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Systematic Review of Virtual Live Tourism

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Proposed Citation:

Abstract

This study published academic works of literature regarding virtual live tourism from 2019 to 2023 were collected from academic and scholar databases. The demanding and open retrieval of pertinent articles for this study is guided by the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) approach. From 52 articles identified through this method, the study focused on distilling insights from the top 10 articles that are most impactful in the field of virtual live tourism. This study serves as a entry point to a comprehensive understanding of virtual live tourism about main ideas, the advantages, and challenges, also addressed gaps in understanding. These gaps provide avenues for future research and exploration, beckoning researchers to delve deeper into uncharted territories and contribute to the evolving body of knowledge in this field.

Keywords:

Virtual Live Tourism, Virtual Reality Tourism, Augmented Reality Tourism

1 Introduction

1.1 Research Background

Recent advances in online technology have caused significant changes in the tourism sector in the last decade. Buhalis et al., (2019) have stated that a new and developing idea called virtual live tourism has become a disruptive force changing how people interact with and perceive locations for travel. The introduction of immersive technology such as live broadcast, virtual reality (VR), and augmented reality (AR) in the travel industry is driving this conceptual change. The desire for distinctive and easily obtainable vacations has increased dramatically as communities become closer together. This demand is being met by virtual live tourism, which gives people the chance to travel while remaining comfortable in their own homes. Users can virtually explore dynamic urban environments, majestic landscapes, and historical sites in real time with this deep immersion that surpasses conventional boundaries.

The acknowledgement of simulated travel as an intricate phenomenon with ramifications for various parties involved in the tourism industry highlights the study's background. Virtual live tourism offers a creative way to showcase locations and captivate potential tourists from the standpoint of destination advertising (Antić & Mayor, 2023). It also calls into question the integrity of distant encounters and how they affect people's perceptions of the worth of in-person travel. In addition, the incorporation of digital travel has an impact on regional economies, affecting visitor spending trends and changing the financial situation of admired tourist locations. Policymakers, business professionals, and academics attempting to negotiate the changing tourist industry terrain must comprehend these complex relationships. The aforementioned research experience provides context for an in-depth examination of virtual live tourism, to clarify its subtleties, obstacles, and prospects (Jude & Ukekwe, 2020). Through an examination of current research, the present systematic review aims to enhance comprehension of the social, cultural, scientific, and economic aspects of virtual live tourism. This will lay the groundwork for additional studies and informed choices in this rapidly evolving field.

1.2 Research Objectives

The major objectives of this paper are:

- To determine the main ideas and developments in the study of virtual live tourism.
- To analyze how virtual live tourism affects the travel and tourism sector.
- To explore the relative merits of the various technologies used in virtual travel.
- To discover the obstacles and restrictions related to the use of virtual live tourism.

1.3 Research Question

The primary questions of this research are:

- What are the main ideas and developments in the study of virtual live tourism?
- How does virtual live tourism affect the travel and tourism sector?
- What are the advantages of the various technologies used in virtual travel?
- What are the obstacles and restrictions on virtual live tourism?

1.4 Significance of Research

The investigation of virtual live tourism is extremely important for learning and the tourism sector in this era of worldwide interdependence and technological development. Zeqiri et al., (2020) have stated that virtual innovations are rapidly changing the field of tourism and travel, and this means that marketing destinations, user involvement, and the long-term viability of the sector as a whole need to be carefully considered. This study adds to the corpus of information by clarifying the various facets of simulated travel. The goal of this research is to discover the intricate connections between technological advances, travel, and society by thoroughly reviewing the body of previously published literature. Understanding these connections is essential for developing well-informed techniques that use virtual reality exhibits to boost tourism and promote economic growth.

Moreover, the study has pragmatic implications for tourism experts and legislators addressing the obstacles and prospects posed by virtual live tourism. As travel destinations compete for consideration worldwide, it is critical to utilize online experiences fully. This research offers a basis for comprehending consumer tastes, creating advertising approaches that work, and making sure that integrating technological innovations in a way that supports environmentally friendly tourism. The study's importance resides in its capacity to direct industry participants, contribute to scholarly discussions, and mould the evolution of simulated tourism into an increasingly enhancing and environmentally friendly future for travellers and locations equally.

2 Literature Review

Several major themes that sum up the current situation of research in this rapidly developing field have been identified by the systematic review of the literature on virtual live tourism. These topics are covered in detail in the ensuing subheadings, which offer a thorough synopsis of the body of research.

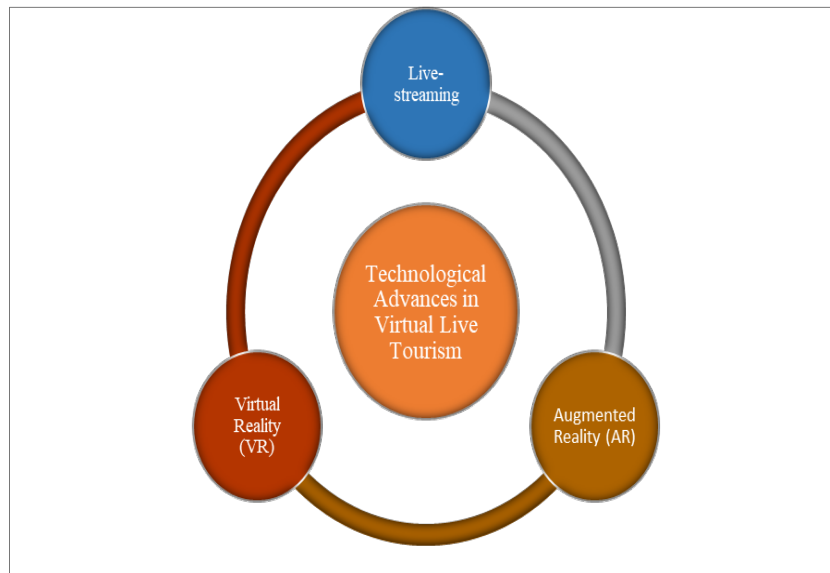## 2.1 Technological Progress in Virtual Reality Travel

Figure 1: Technological Advances in Virtual Live Tourism
(Source: Self-developed)

Technology innovations and virtual live tourism are closely related, and this theme looks at the different platforms and tools used to improve customer service. Researchers have looked into how creativity in live-streaming, virtual reality (VR) and augmented reality (AR) enhances the reliability and involvement of virtual travel experiences (Bourgeois-Bougrine et al., 2022). According to the literature, there is an increasing focus on creating state-of-the-art technologies that replicate realistic environments, allowing users to investigate locations in real time virtually. Real-time involvement and communication are made possible by live streaming technologies, which have become a powerful tool in virtual live tourism. Horeck (2019), streaming in real-time creates an authentic and immediate feeling in virtual travel circumstances, ranging from live broadcasts of cultural activities to expert guides led by locals. This technological method has shown to be especially successful in bringing travellers and destinations together during special occasions, festivals, or events, providing a window into the energy of a place as it develops.

On the other hand, issues like standardization and accessibility become more pressing as technology develops. Accessibility of virtual tourism services across various platforms and devices continues to be a crucial factor. To provide users with a smooth and uniform experience, regardless of the hardware or software they use, standardizing technologies is imperative. The combination of virtual reality (VR), augmented reality (AR), and live-streaming technologies improves virtual travel's visual and sensory elements while creating new avenues for interaction and discovery (Yung & Khoo-Lattimore, 2019). However, to fully realize the promise of virtual live tourism in delivering affordable and immersive journeys, it will be crucial to tackle obstacles and maintain inclusivity as these technologies advance.
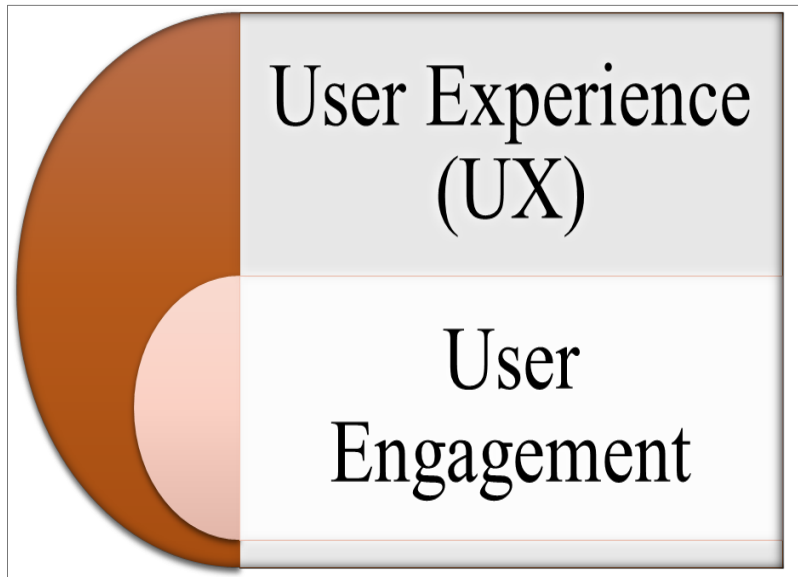
2.2 User Interaction and Experience

Figure 2: 2 Important Aspects of Virtual Live Tourism
(Source: Self-developed)

An important consideration when assessing the efficacy and achievement of virtual live tourism programs is user experience (UX) and involvement (Alenazi & Demir, 2019). This theme explores the complex dynamics that affect enjoyment and fulfilment in the environment of virtual tourism experiences, digging into the emotional and mental effects of virtual travel on humans. The investigation of consumer cognitive and affective reactions to virtual travel environments is one of the main topics of the literature. Research continuously demonstrates how virtual live tourism creates a feeling of appearance and connection by enabling users to lose themselves in the virtual location.

The effectiveness of such interactions is found to be closely correlated with mental involvement in a virtual environment, which directly affects the happiness of users. Often, the integration of modern technologies like augmented reality (AR) and virtual reality (VR) produces this absorbed quality (Jumani et al., 2022). Researchers also stress how crucial interaction is to virtual live tourism. The customer experience is improved when consumers can interact with the virtual environment, either through engaging platform components or user-controlled transportation. An immersive and interactive virtual experience is enhanced by interactive elements, which strengthen the bond between the individual experiencing it and the destination.

Another important factor that shapes customer experiences in virtual travel is the narrative component. According to the literature, employing successful storytelling techniques boosts engagement by giving the virtual journey emotional connection, information, and meaning. Adding storytelling components to virtual travel makes it more engaging and unforgettable. Examples of these elements include immersive scenarios and guided narratives. Furthermore, maintaining an immersive

experience while avoiding sensory overload requires careful consideration because too much stimulation may lessen user satisfaction in general.

2.3 Marketing Techniques for Live Virtual Tourism

In tourism, the role of communication, information and technology stands as pivotal strategies in tourism development to increase efficacy and efficiency in promoting tourism destination (Pahrudin, Hsieh & Liu, 2023). A key factor in the popularity and achievement of virtual live tourism is marketing tactics. Subawa et al., (2021) have stated that tourism companies and marketers for destinations are increasingly using virtual reality (VR), augmented reality (AR), and real-time streaming services to develop absorbed and interactive promotional material as advances in technology continue to transform the tourism industry. This section sheds light on the changing nature of destination promotion by examining the various marketing techniques used in virtual live tourism. Thanks to VR and 360-degree video innovations, virtual tours have become an effective medium for presenting travel destinations.

Virtual live tourism advertising now includes influencer partnerships and social media platforms as essential elements (Femenia-Serra & Gretzel, 2020). According to research, using well-known social media platforms for virtual or live-streaming broadcasts can increase user engagement and broad visibility. Virtual tourism campaigns gain trust and authenticity when they collaborate with influencers who are experts in technology and travel. Using these partnerships, travel destinations can expand their reach and leverage the devoted following of the influencers, resulting in a cascade of online interaction (Femenia-Serra & Gretzel, 2020). Nonetheless, the literature also identifies difficulties and factors to be taken into account when marketing virtual live tourism.

It's critical to preserve authenticity and prevent the idea that virtual experiences are misleading or deceptive (Steingartner et al., 2021). It's a fine line for marketers to walk when it comes to accurately portraying a destination while also highlighting its best features. In addition, the abundance of digital content and the possibility of user fatigue are issues that call for careful planning to guarantee impact and interest over time.

2.4 Economic Aspects and Industry Affects

Traditional tourism sector theories have been reshaped by the emergence of virtual live tourism, which has brought about a transformative rise in business effects and financial considerations. This part looks into the financial consequences that come with this technological evolution and examines the broad measurements of how online live tourism influences many different parties, from local companies to destination management organizations. The literature highlights the possibility of virtual live tourism as an additional tool for destination advancement, which is one of

the main industry impacts. Virtual experiences provide a distinctive way for locations to highlight their activities, events, and culture to draw in more tourists.

The literature does, however, also emphasize the importance of having an in-depth knowledge of how physical and virtual tourism interact. Although virtual live tourism has the potential to spark curiosity and act as a prelude to actual travel, there are worries about the effect of substitution that might occur (Frehlich, 2020). Large virtual exploration may reduce the desire to travel in person, according to certain studies, which raises concerns about the long-term effects on traditional tourism. Finding a careful balance between in-person and virtual interactions becomes essential for managing destinations. Economic factors in virtual live tourism include diversifying revenue and involvement in the community in addition to destination marketing (Barker & Rodway-Dyer, 2023). When properly monetized, virtual experiences can bring in extra money for travel destinations and companies.

New revenue streams could be created by charging for virtual tours, events, or special materials, for example. The literature does, however, emphasize the significance of distributing economic benefits fairly, making sure that nearby communities and companies that are directly affected by tourism get a fair portion of the money made through efforts related to virtual tourism. Shamim et al., (2021) said that virtual live tourism also has economic effects on the technological and knowledge creation industries. The possibilities for technological advancements and employment creation are presented by the demand for absorbed content creation, 360-degree filming, and virtual reality technologies. The travel and technology sectors have a symbiotic relationship that strengthens the possibility of cooperative growth, promoting innovation and economic advancement.

However, the literature acknowledges issues like the digital divide and differences in technological accessibility between various regions and demographics. Managing these gaps is essential to preventing the escalation of current gaps within the tourism industry and beyond as virtual live tourism grows in popularity. The tourism sector is undergoing a transformative phase (Pung & Chiappa, 2020). Furthermore, to ensure a prosperous and welcoming future, participants must work together to capitalize on the beneficial features of virtual live tourism while reducing difficulties. The constantly changing interplay between virtual and physical tourism necessitates an overhaul of business models, regulations, and community engagement methods in light of this developing scenery.

3 Methodology

3.1 Data Collection

A rigorous and thorough methodology is followed during the data collection phase of this SLR to guarantee the selection of high-quality and pertinent papers. The literature evaluation and selection procedure is made more transparent and replicable

by using the PRISMA strategy. The first step was conducting a thorough search through credible research databases such as PubMed and Google Scholar. Search terms like "virtual live tourism," "remote tourism technologies," and "virtual experiences in tourism," were deliberately used to increase the number of relevant articles that were returned. These terms are used to effectively find relevant information regarding virtual tourism. All the terms were chosen to narrow down search result to make sure all databased are precise and rebalance. The search covered a broad chronological scope, unrestricted by publication time, capturing the development of articles in this ever-evolving field. After the first search, 52 papers were found eligible for the evaluation. The list of candidates was then filtered and refined using a methodical application of the PRISMA method. To keep the dataset devoid of redundancies, the initial step involved removing duplicates. A two-step evaluation procedure was then put into place.

Titles and abstracts were carefully examined about preset eligibility and exclusion criteria during the first evaluation stage. Articles that specifically discussed simulated travel, its technological foundations, or its effects on the travel and tourism sector were included. The contents of the chosen articles were carefully examined during the next screening stage to make sure they were in line with the goals of the study. The PRISMA structure demonstrates the methodical procedure of article choosing (Elshater & Abusaada, 2022). The final choice consists of ten articles that precisely reflect the study's goals while also making a substantial contribution to the knowledge of virtual travel. These papers cover various viewpoints, approaches, and conclusions, offering a solid basis for the analysis and summary later in the research. (Elshater & Abusaada, 2022) have said that the PRISMA structure guides an organized method of data collection that improves the accuracy and dependability of the study's findings by ensuring the chosen articles accurately reflect the current level of understanding of digital tourism at the time of selection. The methodical screening procedure that produced ten significant articles highlights how accurately and pertinently the selected literature addressed the goals and research questions.
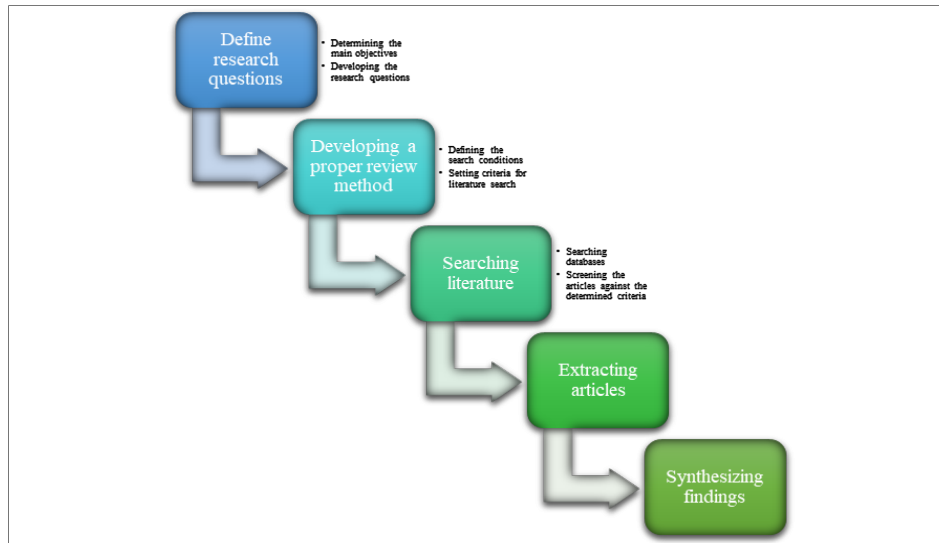
Figure 3: Systematic Review Process
(Source: Self-developed)

3.2 Prisma

The demanding and open retrieval of pertinent articles for this study on virtual live tourism is guided by the PRISMA approach. The proof of identity, assessment, qualification, and inclusion processes the four core steps described in PRISMA are followed in the systematic literature review. Identification entails using a thorough search strategy with specific terms associated with virtual live tourism, utilized in a variety of academic records and resources. 52 articles were found in the pool from the first search. The methodical process of screening involves identifying articles and subjecting them to a stringent evaluation according to preset criteria for inclusion and exclusion. 42 publications were eliminated as a consequence of this critical assessment, which brought the review into compliance with the study's goals.

The process of determining eligibility involves carefully reviewing all the remaining items to make sure they meet the predetermined standards. In this phase, the collection of articles was further reduced to a final 20 that best tackled the study's question. The last phase, inclusion, involves giving each of the 20 eligible articles a thorough analysis that results in the final selection of the top 10 articles. The findings and conclusions offered in this systematic literature review are summarised using these final articles as the foundation. The PRISMA approach is followed in this study to guarantee methodological rigour and openness to the method of choice, which improves the validity and reliability of the combined literature on virtual live tourism.

4 Findings

4.1 Summary of Literature

Sl. No.	Publication Type	Authors	Article Title	Data Used	Sample Size
1	Journal article	Gursoy et al., (2022)	The metaverse in the hospitality and tourism industry: An overview of current trends and future research directions.	Secondary	NA
2	Journal article	Deng et al., (2021)	Travel live streaming: an affordance perspective.	Secondary	NA
3	Journal article	Van Nuenen & Scarles (2021)	Advancements in technology and digital media in tourism.	Secondary	NA
4	Book	Benckendorf et al., (2019)	Tourism information technology.	NA	NA
5	Journal article	Yung & Khoo-Lattimore (2019)	New realities: a systematic literature review on virtual reality and augmented reality in tourism research.	Secondary	46
6	Journal article	Rambach et al., (2021)	A survey on applications of augmented, mixed and virtual reality for nature and environment.	Secondary	300
7	Journal article	Loureiro (2020)	Virtual reality, augmented reality and tourism	Secondary	NA

			experience.		
8	Journal article	Cranmer et al., (2020)	Exploring the value of augmented reality for tourism.	Primary	15
9	Journal article	Katkuri et al., (2019)	Innovations in the Tourism Industry and Development Using Augmented Reality (AR) and virtual Reality (VR).	Secondary	NA
10	Journal article	Becket al., (2019)	Virtual reality in tourism: a state-of-the-art review.	Secondary	NA

(Source: Self-developed)

A thorough examination of ten chosen articles has provided insightful information about the changing nature of remote travel experiences based on a synthesis of the research on virtual live tourism. These papers, carefully selected using the PRISMA method, add to our comprehension of the discipline's guiding themes and ideas. The overview of the literature highlights various important themes, the most significant of which is the revolution that digital technologies have brought about in the travel and tourism sector. Gursoy et al., (2022) have said that it is said that digital tourism is a potent instrument for tourism promotion, surpassing geographic limitations and providing complete immersion to a worldwide audience. The papers constantly emphasize how digital channels can increase a destination's overview and draw in a wide range of virtual tourists. In addition, an individual's experience of simulated travel becomes a research focus. The chosen studies examine how consumers perceive and interact with simulated settings, delving into the emotional and mental components of virtual travel. Deng et al., (2021) have said that a recurring theme is how technology's interfaces shape these encounters, highlighting the necessity of immersive and intuitive platforms to maximize involvement.

Another important theme in literature is its consequences for society and culture. Critical analysis is being done on how digital tourism affects regional

populations and their cultural assets. Researchers emphasize the possibility of favourable and unfavourable results, highlighting the significance of accountable online travel procedures (Van Nuenen & Scarles 2021). In the context of online tourism, maintaining cultural authenticity and reducing adverse externalities like over-tourism become crucial factors to take into account (Benckendorf et al., 2019). Examined are the financial implications of virtual live tourism, emphasizing how it could stimulate regional economies. The body of research emphasizes how virtual experiences can help destinations diversify their sources of income, especially when there are travel limitations. According to Loureiro (2020), a thorough investigation of the wider economic ramifications is necessitated by worries about the fair allocation of revenue and the possible commercialization of virtual encounters. The pieces also shed light on the rapidly changing technological environment that supports digital tourism. Advances in mixed reality (MR), augmented reality (AR), and virtual reality (VR) are discussed, along with the potential consequences for the field's subsequent development (Yung & Khoo-Lattimore 2019). It becomes clear that there is more to learn about the advances of integrating data analytics and AI to create tailored virtual trips. The literature review consistently highlights the difficulties that come with simulated travelling.

Potential barriers to the smooth introduction of virtual trips into the tourism sector include the technological divide, moral issues, and the requirement for uniformity in virtual travel systems (Rambach et al., 2021). The compilation of the ten chosen articles offers a wealth of information about the various facets of simulated tourism (Cranmer et al., 2020). The research provides an in-depth overview of the changing landscape of online travel situations, from its revolutionary effect on destination advertising to the nuances of user interface, social and cultural consequences, financial considerations, and technological advances.

5 Conclusion

5.1 Issues in Research

The systematic literature review on virtual live tourism has revealed several problems and obstacles that deserve careful consideration. The requirement for standardized technology platforms is one of the main issues. A unified structure is required for the wide range of virtual reality (VR), augmented reality (AR), and real-time streaming services to guarantee accessibility and integration for a large number of users (Bouraqia et al., 2020). The literature also makes ethical issues a major focus, posing queries regarding cultural awareness, authenticity, and methods for ethical marketing. observing moral guidelines in virtual live tourism requires finding an equilibrium between successfully marketing destinations and honouring their cultural integrity.

5.2   Conclusion

The literature reviewed offers an in-depth comprehension of virtual live tourism, emphasizing its difficulties, concerns regarding ethics, and transformative potential. A fresh phase has been brought about by the travel sector's integration of technological advances, allowing people to virtually explore destinations. Virtual live tourism has completely changed how people communicate with and encounter travel thanks to its absorbed virtual world features and dynamic live streaming features. One possible obstacle to the smooth introduction of virtual experiences into traditional tourism is the absence of standardized platforms. Setting up industry-wide guidelines for technology and content production is crucial to developing a seamless virtual tourism environment that is advantageous to users and stakeholders alike.

The significance of ethical considerations about societal sensitivity and authenticity highlights the need for accountable marketing strategies. Respect for cultural diversity must be given top priority, and the commercialization of historical sites must be avoided as destinations use virtual live tourism to market their draws. The sector's participants must develop and abide by moral standards to ensure that virtual tourism is consistent with the values of ethical and courteous depiction. It takes careful thought and continuous research to strike a balance between potentially overwhelming sensations and immersive ones. While creating engaging virtual environments is the goal, it's important to comprehend the psychological ramifications of extended virtual involvement. For virtual live tourism to be successful and widely accepted over time, an acceptable balance must be struck between realism and consumer wellness.

5.3   Limitations

Notwithstanding the methodical methodology utilized in this analysis, it is imperative to recognize certain constraints. The removal of articles written in languages other than English could lead to linguistic bias and the potential loss of important perspectives from a variety of linguistic and cultural backgrounds. Furthermore, considering how quickly technology and tourism practices are developing, the inclusion criteria's selected period of 2010–2023 might leave out recent developments. Dependence on electronic databases could result in the exclusion of industry reports or pertinent grey literature that isn't included in university databases' indexes. Furthermore, the significance and breadth of the initial studies must be considered when interpreting the results, and differences in methodology among a few chosen articles may affect the synthesis's overall unity.

5.4   Future Research and Recommendations

Virtual live tourism is a rapidly developing field that offers exciting prospects for further study and advancement (Khang et al., 2023). Some important areas need to be investigated to deepen our understanding and fully utilise this transformative event. First and foremost, it's critical to create uniform frameworks and policies for online

travel sites. This would deal with accessibility issues and guarantee uniformity in user experiences while meeting the needs of a wide range of users. Researchers should concentrate on developing flexible frameworks that can take into account new technologies and stay relevant over time as the technological landscape changes.

Particular attention is needed when it comes to ethical issues in virtual live tourism. Subsequent investigations ought to explore matters related to cultural awareness, genuineness, and conscientious portrayal of travel destinations. A more equitable and environmentally friendly virtual tourism ecosystem can be promoted by creating ethical standards for content production and consumption, which can help allay worries about the appropriation of culture and commodities. Furthermore, it is imperative to conduct studies on the long-term effects of virtual tourism on actual travel habits and location economies.

Government officials and industry customers can design tactics that optimize the advantages of virtual live tourism while maintaining the vibrancy of traditional tourism by taking into account the interactions between virtual and physical tourism. Last but not least, cooperative interdisciplinary studies including specialists in the fields of cultural studies, mental health, technological advances, and tourism can deepen our comprehension of virtual live tourism. These kinds of partnerships can produce all-encompassing insights, guaranteeing a thorough strategy to tackle the opportunities and difficulties brought about by this changing paradigm.

6   About the author

Farah Azreen is currently pursuing Master's degree in Hotel and Tourism management at Universiti Teknologi Mara. She's passionate about technology in tourism.

Faiz Izwan Anuar, lecturer at the respected Faculty of Hotel and Tourism Management, contributes a plethora of knowledge and expertise to the academic domain. His passions are in the dynamic fields of technology, innovation, and social media marketing, with a particular emphasis on tourism management. His insightful thoughts have had a lasting impact on the rapidly changing fields of technology and branding in addition to enriching academia. He is a trailblazer in these fields, and as such, his influence is widespread, making him a source of inspiration and information in the tourism industry and beyond.

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