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# From AI to GenAI: Opportunities and implications for tourism and hospitality

## Introduction

Over the last few decades, Artificial Intelligence (AI) has led to significant developments in technology and operational efficiencies in numerous industries including healthcare, finance, education and tourism and hospitality (T&H). Defined as the ability of a digital computer or computer-controlled robots to simulate human intelligence (IBM, n.d.a), AI leverages algorithms to perform tasks such as reasoning, generalising and learning from past experiences (Copeland, 2024). The latest breakthrough in AI is generative Artificial Intelligence (GenAI) which elevates the field by creating entirely new pieces of text, images, and videos, among other transformative technologies. The main difference between traditional AI and GenAI lies in their capabilities, with the former analysing data based on predetermined rules and the latter creating new content or data (Marr, 2023). Outputs produced by GenAI are indistinguishable from human-created content so its application and implementation will carry significant implications for all industries.

Tourism and hospitality have been at the forefront of innovation to enhance visitor experiences and improve operational efficiencies. In recent years, AI has created opportunities for these industries to further develop highly personalised customer services, generate sustainable growth and increase revenue (Infosys, 2018). The use of GenAI could potentially offer greater prospects to create highly personalised experiences, optimise pricing strategies and generate tailored marketing content (Almasi *et al.*, 2023). This chapter will provide an overview of the current uses of AI in tourism and hospitality, drawing from examples of corporations and businesses that have implemented a diverse range of AI types. The ethical and legal considerations of AI are discussed to provide a comprehensive under-