



Hotel Digital Concierge

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What is a Hotel Digital Concierge

A software application designed to help hotel guests with various needs and tasks while taking pressure off front desk staff

Digital concierges are increasingly being integrated with AI



Benefits for Hotels

Efficiency

- AI driven automation can handle various operation processes such as check in-checkouts, and service requests, reducing workload of hotel staff
- Automating tasks allow staff to focus on more complex and guests centric activities and allows for a leaner hotel staff

Digital Insights:

- AI tools can analyze vast amounts of data collected by digital concierge system to generate insights on guest preferences and behaviors, preferences and trends.
- This can be used to enhance services and marketing strategies



Benefits for Guests

Convenience:

- Streamlined Checking In/Checkout: Guests can expedite the checkin and checkout processes, reducing wait times and paperwork
- Standalone Hotel App: Access to concierge services through a mobile app allows guests to make requests or inquiries from anywhere in the hotel

Personalization

- Customized Experienced : Hotels can use AI algorithms to analyze guests preferences to provide personalized recommendations for services, amenities, and local activities
- Room Preferences: Guests can set room preferences in advance, such as temperature, lighting, and entertainment preferences



Chatbots

Chatbots: Chatbots are computer programs designed to simulate conversation with human users, especially over the internet.

Implemented with NLP capabilities enables guests to interact with the digital concierge using nature language.

Understand and respond to user queries more effectively.



AI Room Services

The room service experience can be greatly improved by the integration of artificial intelligence.

Integrating AI technology into Marriott and other hotel's room services will offer an enhanced guest experience.

However, the key is maintaining a balance between the **technology** and an authentic **human** experience.



AI Room Services

AI technology can track and analyze guest preferences and behavior to tailor a personalized experience for the guest's stay.

The AI can provide predictive room maintenance that connect to the room's HVAC systems or room appliances to ensure a comfortable stay for the guest.

Features for Efficiency:

- In-app or device voice assistant for ease of access
- Convenient In-app purchases

AI Room Services - Real World Examples

In 2017, Amazon introduced a version of Alexa for Hospitality, partnering with Marriott, RedAwning, and Two Roads Hospitality.

This version of Alexa allows guests to request services, control room features, and access information.



AI Room Services - Real World Examples Cont.

IHG's InterContinental Hotels & Resorts collaborated with Baidu to introduce AI-powered Smart Rooms in China.

The Smart Rooms enable guests to personalize settings, access seamless room service, and simplify hotel management through advanced AI technology.

Corey



AI Luggage services

- A type of guest facing AI that can be implemented in Hotels
- Guests would receive the help of AI robots that would be able to help them with luggage
- This robot should be capable of lifting enough weight to handle most luggage

Key Features

- Would Welcome guests with a message
- Would be easy and seamless for the guests to use
- Would work with other systems in the hotel
- Streamlined for best possible guest communication

Key Features (cont.)

- An automated luggage tagging process
- Uses RFID technology to accurately identify luggage
- Would be capable of providing hotel guests with real time updates

Managing Luggage

- Mobile app would provide guests all the tools to monitor luggage
- Guests would be notified whereabouts of the luggage
- App would allow guests to pay for this service on the mobile app and should be able to manage and plan all of their luggage seamlessly before and after checkout

Real life Examples

- Yotel, a hotel in NY uses an AI robot to help guests manage their luggage with storage before and after checkout
- Can lift 500 lbs of luggage and handles on average 300 bags on a daily basis
- Guests take their bags to their own rooms
- Yotel uses a kiosk system for guests to check-in
- 95% of guests prefer the AI luggage system over hotel staff





Video

Guest Satisfaction

- Saved time for guests and hotel staff
- A more positive impact on guest satisfaction (95% of customers prefer this service)
- Future proof with more enhancements and expandable for maximum customer satisfaction
- Affordable luxury service

Benefits of AI luggage Service

- Can Cost-effective solution for a highly desirable service that would replace staff
- Fairly simple to implement
- Can eliminate human error when handling personal luggage for guests

AI integration in guest check in/check out systems

We analysed the findings of two studies that measured the positive feedback of guest facing AI systems during the COVID-19 pandemic in Singapore. The first study used different methods of analysis (TAM, Privacy Calculus Theory, and Personal Innovativeness) while the article by Chang et al. offers real-world guest feedback on automatic check-in/out systems in Singapore.

Video explaining TAM

QUT

TECHNOLOGY ACCEPTANCE MODEL

with
Prof. Jan Recker



Efficiency and Modern Appeal

Positive reviews highlight the speed and efficiency of AI check-in/out systems, with guests appreciating the futuristic and modern aspects of the technology (Chang et al.)

Guests' Cognitive Process

Both studies reveal that guests weigh benefits (efficiency, modernity) against risks (privacy concerns, lack of personal touch) when interacting with facial recognition and AI systems (Boo & Chua, 2022; Chang et al.).

Trust and Privacy Concerns

While trust enhances focus on benefits (Boo & Chua, 2022), privacy concerns are a significant issue, especially when personal details are visible in public areas during self-check-in (Chang et al.).

Lack of Personal Interaction

Negative reviews often cite the absence of a human element in automated check-ins, suggesting a need for balancing AI with human hospitality (Chang et al.).

Usability Challenges

The difficulty in using self-check-in systems, often requiring staff assistance, points towards a need for more user-friendly interfaces (Chang et al.)

Implications for Hotel Management

Marriott should consider these findings in strategizing the deployment of AI systems, focusing on enhancing user experience while addressing privacy and personal interaction concerns (Boo & Chua, 2022; Chang et al.).

Millennials and Gen Z as Key Demographics

The adoption of such technologies is particularly promising for younger, tech-savvy generations, as noted in Boo and Chua's study (2022).

Enhancing Institutional Trust

To increase acceptance of AI systems, hotels should work on building institutional trust and ensuring privacy safeguards (Boo & Chua, 2022).

Integrating Technology with Hospitality

Balancing the efficiency of AI with the warmth of human service could be key to optimizing guest satisfaction in the digital age (Chang et al.).

Which Hotels Brands Should Use AI

Courtyard by Marriott

- Widespread presence in urban and suburban locations.
- Could benefit from AI in terms of increased efficiency due to leaner staff

References

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