


# Chapter 5

## Digital Transformation in Destination Marketing: Leveraging Technology for West Bengal's Tourism Growth

**Birendra Kishore Roy**

 <https://orcid.org/0000-0001-8202-5137>

*Manipal University Jaipur, India*

### **ABSTRACT**

*This chapter delves into the ways technology can boost West Bengal's tourism sector. It focuses on how augmented reality (AR), big data, and AI might draw tourists from all around the world. By giving stakeholders these answers, we can responsibly address problems like data divisions, data overload, and data privacy. This chapter discusses the use of artificial intelligence in predicting visitor behaviour, optimising marketing efforts, and enabling inclusive growth, all while emphasising the need for cultural authenticity in digital marketing. Discussing the community's role in the digital transition could also benefit local stakeholders. The chapter concludes that digitalisation, while maintaining cultural legacy, is the greatest way to improve West Bengal's tourist economy.*

### **1. INTRODUCTION TO DIGITAL TRANSFORMATION IN DESTINATION MARKETING**

Wherever it has arrived (Gretzel et al., 2015), digital transformation has sparked innovation and expansion, and the tourism industry is no exception (Sigala, 2018) (Ray et al., 2024). Thanks to improvements in connectivity, easier access to information, and new ways for travelers to plan and enjoy their trips (Srinivasan et al.,

DOI: 10.4018/979-8-3693-9939-2.ch005

2024) (Roy, Prospective Developments and Advancements in the Hospitality Sector for Eco-Friendly Waste Handling, 2024), destination marketing—an essential part of the tourism industry—has profited greatly from technological developments (Buhalis & Sinarta, Real-time co-creation and nowness service: Lessons from tourism and hospitality, 2019) (Roy & Sharma, The Indian Medical Tourism Industry's Repercussions From AI and Robotics, 2024). In this chapter, the pros and cons of using digital platforms and technologies to promote tourism in West Bengal are discussed (Tussyadiah & Wang, Tourists' attitudes toward proactive smartphone systems, 2016) (UNWTO, 2019). The debate is organized into three main parts: an introduction to the effects of digital transformation on the tourism industry, the reasons for choosing to examine the tourism sector in West Bengal, and the goals and boundaries of this chapter (Chatzigeorgiou, 2020) (Font & McCabe, 2017) (Roy, Role of Artificial Intelligence and Technologies in Improving Ocean Health in Promoting Tourism, 2024) (Roy & Pagaldiviti, Advancements in arena technology: Enhancing customer experience and employee adaptation in the tourism and hospitality industry, 2023).

## **1.1. Overview of Digital Transformation's Impact on Tourism**

Because of its complexity and rapid evolution, the tourist industry must be nimble to keep up with shifting customer preferences and new technology developments (Buhalis & Sinarta, Real-time marketing for tourism: Applications, trends, and future directions, 2019). Destination marketing has been revolutionized using digital tools like VR, social media platforms, big data analytics, and artificial intelligence (AI). Marketers can now optimize resource allocation, create deeper connections with consumers, and personalize advertising to individual tastes thanks to these technologies (Huang et al., 2022). With the help of digital transformation, small and medium-sized businesses have been able to lower their entry barriers and compete on a global level in the tourism industry (Tussyadiah et al., 2017). With the rise of social media influencers, user-generated content on sites like TripAdvisor, and online travel agencies, more people than ever before have access to the information they need to plan their trips with confidence (Xiang et al., 2015). Destinations that want to attract tourists from all over the world and even just around the neighborhood now use digital marketing to give themselves an edge (Mariani et al., 2022). Destinations can display their unique features in appealing ways with the use of immersive technology like 360-degree videos and augmented reality (AR) experiences (Gretzel et al., 2015). Take virtual tours, for example. They let people virtually explore places, which is a great way to build confidence and interest (Neuhofer et al., Smart technologies for personalized experiences: A case study in the hospitality domain, 2015). In addition, destination marketers may make better use of real-time data analytics to track visitor sentiment, anticipate trends, and adjust campaigns

36 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: [www.igi-global.com/chapter/digital-transformation-in-destination-marketing/384029](http://www.igi-global.com/chapter/digital-transformation-in-destination-marketing/384029)

## Related Content

---

### Which Tourist Type Cares More About Environmental Sustainability?: A Quantitative Research

Ömer Ceyhun Apak (2024). *Cultural, Gastronomy, and Adventure Tourism Development* (pp. 323-340).

[www.irma-international.org/chapter/which-tourist-type-cares-more-about-environmental-sustainability/350325](http://www.irma-international.org/chapter/which-tourist-type-cares-more-about-environmental-sustainability/350325)

### Information Source Before Travelling and Choice of Traveling Mode

Bilal Ahmad Ali Al-khateeb and Asef Mohammad Ali Al-khateeb (2020). *International Journal of Tourism and Hospitality Management in the Digital Age* (pp. 29-41).

[www.irma-international.org/article/information-source-before-travelling-and-choice-of-traveling-mode/240703](http://www.irma-international.org/article/information-source-before-travelling-and-choice-of-traveling-mode/240703)

### The Effect of COVID-19 on the Tourism Sector in Turkey: An Evaluation with Financial Statement Analysis

Duygu engül Çelikay and Ferdi Çelikay (2021). *Handbook of Research on the Impacts and Implications of COVID-19 on the Tourism Industry* (pp. 69-91).

[www.irma-international.org/chapter/the-effect-of-covid-19-on-the-tourism-sector-in-turkey/284000](http://www.irma-international.org/chapter/the-effect-of-covid-19-on-the-tourism-sector-in-turkey/284000)

### Inertia Stages and Tourists' Behavior: Moderator Effects of Zone of Tolerance, Switching Barriers and External Opportunities

Zhiyong Li, Rui Cui, Li Li, Yingli Huan and Ruwan Ranasinghe (2018). *International Journal of Tourism and Hospitality Management in the Digital Age* (pp. 1-17).

[www.irma-international.org/article/inertia-stages-and-tourists-behavior/201103](http://www.irma-international.org/article/inertia-stages-and-tourists-behavior/201103)

### Leveraging Talent Management Practices in Hospitality Industry

Amrik Singhand Sukhmeet Kaur (2026). *Best Practices for Human Resources Management in Tourism and Hospitality* (pp. 177-202).

[www.irma-international.org/chapter/leveraging-talent-management-practices-in-hospitality-industry/389462](http://www.irma-international.org/chapter/leveraging-talent-management-practices-in-hospitality-industry/389462)