Chapter 19
Virtual Reality:
The Groundbreaking Smart Technology for the Tourism and Service Industry

Aruditya Jasrotia

https://orcid.org/0000-0002-8274-5609

Amity University, Noida, India

ABSTRACT

Virtual reality, also known as computer-based reality, is an advanced technology that has the capability to upsurge destination accessibility and to increase the popularity of lesser-known destinations. The objective of the current study is to understand the latest trends in virtual reality and to discover the future scope of implementation of virtual reality in the tourism industry across the world. The potential and the employment of virtual reality is not entirely understood and comprehended by many destinations. The present study identifies that there is a continuous development in popularity of virtual reality, and it is the need of the hour today. This disruptive technology has led to the phenomenon of virtual tourism, which gives people a preview and understanding of what they will experience if they visit a place physically. Virtual reality is becoming an outstanding way to showcase information and to gain relevant response from the tourists to enhance the services and overall tourist experience in the tourism destination.

INTRODUCTION

Disruptive technologies like artificial intelligence, robotics, internet, cloud technology, etc. have changed the tourism business from dreaming moments to experiencing moments, as a result it is also changing our life style and travel decision making. Meta-searches, virtual reality and virtual tours are becoming popular. The generation Y (people born between mid-1990s to 2000s) and generation Z (born between mid to late 1990s to early 2010) who are living in technology are becoming more comfortable with virtual reality and due to this, there will be new opportunities in future to utilize it in different ways for additional revenue generation. The dawn of the 21st century presented new innovative and interactive technologies, which has changed various sectors and industries, including the tourism industry completely (Buhalis & Law, 2008). Because of the advanced computer technologies several tourism processes, procedures

and methods have changed (Owen, Buhalis, & Pletinckx, 2004). The mobile-based tour guides (Bellotti, Berta, De Gloria, & Margarone, 2002), audio guides (Gebbensleben, Dittmann, & Vielhauer, 2006) and virtual reality supported museums (Jacobson & Vadnal, 2005) are some of the examples of advanced technologies involved in delivery of tourism services.

Tourism and technology are growing together in the present ecosystem and it can provide the greatest passive engagements on platforms. Virtual tours can help not only in tour planning but also in marketing of a particular destination. Within a few years, "seeing the world" could take on a whole new meaning. The Covid-19 pandemic has contributed to this shift in the favor of virtual tourism and it's no longer a choice but a necessity. It's also a fact that it's too early to say how virtual tourism will shape the tourism industry, but the idea of interacting virtually with locals and experiencing new places without actually travelling is interesting for the modern tourist. In a short period of time, the tourism industry has advanced in the area of application of computers. Information and Communication Technologies (ICT), can provide unimaginable opportunities, if they are used in an effective manner (Mariani, Baggio, Buhalis, & Longhi, 2014). For example, ICT can affect tourism related business as cultural heritage organizations like museums can use it to collect visitors' feedbacks, ideas, preferences in order to improve their services in future (Cappa et al., 2020). According to Jung and Han (2014) in order to achieve destination competitiveness, we need to invest innovative technologies. Virtual reality is beneficial for both the supply side and the demand side of tourism. With the help of information communication technology, it also enhances the visitor's experience. The true potential of the implementation of virtual reality is not yet known and understood. Researchers and academicians have been discussing the impact of technology on tourism since the 90s.

Virtual Reality (VR) has enhanced the relationship between tourists and destinations as it is a tool capable of providing information to the customers and motivating them to travel to a particular destination. These days a vast number of companies are reaching their target customers through interactive and sophisticated presentations such as engaging 360-degree virtual tours. Virtual reality creates a new level of extraordinary tour experience and services. The tourism experience, particularly offered in the form of audio and visual methods plays in important part in persuading the tourists to visit a destination. Virtual tours can assist in maintain sustainability and safeguarding fragile tourism attractions (natural and man-made) by ensuring that tourists are at a safe distance from the attraction. Virtual Reality is now being considered as an instrument to endorse a tourism attraction but, it is important to understand where and how to use it effectively. The objectives of this paper are; (1) To understand the current trends in virtual reality and (2) To explore the future scope of the implementation of Virtual Reality in the tourism industry across the globe. The next section provides a detailed review of literature on the topic of the study. After the literature review, contemporary trends regarding the usage of virtual reality in tourism industry are explained in depth. The final part of the study presents the conclusion and future implications. The rationale behind this study is the need to recognize the current scenario of virtual reality and to comprehend how it can revolutionize tourism industry globally. After the outbreak of Covid-19 pandemic, the virtual reality is no longer a choice. It has become a necessity which needs to be adopted by us in various industries and our daily lives. The study also seeks to the find answer to the big question that is, 'How will virtual reality transform and revolutionize the tourism industry?'

Related Content

Adaptive Routing Quality of Service Algorithms for Internet's Irregular Traffic

Abdelhamid Mellouk (2008). *Encyclopedia of Internet Technologies and Applications (pp. 7-15).*

www.irma-international.org/chapter/adaptive-routing-quality-service-algorithms/16827

Improved Usability of IOT Devices in Healthcare Using Big Data Analysis

Vijayalakshmi Kakulapatiand Mahender Reddy S. (2019). *Predictive Intelligence Using Big Data and the Internet of Things (pp. 110-127).*

www.irma-international.org/chapter/improved-usability-of-iot-devices-in-healthcare-using-big-data-analysis/219120

Incorporating Spatial Queries into Semantic Sensor Streams on the Internet of Things

Sungkwang Eomand Kyong-Ho Lee (2020). *Securing the Internet of Things: Concepts, Methodologies, Tools, and Applications (pp. 1703-1719).*

www.irma-international.org/chapter/incorporating-spatial-queries-into-semantic-sensor-streams-on-the-internet-of-things/235017

Fuzzy-Decision Algorithms for Cyber Security Analysis of Advanced SCADA and Remote Monitoring Systems

Saša D. Mili (2020). *Cyber Security of Industrial Control Systems in the Future Internet Environment (pp. 131-155).*

www.irma-international.org/chapter/fuzzy-decision-algorithms-for-cyber-security-analysis-of-advanced-scada-and-remote-monitoring-systems/250109

Security Issues and Challenges Related to Big Data

Jaimin N. Undavia, Atul Pateland Sheenal Patel (2018). *Big Data Management and the Internet of Things for Improved Health Systems (pp. 86-101).*

www.irma-international.org/chapter/security-issues-and-challenges-related-to-big-data/196041