

TECH BOOSTED TOURISM: A COMPREHENSIVE ANALYSIS OF TECHNOLOGY IN RESHAPING THE TOURISM SECTOR

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Abstract

This comprehensive paper delves into the relationship between sustainable tourism practices and digital technology. The paper covers a range of studies. From SWOT analysis to understand the strengths, weakness, opportunities and threats in the tourism sector to analyse the multifaceted role of effect of digital technology, bibliometric analysis of mobile technology, culinary tourism, link between Bollywood and poverty Tours, effect of covid 19 control measures, potential of Virtual Reality (VR) tourism. The finding reveals there is a transformative potential of digital technology in making the current tourism a tech boosted tourism. The research identifies that the existing literature calling for future exploration in the integration of sustainable tourism practices and digital technology, cultural and social implication of technologies like Augmented Reality (AR) and VR and the development of smart tourism applications meeting the demand of specific Indian cities. Overall, the paper urges for the collaborative efforts to shape tourism policies aligning with the demand of the digital age.

Keywords: Tourism, sustainable tourism, Augmented Reality, Virtual Reality

INTRODUCTION

Tourism is Resilient, each and everyone wants to travel. Despite of covid-19 pandemic, tourism saw a growth in 2022. The International travelers from Europe and Middle East saw a climb to 80% in 2019 and from America it was up to 65% in the same year. The fact that makes it more significant is that the data does not includes visitors of China, which has the largest outbound travelers before pandemic. Forecast of travel and tourism industry GDP for a decade of 2022 to 2032 is likely to grow on an average of 5.8%. (10). Because now travelling is no longer remains going from one place to another, it is now being looked as an experience. If we look Travel cycle as a whole, we can see the technology has entered in each and every part of tourism and it keeps on increasing as the new generation is becoming more and more tech-savvy. With the increasing impact of travel blogger, social media is now the new research ground for travelers. Now travel apps like MakeMyTrip and TripAdvisor make the booking of travelling at your finger tip. Artificial Intelligence (AI) chatbots gauge 24*7 customer support service. Voice tech made travel related services at your lips. Now contactless tech, AR and VR, robotics cloud computing and much more Technology have been developed to give user friendly experience to travelers. (20)

LITERATURE REVIEW

Social economic variables, cultural influences and social media play a great role in offering Sustainable Tourism. SWOT analysis on tourism sector shows how Sustainable Tourism took advantage of its strength by working on its weakness and grabbing the opportunities through overcoming the Threats (17).

The integration of technology with the tourism sector leads to the potential transformation in tourist behaviour and practices. The new term “cosmobility” has been studied which came up with the increased access to the world thanks to the technology. Algorithmic culture, emphasizing algorithmic personalization and the broader implication of AI in tourism sector have been scrutinized by exploring

different dimensions such as user generated content, gamification, AR, VR, and the AI. There is a need of being critical while studying how Digital Technology affect tourism. Future research needs to be the intersection of ethnography and Technology (21).

There are mainly five prominent research clusters viz. Mobile technology, travel mode, mobile instrument, travel behaviour research and mobile applications in the tourism sector. Study reveals that 6G associated to 2030 approximately. The study mainly focuses on technology in tourism through a bibliometric analysis which aims to analyse the current research and also stays the potential future directions in the same area. 803 top journal papers have been analysed and it was found that three stages of development in the research field by mainly with the rise of mobile communication technology (5G). mainly quantitative and visualised perspective on the field have been suggested. the study exclusively focuses on the web of science core collection which give a boost to the encouragement to the Future research two broad and the scope (8).

Delhi, Mumbai and Kolkata the famous cities are being overlooked as a food destination by our Indian authorities. Culinary tourism of these cities needs more marketing to give enhancement to the tourist experience and advantage to the local businesses and community. In order to showcase the real image of the actual culinary experience of these cities, a collaborative effort is the need of the hour by the destination marketing organisations. This study preliminary offers the gap between tourism and food in the big Indian cities, providing a conceptual framework to the literature and setting light on an aspect which is being overlooked in future incoming tourism of India (1).

The complicated relationship between Bollywood, tourism and the evolving perception of authenticity in relation of poverty Tours in India have been underscored. The study includes that Dharavi, the biggest long has been portrayed as symbol of " authentic India" in the Global Marketplace by Bollywood (9).

The effect of covid-19 controls measures on tourism and the rise of VR tourism as an alternate during the pandemic has been analysed. VR is a sustainable solution in post pandemic by using Stimulus Organism Response (SOR) theory. The study aims to highlight the effects of government imposed covid-19 measures on the tourism sector and also the evolution of VR as a major innovation during the pandemic. Major key factors like environmental impact of touristic travel, pandemic travel anxiety, attitude towards VR tourism, eco guilt, innovation of VR pandemic period are studied. Overall, the study offers a theoretical framework of consumer attitude towards VR tourism and also provide practical insights for various stakeholders to capitalise on emerging trends in sustainable travel practices (19).

The importance of tourism policy by highlighting its role in giving direction, regulation and posting collaboration among stakeholders by focusing on Delhi and Mumbai has been studied. A keen interest is paid to the introduction of new tourism policy by the Indian government to cope up the challenges and improve the infrastructure. For example, high Speed Rail link between Delhi and Mumbai, a new Visa policy for foreign visitors and a non-restrictive permission to visit popular tourist attractions. The effect of economic, social and cultural aspect of tourism policy are highlighted. In this study, the retrospective analysis of India's tourism policy from 1982 to the present has been offered. The study also discusses the future of tourism in India, suggesting Global cooperation and sustainable practices (13).

The significance of strategic oriented technology investment for more personalized and efficient hospitality in the luxury hotel sector during the post pandemic is underscored. The study reviews the way through which luxury hotels in India are trying to mitigate the guest fears Amid the covid-19 pandemic (6).

The manifold roles of ICT in Mumbai hospitality sector are focused. The five-point likert scale techniques have been used on 300 surveyed data including hoteliers, travel agencies, tour operators and lodging services. Five main points named, service excellence through personalized servicing, affirming and affordability, accessibility by reducing cost and better internet speed, meeting industry growth and fostering competitiveness come to the highlight. The study also contributes by providing the main points by ICT, with implication for optimising resources and enhancing customer loyalty. It

also throws light on the transformative impact of ICT on Mumbai Tourism and Hospitality, driving excellence, efficiency and global connectivity (12).

The potential of providing more tourist friendly experience through the Tourism Cloud Management System (TCMS), technology like data visualisation, sensor clustering and smart tourism models are delved. The study has the main focus on highlighting the fact that e tickets has replaced the physical tickets and the transport system has become much user friendly with the introduction of Bluetooth and Google Maps for real time tourist identification. Overall, study highlights the effect of ICT on tourism sector, the concept of smart territories and the importance of data visualisation for convenient routes. Smart tourism leads to reducing errors and streamlined process in the tourism industry introduction of tourism cloud management system which uses AR, helps in improving the tourist experience. It also highlights the points if the tourist destination uses smart tools, the Tourist would be happier and tend to visit those places more (23).

The major potential and challenges being faced by Indian tourism sector are explored. The key initiatives taken by government such as " land Bank" for hotel construction and use of railway land and hotels are also discussed. The problem of Highland prices and taxation and the urge to promote domestic tourism is addressed. Study reviews that Cruise tourism hotels should be implemented in major port cities and also suggested strategies to improve India Tourism (22).

An efficient tourist guide application for Indian cities majorly focusing on Delhi is discussed. The study aims to overcoming the problems of traditional guides by offering a very cost effective and accurate options by leveraging the Android technology for example Google Maps and net connectivity. But in the study, literature review is not presented. For strengthening of the study, a systematic review of various available literature on smart tourism guide system, mobile applications for tourist and integration of Technology with tourism is a crucial need (7).

The limitation of mobile devices as compared to PCs and also proposes an idea to overcome this limitation with the help of mashup Technology are aimed. This review paper shows the increasing trend of various mobile app, citing platforms like Yahoo pipes, Microsoft popfly, google mashup editor. It also says that leverage Technology will create miracles for mobile tourist guide. For example- Personalised Mobile Tourist Guide (PMTG). As a whole, the study sets the standard for understanding the context, challenges and solution in the field of mobile tourist guide system (11).

The multifaceted roles of Information and Communication Technology (ICT) in tourism industry, along with the need for strategic adaptation to remain competitive are evaluated. Small and Medium sized Tourist Enterprises (SMTEs) can fully utilise its resources with the use of ICT by looking ICT as a main solution rather than a merely promotional tool. The literature review mainly emphasizes on the ICT on various tourism function, e-learning, distribution channels and educational approaches. Now ICT is reshaping the tourism value chain, defining consumer behaviour and enhancing organisational efficiency. The study looking forward to see strategic approach to technology adoption in the tourism sector (3).

The impact of tourism in Mumbai's economic development by offering employment, foreign currency and social economic growth is emphasized. The Study of 165 tourists justifies that social media is promoting ecofriendly travelling in Mumbai by considering the various factors such as international activities, the covid-19 pandemic, government reforms and changing perceptions. It also shows that there is a downfall in the booking through travel agencies and an upsurge in booking with online platform like MakeMyTrip and TripAdvisor. The study shows the Contemporary travel patterns and their implications for sustainable tourism in India (14).

The future of Asia Pacific tourism in the aftermath of COVID 19 pandemic is explored. The study mainly analyses the four possible futures such as discipline, complete and retreat, unsettled and transform and discusses how current tourism policies shape the whole tourism system. The findings tell that discipline future can be achieved through increased digitalisation with more strict protocol and government control. The complete and Retreat future predicts that by making domestic travel main form of tourism, nationalism can be strengthened. The transform scenario shows the shift towards sustainability, low carbon practices and Social Justices. The unsettled theory explains a future which is explained by ongoing crisis and uncertainties, requiring resilience and adaptability. Overall, the

study throws the light on the need for proactive measures that favours the sustainable opportunities along with managing associated risks (5).

The framework of destination marketing in the tech age, with a special focus on VR as a major tool to empower tourist experience is analysed. The two major key factors VR travel, sense and information quality have been studied. The finding reveals that focused attention highly contributes to high satisfaction level and Telepresence exerts a stronger influence. Overall, the study sheds a light on the key factors that encourage the overall experience and impact tourist intention to visit Real world destinations (2).

The challenges which are being faced by the various tourism locations globally due to the various factors like over tourism, whether events and inadequate management are analysed. The closing or destructing of tourism sites poses a great threat to the tourism development and local communities. The paper came up with the new terminology " second Chance tourism" as a new term to the tourism destinations which are victims of over tourism or deterioration. the main focus of the study is on integrating the virtual and mix technology to offer high class visitor experience and support tourism by lessening pressure on fragile destinations. It also discusses terms like last chance tourism to showcase the potential of AR and VR to offer meaning full and emotive tourism experience both onsite and offsite. The author believes that SCT along with AR and VR can offer the digital preservation of sites and encourage the visitors experience along with the challenges like over tourism and impact of covid-19 pandemic (4).

The various sides of the service quality and consumer satisfaction in the railway Transportation system specifically Mumbai Metro corridor are analysed. For this several studies analysed each addressing the different dimension of service quality, customer satisfaction and related factors in various Railway system. Various factors like landscape on Railway services, importance of consumer satisfaction, cleanliness and punctuality etc have been studied. Overall study says that assessing service quality and customer satisfaction in Mumbai Metro corridor, adding valuable insights to the existing literature (18).

The persisted issues which are being faced by tourist of different age in the Indian tourism sector are highlighted. The study was done on the 110 primary and secondary data with the implication of non-probability sampling technique. The kruskal wallis non parameter test is used and they finding says that opinion of different age group varies regarding the challenges of the Indian tourism sector. The literature review also highlights the various existing challenges in Indian tourism industry such as infrastructure deficiencies, health and safety concern, non-standardised rates and government policies. overall, the study contributes to the various issues faced by different age group and also emphasizes the need for targeted solutions for Sustainable Tourism Development in India (16).

The potential transformation of the Chinese tourism sector with infusion of Technology and diversified travel experience is highlighted. The China (Wuhan) culture and prism expo has used digital innovation like VR tours, robot guides and humanoid platform like crinoid that show the shift towards entertainment and cost-effective solution. The integration of 5G, digital technology and tourism sector is identified as enhancing efficiency and meeting changing tourist need. The industry is ready to change the new tourism experiences such as camping and night time travel. The camping economy has seen explosive growth, reflecting increased prosperity, a rising internet leisure tourism and the impact of covid 19 pandemic (15).

CONCLUSION

The comprehensive review of the diverse studies on tourism and Technology shows the interplay between two factors namely transformative potential of digital technology in reshaping the tourism industry and destination experience. We need a strategic approach to address challenges and capitalising opportunities to make tourism an advance tourism from Sustainable Tourism practices. The finding reveals that a collaborative effort is needed to make tourism policies so that it can meet the demands of digital age.

RESEARCH GAP

Many studies have been done on Sustainable Tourism practices and the impact of digital technology on tourism sector. But there seems a wide gap in understanding the integration of sustainable Tourism practices and digital technology. Exploring How visitors will make themselves comfortable with technology like AR and VR in real world settings and its impact on cultural practices can be a future research scope. Smart tourism guide application has been developed for major cities but smart tourism applications do not meet the unique needs and challenges of various Indian cities.

OBJECTIVES

To evaluate the effect of integrating sustainable Tourism practices with digital technology in the tourism sector.

To explore the cultural and social implications of Technologies like AR and VR in real world tourism settings.

To check the effectiveness of smart tourism application for the specific Indian cities

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