

# IMPACT OF TECHNOLOGICAL ADVANCEMENT IN ROOMS DIVISION OF INDIAN HOTEL INDUSTRY

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**Abstract** *Purpose: The purpose of this paper is to analyze the impact of technological advancement in rooms' division of Indian hotel industry.*

*Design/methodology/approach: Data was collected via in-depth, semi structured interviews with senior hotel professionals including General Managers, Front Office managers, Executive Housekeepers & Sales Managers. Several research papers that provide statistics of organizational benefit due to implementation of technology were compared to Indian Hotel Industry. The research findings illustrate several benefits and drawbacks of implementing technology used by rooms' division department for both front & Back of the house areas.*

*Findings: The results demonstrate that technological advancement in rooms division can have a significant effect on enhancing the customer experience and increasing revenue however it may also be accompanied by challenges such as Data Management and breach of privacy. The study also presents the most commonly installed technologies that hoteliers plan to install in the near future.*

*Practical implications: Evaluation of benefits and drawbacks of various technologies allow hotel managers to decide the implication of latest technological inventions into their organization.*

*Originality/value: By identifying the set of benefits and drawbacks of technologies that are currently implemented in various organizations, this study helps hotel managers decide best possible ways to implement these technological technologies in their organization keeping Capital Investment, Guest satisfaction & employee efficiency into account.*

**Keywords:** *Technological Advancement, Room Divisions, Guest Satisfaction*

## INTRODUCTION

In the ever changing world of technology one can easily lose track of time while looking at fascinating technologies. Hotel industry being one section that always has a need to be innovative and attractive, in order to fascinate more and more customers through their product and services and also keep existing customers engaged. Since last few decades Hotel industry has observed an exponential growth in implementation & usage of technological advancement among the industry players. This has become an indispensable factor in a company's competitive advancement with its contribution to efficient information management not only within the organization but also in relations with customers. Thus it is believed to enhance an organization's productivity by lowering cost, alertness, added value for customers and better customer services (Bilgihan *et al.*, 2011).

These technological advancements have so far catered to organizations need of processing the data quickly and

efficiently in order to achieve more guest satisfaction without losing the human touch that crucial for service industry. However, the world has to offer more. As the technological companies come up with several gadgets and software to make the guests feel more comfortable and bring world class services at guest's fingertips; the industry needs to gear up to implement these tech toys in their organization.

Studies show that hoteliers can achieve greater differentiation by offering the latest technology to guests which will enhance their experience and attracting new customers, which can potentially lead to increased revenues (Brochado *et al.*, 2016). Industry's dependency on technology has become increasingly intense in recent years, not only due to the latest technologies that are made available for hotels to implement but also because of the revolution initiated by the implementation of such technology in the hotel rooms that creates exceptional experience for hotel customers. Nowadays, guests make use of technology throughout their travel experiential journey; from planning their destination or hotel

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through the use of social media (Varkaris and Neuhofer, 2017); contacting hotels online and mobile applications (Murphy *et al.*, 2016); during the trip, through self-check in solutions, digital keys, Wi-Fi, virtual reality and augmented reality (Zhu and Morosan, 2014); and even after the trip, posting comments, opinions or assessments on travel websites, social networks and other various forums (Okazaki *et al.*, 2017).

Experts argue for major improvements in the type and quality of hospitality services to adapt to the changing consumption and travel behaviors of the evolving customer base. Specifically, these improvements are aiming towards attracting the new generation of techno savvy individuals traveling on a budget (Langford, 2016). Execution of these improvements results in a completely altering the service packages and the basic technological framework presently used by hospitality service providers. The aspiration of these improvements should be: personalization of experiences and digitalization of services (Langford, 2016)

Digitalization of services is crucial to appeal to techno savvy guests. The goal of digitalization of services is to move on to a digital business model by pushing hospitality services to guests' touch-point (Kasavana, 2014). A digital service platform gives guests the ability to browse, plan and pick activities at their own convenience thus facilitating seamless integration of technology into their travel experience.

There are third party applications that provide these services which guests are familiar with and rely upon. However, budget allocated for buying or renting these third party applications and services is major concern for hotels (Tossell, 2015).

In order to compete with these third party applications, hotels may consider developing their own applications which will provide better on and off-property services to its guests. Through special incentives such as loyalty points, coupons and discounts, guests can be encouraged to use in-house applications over third party applications. Allowing digital services with the same quality as third party application services requires a sound technological infrastructure base with specialized computation and communication capabilities. This secures revamping of current technological framework used by hotel organizations (Kansakar, 2017).

The upcoming picture of hospitality industry is being formed by the current development in the Internet of things (IoT) technology. Hotels must stay on the leading edge of IoT technology in order to maintain a competitive edge in the market (Kansakar, 2017). The IoT is the interconnection of everyday physical devices like sensors, actuators, identification tags, mobile devices, etc., such that they can communicate directly or indirectly with each other via

local communication networks or over the Internet (Munir *et al.*, 2017). The implementation of IoT technology in the hospitality industry makes hotels qualify as smart buildings that are important aspect of smart cities (Mohanty *et al.*, 2016). The IoT model offers hotels tones of channels of interacting with guests and collecting their real-time data. This opens up new avenues for immediate, personalized and localized services as service providers can track guest behaviors and preferences with higher precision. The IoT also allows hotels to increase back-office efficiency of multiple departments such as Maintenance, front desk, housekeeping etc (Adelson, 2017). It also endorses cost-saving policies like smart energy management (Lee & Cheng, 2018). The IoT technology is already spreading through the hospitality industry with public terminals, in-room technologies and mobile applications (Kasavana, 2014) and some of the promising future IoT applications, such as body area sensor networks, environment monitoring and augmented reality experiences, will certainly usher in new business prospects. Hotels ought to subsequently plan to future evidence their technology structure so their frameworks can be effortlessly redesigned couple with the changing IoT mechanical scene.

Overall, the new technological upgrade of the hospitality industry should create a platform that beneficial for both guest and hotel by facilitating partnership between them. The platform should ensure that guests are treated to an outstanding travel experience while also improving the operational and managerial efficiency for hotel. Furthermore, the new technological framework must be future proof; providing an easy upgrade schedule for addition of new/improved services that allows hotels to continue using same technology in upgraded versions as time passes.

Experts estimate that Hoteliers can stand out by offering the latest technology to guests, enhancing their experience and catch attention of customers from different market segment, and this can possibly lead to improvement revenues (Brochado *et al.*, 2016).

This paper aims primarily at illustrating benefits and drawbacks of implementing technology used by rooms' division department for both front & Back of the house areas and secondly on comparing the statistics of organizational benefit due to implementation of technology were to Indian Hotel Industry. To achieve the mentioned aim the work begins with review of literature that creates a framework for the discussion that follows as a result of primary data collection are put across. The main findings and some managerial insights help in concluding the discussion.

While the world is moving ahead with robotic hotel operations; Indian Hospitality is putting best foot forward to catch up, by installing some of these gadgets in their organizations. As we see presence of artificial

intelligence in form of tablet or voice controlled assistant such as Amazon Alexa in guest rooms, luggage carrying robots, automated bell desk operations or Robots delivering food or on request items to in house guests; we want to get the same for our organization. These support systems are certainly designed for betterment of the industry nonetheless while organizations plan to avail this technology there is a lot of analysis of internal and external factors that has to be conducted to understand the implication of the same and the effect it will have on Capital Cost, Guest Experience and Employee efficiency. Due to diversity in available technologies, this paper focuses on certain segments such as implementation of voice controlled assistance in the hotel rooms, check in check out Kiosk and its connectivity to back end operations.

## LITERATURE REVIEW

A study conducted by Cornell Centre for Hospitality Research in 2014 suggests that it is estimated that the Millennial generation will represent 50% of all travellers by 2025 (Falko, 2016). This highlights the importance to attract Millennials among others by meeting and exceeding their travelling requirements. If this is true for them, then it will also apply for other target segments which is generation X and Baby Boomers, who are sometimes equally tech savvy as Millennials. They are known to have redefined the parameters of traditional luxury consumption by giving more importance to experiences than tangible products. All things considered, there is more esteem ascribed to voyaging and generating memories, than purchasing expensive things. Millennials are additionally portrayed by their high worries and consciousness of the environment. Being continually online through their web based life channels enables them to accumulate an expansive piece of the information on which to base their voyaging choice from online assets and companions' experiences. In the meantime, they are additionally quick in posting bad reviews, subsequently uncovering the specialist organization to fast and major reputational dangers.

A wise businessperson would in this manner connect with these voyagers and measure their consideration keeping in mind the end goal to impact the booking choices. In any case, the endeavours are not completing there as it is additionally imperative to really keep up Twenty to thirty year olds' fulfilment all through each connection amid their stay. The interaction that occurs between the guest and the hotel are at the hotel, of the guests' general involvement will then decide the online reputation of the hotel.

So, How exactly are hotels around the world using technology to keep their guests engaged during their stay?

A recent report by Oracle Hospitality surveyed almost 3,000 US and European travellers to better understand the importance of technology for a hotel guest experience and it makes for interesting reading that 64% of U.S. hotel guests said it is 'VERY' or 'Extremely' Important for hotels to continue investing in technology to enhance the guest experience (Carter, 2017).

To address the difficulty of developing guest desires, the hospitality industry is going with technology. Advancement will empower hotel administrators to emerge from the opposition, satisfy each guest's desire and pull in new customers.

A positive experience won't just affect a guest's stay but it will likewise impact their behaviour and online surveys after their trip. The impact of word-of-mouth remains very high and should not be underestimated, despite all the clever promotion tactics.

- **Technology to Enhance Efficiencies**

A report by PWC on detecting the eventual future of IoT, as of now indicated friendliness as the fifth business with the most noteworthy interest in sensors and whenever compared continent wise Asia is driving and 26% associations that hope to put resources into tangible technology. Based on reports and industry news, this venture today is basic to guarantee positive customer experience (Bauer, 2014).

- **Automating Check-in and Check-out**

With an end goal to enhance efficiencies, hotels are hoping to computerize the check-in and check-out process (Carter, 2017). Mobile hotel check-in and check-outs may well become the norm soon, enabling staff to focus more on guest experiences and guest interactions for more customised services.

Study done by Oracle Hospitality also shows that 60% of the guests still prefer talking to a person with hotel staff at the front desk or concierge. Hence hotels will need to work hard to strike the right balance between technology and personal interaction (Oracle, 2016).

- **Keyless Passage is Expected to Accelerate over the Coming Years**

Unreliable swipe cards will before long be outdated, substituted by an application on your smart phone, which will be the way in to your room. The Hilton hotel is driving the charge for keyless passage. Having already introduced the Hilton Digital Key app back in 2015, Hilton has introduced keyless section benefit in 2,500 hotels. Sooner or later, facial acknowledgment software may likewise be accessible to open guest rooms.

- **Creating Personalised Experience**

Personal data is fast becoming the number one commodity for organisations. With this information comes an abundance

of knowledge, which can help administrators convey an individual touch for each guest. Individual information can likewise be utilized to give the “individual touch” to guests to make them feel unique. For instance, an IoT platform could after some time retain a guest’s particular solace inclinations and naturally setup the space for their next stay, for example, temperature, lights, TV shows and shades. The television could even welcome the guest by name when they walk in to the room to make them feel special (Hotel Online, 2016).

Just consider, if the hotel knew their guest is a wellness supporter or had food hypersensitivity. They could offer a free exercise centre pass, or give a container of free-from treats upon entry. What about if the guest could control the temperature and lighting in their room through their smart phones? Or on the other hand even set a playlist to begin at a particular time? Technology can play an enormous job to make guest stay as simple and hassle free as could reasonably be expected.

On account of ongoing advances in artificial intelligence, hotels have started to equip their rooms with brilliant gadgets that have voice acknowledgment framework. One such hotel that has prepared upwards of 5000 hotel rooms with Amazon’s Reverberate speaker is Wynn Las Vegas. The guests at Wynn would have the capacity to control numerous highlights in the room with Amazon’s Alexa, a voice-controlled VA. This may not be the only hotel to see Alexa in accommodation. Indeed, even Marriott is hoping to pick either Alexa or Siri for its aloft hotel in Boston with the end goal for guests to control their live with simply voice.

- **Hotel-Specific Intelligence for Creating a Brand Reputation**

With voice technology in hotels and IoT gadgets connecting virtual partners, guests have a tendency to appreciate tech savvy space and considerably more astute administrations, leading less interaction with accommodation staff. This is the reason behind why hotels have begun enabling hotel guest check-in and check-out via mobile apps.

The idea of virtual keys empowered with mobile applications, additionally enables them to control air conditioners, light intensity, and other controls. Presently the age of all in one gadget has started with virtual aides to treat guests with an encompassed personalized customer experience. The joined intensity of AI, IoT and virtual assistants can take into account hotel guests on the following level by acquainting them with an assortment of hotel luxuries, amenities, best spots, exceptional attractions and so on.

Comfort and arrangements of this grade will result in robotized guest services for upscale hotels, consequently making a much better future for accommodation brands. Since individuals expect more specials from the hospitality

business, organizations that execute voice technology will be among the most competitive facility providers.

- **Artificial Intelligence in Hospitality Creating Polished Interactions**

In 2018, AI’s capacity to enhance correspondence stream inside the hotels among administration and guests will modernize the general connections with guests. All things considered, the future will in any case not see hotel work force being totally supplanted with AI and chatbots in hotels.

Rather, we will have balanced data administration and AI-fuelled virtual assistants working as a powerful specialized instrument in synchronicity with hotel staff, which will additionally give a lift to a much skilled and streamlined hotel administration framework to take care of day by day activities.

Likewise, with voice technology in hotels, guests can appreciate the speed and consistency while getting to the most essential contact focuses, for example, eateries, hotel butlers, in-hotel amenities by utilizing frictionless touch screen signals on their voice-able gadgets and content based AI chatbots.

- **Technology to Save Energy**

Numerous hotel administrators are focused on ecological sustainability projects and reducing power consumption. Starwood’s ecological objectives were propelled in 2009 and promise to cut power use by 30% and water use by 20% by 2020 globally. (Carter, 2017) Starwood Hotels and Resorts Overall uses sunlight harvesting to change indoor lighting, in view of the measure of common light rolling in from outside. On account of movement sensor technology, lighting can be switched off automatically or temperature decreased when a room is vacant.

Additionally, couple of hotels in Japan, for example, Henn na Hotel, are disposing of light switches totally from the rooms and proceeding onward with sensor controlled lights to ensure the energy isn’t squandered because of human blunders or carelessness.

- **The Robotics Trend in Hotels**

Travel Weekly recently wrote about the Americas Cabin Speculation Summit (ALIS), where forecasts were made for the development in hotel robots to convey guest amenities and clean rooms. In the event that expectations progress toward becoming reality, we may very well discover Maidbots cleaning room in the following five years. Ventures into these sorts of mechanical developments are fuelled by diminishing technology costs, which in the meantime gives hotels the chance to lessen operational costs (King, 2017).

As indicated by the Oracle Hospitality report, room cleanliness is still critical for overall guest satisfaction.

Technology can help hotel operators only if they are willing to invest. The report likewise specifies that 35% of guests said they might want the capacity to plan room cleaning and 26% said they might want to get a notification to appear if their room was cleaned (Oracle, 2016).

It appears to be numerous travellers feel that technology is exceptionally successful for serving guests. Watch out for Botlr then robots conveying in-room things like water jugs, cushions or toiletries.

While they might be an novelty right now in select top of the line hotels like the Marriott, there's no uncertainty robots will soon be a common feature in hotels. In Japan, robots are not only an novelty but rather a reality. Henn na Hotel opened in 2015 and is the world's first hotel staffed by robots.

Here are few reasons why technology is used by hotel organizations.

- **Technology to Enhance Experience**

Technology as of now plays an enormous a job in the travel cycle. From the minute you see a television advertisement for an excursion or when you are impacted with a remarketing promotion while visiting Facebook, the association with technology to discover, book and audit your accommodation/travel experience is made (Carter, 2017).

- **Online Bookings**

The development of more travel sites like Expedia, Kayak, Booking and obviously AirBNB are making it significantly simpler for customers to locate the best deals, the best adventures and the best experiences. These destinations are awesome news for voyagers yet present solid rivalry for hotel administrators, who are opting to have technology to improve and differentiate them. Among U.S. travellers, online information is broadly accessed through PCs (76%), smart phones (46%) and tablets (30%) (Oracle, 2016).

- **On Arrival**

Once arrived securely at your hotel and now as an engaged group of onlookers of your hotel administrator, technology can assume a key job in setting extraordinary, first expectations. To fulfil developing needs, arriving guests could and maybe ought to be given the chance to choose a particular room. Once inside the hotel room, guests are as of now ready to access in-destination movement decisions on account of hotel television software, yet could this go above and beyond? Consider the possibility that the hotel television could likewise make nearby eatery proposals and maybe even make a supper booking. Sounds too good to be true? What about the ability to message hotel staff, if, say, the hairdryer is absent from the room? Rather than utilizing an awkward television remote control, how much better would it be, in the event that you could do this, and the sky is the limit from there.

This may paint the photo of an exceptionally demanding hotel guest, however the Oracle hospitality report expresses these as best initiatives, which guests might want to find in hotels:

- Capability to choose particular room areas (45%)
- Means to share data about in-goal exercises (41%)
- The registration/registration process (39%)
- Ways to make benefit demands (36%)
- Demand for data analyst and researchers

In recognition of the power of technology to give priceless information, it isn't only the hospitality however Banking, retail and different businesses that are likewise looking to select software engineers and different technical resources.

To genuinely understand their guests, hotel administrators are progressively moving to information researchers to get under the skin of their clients. To live up to customers' high expectations, hoteliers need to know their interests, different preferences to help convey a one of a kind and extremely close to personal experience. This can establish a durable connection and give that looked for after noteworthy experience.

Like never before, guests look to their phones and PCs to examine, book, stay and speak with hotels. That means basic technology needs data security, versatile improvement and frameworks combination. Inside hotel tasks, information examination can help find new clients, make a lounge area more productive or give data to officials settling on business choices (LaRose, 2017).

While there is most likely that technology has a tremendous task to carry out in moulding the hotels of the future, there are a few things it can never totally be replaced: the human touch.

Actually while human connections are winding up less and less normal, when they do happen they are more valuable than ever. Hotel administrators must make sure to in any case give a positive human association.

With every one of these advantages come few difficulties of executing these advances to a working hotel. Operational issues and difficulties have been observed to be basic to the achievement and survival of organizations. As indicated by Wong (2004), the different divisions that hotels do experience operational difficulties go from the front office, housekeeping, restaurant and bar entertainment to the marketing and research department. In the Day Inn, an research demonstrated that the management accentuated on improving smooth operations of the hotel enlighten that the majority of the operational difficulties experienced in hotels include: Lack of talented labor, Changes in the socioeconomics, technological progressions, the HR, and

also planning and management issues.

A study by Cobanoglu (2007), discovered that in the vast majority of the recently developing hotels in Australia, operational difficulties were because of technical issues. He affirmed that because of failure of addressing to technical necessities, operational difficulties were experienced by both the workers and the management. His investigation discovered that technology was critical for expanding worker effectiveness in their operations. Besides 71% of his respondents considered that their current technology has fundamentally added to creating more revenue in recent five years. Hence the use of current technology is one of the manners in which can help take care of the issues related with operational difficulties in hotels.

In 2015, US baby boomers were to represent 60% of the country's riches and 40% of spending. In the Unified States, they were relied upon to drive development in hospitality in the leisure sectore. The way to draw boomers is, speaking to their 'eternity youthful' mentality and want for experiential travel. The white collar classes of China and India will likewise make swells of progress far into the future as their movement designs develop from residential to territorial to worldwide. India alone is determined to have 50 million outbound guests by 2020 (Willy et. al, 2014).

Hotels are making large IT expenditures to revamp their technological infrastructure base. In 2016, midscale hotels drove in IT use (7.3%), trailed by upscale hotels (6.1%) and luxury hotels (5.6%) (Adelson, 2016). The expenditures are to a great extent concentrated on digitalization of the administration stage to profit the two gatherings of the hospitality service exchange – the guests and the service providers. Developments in smart gadgets and IoT are driving the change of technology utilized in the hospitality service platform. Guest communications are being moved towards on-screen and online interfaces through guest confronting frameworks which separated from being helpful for guests serves as an open door for service providers to gather profitable information and input (Langford, 2016).

- **Lack of planning**

This is one other factor that is causing a ton of devastation to the extent activities of hotels are concerned. As per Holt (2009), inability to have a marketable strategy for any type of foundation is inclined to disappointment. Other than disappointment, this sort of foundation achieves bunches of operational difficulties in that the proprietor don't know whether the item he or she is putting forth is reasonable to the territory, the interest examples and market patterns are not know subsequently there is high charges of business disappointment because of rivalry and unsatisfactory quality of items advertised. Arranging has different measurements to the extent hotel foundations are concerned. There is

getting ready for labor, area of big business, money related sources to build up the undertakings and some more. One of the principle draws of any hotel is the room. The essential desires for room civilities have changed significantly throughout the most recent years while the physical part of the room has in actuality not changed by any means. Going a long ways past only a perfect and agreeable bed, guests currently need the room design to be easy to understand and available for different advanced gadgets.

At the point when an association chooses to have another development, for example, IoT, one needs to get ready for the infrastructural challenges that will show up once the establishment starts as the expense of redesign adds to the expense of securing the technology. Hotels can take care of the expenses with the advantages that tag along after establishment of the same anyway one needs to investigate the associations money related capacity to tolerate the expenses and after that arrangement in like manner. Arranging additionally incorporates labor administration with respect to how the association chooses to prepare its workers to utilize the technology so as to improve the representative effectiveness.

The exhortation to hoteliers is to guarantee they set up frameworks that are prepared to use the Web of Things later on. When assembling or revamping an hotel, the right, adaptable and versatile foundation ought to be set up to take into consideration IoT technology to be sent. Various suppliers of Guest Room Administration Frameworks have perceived this and give moves up to their current items to offer future-confirmation arrangements that are prepared for this advancement. Beside the guest experience benefits and operational efficiencies, hoteliers are progressively searching for manageable in-room technology that empowers them to upgrade their vitality utilization and diminish their carbon impression, without affecting guest solace and experience. The two administrators and guests are winding up more aware of this test, and we expect frameworks that enable hoteliers to adequately oversee vitality utilization in the room in a smart way to end up typical sooner rather than later.

- **Technological Upgradation**

Technology is a consistently advancing thing that will lose its appeal if not stayed aware of time. It is a basic impetus in making a separated affair. Present day hotels are utilizing current innovations headways in their tasks. A hotel without selection of these advances is inclined to have a great deal of challenges in the executing its tasks. As per a report by the National Alliance of Present day Organizations (NFMB), technology has facilitated the greater part of the troublesome undertakings of physical work. A case of this is the place rather than manual record keeping PCs are being

utilized to store information. Today hotel foundations must receive present day advances in the event that they will be manageable and have their tasks run easily. IT has essentially changed the manner in which the hotel business designs, controls and oversees tasks. For instance, the hotel business is starting to use booths and other self-benefit technologies. Utilization of self-benefit advances in the hotel business has developed significantly, particularly in the regions of self-registration, in-room registration, and foodservice stands.

Having a mechanically propelled foundation requests for convenient update in the product, which will enable guests to have simplicity of working the technology and can get more effective in information accumulation and handling? To adapt to consistently changing interest of guests one must have clutch most recent patterns of the business and careful learning of client desires. Utilization of technology must not restrict utilization of labor in the hotel. Rather an association must use this as a chance to prepare the workers to build connection with the guests and process the guest information for improvement of administration guidelines.

Hoteliers say they can't meet such desires without procuring extra data from guests and that is the place potential issues surface: Does more noteworthy interest go too far from being useful to being meddling? Amid inside and out meetings directed by Phocuswright, hoteliers uncovered that there is a significant separation among them about this subject. U.S. hotels said personalization is ending up progressively essential and are effectively seeking after intends to interface guests to their most loved brands (For instance, illuminating explorers of the closest area of their most loved store.). Yet, in Europe, particularly Germany, hoteliers are worried about encroaching on guest security and are utilizing a customized approach in restricted design, for the most part for pre-stay showcasing and correspondence. A comparable gap exists between chain hotels and free properties (Oracle, 2016).

An European hotel network Expressed, "Personalization up to a specific level is essential. Whenever utilized in an overstated way, guests may feel checked." (Oracle, 2016).

- **Crisis Administration**

As we examined before technological advancement likewise has a worry about guest information leak on break of protection. Despite the fact that the instruments introduced in the rooms are in full intensity of guest, some of the time because of carelessness it might raise a caution of rupture of guest security. Hotels must be set up to abstain from getting into circumstances like these by arranging admirably with respect to how the product will function and the amount of guest information access will it host if a third gathering is included.

Hotels should likewise once in a while manage disappointment of technology in rooms. In such cases the preventive and restorative activity plan must be set up to limit guest uneasiness.

- **Human Assets**

Individuals are the resources for an administration industry association and it can't bear to depend altogether on automated activities for best guest experience. Studies demonstrate that there are right around 60% of guest who might in any case need to have a discussion with People then with the machine. Subsequently regardless of how cutting edge technology gets it can't absolutely supplant labor.

HR are a zone that is developing in significance. As indicated by David (2010), for simplicity of tasks in the hotel business, hotels need to center around its representatives and their jobs as specialist co-ops. Expanding request requires expanded staffing levels when the work pool is contracting. The business is one that is confronted serious deficiency of gifted labor. To address this issue, the industry must endeavor to work with the associations as partners. This will guarantee that representative rights are voiced as a fulfilled worker is anything but difficult to work with and at no operational weight. Remembering that in benefit enterprises, for example, the hotel and friendliness area clients interest for quality and would need to discover the incentive for the cash, If their desires or rather rights are not met, objections are probably going to emerge causing working deplorable. This calls for commitment of additional time and cash to enrollment and preparing of representatives. Prepared labor work quiet, improving productivity in the work environment as they comprehend what is expected of them as far as set of working responsibilities and have the vital aptitudes to play out their obligations adequately offering quality to clients, final product being customer fulfillment empowering rehash visits.

## LIMITATION

As the Indian hospitality industry still is in raw stage of AI installation in its rooms, the research comprises secondary data to evaluate the real life scenario in world and compares it to Indian context. India being a country with significant population that is unemployed will look at technology as major hindrance in employment chances to its citizens. We are yet have to cross miles and bridge the gap between the people and technology in order to use it to enhance the employee efficiency and not to replace the human resources with machines. Key here is finding a right balance of employee efficiency and technological advancement in hotel industry.

## RESULT

Utilizing present day technology in hotels will have its own arrangement of points of interest and impediments which singular association needs to investigate based on their needs. As indicated by Reddy (2018), Set of points of interest incorporate:

1. Mistake Decrease: AI causes us in diminishing the blunder and the shot of achieving exactness with a more prominent level of accuracy is a probability. Intelligent robots are fed with data and are sent to investigate. They can thus help in accurate guest room billing.
2. Troublesome Investigation: Computerized reasoning and the art of mechanical technology can be put to use in troublesome investigations. Not just that, these mind boggling machines can be utilized for difficult or risky tasks such as Façade cleaning. Because of the programming of the robots, they can perform more difficult and diligent work with more noteworthy duty.
3. Every day Application: Registered techniques for computerized thinking, learning and discernment have turned into a typical wonder in our regular day to day existences. We have our woman Siri or Cortana to enable us to out. We are additionally taking off for long drives and outings with the assistance of GPS. Cell phone in a well-suited and consistently is a case of the how we utilize computerized reasoning. In utilities, we find that they can foresee what we will type and right the human blunders in spelling. That is machine insight at work. When we take a photo, the man-made brainpower calculation distinguishes and recognizes the individual's face and labels the people when we are posting our photos on the social media. Artificial Intelligence is widely employed by financial institutions and banking institutions to organize and manage data. Detection of fraud uses artificial intelligence in a smart card based system.
4. Advanced Collaborators: Very advanced associations utilize 'Avatars' which are imitations or advanced partners who can really connect with the clients, in this way sparing the requirement for HR. For artificial thinkers, feelings come in the method for reasonable reasoning and are not a diversion by any means. The total absence of the enthusiastic side, makes the robots think intelligently and take the correct program choices. Feelings are related with states of mind that can cloud judgment and influence human effectiveness. This is totally discounted for machine insight.
5. Tedious Occupations: Repetitive jobs which are dull in nature can be completed with the assistance of machine.

Machines think quicker than people and can be put to performing multiple tasks. Machine knowledge can be utilized to do dangerous assignments. Their parameters, not at all like people, can be balanced. Their speed and time are count based parameters as it were.

At the point when people play a PC games or run a PC controlled robot, we are really interfacing with computerized reasoning. In the amusement we are playing, the PC is our rival. The machine knowledge designs the amusement development because of our developments. We can view gaming as the most widely recognized utilization of the advantages of computerized reasoning.

6. Therapeutic Applications: In the therapeutic field additionally, we will locate the wide utilization of AI. Specialists survey the patients and their wellbeing dangers with the assistance of counterfeit machine knowledge. It teaches them about the reactions of different solutions. Medicinal experts are regularly prepared with the fake medical procedure test systems. It finds an enormous application in identifying and checking neurological scatters as it can mimic the mind capacities. Mechanical autonomy is utilized frequently in assisting emotional wellness patients with coming out of dejection and stay dynamic.
7. No Breaks: Machines, like people, don't require breaks and refreshments. They are customized for extend periods of time and can consistently perform without getting exhausted or diverted or even worn out.

While there are few Detriments as specified underneath:

1. Mind-boggling expense: Production of AI requires tremendous expenses as they are extremely complex machines. Their repair and support incur huge cost. They have software programs which require frequent Upgradation to take into account the necessities of the changing condition and the requirement for the machines to be more quick witted continuously. On account of serious breakdowns, the strategy to recuperate lost codes and restoring the framework may require colossal time and cost.
2. No Imitating People: Intelligence is accepted to be an endowment of nature. A moral contention proceeds with, regardless of whether human insight is to be recreated or not. Machines don't have any feelings and good qualities. They perform what is modified and can't make the judgment of right or off-base. Indeed, even can't take choices on the off chance that they experience a circumstance new to them. They either perform inaccurately or breakdown in such circumstances.

3. No Change with experience: Not at all like people, AI can't be enhanced with experience. With time, it can prompt wear and tear. It stores a ton of information yet the manner in which it very well may be gotten to and utilized is altogether different from human knowledge. Machines can't adjust their reactions to evolving situations. We are always shelled by the inquiry whether it is extremely energizing to supplant people with machines.

In the realm of computerized reasoning, there is not at all like working with an entire heart or energetically. Care or concerns are absent in the machine knowledge word reference. There is no feeling of having a place or fellowship or a human touch. They neglect to recognize a persevering individual and a wasteful person.

4. No Unique Creativity: Do you need imagination or creative ability?

These are not the strong point of AI. While they can enable you to plan and make, they are no counterpart for the intensity of reasoning that the human cerebrum has or even the technology of an imaginative personality. People are profoundly touchy and enthusiastic educated people. They see, hear, think and feel. Their considerations are guided by the sentiments which totally needs in machines. The inherent natural capacities of the human mind can't be reproduced.

5. Unemployment: Replacement of people with machines can prompt joblessness. It is a socially bothersome wonder. Individuals with nothing to do can prompt the ruinous utilization of their creative minds. People can pointlessly be profoundly subject to the machines if the utilization of AI ends up wild. They will lose their imaginative power and will wind up apathetic. Likewise, if people begin thinking ruinously, they can make destruction with these machines.

## CONCLUSION

Hoteliers can't bear to miss the most recent customer behaviour patterns, which to a great extent depend on use of latest gadgets. From the point of view of customer services, these inventive arrangements enable to speed up the conventional methodology and diminish the guest's input that is generally required to encourage their requests and preferences. From the point of view of hotel administration, the pattern towards the associated room and the expansion of the Internet of Things will be a principle driver for innovation related enhancements in the guest experience and hotel operations in the coming years.

Hoteliers should therefore act wise and utilize the technological advances to support them: whenever connected proficiently, regardless of the underlying capex, hotel technology is an intense instrument that can fortify the picture of the hotel for public, smoothen the operational effectiveness of the standard methods, increase reliability to the brand and, in addition, impressively limit operational expenses.

In spite of all these factors hotels in India such as Bawa Continental is experimenting with AI in rooms in form of Amazon Alexa. At present though it is at a very raw stage it's a big step that Indian hospitality Industry is preparing for. It certainly will come with a few glitches that would have to be eradicated as the system is customised for being used in the operational hotels. Few hotels in India are also equipped with Check in Kiosk for Airport Check in while few allow its guests to control the room function on a tablet.

The hotel business is characterized by human association, the giving of services to make the guest interaction uncommon. It is a crucial that it will dependably remain a steady, paying little heed to commercial centre patterns and elements that advance the business. In any case, that does not mean administration can't be upgraded and, truth be told, it must.

Factors, for example, size, expansion plans and geology frequently manage hoteliers' utilization of technology, yet its adaptability enables it to be sent in an assortment of imaginative ways. Indeed, even in restricted fashion, innovation is a critical resource since it tends to the business' clashing objectives: work productively at scale and at the same time give individualized administration. By driving both, technology can cultivate more noteworthy guest loyalty and produce greater revenue.

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