The Transformation of Personalisation in Hospitality Through the Implementation of Artificial Intelligence (AI)

Khushboo Bilal[1*], Sajad Ahmad Bhat[2], Danish Iqbal Raina[2], Parvez Abdulla[2], Zakir Hussain[2], and Nur Azizah[3]

Abstract

Purpose – This paper aims to explore the significant impact of Artificial Intelligence (AI) on personalizing guest experiences within the hospitality industry. It investigates how AI-driven solutions are revolutionizing the customization of services and improving operational efficiency.

Methodology/Design/Approach - The study uses a qualitative approach, examining case studies, industry trends, and technological advancements in AI integration. It critically assesses the transformations in guest interactions, operational processes, and revenue management within the sector.

Findings - The integration of AI has led to enhanced guest experiences, streamlined operations, and more effective revenue management strategies. However, challenges in adoption remain, including technological barriers and concerns around data privacy. Opportunities for further growth in AI application within the industry are also highlighted.

Originality/Value - This paper provides new insights into the evolving landscape of personalized hospitality, offering valuable perspectives for both industry professionals and stakeholders. It contributes to the understanding of how AI is shaping the future of hospitality services, emphasizing both its potential and the hurdles it presents.

Keywords: Artificial Intelligence (AI), Personalization, Hospitality industry, Transformation, Visitor experience

Introduction

In the digital era, the adoption of artificial intelligence (AI) is indispensable. Since its inception, AI has presented numerous opportunities and challenges across various industries, including hospitality. Likewise, AI must be considered when driving innovation in the global economy. Several AI-powered technologies have emerged with the potential to enhance the economy and elevate people's living standards (Allam, 2016; Koo et al., 2021; Limna et al., 2021). The contemporary hospitality industry operates within a fiercely competitive landscape, marked by the influx of new technologies and heightened customer expectations for exceptional service. These factors not only serve as significant drivers of innovation but also continually pose challenges related to escalating costs.

The success of these enterprises often hinges on their overall financial performance, their capacity to adapt to evolving environments, and their ability to innovate and diversify their offerings to meet customer needs and expectations (Van Niekerk, 2016; Wikhamn, 2019). Consequently, the hospitality and tourism sector is leveraging cutting-edge technologies like artificial intelligence and robotics (AIR) to enhance customer service and experiences. These technological advancements have been converted into sophisticated tools for delivering customer service and are instrumental in enhancing the overall customer experience (Goel et al., 2022).

*Correspondence:
Khushboo Bilal
Khushboobilal66@gmail.com
Research Scholar, Institute of Tourism and Hospitality Management (UITHM)- Chandigarh University, Punjab, India.

83-90

Additionally, the recent progress and utilization of advanced technology and information communication technologies (ICT) have automated and revolutionized every facet of the tourist experience, leading to significant transformations in the tourism and hospitality industry (Kumar et al., 2021). Furthermore, the rapid evolution of AI in hospitality management holds promise for improving corporate performance. For example, the hospitality industry, particularly the hotel sector, operates in a data-rich environment, accumulating vast amounts of data in various formats.

In the hospitality sector growing ever more competitive, offering personalised experiences is now crucial to attract and retain guests. Thanks to the emergence of Artificial Intelligence (AI) technology, hotels and resorts now possess potent instruments to provide customized services and boost guest contentment. This paper delves into the transformative influence of AI on personalisation within the hospitality sector, examining how AI-driven solutions have reshaped guest experiences, operational workflows, and revenue management strategies.

To maintain a competitive advantage in an increasing hospitality landscape, offering personalised experiences is now crucial to attract and retain guests. Thanks to the emergence of Artificial Intelligence (AI) technology, hotels and resorts now possess potent instruments to provide customized services and boost guest contentment. This paper delves into the transformative influence of AI on personalisation within the hospitality sector, examining how AI-driven solutions have reshaped guest experiences, operational workflows, and revenue management strategies.

Literature review
The concept of Artificial Intelligence (AI)
The term 'Artificial intelligence' was first coined by John McCarthy in 1956 during the renowned Dartmouth Conference, where he discussed the science and engineering behind creating intelligent robots and machines (BBVA, 2016). Artificial intelligence (AI) refers to the replication of human intelligence operations by computers, particularly computer systems, with examples including machine learning and speech recognition (Ed Burns, 2021). AI is revolutionising nearly every sector of a nation's economy by enabling computers to make informed decisions that lead to more efficient operations (Jain, 2021). Artificial intelligence (AI) is a combination of two terms: "artificial," which pertains to creations by humans, and "intelligence," which denotes the capacity for independent thinking. Consequently, AI is characterized as a human-made cognitive ability (Limna et al., 2021). AI involves the emulation of human cognitive functions by computer systems, a process highly effective at executing specific tasks. Its integration significantly transforms various sectors of a nation's economy by empowering computers to make informed decisions, thereby enhancing operational efficiency (Holzinger et al., 2021; Kumar et al., 2021). Additionally, AI facilitates smarter working practices, leading to improved business outcomes. However, its adoption also demands the development of new proficiencies and competencies, spanning technological prowess, social and emotional intelligence, as well as creative aptitude (Ivanov & Webster, 2019; Ruel & Njoku, 2021).

Artificial intelligence comprises a range of technologies designed to replicate human intelligence for problem-solving purposes. Similar to humans, AI systems can follow rules, enhance their performance over time, acquire knowledge, and adjust to changes in their environment (Russell & Norvig, 2016). The definition and criteria for AI have evolved, initially requiring only a basic level of intelligence for classification as AI (Buhalis et al., 2019). However, current standards demand specific autonomous behaviours for systems to be deemed intelligent (Sterne, 2017). AI systems must possess autonomy, self-awareness, creativity, and social capabilities (Kaplan & Haenlein, 2020). Therefore, for this study, AI systems are characterized as those capable of autonomously emulating human cognition, making decisions, and executing complex operations and tasks using large datasets. According to Huang and Rust (2022), AI initially enhances and eventually supplants human intelligence (HI) at certain levels of intelligence, with the optimal scenario being collaborative teamwork between AI and HI.

Artificial Intelligence (AI) has emerged as a transformative force across a multitude of industries, with its impact particularly pronounced in sectors such as hospitality and tourism. The integration of AI technologies has catalysed a significant paradigm shift in how businesses within these domains operate and interact with

their clientele (Zapanta, 2023). Within this dynamic landscape, AI holds immense potential to revolutionize various facets of the tourism and hospitality industry, spanning critical areas such as customer service, marketing strategies, and overall operational efficiency (Bulchand-Gidumal, 2022).

Personalisation in the hospitality industry

The notion of personalization in the hospitality sector has undergone substantial evolution over time. Historically, personalization relied on manual methods and guest preferences obtained through surveys or interactions with staff. Nevertheless, technological progress, notably in AI and machine learning, has empowered hotels to transition from static guest profiles to dynamic, data-centric personalization approaches. AI algorithms analyse extensive guest data in real-time, enabling hotels to forecast needs, preferences, and behaviours with unparalleled precision.

Guest personalization within the hospitality sector entails tailoring services, experiences, and interactions to suit the specific preferences and requirements of individual guests. This process involves gathering and analysing guest data to craft personalized offerings that amplify guest satisfaction and foster loyalty. In recent times, guest personalization has gained heightened significance as hotels and other hospitality establishments endeavour to deliver distinctive and memorable experiences to distinguish themselves in a competitive environment. Major restaurants across India have begun leveraging guest data to tailor menus, provide dish recommendations, and accommodate dietary limitations. For example, OpenTable, a renowned restaurant reservation platform, employs AI algorithms to offer personalized restaurant suggestions derived from a user's dining past and preferences (Economic Times, 2019). This strategy not only elevates guest contentment but also augments restaurant earnings.

Integration of Artificial Intelligence (AI) in the hospitality sector

Certainly, the incorporation of Artificial Intelligence (AI) into the tourism and hospitality sector represents a domain ripe for exploration and research. Despite advancements in leveraging AI's capabilities, there remains a compelling need for a deeper understanding of its potential applications and resulting impact. At the core of this exploration lies the imperative to address the ethical implications inherent in AI adoption. As AI systems become integral to customer interactions, ethical considerations such as data usage (Writer, 2021), algorithmic biases (Monaghan, 2023), and the potential erosion of the human touch (Mansukhani, 2023) demand a thorough examination. This scrutiny extends beyond the technological realm, encompassing the development of effective strategies for AI implementation within the complex operational fabric of these industries. Identifying optimal methods for seamlessly integrating AI while preserving the personalized nature of hospitality and tourism experiences is a pivotal avenue for research. Moreover, the transformative presence of AI prompts inquiry into its influence on both customer experiences and employee well-being. Understanding how AI alters the dynamics of guest interactions and the work environment is vital for shaping the future of these sectors. As the landscape of AI in tourism and hospitality evolves, research efforts such as those indicated by Knani et al. (2022) will play a pivotal role in guiding practitioners and stakeholders towards informed decision-making and sustainable growth.

The Influence of Artificial Intelligence (AI) on the transformation of personalisation in the Hospitality Industry

Artificial Intelligence (AI) has a profound influence on the transformation of personalization in the hospitality industry, reshaping how hotels interact with guests and tailor experiences. Contemporary technological advancements, such as AI and robotics, are extensively employed across various sectors of the hospitality industry, encompassing hotel operations, personalisation, tourism services, food and beverage establishments, as well as meeting and event management (Drexler & Lapré, 2019; Yang et al., 2020). Furthermore, the evolution of AI and robotics, coupled with heightened digital connectivity, exerts influence across all industries, including personalisation in hospitality. Organizations utilize these sophisticated technologies to streamline operational workflows, minimize expenses, and enrich customer experiences while introducing novel offerings (Mingotto et al., 2021).

The integration of AI and robotics yields diverse effects on the transformation of personalisation in the hospitality sector. For instance, AI integrated into point-of-sale systems aids in mitigating employee theft and discrepancies in food and beverage establishments, such as cafes and restaurants (Berezina et al., 2019). Additionally, AI and automation services possess the potential to not only reduce human errors but also offer predictive insights into future trends. Consequently, AI and automation systems adeptly analyse vast datasets, transforming them into actionable business intelligence. Furthermore, organizational expertise expands, enabling improved customer experiences. AI effectively serves business clients by identifying and optimizing future sales opportunities (Lu et al., 2020; Kumar et al., 2021; Thong-On et al., 2021).

As a result, AI and robotic technologies present numerous opportunities for the hospitality industry through the transformation of personalisation to enhance daily operations and long-term strategies and ensure consistent delivery of high-quality products and services to customers (Yang et al., 2020). Hence, AI significantly influences the hospitality industry.

Method

Narrative synthesis entails systematically reviewing and synthesizing findings from multiple studies, relying heavily on textual descriptions to summarize and elucidate the synthesis's outcomes (Popay et al., 2006). In this review, a narrative synthesis methodology was utilized to examine the transformation of personalisation in the hospitality industry through the integration of AI. The literature was systematically surveyed, drawing from various sources such as books and research articles accessed through databases including, Google Scholar, University databases, Web of Science, and Shodhganga. Inclusion criteria encompassed studies clearly defining AI across all facets of the hospitality sector, published in English and peer-reviewed. The database search employed a set of keywords related to the transformation of personalisation in the hospitality industry through the integration of AI, including "artificial intelligence," "AI, "Personalization", "Hospitality industry", "Transformation", and "Visitor experience".

The qualitative approach involves four primary research steps: research design, data collection, data analysis, and report writing (Erickson, 2012). Content analysis, a versatile technique, is applied to qualitative systematic reviews. Reviewers aiming to generate knowledge and theory from highly organized and contextualized data are encouraged to adapt or modify content analysis methods (Finfgeld-Connett, 2014). Therefore, a qualitative content analysis approach was employed in this paper.

Findings

Our study identified both contextual and methodological gaps. A contextual gap arises when desired research findings offer a different perspective on the discussed topic. For instance, Ruel & Njoku (2021) investigated how artificial intelligence (AI) technologies have reshaped the hospitality industry. They formulated a theoretical framework to assess its effects on employee engagement, retention, and productivity levels, considering its potential implications for service quality and customer satisfaction. The study utilized role theory and the service-profit chain to construct a role-service-profit chain model, outlining how managers can evaluate the relationship between the role expectation of technological innovations and service quality/customer satisfaction through their impact on employee-related outcomes, subsequently gauging the effects on profitability and growth. Conversely, our present study centred on the role of Artificial Intelligence (AI) and data analytics in augmenting guest personalization.

Additionally, a methodological gap is evident; for instance, in their exploration of how artificial intelligence (AI) technologies have transformed the hospitality industry, Ruel & Njoku (2021) employed role theory and the service-profit chain to develop a role-service-profit chain model. This model suggests how managers can assess the correlation between the role expectations of technological innovations and service quality/customer satisfaction through their influence on employee-related outcomes, and evaluate the consequent impact on profitability and growth. Conversely, a qualitative content analysis approach was employed in this paper.

Conclusion and recommendations

The investigation into " The transformation of personalisation in hospitality through the implementation of Artificial Intelligence (AI)" has illuminated the transformative capacity of these technologies within the hospitality sector. The study revealed that AI and data analytics have emerged as potent instruments for hotels and hospitality enterprises to customize their offerings and interactions to cater to the unique preferences and requirements of their guests. The research findings highlight several pivotal observations.

Primarily, the integration of AI and data analytics in the hospitality domain represents more than just a technological trend; it signifies a fundamental change in how hotels interact with their guests. By implementing AI-driven chatbots, recommendation systems, and predictive analytics, hotels can deliver a level of personalization previously unattainable. Guests now encounter services tailored to their tastes, resulting in a more gratifying and memorable stay. Moreover, the influence of AI and data analytics on guest personalization extends beyond heightened guest satisfaction. It carries significant ramifications for revenue generation and customer loyalty. Personalized experiences foster increased guest loyalty and positive feedback, which, in turn, attract more guests and stimulate revenue expansion. Additionally, AI and data analytics enable hoteliers to optimize their resources, reducing operational expenses while concurrently elevating service quality. Nonetheless, it is crucial to acknowledge that while AI and data analytics offer substantial advantages, they also raise ethical concerns. Striking a delicate balance between personalization and privacy is a critical challenge. Guests may feel uneasy if recommendations become overly intrusive or if their data privacy is not adequately safeguarded. Consequently, hoteliers must ensure the responsible and transparent utilization of guest data in their personalization endeavours.

In summary, this study underscores the significant potential of AI and data analytics in revolutionizing the hospitality industry through enhanced guest personalization. By delivering personalized experiences aligned with individual preferences, hotels can enhance guest satisfaction, drive revenue growth, and cultivate customer loyalty. However, the industry must navigate the ethical considerations surrounding data privacy to ensure that the benefits of personalization are realized without compromising guest trust and privacy. The insights gleaned from this study offer valuable guidance for hoteliers, service providers, and policymakers seeking to harness the capabilities of AI and data analytics to curate exceptional guest experiences in the ever-evolving hospitality landscape.

To fully exploit the capabilities of AI and data analytics for personalized guest experiences, hotels must invest in robust infrastructure and data management systems. This entails upgrading their technological framework to facilitate data collection, storage, and analysis. It's crucial to have the necessary hardware and software in place to manage the increasing volume of guest data generated by various touchpoints. Additionally, hotels should consider recruiting data scientists and AI experts to effectively manage and extract insights from the data.

Efforts should be made to gather comprehensive and relevant guest data across all touchpoints, including booking platforms, check-ins, in-room interactions, and post-stay feedback. The greater the amount of data collected, the more precise and personalized the recommendations and services can become. This data may encompass guest preferences, past behaviour, feedback, and even social media activity.

Hotels should adopt AI-driven personalization algorithms to analyse guest data and offer tailored recommendations and experiences. These algorithms can suggest room amenities, dining options, spa treatments, and local activities based on individual preferences and behaviour patterns. Continuous learning and adaptation of these algorithms ensure that personalization remains relevant and effective.

Hotel staff should receive training to effectively utilize AI tools for enhancing guest personalization. For instance, front desk agents can access AI-powered guest profiles and preferences to facilitate a more personalized check-in experience. Housekeeping staff can receive alerts and recommendations for room preparation based on guest preferences, while restaurant staff can leverage AI to suggest menu items tailored to individual tastes. Proper training and seamless integration of AI into daily operations are critical for delivering seamless personalized services.

Lastly, hotels should foster a culture of continuous monitoring and adaptation. This involves regularly evaluating the effectiveness of AI and data analytics in enhancing guest personalization by measuring guest

satisfaction scores, repeat bookings, and revenue growth. In conclusion, the recommendations outlined provide a roadmap for hotels and the hospitality industry to capitalize on the benefits of AI and data analytics in enhancing guest personalization. By investing in infrastructure, collecting comprehensive guest data, implementing AI-driven algorithms, empowering staff, and maintaining a commitment to continuous improvement, hotels can deliver exceptional personalized experiences that foster guest satisfaction, loyalty, and long-term business success.

Acknowledgment
Not applicable.

Declaration
Ethics approval and consent to participate
Not applicable.

Consent for publication
Not applicable.

Availability of data and materials
The data supporting the findings of this study are available upon request.

Competing interests
The authors have no conflict of interest to declare.

Declaration of generative AI and AI-assisted technologies
During the preparation of this work the author used Grammarly in order to correct spelling mistakes and help me make better sentences. After using this tool/service, the author reviewed and edited the content as needed and takes full responsibility for the content of the published article.

Author contributions
KH and SAB conceptualization, methodology, validation, formal analysis, writing review and editing, supervision project administration. DIR, PA, ZH and NA investigation, data curation, writing original draft preparation. All author shave read and agreed to the published version of the manuscript.

Funding
Not applicable.

Author detail
[1]Research Scholar, Institute of Tourism and Hospitality Management (UITHM)- Chandigarh University, Punjab, India. [2]Baba Ghulam Shah Badshah University, Rajouri, India. [3]Institute for Innovative Learning, Mahidol University Thailand, Nakhon Pathom, Thailand.

References
Agyekum, K., & Kwakye, I. O. (2019). *The Influence of Personalization on Customer Relationship Management in the Hotel Industry*: Evidence from Ghana. International Journal of Hospitality Management, 77, 1-10. https://doi.org/10.1016/j.ijhm.2018.05.019
Berman, D. (2023). *Revolutionizing the hospitality industry with artificial intelligence*. Forbes. https://www.forbes.com/sites/forbesbusinesscouncil/2023/09/11/revolutionizing-the-hospitality-industry-with-artificial-intelligence/
Bisoi, S., Roy, M., & Samal, A. (2020). *Impact of artificial intelligence in the hospitality industry*. International Journal of Advanced Science and Technology, 29(5), 4265-4276.
Blattberg, R. C., Getz, G., & Thomas, J. S. (2001). *Customer Equity: Building and Managing Relationships as Valuable Assets*. Harvard Business Review, 79(7), 114-121.
Buhalis, D., Harwood, T., Bogicevic, V., Viglia, G., Beldona, S., & Hofacker, C. (2019). *Technological disruptions in services:*

Kizildag, M., Ozturk, A.B., Demirer, I. and Cobanoglu, C. (2019). *The impact of big data analytics on the hospitality industry: A review of literature and future research directions*. Journal of Hospitality and Tourism Technology, 10(4), 760-776. https://doi.org/10.1108/JHTT-03-2019-0037

McKinsey & Company. (2020). "The State of AI in Hospitality." Retrieved from DOI *Link Nigerian Hospitality Report. (2018). Key Insights and Trends in the Nigerian Hospitality Industry.* Retrieved from https://doi.org/10.13140/RG.2.2.22700.31363

Ruel, H. and Njoku, E. (2021). AI *redefining the hospitality industry*. Journal of Tourism Futures, 7(1), 53-66. https://doi.org/10.1108/JTF-03-2020-0032

Sun, Y. (2019). "*Guest Personalization in the Hospitality Industry*: A Systematic Literature Review." Journal of Hospitality Marketing & Management, 28(6), 641-667. DOI: 10.1080/19368623.2019.1585720

Tanaka, H., & Tazaki, M. (2018). Omotenashi and Guest Satisfaction*: A Study of Japanese Hotels.* Journal of Hospitality and Tourism Management, 35, 55-58.

Tussyadiah, I. P., & Park, S. (2018). "*When Guests Trust Hosts for Their Word: Host Profile, Trust in Host, and Intentions to Use P2P Accommodations*." Tourism Management, 67, 261-272. https://doi.org/10.1016/j.tourman.2018.01.010

Goel, P., Kaushik, N., Sivathanu, B., Pillai, R., & Vikas, J. (2022). *Consumers' Adoption of Artificial Intelligence and Robotics in Hospitality and Tourism Sector*: Literature Review and Future Research Agenda. Tourism Review, 1-16.

Hecklau, F., Orth, R., Kidschun, F., & Kohl, H. (2017). Human Resources Management: Meta-Study-Analysis of Future Competencies in Industry 4.0. *Proceedings of the International Conference on Intellectual Capital, Knowledge Management & Organizational Learning*, 163-174.

Holzinger, A., Malle, B., Saranti, A., & Pfeifer, B. (2021). Towards Multi-Modal Causability with Graph Neural Networks Enabling Information Fusion for Explainable AI.*Information Fusion, 71*, 28-37.

Ivanov, S., & Webster, C. (2019). Conceptual Framework of the Use of Robots, Artificial Intelligence and Service Automation in Travel, Tourism, and Hospitality Companies. *Robots, Artificial Intelligence, and Service Automation in Travel, Tourism, and Hospitality, Emerald Publishing Limited, Bingley*, 7-37.

Jain, P., & Aggarwal, K. (2020). Transforming Marketing with Artificial Intelligence. *International Research Journal of Engineering and Technology, 7*(7), 3964-3976.

Jarota, M. (2021). Artificial intelligence and robotisation in the EU-should we change OHS law? *Journal of Occupational Medicine and Toxicology*, *16*(1), 1-8.

Adam, M., Wessel, M. & Benlian, A. AI-based chatbots in customer service and their effects on user compliance. Electron Markets, 31, 427–445. https://doi.org/10.1007/s12525-020-00414-7

Al-Hyari, H.S., Al-Smadi, H.M., & Weshah, S.R. (2023). The impact of artificial intelligence (ai) on Guest satisfaction in hotel management: an empirical study of luxury hotels. GeoJournal of Tourism and Geosites, 48(2spl), 810–819. https://doi.org/10.30892/gtg.482spl15-1081

Alkhayyat, A. M. & Ahmed, A. M. (2022). *The impact of Artificial Intelligence in Digital Marketing* (Master thesis). Malardalens Universitet, Sweden.

Alvarez, E., Ferrer, J. C., Muñoz, J. C. & Henao, C. A. (2020). *Efficient shift scheduling with multiple breaks for full-time employees*: A retail industry case. Computers & Industrial Engineering, 150: 106884.

Amar, J., Rahimi, S., von Bismarck, N. & Wunnava, A. (2022). *Smart scheduling*: How to solve workforce-planning challenges with AI. Retrieved from https://www.mckinsey.com/capabilities/

Anzen, E. & Ekberg, L. (2020). *Understanding how automatized personalization with AI can drive value in B2B marketing (Master thesis).* Degree Project in Industrial Engineering and Management, Sweden.

Barak, S. (2023). Artificial intelligence in hospitality: how AI is changing the industry. Retrieved from https://ensoconnect.com/blog/artificial-intelligence-in-hospitality-how-ai-is-changing-the-industry/

Barron, K., Kung, E. & Proserpio, D. (2020). The Effect of Home-Sharing on House Prices and Rents: Evidence from Airbnb. Marketing Science, 40(1), 23-47. https://doi.org/10.1287/mksc.2020.1227

Bethesda, M. D. (2017 September 18). Marriott International's AI-powered Chatbots on Facebook Messenger and Slack, and Aloft's ChatBotlr, Simplify Travel for Guests Throughout Their Journey. Retrieved from https://news.marriott.com/news/

Bhuian, D. (2021). The Impact of Service Quality on Customer Satisfaction in Hotel Business Development (Master thesis). Karlstad University, Sweden.

Bigdata (2023 February 9). Artificial Intelligence in Tourism Industry: Revolutionising the Way We Travel. Retrieved from https://bigdataanalyticsnews.com/artificial-intelligence-in-tourism-industry/

Biliavska, V., Castanho, R. A. & Vulevic, A. (2022). Analysis of the impact of artificial intelligence in enhancing the human resource practices. Journal of Intelligent Management Decision, 1(2), 128-136. https://doi.org/10.56578/jimd010206.

Bulchand-Gidumal, J. (2022). Impact of Artificial Intelligence in Travel, Tourism, and Hospitality. In: Xiang, Z., Fuchs, M., Gretzel, U., Höpken, W. (eds) Handbook of e-Tourism. Springer, Cham. https://doi.org/10.1007/978-3-030-48652-5_110

Bulchand-Gidumala, J., Secin, E. W., O'Connor, P. & Buhalis, D. (2023). Artificial intelligence's impact on hospitality and tourismmarketing: exploring key themes and addressing challenges. Current Issues in Tourism, 1-2. https://doi.org/10.1080/13683500.2023.2229480

Chandra, S., Verma, S., Lim, W. M., Kumar, S., & Donthu, N. (2022). Personalization in personalized marketing: Trends and ways forward. Psychology & Marketing, 39, 1529-1562. https://doi.org/10.1002/mar.21670

Chang, Y. W., Hsu, P. Y. & Lan, Y. C. (2019). Cooperation and competition between online travel agencies and hotels. Tourism Management, 71:187-196. DOI:10.1016/j.tourman.2018.08.026

Chui, M., Hazan, E., Roberts, R., Singla, A., Smaje, K., Sukharevsky, A., Yee, L. & Zemm, R. (2023 June 14). The economic potential of generative AI: The next productivity frontier. Retrieved from https://www.mckinsey.com/capabilities/mckinsey-digital/our-insights/

Clark, S. (2023 June 27a). How Is AI Changing Digital Transformation? Retrieved from https://www.cmswire.com/digital-experience/how-is-ai-changing-digital-transformation/

Clark, H. (2023 August 6). 32 Best AI Chatbots For Customer Service in 2023. Retrieved from https://thecxlead.com/tools/best-ai-chatbot-for-customer-service/

Das, R., Chadha, H. & Banerjee, S. (2021). Multi-layered market forecast framework for hotel revenue management by continuously learning market dynamics. Journal of Revenue Pricing Management, 20(3):351–67. doi: 10.1057/s41272-021-00318-x.

Das, A. C., Phalin, G., Patidar, I. L., Gomes, M., Sawhney, R. & Thomas, R. (2023 March 27). The next frontier of customer engagement: AI-enabled customer service. Retrieved from https://www.mckinsey.com/capabilities/operations/our-insights/

Edelman, D. C. & Abraham, M. (2022). Customer Experience in the Age of AI. Harvard Business Review. Retrieved from https://hbr.org/2022/03/customer-experience-in-the-age-of-ai

Fjallman, A. (2023 January 20). Intelligent price automation for hotels: Leveraging AI while leaving room for a human touch. Retrieved from https://atomize.com/blog/intelligent-price-automation-for-hotels-leveraging-ai-while-leaving-room-for-a-human-touch/

Fontanella, C. (2022 March 4). 11 Chatbots That Will Revolutionize Your Customer Service. Retrieved from https://blog.hubspot.com/service/customer-service-bots

Garcia-Madurga M-A, Grillo-Mendez A-J. (2023). Artificial Intelligence in the Tourism Industry: An Overview of Reviews. Administrative Sciences, 13(8):172. https://doi.org/10.3390/admsci13080172

Gill-McLure, W. & Firth, J. (2018). Managing People at Work: The Travel Industry. In book: Operations Management in the Travel Industry, Publisher: CABI: Oxford.

Guerrero, M. J. (2022). Strategic advantages of managing pricing data in real-time. Retrieved from https://www.minderest.com/blog/real-time-pricing-management-benefits

Haleem, A., Javaid, M., Qadri, M. A., Singh, R. P. & Suman, R. (2022). Artificial intelligence (AI) applications for marketing: A literature-based study. International Journal of Intelligent Networks, 3: 119-132. https://doi.org/10.1016/j.ijin.2022.08.005

Kumar, S., Gupta, S. K., Vaishnav, A. K. & Kumar, P. (2022). Evaluation of E-Service Satisfaction Among Online Travel Agency (OTA) Users. In book: Disruptive Innovation and Emerging Technologies for Business Excellence in the Service Sector (pp.69-80). https://doi.org/10.4018/978-1-7998-9194-9.ch004

Limna, P. (2022). Artificial Intelligence (AI) in the hospitality industry: A review article. International Journal of Computing Sciences Research. Advance online publication. doi: 10.25147/ijcsr.2017.001.1.103

Mansukhani, M. (2023 March 29). Balancing Efficiency with Empathy: The Ethics of AI in CX. Retrieved from https://www.linkedin.com/pulse/balancing-efficiency-empathy-ethics-ai-cx-manoj-mansukhani/

Monaghan, J. (2023 August 5). AI Ethics in Customer Service: Striking the Right Balance. Retrieved from https://www.linkedin.com/pulse/ai-ethics-customer-service-striking-right-balance-joshua-monaghan/

Nair, G. K. (2019). Dynamics of pricing and non-pricing strategies, revenue management performance and competitive advantage in hotel industry. International Journal of Hospitality Management, 82: 287-297. https://doi.org/10.1016/j.ijhm.2018.10.007

O'Hara, L. (2021). Applying Artificial Intelligence in the Hotel Industry: Exploring Perspectives of Employees. Human Nutrition and Hospitality Management (Undergraduate Honors Theses). Retrieved from https://scholarworks.uark.edu/hnhiuht/19

Owen, R. (2021 October 4). Artificial Intelligence at Airbnb – Two Unique Use-Cases. Retrieved from https://emerj.com/ai-sector-overviews/artificial-intelligence-at-airbnb/

Publisher Notes