

## FUTURISTIC HOTELS: A STUDY ON EVOLUTION AND GROWTH OF SMART HOTELS

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### ABSTRACT

*One of the most important technological trends that the hotel industry has seen in the recent times is the emergence and rise of smart technology. Implementation of modern technology in the hotels is advantageous to the guest as well as the hotels. It has been observed that modern technology is very effective in order to improve financial results and in achieving customer satisfaction especially in today's competitive world. This paper tries to explain what a smart hotel is and why the technology is becoming so important in today's time and how it is influencing the Hospitality Industry Globally.*

**Keywords:** Smart Hotel, Internet of Things, Digital Technology.

### Introduction

Smart hotel are those hotels which make use of devices that connects the Internet to communicate and interact with each other. It is also called as the Internet of Things (IoT) with the help of (IoT) even normal devices or appliances that are used on daily basis can be used for effective communication. IoT enables sending and receiving data and so it is called smart even multiple devices can be controlled from a single control point, such as smart phone, one another and it also allows the users to control multiple devices that to from a single control point, such as a remote control, smart phone, tablet or smart speaker. One of the unique features of these devices is that these devices are very effective in finding and using various kind of information that are available on the internet thereby answering to the request of the customers.

### Objective of the study

1. To study and understand the impact of modern technology on the hospitality industry
2. To find out the challenges faced by the hospitality industry in implementing modern Technology

### Methods

This Research study is based on secondary data which was collected through sources like books, journals, Websites and Articles.

### Reasons for Existing Hotel to be converted into a Smart Hotel

In today's global scenario hotels must try to turn and convert their existing hotels into a smart hotel, for the reason that smart hotels will significantly help to improve the guests experience, ease the work of the staff, and will also help in control the cost for the owners.

There are many advantages of smart hotels one of it being sustainability, this also is linked to energy saving inside the rooms of the hotels, as rooms are an important component of the hotel and with the help of Internet of Things, the light bulbs in the hotel rooms can be controlled automatically to increase or decrease the power, this is based on the intensity of the light and illumination of the room, even heating can be carried out automatically in order to maintain a certain temperature, once a certain temperature is reached the radiators cuts down and what it does is that it leads to a lower energy bill. What a smart room, does to the guest is that it helps to control the various components and at the same time it helps the management of the hotels to reduce the operational costs.

One of the most unique features of a smart hotel is that it offers personalisation for the guests for example, in the room a control point is made available which can be used by guests to set conditions within the room, another feature of personalised service is that with the help of a smart TV and smart speakers guests

will be able to access their own accounts on services like Netflix and Spotify.

With the help of a smart technology the guest are able to access with their Amazon account to connect with their audio books and music files, also with the help of devices such as Amazon Alexa speakers, the guest checking in the hotels will be able to use their voice for asking question related to various services available in the hotel and then receive an appropriate answer many devices lined to IoT will also be able to be connected with other hotel services such as information related to restaurant, bar, spa, and room availability, this can also be connected to the hotels system, providing them with live data. Smart hotels also aid the guess to connect wall maps to internet this allows the guests to receive information as well as the reviews of local restaurants, eatery's, bar, picnic and tourist spots. While providing with personalisation for the guests, It is also essential for the management of the hotels to take care of the smart hotel systems and technology, specifically while protecting the customers privacy, hotels must be transparent in this and they must adhere to data protection legislation, with the help of Technology the guest staying the room can also quickly and easily make adjustments in their room, as per their choice and need by this way they can enjoy their stay as well as fell homely.

A very unique in the hotel room which has been created by smart room technology is that with the help of a smart hub, tablet device and the central control point available in the hotel room guests are able to change the conditions within the room, like choosing a preferred temperature as well as lighting level this can be done through IoT technology, even the heating of room air conditioning, lighting adjustments can then be automatically maintained. It is usually seen that when it comes to technology it is an expensive business but with smart technology it actually reduces the costs. When it comes to the reduction of cost it is associated with sustainability and energy efficiency within the hotel rooms, as certain devices of the rooms are only being used when they are actually needed, even the light bulbs intensity is automatically reduced during daylight hours, and the heating of the rooms is automatically

turned off when a certain specified temperature is reached or when a room is not occupied TVs, lights, heating and other devices can also be controlled through voice commands thereby saving on the costs of energy as well as promoting eco-friendliness.

With the help of a smart technology in the room's guest are able to get information to their quires related to room service without calling to reception desk over the telephone because smart hub installed in the room attends to the questions of the guests and give them solutions immediately.

There are other benefit of smart hotel room like the employees of the hotels are able to access a variety of room controls from a remote location of the hotel this helps in making the rooms ready after the guest checks out so that when the new guest who checks in the hotel room is already ready for a new guest, even the ideal temperature is ensured by this when a guest checks in the room thereby improving the level of comfort which the guest expects this also saves time and effort. It is observed that whenever any issues related to technical failure is concerned it creates some kind of embarrassing situation to the hotel in front of the guests this issue is than solved, but with smart hotel it has an ability to anticipate the faults that can happen and allow the repairing work to happen instantly because of its ability of having attached to sophisticated devices. With the help of IoT the performance of electronic devices can be monitored remotely, and it provides the hotel staff with live information about the status of operation. This Technology also have the ability to spot areas where frequent repairs' are needed this means that the issues are spotted in advance before they become critical and complicated benefiting both the guests and hoteliers alike. Another feature of this is it saves on lot of money of the hoteliers because it curbs the losses which occurs due to rooms being out of order thereby protecting on revenue management.

### Literature Review

Nowadays, the development of technology is advancing at a rapid pace. As the growing numbers of customers demand technology to consume services, hotel industry is increasing their investment on technology dimension in

order to enhance the service quality, thus, increase customers' satisfaction (Camison, 2000 and Meuter et al., 2000). Self-service technologies (SSTs) are technological interfaces that allow customers to create service outcomes independently, without employee involvement. Therefore, since there are only two results: satisfied and dissatisfied, service performance becomes an important factor of influencing customer perception and experience.

As per Sio.2021, Latest technology has been in demand due to its advancement also the growth of mobile devices users for travel purpose has grown more than 51% in the recent times. The number of mobile users researching travel options on their mobile devices is expected to grow by 51% in 2012 and another 15% by 2013 (Saio, 2012). A market study by Reuters Synovate Global (plugged in) shows that 47% of potential clients demand the latest technology from the hotels they choose. Also, one third of guests assess a hotel by its website and 50% do research and comparisons online, before making their choice. The same report found that seven out of ten consumers would rather stay in a less expensive hotel and that hi-tech facilities are the top criteria in choosing a hotel. As per the latest survey from Reuter's synovate global more than 47% of the travellers have a demand to book hotel which has latest technology. Smart hotel is a hotel that uses advanced electronic devices, which is powered by the Internet of Things (IoT). This IoT technology is connected to ordinary devices with internet-connectivity, this helps in transferring the data and efficient communications. With the help of IoT technology multiple devices are able to be controlled through a smart speaker, and what it does is it monitors the devices from a single hub. Today a lot of hotel are implementing the concept of the smart hotel, as this technology is becoming very popular because of its ability to improve and enhance the guest's satisfaction and help in cost reduction. There by improving the financial results. Today our life is heavily depended on the technology if the hotelier wants to stand out from traditional hotel and bring novelty and interesting concept from sales and marketing point of view; they should adopt smart technology because the future hotels are going too based on the concept of smart hotels.

### Major challenges

The followings are some of the major challenges that are faced by hotels while adopting digital Technology

**Reluctance to invest in digital technology:** It has been observed that there is reluctance from the hoteliers to invest in digital technology this could be due to the lack of understanding and awareness related to the advantages of technology in fact hoteliers should accept the fact that today they are catering to the technology obsessed travellers whose expectations are very high when it comes to technological experience.

**Lack of proper education and professional development opportunities:** In the Indian scenario from hospitality perspective, there is lack of professional training on digital hospitality technology and latest technology available today, even training imparted with best practices given by hospitality schools available in our country are of a very basic level and it should be upgraded on a continuous level, planning should be done to give formal trainings on latest technology innovations and digital hospitality technology this would be helpful in boosting the education for future hoteliers on the importance of technology in this industry.

**Over use of technology:** India has always been looked upon as a country with a very rich culture, hotel guest and travellers are always given personal attention, taken care of and pampered but with hotel technology there will always be a danger of over-using technology to such an extent that the guest coming to smart hotel will not feel valued .Here the hotel need to create the balance to make them comfortable by giving them personal attention at the same time make them feel appreciated and welcomed. Indian travellers will not be offended with a little bit of technology available in the hotel.

**Automation or Human Touch:** In Recent times, some stand-alone hotels have introduced delivery robots in room service, today "Robotic technology in growing very steadily in almost all the major industry and the hospitality industry is not an exception to it but when it comes to Indian culture the element of personal touch, will always be an added advantage for

the guests in our country we still believe in the concept of, 'Athithi Devo Bhava'.

### Robotics

In some of the countries across the globe Robots have already started to replace jobs in various hotels, from front desk, housekeeping staff and food production department. Today Robotic technology and AI are already helping the hotel industry to increase efficiency and save on cost of manpower. Robot butlers are already implemented in some of the present hotels of USA and China, considering that robotics technology is the future of the hotel industry many hotels of Japan have started with the concept of robots as receptionists.

To sum up if the hotel have to be better, accelerate and stand out then they must adopt the "digital way of life" because today's travellers are tech-savvy travel consumers and are used to digital technologies whether at home or at the work place so current hotels must convert them into Smart Hotels and become a 100% digital technology-enabled industry, this in return will help the hoteliers in Guest Engagement, Acquisition and Retention Technology.

### Conclusion

Today we are in the world of digital age where the expectations of travellers are very high and so to make their hotels really SMART the hoteliers should take the steps to go beyond the TV with flat-screen, and PMS, also more stress

should be laid on the use of digital technology applications and devices for the comfort of the travellers as far as making the hotel room smart the use of media hubs which are streaming should be implemented, with this further the technology based on personalization and modern applications should be used for sales and marketing of hotels.

With the rising population of Gen next that is Millennia's 'and gen Y, it is expected that in the coming years hotel industry will experience that many hotels will adopt modern technology which are used by next generation such as.

Artificial Intelligence (AI), Customer service (chat bots), personalization (one-to-one marketing, one-to-one pricing), database management (single-view customer data) and loyalty programs, Voice Assistants/Voice Search: Integration of major hotel brand CRS with voice assistants like Amazon Alexa, Google Assistant and Apple Home Pod, customer service (voice assistants in hotel rooms).Internet of Things (IoT) Customer service (concierge, hotel lobby, room service); hotel security, operations (power and A/C management).

This study will help the hoteliers to understand the future technological trends within the hotel industry, as well as the future trends related to digital technology and its benefits to the travellers and the hoteliers.

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