


HUMAN COMPUTER INTERACTION
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Abstract:

This research document consists of the highest level of general development of Human computer interaction which is operating in the hospitality service sector and how these are putting impact on the guest experience as well as transforming the hospitality service platform, along with upcoming latest technology which can again play an important role to improve the hospitality sector from all points. Tourism and Hospitality Sector are very crucial parts pertaining to the growth of the global economy. These sectors have tremendously reshaped within a recent time frame because of adoption of new technology inventions. The focus of the research document also on the different challenges faced by the current technology trends as well as upcoming technology, negative aspects which can arise in the future hospitality sector concerning the guest as well as hospitality service providers.

Keywords: *Hospitality, Tourism, Global economy, technology invention, transforming, growth.*



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Introduction -

Human computer interaction would be an effective technique for attracting consumers who are willing to try out new technologies. The aim of the entire process of digitalizing the hospitality operation is to provide the guest with a "one touch point" experience of the services. This digitalization includes features such as browsing, planning, and selecting activities at their leisure, online direct reservation, nearby location-based service, multiple forms of personalized communication, and a source to communicate with the organization via social media networks, to name a few examples of digital services. Third-party user applications are common in the market for delivering such guest-friendly services, so if a hospitality service provider wants to remain competitive, they must create their own application that can provide a better in-house and off-property experience for their guests. In terms of digitalization competition, the hotel can begin to control guests through exclusive deals such as loyalty programme rewards, coupons, and bonuses on in-house application use, rather than using any other third-party application, as well as offering better quality features than other third-party applications.

The internet of technology will play a significant role in shaping the future of hospitality management. Sensors, robots, actuators, identity tags, and mobile phones are all examples of interconnected computing devices that use unique identifiers (UIDs).



Tourism, both international and domestic, has been gradually growing for many years. These sectors include essential components like lodging, food and beverage, health and spa, and entertainment, all of which produce revenue for the global economy. The experts in this field express their concern for improving work quality in order to provide a better hospitality experience to guests and maintain the sector's growth. Along with their concern, the experts also express the importance of upgrading due to changing customer behavior as a result of technological advancement. The aim of this upgrade is to provide a more personalized guest experience while also making the hospitality operational work more digital.

Hotels those who have upgraded their systems with Internet of things technology are categories as smart buildings which are another side of the smart cities. Main feature of this is to collect the real time data of the guest which gives opportunity to provide for accurate, prompt, personalized and localized services as per guest interest. IOT also plays a major role to increase efficiency of hotels all the major departments such as Front Office, housekeeping, F&B service and sales marketing along with the smart energy saving feature to control the cost along with social responsibility activity.

In coming 3-5 years we all will witness extensive up gradation of following next generation technologies, such as voice assistant/ voice search like amazon Alexa, Google assistant and apple home pod this will work by the guest voice command for getting certain information as well as to punch guest order or for room weather, television and light control. Another extensive up gradation is robotics, human interaction may get replace by robots who will get operate on Front desk, housekeeping and concierge.

These days guest expectation from the hotel have changed, Due to technology advancement, guest have the power and can find out every information without having an interaction with the hotel, these creates new challenges for hospitality service provider. The main challenge is now majority of guest don't trust to marketing despite they trust other guest experience, studies show that around 70% of consumers decision are based on online review given by other guest, Trip Advisor survey reports that around 93% customers considers online review to decide the hotel, hence for hotels brand image has to be good for online visibility to catch good number of audience. Another challenge is these days guest don't find them self-satisfied by only getting proper stay in the hotel, despite of that they demand for something special experience which they cannot get form somewhere else, there for hotel should have the brand image of destination rather than just having a nice building to get heads in beds is not enough. Pertaining to these challenges hotel should have new investments for installing new tools and platforms to get effective results.

In earlier years it seems that hotel started spending more expenditure to upgrade their technological infrastructure. In the year 2016 medium range hotels spend approx. (7.3%), upscale hotels spend (6.1%) and luxury hotels spend (5.6%). these expenses were largely focused on digitalization of hospitality services that is actually called as the starting of a state of the art hospitality services. Guest interaction ways with the hotels got transformed with online interface and on screen interface, these ways give double opportunities to hotel business to collect valuable data and feedback of guest. Under the on screen and online interface consist of hotel mobile application, in- room tablet, Self-check kiosk, smart phones, in room digital remote control and point of sale terminals. These interface play immense effective role to give complete digital service experience in all phases of guest cycle. For example, Starwood & Hilton hotels provide automatic registration and keyless entry service by the use of hotels mobile application. Telkonet's Eco smart company offers mobile applications which has features to control in room IoT products. Peninsula hotels provide in room tablet



for guest to for in room dining order, to control room function. Samsung's Hospitality solutions provides TV remote interface for in room temperature control. Another features of guest facing system is location based technology which allows guest to get overview regarding in house and off property guest service like digital guide tour, local food, event and attraction. This practices promotes the local businesses and keep the revenue in the loop of particular market. The advance development of guest facing system and IoT technology are consistently coming up with new up gradation such as guestroom thermostats unit, body motion sensors which leads to control lights and temperature of the guest room if the rooms are unoccupied, which helps hotel to have the control on energy cost by 20 to 45 percent and also contribute to society for environment protection. Example. Starwood Hotels follows the concept known as "daylight harvesting" pertaining to energy saving scheme which saves consumption of energy and also helps to improve the in house light consistency based on the natural light coming to the hotel. Smart wearable devices are the actual revolution in IoT technology, devices are like smart watches, smartphones etc. These devices are the source of data such as human body temperature, heart beat rate and live location etc. Smart gadgets provides authentic data for the automatic adjustment of guest room temperature on the basis of guest body temperature, room lights adjustment on the basis of guest sleep cycle, the meal preference also done as per guest fitness goal, dietary food will be serve for example high carbohydrate and sugar free food for diabetic guest, high cholesterol meal option for heart disease guest. Water consumption saving is also getting done through IoT by installing smart bathroom equipment such as smart sinks, smart shower heads, water flush control toilets etc. Building automation and its monitoring are beneficial for both guest and management, especially for disable guest who can find very flexible stay if he is getting keyless entry service, automated check in check out system, digital concierge etc., this can get the guest satisfaction on greater level. Work efficiency of hospitality services can improve such as in room monitoring system to detect whether room is vacant or occupied to schedule housekeeping service. Automated minibars gives the front office system updates about the charges of minibar product consumption by guest. Various utility system such as elevators which take the guest to the only floor where he has assign the room; this prevents the unnecessary access of people on guest floor and provide extra security measures . As we all know effective technology comes with hug responsibility, Latest technology advancement use to give personalized service experience to guest by tracking his/her data like location, preference and behavior. These precious data has to store and handle responsibly for the guest protection and security from physical, economic and social threats. All the guest facing system, point of sale and automatic guest check in \ check out kiosk has to have strong security measure to protect it from data leak or theft. Hotel network security system prevents hackers form hacking the guest personal data which is connected with the network. Hackers also do the practice to reprogram the hotels IoT system for annoying the hotel standard work procedure. Hotels has to implement strong security protocols in every guest interaction and its active network connection with hotel.

Guest security is very essential responsibility of the hotel but along with that responsiveness to the guest request is also crucial to make the guest stay smooth during his/ her stay. Hotels should make sure the prompt acknowledgement for all guest request with prompt delivery of guest request. This practice can be successfully achieved by digitalization of guest interaction with the hotel. Digitalize interaction leads to keep away the miscommunication and confusion about guest service request. This practices plays a major role to improve responsiveness to guest request and add good brand image in guest mind. Prompt responsiveness practice can also keep the hotel maintenance requirement on track so that hotel can have proper room availability inventory count on every day basis.


Conclusion:

One of the key issues in this paper is that the hotel should restructure its service platform to fit into the new technological future; guest personalization and digitalization of services are two major aspects to be focused on. The key to delivering a modernized hospitality guest experience is to invest in state-of-the-art hospitality facilities as a future-proof investment from the hotel for up gradation. For today's time a satisfied guest is good but actually that's not enough, keeping the guest engaged is very important by different digitalize technology, these guest are the one who put positive review of their stay. This is the stage for hotels to create a powerful brand experience for their guests, such as allowing guests to experience all of the hotel's experiences at the click of a button, as well as using their own smart devices, for various front-of-house services such as food ordering, spa appointments, gift purchases, inquiry, maintenance requests, current bill status, and check in/check out. This practices makes the guest interaction with the hotel very prompt without looking for any staff or doing telephone call, this creates powerful brand image in manner of fast, effective and attentive service through the channel of guest own preference.

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