


Chapter 3


Transforming Smart City and Smart Sustainable Tourism Projecting Artificial Intelligence and IoT: Immersive Potential for Revolutionizing Urban Living and Enhancing Travel Experience

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ABSTRACT

The swift progress of technology has led to the emergence of the notions of smart cities and smart tourism, which are expected to significantly transform both urban living and travel experiences. Modern technology is used by smart cities to maximize urban services, increase sustainability, and improve the quality of life for their citizens. A subset of this more comprehensive strategy called “smart tourism” focuses on using these technologies to improve travelers' experiences and make their travels more frictionless, educational, and pleasurable. Cities that effectively

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utilize technology have the potential to improve not just the standard of living for its citizens but also offer tourists unique and sustainable experiences. These ideas will surely be crucial in determining how future cities and tourist destinations are shaped as they develop further. This chapter explores the mutually beneficial link between smart tourism and smart cities, emphasizing the advantages, difficulties, and potential future developments.

1. INTRODUCTION

Information and communication technology (ICT) and the Internet of Things (IoT) are used in smart cities to manage and enhance urban services and infrastructure (Dwivedi et al., 2024) (Gupta, et al., 2024). The essential elements consist of- IoT and Connectivity: Real-time monitoring and decision-making are made possible by sensors and linked devices that gather data on everything from air quality to traffic flow; Sustainable Development: Cities may lower their carbon footprint by focusing on smart grids, renewable energy sources, and effective waste management; Enhanced Mobility: The goal of smart transportation systems is to lessen traffic and pollution (Khan et al., 2024) (Wang, 2024). These solutions include driverless cars and effective public transportation; E-Government: Through the use of digital platforms, citizens and the government may communicate more effectively, leading to improved service delivery and transparency; Public Safety: Modern emergency response and monitoring technologies make cities safer and more secure. These initiatives aimed at combining smart city and smart tourism have the potential to completely transform urban travel and lifestyle (Alyasiri et al., 2024).

A smart city is a local government that uses information and communication technologies (ICT) to raise standards of living, provide employment, and encourage sustainable development via economic expansion (Mogaji et al., 2024). A smart city may learn a great deal about how resources are used by gathering data from sensors and other devices (Gursoy & Cai, 2024). The term “Internet of Things” (IoT) describes a system of physical objects that are linked to the internet and collect and exchange data in an effort to lessen traffic and pollution in cities (Kannan, 2024). The Internet of Things (IoT), which consists of billions of networked devices and sensors, makes it possible to gather and share environmental data while also enabling networked communication and interaction amongst these devices (Singha & Singha, 2024). Applications for the Internet of Things (IoT) make life easier for both consumers and companies, from smartphones to traffic lights. In the modern era of technology and artificial intelligence (AI), the conventional world has transformed into smart (Abrokwah-Larbi, 2024). More or less all the developed and developing cities are now in the pathway of becoming smart and transforming themselves into

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