


Chapter 15

Technological Advancements in the Hospitality Sector: The Role of Intelligent Chatbots

Bindu Aggarwal

 <https://orcid.org/0000-0003-1793-382X>

Chandigarh University, India

Pawan Kumar

 <https://orcid.org/0000-0001-7501-3066>

Lovely Professional University, India

Ranjeet Verma

Chandigarh University, India

ABSTRACT

In today's digital era, the emergence of artificial intelligence (AI) is crucial, particularly in the significance of chatbots. From the start, AI has opened numerous possibilities and obstacles across various sectors including the hospitality sector. Similarly, AI needs to be considered in the process of translating new innovations into the worldwide economy. Addressing customer inquiries is a critical aspect of the hospitality sector with many businesses embracing this technology like the use of chatbots for round-the-clock customer interaction. This chapter explores the effective incorporation of chatbots into the hospitality sector and their potential to revolutionize its future. It also suggests a framework for utilizing smart chatbots to enhance the hospitality sector's operational efficiency. The chapter wraps up by highlighting main findings, providing suggestions and implications for policy and practice, and emphasizing the need for a harmonious relationship between

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technological advancements such as chatbots and the hospitality sector to deliver improved customer experiences.

INTRODUCTION

Many technologies created by AI have the potential to improve the economy by increasing people's living standards (Allam, 2016; Koo et al., 2021; Limna et al., 2021). Today's hospitality industry faces a competitive environment filled with new technologies, customer expectations for better services are an important source of innovation, and prices continue to rise. To maintain a competitive edge and improve business performance, many organizations are using AI-based technologies such as point-of-sale (POS), Facebook advertising, and LINE advertising (Dash et al., 2019; Limna et al., 2021). With AI and automation technology there are many opportunities for tourism and hospitality companies to improve their daily operations and provide high-quality services to customers (Drexler & Lapre, 2019; Kumar et al., 2021). Despite the widespread use of technology in hospitality and general hospitality, it is still difficult to achieve the right balance between digital and human activities. The use of artificial intelligence, robotics and service automation is increasingly important to gain a competitive advantage in terms of service quality, but providing a better customer experience remains controversial (Naumov, 2019). Therefore, it is very important to discuss the adoption of artificial intelligence (AI) in the hotel industry.

Everyone agrees that companies should work with their customers. For the tourism industry this is even more important. Technology is a useful tool for this purpose. The telephone and e-mail are clear examples of the usefulness of technology. In the past, most of these interactions were based on human skills, but self-service technologies (SST) offer opportunities for interaction i between businesses and their customers. For example, in the tourism sector, touch screens are a popular way of interacting among visitors in hotels and airports (Melián-González & Bulchand-Gidumal, 2015).

Recently, companies have started to adopt more chatbots or SSTs. According to Shawar & Atwell (2007), a chatbot is "...a computer program that interacts with users using natural language". Other names for this technology are virtual agents and chatterbots. Today, chat bots are common in mobile applications and text messaging systems and are published on company websites. The new format is a physical object in the form of a simple speaker based on cloud technologies such as Alexa and Google Home. A quick search of reviews submitted by customers to TripAdvisor shows that guests of hotels, restaurants, transportation companies and resorts are using it. Some of these uses are voluntary (i.e., the user has chosen to

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