Chapter 9

Understanding the Dynamics of Blockchain Technology and Its Impact on Environmental Sustainability in the Hospitality Industry

Sunita Jatav

https://orcid.org/0000-0002-7946-4638 School Of Business, MIT World Peace University, Pune, India

Rupali Gupta

School of Business, MIT World Peace University, Pune, India

Vijeta Singh

Ramcharan School of Leadership, MIT World Peace University, Pune, India

ABSTRACT

This research examines the possible contributions that blockchain technology could make to overcoming a variety of obstacles and accomplishing the objectives of sustainable tourism. Blockchain technology shows promise for the development of sustainable tourism that is aligned with the Sustainable Development Goals (SDGs). Blockchain technology has the potential to disrupt existing tourism operations, boost local economies, manage food supply chains, reduce food waste, improve tourists' satisfaction, influence sustainable behaviour, and address awareness-related concerns. In addition, this study makes suggestions for new lines of research that could be pursued in order to investigate the full potential of blockchain technology as it relates to sustainable tourism. This study covered Indian and International Cases of Multinational and Indian Companies with challenges and opportunities.

DOI: 10.4018/979-8-3693-2065-5.ch009

INTRODUCTION

The United Nations' 2030 Agenda includes seventeen sustainable development goals (SDGs) aimed at ending global poverty, safeguarding the planet's natural resources, and boosting economic opportunity for all people. The tourist industry is mentioned three times in the United Nations 2030 Agenda for Sustainable Development, but it nonetheless has ramifications in terms of employment opportunity, sustainable production, utilization of goods and services, and sustainable use of natural resources. If tourism is done in a sustainable manner, it can have positive effects on the economy, society, and environment. Responsible management of the tourism industry's financial, ecological, and social impacts is a hallmark of sustainable travel. This type of tourism also considers the requirements of all stakeholders involved. In general, for tourism to be sustainable, it must cater to the tourists and tourism destinations needs and requirements but without harming nature. This must be done while also making room for opportunities for the industry's continued growth and ensuring that its cultural and natural landmarks, ecosystems, and life-supporting mechanisms are preserved (UNEP and UNWTO 2005; Pan et al 2018).

Economic sustainability, social sustainability, and environmental sustainability are the three pillars upon which the notion of sustainable development. Economic sustainability refers to the effectiveness of a company's operations over the course of time; social responsibility refers to the provision of equal opportunities, the respect of diverse cultures, the reduction of poverty and discrimination; and environmental sustainability refers to the appropriate management of scarce resources, particularly those that are not renewable (Kuhn, 2007; Tanguay, 2013). The blockchain technology possesses exceptional qualities and has the potential to exert a significant influence on the operations of businesses as well as an entire sector's worth of industries. High energy consumption, greenhouse gas emissions, incorrect waste management and treatment, and the loss of biodiversity are some of the obstacles in the way of the growth of sustainable tourism.

Furthermore, tourism causes a decline in communication channels and restricts access to informational resources, as well as contributing to the deterioration of natural ecosystems and endangers heritage management and the authenticity of cultural traditions. Two ways to start dealing with these problems are to look into how blockchain technology could be used to solve some of them and to talk about how this new technology could possibly help other parts of sustainable tourism. The areas of sustainable tourism in which the implementation of blockchain technology might have a favourable impact on the respective fields (Treiblmaier, 2019).

Overview of Indian Hospitality Industry

Indian hospitality is based on the ancient convention of "Atithi Devo Bhava" which means "the Guest is God". India is popular with people from all over the world because it has different cultures and ethnic groups. Additionally, India has gained recognition as a destination for spiritual tourism, attracting both domestic and international travellers. The Indian hospitality industry falls within the spectrum of travel and tourism. According to the World Tourism Organization of the United Nations, tourism is "a social, cultural, and economic phenomenon that involves the movement of people to countries or places outside of their usual environment for personal or business or professional purposes". The hospitality industry sets the very foundation for travel and tourism which means providing services to customers in terms of food & beverages, accommodation, travel and tourism and entertainment and recreation. The tourism

10 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/understanding-the-dynamics-of-blockchain-technology-and-its-impact-on-environmental-sustainability-in-the-hospitality-industry/335656

Related Content

Unveiling India's Automobile Sector Evolution: Analyzing Current Electric Vehicle Trends

Jotish John A.and Hakeem Niyas (2024). A Sustainable Future with E-Mobility: Concepts, Challenges, and Implementations (pp. 338-353).

www.irma-international.org/chapter/unveiling-indias-automobile-sector-evolution/349719

Exploring Green IT Adoption: A Case of a Business Process Outsourcing Firm

Alexander A. Hernandezand Sherwin E. Ona (2014). *International Journal of Green Computing (pp. 13-28)*. www.irma-international.org/article/exploring-green-it-adoption/141578

Study on Labour Force in Romanian Agriculture

Maria Nica (2018). *International Journal of Sustainable Economies Management (pp. 36-44).* www.irma-international.org/article/study-on-labour-force-in-romanian-agriculture/202430

Global Development on LCA Research: A Bibliometric Analysis From 2010 to 2021

Gaurav Gaurav, Alok Bihari Singh, Chandni Khandelwal, Sumit Gupta, Sundeep Kumar, M. L. Meenaand G. S. Dangayach (2023). *International Journal of Social Ecology and Sustainable Development (pp. 1-19).* www.irma-international.org/article/global-development-on-lca-research/327791

Opportunities and Challenges in Solar Photovoltaic Waste Management

Bhanu Prakash Saripalli, Adip Krishna Guduruand Jayaditya Reddy Yeruva (2024). Sustainable Solutions for E-Waste and Development (pp. 217-238).

 $\underline{www.irma-international.org/chapter/opportunities-and-challenges-in-solar-photovoltaic-waste-management/338705}$