are also inspected continuously and filtered out air continuously. Designers are look to create multifunctional guestrooms. Designer try to create touch-less entry doors, smart HVAC systems, touch-less television.

RESEARCH METHODOLOGY

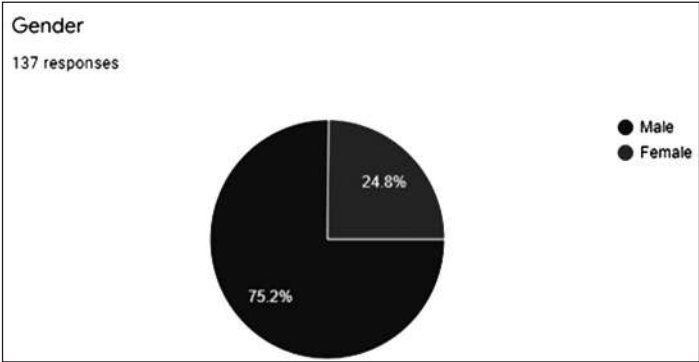
SAMPLE: Total 138 respondents participated in this survey. The survey was conducted by random sampling method and questionnaire was filled by people who have visited star hotels at least once to stay.

QUESTIONNAIRE: The questionnaire consist of various MCQ's related to room interior design and decoration in star hotels.

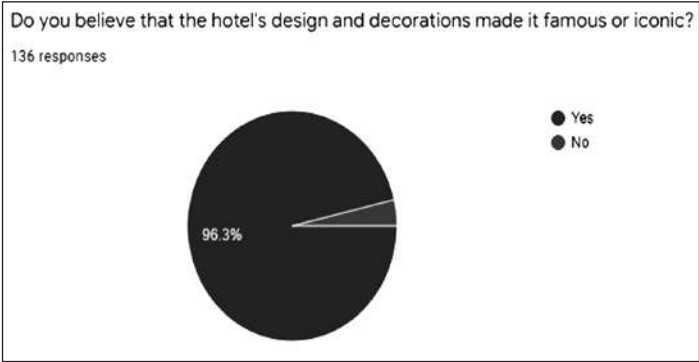
SECONDARY DATA: The secondary data collected by magazines and books and research papers.

DATA ANALYSIS: Demographic profile of respondents is shown through pie diagram below

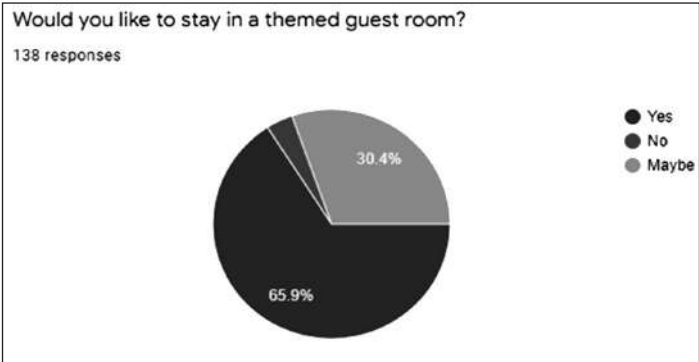
The following are the statistical report found from the survey



Out of 138 people totally 24.8 % female and 75.3 % male has voted . for the different questionnaire.

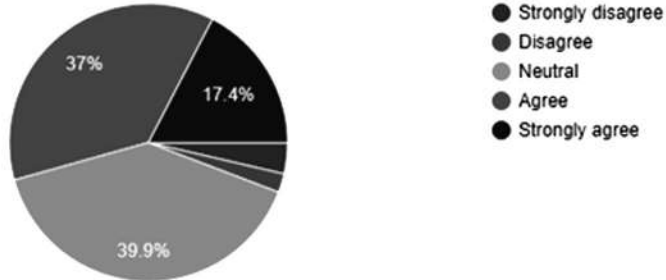


Out of 136 responses



Do you agree that the design and decor should be functional from the perspective of the guests?

138 responses



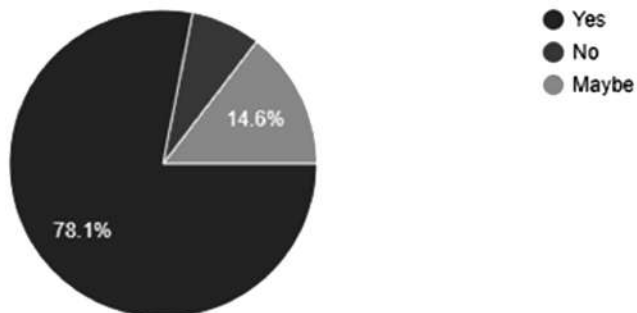
furniture is very significant from a comfort standpoint

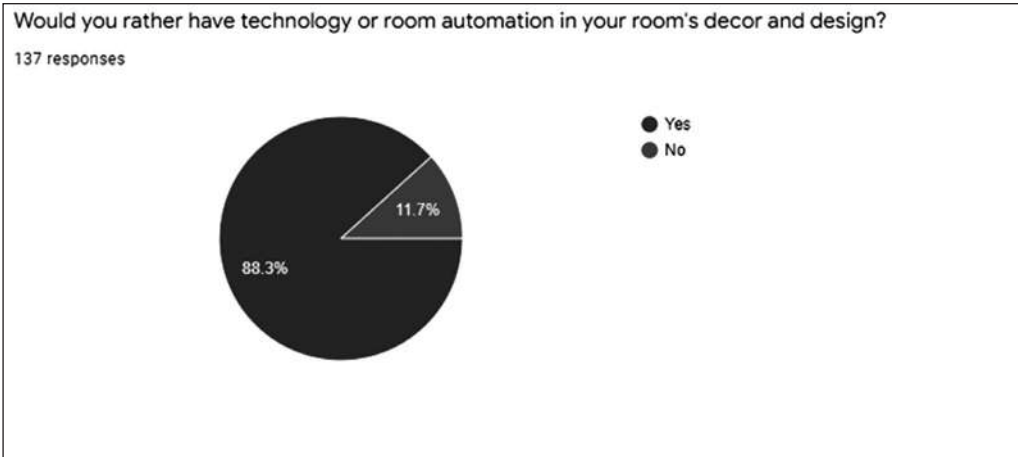
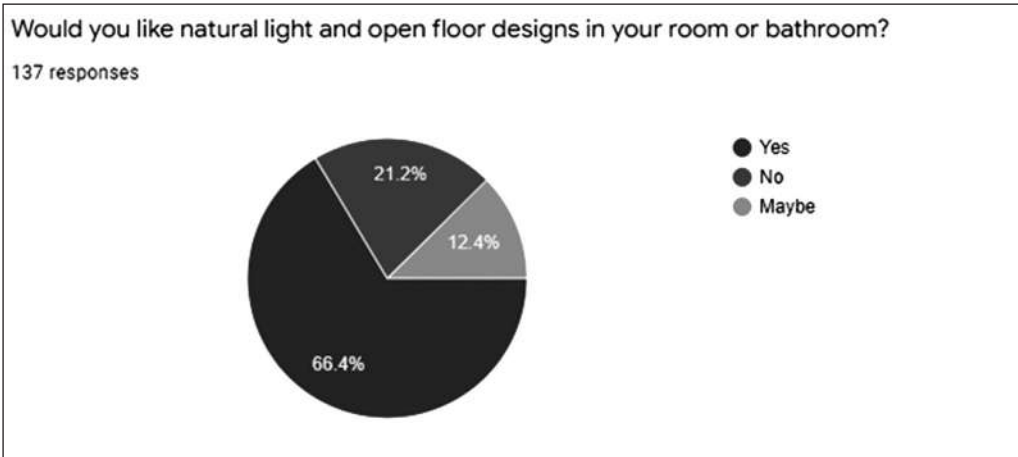
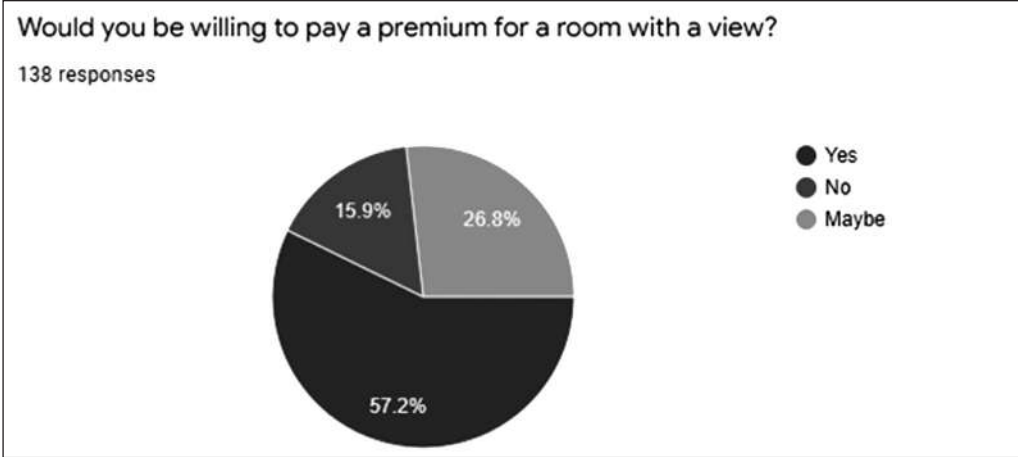
135 responses

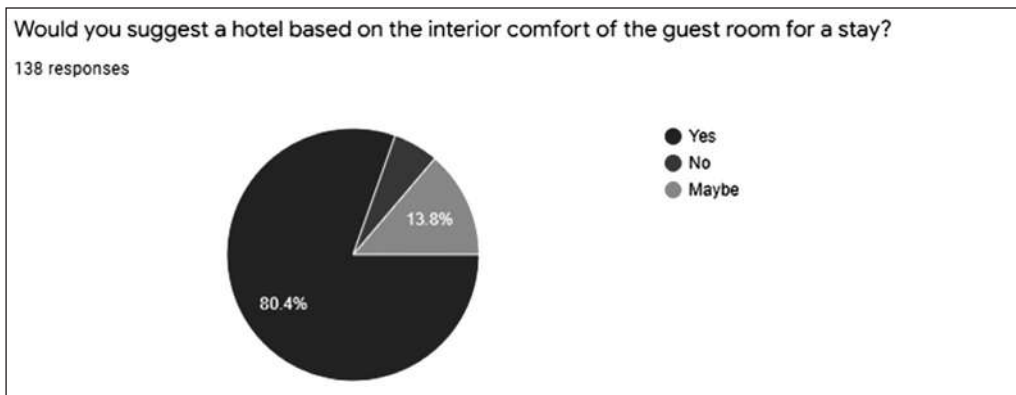
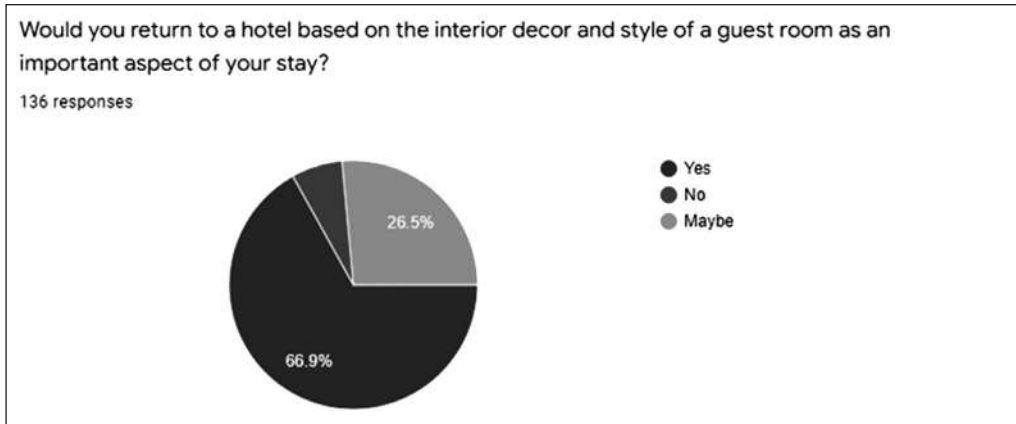


Are you aware that the size of a room's design is determined by its category?

137 responses







CURRENT INTERIOR DESIGN AND DECORATION TRENDS DURING AND AFTER COVID-19

Self-check-in portal installed at the hotel’s entrance. To open an assigned guest room, hotels send a code to the guest’s mobile phone.

- The emphasis is on hygiene, sanitation, and severe cleaning methods, with social distancing advocated in guest rooms as well, with chairs arranged so that people sit far apart.
- To prevent utilising fingers for touch, the guest’s mobile phone is connected to all of the room’s buttons and switches via a specific app.
- If a visitor is using the mini-bar at the moment, the cost is automatically added to the guest’s folio when the bottles are removed from the bar.
- Natural resources are used in the majority of hotels.

CONCLUSION

Room interior design and decorating has a significant impact on the visitor experience in five-star hotels, as well as helping to enhance revenue and repeat business. There have been numerous improvements in hotel room architecture as a result of the COVID-19 outbreak. Different elements and components of interior design and decor have an impact on guest stays, as well as expertise. Since the old age due to various changes in cultural behaviour in the society also from the results the changes has an intensive impact in the interior designs in the star hotels.

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A STUDY ON EMERGING TRENDS IN PEST CONTROL PRACTICES

S. Jananika

*Second Year M.Sc. in Hospitality Administration,
IHM, CTAN, CIT Campus, Taramani, Chennai-600113.*

Michael Santhosh. A

*Lecturer,
Institute of Hotel Management Catering Technology,
C.I.T Campus, Taramani, Chennai-600113.*

ABSTRACT

Purpose – The aim of the study is to suggest better ways of pest control methods that can be used in hotels which also can help in gaining credibility.

Design/methodology/approach – The study used face to face interview, telephone interview technique. A questionnaire was made and circulated among the students who had minimum of 4 months experience in the hotel industry and various people from the hotel industry. A usable sample of 94 participants resulted.

Findings – The results indicate that even though maximum of the respondents agreed that rats can cause a huge loss to the hotels, when gave a option of choosing between trap and poison they choose traps rather than giving poison and killing them.

Article Type: Research paper.

Keywords: Pest, Pest Control, Pesticides, Rodents, Chemicals, Organic, Termites, Monkey Menace, Bed Bugs, Hotels.

INTRODUCTION

Pests are unwanted guests which can cause a lot of damage to the hotels. The guests visit hotels to take rest and spend their time in leisure but when a guest is encountered with a pest in the hotel, it creates a bad impression about the property. Pests can ruin a guest's stay at the hotel and leave behind a bad experience in the hotel. The guest who had a bad experience because of the pest may leave a negative comment on the social media which may give a bad reputation to the hotel and which will in turn affect the business seriously. A lot of reviews in tripadvisor and goibibo website showed that even though the location and service level of the hotels were up to mark due to monkey menace the guests were not able to enjoy the stay. They were asked to keep the doors and windows always closed to prevent monkeys entering guest rooms and also few stated that they were not able to use the balcony. Thus, it is a very important task for the housekeeping department to keep the pests in control.

Jananika & Michael Santhosh



METHODOLOGY

The study is based on the primary data collected by administering a structured questionnaire to the students and the people from hotel industry. For face to face and telephone interview, convenience sampling technique is used for selecting pest control agency and the respective employee. Before starting this research a series of informal interviews were conducted with the employees of pest control agency to gain some insight into this matter. From those interviews it was found that hotels have to acquire license from agriculture department for storing and using pesticides in hotels. Based on these interviews, questionnaire was made to find out the respondents experience, opinions and awareness about pests and pest control. The study uses likert scale of 1 to 5, where 1 represents agree and 5 represents disagree.

VARIOUS PESTS FOUND IN HOTELS

In general terms insects, small animals and unwanted microbial growth (e.g. fungi) which has the potential to cause damage to the furniture, fixtures and equipments (FFE) and illness and discomforts to humans are considered as pests.

Common pests

- Mosquitoes
- Flies
- Cockroach

- Rodents
- Termites
- Bed bugs

Common pest control carried out in hotels includes

- General disinfestations
- Vector control
- Cockroach control
- Rodent control
- Bed bugs control
- Termite control

GENERAL DISINFECTION

General disinfection is a combined, effective treatment against all house hold pests like cockroaches, bugs, moths, spiders, lizards, ants, silverfish, etc. The intermediate and ultimate control of these pests can be done by spraying a special insecticide formulation which will not only destroy the pest and their eggs but also leaves a residual action which prevents reinfestation for longer period.

Chemical name:

- Solfac SC (cyfluthrin) -2 ml per litre
- Responsar
- Propoxur 20% EC (20 ml per litre)
- NT – Cock (Alpha cypermethrin 10 SC)
- Cockroach gel: Apply two small drops at place, where cockroaches are found. When the cockroach eats the gel it will die. (It is a eco-friendly method, safe to use and odourless)

VECTOR CONTROL

Mosquitoes and flies are carriers of diseases like malaria, dengue fever, dysentery, cholera etc. They breed in areas such as drainage streams, street sewers which don't drain completely, rain barrels, buckets of water, swimming pools, drain lines from rain gutters, shrubs, trees, slow moving water, just about anywhere water is used or is able to accumulate.

A multi pronged method is used to tackle the mosquito menace, which includes controlling/eradicating mosquitoes with a planned usage of larvicide at their breeding sites.

Residual spraying of the insecticides and adulticides in the adult resting places, in and around the premises.

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Fogging of the external areas can also be done depending on the sensitivity of the premises to combat the menace of mosquitoes.

Chemical name:

- solfac Sc (cyfluthrin) – 2 ml per litre
- K-othrine flow
- TATA Sentry
- Responsar SC (beta cyfluthrin) 20 ml per litre
- Pyrethrin (fogging and spray)
- King fog ULV (0.5 ML)
- Deltamethrin 1.25% ULV
- ARBUDA Delta fog
- NCore

COCKROACH CONTROL

Roaches are a health hazard, carrying bacteria on their bodies that are transmitted to humans.

The main diseases transmitted are different forms of gastroenteritis including food poisoning, dysentery, and diarrhoea.

To combat the menace of cockroaches, a multi pronged approach wherein all the areas are treated with a Non toxic Anti cockroach paste a product which is (1) totally non toxic by nature (2) totally odourless (3) can be done in operational areas without having to make special arrangements or shut down for the same.

Monthly once areas like kitchen, restaurants and other food areas which have high risk of infestation will be treated with low toxic chemicals.

RODENT CONTROL

Rats cause damage by their feeding habits running into thousands of million tonnes of food, feedstuffs throughout the world, but losses due to contamination is even higher.

Rats devour food stuff. Rats contaminate food with droppings, urine, hair and germs. They destroy packaging material and gnaw wood, pipes, electrical cable, etc.

Rats transmit disease to humans and animals e.g. bubonic plague. They also cause bite wounds and other injuries.

Rodent control programme includes inspection, sanitation, proofing, baiting and future monitoring.

Glue pads can be used and rats can be controlled and eradicated by spreading rat killing cakes.

TERMITE TREATMENT

Termites also known as white ants are tough, well organized, most persistent insects. There are two types of commonly found termites – subterranean termites and Non – subterranean or wood termites.

Termites are social insects which continually seeks a source of cellulose to feed their colony members. Such searches for cellulose lead them to the human habitats where they can find paper, cloth, wood and other sources of cellulose. When they have established a trail to the source of their food, the presence of mud tubes made by the termites is one of the signs of termites. Apart from that the frass caused by their damage and occurrence of live termites too indicates their presence and possible damage to the cellulose containing materials.

Termites are mainly responsible for damages in buildings. They are always connected to the soil or close to any moisture source. The main symptoms of these kinds of termites are the presence of mud – tubes in a area within the building. These termites attack the building through tiny cracks and crevices in the foundation, floors, and walls. They cause severe damage to property by destroying furniture, wooden frame works, doors, windows, beams, paper products or anything that has a cellulose base. The prevention for this kind of termite infestation is a pre – construction treatment that has to be done at the time of constructing building. However for the buildings that has not done a pre – construction treatment, post – construction treatment is also available to prevent similar damage.

Treatment against termites is by odourless termiticides applied on the wall – floor junction and affected wooden sections of a building.

Chemical name:

- Premise SC (Imidacloprid 30.5%). Premise does not kill termites immediately on contact; instead it allows more termites to be exposed to the treated soil thus, giving a better control.
- Biflex TC (Bifenthrin)
- Chlorpyrifos 20% EC

Active ingredients used in pest control chemicals are abamectin, cyfluthrin, fipronil, permethrin, bifenthrin, hydramethylnon, pyrethrum, boric acid, deltamethrin, IGR (Insect Growth Regulator).

CHEMICALS WITH ODOUR

Odour chemicals doesn't always mean there is a health risk, but at the same time many chemicals including some pesticides odour can make people sick or affect their quality of life.

All the odours represent an exposure to a chemical. The chemical you smell may not be the pesticides active ingredient itself. Active ingredients that target pest, solvents used to dilute the formula and other ingredients designed to make the products work better – any one of them may produce a sickening odour.

Side effects

It may affect the health, causes irritation in eye, nose and throat. It may cause damage to the central nervous system and kidney. Headache, dizziness and nausea can also be experienced.

ODOURLESS PESTICIDES

Odourless concentrate is Non – irritant, the formula does not contain any organic solvents that could give rise to unpleasant smells associated with emulsifiable concentrate formulations.

Odourless pesticides are Non – flammable, making it safe to transport and store almost anywhere. It is Non - staining and recommended in sensitive areas.

ULTRASONIC PEST REPELLERS

These electronic devices use high frequency to keep the rodents and insects away. It doesn't cause any harm to humans.

ANALYSIS

Table1: Analysis of awareness, experience and opinions of the respondents

S. No.	Description	No. of Respondents	Respondents (%) Total respondents = 94
1.	AGE		
	18 – 24		
	25 – 30	78	83
	30 – 35	4	4.3
	35 – 40	4	4.3
	Above 40	3	3.2
2.	QUALIFICATION		
	12 th	14	14.9
	Under graduate	48	51.1
	Post graduate	28	29.8
	Ph.D	1	1.1
	DHM	1	1.1
	Graduate	1	1.1
	Restaurant work	1	1.1

3.	Which of the following are pest		
	Rodents	67	71.3
	Mosquitoes	78	83
	Ants	51	54.3
	Cockroaches	83	88.3
	Termites	75	79.8
	Bed bugs	77	81.9
	Flies	62	66
	Spiders	53	56.4
	Lizards	44	46.8
	Monkeys	14	14.9
4.	AWARE THAT PEST CONTROLS ARE CONDUCTED IN HOTELS		
	Yes	88	93.6
	No	6	6.4
5.	FACED INCONVENIENCE DUE TO PEST WHILE STAYING IN HOTEL		
	Always	5	5.3
	Sometimes	61	64.9
	Never	28	29.8
6.	WILL NOT AGREE TO STAY IN A GUEST ROOM WHICH HAS PEST		
	Yes	83	88.3
	Sometimes	5	5.3
	No	6	6.4

7.	AWARE THAT LICENSE HAS TO ACQUIRED FOR USING PESTICIDES IN HOTELS		
	Yes	61	64.9
	Not much aware	30	31.9
	No	3	3.2
8.	AWARE THAT ORGANIC PESTICIDES ARE AVAILABLE		
	Yes	80	85.1
	No	14	14.9
9.	ORGANIC PESTICIDES ARE EFFECTIVE THAN CHEMICAL PESTICES		
	Agree	20	21.3
	Slightly agree	16	17
	Neither agree nor disagree	41	43.6
	Slightly disagree	13	13.8
	Disagree	4	4.3
10.	REGULAR PEST CONTROLS HAS TO BE CONDUCTED IN HOTELS		
	Agree		
	Slightly agree	64	68.1
	Neither agree nor disagree	11	11.7
	Slightly disagree	8	8.5
	Disagree	4	4.3
		7	7.4
11.	BEST METHOD TO ERADICATE RODENTS		
	Trap	58	61.7
	Poison	36	38.3

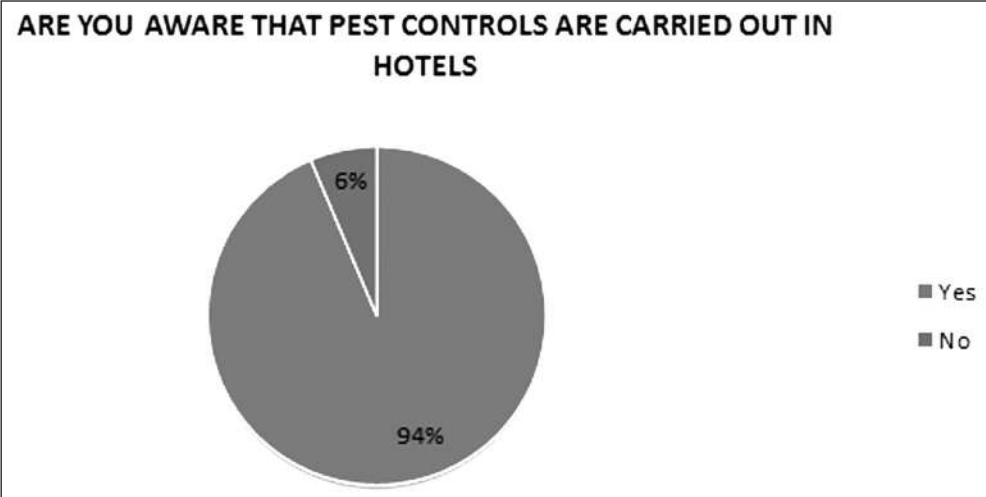
12.	RATS CAN CREATE HUGE LOSS TO THE HOTELS		
	Agree	61	64.9
	Slightly agree	13	13.8
	Neither agree nor disagree	7	7.4
	Slightly disagree	9	9.6
	Disagree	4	4.3
13.	BED BUGS CAUSES DISCOMFORT WHILE SLEEPING IF NOT CONTROLLED OR ERADICATED		
	Agree	71	75.5
	Slightly agree	6	6.4
	Neither agree nor disagree	7	7.4
	Slightly disagree	4	4.3
	Disagree	6	6.4
14.	SAFE DISPOSAL OF GARBAGE IS A PEST CONTROL METHOD		
	True	75	79.8
	May be	15	16
	False	4	4.3
15.	MONKEYS ARE CONSIDERED AS PESTS IN RESORTS AND HILL STATIONS		
	True	19	20.2
	May be	46	48.9
	False	29	30.9

From this table we get to know that the maximum of the respondents fall in the age group of 18- 24 (83%) followed by the age group of above 40 (5.3%), 25 – 30 (4.3%), 30 – 35 (4.3%) and 35 – 40 (3.2%).

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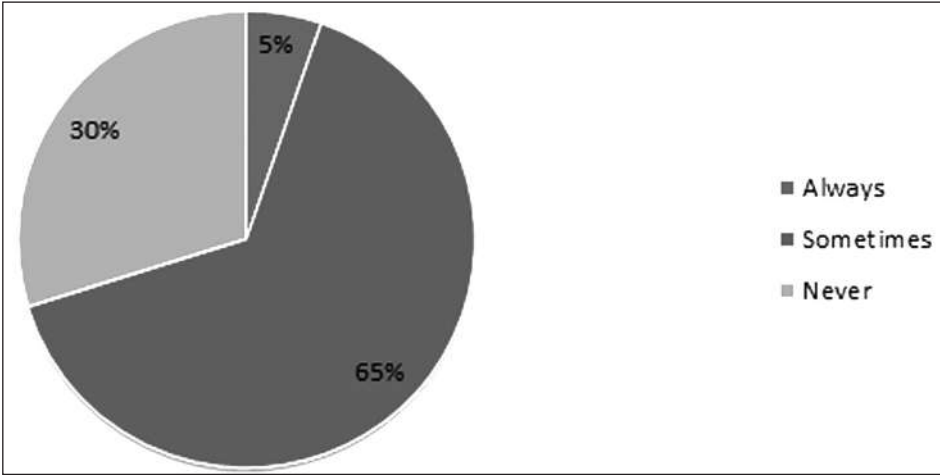
Majority of the respondents were educated and degree holders.

Maximum of the respondents (88.3%) considered cockroaches as pest followed by mosquitoes (83%), bed bugs (81.9%), termites (79.8%), rodents (71.3%), flies (66%), spiders (56.4%), ants (54.3%), lizards (46.8%) and monkeys (14.9%).



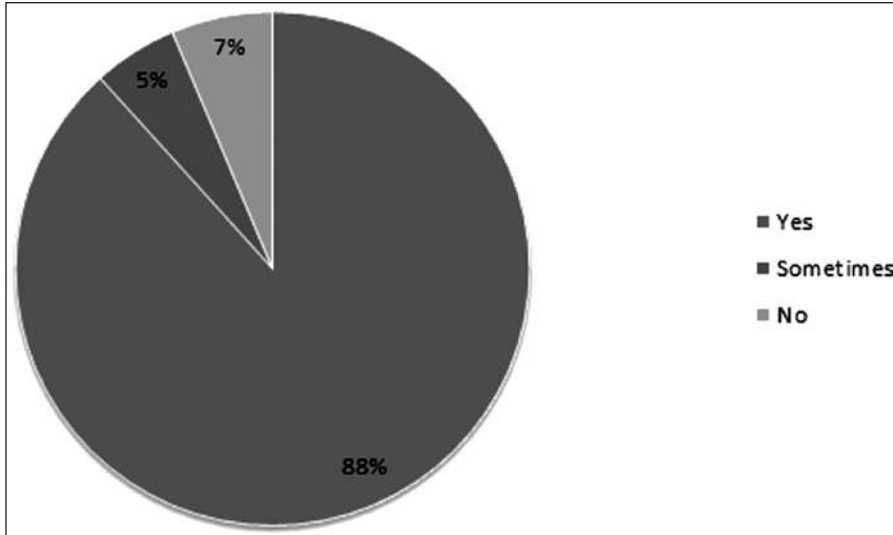
88 out of 94 respondents (93.6%) were aware that pest controls are conducted in hotels.

HAVE YOU EVER FACED ANY INCONVENIENCE DUE TO PEST WHILE STAYING IN A HOTEL



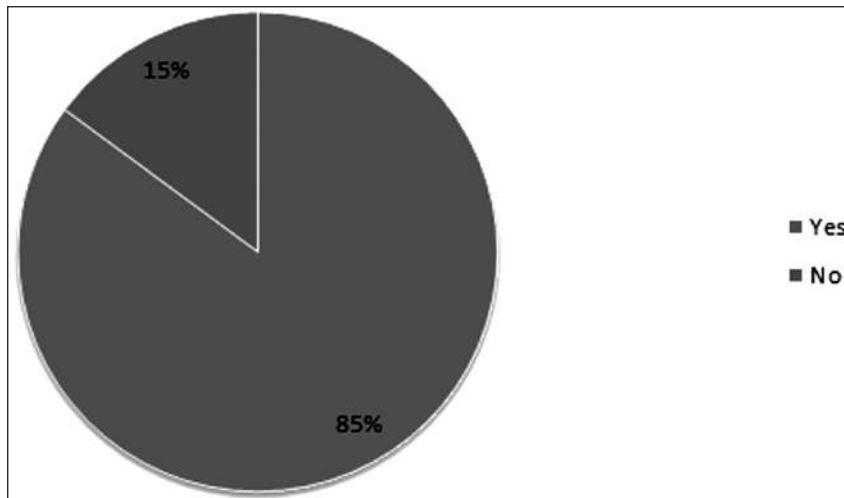
Almost 65% of the respondents had faced inconvenience due to pest while staying in a hotel, 5.3% of respondents had always encountered with pest and around 30% (28 respondents out of 94) never had such experience.

AS A GUEST YOU WILL NOT AGREE TO STAY IN A ROOM WHICH HAS PEST



83 respondents (88.3%) will not agree to stay in a guest room which has pest, 5 out of 94 respondents (5.3%) has tolerance and only sometimes they will deny to stay in a room which has pest, 6.4% of the respondent don't have any issues in staying in a room which has pest.

ARE YOU AWARE THAT ORGANIC PESTICIDES ARE AVAILABLE IN THE MARKET



64.9% of the respondents were aware that license has to be acquired for storing and using pesticides in hotel almost 32% of them had some idea about this whereas 3 out of 94 respondents had no idea about the license.

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Around 81% of the sample is aware that organic pesticides are available in the market and only 14.9% of the sample did not know about it.

20 respondents (21.3%) completely agreed with the statement that 'organic pesticides are effective than chemical pesticides, 17% slightly agreed, and 13% slightly disagreed and only 4% completely disagreed. 41 out of 94 respondents (43.6%) neither agreed nor disagreed to the statement.

64 respondents out of 94 (68.1%) fully supported the statement 'conducting regular pest control in hotels is necessary, 11.7% slightly supported, 4.3% slightly disagreed, 7.4% completely disagreed.

61.7% of the sample chooses using trap as best method for eradicating rodents rather than using poison.

61 out of 94 respondents (64.9%) agreed that rats can create huge loss to the hotels, 13.8% slightly agreed with it while 7 of the respondents neither agreed nor disagreed, 9.6% of them slightly disagreed and 4.3% completely disagreed.

75.5% of the sample completely agreed that bed bugs causes discomfort to the guests while sleeping if not controlled or eradicated, 6.4% slightly agreed, 7.4% neither agreed nor disagreed, 4.3% slightly disagreed and 6.4% completely disagreed.

Around 80% of the sample accepted that it is true that safe disposal of garbage is also a pest control method, 16% thinks it may be a pest control method while 4 out of 94 respondents said it is a false statement.

20.2% of the sample says it is true that monkeys are considered as pests in resorts & hill stations, 30.9% says it is false, while 48.9% thinks monkeys may be considered as pests.

SUGGESTIONS AND CONCLUSION

In this study it was found that maximum of the respondents considered cockroaches as pest even when rats and termites had the potential to cause physical damage to the property and most of them are aware that pest controls are carried out in hotels.

It is also found that most of them agreed that regular pest control has to be conducted in hotels and also as a guest, they will not agree to stay in a hotel room which is infested by pests.

When contacted Taj group of hotels & Somerset group of hotels in Chennai city it was found that they adapted contract based pest control. The contract people are responsible for annual maintenance and they should have got valid trade licence for doing pest control.

From this study, it is suggested that using of chemical free pesticide can bring a positive impact on hotels and the employees.

Using of organic or chemical free pesticides can reduce the health risks of both the employees and the guests.

LIMITATIONS OF THE STUDY

The following are the limitations of the study

- This study is carried out in Chennai district only.
- The employees, hotel school graduates, faculties, HRM department staffs, pest Control Company are only considered for data collection.

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NEW MARKETING TRENDS IN HOTEL ROOMS

Shivani

*P.G.D.M. student,
Welingkar Institute of Management, Mumbai.*

Mayank Singh

*P.G.D.M. student,
Welingkar Institute of Management, Mumbai.*

ABSTRACT

Objectives: The major goal of the study is to figure out what marketing methods are used in hotel rooms. In the midst of a global pandemic, when everyone is focused on social isolation rather than travel, hotel room marketing has become increasingly difficult. As a result, many hotels, large and small, are battling to stay afloat. The recent year has shown how the pandemic has altered hotel marketing trends, as well as how lifestyle changes have affected traditional workplaces. But there was a big shift in technology with major breakthroughs in digital and touchless hotel technology, contactless service alternatives, and a full revamp of how guest and employee safety is maintained in every sector, including the hospitality business. One of the most significant issues that individual hotels face is competition within the hotel. Hotel room marketing is critical since it allows hotels to sell their properties, showcase their distinctive features, set themselves apart from competitors, and demonstrate the benefits of staying there. Finally, staying current with hotel marketing trends and engaging customers through marketing can assist hotel owners in increasing the amount of bookings and money they earn.

Design/Methodology/Approach: The paper is based on a summarized review of previous theoretical contribution.

Findings: The analysis of new hotel room marketing strategies and describes different and numerous activities involved in marketing. A proactive and trustworthy implementation of these activities enables hotel rooms maximize their revenue.

Originality of the research: The study can help us to understand how important it is to be updated in all aspect of marketing to be in the competition. These can serve as a valuable source of information in academic circles and be especially useful to marketing managers in hotels that aim to be one step ahead of competition.

Keywords: Marketing strategies, Technologies, Hotel rooms.

INTRODUCTION

Hotel room marketing is an umbrella phrase that refers to the many marketing strategies and techniques used by hotels to promote their business and make a positive impression on their consumers. It all boils down to making a hotel as appealing as possible in order to attract as many visitors as feasible. Hotel marketing takes place online as well as in person in the digital age, and hotel businesses must maximise their visibility through website traffic, social media, email, and a range of other platforms. The hospitality industry's extremely competitive business climate necessitates the development of innovative marketing techniques in order to gain a larger market share. As a result, hotels devise unique marketing techniques that enable them to get a competitive advantage over other firms in the same industry.

HOTEL ROOMS MARKETING

Marketing arose from a requirement to focus on accepting a set of administrative tactics in order to satisfy customers' needs as a result of economic and business pressure. The hotel sector's marketing evolution is similar to that of any other industry. The fundamental reason for hotel room marketing is the increase in the number of guests in need of accommodations, as well as the increased competition among accommodation service providers. Furthermore, the hotel sector is maturing as a market, with worldwide competition increasing and customer acquisition becoming a challenge. As a result, there has been a significant shift in marketing. Digital marketing has transformed the marketing industry and opened up new channels for selling products, such as social media marketing, internet and mobile applications, and search engine optimization (SEO), to advertising on Google and online magazines through search engine marketing (SEM). Competition from intermediaries such as travel agents and tour operators will be present for all hotels, as they are one of the sources that brings guests to the hotel through their advertisements.

NEW MARKETING TRENDS IN HOTEL ROOMS

The Future: Metaverse, Virtual Reality, Augmented Reality

The terms "metaverse," "virtual reality," and "augmented reality" have become fashionable. While hotels may not use them, it's certainly entertaining to speculate about what hotel marketing might look like in the not-too-distant future. The larger chains with bigger budgets will be the first to adopt virtual reality. Imagine a guest being able to virtually walk inside your hotel and tour their room before making a reservation. Augmented reality is a virtual reality gateway technology. This may appear to be an online meeting, but it allows planners to move and create portions of the meeting online to suit their needs. Guests can also use augmented reality during their stay. Smartphones can be used to display QR codes or maps that represent services, features, and deals in the palm of your hand. Imagine a scavenger hunt similar to Pokemon Go for locating goodies in real life but on a smartphone if your hotel caters to families. Such features give one-of-a-kind experiences that guests will enthusiastically share on social media.

While the metaverse does not yet exist, keeping an eye on advancements and letting your imagination go wild is entertaining. Perhaps virtual hotel stays are on the future for those armchair tourists who wish to visit from far.

Search Engine Optimization (SEO)

Getting a better hotel company might be as simple as optimizing a hotel website. It is a method of increasing the visibility of a website in search engine results, and it is based on key terms and the frequency of the website in search engine listings. The higher ranked website is determined by the number of visitors who visited the website regularly on the search results page, as well as how frequently a site appears in the search results list. This will assist hotels attract more visitors, who will then become hotel guests. SEO can target different types of searches, such as word searches, local searches, video searches, image searches, and institutional searches. For example, in a hotel, the location, amenities, and news about the hotel will drive traffic to the website, and SEM tools can help improve web site traffic. Every hotel must have a website, which is becoming increasingly vital for making hotel rooms available online. The main goal of that website is to drive visitors to a specific hotel web site using internet technologies.

Touchless Tech and Customer Expectations

We've talked a lot about how COVID-19 has affected hotel guests' expectations. Flexible cancellation rules, high sanitary standards, and safety measures may forever alter guest expectations. Touchless hotel technology, which was available before the pandemic, has come into its own in recent years, allowing hotels to deliver safer and more socially distant services like self-check-in, mobile messaging, keyless entrance, and smart room technology to decrease physical touch. Using AI for Personalization In guest-facing touchless hospitality technology, the ultimate goal of AI is to provide guests with a tailored experience during their stay. In the coming year, promoting how your hotel is exceeding guest expectations and keeping guests and workers safe will be a crucial hotel marketing tactic. Using the property's website, digital marketing, and email communications, keep visitors informed about the property's Covid protocols and efforts. Customers anticipate a positive experience with the company and expect support professionals to be helpful - after all, no one like hearing promises from customer service that go unfulfilled (or not even hearing any promises at all). Basic customer service is provided through AI-powered chatbots. A chatbot on your hotel's website can assist you in answering all of a user's questions and converting them into a customer.

Automated Email & SMS Campaigns

Email marketing still yields the highest return on investment of any marketing strategy. Marketing have been accepted into their personal email; thus, it is also the most personal. Hotels that respect this prerogative will gain the biggest benefits. This implies that out of respect for your guests, marketing emails must be extremely tailored, relevant, and beneficial to them. Let's see how it is done, create visitor segments based on specific demographics and interests using customer relationship management (CRM) systems like Revinat and Cendyn that are informed by your property management system (PMS) data. This makes sending relevant email offers

and information a breeze, especially if your PMS or email platform automates the process. The same is true for SMS, however your campaigns must be significantly shorter. Text messaging marketing has typically been more popular among younger groups, but older generations are starting to catch on. Use SMS to tailor communication with guests during their stays as well, by asking if they require anything or offering on-site promos like restaurant discounts.

Hotel Sustainability and Cause Marketing

While the year 2020 did not provide us flawless vision, it did force us to examine our collectively flawed view of social injustice and environmental challenges. Hotels will not only tell visitors what they are doing to help the environment, but will also invite them to participate. This can be accomplished, for example, through a giveback scheme in which a percentage of each booking is donated to a specific cause. In order to strengthen the economy, small firms must rely on and lift one another. Local services and partnerships benefit your community while also attracting visitors. Use social media and your website to promote local companies, from restaurants to activity providers. Packages or add-ons with partnership offerings could be incorporated.

Loyalty Programs and Memberships

While loyalty programs are not new to large hotel chains, many small hotels will incorporate them into their marketing strategies. When tourism is more localised than ever, independent properties have an even better chance of attracting repeat guests. Loyalty programs are effective because they maintain existing relationships while also allowing you to make highly targeted offers. Hotels can create their own loyalty programs and memberships, or they can use firms like Stash Rewards and Voila to access ready-made networks that include other properties.

Influencer Marketing

Influencer marketing involves both classic and new types of marketing and is based on the premise that celebrity endorsements can help a product or service get a new audience that is more closely identified with the celebrity of choice. Influencer marketing has evolved as a result of the advent of social media and is swiftly becoming a cornerstone of social media marketing in a range of industries. Indeed, with the support of a built-in audience, an increasing number of hospitality organisations are beginning to employ this marketing method to promote their hotel rooms in an almost seamless manner. By gaining more exposure, influencer marketing may help hotels drastically enhance brand awareness. Furthermore, by selecting the correct influencers to work with, the investments could yield excellent outcomes, ensuring a high return on investment.

Instagram, in particular, has become one of the most widely used platforms for this type of marketing, given to its monthly user base of one billion people. A substantial component of this group consists of millennials who, through the images they publish, influence their followers shopping decisions.

Remarketing

With the COVID-19 pandemic continuing for over a year, many firms are expressing thanks and demonstrating to their customers that they are aware of the situation through social distancing. This does not, however, imply that businesses have abandoned their marketing methods - the remarketing strategy, for example, is still in use.

Remarketing ads are used to target consumers who have already interacted with your company (e.g., visited your website, watched your video on YouTube, liked your social media posts). Such advertisements assist you in converting potential clients who have forgotten about you into actual customers – and possibly returning customers.

Brand Partnerships

A collaboration with another company to establish a marketing strategy that benefits both parties is known as partnership marketing. Partnership campaigns benefit both parties and help them achieve their goals. In the hotel sector, partnership marketing is a strategy that combines the efforts of multiple hotel companies to increase sales and market share. When multiple brands pool their resources, they can:

- Work together to create strategies
- Develop better products
- Bring in more customers
- All while extending their core services

Airbnb has demonstrated numerous times that partnerships may have a significant impact on the audience. Customers are able to receive something distinct from brands. KLM Royal, Dutch Airlines, UK retail giant Waterstones, and even the French government have all had successful relationships. A contest was launched in collaboration, with the winners receiving a free night in a luxury Airplane Apartment. With the French government, it was a Halloween night at the Paris Catacombs that helped enhance the profile of a lesser-known French tourist attraction.

REVIEW OF LITERATURE

Due to the epidemic and international lockdown, the hotel industry has undergone a negative transformation in the last two years. We've witnessed how technology has changed the way people do business in the last year. Once thought to be impersonal, social media has shown to be a successful tool for creating and sustaining relationships with customers, and it will play a significant role in hotel marketing. Because developing customised service and connections has always been a goal in the hotel room sector, the transfer to using technology to do so will be very painless. Hoteliers are continually inspired by their guests, and they can't wait to see what new ideas they'll come up with.

METHODOLOGY

The data for this study was gathered using both qualitative and quantitative research methodologies. Only 40 of the 50 questionnaires issued at random were completed and used for analysis. The research was conducted in February 2022 at hotels in Chennai and Maharashtra. For data analysis, the Statistical Package for Social Sciences (SPSS 21 version) and AMOS were used, while secondary data was acquired through a literature study.

Data Collection and Analysis

With the help of research assistants and mentees, data was collected from a convenience sample of participants from hotels in Chennai and Maharashtra. The Statistical Package for Social Sciences (SPSS) version 17.0 for Windows, a product of SPSS, Inc., was used to analyze the data. Descriptive statistics (e.g., mean) were used to examine (1) the significance of new marketing trends in hotel rooms and (2) the various hotel marketing tactics.

FINDING

The expected outcomes include several new marketing trends that are being deployed in hotel rooms. Interviews with research participants were performed to learn about the changes they have made to their marketing strategies and what they are doing to stay ahead of the competition. Use of Metaverse, VR, and AR technologies are some of the greatest ways we've found to promote hotel rooms. These technologies allow people to visit or learn about hotels without having to physically visit them. It is really beneficial to advertise your hotel rooms, and it can be utilized as a very effective marketing technique. SEO stands for search engine optimization (SEO) Search Engine Optimization (SEO) is used to ensure that a website receives the most traffic by utilizing specific keywords that are often searched by customers. They recognized the requirements and intentions of their customers and changed their website accordingly. People looking for hotel rooms would be sent to their website as a result of this. Touchless Technology and Customer Expectations Through smart hotel technology that automates common tasks or allows guests to use their phones for key tasks, a touchless hotel reduces or eliminates the need for guests to interact with germ, unsafe surfaces as much as possible. This is possible with the help of digital check-in, smart thermostats, and sensor faucets, among other things. Influencer marketing has grown in popularity as a profitable digital marketing technique for increasing hotel room awareness, customer loyalty, and direct reservations. This is due to the fact that digital word of mouth spreads considerably faster than traditional word of mouth and has the ability to reach a much bigger audience. Furthermore, social media influencers have witnessed an increase in authority, credibility, and trust among today's consumers. The importance of hotel partnership marketing cannot be overstated. Forming strategic alliances is a tried-and-true method of expanding your brand's reach. When you team up with other brands that share shared interests, you're effectively double the value of your marketing spending and increasing brand awareness for everyone. Partnership campaigns benefit both parties and help them achieve their goals. In the hotel sector, partnership marketing is a strategy that combines the efforts of multiple hotel companies to increase their sales and market share. Loyalty programs are effective because they maintain existing relationships while also allowing you to make highly targeted offers.

Remarketing ads are used to target consumers who have already interacted with your company. Sustainability is the mindful use of resources and plays a vital role in hotel industry. Hotel leaders can improve efficiency and attract growing number of customers looking for environmentally and socially responsible products and services.

CONCLUSION

According to this study, the promotional material benefits from implementing new marketing trends. Hotel rooms can easily sell and showcase their products and services using these approaches, and clients benefit from having prior knowledge of the hotel room thanks to AR and VR technologies. Optimizing the hotel website on a regular basis will result in a better hotel business. The hotel room website will appear in search engine results and will be ranked based on how frequently it is optimised. In the hotel industry, videos are a good source for digital marketing. If a hotel has a promotional film that can be used on YouTube and Instagram, a hotel marketing expert should shoot a video with a marketing strategy that is exclusive to the business. Influencer marketing is cost effective because it's cheaper than advertising and public relations. If someone recommends something to you, you're more likely to remember it, investigate it further, and possibly buy it. The source is another person, a human being, rather than a firm telling you something through an advertisement. It makes marketing more human psychologically, which is why it is so effective. Additionally, you'll have an easier time reaching out to your ideal customers. Influencer marketing is efficient as long as you have a client avatar in mind that is your ideal customer. Oyo is known for partnering with influencers in the travel and tourism industry. Oyo manages to convey the beauty of numerous locales while being inconspicuous about their own promotions through posts or re-posts. Another unusual strategy employed by Oyo is the use of Instagram highlights.

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GUEST'S PERCEPTION AND BEHAVIOR ON GREEN PRACTICES IN GUEST ROOMS

Priya Harit

*Lecturer cum Instructor,
IHMCT & AN, CIT Campus, Taramani, Chennai-600113.*

Vishal Kumar

*First Year M.Sc. in Hospitality Administration,
IHMCT & AN, CIT Campus, Taramani, Chennai-600113.*

ABSTRACT

Objectives: The main objective of the study is to identify what influences the guest behavior and perception towards the Green practices in Hotel Guest Rooms. It helps in find out the involvement of hotel staff in green practices and guest's intentions to stay in green hotel guest rooms while engaging themselves in such practices. The purpose of this paper is to enhance knowledge about green hotel guest room services and the possibilities it gives for successful management in hotel as well as for increase the level of guest experiences. Design/ Methodology/Approach -The paper is based on a summarized review of previous theoretical contribution. Findings- The analysis of hotels identifies and describes different and numerous activities of green marketing management and its impact on guest in acceptance of green hotel trends. A proactive and trustworthy implementation of those activities enables green hotel guest rooms to achieve increasing benefits no matter their size, classification and target customer in hotels. Purpose of the research -The study can help us to understand how environmentally conscious hotel management establishes a suitable setting for greening hotels guest room services. These can use as a good and useful source of information in academics and be specially useful for marketing of hotels that aim to be green.

Keywords: Guest behavior, Green practices, Hotel guest rooms.

INTRODUCTION

Hospitality and tourism in India have gradually grown to be a full-fledged industry in the recent past. Millions of tourists and travelers are coming in India as well as the same citizen are also travelling a lot in the country. Tourism is one of the highest revenue-providing sector. Due to such highly competition environment that is rigorously increasing, demands the pro-green that is in hotels to develop an eco-friendly system. There is a great need of preserving our natural reserves by means of sustainability and using eco-friendly practices. The study measures the consumer's attitude and behavioral practices relating to the use of green practice in the Indian hotel guest rooms.

Priya Harit & Vishal Kumar

HOTEL ROOMS AND GREEN INITIATIVES

Their race to going green has started among Indian hoteliers but the race has started only recently. India is becoming a major global tourism destination. Living up to the image of leading hotels of emerging tourism destinations, the hotels are trying to provide world class service to its customers. As considering the same, hotels have started claiming “LEED” or “Ecotel” certified. LEED and Ecotel Certificates are given by the third-party organizations to hotels maintain high environmentally responsible and sensitive practices. With hotels having Ecotel and LEED certification, we can be sure the organizations are following strict power saving norms. According to Wood (2002, p.28), an eco-lodge is a tourism accommodation facility that meets certain criteria. It is said that it contributes to the conservation of the surrounding natural and cultural environment. While constructing the establishment, a green hotel guest rooms minimizes its impacts on the environment and is designed and built in style that it fits into the particular, physical and cultural context by its form, color and landscaping, without neglecting the local architecture and design. A green hotel guest rooms also takes into consideration sustainability for example in terms of water usage, energy consumption, disposal of solid waste and sewage related issues. Furthermore, a green hotel guest rooms contributes to environmental awareness training of both the tourists and the employees. However, it is not possible to deliver the 100% environmentally friendly as the hospitality product. Particularly, it realizes the environmental benefits with the marketing strategies as the selling of products according to consumer satisfaction and the fulfillment of consumer expectations for eco-friendly products. “Environmental friendly” products should reduce the destructive influence on environment.

Researchers have proposed early “failure” works for numerous ecological friendly good that ensure the customers that the functional performance of product was partly attributable. However, some customers consider lesser functional performance during the purchase of environment friendly product. Wong et al gave a theory that “green’ is seldom the overriding determinant of brand choice or product however just another advantage or aspect that integrates value, generally a ‘feel good’ aspect to the whole product”. Some researchers like Mc Daniel and Rylander propose the reconsideration of “needs” and wants of consumers in context of sustainability of environment with the best interest of society meanwhile ignoring the long-term factors without affecting the customer’s satisfaction. Kotler proposed the concept as “the perception of societal marketing carries that the administration action is to estimate the interest, desires and requirements of aim markets and to bring the anticipated consumptions more efficiently and effectively as compared with the competitors in manner that advances and conserves the society’s and the consumer’s well-being). According to the further research on this theory, there was a conclusion that only location of environment was enough to product success guarantee.

The hotel industry has become more alarmed towards maintaining the equilibrium between the environmental, resource consumption, ethical and societal concern consequently environmentally responsible movements are one of most essential items on the agenda for hotel operations. Ecological consciousness is gaining more and more ground amidst people around the globe. According to some reports, many hotels charge a premium cost on the name of ecological friendly goods so as to recover the additional disposal, marketing and production costs. This may

consists the cost of initial set-up for the production and distribution process of novel or substitute more environmental friendly products; reuse and re-manufacture; product recapture expands; or to attain the economical scale with the recovery of indirect costs. Few examples on market places also recommended that guest still not ready to spend the premium charges generally. Therefore, there is a conclusion on the guest approaches that it is always inconclusive and inconsistent.

In India, the guest consuming the services of hotels are sensible towards the eco-friendly practice. They support and appreciate the hotels that support the green practices deprived of negotiating the quality of service. The guest would select to book the lodge that obey sincerely such practices, however, are not ready to expand additional costs for these services. Few guests are willing to spend additional on green practice specially those who are more approachable toward environmental products. Green practice have the base of growing guests. Hence such practices help the hotel to create a position distinctively amount the hospitality market. Overall the purpose of the study is to determine influences of hotel guest’s intention to stay in great hotels or hotels with eco-friendly environment. After analyzing the primary and secondary data the findings are being discussed and conclusions came as in context with the future direction of research and its social implementation. In often, guest will spend on an average around 5% more for their usual range. Some of the groups can spend as much as 20% or more on such products for enhancing green practices. This may happen mostly during the sustenance of the perceiving of environmental benefits to make private benefits from which the guest either personally, directly or exclusively take profit from the practices, in place of public goods that benefits the whole society. Consumer retention and adoption of environmental products are getting influenced by the performance of product. It means a performance gap exists of the existence of relative performance regarding consumer skepticism of environmental products. Such factors strongly affect the acceptance of products.

Pros and Cons of Green practices in hotels

PROS	CONS
Non-Toxic Environment	Set up cost is high
Reduced pollution	Limited range of products
Energy and Water saving	Organic products are expensive
Beneficial for Health	Need Expertise
Cost saving in Long Run	Time Consuming
Prominent choice by Eco Traveler	Location is an issue
Sustainable development	Availability of Materials
Less Effect on non-renewable resources	Increased cases of Green Washing

Common Green Practices Followed by Hotels in Guest Rooms

Going green isn’t just a trend, it’s something a lot of travelers put an emphasis on nowadays. Guest choices are now changing and making more eco-friendly choices than before and that includes opting for eco-friendly hotel stays. Hotel industry has also noticed the environmental problem and want to responsibly act on their role to save the environment as well as to create the awareness in their guests also by implementing green hotel practices. The added benefit is to impress same guests so they will keep coming back. Various practices that are followed by hotels

in the guest rooms are:

1. Recycling Initiative
2. Reuse of Towels
3. Temperature Control
4. Organic Food Options
5. Natural source of lightings
6. Ditching Bottled Water
7. Revamp Bathrooms

REVIEW OF LITERATURE

One of the most important tourism related terms discussed nowadays is eco-tourism. This is an important phrase to be remembered when discussing about the current status of tourism and the world of today.

Now a days green practices like 'Recycle, reuse, reduce' have been incorporated in the organization policy. Nowadays hotels gives messages in the bathroom requesting its guests to reuse shampoo bottles which can be recycled, offer linen change option and towel reuse program to guests. Hotel Guest rooms have installed new shower appliances and bidets that consume less water. Several hotel guest rooms have power connection that is operated with a key card that switches the power off when the guest leaves the room. Hotels have also started green integrated pest management program. This program helps in less dependence on chemical treatment and is environment friendly. For beach resort it is advisable to avoid disposing of sewage in the sea, re-educating, disposing of waste by recycling, effective sewage treatment and waste disposal. Resorts are now adopting wind tidal and solar energy in their day today operation along with Sewage Treatment Plant for its sewage water. Aerators and flow restrictor constraints the flow of water by allowing 3litre and 6 liters flush to be used in the bathroom, eco-practices emphasis use of LED lamps.

METHODOLOGY

Population and Sample The target population for this study was consumers in the India due to time and financial constraint. The sample selection for this study was a convenient sample due to time and financial constraint which made the study a little limited to specific hotels study.

Data Collection and Analysis

Data was collected from a convenience sample participant in Tamil Nadu and Andhra Pradesh States during spring break with the help of research assistants/mentees. Data analysis was done using the Statistical Package for Social Sciences (SPSS). Descriptive statistics were used to analyze (1) the importance of the green hotel concepts to guest, (2) explore what consumers were willing to face to patronize green hotels, and (3) explore green practices related to conservation methods that guest were more prone to experience.

Result and Discussion

Total 241 respondents participated in this study, On average 63.90% were female and 36.10% were male. The age of the respondents ranged from less than 20 years to above 50 years of age, 30.71% were less than 20 years, 26.56% were between 21 and 25 years, 9.13% were 26 to 30 years, 11.62% were 31 to 40 years, and 21.4% were above 40 years old (see Table 1). The first objective of this study was to explore guest’s perceptions of the importance of the corrective actions taken by hotels to be recognize as green hotels. Table 2 displays that the perception of guest when it came to the general importance of green hotel practices was about 88% surveyed felt it was “somewhat to very important.” Whereas about 12% felt that it was “rarely important” to “not important at all”.

According to this study, 69.71% of the guest felt that water conservation was “somewhat to very important”, 30.29% of the guest felt that water conservation was “rarely important,” to “not important”

Table 1: Demographic profile

Characteristic		Frequency – N=241	Percentage%
Sex	Male	87	36.10
	Female	154	63.90
Age	Under 20 years	74	30.71
	21-25 years	64	26.56
	26-30years	22	9.13
	31-40 years	28	11.62
	Above 40 years	52	21.58

In regard to energy conservation, 89.63% of the consumers in this study felt that it was “somewhat to very important” to conserve energy. Only 10.37% of the consumers felt that it was “rarely important” to “not important” to them. Waste reduction is third conservation method that was discussed in this survey. Whereas, 85.06% of surveyed participant felt that waste reduction was “somewhat to very important” to them, 14.94% of the respondents felt that it was “rarely important” to “not important” to them when it came to green hotels.

Table 2: Guest’s perceptions of a green hotel

	Frequency	Percentage
1. The importance of water conservation		
Rarely important to not important	73	30.29%
Somewhat important to very important	168	69.71%
Total	241	100%
2. The importance of energy conservation		
Rarely important to not important	25	10.37%
Somewhat important to very important	216	89.63%
Total	241	100%

3. The importance of waste reduction		
Rarely important to not important	36	14.94%
Somewhat important to very important	205	85.06%
Total	241	100%
4. The general importance of green hotel practices		
Rarely important to not important	29	12.03%
Somewhat important to very important	212	87.97%
Total	241	100%

Obviously, the result of the first objective indicates consumers' interest in green hotel guest room practices. Hoteliers need to understand this trend in the travel and tourism industry and find ways to adopt and capitalize on green hotel practices as an organizational culture. An innovative hotelier should recognize this trend and adopt hotel green practices as a strategic move towards a competitive advantage. The second objective of this study was to explore what consumers were willing to endure to patronize green hotel guest rooms. Table 3 showed that about 78% of the consumers in this study "somewhat agree", "agree" or "strongly agree" as a multiple night guest in a hotel to reuse their towel; 86.31% "somewhat agree", "agree" or "strongly agree" as a multiple night guest in a hotel to reuse their linen; 85.94% "somewhat agree", "agree" or "strongly agree" to prefer a low flow toilet (less water per flush) to high flow toilet in guest rooms; 58.09% of the consumers in the study "somewhat agree", "agree" or "strongly agree" to prefer low flow faucets to high flow faucets in guest rooms; and, 65.98% of the consumers in the study "disagree" or "strongly disagree" to prefer low flow showerheads to high flow showerheads in guest rooms. The result of this study indicates that consumers are willing to conserve water. Given this outcome it will be very interesting to see if there is any important difference between the effects of low flow showerheads to high flow showerheads in guest rooms. One important and interesting finding was how many consumers would choose a "green" hotel over one that lacked green practices; 53.75% of the consumers surveyed said they would choose a "green" hotel over an alternative. In regard to the cost of going green, about 46% of the consumers in this study believed that hotel owners should pay the initial cost of going green, and about 75% of the consumers were willing to pay less or the same amount per room in green hotels as compared to non-green hotels. The study also indicated that over 50% of the consumers in this study preferred guest reward points or some form of discount in order to support green hotels' water conservation practices. Contrary to results of past research the majority of respondents in this study believed that a green hotel room should be priced the same or less than one that is not green. In fact, 50% of the respondents in this study preferred guest reward points or some form of discount in order to support green hotels. Hence, hoteliers need to be aware that guests have a perception that a green hotel might be more expensive than a non-green hotel. If that is the case, that perception could be impeding potential guests from patronizing green hotels.

Table 3: Consumers' behavior regarding socio-environmental responsibilities

Socio-environmental responsibilities	Frequency	Percentage
A. As a multiple night guest in a hotel, I am willing to reuse my towel.		
Disagree/Strongly disagree	52	21.58%
Somewhat agree/Agree/Strongly agree	189	78.42%
Total	241	100%
B. As a multiple night guest in a hotel, I am willing to reuse my linen.		
Disagree/Strongly disagree	33	13.69%
Somewhat agree/Agree/Strongly agree	209	86.31%
Total	241	100%
C. I would prefer low flow showerheads in guest rooms to high flow showerheads.		
Disagree/Strongly disagree	159	65.98%
Somewhat agree/Agree/Strongly agree	82	34.02%
Total	241	100%
D. I would prefer low flow faucets in guest rooms to high flow faucets.		
Disagree/Strongly disagree	101	41.91%
Somewhat agree/Agree/Strongly agree	140	58.09%
Total	241	100%
E. I would prefer low flow toilet (less water per flush) in guest rooms to high flow toilet.		
Disagree/Strongly disagree	58	24.06%
Somewhat agree/Agree/Strongly agree	183	85.94%
Total	241	100%
F. I would choose one hotel over another, because it is considered "green."		
Disagree/Strongly disagree	111	46.25%
Somewhat agree/Agree/Strongly agree	129	53.75%
Total	241	100%

Conclusions, Implications and Limitation

According to this study, consumers seemed ready to incorporate “green” hotels into their traveling excursions. According to the results of this study, guests had a positive perception of green hotels. Most people are willing to stay in green hotels. Although hoteliers should be prepared to come up with some form of offers and programs to motivate some guests to support their green practices. Also, hoteliers should consider green practice as an organizational culture and make strategies to promote their green practices as a competitive advantage. However, this study indicates that the majority of the guests are not willing to pay more for a green room. Hotelier should plan the strategy recognize this and price rooms competitively with required promotions to eliminate the potential negative perceptions. The limitations of this study include the sample selection and the number of participants in the study. A random sample of guests from various hotels in all the regions of the country could provide a more representative and generalized result.

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GUEST SATISFACTION TRACKING SYSTEM

GUEST SATISFACTION TRACKING SYSTEM: A STUDY FROM THE HOTELS OF INDIA IN 2022

K. Pradyumn and Shubham Singh

*First Year M.Sc. in Hospitality Administration,
Institute of Hotel Management Catering Technology and Applied Nutrition, Taramani,
Chennai - 600113.*

ABSTRACT

Satisfaction: a feeling we get when we get the best of the services changes the whole impression of what we have experienced. Every person would have experienced the warmth of the hospitality sector at least once in their life time. The hospitality sector keeps upgrading itself to meet the needs of the guests travelling.

The most important motto of any hospitality sector is to make the guest satisfied with their services. The way the hospitality sector is growing and adopting the needs of the guests with only the vision to satisfy them. The more guest is satisfied with the hotel or the outlet, the chances of them returning becomes more.

Here in this paper presentation, a study is conducted in the hotels to know how the satisfaction of the guest is recorded and analysed through the guest satisfaction tracking systems. We are also going to study about how to improve the satisfaction tracking systems to become more accurate and easier to analyse.

The expectations of the guests increase day by day and the hospitality sector is changing with the same pace. The accuracy of the guest satisfaction data improves the way the hotels can try to adopt themselves to the guests. Genuine information and time to time updating of it not only helps the hotels but also helps the guests to know what hotel or outlet they have to be visiting.

Keywords: Technology, Guest satisfaction, Hospitality sector, Tracking systems.

INTRODUCTION

Customer service is termed as the support we offer to the customers both before and after they buy or use the product/service. To yield to the needs and expectations of the customers hospitality personnel should know the expectations and should be ready to reach those standards. The organisations vision towards its services must guide to the services offered and the way they are offered. It is very important for the staff to listen and understand the customers need or wants. Sometimes we have to be ready to anticipate the need and be ready to help them immediately.

If the customer doesn't feel like we are offering a good service then the organisation is not offering the best service and should change the way they operate. The customer is the final judge in any given business, no matter how good the graphs show. In order to know what the customer wants; we have to consistently keep asking them about the services provided along with a possible small talk to make them comfortable.

The service quality is measured by the consumer's fulfilment. Researches show us, the more quality satisfies the guests the more loyal they become to the organisation. The major purpose of this post is to learn about several approaches to assess visitor satisfaction, analyse them, and come up with superior alternatives that are more accurate and cost-effective. This research shows us the quality awareness, quality perception, guest satisfaction and the following behavioural intentions of the guests. It has been demonstrated that satisfaction is directly related to their willingness to return to the hotel, so it is an essential element for loyalty.

OBJECTIVES

1. To know how the hotels track the guest reviews.
2. To analyse the working of hotels towards guest satisfaction.
3. To analyse the usage of technology in the guest satisfaction and review tracking.

METHODOLOGY

In this research work, the primary information is collected from one-to-one conversations with the hotel managers from Novotel and Hotel Savera. The secondary data is collected through books and journals.

REVIEW OF LITERATURE

Data for the above-mentioned topic will be extracted from a combination of literature reviews, including different thesis on related subjects, books, and the internet.

1. According to (Puneet H. Thakkar, Rasika Gumaste, Ritu Bhagwat, October 2014, ISSN 2278-2540), the hospitality industry is rapidly growing, as is hotel rivalry to retain customers. A retained client is crucial to any hotel in today's market, not just in terms of brand loyalty and market goodwill, but also in terms of lowering expenses involved with acquiring new clients. Guest satisfaction has been a criterion for measuring a hotel's success over the years.

2. Hoteliers are more likely to anticipate and meet their clients' needs and wants after their consumers and requirements have been recognised and understood. Higher profitability is a result of better service. Furthermore, several empirical studies show a positive relationship between customer satisfaction and customer loyalty (Kandampully and Suhartanto, 2000; Dimitriadis,2006; Chi and Qu,2008; Faullant et al., 2008), as well as a positive relationship between customer satisfaction and positive word-of-mouth (Söderlund,1998).

3. Over the last few decades, hotel executives and practitioners have been increasingly aware of the importance of service quality in achieving this goal. According to Lam and Zhang (1999), the tourist and hotel industry's specialists have seen an increase in client demand for high-quality products and services in recent years.

(Alex Birkett 03-Jun-2021) Admitting that you have room for development is the first step toward overcoming this. The second stage is to determine where you now stand in terms of client satisfaction. Customer happiness can be measured in a variety of ways, but it all boils down to getting feedback from customers through surveys and data. We'll need to question people about their experiences and compare them to quantitative reports to accurately evaluate customer opinion.

4. International Journal of Advancement in Technology, Silky Vigg Kushwah, March 2014. According to the IILM Institute of Higher Education in New Delhi, service quality is the consequence of a customer's evaluation of their hopes for a service and their impression of how the service was delivered. Several experts have varied definitions of service quality.

5. Staff attachment (equal to organizational commitment), consumer attachment, and human resource management methods are all linked, according to Ulrich et al. (1991). As a result, we included the issue of employees in our investigation.

6. (Alex Birkett 03-Jun-2021) Admitting that you have space for development is the first step in overcoming this. The second stage is to determine where you now stand in terms of client satisfaction. Customer happiness may be measured in a variety of ways, but it all boils down to getting input from customers through surveys and statistics. We'll need to question individuals about their experiences and compare them to quantitative reports to correctly evaluate customer opinion.

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SERVICE TO CUSTOMERS

Hotels provides services to customers for a purpose. Families, leisure travellers, business travellers are some categories in which customers can be divided into. Every customer doesn't need assistance while the stay but when a guest comes for assistance the staff should always remember "every contact the staff make with the customer within the hotel, is an opportunity for the staff to make their impression. Managing those momenta effectively takes commitment and long-term belongingness towards the organisation. Handling the guests in an effective way and making sure they are comfortable can sometimes also gains us the non-acquired customers from a long time.

According to Kotler, satisfaction can be defined as a person's sentiments of joy or dissatisfaction as a result of evaluating a performance of the product success to his or her expectations. Satisfied customer is also the totality of a person's perceptions, evaluations, and psychological impact to a product or service's consuming experience. September 2010, Pezeshki Vahid, for the corporate financial performance, School of Engineering and Design, three-dimensional modelling of customer satisfaction, retention, and loyalty to product is a continuous problem.

When looking at customer satisfaction from the consumer's perspective, different behaviour is expected. Customers can be categorised into various groups.

Disappointed: People who were disappointed since their expectations were not met. They rarely complain on the spot (passive negative attitude), but they can demonstrate active negative conduct based on their level of discontent and personal qualities. Those who were more inclined to spread unfavourable word of mouth about the company's reputation and image.

Satisfied: Those who received exactly what they expected are satisfied. They have a favourable view toward the company and prefer its products, but they do not engage in active activities.

Then comes the guests those who perceived a far greater degree of performance than expected were fascinated. They reward the company by engaging in active positive behaviour and publicising their positive experiences as brand ambassadors, so enhancing the company's reputation. Loyalty is one of the best ways to show satisfaction. Satisfied customers will revisit again to the hotel to receive the warmth of that organisation.

Measuring and monitoring service quality and customer satisfaction is one of the most important techniques for customer-focused businesses. This simple process employed by hotel managers has evolved into the Guest Satisfaction Tracking System, (GSTS) which is a more systematic and sophisticated procedure. It primarily aids management in determining which features in their services enable them to achieve maximum satisfaction and which services require improvement.

Although metrics are only measures and cannot provide specific feedback from consumers, they provide a visual representation of our effectiveness in keeping our customers pleased. Everybody on the team keeps track of how they fared on the feedback questionnaires on a regular

basis. It's also added a competitive aspect to the team, as they compete to see who can get the most "excellent with remark" comments from their consumers. It's also wonderful to be acknowledged when you've done a good job, so reading such remarks is a big plus.

One of the most useful features of client feedback is the ability to monitor it using tags, product names, and other descriptors. Every ticket in our support system collects data based on the product, service, or complaint mentioned. By generating analytics on the most-asked question, most-requested feature, and so on, we as a team can become the "funnel of feedback" from our consumers to our development team, and also our marketing and advertisement teams. This data can help us figure out how to decrease the need for customers to reach us by disclosing information we forgot to include in our help guidelines or website material, and it can also help us figure out how to lessen the need for consumers to contact us.

CUSTOMER SATISFACTION

As all studies agree that customer happiness is a significant aspect in company performance, a number of key advantages for businesses are listed:

- promote the company's favourable image and reputation.
- boost the sales volume, satisfied consumers buy more often, decrease marketing expenses of acquiring new customers.
- Boost positive word-of-mouth, resulting in immediate knowledge and a reduction in the buyer's risk.
- Increase the effectivity of responding to customers.
- Increase the value of performance.
- Educate and increase the staff sufficiently so every guest gets required attention.
- Boost the customer loyalty rates using the services provided.
- Increase the market share consistently.
- Protect the loyal customers without disappointing them consistently.

Companies have a strong incentive to identify consumers who are likely to move as early as possible, to continually monitor satisfaction, and to investigate any complaints on a regular basis. Developments should be based on such outcomes in order to avoid repeating the same blunders. Customers' complaints might take a variety of forms. When a problem arises, some consumers instantly voice their unhappiness with the service provider, while others do not complain on the moment but instead discuss their difficulties with family, friends, or the wider community via social media platforms, resulting in negative word of mouth. In reality, it makes no odds whether the complaint is justified or not.

TECHNOLOGY AS AN ENHANCEMENT OF CUSTOMER SERVICE

Technology plays a vital role in the hospitality industry in the modern age. It increases the efficiency of the staff and accuracy of the services provided which finally results in the guest satisfaction. The feedback is generally taken at the time of check out of the guest. A form in the form of a digital tablet is handed over and the guest is asked to fill the form in which the questions are sophisticatedly placed in order.

All these feedback forms are linked to the PMS of the hotel which analyses and gives out the perfect data regarding the feedbacks.

The data is sub divided into various parts respectively according to the departments or the services provided to the guest. This data is then analysed and evaluated in the forms of charts by the department heads of the hotel and possible necessary actions are taken.

While having many advantages like the ones we spoke of, technology also has a few disadvantages of its own. Many aged guests are not very familiar with the technology and might find operating the devices a little difficult. Technical glitches or software glitches also has a high chance of occurring which disrupts the pleasant working of the hotel. There might be chances where the guest couldn't understand the questions of the form and refuse to fill it or may find no need for filling up the form for which the staff can politely Explain the importance of the feedback form to the guest, but never push them to fill it out.

On-property interactions do not determine a guest's overall assessment of their stay. After a visitor has left your property, how and when you interact with them might have an influence on their chance of returning. Staying involved with guests is crucial for getting reservations at the lowest cost, with loyalty-related bookings accounting for more than 50% of all bookings for the first time in 2019. If your hotel has a guest-facing applications, you can communicate with your visitors even while they aren't on the premises. You can guarantee that your hotel is top-of-mind for visitors over your competitors by delivering timely promos and discounts, while also providing meaningful value to users.

Hoteliers cannot afford to restrict the solutions they provide since technology is a decisive factor for where visitors stay as well as an efficient generator of engagement and income. Technology investments will continue paying off in terms of visitor satisfaction, loyalty, and profitability.

DATA ANALYSIS

Customer satisfaction and service quality are focused on keeping that customer relationship and competitive advantage. Guest satisfaction tracking system have had been a great instrument for tracking of the satisfaction levels possessed by the guests after receiving a service from the hotel. Through our research we came to know the importance of technology which helps the hotel industry The hotels thrive hard to make the guests satisfy with their services.

Before the usage of computer technology, the hotels used to have a feedback form which was filled by the guests at the time of checkout. This had a major drawback as majority of the guests were not showing interest in filling it or didn't want to fill the form for some other reason.

The technology has got a kind of revolution in guest satisfaction tracking systems. Messages, mails or even calls are sent out to the guests after their checkout from the hotel. This helps them commemorate all the experiences they had back at the hotel which eventually helps the hotel gain the feedback in a more positive manner.

The hotels have also seen a drastic growth in the amount of feedback they have been getting after the usage of these techniques. All the feedbacks are recorded and analysed which help the hotels to formulate new methods and strategies to increase the guest satisfaction. All the feedbacks by the guests are recorded in their profiles personally and monitored and made sure the same issue isn't repeated the next time guest comes back.

CONCLUSION

Satisfaction is characterized as a person's feelings of happiness or discontent as a result of comparing a product's performance to his or her anticipation. Customers can be divided into three categories: satisfied, disappointed, or intrigued. Customers that are satisfied will return to the hotel to experience the hospitality of the staff. Guests who are dissatisfied or intrigued reward the firm by behaving positively and sharing their good experiences as endorsers, so boosting the company's image. One of the most crucial approaches for customer-focused firms is measuring and monitoring service quality and customer happiness.

It ultimately boils down to responding to your consumers, regardless of the technology or technique you use. They're more than simply a voice on the other end of the line or a message in an email. For us, they are business owners who are attempting to turn their entrepreneurial dreams into reality, an activity that is both exhilarating and scary. Empathy for your customer's specific predicament may go a long way.

The Guest Satisfaction Tracking System (GSTS), which is a more systematic and sophisticated technique, originated from this simple process used by hotel administrators. It basically assists management in evaluating which elements of their services allow them to attain maximum satisfaction and which services need to be improved. The feedback is usually collected when the guest checks out. The guest is given a form in the form of a digital tablet and requested to fill it out. Many elderly guests are unfamiliar with technology and may find it difficult to operate the equipment. Technical or software faults are also likely to occur, causing the hotel's operations to be disrupted.

The focus is no longer solely on the hotel's honours and collections; rather, the people serviced and the relationships maintained are the primary activities. Internal feedback is just as vital as guest feedback since it shows us exactly what actually is happening. Some of the major negative we got to know through the research is regarding the usage of technology by guests and unreliability on the technology.

The focus is no longer entirely on the hotel's accomplishments and possessions; rather, the key activities are the people served and the connections maintained. Internal feedback is equally as important as visitor input since it reveals exactly what is going on. The use of technology by customers and the technology's unreliability are two of the primary drawbacks we discovered via our study.

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GUEST'S PERCEPTIONS AND EXPECTATIONS IN THE HOTEL INDUSTRY IN PRESENT SCENARIO WITH REFERENCE TO MADURAI

I. M. Karthikeyan

*Assistant Professor,
Department of Tourism & Hospitality Management,
Annai Fathima College of Arts & Science,
Thirumangalam, Madurai.*

A. Sebastian Shalvin

*Assistant Professor,
Department of Catering & Hotel Management,
Hindusthan College of Arts Science,
Coimbatore.*

ABSTRACT

Expectation is the bond that the conveyance with the Customer Satisfaction. It is a powerful urge to remain as an individual from a specific inn industry and they keep up with (or) practice undeniable degrees of endeavors for the inns in Madurai. It is likewise named as the person's mental connection to the lodging business. The review is fundamentally to consumer loyalty and giving items or administrations top caliber. The assumption is really difficult for the help business. The target of the review is to figure out the elements that differ between segment factors of the respondents and free factors. The scientists have taken the autonomous elements; it was picked on both essential and optional information. It additionally extends a connection between those autonomous variables and segment factors. The essential information has been gathered utilizing the poll and has been investigated utilizing measurable devices with the assistance of engaging examination, chi-square test, connection and numerous relapse for information investigation in this review. The outcomes demonstrate that the consumer loyalty and need of expectation.

Keywords: Expectation, Customer Satisfaction, hotel industry, independent factors.

EXPECTATION - AN OVERVIEW

Expectation has drawn on "the conveyance of phenomenal or better help relative than client expectation". Expectation has tracked down one of the critical elements in distinctive administrations and items. Expectation is a significant device to gauge consumer loyalty. There is a cozy connection among assumption and consumer loyalty. Consumer loyalty can be safeguarded by giving items or administrations top caliber. The idea of assumption arises as really difficult

for administration ventures. This is a direct result of the attributes of administrations; particularly in the experience between the supplier and client in the help interaction, assumption is a more complicated develops than the item quality. Without a doubt, the most basic meaning of a quality item is the one that measures up to the assumptions of the client. In the inn business, quality is characterized basically as item adaptation to determinations while living up to the expectations of the client.

LITERATURE REVIEW

Aid Liat, C., and Zabid, A. R. (2013) expressed that the higher the class of the lodging, the more prominent will be the quality. So more the client pays the more prominent will be their assumption and faithfulness towards the lodging. The idea to improve lodging administration quality was to complete it across three levels, considering the improvement of cycle quality, result quality and underlying quality all through the impact of "soft" and "hard" administration fragments and the "climate, or effect on them.

G/egziabher (2015) inspected the assistance quality and clients' fulfillment in lodging industry in Addis Ababa, Ethiopia on three star inns expressed that the mix of exemplification, realness, responsiveness, certainty and correspondence together has huge and beneficial outcome on consumer loyalty. And furthermore, the inn visitors' impressions of administration quality given by the inn business were lower than their assumptions.

Asirifi et al. 2014, he expressed that Service responsiveness as far as responsive mentality and brief reactions to client's solicitation adversely affect administration quality which prompts client faithfulness and benefit.

Deng Yingru (2013) concentrated on the connection between administration quality and client unwaveringness of catering bunch purchasing. The exploration demonstrates that gathering purchasing will deliver a positive outcome on catering endeavors and furthermore positively affects client dedication in cooking undertakings through consumer loyalty.

STATEMENT OF PROBLEM

Expectation is characterized as the result of an examination between expectation for assistance and what is seen to have been gotten. The lodging business in Madurai has seen expanded development as of late, nonetheless, notwithstanding this development; the business keeps on experiencing issues with respect to expectation. Such expectation disappointments incorporate low assistance quality, unfortunate coordination among offices, and unfortunate food quality and correspondence issue with the representatives. The effect of elements, for example, actual climate, association and representative conduct quality and result factors viz., expectation which prompts client steadfastness. Out of more factors, which element is assuming the huge part to quantify the expectation? With this inquiry, the analysts have made an endeavor to concentrate on the elements impacting assumption for the visitor's.

OBJECTIVES OF STUDY

The main objectives of this paper are

- To study the variations between demographic variables of the respondents and independent factors.
- To study the relationship between the independent factors and expectation.
- To study the effect of independent factors on expectation.

HYPOTHESES OF THE STUDY

Based on the review of literature and objectives of the study, the hypothesis was formulated and examined in this study.

- **Ho1:** Independent factor does not vary with the demographic characteristics of the respondents.
- **H02:** There is a significant relationship between the independent factors and the expectation of guest's.

RESEARCH METHODOLOGY

This study is done by taking on the logical exploration plan. The scientist has utilized both essential and optional information. The essential information were gathered from the 175 respondents in different hotels in Madurai through an organized poll which has dependability worth of 0.892 (89%) by applying Cronbach's Alpha Test. The respondents were browsed all degrees of clients in a lodging by applying irregular inspecting technique. The scientist has utilized factual instruments, for example, clear investigation, chi-square test and ANOVA examination for information examination in this review.

LIMITATIONS OF STUDY

The assessment is communicated by the sightseers visited in the inns in Madurai may not be completely material to different lodgings industry. The example size is bound to the concentrated inn, Madurai objective. Assessment uncovered by travelers about a particular place at a specific mark of time may not be material to every one of the spots and all times.

Table 1: Demographic Profile of the Respondents

S.No	Demographic Factors	Demographic Factors				
		>25	26 - 35	36 - 45	45 - 55	<56
1.	Age	49	76	30	10	10
2.	Gender	Male		Female		
		99		76		
3.	Monthly Income	<5 lakhs		6-10 lakhs		>10 lakhs
		96		60		19

4.	Occupation	Salaried	Student	Self-employed	Others
		78	30	43	24
5.	First visit to the hotel	Yes		No	
		88		87	
6.	Educational Qualification	UG	PG	Others	
		73	62	40	

Source: Primary data

The above table portrays that 28% of respondents were in the age group of under 25 years, 43% of respondents were in the age gathering of 26-35 years, 17% of respondents were in the age gathering of 36-45 years, 5% of respondents were in the age group of 45-55 years, 5% of respondents were in the age gathering of over 56 years of which 56 %of respondents were male and 43% of respondents were female. The table additionally shows that 55% of respondents are drawing a month to month pay gathering of over 5 lakhs, 34% of respondents are drawing a month to month pay gathering of 6-10 lakhs, and 10% of respondents are drawing a month to month pay gathering of over 10 lakhs and furthermore 42% of the respondents were qualified with an UG degree, 35% of the respondents were qualified with a PG Degree, 21% of the respondents were qualified with different courses, of which the control of the respondents salaried was 44%, understudy was 17%, independently employed was 25% and others were 12% .The table also shows that half of the respondents were encountering the primary visit to the inn and 49%of the respondents were not encountering the principal visit to the lodging separately.

Table 2: Chi-Square Test Between Demographic Factors and High quality Services

S.No	Factors	χ^2 Value	Sig.	Result
1	Gender	5.409	0.144	Accept
2	Age	55.241	0.000*	Reject
3	Martial	13.563	0.103	Accept
4	Coming from	22.230	0.026*	Reject
5	Education	37.198	0.000*	Reject
6	Occupation	51.514	0.000*	Reject
7	Income	45.912	0.000*	Reject
8	Purpose of visit	32.951	0.000*	Reject

(* = H_0 accepted at 5% significance level)

Hypothesis (H0): There is no association between demographic factors of respondents and the high-quality services.

From the table, the outcomes show that there is no huge affiliation between demographic factors like orientation and conjugal of the respondents and great services, since invalid theory is acknowledged ($p > 0.05$). The outcomes additionally show that there is a significant relationship between segment factors, for example, age, coming from, training, occupation, income, the motivation behind visit, re-booking, No.of. days stay, first visit inn, since null hypothesis is dismissed ($p < 0.05$).

Table 3: Independent Factors and the Demographic Variables of the Respondents – One Way Anova

S.No	Independent Factors	F	Sig.	Result
1	Ambience	0.7843	0.4585*	Accepted
2	Location	9.3186	0.0002	Rejected
3	Cleanliness	3.0374	0.0513*	Accepted
4	Food and beverages	1.3676	0.2582*	Accepted
5	Safety and security	2.4805	0.0875*	Accepted
6	Interaction and employee behavior	6.9340	0.0014	Rejected
7	Waiting time	14.1262	0.0000	Rejected

(* = H_0 accepted at 5% significance level)

Hypothesis (H0): There is no significant difference between demographic variables and Independent factors of expectation.

From the table, the outcomes show that there is no critical distinction between demographic factors of the respondents and autonomous elements of administration quality such as ambience, neatness, food and drinks and wellbeing and security at 5% importance level ($p > 0.05$). The outcome additionally shows that there is a critical contrast between the position of the respondents and a few autonomous variables like Location, Interaction, and employee behavior and Waiting time.

FINDINGS & SUGGESTIONS

Findings

- ▶ From the review it was viewed that as 44% of respondents were in the age gathering of 26-35 years, 17% of respondents were in the age gathering of 36-45 years of which 56% of respondents were male and 43% of respondents were female. This table additionally shows that 34% of respondents are drawing a month to month pay gathering of 6-10 lakhs, and 10% of respondents are drawing a month to month pay gathering of over 10 lakhs.
- ▶ 36% of the respondents were qualified with a PG Degree, 43% of the respondents were qualified with an UG Degree of which 51% of the respondents were experiencing the first visit to the inn and half of the respondents were not encountering the first visit to the inn.
- ▶ 38% of respondents came setting down deep roots for a business visit, 31% of respondents came here to remain for the occasion of which 37% of the respondents coming from Tamil Nadu and 23% of the respondents were coming from Kerala. This table likewise shows that 33% of the respondents common booking the lodging through telephone and 27% of the respondents usual booking the inn through Mail.

- ▶ 45% of the respondents were salaried, 25% of the respondents were self-employed. The table additionally shows that 56% of the respondents were hitched and 24% of the respondents were not hitched of which the 57% of the respondents stay for 1 day and 30% of the respondents stay for 2-3 days.
- ▶ From the examination, the outcomes show that invalid theory is dismissed and it was concluded that there is a critical connection between segment factors such as age, coming from, instruction, occupation, pay, reason for visit, re-booking, No.of. days stay, first visit inn of the respondents with the assistance quality, it is also concluded that there is no huge relationship among orientation and conjugal of the respondents with that of the help quality, since invalid speculation is acknowledged
- ▶ The examination of ANOVA shows that there is no huge contrast between demographic factors of the respondents and autonomous variables of expectations such as feeling, neatness, food and drinks and wellbeing and security. The result also shows that there is a critical distinction between the place of the respondents and a few free factors like Location, Interaction, and worker conduct and Waiting time.

Suggestions

- ✓ The lodging can work fair and square of by focusing on mood, area, cleanliness, food and refreshment, wellbeing and security, association and conduct quality, holding up time, administration quality
- ✓ Since neatness affects client dedication the inn need to concentrate more on tidiness factor.
- ✓ Cooperation and Behavior Quality will likewise affect administration quality so it is suggested that the workers of the inn ought to be prepared appropriately to interact with the visitors of the inn. The inn can have a periodical assessment on the training process.
- ✓ The hanging tight time for administration conveyance interaction ought to be appropriately kept up with to fulfill the customers and to make them faithful to the lodging.
- ✓ Since every one of the elements considered in the review have a positive relationship with service quality, client reliability the lodging ought to consider these elements as significant for the overall improvement.

CONCLUSION

To put it plainly, obviously cordiality and the travel industry supervisors need to attempt occasional traveler fulfilment appraisal, as fulfilment can't be improved without estimating it. Anyway they additionally need to consolidate relative execution estimation into their examinations, as any data without relative execution is fragmented. Administration experiences bend the structure squares of value in friendliness administration. Focusing in on cordiality administration quality as such will assist friendliness organizations with meeting the beautiful difficulties of the thousand

years, upgrade their market positions. Up until this point, our speculation has been demonstrated. "A client's assumption and view of administration quality overview will give huge data that can be utilized by accommodation pioneers to foster the help improvement programs".

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ROLE OF VIRTUAL REALITY IN HOTELS FOR UTMOST CUSTOMER COMFORT

Chelliah Subramanian

*Second Year M.Sc. in Hospitality Administration,
IHMCT & AN, CIT Campus, Taramani, Chennai-600113.*

Siddarth Ramakrishnan

*Second Year M.Sc. in Hospitality Administration,
IHMCT & AN, CIT Campus, Taramani, Chennai-600113.*

ABSTRACT

Virtual Reality brings a different level of experience in customer satisfaction. Offering a vast range of applications for the comfort of the customers. Virtual Reality technologies are rapidly evolving to better efficiency day by day which can help hotels save various resources and time. The aim of this research paper is to throw light on the role of Virtual Reality in hotels.

Key words: Virtual Reality, Hotels, Customers.

INTRODUCTION

Virtual Reality is a technological advancement that offers simulated experience of fantasy or real world. Nowadays used in variety of fields like gaming, education, military or space training and businesses (such as virtual presentations). Virtual Reality is divided into three different categories based on the level of experience it offers.

The categories are

1. Fully-Immersive Simulation
2. Semi-Immersive Simulation
3. Non-Immersive Simulation

- **Fully-Immersive Simulation:**

It encompasses all senses that will provide users a real-like experience as it interacts directly to nervous and brain system. Experienced through a set of gadgets like headphones, gloves, head-mounted displays and other gears.

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- **Semi-Immersive Simulation**

Used mainly for education and training areas using graphical projections through advanced computers and 3D projection systems. They provide only a partial virtual experience and user will still be attached to the real world.

- **Non-Immersive Simulation**

Being very common in day to day lives, an average video game or 360° simulation of a building, car, etc., are some of the examples of Non-Immersive Simulation. This simulation is no way directly linked with brain or nervous system. The user experiences this only through ears and eyes.

Virtual reality (VR) is a promising technology for the Hotel industry because it has the powerful impact of deceiving the senses into believing one is present in a virtual world offering computer-generated interactive 3D environments. These simulations have the potential to be used by any user for preferred experiences controlled by powerful computers and rendered as 3D imagery creating a Virtual Environment. He/she feels as though he/she is inside the world projected by the device.

OBJECTIVES

- 1) To study about the applications of VR in Hotels.
- 2) To study how VR can be used to provide customer satisfaction in hotels.
- 3) To study how VR can be used to minimize the resources in hotels.

ANALYSIS

Over many years Information Technology have been used in various parts of Hotel Industries right from point of sales to financial analysis. By using VR the efficiency will go a step ahead in both smooth working of management and customer comfort like Electronic catalogues, Virtual tours etc. Being able to view the facilities and services that is offered in the Hotels create an interest and excitement in them. VR have been recognized as one of the rapid and eye-catching technology. There are many possible ways where VR can be applied in hotels. They key for using VR in hotel is to find which device offer best VR device is effective and user friendly of their budget that is available in the market.

Virtual Reality or VR is presently one of the most progressive tech sectors and it's an innovative technology that hotels should be using to attract more guests and increase direct bookings.

Virtual Reality Applications in Day to Day Life

1. VR in Navy

The military in the United Kingdom and United States America have both adopted the usage of Virtual Reality in their training because it lets in them to undertake a huge variety of simulations. VR is utilized in all branches of carrier: the army, air pressure, marines and coast guard. In

a generation in which generation is adopted from an early age and kids are familiar with video games and computer systems, VR proves an impact technique of education. VR can deliver a trainee into some of one of kind conditions, places and environments for a number schooling function. The military makes use of it for flight simulations, battlefield simulations, medic education, vehicle simulation and digital boot camp, amongst other things. VR is a very immersive, visual and sound-primarily based enjoy, that may adequately replicate dangerous schooling conditions to put together and train soldiers, without setting them at danger until they're prepared for combat. Likewise, it may additionally be used to train squads a few softer skills, along with verbal exchange with neighbourhood civilians or international counterparts while out in the field. any other of its makes use of consists of treating put up-disturbing stress disease (PTSD) for soldiers who have again from combat and want help adjusting to ordinary existence conditions; this is known as digital truth publicity therapy (VRET). A key advantage for the use of virtual fact technology within the army is the discount in costs for training.

2. VR in Gaming:

VR is revolutionising the sports activities enterprise for players, coaches and viewers. Digital fact may be used by coaches and gamers to train more efficiently across a number sports, as they are capable to look at and revel in sure situations time and again and can enhance every time. Basically, it's used as a training useful resource to assist degree athletic overall performance and analyse method. Some say it is able to additionally be used to improve athletes' cognitive abilities when injured, because it allows them to experience game play scenarios truly. In addition, VR has additionally been used to decorate the viewer's revel in of a sporting occasion. Broadcasters are actually streaming stay games in virtual fact and getting ready to at some point promote virtual tickets to live games in order that all of us from everywhere within the global can 'attend' any sports event. Probably, this may also permit for individuals who can not manage to pay for to put money into attending stay sports activities to sense covered as they are able to experience the identical experience remotely, either without cost or at a lesser cost.

3. VR in Mental health

As stated in brief before, VR era has turn out to be a number one method for treating put up-anxious pressure. The usage of VR exposure remedy, someone enters a re-enactment of a traumatic event in a try to come to phrases with the event and heal. Likewise, it has also been used to deal with anxiety, phobias and despair. For example, a few patients with anxiety discover meditating using VR to be an effective method to control pressure reactivity and raise coping mechanisms. Digital reality generation can provide a safe environment for patients to come back into contact with things they fear, even as ultimate in a controlled and secure surroundings. This is simply one of the ways digital fact may have an actual tremendous effect on society.

4. VR in Clinical training

Due to its interactive nature, clinical and dental students have all started using VR to practice surgical procedures and methods, allowing for a effect loose mastering environment; the risk of causing damage or making a mistake while working towards on real sufferers is eliminated. Digital sufferers are used to permit college students to broaden competencies that may later be

implemented in the actual global. The use of VR generation within the clinical industry is an powerful manner to not most effective enhance the satisfactory of students in education however it additionally presents a outstanding possibility to optimise charges, mainly when you consider that health services are continuously below stress with tight budgets.

5. VR in Education

VR uses for education don't stop at the navy or clinical discipline; however extend to schools with virtual fact additionally adopted in training for teaching and mastering conditions. College students are able to interact with every other and inside a three-dimensional environment. They also can be taken on virtual discipline trips, for example, to museums, taking tours of the sun gadget and going back in time to extraordinary eras. Digital truth may be in particular useful for students with special needs, such as autism. Research has discovered that VR may be a motivating platform to soundly practice social abilities for children, such as those with Autism Spectrum disorders (ASD). Era business enterprise, Floreo, has evolved digital reality situations that allow youngsters to examine and practice talents which include pointing, making eye contact and building social connections. Parents also can comply with alongside and engage by way of the use of a linked tablet.

6. VR in Fashion

A lesser recognised use of VR is in fashion in which it has simply been having quite a profound effect. For example, virtual simulations of store environments may be extraordinarily beneficial for outlets to layout their signage and product shows without fully committing to the construct like you will in the actual world. In the identical way, suitable time and resources can be allotted for the construct of the store layout. Some popular manufacturers which have already begun implementing VR of their enterprise encompass: Tommy Hilfiger, instruct and hole. VR makes use of for those big names encompass providing a 360-diploma experience of favour suggests and allowing clients to strive on clothes truly.

VR made its first significant splash in the gaming universe to fascinate players in magical worlds and onto amazing real-life experiences. The hotels and tourism field rapidly realised the potential selling points this technology extended.

6 reasons why Virtual Reality is highly beneficial for hotels

1. Experience Marketing

Potential customers are looking for the ideal vacation, and need to know they're making the perfect decision when they reserve your hotel. Hence, one of the vital advantages of virtual reality video is the capability for guests to experience a property and its wide facilities before reserving, delivering them with added reassurance. A VR video allows potential customers to get to know your property and where everything is before they visit, from the entrance, to the variety of room types, and also the pool area, spa, F & B outlets and other facilities. It can also aid event planners, allowing them to decide what the hotel can extend them before committing to a booking.

2. Value Creation

It's said that an image is worth a thousand words, and a video is worth a thousand pictures. However, virtual reality video is invaluable, and its use for establishing worth is an illustration of this. If this is the case. With hotels, explaining your USP in text, and conveying the distinct look and feel of your property can be a real challenge. Still images may be fit to aid with this, but an interactive virtual reality video is the next elegant thing to being physically present. As a result, potential guests will be able to see the unique qualities of your hotel first-hand, and gain a substantial clearer sense of why your rooms have a better price-to-quality proportion than competitors.

3. Interactive Elements

One of the top elements about VR video works is the ability to add interactive constituents. For example, when a user virtually experience enters your hotel, you can ensure they're welcomed warmly and professionally by a receptionist, who can offer them advice on how to navigate the property; giving them with an illustration of your guest service. Additionally, interactive “info points” can also be set up to trigger certain events. Guests can use these to take additional information, open up hotel room and F&B outlets reserving forms, see meeting and ballrooms and see various event set ups like weddings, birthdays etc or heed to a chef introducing their team and explaining your hotel restaurant menu.

4. Increase Direct Bookings

Direct bookings are preferable for properties, due to the lack of commission that needs to be paid on them. Yet, frankly generating direct bookings is a real challenge in the current world, especially when online trip agencies like Expedia and Booking.com extend convenience, immediate rate comparisons and other advantages. A VR hotel tour can become a real difference maker here, however, as the immersive experience can aid customers to make up their minds up swiftly. Adding direct booking functionality to your virtual reality video can capitalise on this, resulting in quicker conversions. The increase in bookings can also have yield management advantages too.

5. Increase Up-Sell and Cross-Sell

Potential guests witnessing your hotel and its wide range of facilities in “fact” – in fusion with fresh interactive information – provides you with creative ways of attracting guests to buy complimentary products, or to decide the value of upgrading. With this in mind, it's perfect for up-selling and cross-selling strategies. For example, tourists can smoothly visualise different types of rooms and what makes them special, from bed size and view, through to the presence of a balcony. This makes it simple to encourage customers to upgrade. Alternately, a bottle of champagne could be set up to appear on the hotel VR video when potential guests view one of your bridal suites. This also serves as an ideal chance to bring customers to purchase champagne as an additional product.

6. Beat the Competition

Ultimately, VR videos marketing can be advantageous in what's a greatly competitive industry, where guests have a huge range of options to select from. After all, virtual reality is a creative marketing tool. Adopting this approach will distinguish your hotel from competitors who don't use VR videos, giving your property as modern and forward-thinking. By delivering a virtual reality video, you can boost the chances of guests reserving your hotel. This can help to give you with a competitive advantage over rival hotels in the same city or area, rival hotels in same destinations around the world, or even rival hotels in broadly different areas, offering a widely alike travel and stay experience.

Virtual Reality applications in hotels are as follows:

1. Virtual Tour

Hotels are tapping into this marvel by harnessing Google technology to produce 'virtual tours', a strategy by which a hotel can offer their potential customers a 360-degree walkthrough of their available facilities, infrastructure and luxuries.

Statistics show that virtual tours reduce the volume of wasted viewings by 40. Hotels with a virtual tour involved are clicked, on average, 10 times further than those without one.

These virtual tours can be made available in hotel websites, allowing guests or possible guests to take a look at their dream room, or different facilities of the hotel, before they reserve or before they arrive.

While these tours are breath taking experience with a VR headset, they can also potentially be made accessible to those without access to a headset on social media websites or application like Facebook, harnessing its 360 high-definition video technology.

Decision-makers can vividly experience different categories of rooms, their various F&B outlets, lounges, and Halls and Boardroom spaces by watching the VR videos. That can give them clear choices on everything from whether to hold an event in the place to which property is the perfect choice for their dream stay.

2. Booking Process

Eventually one of the fascinating uses of VR technology in recent times has been the creation of Virtual Reality Booking Process. This has lately been put into action by companies like Amadeus, allowing guests to look for travel options, compare hotel rates and book rooms of their choice through a virtual reality headset.

The capability for this has not yet been completely explored, but it's easy to see how this VR booking process can allow guests to explore virtual hotel rooms, experience exotic sights and book a room seamlessly.

3. Education Tool

Virtual Reality has great potential when it comes to education and training. It can be used extensively in the Learning and Development Department of Hotels. A VR model can be an effective way to educate people as it leverages the perception capabilities to a great extent. The trainers in the L&D department can use VR models to teach and train the staff of the hotel for a better understanding.

4. Virtual Tour of Nearby Attractions

The location of a hotel can be one of the reasons for a guest to choose or select a hotel. The Virtual Reality Technology can give the user a virtual tour of the hotel's location, nearby attractions, historical events and cultural experiences in the locality of the hotel. VR images and videos can be included in the booking sites to attract customers to choose or select a hotel.

5. Interactive Dining Experience

Great food can be one of the primary focuses for travellers who plan a trip from home to get away from the routine life. Virtual Tours of restaurants and the menus in the restaurants of hotels can be used as an effective marketing tool to attract customers. While at the restaurant, VR headsets can be given to guests so that they can enjoy playing VR games and watching VR videos while their food is being prepared. The entire process of the preparation of the dish that is ordered can be shown to the guests using VR headsets.

6. Virtual Reality Entertainment

In-House Entertainment has become one of the main aspects of a hotel especially. Be it business hotels or leisure hotels customers always like some entertainment within the hotel for them to not having to take the effort to go out. Fitness centres, Swimming pools, Indoor games, Outdoor games like tennis (in resorts) are predominantly there in hotels for the entertainment of the guests. Hotels can level up this guest entertainment experience by providing VR models to play VR games and watch VR videos which will entertain the guests to a great extent.

7. Marketing Using Virtual Reality (VR)

360° videos of the rooms, restaurants, and public areas of the hotels can be shown in billboards in airports and high traffic areas. This will attract locals looking for a weekend getaway and international travellers looking for a hotel to stay during their trip. Eye catching visuals of the hotel can make it memorable for potential customers.

8. Virtual Reality (VR) Blueprints to Attract Investors:

Before a hotel is even built, Virtual Realty can be of great use. 3D and 360° plans and blueprints can come in handy to attract investors. Investors will be greatly impressed with an immersive tour of the plan of the hotel which will make way for the funding of the project. There is no need to be in the same room with the investors for an attractive presentation of the proposal. Information-rich immersive proposals can be done using VR models and sent to the investors who can get all the idea they need at the comfort of not being required to travel somewhere for a meeting.

CONCLUSION

The following have been covered in this research paper:

- An introduction to Virtual Reality (VR).
- Three different categories of Virtual Reality (VR).
- The Role of Virtual Reality in the Hospitality Industry.
- Applications of Virtual Reality (VR) in hotels around the world which are
 - 1) Virtual hotel tours
 - 2) Virtual booking process
 - 3) Education tool
 - 4) Virtual tour of nearby attractions
 - 5) Interactive Dining Experience
 - 6) Virtual Reality Entertainment
 - 7) Marketing using Virtual Reality (VR)
 - 8) Virtual Reality (VR) blueprints to attract investors

Tourists prefer relevant information given to them at the right time to help them during their travel. Hotels being the most prominent of all tourism products are expected to provide their customers with all the information required. Information Technology (IT) has been proved to be the most effective way of information transfer in the hospitality industry over the last decade. Now, technologies like Virtual Reality (VR) are booming like icing on cakes to the IT department for much more effective and interactive information transfer to the customers.

Hotels that use Virtual Reality (VR) technology are proving to be more successful and VR looks to have a great scope in the hospitality industry.

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FASCINATING TRENDS IN HOTEL INTERIOR DECOR

Ritu Agnes

*Final Year B.Sc. in Hospitality & Hotel Administration,
Institute of Hotel Management Catering Technology and Applied Nutrition, Taramani,
Chennai-600113.*

Shemuel Judah Barnabas. S

*Final Year B.Sc in Hospitality & Hotel Administration,
Institute of Hotel Management Catering Technology and Applied Nutrition, Taramani,
Chennai-600113.*

ABSTRACT

Interior design of the hotel is what aids grabs guest attraction and motivates them to stay in a hotel this is why it's necessary for management to efficiently organize and match patterns and colors. The most significant aspect of a guest's and the staff's experience is the interior design. The hotel's décor is what gives the place its charm and drama. New trends and techniques for designing and decorating a hotel are briefly covered in this article.

INTRODUCTION

Interior design is a personal representation of a person's values. The term "interior decoration" is self-explanatory: it is the total of a person's or a group's particular interests with the goal of beautifying a personal space or a public place. Interior décor is a person's own expression created by integrating diverse aspects of art and applying particular principles to them (Raghubalan, 2015). Interior design is the art and science of enhancing the interior of a building to achieve a healthier and more aesthetically pleasing environment for the people using the space.

A Brief History on Interior Decoration

Interior decoration has always had a role in designing a house. Though it became a prominent criteria for designing a place of living later it has always been a silent element, a person making a living space will design and have interior decoration of some sort without knowing. Even stone age people had some sort of interior decoration like animal skins and cave paintings which were supposed to be the trends during such time(stone age boundless art history, Lumen learning 2016). During the Mayan civilization era the people used to decorate their houses with sculptures(housing- Mayan, weekly). The ancient Egyptians decorated their mud homes with basic furnishing like animal skins, sculptures, painted urns etc(Egyptian art and architecture. Thomas Garnet Hendry James 2010). Roman and Greek civilizations advanced the Egyptian art

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of interior design and décor. The ancient Greeks stressed a home design style based on simplicity and inspired by natural colours. While the previous Greek style impacted the Romans, they added a dash of luxury and intricacy to the austere Greek décor (Greek and Roman style home interior decorating, Emily Beach 2010). These were just some of the examples of interior decorations used by people through out history. A very unique element about interior designing and décor is the person doing it, there are no limits to a persons creativity in interior décor there is endless possibilities and limitless combinations which is the reason why interior design and décor have been improvised to its modern form.

Need for Good Interior Design and Decor in Hotels

The interior design and décor in hotels is of utmost importance in creating a good experience for the guests and staff of the hotel. The design represents the brand or the property itself. It communicates about the theme and the atmosphere around which the property is built. The décor also plays a decent role in keeping up if not overtaking the competitors in terms of attracting more guests thereby making a greater profit which are some of the reasons why brands or properties spend a great deal of money on investing in décor.

OBJECTIVES

- To find modern trends in interior décor in hotels.
- To analyse the role of foliage plants as a part of interior décor.
- To find the role of anti-bacterial materials in interior décor post Covid.
- Use of eco-friendly interior décor.

REVIEW OF LITERATURE

In the article New Hotel design (Otto Riewoldt, 2006) The author states that modern hotel design/décor is responsible for more bold, colourful, more imaginative creations than any other architectural genere He also adds that there has never before been such amazing diversity, such a potpourri of styles an such extravagance of playfulness, he then compares interior decoration to a box of chocolates which present business travellers and holiday makers alike with deliciously agonizing choices. He belives that taste is subjective and money is instrumental in deciding exclusivity.

In the article the lobby as a living room: what interior design innovations and products do luxury hotels implement to attract guests to their lobby(Roaxne Braun, 2011) The author states that the contemporary hotel is a current design development since the beginning of the 21st century, which considers the needs and demands of today's customers, he continues by stating that Hotel design is a result of socio-cultural changes, technological advancements, economic and political situations, and environmental factors and that those elements create the macro-environment of a hospitality business and strongly influence the customers' demands, wishes, and desires. He then includes that hotel properties and marketers need to carefully observe and evaluate those

transformations in order to offer the “right product [or service], to the right customer, at the right time for the right price” and that this attentive behavior will lead to increased revenue and thus profit and success

In the article *Development of New Foliage Plant Cultivar* (J. Chen, R.J. Henny, and D.B. McConnell, 2002) The authors begin their study by stating that Foliage plants, defined literally, would include all plants grown for their attractive leaves rather than for flowers or fruits. In general horticultural terms, however, foliage plants are mostly those with attractive foliage and/or flowers that are able to survive and grow indoors. Thus, they are used as living plants for interior decoration or interior landscaping

In the article *the use of plants in modern interior design* (woodpecker, 2012) The publisher says that nowadays, the use of plants in modern interior design is getting more and more popular, that they not only making spaces more appealing and alive, they also play a role in one’s overall health he then adds that indoor plants can be used as accent pieces, to soften areas or even to create a certain expression. The author then brings out several benefits of foilages. For example foilages help to reduce stress and anxiety, foilages help to improve one’s sleep pattern, they can filter the air inside the room, they can increase productivity etc

In the article *décor materials that will become essential in a post-COVID-19 world* (Pooja Khanna Tyagi, 2020) ,The author says that Within a short span of time the COVID-19 pandemic has changed our lives as we know it. While the virus may be short-lived it will have a long term impact on interior design/décor, she then suggests the following materials that she believes will be used in a post COVID-19 world for interior design/décor. Firstly she mentions that anti-bacterial fabrics will be used for curtains and upholstered furniture because they prevent the growth of harmful microbes she says that any fabric can be turned into an anti-bacterial by just applying anti-bacterial agents to the surface, next she mentions anti-bacterial surfaces in which she believes that Some of the most frequently touched surfaces include counter tops, cabinets, handles and knobs to name a few. These, while need to be cleaned frequently, should also be anti-bacterial in nature. She then mentions some brands of anti-bacterial materials, next she mentions anti-bacterial paint where she says that many places will opt for antimicrobial paints for interior walls because they are resistant to mould, fungus and bacteria she also mentions that alternately some additives can be mixed to any paint colour to make it antimicrobial in nature.

In the article *eco-friendly materials in interior design* (uncube, 2018) the publisher argues that eco-friendly materials play an important role in interior décor. In order to create a healthier environment for functioning eco-friendly materials are increasingly being used in interior décor because of its quality and its benefits for people and the planet. Some of the main features of eco-friendly materials are a renewable source, a reuse of waste product, embedded energy, are locally available, are a reduction to air water and land pollution, durability and life span aids energy efficiency, enhances recycling, etc., the most commonly used eco-friendly materials are bamboo, teak, cork, reclaimed wood, recycled plastic, felt, stainless steel, aluminium, clay brick, bio-glass, hemp fabric, soy bean fabric, etc.

New Trends of Interior Decoration in Hotels

A proper and well executed interior designing plays a major role in attracting customers as the ambience is what matters before the guest gets to experience the services. Service, facilities and food offered should go hand in hand with the interiors like the theme of the hotel as a slight negligence in any one of them would lead to a negative guest experience. Interior designing of hotels, guest rooms, restaurants or even of any residency is the most important thing at this time. A great interior design adds up to an aesthetic feel and pulls prospective guests towards the hotel again and again as people tend to go to places which helped them relax and feel comfortable. The patters, arrangement, colors used adds to aesthetic appeal and also help maximize the functioning of the certain area. Interior designing doesn't only mean the colors or pattern it also means how a certain place is arranged and how minimal the things are kept.

Interior designing adds up to bring a person to emotions ease and also make them spiritually calm. Feng shui the Chinese art of spatial positioning of things in a room to get energy flow that is also known as wabi sabi. Interior designing of homes or guestrooms helps in the physical and mental wellbeing of a person living there for instance let's take the colors and how they affect the mood.

- Red – Stimulates anger, love and power
- Yellow – happiness
- Blue – soothing
- Grey- brings comfort and warmth
- White- gives a calm feeling

In recent times it's observed that 5 star hotels mostly use neutral colors like white and grey as the main aim behind a good guestroom is to provide the customer with calmness and comfort. The guestrooms are decorated with accent color schemes giving the rooms an aesthetic as well as comfort feel. During the covid times when many corporate employees worked from home the trend of staycations increased rapidly where the guest needed a change in place where they could work and relax together. So new interior designing trends evolved which mostly gave the rooms a down to earth, simple and calming effect while giving the rooms' aesthetic appeal.

Interior designing trends emerging in 2022

Neutral color with earthy tones like brown:

- Neutral colors like white or grey are used on walls and ceilings with slight tones of brown or shades of brown to add accent to the guestroom and gives it a calm and down to earth feeling. The brown elements in guestroom give it a 70s look and gives a rich elegant timeless look.
- Rooms are painted with terracotta color from walls to ceilings to give a monochromatic moment that gives the room a cozy feeling.

Elements (furniture, wallpapers, upholstery) inspired by nature

- Lockdowns happening for the past two years and people spending more time indoors, people have been trying to connect with nature. This has inspired people to adopt more natural elements to furniture like backs plashes to bath tubs and decorative objects.
- This raw and imperfect feel of the natural materials gives the room depth and soul as well as calming feel to the guestroom.
- Placing artificial or real indoor plants has also gained interest in the recent times.

Leather sofas

- Leather adds a rich tone to the room and says a different story when it starts ageing.

Mixing design styles

- All white rooms with wooden and metallic furnitures adds aesthetic look to a room the walls being calm and furnitures adding a dark look to the room.

Antiqued plaster walls

- The plastered walls are spot sanded and given texture by expert craftsman. This adds a historical and dreamy feel to the place.

Elevated outdoor furnitures

- Adding metallic furnitures to the furniture in gardens of the hotel gives a sophisticated look to the theme of the hotel.

Usage of patterned jute

- Adding patterned jute designs like wall hangings or rugs provides accent to the room and gives texture and depth to the space.

Using vintage and sustainable products

- Using Sustainable materials has become top priority for many designers. This reduces carbon footprint by reducing waste and recycling items.
- Vintage items gives a dramatic feel to the guestroom.
- the room is provided with a warm and textured feeling by using vintage products.

Minimal non-functioning decorative objects

- Decorative items with no purpose and meaning but character add drama to the room.

Use of plants

- Plants make spaces more appealing and alive and also effect the health of the people living there.
- Indoor plants add accent and give expressions to the area.
- Plants filter air and helps fight cold and allergies.
- Plants reduces stress and anxiety helps a person sleep better and also increases productivity.

Use of antimicrobial floorings, textiles and paints

- Covid-19 pandemic has lead to people wanting to have cleaner rooms and has inspired people to adopt to antimicrobial walls and furniture.
- Anti microbial acts as a first line defense against germs and bacteria.
- Antimicrobial materials used in different areas of the room are:-

Area	Material
Floor	Cork
Countertops	Silestone
Fixtures and hardware	Copper
Bedding	Cotton

Use of eco-friendly materials

- Eco-friendly materials are renewable, available locally and reduce air, land and water pollution.
- Some Eco-friendly materials that can be used are:-
Bamboo, cork ,teak, reclaimed wood, recycled plastic, felt, stainless steels, aluminum, bio glass, marble, granites and bio glass.

CONCLUSION

Interior designing in hotels have emerged a long way in the past decade. Play a major role in the guest experience. Interior designing adds theme, expression and drama to the room. A room is not only about the painting but by the elements like paintings, furniture and upholstery.

The current trends in interior designing in 2022 are:

- earthy tones
- indoor plants

- decorative non-functioning object
- use of sustainable materials
- antimicrobial
- eco-friendly materials

These are the trends that attract the guest towards a hotel. It's important for hotels to combine patterns and different techniques efficiently so that the space is functional, well organized and gives a great eye appeal to the people viewing it.

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A STUDY ON PAW-PARTNER FRIENDLY HOTELS OF CHENNAI IN THE YEAR 2022

Mohana Rangan. B. H

*Assistant Lecturer,
Institute of Hotel Management,
Bhajipura Chokdi, PDPU Road, Airport Gandhinagar Highway, Gandhinagar,
Gujarat-382421.*

K. Pradyumn

*First Year M.Sc. in Hospitality Administration,
IHMCT & AN, CIT Campus, Taramani, Chennai-600113.*

ABSTRACT

“WHO LETS THE DOG IN?”, just a line from a song was trending a few years ago now has led to whole research on the pet-friendly tourism. Every pet friendly location is not only making the place better for pets but also a great place for the pet owners to hangout. It serves as a new way of getting their pets a new friend.

Hotels and restaurants, by making themselves pet friendly, are playing an inevitable role in the hospitality industry and the lives of the owners of human’s best friends. Just like the tourism industry is growing in the country, the pet friendly tourism is also growing at a great level. Having an upper hand in the point of pets, the pet friendly hotels are attracting a lot of people both nationally and internationally.

Here in this paper, the pet friendly hotels in Chennai are focussed on the challenges they are considerably adopting to the needs of a pet and the pet owners, the importance of implementing the health and hygiene practices at the hotel.

The trend of owning a pet and travelling with them has been eventually growing every year and there is a necessity for the hotels to adopt to the changes. Hotels making themselves is not only going to help the hotels increase the foot fall but also helps the pet owners to travel without any reassurance needed which ultimately increases the growth of the tourism industry.

Keywords: Pet friendly, hospitality industry, travelling with pets, staying with pets.

INTRODUCTION

People across the world now consider their pets as a part of their family. The pet market in India has been rapidly expanding with an annual rate of over 30%. People's lifestyles all across the world have been changed as a result of this. It also has a significant impact on peoples travel habits.

In the absence of the owners, the care centres take very good care of them and provide the necessary attention. The main disadvantage of these facilities is that the pets become extremely agitated, and some may even become despondent. This, in turn, leads to several other negative consequences, such as anger or anxiety.

Pet boarding was determined to be the most important factor affecting consumers' willingness to return. As hotel operators adopt the new policy of accepting dogs and respond to the particular demands of hotel guests, the likelihood of consumers returning to the hotel increases. Pet-friendly hotels should cater to both visitors with and without pets. This is an important consideration for hotels to bear in mind since they must safeguard both of them.

"Buying or selling a product or service in a specific region of demand", as defined by market niche, or niche marketing. In this situation, the service is promoted and sold to those who are most interested in it, rather than to the broader public. Advertising to a specialised market is frequently less expensive than advertising to a larger market, and the product or service must be tailored to the specific demands of the targeted potential clients. As a result, targeting travellers with pets has become a specialist marketing strategy.

OBJECTIVES

- To understand about the pet tourism in the country.
- To find out the extent of guest satisfaction with services of the hotels or outlets.
- to study the aspects that pet owners consider about when travelling with their pets.
- To analyse the knowledge of responders with the availability of pet friendly hotels in the city.

METHODOLOGY

Quantitative research is done in the form of surveys and few personal interviews with random people and pet owners in the city. Online forms are sent to the target group irrespective of their travel history with their pets.

TRAVELLING WITH PETS

Pet owners are encouraged to participate in outdoor recreation with their pets, resulting in the birth of pet tourism. When asked why they wished to travel with their dogs, 45 percent said it increased their enjoyment with the vacation by providing company, while 19 percent said it relieved their pets' worry of someone being left home (Nieminen, 2015).

According to studies, People who travel with their pets tend to stay longer and spend more money, so it makes excellent commercial sense for hotels to acknowledge them. Hoteliers may benefit from pet-friendly practices, but they may also face challenges. Some creativity may be required to achieve some kind of sales balance with the hurdles of varying market needs and seasonal marketplaces.

And as a result, a variety of hotels of multiple brands and service levels have ended up joining the trend of attempting to attract the relatively wealthy niche travel group known as pet owners. The money generated by people staying with pets is most likely reflected via intangible ways. The ability for visitors to bring their pet as an assistance to a hotel or resort may increase loyalty within the target group, highlighting the usefulness of a pet-friendly programme as an opportunity to do business for a hotel.

While hotels want to maximise earnings by delivering pet-related services, they also have to deal with higher operating expenses when they admit pets. This becomes a financial concern, which hotels strive to reduce by finding ways to save money. Because the majority of visitors are non-pet tourists, the expenses and dangers of providing pet-related services are frequently a source of concern for operators. Dog barking, for example, is inconvenient for other visitors and can transmit to other dogs.

Extra renovations to soundproof the rooms may be required to offer each guest with a pleasant night's sleep. Dog assaults are also the most serious of the potential issues, leading to litigation against the hotel's owner. As a result, pet-related infrastructure such as fencing and kennels may be required. An increase in cleaning expenses is frequently imposed, as is the need that each room be thoroughly sanitised once a pet traveller departs. Carpet shampooing, eliminating dog hair, and returning the area to allergen-free standards are among the other cleaning tasks. As a result, additional equipment is required, and even the furniture must be replaced on a frequent basis.

For some organizations, promoting a hotel as pet-friendly could be about striking the correct balance. While marketing to pet-friendly travellers may generate a lot of revenue since many pet owners consider their pets to be family members, some hotels attempt to avoid promoting their pet-friendliness too much to prevent losing business travellers who choose not to have pets in the hotel.

Hotels often welcome pets because the improved visitor happiness and market share outweigh any potential disruptions or damages. For a great pet programme, the hotel should connect with channels such as social media and pet-friendly tour operators, as well as look for greater collaboration. A well-structured programme increases the likelihood of pet-friendly visitors being happy, since they want to understand about any limits and prices in advance. It is also seen to be the greatest strategy to attract pet owners if there are no additional expenses and pets are not confined to smoking rooms or the least appealing accommodations.

There are no restrictions on what qualifies as a package or how many components it must have. Packages typically feature at least two aspects in addition to the hotel room, as adding just one component is not enough to be labelled a package in marketing terms. A modest package can include a hotel room, transportation, and a meal. These are the most common inclusions in

a package that includes entertainment and wellbeing. The likelihood of a bundle attracting client attention is determined by its distinctiveness. As a result, the most difficult and time-consuming aspects of building a package are identifying the target market niche and developing the correct concept.

Reliable data enables the hotel to construct a package for visitors who are already familiar with the hotel, as well as a package for raising income from the leading market segment or generating demand from a narrower target group with latent potential. This type of concealed demand is frequently triggered by the package's availability.

Bowlby coined the word "attachment", which refers to the bond that occurs between a parent and a child in other animals. Pet owner behaviour is obviously parental behaviour toward their companion animals, according to Askew. Three characteristics are generated by pet owners: delight, caring (protection), and anthropomorphism. When humans coexist with other animals, they experience joy. Pet owners who offer caring (or protection) to their animals also provide protection and security to other animals. Humans transferring their own emotions, ideas, and sentiments to animals or inanimate objects is known as anthropomorphism. Unmarried and divorced persons, as well as couples without children, showed a considerably high level of anthropomorphism, according to Albert and Bulcroft. Pet owners are becoming more attached to their pets, which implies they are more inclined to direct them enhancing their commitment to their pets.

BIG CHAIN HOTELS' PET POLICY

The large chains have become pet-friendly in recent years as part of a significant customization strategy aimed at increasing profit margins and expanding the target demographic. Before checking in, most places require non-refundable pet fees and the signing of a pet waiver. Despite the fact that a pet policy has been established, flexibility is still determined by the General Manager of the hotel (BBC, 2018). The fact that this policy is extremely delicate means that it cannot be implemented by a single set of rules. It's all about personalization and happiness. Although rules are established as recommendations, compromises are still feasible in some areas.

Luxury pet amenities and extended services are used as part of marketing techniques to entice pet-owner consumers. Revenue maximising tactics include additional fees and expenditures. To preserve the comfort of other guests, zoning restrictions are clearly indicated, and pets are not permitted in food and beverage facilities, including pools and fitness clubs, at any time. Any disruptive behaviour is not tolerated. All damages to hotel property as well as other guests must be borne entirely by the pet owners. It is reasonable to expect that huge chains continue to place a greater emphasis on non-pet owner customers as a source of income and to maintain the facilities' perceived image.

"Many dog owners describe being as devoted to their dogs as they are to their best friends, children, and spouses, and that they are more involved with their dogs than they have ever been" (Zhang, 2012). The hotel administration understands how dogs are viewed as part of the family and how owners are ready to spend to ensure their pets' comfort while on the road (Suksanguan, 2016).

It's also thought that the pet-related sector is growing since Millennials are delaying having children, and their dogs are typically treated as if they were their first kid. As a result, the property is glad to welcome domesticated pets, particularly dogs and cats, according to the previously specified regulations. As a revenue-generating strategy, it is the method they extend to new market segments.

However, as sophisticated demand grows, customization may become an accidental or even needless part of the operating process. The high cost of customisation may raise operating costs without generating comparable revenue gains. Complication minimization in pet-related services, as well as new business cooperation models between pet-related entrepreneurship and hotels, might be a new topic of research. The extensive research of hotel pet policies focusing on customer behaviour should be viewed as a pattern of micro behaviours leading to macro trends that can lead to company diversification opportunities.

DATA ANALYSIS

According to the data gathered during the questionnaire procedure, the majority of pet owners (76 percent) are between the ages of 18 and 25 years old. The second-largest segment of the pet-owning society is made up of people aged 45 and older. This clearly shows that people of all ages, both young and elderly, want a pawed buddy.

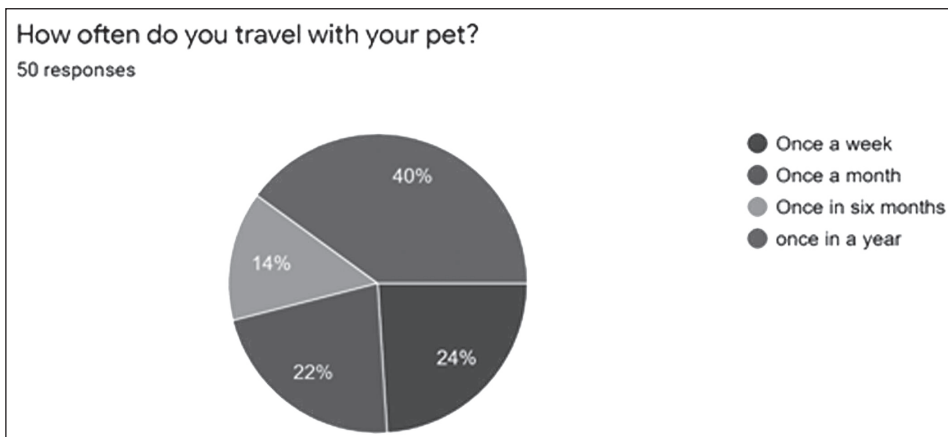


Figure 1

According to the responses, over 40% of pet parents only travel with their pets once a year, whereas nearly equal percentages travel once a month and once a week. The remaining 14% of pet owners only travel once every six months for different reasons.

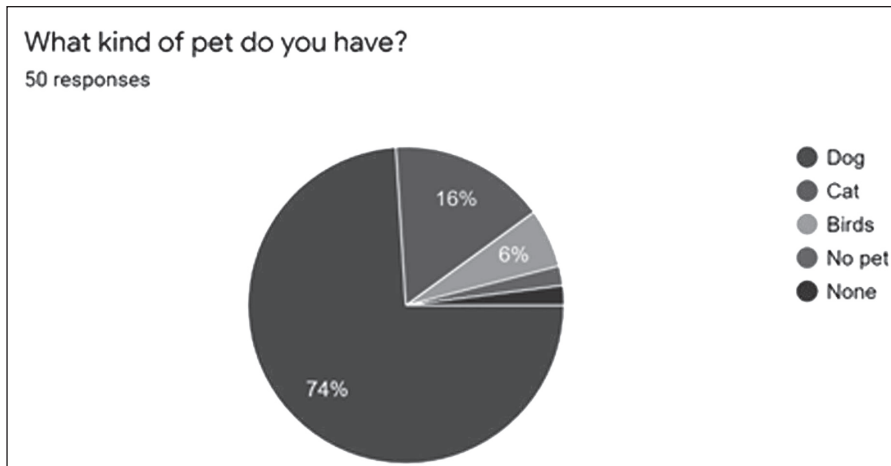


Figure 2

According to the data collected, the majority of pet owners, 74 percent, have dogs as their companions, while 16 percent have cats and 6 percent have birds. We could see by that the vast majority of the people choose to have dogs as pets, while a tiny fraction of them have never had pets and a few others have had pets in the past but no longer possess one owing to various reasons.

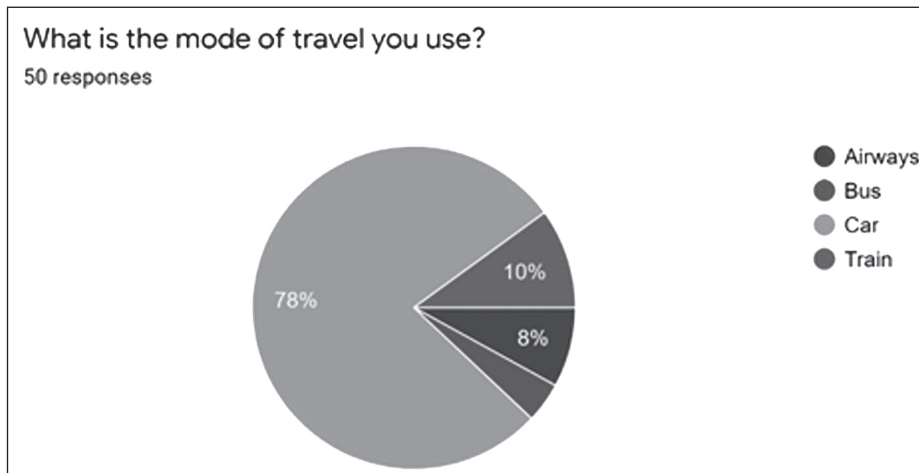


Figure 3

When asked if they had any issues while commuting, 46% of respondents said they do not have any issues. There might be a variety of causes for this, including the government gradually recognising and attempting to resolve the challenges that arise while travelling with pets. Another factor might be the 78 percent of individuals who travel in cars with their dogs. Airways may also be used as a mode of transportation, although they are more expensive and riskier than trains or roadways.

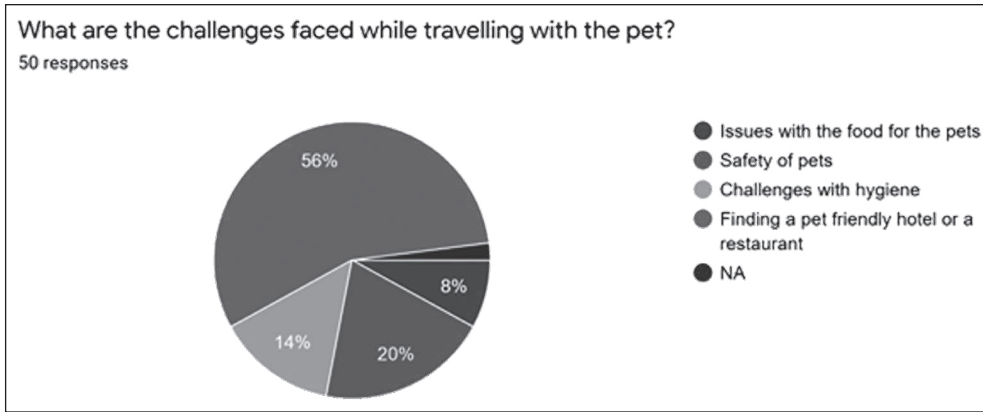


Figure 4

Despite the fact that 64% of respondents felt secure travelling with their pets, finding a pet-friendly hotel or restaurant is a major challenge. Concerns about the safety and sanitation of pets are also a key aspect of the issue that any pet owner is concerned about. The remaining 8% of individuals have trouble locating pet food that is suited for their animals.

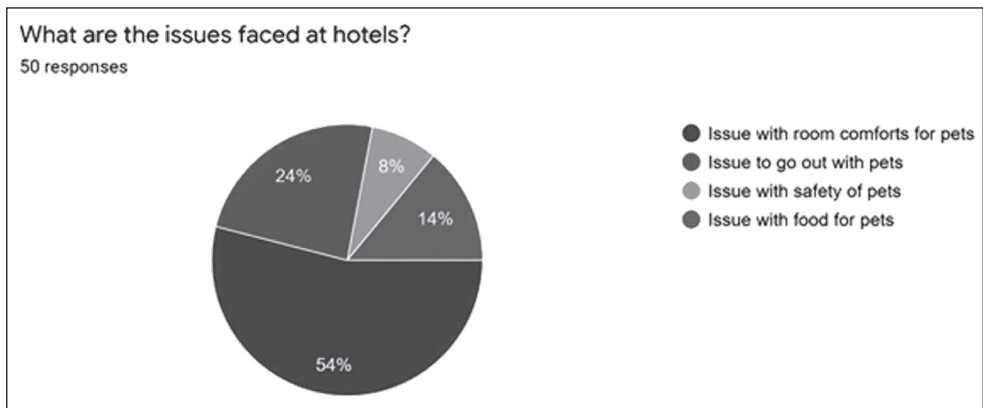


Figure 5

According to the graph, 70% of pet owners require a pet friendly hotel when travelling. Only about 22% of pet owners see the need for a pet friendly hotel on a timely manner. Despite the fact that they have found a pet-friendly hotel, they are having several problems there. Some of them are due to a problem with the room's amenities. A majority of 54 percent of pet owners have issues with their pets' comfort while vacationing. Many of them also suffer a major problem when it comes to going out with their dogs, since there are just a few pet-friendly establishments available. Other people encounter issues with pets' safety, and few struggle with the issue of pet food.

When questioned about the required measures taken by the respondents, the vast majority stated that they take great care to ensure the hygiene and safety of their pets. Many of them have also stated that they would always keep their pet's medications and diapers with them in case of

an emergency. The most prevalent response from all of the respondents was that they pack food for their pets because they have problems with the food given at the places they visit.

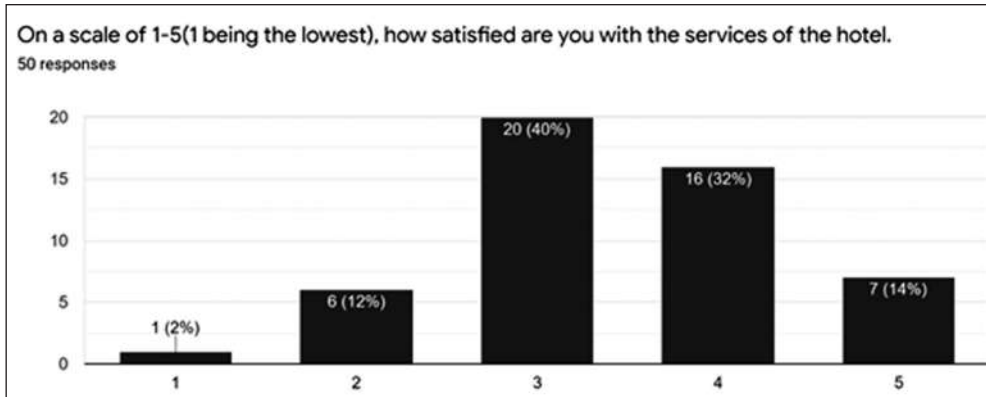


Figure 6

The vast majority of pet owners have stated that they are anxious with the hotel's services as well as the care given to their pets by the outlets. This has been mentioned as a serious concern by many of them. While 30% of respondents are satisfied, the hotels have a tremendous opportunity to improve and a wonderful path to go forward in order to satisfy the demands of their consumers, according to the survey.

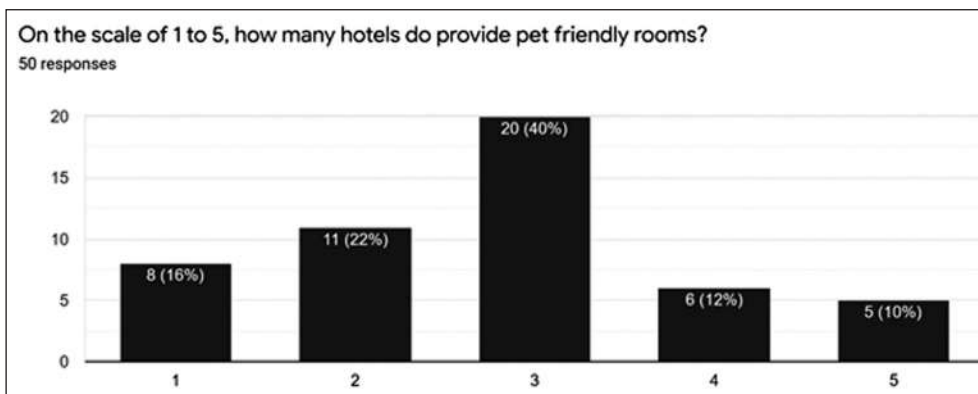


Figure 7

According to the results of the poll, 40 percent of the places in the city provide pet-friendly rooms to its clients, a number that is steadily increasing. The hotels are doing their best with their customer engagement by acknowledging to be pet-friendly. Many hotels, on the other hand, limit pets to rooms alone.

CONCLUSION

The pet market in India has been rapidly expanding with an annual rate of over 30%. As hotel operators adopt the new policy of accepting dogs, the likelihood of consumers returning to the hotel increases. People who travel with their pets tend to stay longer and spend more money, so

it makes excellent commercial sense for hotels to acknowledge them. The ability for visitors to bring their pet as an assistance to a hotel or resort may increase loyalty within the target group. For a great pet programme, the hotel should connect with channels such as social media and pet-friendly tour operators. Packages typically feature at least two aspects in addition to the hotel room, as adding just one component is not enough to be labelled a package in marketing terms.

The significant portion of pet owners are between the ages of 18 and 25, accounting for 76% of all pet owners. Population aged 45 and above make up the second-largest portion of the pet-owning population. Over 40% of pet parents only take their pets on vacation once a year, with approximately equal numbers taking them once a month and once a week. Concerns about the safety and hygiene of pets are another major issue for any pet owner. The large majority of pet owners have expressed concern about the hotel's facilities as well as the care provided to their dogs by outlets.

"Necessity is the mother of innovation", says a common saying referenced by Kuruvilla. As subsequently said, the moment for pet-friendly excellence has arrived, and there is no turning back from accommodating and serving dogs in the same manner as their human counterparts. Pet vacation properties have a bright future and a potentially "need of the hour" because they don't require large investments.

There is a discussion over whether pet-friendly is the concentrated niche to pursue, or whether businesses could broaden their views to include particularly built pet holiday lodgings. Others regard it as a genuine endeavour that should only be undertaken with great enthusiasm, while some see it as a burgeoning specialty that can provide additional money prospects. According to the poll, while 30% of survey participants are happy, hotels have a significant opportunity to improve and a splendid future ahead. Inclusivity and heterogeneity are crucial factors in today's development, and a vacation with a twist embraces both, thanks to one's love of animals.

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RELATIONSHIP BETWEEN ROOMS DIVISION DEPARTMENT IN HOTELS OF CHENNAI AND CARRIER OF HOSPITALITY GRADUATES

R. Parimala

*Principal In-charge & Head of the Department,
Institute of Hotel Management,
4th Cross Street, C.I.T Campus, Taramani, Chennai-600113.*

Jitendra Das

*Senior Lecturer,
Institute of Hotel Management,
4th Cross Street, C.I.T Campus, Taramani, Chennai-600113.*

ABSTRACT

Hospitality and Hotel industry has got two sides of the same coin out of which one side reflects the hospitality industry to be Glamorous in nature and on other side it is viewed as an industry having low social status, low pay and long working hours, etc. The main objective of this study is to evaluate the scope and hindrances faced by the hotel management graduates in taking up job in Rooms Division department of any hotel. The study has adopted the exploratory and analytical methods to conduct the study. Key inference based on the primary work covered in this research paper, it is inferred that the hospitality industry needs to understand and respond to the changing characteristics of hospitality Undergraduate so as to enable them to develop their careers in a way that is attractive to them so that they can be loyal to the industry resulting in the rapid growth and prosperity of both, self and the industry. This research also highlights various human resource and career related issues which the hospitality related stakeholders should be addressing in relation to the future recruitment and retention of employees in this sector.

Keywords: Carrier, Challenges, Hospitality, Hotel Management Graduates, Rooms Division, Scope.

INTRODUCTION

United Nations World Tourism Organisation evaluated the hospitality industry to be economically important around the world in the year 2006 itself but even today this industry across the globe is a marginal revenue generator. Hospitality industry provides comfortable and luxurious services such as food, accommodation, entertainment and leisure requirement to their guests at any given point of time.

Among of all the departments of the hotels, Rooms Division is the largest one which has got two major sections namely the Housekeeping and Front-office. Housekeeping section of this department usually takes care of the back of the house and performed to its never ending duties of 24 hours a day, Seven days in a week and throughout the year to provide clean, hygienic, fresh environment and comfort to every individual stepping into the hotel. On the other hand the front Office section of the Rooms Division Department take care of the guests room booking, registration, allotment of rooms, travel requirements etc., in the reception which is the front area of the hotel. Like any other department in hotel, Rooms Division also offers an individual to make a successful career and reach to the greater heights in the management up to the level of General Manager or even higher position.

According to Arnold (1997) a career is the individual's sequence of job positions, roles, activities and experiences. However, Tymon and Stumpf (2003) explains career as a sequence which relates to activities that are "meaningful to the individual and add value to the organisation in which the individual is employed". Arthur in the year 1994 has seen a remarkable change in career sequencing of the employees; he observed that in place of movement of the employees within the company, cross-company, boundary-less career moves became more prominence. McCabe also emphasises in the year 2001 about the evidence of mobility of hospitality undergraduate students within different sectors of tourism and hospitality. Further he also stated about the Multi-directional career systems which has been clearly emerging across industries, including hospitality industry.

Consideration all the above points, it was decided to take up the present study to evaluate the present scenario of relationship among the Rooms Division department of Hotels and the outgoing hospitality graduates from the hotel management institutes Chennai for last five years from 2016-17 to 2020-21.

AIM

The aim of the study is to discover the recent trends in relationship between hotel management passed out students and their perception to prosper in the Rooms division department in hotels of Chennai.

OBJECTIVES

- 1) To explore the trend of hotel management Graduates of Chennai, joining Rooms Division department in various star hotels of Chennai in last five years.

- 2) To evaluate the benefits of joining Rooms Division department in various star hotels in Chennai
- 3) To analyse the challenges for joining Rooms Division department in various star hotels of Chennai

METHODOLOGY

The study followed mixed method of research approach such as exploratory and analytical

- In the present paper, the uses of both primary and secondary sources were made to evaluate the relationship between Rooms Division and employability of hospitality graduates of Chennai in the star hotels of Chennai.
- The tools significantly used for the collection of primary data was questionnaire
- The data for qualitative analysis were collected from the passed out hotel management graduates of Chennai for last five years, hoteliers of Chennai and faculties of hotel management institutes in Chennai through both the personal and Telephonic Interviews for qualitative analysis
- The required data and information for the quantitative analysis for the present study were collected about the Hotel Management Graduates passed out between 2016-17 and 2020-21 from Hotel Management Institutes of Chennai.

PERIOD OF STUDY

The Quantitative study is based on the records of the placement of passed out hospitality graduated of Chennai city between the years 2016-17 to 2020-21. The Qualitative data is collected between the month January and February of 2022.

REVIEW OF LITERATURE

Chuang & Dellmann in the year 2010 stated in their study that although the number of hospitality educational institutions and graduates are increasing day by day, the number of well-trained and qualified employees in the industry is still meagre. Onur & Derya (2021) vouched upon their work stating that career self-efficacy and career expectations are one of the most valuable reasons for the employees to stay within the industry. Yi Liu, Jason & Mary (2022) threw light on the fact that the hospitality students' career decision-making process and career intentions have important implications for educators.

Research conducted by Kusluvan and Kusluvan in the year 2000, revealed that many students seemed to choose their discipline of undergraduate based on inadequate knowledge about the employment and career conditions in the sector. Engin & Tahire (2020) found the hospitality undergraduate students showing more favourable attitudes at the beginning of their education than in their final years. Latoya & Lisa in the year 2019 evaluated that low salaries, low status, and the lack of career advancement opportunities have negative impacts on hospitality students' hospitality career satisfaction. Kiwon, Ning & Seonjeong (2021) inferred from empirical study that the social recognition is one of the influential antecedents in the formation of individual

perception. Aleksandra & Anna told in the year 2021 that the perceptions of students who have never done an internship are more positive than those of those who have done. Students were determined to be aware of the importance of an internship. But the negativities they suffer during this process are more than positivity.

Pang, (2010) and Raj & Rajesh in their respective studies has mentioned that requirement of skilled hospitality graduates in hotels is very high, even higher than the number of graduates passing out every year but on the other hand number of such students taking up job in hotels are very less.

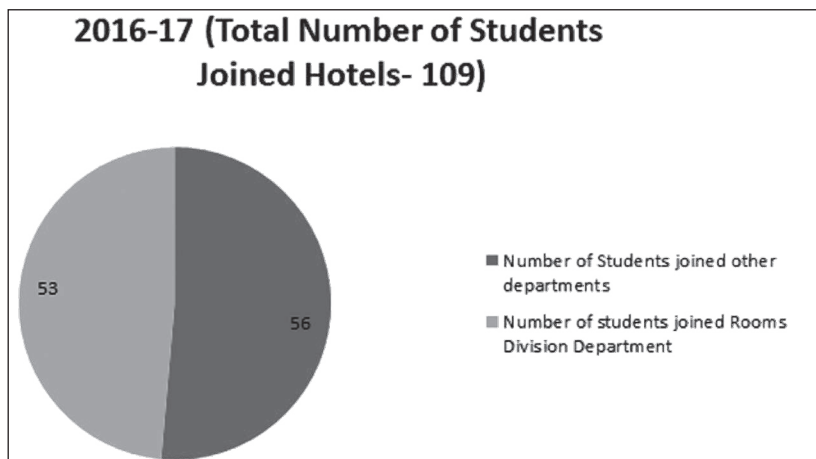
DATA ANALYSIS & INTREPRETATIONS

Table Number- 1 Hotel Management Graduates passed out bathes between 2016-17 and 2020-21 from Hotel Management Institutes of Chennai working in various hotels

Serial number	Passing out year of hotel management graduates	Total number of graduates joined hotels	Total number of graduates joined rooms division department of hotels	Total number of graduates joined other department of hotels
01	2016-17	109	53	56
02	2017-18	104	48	56
03	2018-19	69	27	42
04	2019-20	85	32	53
05	2020-21	31	10	21

Above table reflects the information based on the analysis of primary data and it reveals the fact about the Hotel Management Graduates passed out bathes between 2016-17 and 2020-21 from Hotel Management Institutes of Chennai working in various Three Star, Four Star, Five Star, Five Star Deluxe and Budget hotels of Chennai.

Chart Number - 1



Above chart clearly indicates that 48.62 percent students took up their carrier in the year 2016-17 in Rooms Division Department of hotels, whereas remaining 51.38 percentages of hospitality graduates joined other departments.

Chart Number- 2

2017-18 (Total Number of Students Joined Hotels- 104)

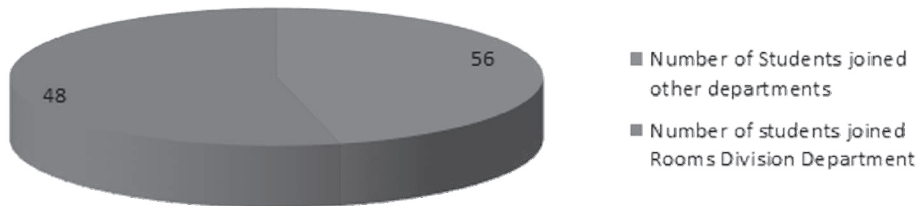
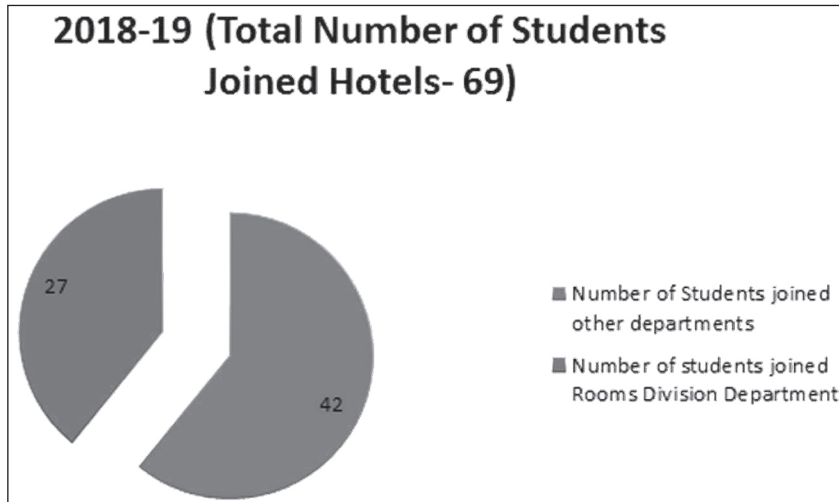


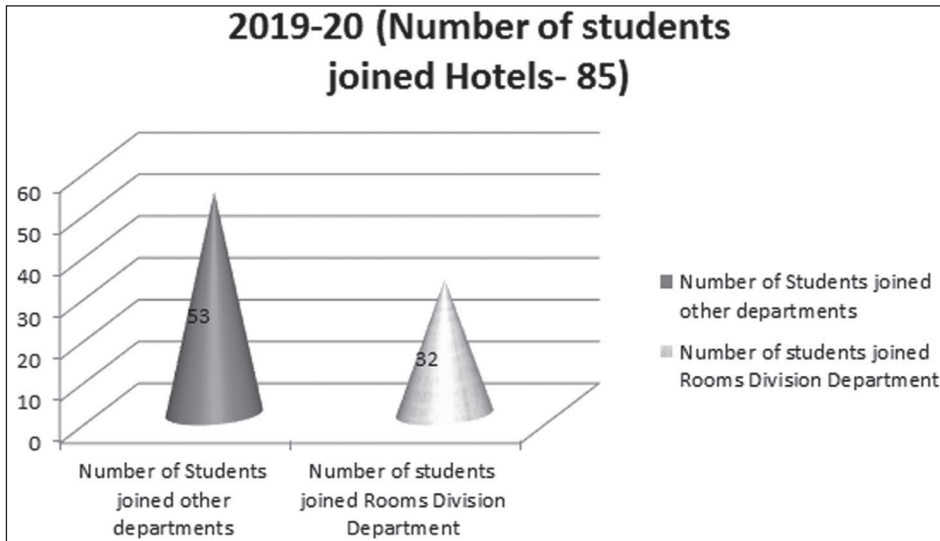
Chart number 2 reflects the fact that 46.15 percent students took up their carrier in the Rooms Division Department of hotels in the year 2017-18; however remaining 53.85 percentages of hospitality graduates joined other departments.

Chart Number- 3



In the year 2018-19, only 39.13 percent students preferred the Rooms Division Department of hotels and remaining 60.87 percentages of hospitality graduates joined other departments as per the above chart.

Chart Number- 4



As portrayed above, 37.64 percent graduates hold the hands of the Rooms Division Department of hotels but 62.36 percentages of hospitality graduates hold hands of other departments in hotels in the year 2019-20.

Chart Number- 5

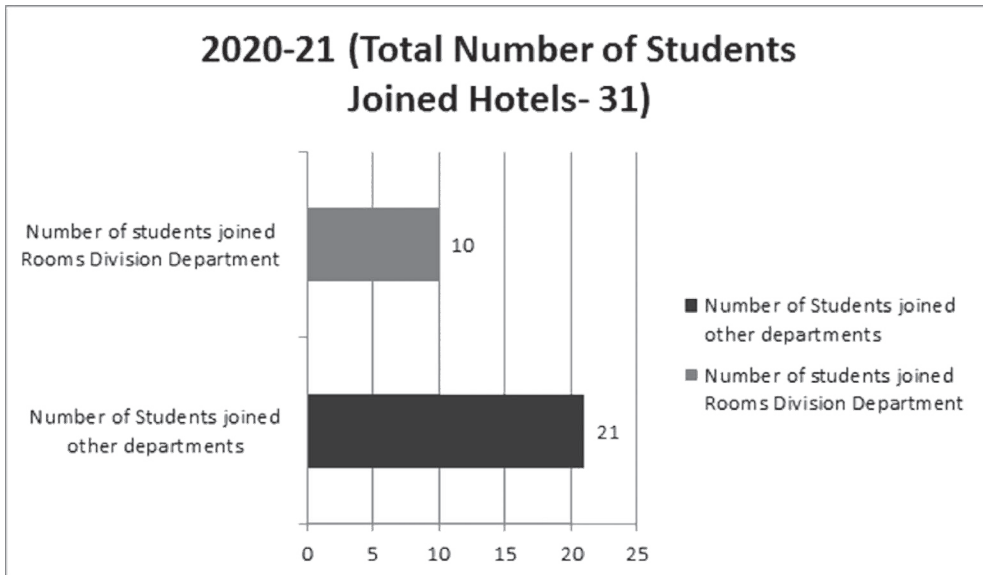


Chart number 5 shows the declining status of number of students taking up carrier in hotels and the departments are also affected due to this trend. In the year of 2020-21 only 32.25 percent hospitality graduates preferred working in Rooms Division Department therefore remaining 67.75 percent started their carrier in other departments of hotel.

FINDINGS AND DISCUSSION

Previous section of this study which dealt with the data and analysis part of our research clearly shows that the number of students taking up Rooms Division as their carrier is declining year by year. The trend of Hotel Rooms Division Department is also projected through the table number- 2.

Table Number-2: Students taking up Rooms Division as their Carrier

Serial Number	Passing out year of hotel management graduates	Total number of graduates joined rooms division department of hotels
01	2016-17	48.62
02	2017-18	46.15
03	2018-19	39.13
04	2019-20	37.64
05	2020-21	32.25

Career intentions in hospitality were significantly associated with students' Gender, Work experience, Outcome expectations, Long Working hours, Salary / Low pay, Opportunity for advancement, Poor physical working condition, Stressful job, Lack of family life, Over all low job satisfaction, Low social status, High amount of low skill jobs, influences of family and friends'.

Some of the inputs of the Passed out hospitality graduates during the face to face interview are discussed below:

1. Many student respondents preferred to work in the back of house rather than working in the front of house so as to be away from social stigma.
2. "Sometimes I feel that you don't get the rewards that you deserve".
3. "For what you do, the pay is terrible".
4. "I think that you will have to sacrifice your friends and family in order to be successful in the industry".
5. "You'll have to work long hours and also work away from home".
6. "I think I would like to start up my own business and end up as the CEO of an event organisation".
7. "Get a management trainee position in a restaurant chain and then after a few years, move out and set up my own business".

Present study came out with the most sensational information from the hoteliers that they need more number of hospitality graduates to join them but they are not able to get skilled human resources for their respective hotels. It also revealed the fact why the hospitality graduates are not willing to take up the hotel Rooms Division Department in hotels.

Since most of the reasons for not taking up rooms Division Department as their carrier which are figured out by the hospitality graduates are common, it may be true for other departments of the hotels as well. Therefore, further study can be taken up to understand the carrier trends in other depart of Hotels in Chennai.

CONCLUSION

Findings of this study have some implications for academicians in hotel management and tourism, as well as executives in these fields.

The young talents select hospitality careers because of high levels of satisfaction with hospitality schools (Frawley et al., 2019), career interest (Song and Chathoth, 2008; Song and Chon, 2012), satisfaction in internship (Walsh et al., 2015), industry-person congruency (Teng, 2008), the self-fulfillment nature and career accomplishment of hospitality jobs (Brown et al., 2015; Chuang and Dellmann-Jenkins, 2010), and job placement opportunities (Goh et al., 2017). Unfortunately, as they join the industry, their commitment to the industry is reduced by the low perceived social status of the work.

However this may represent a challenge for the hotel industry. The industry must put more emphasis on work life balance. Ultimately it can be concluded that a proper liaison between colleges, hotels and students can help retain hotel management graduates in the hotel industry.

SUGGESTIONS

Conducting counselling session is the demand of the day in hotel management institutes so as to know about the difficulties faced by the students during their Industrial Exposure Training (IET) and deal with the situation accordingly with mutual discussion between the Students, Academicians, Hoteliers and the lawmakers. Nowadays with many hospitality firms advocating a 5 day work-week, companies that are still practising a 6-day work-week should follow suit.

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Private Limited
No.1-B, Second Main Road
Ram Nagar South, Chennai - 600 091
Phone: 91-44-4283 7178 / 4386 9302
Mobile: +91-72002 58368
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www.vijaynicole.co.in

