

## Chapter 7

# Case Studies and ChatGPT: Enhancing Tourism Education

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### ABSTRACT

*In today's world, the presence of artificial intelligence applications is observable in various aspects of life. One of the artificial intelligence-based applications, ChatGPT, has been employed in many fields. Scientific research has delved into the potential applications of ChatGPT in different domains. In the realm of tourism education, research studies focusing on ChatGPT are increasingly emerging. This study investigates the impact of case studies created through ChatGPT on tourism students, in addition to the theoretical knowledge provided in tourism education. Interviews were conducted with 32 tourism students, and the detailed results are presented.*

### INTRODUCTION

With the advancements in technology, it is observed that people's tools for acquiring information have transformed, making knowledge more easily accessible wherever desired (Çelik, 2023). Recently, the school term has started to be defined as a place where students and teachers come together physically or virtually to perform learning and teaching activities, based on recent studies and events (Timms, 2016). Looking at this definition, it is possible to say that artificial intelligence technologies are now integrated into every aspect of our lives, including education (İşler & Kılıç, 2021). The concept of artificial intelligence was first coined by McCarthy in 1956 (Russell & Norvig, 2010). Artificial intelligence is defined as information

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processing technologies initially developed by humans to perform tasks that are feasibly achievable by humans (Skilton & Hovsepian, 2017). In 1997, a historic achievement was accomplished when the computer program named “Deep Blue,” developed by IBM, defeated the reigning world chess champion, Garry Kasparov, in a chess match. This event, marking the victory of a computer over a human chess champion, became a symbolic representation of the competition between human intelligence and developed machines. It is widely recognized as a turning point in artificial intelligence (Campbell, 2002). According to Kurzweil’s (1990) definition, artificial intelligence is characterized not only by machines and systems developed to perform tasks using human intelligence but also by the art of developing such machines. Artificial intelligence technologies aim to enable machines developed through these technologies to solve complex problems more akin to human problem-solving (Sridhar, 2018).

OpenAI is a research company aiming to benefit humanity with artificial intelligence without pursuing profit (OpenAI, 2023). GPT-3, a language model, was developed by OpenAI on November 30, 2022 (Tong & Zhang, 2023). This artificial intelligence robot/program, known as ‘ChatGPT,’ gained recognition and usage as it engages in natural conversations with users (Erul & Işın, 2023). ChatGPT is a chatbot application developed based on OpenAI’s GPT technology. It can process a wide range of text-based requests, from basic questions and queries to more complex tasks, providing responses that go beyond mere information retrieval (Lund, 2022). Through a fine-tuning process that incorporates dialogue optimization, ChatGPT is endowed with the ability to respond to requests in a conversational style, similar to human interaction (Health, 2023). ChatGPT is utilized in various sectors, particularly benefiting tourists who utilize sub-sectors such as accommodation, transportation, services, and entertainment, all considered components of tourism. Tourists often resort to artificial intelligence applications to gain different insights and information about where hospitality spirit is more prevalent, where service quality is better, and which places are attractive, all in pursuit of creating unforgettable experiences (Erul & Işın, 2023; Goeldner & Ritchie, 2012). In recent times, advancements in deep machine learning have led to the emergence of platforms capable of generating text that mimics human writing, thinking similarly to humans. Several content writing platforms have AI capabilities, including Rytr, Jasper, ChatGPT, and CopyAI. Currently, the most impressive and captivating among these platforms is ChatGPT. The user-friendly interface of the ChatGPT application has contributed to its rapid growth in a short period (Gleason, 2022).

The groups that adapt most rapidly to technological developments and changes are generally school-aged youths, as they closely follow technology trends, and consequently, individuals in this group are frequent users of artificial intelligence applications. Given ChatGPT’s ability to respond to various topics and assist, it is

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