The Innovation in Hotel Industry Called "The Smart Room

Mr Sunil Manohar Naidu
Bharati Vidyapeeth College of Hotel & Tourism Management Studies
Mr Deepanshu Dheer
Bharati Vidyapeeth College of Hotel & Tourism Management Studies

Abstract

In today's Digital world we for one would be the first to admit, that the generation belongs to the smart way of looking at things. Hence, we get the future guest to be called smart guests.

To sustain the demands of the smart guests we have today introduced a Modern Marvel of Technology Called as Smart Room. The Smart room connects the daily needs of the Guest like placing an order through room service, playing the favorite tune in house Music system. Or placing any request through the Interface of Hotel Services Eg Wi-Fi, Internet connection. Laundry requests and many More Applications. The transformation of any room to a Smart room can be quantified to the following aspects, Room Controls, Entertainment Vis A Vis Voice Control, Faster Guest Service, Rooms Sustainable, Maps which are Interactive, User Privacy, Customized Entertainment. The quest for improving the guest experience and saving financial wellbeing, greater efficiency, swifter repairs, and many more applications.

Through this Research paper, we would like to gain and In-depth application of smart room to the modern Hotel Industry. The application in Rooms Management System. Some of the Major Brands in the Hospitality Industry are moving forward with creating Smart rooms for the perfect Stay experience. Hotels Like The Oberoi, Hotel Grand Hyatt, Lemon tree Hotels and many more.

Keywords Smart room, Digital, Stay Experience, Connectivity

I. INTRODUCTION

In this era of modern technology and science even the Hotels are growing a lot they are not only providing world class service but they are also focusing on the world class facilities in the Rooms like modern technology in the rooms.

Few of those facilities are: -

Keyless Entry – Guests are allowed to enter through apps

Mirror Television - TV on the bathroom mirror

Texting Concierge – Can talk to the concierge through phone

Smart Thermostats – guest can control temperature through mobile

Streaming Devices To TV

Smart Lighting – Using Mobile to control the brightness of the lights and atmosphere.

Mp3 Docking Station – charge and play music at the same time

High Speed Internet – Most Important Thing ever

Light Sensors – turns on when guest enters and turns off when guest goes

Robots – Cleaning, Vacuuming and etc.

Tablets – to order foods, give laundry and etc.

Smart A.I – used to control all rooms features like window, TV, curtains etc.

These are like few of the new trends in the Industry which the hotels are talking and apply to provide a class of service which will make a guests stay way more interesting and enjoyable. These services come with a surely cost a bit and is hard to maintain but once applied to the hotel the hotels way of working also changes a lot as it bring few positive and negative points both like it is hard to maintain, and old and less educated staff finds it hard to use and understand and they can also get scared of using it because of the fear of breaking it and had to pay for it. These services are very expensive and hard to maintain and can cost a lot of money if damaged but this is also very usable as this can make sure a guest can enjoy his stay and get a lot of facilities at his finger tip and this also helps the staff as guest can do a lot of work on the tablet and mobile so the guest don't need to call the front office again and again for every work. This will help the staff to focus more and guest experience.

In the hospitality industry, the main contributor to hotel's revenue comes from Rooms' sales. A few years back, big beds with clean linen, television, iron, hair dryers, and telephone were enough to keep hotel guests happy and satisfied. However, this is no longer true. Changes in lifestyles have also increase the demand on the level of service required in hotels. It is very common for homes to have a high-definition (HD) flat panel television, high-speed internet access (HSIA), Hi-Fi system, and the list goes on. Guests are becoming more tech savvy. All these technologies from the home are slowly creeping into the hotel guestrooms.

Travelers also expect the latest technology available in the guestrooms so that they can stay connected with their businesses and home twenty-four hours a day many customers are using latest the technology at home and look for similar resources when they travelled (Forty-eight percent of hotel operators cited in-room entertainment as important.

Hoteliers need to ensure that their guests have a memorable and unforgettable pleasant experience during their stay in the hotel. Hoteliers are aggressively marketing and promoting to attract guests who are increasingly looking for a more up-market experience in their guest rooms.

This paper is an exploratory study on the various technologies and facilities enhancement adopted by hoteliers in their guestrooms to meet the high and demanding expectations from today business and leisure travelers. Areas of study include security, communications, in-room entertainment, room service, guestroom automation system and environmental control.

II. IMPORTANCE OF THE ENVIRONMENT AND TECHNOLOGY

On the area of climate change, the EU, Japan and United States have committed to cut carbon emissions by at twenty percent, twenty five percent and seventeen percent by 2020 respectively. With so much attentions being brought up on the climate change during the Climate Conference, it is not surprising hoteliers and owners is making using of technology to leverage their business sustainability. This paper will also explore into business sustainability using guestroom technologies adopted by both hoteliers and owners.

With the right technologies and equipment in place, owners and management want to ensure that these will create truly memorable experiences for their guests; eventually turn into higher occupancy and higher average room rates. Technology in guestrooms is playing an increasing role in increasing room revenues and building up new business opportunities in the hospitality industry.

Purpose

The purpose of this professional paper is to explore the different types of technologies and equipment that impact guest-facing technologies in the guestroom. Areas include voice over internet phone, high-speed internet access, guest room entertainment, guest services such as mini-bar, in-room security, communications, and central environment control offered for the hotel guestroom's applications. Information on latest technologies adapted by the hoteliers and the industry in each of the above areas will be included. As travelers are increasingly aware and making daily choices to reduce.

their environmental impact on global warming for both at home and in hotels where they stay; they also expect hotels to act and embrace sustainability through both developmental and operational strategies. This paper also looks into how hoteliers prove their green credentials by using both green technologies and at the same time using technology to leverage on sustainability for their daily operations as part of the effort in helping the hotel industry reduce its impact on the environment and move towards business sustainability.

Justification

There are many reasons to think that technology will continue to drive the guest experience, both today and tomorrow. It is the single greatest force driving the change and complexity in the hotel industry. This exploratory study would be of interest to both business and leisure travelers facing technology and to have a better understanding of the current or near future guestroom technologies in the hotel industry. Independent hotel owners may benefit from this study on the technologies available in the industry to upgrade or enhance the guestrooms in their properties.

Consumers who are environmentally conscious will be interested, as this paper will include technologies adopted by hoteliers that have a positive impact in the environment and at the same time give the guest a memorable experience during their stay in the hotels. Achieving guest loyalty will involve more than simply installing and layering technology after technology in the guestroom. Looking ahead, technology sits at the heart of the guests' demands. Over the last five years, technology has done more to shape future guests' expectations.

Glossary

High Definition Television

High Definition Television (HDTV) is a video having substantially higher resolution than traditional television systems. High definition has one or two million pixels per frame; roughly five times that of standard definition television.

Internet Protocol Television

Internet Protocol Television (IPTV) delivers television programming via a broadband internet connection using Internet protocols suite. It requires a set-top box to deliver the programs .

Liquid Crystal Display

A liquid crystal display (LCD) is a thin, flat electronic visual display that uses the light modulating properties of liquid crystals.

Radio Frequency Identification

Radio Frequency Identification (RFID) is a data collection technology that uses electronic tags for storing data. It comprises of an integrated circuit for data storage known as tags or labels and the other component is the readers. It acts as an antenna for receiving and transmitting the signal. Transmitting in the kilohertz, megahertz and gigahertz ranges, tags may be battery-powered or derive their power from the RF waves coming from the reader.

III. LITERATURE REVIEW

The evolution of technologies changes the way we live. In fact, the way people use technology becomes part of a change in the way the people live and interact when they travel. Other factors are influencing the way they live and the technologies they use when they are at home. At home, people are profoundly impacted by new technologies on a regular basis, and these are impacting what they will expect in the hotels when they travel and stay.

Supporting core business strategies, managing constant change, meeting high expectations and demands from guests are constant challenges faced by hoteliers and property management. They have to continuously outperform and be able to differentiate from their competitors through constant innovations and creative ideas. The need to accept innovative technologies to maintain market leadership positions and compete in the market is globally recognized in the hospitality industry. To be a market leader and win the customers, having efficient service is not enough. It has to be combined with smart room technology. Business and leisure travelers are confronted with technologies adopted by hotels, which hoteliers hope to give travelers the feelings that they have the same or better technology in the guestroom as they do at home.

IV. INCREASING GUEST EXPECTATIONS WITH TECHNOLOGY

Beyond the need to update infrastructure, there's a growing demand from technology-dependent business travelers for greater connectivity and functionality in hotels and guest rooms. For these travelers, Smart phones, pocket PCs, tablet PCs, and wireless connectivity are standard equipment at work and at home, and the ability to stay connected while on the road is a central factor in decisions about where to stay. To remain competitive, hotels must be able to provide the same technology capabilities that guests have come to expect in the office and at home.

Having more bandwidth, however, is just one piece of the puzzle. If a guest cannot or have difficulties to connect to the network, then more bandwidth does not make a difference. In order for high-speed internet access (HSIA) to be successful for a hotel,

the internet access connection must be reliable, stable and secured when it is used to complementing and enhancing the guest experience and expectations.

Planning for the future

Not many hoteliers had the means to invest in replacing the legacy systems and proprietary technology they rely on to manage operations due to limited budget or other constrain from the management. More recently, organizations across the lodging industry have begun to take a serious look at the long-term value that investments in technology infrastructure may offer. However, they face a wide range of important questions. Is client-server still the answer? Should Web-based technologies be considered? What about hosted products? Will the technologies they invested in be phased out before they can recover their return on investment? Many in the industry are looking for guidance from major technology players to help them determine the best choices for new technologies to enable them achieve their business goals.

Integrated network

Today, with the evolution of technology, hotel operators know that one of the ways to improve guest experiences, create new revenue opportunities, and optimize operations is with an integrated, converged communications network that leverages advanced wired and wireless voice, high speed Internet access (HSIA), video on demand, Internet Protocol Television (IPTV).

Technology vs human

Hoteliers ultimately must not forget that they are in the hospitality industry. It is a people business. While technology offers great opportunity for the hotelier to enhance guests' experience in their guestroom and increase room revenues, the humane touch from the

staff providing the services to the guests are extremely important as well. According to The Ritz-Carlton Hotel, the company will never want to place a check-in kiosk in the lobby of a Ritz-Carlton; nor will the guest receive a wake-up call from an automated machine but from the staff themselves. No matter how advance is the technology, it will never replace or engage better than the staff who serve the guests.

V. CONCLUSION

By seeing the complete report made and by doing all this research and survey we came to know about these technical trends are like modern rooms are growing a lot as we can see hotels and brands like Accor and many other brands are focusing more and more on these new modern trends in the rooms as they feel like with luxury guest should also have an tension free and an experience which they can never forget as this made a great opinion among customers in the market and can help a hotel to gain more and more customers and good reviews. As we have done actual surveys in many hotels like Sofitel, trident and etc. were we got opportunity to communicate with the staff and guests as we gave them few questionnaires asking about new technology and modern rooms and there review actually made me think more about it as we saw many people are actually very interested to just try out these features and services and they are very impressed to see hotels and brands are taking more and more interest and working so hard to make the guests experience much better and after taking with the staff we saw that these new facilities in the room is actually making the hotel more booked and also helping in getting more good reviews on the social media and travel apps. These new modern rooms include a lot of good and feature packed facilities which is very helpful like use of A.I (artificial intelligence) to control the room features so you can just sit on your bed and do anything you want like opening Curtin's, calling housekeeping, turning the TV on and etc. and many more things like free high speed Wi-Fi and all which are very important now a days as many people do meeting and video calls from the rooms so fast Wi-Fi. Is necessary. Then the concept of automatic lights which just turns on the lights whenever you walk on the floor and turn off the light when your foot is not on the floor or you leave the room this concept is also very energy efficient and also saves the environment at the same time. Then comes the mobile application which can control all the electronic things in the room without going to them like lights, temperature of the A.C, television, and etc. this made me think more about how much the hospitality industry is changing and how it is updating itself for the future and is also conceding the demands of the customers at the same time. So just to conclude I would like to say the concept of modern room has changed the face and working style of the industry and how it operates. And also made other hotels to work harder and bring new technology in so finally the guest can also get the luxurious experience as well as the comfort at the same time. These new modern rooms will definitely change the face of the industry and how hotels operate these are extremely good facilities but these has also cause a little bit for old staff but they will get used to it after some time and they will also use it for their better working and operations as these surely reduce their stress of working a little bit and also these services are expensive to maintain at the same time so many hotels do not have it right now but surely after some time it will be available at every hotel for better experience and stays for the guests.

Question to the guest

- 1) Do you like the concept of smart room?
- 2) Which facilities do you like the most?
- 3) Was it hard to use the new services?
- 4) Does it change the way of living in the room?
- 5) Is it helpful?
 - Do you want these services in your room?
- 6) Does it make your experience better?
- 7) Do you have problems with any new technology?
- 8) Will you tell your friends and family to come and try out these new features on their stay?
- 9) Is it useful or just fancy features as per your experience? Questions to the staff
- Questions to in
- Is it helpful?
 Does it reduce work load?
- 3) Do you feel comfortable with these facilities while cleaning room?
- 4) Is it creating trouble in your work?
- 5) Do you think these services had increased the number of customers in the hotel?
- 6) Do you get happy customers or angry customers?
- 7) Do you suggest these facilities in the hotels?
- 8) Does these services cause troubles in your working?
- 9) Is it tuff to solve troubles caused by these technical devices?
- 10) Is guest satisfied with these services in the rooms as per your reviews?

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