

Clean Technology for Green Hotels

Rajiv Kumar Dwivedi*, Dr Manoj Pandey** and Prof. (Dr.) Anil Vashisht***

*Asst Professor Amity Business School, Amity University, Gwalior

** Associate Professor & HOD , Amity Business School, Amity University, Gwalior

***Director, Amity Business School, Amity University, Gwalior

Abstract

Technology is very strongly influencing every industry. Technology and the power of internet are increasing the expectation of the consumers in every industry including the hotel industry. A sector where the consumer's expectation for a positive experience is very high, technology can provide solutions to overcome the challenges. Technology for a customer means an improvement in the life style that makes the life easy. With the development of any new application the expectation increases to 'what else' or 'what better' is possible. . Green technology, normally referred as clean technology also, works towards producing products or/and services that are environmental friendly and also are sustainable in nature. Green technologies increase the productivity & efficiency while not increasing the environmental impact, others provide drastic reduction in environmental impact

Keywords – Green technology, hotel, environmental, sustainability.

Introduction

There is no industry today that is untouched by technology. The power of internet is increasing the expectations of the customers in every industry, including the hotel industry. A sector where the consumer's expectation for a positive experience is very high, technology can provide solutions to overcome the challenges. Technology for a customer means an improvement in the life style that makes the life easy. A report (By the Oracle hospitality), surveyed around 3,000 United States & European tourists in order to understand the role of technology in improving the guest experience with respect to hotel stay. Sixty four (64%) percent of United States hotel guest said that it is extremely important for a hotel to regularly invest in technology in order to increase the guest expectation. A positive guest experience will not only improve the loyalty for the hotel but also will spread the word of mouth & improve the online reviews for the hotel. We should not forget that ultimately it is the genuine customer satisfaction and recommendation that counts the most and any technology has to work in that direction only. A Price Water Cooper (PWC - 2014) report says that hospitality is the fifth biggest industry to invest in sensors.

On Arrival

Today the guests are becoming more and more demanding. A report by Oracle Hospitality brings the important points that a guest would like to see in a hotel.

- ❖ Flexibility in selecting specific room locations (45%)
- ❖ Various means to share information (Destination activities) (41%)
- ❖ Check – in and check - out process (39%)
- ❖ Different ways to make service request (36%)

Check in – check out – Automation

In order to improve the efficiency and ease of the customers, hotels are in the process of automating the check ins & checkouts. This may help the staff to concentrate on other important things to improve the guest experience. But 60% of the guests still prefer to speak in person with the hotel staff & thus hotels will have to create a balance between technology & personal interactions

Key less Entry

Keys and swipe cards will soon become the gone day's things. These will be replaced by smart phone applications. The Hilton hotels have already introduced Hilton digital key application (in 2015) and now Hilton is working on keyless entry. In coming times facial recognition software may take over.

Personal Data Maintenance

To give a personal touch to the guest, hotels are working on maintaining personal data of the frequent travelers. This will help the hotels to create a personal touch with the guest & increase his experience. For example if the hotel has the customer's information that he/she likes swimming pool view, blue color bed sheets, is diabetic, has an allergy towards something and the hotel provides the same, it can improve the experience of the customer to a great extent.

Technology to save water & energy

Technology is helping hotels in a great way to save water and energy. Technology products like low flow shower aerators, self stopping taps, urinal sensors & dual flush toilets are saving lot of water. Similarly technology products like keycards, sensors, LED bulbs, green switches and power saving HVAC systems are saving lot of electricity for the Hotels.

Bookings and Arrivals

The availability of a number of booking sites like makemytrip, goabibo, tripadvisor and kayak have made it very convenient for the customers to get the best deals and best experiences. Technology can play a great role to enable the customer to choose a specific room, favorite food, book a cab and to plan his check in and checkout time (and to prepone or extend it)

Data management

Data management software can help the hotels in managing their operations as well as in increasing the guest experiences. Tailor made data management software can help the hotels to manage their inventory, people and processes. These management information systems can also store and retrieve the data of the guests. With the increasing scope of this, there is an increase in the demand of data scientists in different industries. In order to deliver a delightful experience, hotels need to know the interest, likings and disliking of their customers. This can create a long lasting impression and can improve the loyalty of the customers.

Robotics – The new trend

Robotics is the new thing which is going to take over hotel industry as per the latest predictions. One may not be surprised to see robots doing room cleaning and delivering guest amenities in coming five to ten years.

Newer Green technologies

Green technology, often referred as clean technology is that technology that works towards producing products/services that are environmental friendly and are sustainable in nature. Some green technologies offer increase in productivity & efficiency while not increasing the environmental impact, others provide drastic reduction in environmental impact. The United Nations Environmental Program (UNEP) divides the industry into these sub categories.

- ❖ Wind
- ❖ Solar
- ❖ Bio fuels
- ❖ Bio mass
- ❖ Small hydro
- ❖ Geo thermal
- ❖ Marine

In 2017, green technology continued to dominate new power generation capacity. Solar and wind categories have continued their lead. Along with these two, electric vehicles also have gained lot of attention by the four wheeler and two wheeler industry. Green technology also is giving space to new objectives. These objectives are

- ❖ Source Reduction- In this the goal is to reduce pollution and waste by changing the production and consumption ways using green technologies.
- ❖ Sustainability – Whatever goals are to be attained have to be sustainable in nature.
- ❖ Innovation – New innovative methods have to be found so that it works on improving efficacy & productivity, reducing the cost and at the same time is environmental friendly.
- ❖ Cradle to cradle design – In this kind of method those kinds of products are to be produced that can be reused and recycled, in a way to end the cradle to grave cycle of the products.
- ❖ Environment friendly – The products and services have to be environmental friendly and the products and technology should complement each other.
- ❖ Energy – Energy being one of the most important issue in this entire discussion, the focus has to be towards the development of alternative fuels
- ❖ Green technology strategy – While choosing a sector for green technology investment it becomes important to integrate the business objectives with the environmental objectives. For any green technology investment one has to keep in his mind that one should not fall in green washing trap (in this a company, product or service claims to green but it is actually not).

Conclusion

There is absolutely no doubt that technology plays a huge role in shaping any industry. This fact is equally true for hotel industry in which at every step technology is improving the quality of life of the guest by improving their experience. The challenge of investing in green technology is a two-fold challenge.

- 1) To achieve the business (economic) goals of the organization
- 2) To use technology for socially and environmentally responsible purpose.

Along with using green technology it has to be kept in mind that there is no substitute to human touch. As the reality is that the human touch is reducing day by day, the importance of human touch is also increasing. We need to remember that we have to create a balance between human touch and technology to get the best results.

Bibliography

Beldona, S. & Cobanoglu C. (2007). Importance-performance analysis of guest technologies in the lodging industry. *Cornell Hotel and Restaurant Administration Quarterly*, 48(3), 299-312.

D. C. Ukpabi and H. Karjaluoto, (2017) "Consumers' acceptance of information and communications technology in tourism: A review," *Telematics and Informatics*, vol. 34, no. 5, pp. 618 – 644.

G. Piccoli, T.-W. Lui, and B. Grun, (2017), "The impact of IT-enabled customer service systems on service personalization, customer service perceptions, and hotel performance," *Tourism Management*, vol. 59, no. Supplement, pp. 349 – 362.

Kasavana, M. L. (2005). What's next in self-service, *The Bottomline: The Journal of Hospitality Financial and Technology Professionals*, 20(2), 24-26.

Koutroumanis, D. A. (2011). Technology's Effect on Hotels and Restaurants: Building a Strategic Competitive Advantage. *Journal of Applied Business and Economics*, 72-78.

Magnini, V. P., Jr., E. D., & Hodge, S. K. (2009). Data Mining for Hotel Firms : Use and Limitations. *Cornell Hotel and Restaurant Administration Quarterly*, p. 105.

Parets, R.T., (2004). Hotel rooms are high-tech homes away from home. *International Gaming & Wagering*, 25(3), 26-31.

R. C. Wood, *Key Concepts in Hospitality Management*. (2013), SAGE Publications Ltd.

Singh, A, & Kasavana, M. (2005). The impact of information technology on future management of lodging operations: A Delphi study to predict key technological events in 2007 and 2027. *Tourism & Hospitality Research*, 6(1), 24-37.

Y. Wang, K. K. F. So, and B. A. Sparks, (2017) "Technology readiness and customer satisfaction with travel technologies: A cross-country investigation," *Journal of Travel Research*, vol. 56, no. 5, pp. 563 – 577.