

Chapter 17


Understanding the Impact of Artificial Intelligence and Robotics in the Tourism and Hospitality Industry Through Customer Experience: A Systematic Literature Review

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ABSTRACT

In the current scenario, the role of artificial intelligence is becoming crucial as it can perform challenging tasks and actions with less time and more accuracy. There is a need for more extensive research in the domain of artificial intelligence

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in the hospitality and tourism industry. Hence, this study investigates the impact of artificial intelligence and robotics on the employment and skill requirements of the hospitality and tourism workforce. This study also uses AI and robotics to enhance the personalized customer experience. Researchers employed a systematic literature review and applied the PRISMA technique to present an extensive and in-depth analysis of existing research on adopting AI and robotics in the tourism and hospitality industry. This research will also help managers focus on digital marketing and promote artificial intelligence's role. Further research should investigate the 'digitalization' of guest experience and quality of services in hospitality and tourism.

INTRODUCTION

The tourism and Hospitality industry is one of the most high-hit industries due to the declaration of lockdowns amid the COVID-19 pandemic (Shretta, 2020; Lenzen et al., 2020). In 2020, there were restrictions on travelling to global destinations, as the United Nations World Tourism Organization reported. Therefore, due to this pandemic, almost 4 per cent of job losses were reported in Australia (Pham et al., 2021), around 3 million in Japan (Kitamura et al., 2020), around 6.4% in Greece (Mariolis et al., 2020) and 24% decline of employment in Tanzania tourism (Henseler et al., 2022). Moreover, the industry has seen unprecedented losses, 8 times more than the financial crisis in 2008 (UNWTO, 2020b). Thousands of hotel and travel concerns have to assert bankruptcy (Shin & Kang, 2020). New norms of keeping social distancing, avoiding personal touch and travel bans have brought the industry to a halting stage (Sigala, 2020). According to the World Health Organization, the disease has speedily spread globally, with 521,920,560 confirmed cases and 6,274,323 deaths as of May 2022, which creates fear of illness amongst tourists (Jamal & Budke, 2020). The only way to pre-cure disease includes wearing a mask, maintaining hygiene, evading contact with others and preserving social distance (Tognotti, 2021). This has changed tourists' perceptions (Gursoy & Chi, 2020). They started changing their lifestyles to stay healthy (Majeed & Ramkissoon, 2020). In 2023, according to the health department of India, coronavirus is once again wreaking havoc in many countries, So the industry must find an effectual solution to recuperate from the pandemic (Gaur et al., 2021) and introduce significant transformation in their operations (Gössling et al., 2020).

Artificial intelligence (AI) and robotics are the hottest buzzwords in tech. It is a computer-based technology that can execute work and actions that necessitate the person's intellect (Russell & Norvig, 2016). AI was formerly developed in 1956 by John McCarthy at the Dartmouth Summer Research Project. Throughout the years, numerous searches have been done like face recognition (Haenlein & Kaplan, 2019),

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