

The impact of AI and automation on the hospitality industry

The hospitality industry is no longer dependent on conventional approaches to guest service and administration. One of the largest employers in the world, the sector today thrives on personalized customer service, curated experiences, and human interactions. Key technologies, automation, and artificial intelligence (AI) are transforming the industry and reshaping how hotels and restaurants interact with their guests. As the industry navigates this AI-driven future, a new age characterized by efficiency, innovation, and personalization is about to rise.

Rise of AI in hospitality

AI, with its transformative power, has altered the way visitors engage with hotels. It starts working as soon as a visitor makes a reservation, evaluating information and preferences to provide a customized stay. Moreover, AI chatbots can assist customers in making reservations, responding to enquiries, and suggesting restaurants.

AI allows hotels to automate a variety of activities, including check-in and check-out procedures. Expediting the process end-to-end limits the possibility of long queues and makes the entire experience a smooth and efficient one. The results of a survey conducted by Hotel Tech Report on 400 guests endorse this. In their annual State of Hotel Guest Technology Report 2025, it was discovered that 58 per cent of guests feel that AI has significantly improved their booking and stay experiences.

Additionally, AI is increasingly being employed in hotels and restaurants to improve the safety and security standards of hotels. With facial recognition technology, the hospitality industry can detect unauthorised access and prevent potential security threats. Not only this, AI-powered surveillance systems can

also monitor areas in real time, guaranteeing safety and security to visitors and guests.

The potential of automation in the hospitality sector

Far from being a catchword, automation is proving to be a game-changer in improving the service standards of almost every industry. In the hospitality sector, automation covers aspects like managing reservations and check-ins, implementing effective marketing strategies, and helping staff execute their operations. Businesses are thus able to eliminate mundane and repetitive processes, reduce errors, and utilize human resources to focus on more guest-centric and challenging activities.

Here's a look at some of the common processes used by the hospitality industry to increase their revenue, efficiency, and productivity:

System integration services

Nowadays, many hotel revenue managers are using automated revenue management systems, including RFP (request for proposal) management, pricing tools, and hotel inventory systems. As rooms are booked at the hotel, automatic hotel systems interact and update to ensure that accurate availability is displayed to customers booking directly through the hotel's website, third-party sites, or RFP management platforms. Instead of manually tracking and entering data from one system to another, revenue managers use hotel automation to guarantee that real-time changes are appropriately represented in the property's CRM (customer relationship management), revenue, inventory, and sales systems.

Automated revenue management system (ARMS)

With an ARMS, hoteliers can improve their pricing and rate level utilization strategies. When high demand is recognized, they may configure their RMS to automatically alter the prevailing rates to encourage appropriate pricing patterns and maximize revenue possibilities. In contrast, when demand is low, the RMS may optimize to give more discounted rates, extended stay specials, or other limited-time deals to attract customers to their property.

Automated marketing

By using automated ad retargeting technologies, hotels and restaurants can analyze the profile of potential customers who visited their websites and expressed interest in the facility, such as seeing a guest room or visiting the meeting space, but did not complete the booking process. Consequently, they can retarget advertisements to contact interested travellers, agents, and planners to encourage them to book.

Considering the benefits of these technologies, King Research projects in its report that the global AI in the hospitality market will reach \$70.32 billion by 2031.

While AI and automation are critical for enhancing the hospitality industry's operations, they cannot replace the human element, imperative for a personal touch. For instance, hotels can transform receptionists into experienced officers by utilizing AI to automate basic check-in procedures, allowing them to focus on client interaction and customisation.

AI and automation are redefining the hospitality industry. While they offer a plethora of advantages, cost savings, and customer experience enhancements, their utilization necessitates careful consideration of labour implications, ethical standards, and the preservation of the human aspect that distinguishes excellent hospitality. By achieving the right balance between automation and AI, the hospitality industry can flourish in the digital age, meeting the evolving needs of modern travellers and guests.