


Chapter 2


The Contribution of AI Applications to Customer Value Creation in Hospitality

Ridouan Nejjari

 <https://orcid.org/0000-0002-5127-0364>

Sidi Mohamed Ben Abdellah University, Morocco

Youssef El Fakir

 <https://orcid.org/0009-0002-5556-8130>

Sidi Mohamed Ben Abdellah University, Morocco

ABSTRACT

Artificial intelligence (AI) is considered as key driver of innovation in many sectors, including hospitality. The gaps in the literature highlight the need for a thorough and integrated study of the impact of AI in hospitality, particularly in relation to the customer experience. This research fills this gap by shedding light on how AI can transform value creation practices through interactions between hotels and their guests by providing an analysis of the main current applications of AI applied in the hotel sector. A systematic literature review was carried out to explore the role of AI in the hospitality sector, highlighting its impact on customer experience and value creation. The PRISMA method was adopted and data were collected from Scopus. A final list of 54 Book chapters of IGI GLOBAL and journal articles were included to broaden perspectives. Thematic analysis was used in this systematic review to effectively structure the results and properly address the research objectives.

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1. INTRODUCTION

1.1. Theoretical foundation and the relevance of the subject

Artificial intelligence (AI) is now considered as key driver of innovation in many sectors such healthcare (Khizzou et al., 2024a, 2024b, 2024b, 2025) and also in hospitality. By 2027, the global market of IA in hotel sector is expected to overcome 1.2 Billion dollars (Brand et al., 2023). Hotel businesses need to adopt new technologies to gain prominence and rise above other competitors, allowing better understanding customer preferences, predicting their needs, automating certain tasks and offering a tailored experience. In this sector, digital transformation is no longer an option, but a necessity to maintain sustainable competitiveness (Alla et al., 2025; Khizzou et al., 2024a; Saputra et al., 2024). AI can improve customer satisfaction (Sankar & David, 2023), strengthen loyalty and support hotel performance (Prentice et al., 2020). Nonetheless, certain ethical and technological challenges, such as technological cost, the management of personal data, and the customer privacy still need to be overcome to fully maximise the benefits of this technology.

Most studies of literature review are carried out in both hospitality and tourism settings (Aarabe et al., 2024b; Aarabe, Bouizgar, et al., 2025b, 2025a; Aarabe, Khizzou, et al., 2025; Nouhaila et al., 2024) and in marketing (Aarabe et al., 2024a), the gaps in the literature highlight the need for a thorough and integrated study of the impact of AI in hospitality, particularly in relation to the customer experience. This research will not only fill this gap, but also offer a more nuanced analysis of AI applications in the hospitality sector.

1.2. Research problem

In the hotel sector, the integration of AI is significantly transforming the customer experience, enabling personalised services, process automation and improved operational efficiency. Nonetheless, even though AI has great benefits in improving customer satisfaction and loyalty (Sankar & David, 2023), a number of challenges relating to the use of these technologies remain, including the management of personal data, confidentiality and ethical issues (Bhaskar & Sharma, 2022).

This research aims firstly to explore the specific applications of AI in the hotel industry, secondly assess the impact of these technologies on the customer experience and value creation, operational efficiency and historical heritage, and thirdly to identify the challenges faced by hotel businesses.

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