


Chapter 1

AI in the Hospitality and Tourism Industries

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ABSTRACT

Artificial intelligence (AI) technologies are powering transformation throughout the hospitality and tourism industry. This chapter discusses its history, the application, and impact of AI on the hospitality and tourism sectors, as well as the challenges and prospects. During the last two decades, a variety of information and communication technologies (ICTs) have been deployed to add value, allow cost-effective provision of services, and enhance the pre-, during-, and post-travel experiences of tourists. The incorporation of ICT runs into all the steps from preparing to booking, delivering, and after return as the process of travel. ICTs and AI are related, especially after the onset of the so-called second information revolution, which brought about the possibility of making greater use of artificial and online/physical aspects in ICTs due to the progress in the field of AI. AI is revolutionizing the industry and

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customer service, improving such things as guests' experiences with personalized recommendations and faster interactions.

INTRODUCTION

The hospitality industry is famous for creating exceptional customer experiences at numerous touchpoints such as hotels, restaurants, travel services, etc. The industry is also recently going through a digital transformation shift due to the advancement in technology, with the rise of AI being a major source of that innovation. Two instances of intelligent technologies that have received more recognition in the hospitality and tourism industries are robotics and artificial intelligence (AI). The services sector of the economy is service-oriented, and organizations employing promotional activities, customer service, and communication to Smart tourism and hospitality have given businesses an opportunity to improve their efficiency and operations, which has led to better customer service delivery procedures and higher-quality products. The automation of services may have an impact on customer preferences (Jabeen et al., 2022). AI is revolutionizing the way hospitality businesses operate, offering solutions that enhance efficiency, personalize guest experiences, and optimize overall performance. Primarily in the last three years, a wealth of research on the uses of AI in T&H has come into existence due to the growing significance of AI among practitioners as well as scholars. Therefore, it's fundamental to revisit theme evolution, suggest directions for future research, and evaluate already available appropriate studies to comprehend the intellectual framework and the flow of knowledge regarding artificial intelligence (AI) (Knani et al., 2022).

Artificial Intelligence (AI) is the umbrella term for a broad range of technologies that allow robots to replicate human intelligence and carry out tasks like acquiring knowledge, solving issues, and making decisions that normally need cognitive ability from humans. Within the framework of the hospitality and tourism sector, AI is being leveraged to automate processes, analyze data, and interact with customers in ways that were previously not possible. This chapter explores the various applications of AI in the hospitality sector, its impact on businesses and customers, and the challenges and opportunities that come with its adoption. Since AI can greatly influence both the primary goal of Tourism & Hospitality study as well as the industry shortly, a thorough and rigorous analysis of AI research in T&H is necessary to understand the domain's origins, core topics, and evolution. Even so, despite its need, there is still a lack of comprehensive discussions on this phenomenon, which restricts our comprehension of the field's source information, technological advances in AI research, and possible future paths (Saydam et al., 2022). In addition to the above, revenue management systems, incorporating AI, disrupt pricing strategies concerning

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