

9 Technological Advancements and Immersive Experiences

After reading this chapter, you should be able to:

- Explain how contactless technologies (e.g. mobile check-ins, biometrics, RFID) have been integrated into the tourism sector and evaluate their role in enhancing resilience during crises.
- Critically assess the benefits and limitations of Virtual Reality (VR) and Augmented Reality (AR) in supporting tourism accessibility, visitor engagement, and destination visibility.
- Analyse how tech-enabled personalisation, supported by AI and recommendation systems, can improve visitor experiences and contribute to resilient tourism planning.
- Discuss the ethical, legal, and social challenges linked to digital transformation in tourism, including privacy, bias, and the digital divide.
- Apply theoretical and practical insights to propose strategies for implementing technology in tourism that balance innovation with inclusivity, sustainability, and human connection.

Introduction

This chapter will examine how emerging technologies are reshaping the tourism sector and contributing to resilience in times of disruption. It will begin by exploring the integration of contactless technologies, such as mobile check-ins, digital payments, biometrics, and RFID, which have accelerated in response to health crises such as COVID-19. Such innovations will be shown to reduce physical contact while improving efficiency and sustainability, though the discussion will also highlight ongoing challenges around accessibility, equity, and data protection.