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Exploring the Role of Virtual Reality in Promoting Sustainable Tourism Practices Amidst COVID-19 Pandemic

Harnessing the Potential of Artificial Intelligence to Promote Environmental

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Abstract

Virtual reality (VR) technology is revolutionising the tourism industry by enhancing customer relationships, marketing tourist destinations, and improving overall travel experiences. Studies show that VR applications create positive images of destinations and effectively communicate these to potential customers. Additionally, VR and augmented reality (AR) technologies are valuable for planning, marketing, education, and preservation in tourism, offering benefits such as cost reduction, tourist attraction through gamification, and brand loyalty building. However, the high cost of these technologies can limit their accessibility and marketing efforts. Tourism 4.0 aims to

BOOK CHAPTER

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Virtual reality (VR) technology is revolutionising the tourism industry by enhancing customer relationships, marketing tourist destinations, and improving overall travel experiences. Studies show that VR applications create positive images of destinations and effectively communicate these to potential customers. Additionally, VR and augmented reality (AR) technologies are valuable for planning, marketing, education, and preservation in tourism, offering benefits such as cost reduction, tourist attraction through gamification, and brand loyalty building. However, the high cost of these technologies can limit their accessibility and marketing efforts. Tourism 4.0 aims to leverage VR, AR, Internet of Things, and artificial intelligence to enhance tourism experiences while minimising negative impacts through data-driven strategic planning aligned with sustainable development goals. During the COVID-19 pandemic, VR has emerged as a viable tool for sustainable tourism, serving as a substitute for physical travel when restrictions are in place and allowing tourists to enjoy virtual holiday experiences. This increased use of VR, driven by its ease of use, usefulness, and authenticity, helps reduce virus transmission risks, alleviate pressure on the tourism sector, and promote sustainability. The United Nations highlights the importance of rebuilding the tourism sector in a safe, equitable, and climate-friendly manner post-pandemic. This research explores the impact of VR on sustainable tourism during the COVID-19 pandemic.

