



Escalating Hospitality Security Solutions

Hospitality Industry's Security Boosts Revenue & Protects Image

The hospitality sector in India is growing with the increase in business and leisure travelers day by day. Hospitality is also the way people treat others, that is, the service of welcoming receiving guests. Hospitality plays a fundamental role to augment or decrease the volume of sales of an organization.

To meet the growing guest expectations the hotels are now

spending more and more on the latest technology but still find it difficult to instil a sense of security among guests. Good security depends on the ability to effectively identify and manage risks. As there is rise of the infrastructure of the hotels, the need for advanced security solution has surged. Thus, that has created the demand for video surveillance, Alarm management, Access control management, Hotel entrance and Exit parking management solution system to all sensitive locations in the hotel premises.

It is often hard to balance the need for effective security measures against the expectations and needs of the customers. It is also a challenge for hoteliers to have more stringent security procedures that do not negatively impact the guest experience which has become an important ingredient for hotels in India. Thus, the security and safety management of guests and hotel



Today the hi-tech hospitality electronic security systems are enabled with AI and IoT applications. It is amazing to see how the hospitality sector has become an applied field of advanced transformative technologies such as Artificial Intelligence, Internet of Things (IoT), Big Data and Blockchain.”

Ashish P. Dhakan
MD & CEO,
Prama Hikvision India Pvt. Ltd.

establishment is the top priority for hospitality sector.

Vulnerability risks faced in the hospitality industry.

“The Hospitality sector is gradually rebounding relative to pre-pandemic levels, with an increase in revenues due to the receding pandemic threats. However, as the hospitality sector faces ongoing disruption from the pandemic and supply chain challenges, they will need to navigate a new path to growth. The pandemic risk is ebbing with time, but new risk categories will continue to unfold in the hospitality ecosystem. Being resilient and vigilant with the help of smart hospitality security solutions is the only way forward. The most common serious security challenges that keep the security staff busy in the hotels can be broadly categorised as financial frauds, cognizable crimes, cyber-crimes and anti-social behaviour. The hospitality industry is also vulnerable to risks of accidents related to drowning, fall and fire,” said Ashish P. Dhakan, MD & CEO, Prama Hikvision India Pvt. Ltd. He further added, “The pandemic has given rise to new set of challenges in the hospitality ecosystem”. These include non-compliance of public safety norms (mask wearing, social distancing and crowd flow), fake vaccination certificates and forged RTPCR reports. The pandemic crises have shown the impact of vulnerability to risks faced by the hospitality industry. Beyond that, the hospitality industry has remained

a soft target for terrorists, extremists and crime syndicates due to its close proximity to foreigners, celebrity guests and high net worth individuals for maximum impact. The previous incidents of terrorist attacks on hotels across the globe show a clear trend. The hospitality sector thrives on word-of-

mouth, public perception and brand image. Even the slightest lapse in security can ruin the entire brand, not just that one particular unit.”

“The pandemic has forced the hospitality sector to ramp up its security to not just ensure perimeter security but also as a tool for business intelligence,” said Sudhindra Holla, Director, Axis Communications, India & SAARC.

He further added, “Some of the vulnerability to risks faced in the hospitality industry are as follows.”

- **Safety and Security** - The hospitality industry has been fighting with various security risks by adapting to new technologies and training the security personnel and employees as well
- **Data Privacy** - As the hospitality sector utilizes digital systems to automate tasks and manage their data (reservations and bookings), the risk to potential cyber and data theft also increases manifold



- **Ensuring proper conduct of employees** – Property theft and misconduct can seem to pose major risks to the hospitality sector and one must ensure a proper vigilance system for continuous monitoring of staff
- **Ensuring govt issued SOPs are followed** – The new normal, as a result of COVID-19 has put forth various govt issued guidelines that have to be followed in order to ensure customer and employee safety and failing to follow a strict protocol gives birth to a number of risks
- Mostly all hotels in India have ‘open door policy’ inevitably introducing the risk of attracting the attention of opportunistic thieves as well as organized gangs

“One of the primary concerns in identification of unwanted individuals entering and leaving the premises. This has created a tremendous threat as the foot traffic at large hotels on any given day will vary depending on the number of events and reservations,” said Sudhindra Holla, Director, Axis Communications, India & SAARC

“As the hospitality industry is a high profile and affluent industry, it naturally attracts negative and anti-social elements and exposes itself to risks such as terrorism, shooting

incidents, robberies and property thefts committed by both insiders and outsiders. It is also vulnerable to identity thefts, cyber-attacks, credit card frauds, unauthorized visitors, gas leakage and fire. Guests when they get injured could file law suits to claim huge compensation which may dent the bottom line of the hotel,” said Parthesh Dhaggal, Founder, Enceplon

“Disconnected security systems, analytics, and operational tools represent a steep cost to those in the hospitality sector. Disparate security systems can also lead to exposure to cyberattacks. In fact, cyber criminals because of the sensitive and lucrative customer data it possesses often target the hospitality sector. Therefore, it is essential that all physical security software and entry points be sufficiently protected from such infiltrations,” said Maite Herreo, Industry Marketing Specialist at Genetec, Inc.

He further added, “Customer loyalty is of the utmost importance to this industry. More than ever, safety and security are top of mind for travelers. Therefore, putting that loyalty in jeopardy if customers and guests do not feel safe represents a substantial risk to businesses in this sector.”

The Hospitality Industry is vulnerable to several external and internal factors. External factors like terrorist attacks, climate change, and

health threats like the pandemic could lead to a serious existential crisis for the industry. Likewise, internal factors could threaten the safety of the guests and employees, which could bring a bad reputation to the hotel.

Hotels are duty-bound to ensure the security of internal and external customers and their assets from third-party threats. Hotels are open to the public and any person is free to walk into the property and look. In such cases, it is important to understand the intent of the visitors to prevent their entry to the property and reduce physical security vulnerability.

“Additionally, hotels have a legal requirement to gather and maintain the personal data of their guests. Unauthorized access to client data could put the guests at risk and their details could be subject to unlawful use. Cybersecurity vulnerabilities can be reduced by filtering out the people who have access to the property and data by having up-to-date vigilance solutions,” said Kaushal Kadakia, Marketing Manager, Matrix Comsec

He further added, “Hotels invest heavily in their property and assets, crimes like employee theft and harm caused to the property by the guests could impact the bottom lines. Likewise, customer disputes at the reception counter could dent the reputation of the hotel. Finally, increased internet connectivity puts



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Director, Axis Communications
India & SAARC



the hotel under pressure to deliver avant-garde service at all times one bad review could be circulated many times over tainting the reputation of the hotel.”

Significance of physical security in the digital era.

“As far as today’s physical security management trends are concerned, there is a seamless convergence between physical and digital (IP-driven) protocols and systems. The physical security has remained the first layer of security despite the evolution of multiple layers of IoT driven security systems and solutions including the cybersecurity.

The advent of electronic security has changed physical security management in a huge way. The paradigm shift from manned guarding to electronic security has paved the way for newer positions such as Chief Security Officer (CSO) and Chief Information Security Officer (CISO). The new two-tier security structure (CSO and CISO) is now being practised in the Hospitality sector across the globe. While the CSOs’ mandate remained to ensure the physical security protocols to be followed for guests, hotel staff, and vendors - besides keeping track of

video surveillance, intrusion alarm and access control data, the CISO focuses on the data security and cybersecurity agenda for the hotel management, guests and staff,” said Ashish P. Dhakan.

“The security industry is undergoing and embracing a huge digital disruption. The hospitality industry must see this as an opportunity and utilize it to their advantage to thrive in today’s world. By challenging conventional thinking and reimagining how business is done, physical security can provide next-level insights, improving life safety and creating value across the organization beyond traditional risk management,” said Sudhindra Holla.

“Many confuse physical security with only deployment of security guards. While security guards form one-part, physical security encompasses protection of the guests, employees, visitors, material and informational resources and other assets and properties from any damage or loss.

It also includes protection from fire, flood, theft, vandalism, terrorism etc. The objective of physical security is to safeguard personnel, information, equipment, IT infrastructure, facilities and all other hotel assets.

The importance of physical security comes to fore when miscreants or criminals find it difficult to get through many layers of security to gain access. Consequently, they are forced to give up their sinister designs.

Strong physical security is provided by installation of perimeter fencing, biometrics, facial recognition, intrusion alarm/detector, motion detector, video surveillance, robust integrated access control, fire extinguishers and command and control center, which constantly monitors all the areas," said Parthesh Dhaggal.

Further, he added, "In today's uncertain world, online and physical security must go hand-in-hand, so that hotels and other organisations effectively ward off threats whichever direction they come from."

"Monitoring the safety of customers and employees, ensuring access to doors is effectively managed, and protecting perimeters remains essential to the functioning of the hospitality industry even in the digital era.

As well, traditional security tools such as video monitoring and access control remain significant in the digital era by offering new capabilities and unique insights. Metadata mining, video analytics on top of traditional video, granular video reporting and investigations, slip and fall notifications, and gunshot detection are just a few examples of the new security abilities enabled by traditional security tools," Maite Herreo.

In addition, the cybersecurity of physical security is of great significance in this digital era. Left unprotected, security systems can easily become entry points for malefactors and can undermine an entire security ecosystem.

Further, he added, "as more IoT (Internet of Things) devices become connected to a system, the threat of infiltration grows as these devices could potentially become entry points themselves. As guests and customers connect their own devices to the

system, this menace grows and puts consumers at risk. Increasingly, hotels are allowing guests to use their own mobile devices as room keys and as self-check-in and checkout mediums, all in efforts to make the stay frictionless. However, these personal devices can also quickly become entry points for a cyberattack and put customers' safety in jeopardy. Therefore, it is crucial all aspects of a system are protected."

"Physical security systems range from creating man-made barriers like walls, fences, and other systems preventing the entry of unauthorized individuals to tracking the activities of the individuals within the premises. In most brick-and-mortar establishments, physical security is of utmost importance. A comprehensive security infrastructure helps hotels have absolute control over security matters of their premises.

Physical security aids early detection and prevention of unwanted events. Any institution that holds the responsibility for the safety of the people and assets within the property should invest in measures to safeguard whatever is under their care. Modern-day security systems should be proactive rather than reactive to help avert incidences before they happen.

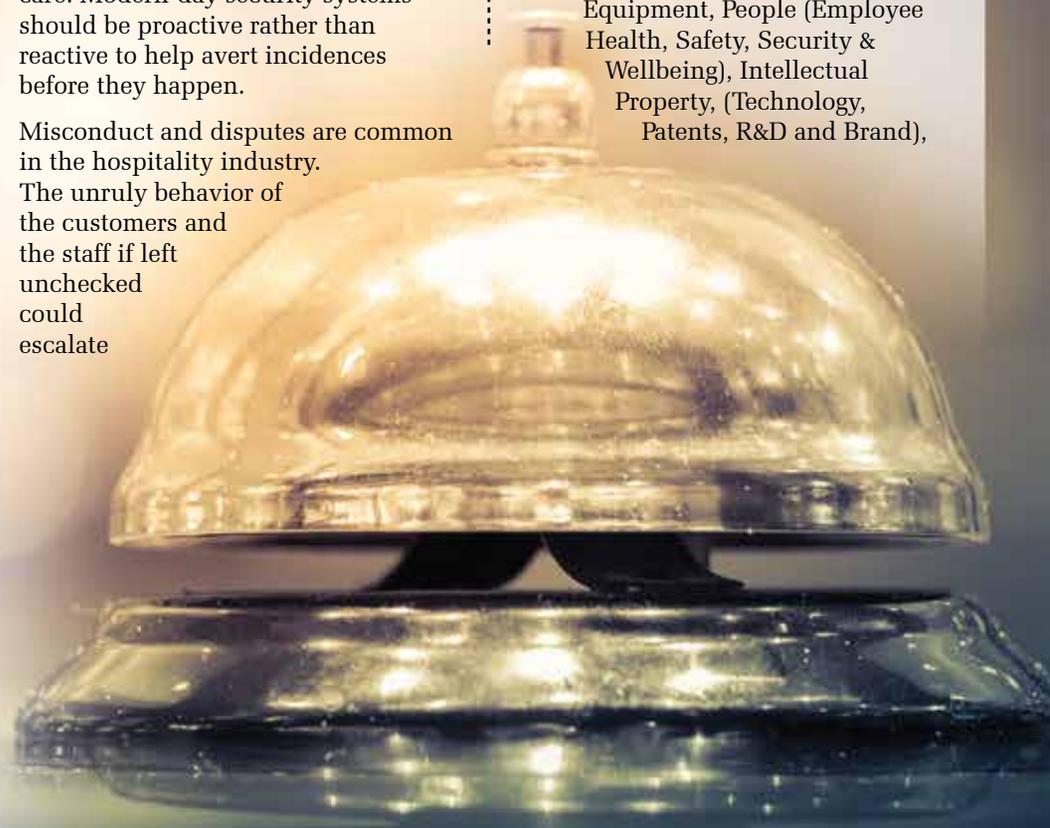
Misconduct and disputes are common in the hospitality industry. The unruly behavior of the customers and the staff if left unchecked could escalate

into a bigger problem and bring a bad reputation to the hotel. Security cameras come in handy for playback, investigation, and resolving disputes," said Kaushal Kadakia.

Further, he added, "With the ongoing vaccination drive globally, the worst of the pandemic is now behind us. However, with the new mutations erupting frequently hotels will have to follow the social distancing norms and guidelines especially when areas are at capacity and chances of contagion spreading is high. Various access control systems have already made the access to staff and the guests contactless."

Added security challenges due to COVID-19

"The pandemic has created a multiple physical security challenges in the hospitality sector. In fact, disruptions caused by the outbreak have emerged as one of the biggest security challenges for the hospitality ecosystem. The current security challenges in this phase are faced by the hospitality firms in protecting their infrastructure properties (Corporate Offices, Branch units, Machinery and Equipment, People (Employee Health, Safety, Security & Wellbeing), Intellectual Property, (Technology, Patents, R&D and Brand),



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Parthesh Dhagga
Founder, Enception



Data (Cybersecurity) and Logistics (Supply Chain),” said Ashish P. Dhakan.

“The contribution of CCTV, as generally perceived by people as the crime prevention tool, has substantially evolved over the years,” said Sudhindra Holla.

Further, he added, the pandemic has significantly transformed business operations affecting all verticals and even the hospitality industry. It has immobilized the global workforce to their houses and has thrown a major challenge to all business leaders in terms of business resilience and being the caretaker of the employees.

Some of the added security challenges due to COVID- 19.

- Ensuring govt issued SOPs are followed – The new normal has put forth various govt issued guidelines that have to be followed in order to ensure customer and employee safety and failing to follow a strict protocol gives birth to a number of risks
- **Incident response:** Have a team who can handle incidents and respond effectively. Since the risk team is now operating in completely different environments and mindsets, incident response plans and protocols might become obsolete or need to be adjusted

- **Ensuring that remote access capabilities are tested:** Security teams should ensure that company laptops have minimum viable end configuration for remote working. Whenever possible, they should confirm whether personal devices have adequate anti-malware capabilities installed and enabled.

COVID -19 has thrown multiple security challenges to the hospitality industry. Non-availability of regular staff, absenteeism and contactless hotel service have been witnessed since early 2020 due to unstoppable virus. All staff, guests and visitors of the hotel are made to comply with basic protective measures against COVID-19 including compulsory wearing of face masks for all who enter the hotel, medical check-up like temperature, BP, hand hygiene, physical distancing, avoiding touching eyes, nose and mouth, cough and sneezing etiquette (respiratory hygiene), stay-at-home orders when indicated and seeking medical attention when symptoms consistent with COVID-19 are present.

Staff must be trained in the use of the kit including when to use the full PPE kit and procedures for putting on, removing and disposing of the PPE.

Monitoring sick guests, evacuation of suspected cases to minimize the risk of contaminating other guests, using only disposable material wherever

possible have become the norm. Any material to be re-used should be non-porous and disinfected. Regular sanitization of all rooms and guest contact points have increased the burden of the staff.

Self-monitoring gadgets are given to guests in big hotels. Virtual views on the TV of restaurants, lobby, and bars to see the atmosphere to avoid crowds. Digital payments of bills and food and beverage at kiosks, which will give out receipts much, like the ATMs.

Staying behind plexiglass boards at reception and concierge desks to prevent droplet transmission. Teleworking may be a possibility for some jobs, which can help reduce physical contact with others.

Many hotel operators are forced to scale down their operations and curtail services, said Parthesh Dhaggal.

Further he added, "COVID -19 has compelled investments in new safety technologies to increase revenues streams through new business opportunities to maximize workforce and operations while leveraging data to power customer experiences and win loyalty will find a faster path to recovery."

"It is no surprise that the hospitality industry has been impacted by the COVID-19 pandemic and its distancing restrictions. Therefore, managing occupancy of customers in hotels and restaurants while delivering the same quality of service has become top of mind for this industry.

Managing and granting access to certain areas and personnel has also become important for this industry. As states of covid regulations fluctuate over time, it is also important to remain flexible in managing these access rights.

As well, screening has become critical to make consumers & guests feel safe and confident that restrictions, such as vaccination screenings, are followed and enforced. Consequently, having a reliable database to store that information, such as visitor management and contact tracing, has become an added security challenge for this industry.

The wearing of masks indoors has also become an added challenge due to COVID-19 as it makes facial recognition and, as a result, video investigations more difficult," said Maite Herreo.

"Pandemic or not the hotel industry is a challenging sector, whatever happens globally as well as locally impacts hospitality. Pandemic particularly has been very difficult for the sector and many hotels have had to shut down the business or are working below their original capacity," said Kaushal Kadakia.

Additionally, in order to contain the pandemic vital global response was mapped out in terms of travel restrictions, hygiene, quarantine, and social distancing.

Reduction in manpower has left many areas of the hotel unmanned, exposing the property to security threats. Vulnerable spots like parking lots and lobbies could be a hotbed for crime, the cost-effective means of solving the problem is to install a security system to cover blind spots and centrally monitor the premises.

Further, he added, "Hotels now need to check the temperature of the guests visiting their property to ensure an infected person does not enter the property. Special IP cameras can be deployed to detect the face of the people entering the property along with their body temperature. This helps to restrict the entry of potentially sick people on your premises.

Contactless access control was the need of the hour to ensure the safety of the guests and employees to eliminate touching of the surfaces. Installation of contactless access control is money well invested to enhance guest safety and their user experience."

Technological advancements for security in hospitality sector

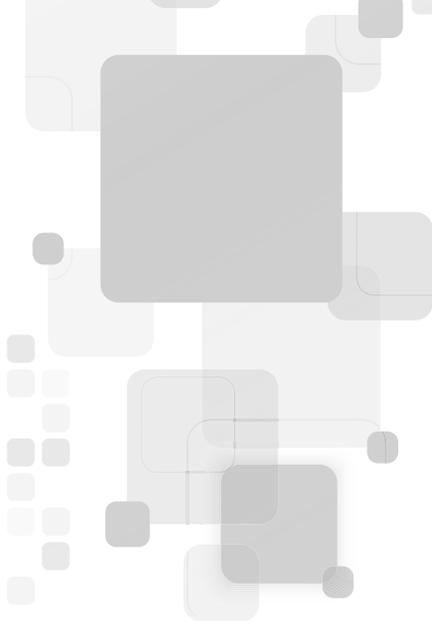
"The hospitality industry has come a long way from the manned guarding era, today the hi-tech hospitality electronic security systems are enabled with AI and IoT applications. It is amazing to see how the hospitality sector has become an applied field of advanced transformative technologies such as Artificial Intelligence, Internet of Things (IoT), Big Data and Block chain," said Ashish P. Dhakan.

Further, he added, the hospitality sector has remained the early adopters of new technologies and security innovations.

Smart Solution

The Hikvision Smart Solution for Hotels is a complete IP surveillance





Using personal devices as room keys and self-check-in and checkout mediums are all in efforts to create a frictionless experience for guests to free flow through the hotel, while still ensuring all systems are secure.”

Maite Herreo
Industry Marketing Specialist,
Genetec, Inc.



system for hotel security. The solution provides around-the-clock protection with industry-leading low-light technology, automated vehicle access control with Hikvision’s automatic number plate recognition (ANPR) module, and automatic event alerts with Hikvision’s Smart detection. The Smart Solution includes integrated IP products such as IP cameras, NVRs, and video management software — helping to create a reliable, flexible security platform for hotels.

Hikvision product offerings for the hospitality security, include Video Surveillance, Access Control, Perimeter Security and Intrusion Alarm products. The Hospitality Sector specific products like Smart Pole, Emergency Call Box, Bollards, Under Vehicle Surveillance System, Door Frame Metal Detector, Hand Held Metal Detector and X-ray Baggage Scanners are serving the special security requirements.

Integrated Security Solutions

The new transformative technologies, including Artificial Intelligence (AI), Internet of Things (IoT), Big Data (Video Analytics) and Block chain (Data security) have given a boost to integrated security solutions. The rise in proliferation of IP cameras has supported the integrated security solutions.

IoT Security solutions for Smarter Guest Experience

Internet of things (IoT) is enabling smart security trends in the hospitality sector while driving service efficiency. The hotel experience is getting a boost from IoT ecosystem. From access to streaming services to a room key on your smartphone, the essential amenities in a guest room are becoming increasingly digital. Guests want concierge services or temperature controls at the push of a button (or tap of a finger), and voice-activated controls are expanding beyond simply asking Alexa to play your favorite song.

Physical Security Systems

There are many hotels and other properties within the hospitality industry which need to upgrade their manual security measures to Non-intrusive physical security systems. Huge barriers and barricades don’t look appealing to the eye, and many worry about putting the guests off. The industry trends are moving towards non-intrusive security devices and systems that are almost invisible or at the most gel with the interiors to make themselves invisible.

Artificial Intelligence Applications to grow within the sector

We have already seen many successful deployments of artificial intelligence (AI) applications across the hospitality industry.

This technology has the potential to enormously improve customer service levels whilst providing more time for human resources to get all other tasks done. This makes AI absolutely vital for the future of the sector. AI enabled facial recognition technology is another area, which is driving innovations like VIP Guest Alerts and personalised greetings, etc.

Focus on Cybersecurity

This arguably even more important for those in the hospitality sector as this is naturally an industry that handles a large amount of customer personal details. It is necessary for the hospitality sector to focus more on Cybersecurity compliance in each layer of the hospitality ecosystem.

Use of Virtual Voice Assistant Technologies

The hospitality sector has been witnessing a huge range of application for voice assist technology and its growing possibilities. It is being used to check-in or get customer assistance, it may soon be possible for customers to simply speak to a mobile phone screen and get everything sorted out.

As per Sudhindra Holla, Some of the technological advancements for security in this sector are –

- **Utilization of a strong solution that is well secured–** A strong cybersecurity solution is an absolute necessity in

today's changing world when organizations were forced to opt for remote working due to the pandemic. We, at Axis Communications firmly believe that our cameras are very secured and comes with end-to-end security

- **Voice Control** – The demand for voice control is growing. This involves the use of smart audio devices like speakers located at different points in the hotel
- **Facial Recognition Technology** – Facial Recognition can be utilized for seamless operations- from checking in guests to maintaining employee attendance
- **People Counting** - Our People Counting solution has been specifically curated for measuring and taking faster action to avoid congestion or a queue and maintain social distancing norms, which is so crucial for the hospitality sector. It gives analytics and valuable insights such as – how many employees are in an area like a, cafeterias, lift lobbies, a specific floor, kitchen, or sites at the same time, how they move, where they congregate, and periods of

peak occupancy. These insights further enable the management to plan accordingly and take immediate action to make social distancing normal while improving service, operational efficiency and profitability

- **AXIS Occupancy Estimator** - AXIS Occupancy Estimator offers a cost-efficient way to accurately estimate occupancy levels on the hotel site to comprehend visitor patterns better and how the space is used. It provides real-time data on how many people are present in the premises or in a certain area at a certain time. This valuable data helps in increasing operational efficiency to maintain the premises and avoid crowding, optimize workforce planning and opening hours and take necessary measures to adhere to the social distancing guidelines
- Axis have collaborated with **Application Development Partners (ADP)** to provide



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solutions such as Social Distancing solutions, Touch Free solutions, Body Temperature Monitoring solutions, Mask Detection solutions and Touch Free Attendance systems with facial recognition capabilities to offer top-notch solutions to create a secure working environment for all employees and customers

- **Audio solutions and Public Announcement** solutions are becoming important too, in the current context of the pandemic, to better manage and monitor employees

Moreover, guests so that they follow and adhere to the social distancing norms better

“Technologies that were once traditional security tools now also serve as intelligence gathering tools. Tracking consumers throughout their buyer journeys with LiDAR sensors, video analytics, and Bluetooth can help the industry better understand wait times, consumer behavior, and customer preferences. These additional data collecting capabilities now help the hospitality industry better serve its consumers,” said Maite Herreo.

Further, he added, “Specifically in the hotels and resorts industry, connected rooms have seen a rise in adoption. Using personal devices as room keys and self-check-in and checkout mediums are all in efforts to create a frictionless experience for guests to free flow through the hotel, while still ensuring all systems are secure.”

“With the end of the pandemic nowhere in sight various industries have adopted new technologies to adjust to the demands. COVID-19 has ushered the hospitality industry towards contactless technologies. Use of Intelligent Video Analytics to ensure social distancing, contactless access control, temperature detection, and many more,” said Kaushal Kadakia.

Further, he added, “Security is of utmost importance for the Hospitality sector and it can benefit from a range of security solutions available in the market. Intelligent video analytics offers various solutions like Parking management solutions, Perimeter security, access control, and many more. The advent of 5G and IoT will further enhance the security solutions accessible to the hospitality sector.” **AKS**

