

# Chapter 5

## Impact of Technology in Sustainable Tourism Development: Virtual Reality

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### ABSTRACT

*Tourism has been one of the engines powering the thriving economies, leveraging the quality of lives and transforming the people's sociocultural status worldwide. There is no doubt that innovative technologies are critical and significantly efficient for the economies during a hard time and in blossoming times. Moreover, it is also vital to understand and present some essential issues that harm tourism development. Thus, this chapter strives to offer innovative technology-oriented alternative strategies and practical implications to benefit all the stakeholders at the destination and the consumers by focusing on the long-term benefits. This chapter also aims to understand how technology can take a role to stimulate visitors' motivation and behaviour towards a touristic product or a destination.*

### INTRODUCTION

VR technology has set an irreversible mark between the classical and modern-day tourism product marketing approach. Travel agencies and customers use to book their destination thru two-dimensional images, which mostly resulted in disappointment

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due to the unrealistic based information that manipulated the customers' intention towards a tourism service and product. Unlike the classical method, VR technology provides three-dimensional vivid and more realistic digital media that capture and engage the users by creating a sense of presence' feeling. Providing a lifelike impression with computer-generated 3D images are the core dimension of the VR environment that evolved the marketing technology (Choi, Hickerson, & Lee, 2018). Hence, VR transforms the way how we travel, the way how we promote our products, the way how we operate our businesses, and how we visit attractions (Guttentag, 2010; I. P. Tussyadiah, Wang, Jung, & tom Dieck, 2018; Yuce, Arasli, Oztüren, & Daskin, 2020).

VR is a digitization environment that depicts a destination or a site where users are taken away without leaving their seat. VR can be defined as a gadget that allows the users to feel and react to the stimulated or depicted (virtual) environment with all the senses as if they are in the actual place (Hudson, Matson-Barkat, Pallamin, & Jegou, 2019; Laurell, Sandström, Berthold, & Larsson, 2019). VR has been used in many areas, including education (Bower, DeWitt, & Lai, 2020), medical (L. Li et al., 2017), marketing (Pestek & Sarvan, 2020), and tourism (Choi et al., 2018). With the advent of using VR in the tourism industry, VR offers unlimited opportunities for consumers and suppliers due to changes in the way the consumer's shop and the way suppliers market their products (Rather, 2020). For example, from the consumers' perspective, VR is a decision-making technology that allows potential consumers to try the product or service before buying it. From the suppliers' aspect, VR poses an excellent opportunity to confront many challenges during economic downturns, visiting susceptible sites or coping with the health-related crises like the CORONA-19 epidemic (Rather, 2020). This epidemic caused fundamental drops in visitation during the first year of the pandemic in 2020 (S. Li, Tian, Lundberg, Gkritzali, & Sundström, 2020). Using such a useful technology also presents alternative strategies for those who cannot travel due to age, financial, and health issues (Otoo, Kim, & Choi, 2020).

Scholars have concentrated on investigating the impact of VR technology on businesses, organizations, and customers to understand whether VR is beneficial for all involved in the tourism industry (Errichiello, Micera, Atzeni, & Del Chiappa, 2019; I. P. Tussyadiah et al., 2018). Even though Virtual Reality (VR) is not a new buzzword like 'Humanoid Robots' (Murphy, Gretzel, & Pesonen, 2019; I. Tussyadiah, 2020), yet it presents several benefits for the travel industry. As VR technology gets familiar within our world, most major industries have placed their interest in cutting the marketing costs and maximizing their benefits by offering alternative opportunities to the consumers. Tourism organizations, travel companies, and destinations have implemented VR technology into their system to increase service quality, enhance efficiency, and improve customer satisfaction while reducing the overall business

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