

# Cover page

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- Component 2

A photograph of a tropical resort at night. In the foreground, a swimming pool reflects the lights from the resort building and the palm trees. A metal ladder is visible in the pool. The resort building is a multi-story structure with a dark roof and warm interior lighting. Several tall palm trees are scattered around the building and pool area. The sky is a deep blue, suggesting dusk.

# BMIH6001

## CONTEMPORARY THEMES IN HOTEL AND HOSPITALITY SECTOR

By Abul Imran

# Abstract/Introduction

- The hospital industry is rapidly adopting new technologies to improve guest experiences and streamline operations

## Key innovations

- AI Chatbots for customer service automation
- Mobile check-in for smoother arrival process
- Smart room technology for personalised guest comfort
- AV/VR experiences for enhanced engagement
- This paper examines both opportunities and challenges in implementing these innovations
- A pestle analysis is used to asses the external factors influencing technology adoption
- Technology has always been used by the hotel industry but it increasingly advanced after the pandemic

# Overview of Literature

- **AI Chatbots & virtual assistants** : help guests with instant responses and automated bookings. This reduces labour costs (Roy et al., 2021)
- **Personalised recommendations**: using AI to suggest services based on guest preferences, improving customer satisfaction and loyalty (Demir et al. (2023)
- **Mobile Check in & contactless services**. streamline guest arrivals and reduce wait time which ensures smooth check-ins and check-outs. Also allows to request services and control room settings from their phones. This increases guest satisfaction (Fauzillah et al 2023) (Shin et al 2022)
- **Big data analytics**: help hotel understand guest preferences, adjust prices egis and improve services quality (Zarco et al.,2022)
- **VAR**: Let guests preview hotel amenities, rooms and nearby attractions . (McLean et al. (2022).

# PESTLE ANALYSIS

**Political factors** – Governments support hotel technology use by offering funding and tax benefits. Countries like Japan and Singapore promote smart hotels using AI and automation to improve guest experiences (Park et al., 2023).

**Economic Factors**- Hotels invest more in AI Chatbots, mobile check-ins and smart rooms when the economy is strong (Molina-Castillo et al., 2023). During the economy downturns, hotels focus on cutting costs but automation can still help save money.

**Social factors** – Modern younger travellers have a demand for hotels to offer fast, digital. (Ramzan et al., 2023). Since Covid-19 guests now prefer contactless services. (Ratna et al 2024)

# PESTLE ANALYSIS

- **Technological factors** - hotels use AI and Machine learning to offer personalised services, like Chatbots for customer support, smart tools for adjust room settings and mobile apps for checks in. VAR lets guests take virtual tours of hotel facilities and local attractions
- **Legal factors** - Privacy laws and cybersecurity regulations ensure hotels protect guest information and follow strict cyber security rules to make sure guest information is not misused. (Gangwar & Reddy (2023).
- **Environmental factor** – Hotels are reducing waste by using automated lights, waste management systems, water-saving devices to save energy and costs (Rasheed et al (2023). An increasing number of travellers prefer eco-friendly hotels, prompting businesses to invest in sustainable technologies.

# Advantages and challenges of Technology

## AI Chatbots

- Used by Marriott hotel to assist guests with bookings, inquiries and service requests (Chaudhuri et al 2024)
- Benefits: Available 24/7 customer service, reduce wait times and personalised guest experiences
- Challenges: Lack of human interactions and can misunderstand complex requests

## Smart Room Technology

- Luxury hotel (e.g. Peninsula Hotels) offer voice-activated and app-controlled room features, such as lighting, temperature and entertainment (Zhang et al 2023)
- Benefits: Enhances guest comfort allows customised room settings, improves energy efficiency and supports sustainability and reduces costs
- Challenges: High installation and maintenance- costs and will be expensive for smaller hotels. Not all guests are able to use technology well and there are security concerns

# How Technology is Changing Hotel Operations

## Future Policies for Technology Adoption

- The hospitality industry is undergoing a major technological shift to improve efficiency and guest satisfaction. (Bharwani, and Mathews, 2021).
- Policies should focus on security, accessibility of new technologies.

## AI Chatbots & Virtual assistants

- 24/7 assistance for bookings, reservations and questions and feedback
- Help improve guest experience and hotel efficiency by reducing response times.

## Smart Sensors & Predictive Maintenance

- Adjust room conditions ( temperature, energy use) for comfort & efficiency
- Reduces costs and supports sustainability
- Forecasting system detect hazards & improve maintenance scheduling. (Yang *et al.*, 2021).

# How Technology is Changing Hotel Operations

## AI & Machine learning in Hotel Management

- Personalises guest experience and pricing strategies (Lee *et al.*, 2021).
- Helps manage work force ( performance analysis, training and engagement

## Contactless technology

- Contactless technology allows for mobile check-ins, digital payments and keyless room access.
- Eliminates long-queues at check-in counters, saving guests time and improving operational efficiency.
- Reduces the need for direct human contact, aligning with post-pandemic health and safety regulations.
- Studies show contactless services contribute to a 20% guest satisfaction

# Conclusion

- Hotels use technology like AI Chatbots, smart rooms, and AR/VR to improve service, safety and convenience.
- These technologies make hotels more efficient, personalised and eco-friendly.
- However, they also have challenges like security risks, updates and maintenance costs.
- A mix of technology and human interaction is important to improve guest satisfactions and creating a secure, welcoming environment.

# References

- Bharwani, S. and Mathews, D., 2021. Techno-business strategies for enhancing guest experience in luxury hotels: a managerial perspective. *Worldwide Hospitality and Tourism Themes*, 13(2), pp.168-185.
- Chaudhuri, R., Chatterjee, S. and Vrontis, D., (2024). Adoption of blockchain technology in hospitality and tourism industry and sustainability performance: impact of technological turbulence and senior leadership support. *EuroMed Journal of Business*, 19(1), pp.62-83
- Gangwar, V.P. and Reddy, D., (2023). Hospitality industry 5.0: Emerging trends in guest perception and experiences. *Opportunities and Challenges of Business 5.0 in Emerging Markets*, pp.185-211.
- McLean, G. and Barhorst, J.B., 2022. Living the experience before you go... but did it meet expectations? The role of virtual reality during hotel bookings. *Journal of Travel Research*, 61(6), pp.1233-1251.
- Molina-Castillo, F.J., Meroño-Cerdán, A.L., Lopez-Nicolas, C. and Fernandez-Espinar, L., (2023). Innovation and technology in hospitality sector: outcome and performance. *Businesses*, 3(1), pp.198-219.
- Park, H., Lee, M. and Back, K.J., (2023). A critical review of technology-driven service innovation in hospitality and tourism: current discussions and future research agendas. *International Journal of Contemporary Hospitality Management*, 35(12), pp.4502-4534.
- Lee, M., Ahn, J., Shin, M., Kwon, W. and Back, K.J., 2021. Integrating technology to service innovation: Key issues and future research directions in hospitality and tourism. *Journal of Hospitality and Tourism Technology*, 12(1), pp.19-38.

# References

- Ratna, S., Saide, S., Putri, A.M., Indrajit, R.E. and Muwardi, D., (2024). Digital transformation in tourism and hospitality industry: a literature review of blockchain, financial technology, and knowledge management. *EuroMed Journal of Business*, 19(1), pp.84-112.
- Roy, B.K. and Pagaldiviti, S.R., 2023. Advancements in arena technology: Enhancing customer experience and employee adaptation in the tourism and hospitality industry. *Smart Tourism*, 4(1).
- Rasheed, H.M.W., He, Y., Khizar, H.M.U. and Abbas, H.S.M., (2023). Exploring Consumer-Robot interaction in the hospitality sector: Unpacking the reasons for adoption (or resistance) to artificial intelligence. *Technological Forecasting and Social Change*, 192, p.122555.
- Shin, H.H., Jeong, M., So, K.K.F. and DiPietro, R., 2022. Consumers' experience with hospitality and tourism technologies: Measurement development and validation. *International Journal of Hospitality Management*, 106, p.103297
- Yang, H., Song, H., Cheung, C. and Guan, J., 2021. How to enhance hotel guests' acceptance and experience of smart hotel technology: An examination of visiting intentions. *International journal of hospitality management*, 97, p.103000.
- Zarezadeh, Z.Z., Rastegar, R. and Xiang, Z., 2022. Big data analytics and hotel guest experience: a critical analysis of the literature. *International Journal of Contemporary Hospitality Management*, 34(6), pp.2320-2336.
- Zhang, X., Tavitiyaman, P. and Tsang, W.Y., (2023). Preferences of technology amenities, satisfaction and behavioral intention: The perspective of hotel guests in Hong Kong. *Journal of Quality Assurance in Hospitality & Tourism*, 24(5), pp.545-575.