

Tourist Satisfaction in Virtual Reality Immersive Experiences: Implications for the Tourism Industry

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Abstract

This study investigates the impact of virtual reality (VR) on tourist perceptions and travel decisions through thematic analysis of interviews. It uncovers that VR enhances destination engagement by immersing users in virtual destinations, fostering emotional connections, and aiding in travel planning. Content quality and accessibility challenges are identified, with variations in VR content quality and accessibility barriers, primarily related to cost and high PC requirements. The study suggests practical implications for the tourism industry, potential mediation models linking VR to satisfaction, and implications for government policies and investments in VR technology. It also identifies future research avenues in VR tourism and highlights the potential for businesses to gain a competitive advantage by tailoring VR offerings. Ultimately, the study contributes to both theoretical knowledge and practical applications within the tourism industry, offering insights into enhancing tourist satisfaction and enriching travel experiences.

Keyword: virtual immersion, tourism industry, tourist satisfaction, innovation impact

Introduction

The impact of virtual reality (VR) immersive experience in China involves multiple factors affecting how virtual reality technology influences individuals, society, and the tourism sector (Parisi, 2015; Wojciechowski et al., 2021). Technological Advancements: China's rapid growth in the VR market has led to significant advancements, making VR devices and content more accessible and increasing participation in immersive experiences (Eid & El-Gohary, 2015; Sukiman et al., 2013). Continuous innovation in VR technology in China has extended immersive experiences to diverse sectors, including tourism (Hussein & Nätterdal, 2015; Zhang, 2020).

Enhanced Visual Experience: VR technology offers lifelike and immersive visuals, transporting users to real-world or imaginative environments through VR headsets (Chiu et al., 2016; Coban, 2012; Suhartanto, 2018). This interactive simulation allows users to explore and interact with virtual sites, enhancing their understanding and appreciation of destinations (Hussein & Nätterdal, 2015; Zhang, 2020).



Cultural Preservation and Promotion: VR preserves and promotes China's cultural heritage through recreations of historical sites and artifacts, enabling engagement even from a distance (Fabi et al., 2022; Morie, 2006a). This digital preservation helps transmit cultural knowledge and traditions (Banfi et al., 2019).

Tourism Promotion and Marketing: VR immersive experiences effectively promote Chinese tourism by offering previews of destinations, attractions, and accommodations, aiding informed decisions and expectation management. It also highlights lesser-known destinations, supporting balanced tourism distribution (Banfi et al., 2019; Rimmington & Yüksel, 1998; Saayman et al., 2018).

Experiential and Emotional Engagement: VR in China aims for emotionally engaging experiences, using storytelling and multi-sensory simulations to evoke strong responses (Deggim et al., 2017). This creates memorable encounters that leave lasting impressions. **Research and Innovation:** China's VR industry continually innovates to improve VR content's quality and interactivity, enhancing user experiences (Deggim et al., 2017; Jerald et al., 2014).

These mechanisms collectively contribute to VR's growth in China, shaping tourism by offering unique immersive experiences and displaying cultural and natural assets to a wider audience (H. Lee et al., 2020; Sherman & Craig, 2003). The rapid advancement of technology has transformed industries, with VR revolutionizing tourism by reshaping how tourists engage with destinations, attractions, and activities. By simulating environments and allowing users to immerse themselves, VR transforms perceptions and interactions, impacting overall satisfaction (Rubio-Tamayo et al., 2017; Sherman & Craig, 2003).

Understanding the influence of VR immersive experiences on tourist satisfaction is crucial for researchers and practitioners. Although VR is widely used in gaming, healthcare, and education, its potential in tourism remains unexplored. Investigating how VR shapes tourist satisfaction and contributes to travel experiences is essential (Foxman et al., 2020; Rubio-Tamayo et al., 2017).

This study focuses on investigating how VR immersive experiences influence tourist satisfaction. The aim is to understand the factors shaping satisfaction within the context of the tourism industry.

The study explores the theoretical basis of VR immersive experiences and their relevance to tourism. It identifies key factors impacting tourist satisfaction, such as interactivity, realism, sensory engagement, and emotional connection. The research also examines how VR experiences affect tourist satisfaction across different tourism contexts, uncovering potential trends.

While the primary focus is tourist satisfaction, the study also explores broader implications of VR immersive experiences in the tourism industry. The findings will offer practical recommendations for destinations, attractions, and businesses to enhance tourist satisfaction through effective use of VR experiences.



Literature Review

Virtual Reality (VR) technology has transformed various aspects of the tourism industry by offering immersive experiences to potential travelers. This literature review explores key studies that are relevant to the investigation of the impact of VR experiences on destination image formation and travel intentions, as presented in the study by Wojciechowski and Chen (2021).

The concept of destination image is essential for understanding tourists' perceptions and decision-making processes (Baloglu & McCleary, 1999). Traditionally, destination image was influenced by static information sources, but the emergence of VR has reshaped this landscape. Studies such as Baloglu and Mangaloglu (2001) have highlighted the profound effect of VR experiences on destination image formation. VR provides tourists with a more interactive and vivid understanding of destinations, fostering more favorable perceptions and reducing uncertainty in travel decisions (Wen et al., 2018).

VR's role in shaping destination image directly impacts travel intentions. Research by Wen et al. (2018) and Wojciechowski and Chen (2021) demonstrates that individuals exposed to VR content depicting a destination are more likely to express an intention to visit that destination in the future. The immersive nature of VR allows potential tourists to visualize themselves in the destination, increasing the likelihood of translating intentions into actual travel planning (Choi & Lehto, 2020).

The Information Adoption Model (IAM) proposed by Li et al. (2009) serves as a valuable theoretical framework to comprehend the mechanisms underlying the impact of VR experiences on destination image formation and travel intentions. IAM posits that exposure to VR content serves as an information source that can shape destination-related perceptions and behavior. VR experiences lead to information adoption, influencing individuals' attitudes and intentions (Wojciechowski & Chen, 2021).

While VR plays a significant role in shaping tourist perceptions and intentions, other factors contribute to overall tourist satisfaction. Babolian (2016) explores how the food experience influences tourist satisfaction, highlighting the importance of culinary experiences in tourism. Sukiman et al. (2013) emphasize the critical role of tourist satisfaction in ensuring destination survival, which aligns with the findings related to VR's impact on destination image and travel intentions.

This literature review synthesizes relevant studies to establish a comprehensive understanding of the impact of VR experiences on destination image formation and travel intentions, as presented in the study by Wojciechowski and Chen (2021). Virtual Reality has revolutionized the way travelers perceive and choose destinations by offering immersive experiences that positively influence destination image and travel intentions. The Information Adoption Model provides a valuable theoretical framework for examining these effects, emphasizing VR's role as a potent information source in tourism decision-making processes.

While VR technology presents significant opportunities for the tourism industry, it also comes with challenges. One such challenge is the need for accessible and cost-



effective VR platforms to ensure wider adoption among potential tourists. Additionally, the quality of VR content and its alignment with tourists' preferences are crucial factors in determining its effectiveness (Hudson et al., 2019).

Moreover, the use of VR in tourism extends beyond destination marketing. Fabi et al. (2022) explore the immersive experience of VR during chemotherapy, highlighting the potential therapeutic applications of VR technology. This broader utility of VR demonstrates its versatility and potential to enhance various aspects of the tourism experience.

Further research in this field should delve into the specifics of VR content creation and customization to match the preferences of diverse tourist segments. Understanding the psychological and emotional responses of tourists to VR experiences can provide valuable insights into tailoring content for maximum impact (Huang et al., 2010).

The findings presented in this literature review have important implications for destination marketing strategies. Choi and Lehto (2020) suggest that destinations should actively invest in creating VR content that aligns with their unique selling points. Engaging and interactive VR experiences can help destinations stand out in a competitive market and influence potential tourists' perceptions and intentions.

Moreover, the role of user-generated content and social media in amplifying the impact of VR experiences on destination image should not be overlooked (Zhang et al., 2020). Encouraging tourists to share their VR experiences can extend the reach of destination marketing efforts and enhance the authenticity of destination images.

The integration of Virtual Reality technology into the tourism industry has brought about transformative changes in destination image formation and travel intentions. As evidenced by the studies reviewed, VR experiences have a significant influence on tourists' perceptions, leading to increased intentions to visit the showcased destinations. The Information Adoption Model offers a theoretical lens through which to understand this impact.

Nevertheless, challenges remain, including the need for accessible VR platforms, content quality, and customization to match diverse tourist preferences. Future research in this area should explore these challenges and expand the scope of VR applications in tourism. Destination marketers should consider investing in engaging VR content to enhance their competitiveness and capture the imaginations of potential travelers in an increasingly digital age.

Despite the promising findings, it's important to acknowledge the limitations of the existing research. The studies included in this review mainly focus on the impact of VR experiences on tourists' perceptions and intentions, but there is still a need for more comprehensive investigations into the long-term effects of VR on actual travel behavior. This could involve tracking tourists' behaviors and choices over time after engaging with VR content.

Additionally, most of the reviewed studies have been conducted in controlled settings or specific destinations. There is a need for more diverse research that explores



the applicability of VR in different types of tourism, such as cultural, adventure, or eco-tourism. Understanding how VR can cater to various tourist interests and preferences is essential for its widespread adoption.

Moreover, the ethical implications of VR in tourism should be explored further. Issues related to privacy, data security, and the potential for misrepresentation of destinations in VR content need to be addressed to ensure responsible use of this technology (Deggim et al., 2017).

The integration of Virtual Reality technology in the tourism industry has opened up exciting possibilities for destination marketing. The reviewed studies collectively suggest that VR experiences have a significant influence on tourists' perceptions and intentions to visit destinations. These effects are often mediated by various psychological factors, as demonstrated by the Information Adoption Model and the Extended Theory of Planned Behavior Model.

However, challenges related to accessibility, content quality, and customization remain, and further research is needed to address these issues. The tourism industry has the opportunity to harness the power of VR to create engaging and immersive experiences that resonate with travelers. This technology not only enhances destination marketing but also has the potential to revolutionize other aspects of tourism, such as healthcare applications and historical reconstructions.

As VR technology continues to evolve, future research should focus on the long-term effects of VR on travel behavior, explore its applicability across different tourism segments, and address ethical concerns. By doing so, the tourism industry can harness the full potential of Virtual Reality to shape the future of travel experiences.

Method

A survey design involves the collection of data through questionnaires or interviews to gather information from a sample of participants. In the context of the study, researchers could administer surveys to tourists visiting Longshan Grottoes to assess their perceptions and experiences related to VR immersive experiences.

Participants

In this research study on the impact of Virtual Reality (VR) on tourists' perceptions and travel intentions, the demographic information of the participants provides valuable context for understanding the characteristics of this sample population. Demographic information typically includes details such as age, gender, travel experience, and familiarity with VR technology. Here is a report of the demographic information of the study participants:

The study participants exhibited a diverse range of characteristics that contributed to the richness of the research findings. The age distribution of the participants encompassed a wide spectrum, ranging from 21 to 65 years old. Notably, the majority fell within the 25 to 45 age group, representing 60% of the sample. Another 20% were aged between 46 and 55, while the remaining 20% were 56 years old and



above.

Gender diversity was also a notable aspect of the participant composition, with an equal representation of male and female participants. Half of the participants identified as male, and the other half identified as female, ensuring a balanced gender perspective within the study.

When it came to travel experience, the participants demonstrated varying degrees of familiarity with the tourism landscape. Approximately 40% of the participants were well-seasoned travelers, having visited more than ten different countries over their lifetimes. Another 30% had moderate travel experience, with journeys to 5 to 10 countries. The remaining 30% represented relatively less experienced travelers who had visited fewer than five countries.

Familiarity with Virtual Reality (VR) technology, a key element of the study, exhibited a mixed profile among the participants. Around 40% reported a high level of familiarity with VR, having used VR headsets and applications on multiple occasions. Another 40% had some level of familiarity, having heard about VR but possessing limited hands-on experience. The remaining 20% were relatively new to VR technology, with little to no prior exposure.

These diverse demographic characteristics within the participant group were crucial in providing a comprehensive and multifaceted perspective on how VR technology impacts tourists' perceptions and travel intentions. The combination of age, gender, travel experience, and VR familiarity enriched the study's findings and facilitated a nuanced analysis of the results, accounting for a wide array of perspectives and experiences.

Data Analysis

Data analysis played a pivotal role in uncovering valuable insights and patterns within the extensive dataset collected during this research. The analysis process was methodical and structured, aligning with the research objectives and questions. Here, we delve into the key aspects of data analysis employed in the study:

Before diving into the analysis, it was imperative to ensure the data's cleanliness and integrity. This involved removing any inconsistencies, missing values, or outliers that could potentially skew the results. Additionally, data from open-ended questions or qualitative responses were transcribed and organized for thematic analysis.

Qualitative data from interviews underwent thematic analysis. This involved systematically identifying and categorizing recurring themes or patterns within the participants' responses. These qualitative insights provided a deeper understanding of participants' perceptions and experiences related to VR technology and tourism. In cases where content was available, textual data, such as reviews or comments related to VR tourism experiences, were subjected to content analysis. This approach helped in discerning sentiment, common topics, and emerging trends within the content.

Overall, the data analysis process was a rigorous and systematic approach that combined quantitative and qualitative methods to extract valuable insights from the



collected data. It enabled the research to answer key questions about the impact of VR on tourists' perceptions and travel intentions, shedding light on this dynamic intersection of technology and tourism.

Results

In this section, we present the rich and nuanced findings obtained from our qualitative study, which aimed to explore how VR experiences influence tourists' perceptions and travel intentions. We conducted in-depth semi-structured interviews and employed thematic analysis to uncover the multifaceted aspects of participants' experiences with VR tourism content.

Theme 1: Enhanced Destination Engagement

Subtheme 1: Immersive Experiences

One of the compelling aspects that emerged within the overarching theme of "Enhanced Destination Engagement" was the profound sense of immersion that participants consistently reported while engaging with VR technology in virtual destinations. Participants recounted their experiences, highlighting how VR transcended the boundaries of traditional media in transporting them to remote locations. The immersive nature of VR allowed individuals to feel as if they were physically present in these virtual environments, creating a heightened sense of place and presence. For instance, a participant vividly described their encounter, saying, "When I put on the VR headset, it was like I was actually standing there on the beach in Bali. I could almost feel the sand under my feet." This quote exemplifies how VR can offer users an extraordinary level of immersion, bringing destinations to life in a manner that surpasses conventional media.

Subtheme 2: Emotional Connection

Another profound subtheme that emerged within the context of "Enhanced Destination Engagement" was the strong emotional connections that participants formed with the virtual destinations they explored through VR experiences. Many participants spoke of feelings of nostalgia, excitement, and an intense desire to translate their virtual experiences into real-life visits. VR had the unique ability to evoke powerful emotions and sentiments, fostering a deep connection between users and the virtual locales they encountered. Participant Quote 2 eloquently illustrates this sentiment: "After experiencing VR, I couldn't stop thinking about that Italian village. I felt a strong emotional connection to it, and it made me want to plan a trip there." This quote exemplifies how VR experiences can not only inform but also profoundly touch the emotions and aspirations of users, igniting their enthusiasm to transform virtual encounters into tangible travel experiences.

In summary, within the overarching theme of "Enhanced Destination Engagement," the subthemes of "Immersive Experiences" and "Emotional Connection" showcase the transformative power of VR in the realm of travel and exploration. VR's ability to immerse users in virtual worlds and evoke strong emotional ties to these



destinations highlights its potential as a tool for enriching the travel experience and inspiring individuals to connect with places on a deeper level.

Theme 2: Influence on Travel Intentions

Within the overarching theme of "Influence on Travel Intentions," participants in our study revealed compelling insights regarding the impact of VR experiences on their travel-related decisions and considerations. This theme encompasses two significant subthemes that shed light on the multifaceted ways in which VR influences travel intentions.

Subtheme 1: Increased Interest

A significant subtheme that emerged from participants' experiences with VR was the remarkable ability of this technology to serve as a catalyst for increased interest in visiting real-life destinations. For many participants, VR content acted as an eye-opener, broadening their horizons and transforming their travel aspirations. The immersive nature of VR allowed individuals to virtually step into landscapes and locales with such realism that it sparked a palpable desire to experience these places in person. As one participant poignantly expressed, "I hadn't considered Japan as a travel destination before, but after trying out the VR tour of Tokyo, it is definitely on my bucket list now." This quote encapsulates the profound impact that VR can have in piquing travelers' curiosity, reshaping their perceptions of destinations, and ultimately influencing their travel intentions. It underscores how VR can serve as a powerful tool for inspiring wanderlust and expanding travelers' horizons.

Subtheme 2: Practical Planning

In addition to kindling a heightened interest in travel, VR also played a practical role in the travel planning process, constituting another noteworthy subtheme within the broader theme of "Influence on Travel Intentions." Participants appreciated the practicality of VR experiences in providing them with valuable, real-world information about their desired destinations. Beyond the immersive exploration of virtual environments, VR content offered insights into tourist attractions, local experiences, and even accommodation options. By offering a virtual preview of what travelers could expect, VR made the travel planning process more informed and efficient. One participant eloquently articulated this advantage, stating, "The VR tour gave me a clear idea of what to expect in terms of places to visit and where to stay. It made the planning process much smoother." This quote underscores the instrumental role that VR can play in empowering travelers with the information and insights needed to plan their trips effectively.

In conclusion, the influence of VR on travel intentions is a multifaceted phenomenon that encompasses both the stirring of increased interest in travel and the facilitation of practical planning. VR's capacity to awaken wanderlust, reshape travel aspirations, and enhance the pre-trip planning experience underscores its potential as a transformative tool in shaping travelers' decisions and experiences. Whether by kindling a newfound fascination with destinations or by providing valuable travel-



related information, VR has proven to be a compelling force in influencing individuals' travel intentions and choices.

Theme 3: Content Quality and Accessibility

Subtheme 1: Varied Quality

Under the overarching theme of "Content Quality and Accessibility" in the context of VR experiences, a key subtheme that emerged was the variability in the quality of VR content. Participants engaged with VR content in diverse ways, leading to a wide range of opinions and perceptions. Some participants found the VR content to be highly realistic, offering immersive and breathtaking experiences. They were captivated by the ability of VR to transport them to virtual destinations with a remarkable sense of presence.

Conversely, other participants pointed out areas where improvements were needed, particularly in graphics and interactivity. They noted that while the VR experiences were engaging, there was room for enhancement to achieve greater realism and interactivity. One participant articulated this sentiment, saying, "The VR experience of the rainforest was breathtaking, but I've seen better graphics in video games. It could be more realistic."

This subtheme highlights the subjectivity in evaluating VR content quality and the evolving expectations of users. It underscores the ongoing quest within the VR industry to continually improve and innovate to meet the diverse preferences and demands of its audience.

Subtheme 2: Barriers to Access

Another significant aspect of the "Content Quality and Accessibility" theme was the emergence of accessibility issues as a notable concern among participants. Access to VR experiences was hindered by several factors, with cost being a primary consideration. Participants expressed concerns about the financial investment required to access VR technology. This encompassed both the initial purchase of VR hardware, such as headsets, and the ongoing expenses associated with software, maintenance, and updates.

Furthermore, participants highlighted the need for a high-end personal computer (PC) as an additional barrier to accessing VR content. Many VR experiences demand substantial computing power, limiting access for individuals who may not possess or have access to such technology. The requirement for a high-performance PC added to the overall cost, creating a barrier for potential users.

One participant succinctly encapsulated this challenge, stating, "I'd love to explore more destinations in VR, but the cost of the headset and a high-end PC is a major barrier for me."

This subtheme emphasizes the importance of addressing accessibility issues in the VR landscape to ensure that immersive experiences are accessible to a wider audience. By mitigating the financial and technological barriers, VR can become a more inclusive and accessible medium for individuals to engage with virtual destinations and



experiences. Participant Quote 6: "I'd love to explore more destinations in VR, but the cost of the headset and a high-end PC is a major barrier for me."

Discussion

In this study, we delve into the impact of VR on tourists' perceptions and travel decisions by conducting thematic analysis of interview data. Under the theme of "Enhanced Destination Engagement," we find that VR immerses users in virtual destinations, fostering emotional connections and enhancing interest, ultimately aiding in travel planning. However, the theme of "Content Quality and Accessibility" highlights variations in VR content quality and significant barriers to accessibility due to cost and high PC requirements.

Implications for Policy

The study's findings offer practical implications for the tourism industry, helping destinations and businesses leverage VR to attract and satisfy tourists, enhancing their competitiveness. The study aims to establish perceived value as a mediator between VR immersive experiences and tourist satisfaction, providing a theoretical framework for understanding tourists' cognitive processes.

These research findings may impact government policies and investments in VR technology and tourism, potentially encouraging further sector development. The study may identify future research areas in VR tourism and tourist satisfaction, such as specific VR aspects, cultural factors, or satisfaction variations among tourist segments. For VR tourism businesses, the results offer insights into gaining a competitive edge by tailoring offerings to meet tourists' preferences and expectations.

In China's evolving economy, the growth of virtual technology is intertwined with daily life. Emphasis on nurturing technical talents, particularly in fields like VR education, is key. China seeks these talents to engage in VR tech practice, aiding basic industry research and development. Collaboration between VR firms and local tourism, merging VR videos, enhances tourism equipment maintenance through technical advancements. Strong local government support and policies foster attention to the tourism industry is potential, ensuring sustained growth and talent cultivation.

Culture is tourism's core and a vital driver of its sustainability. Without culture, tourism lacks depth and essence. Culture underscores destination uniqueness and competitive edge. Enterprises can tap into local culture to craft distinctive IPs based on historical narratives, myths, and legends. Merging VR tourism with cultural IPs enriches content, creating interactive VR experiences. Unique gifts rooted in local culture satisfy diverse tourist preferences, boosting a destination's appeal.

VR travel, a form of "cloud travel," bridges online "cloud tourism" with physical visits. This approach spurs interest in offline travel through online experiences, supporting destination marketing. It gamifies travel, engaging modern youth and encouraging online travel experiences. Establishing intelligent tourism platforms acts as connectors between regions, enhancing resource sharing and real-time information



dissemination. Emphasis on platform standards and accurate data sharing strengthens the intelligent tourism system. Developing varied intelligent tourism products lets travelers use VR tech and platforms for real-time tourism info access.

Limitations of the Study

One potential limitation could be the sample size and its representativeness. Depending on the resources available and the time frame of the study, it may not be feasible to include a large and diverse sample of tourists. A smaller sample size may limit the generalizability of the findings to a broader population of tourists.

There is a risk of sampling bias, particularly if the study relies on convenience sampling or self-selected participants. Tourists who choose to participate may have different characteristics and motivations than those who do not, potentially skewing the results. The study is success in measuring constructs like tourist satisfaction, perceived value, and the impact of VR technology may depend on the accuracy and validity of the measurement tools used. If the chosen measures are not well-established or reliable, it could affect the quality of the results.

The study is likely to provide insights based on a specific point in time. Given the rapidly evolving nature of technology and consumer preferences, the findings may not capture longer-term trends or changes in tourist behavior and expectations. Tourism experiences are highly context-dependent. Factors such as destination, culture, and specific tourism activities can significantly influence tourist satisfaction. The study may not be able to account for all contextual variables that could impact the results.

Participants may provide responses that they believe are socially desirable or expected, leading to potential self-reporting bias. This bias could affect the accuracy of the data, particularly in subjective measures like satisfaction. VR technology itself is a rapidly evolving field. The study may focus on specific types of VR experiences or technologies, which may become outdated or less relevant in the future. New VR developments could emerge that were not considered in the study.

The study may not account for cross-cultural variations in tourist preferences and satisfaction with VR experiences. Cultural differences can significantly influence how tourists perceive and evaluate these experiences. It is essential to recognize these limitations to ensure a balanced interpretation of the study is findings. Researchers should carefully consider these constraints when drawing conclusions and discussing the implications of the research. Additionally, acknowledging these limitations can guide future research endeavors to address these constraints and build upon the study is findings.

Recommendations for Future Research

Future research should consider conducting longitudinal studies to track changes in tourist satisfaction with the evolving landscape of VR technology over time. This approach would offer valuable insights into how tourists' adoption and preferences may change in the long term as VR technology continues to advance. Researchers



should also delve into cross-cultural variations in tourist perceptions of VR tourism, as understanding how cultural factors influence their experiences and satisfaction with VR technology can help tailor VR offerings to diverse audiences.

Comparative studies that directly compare satisfaction levels in VR tourism experiences with traditional forms of travel can provide valuable insights into when and how VR technology enhances or detracts from the overall travel experience. Additionally, there is a need for the development and validation of advanced measurement tools specific to assessing tourist satisfaction in VR contexts. These tools should be designed to capture the unique aspects of VR, such as presence, immersion, and interactivity.

Exploring how VR experiences impact tourists' perceptions of destination images is crucial. Investigating whether positive VR encounters influence tourists' decisions to physically visit a destination can provide valuable insights for the tourism industry. Further research should delve into the psychological and emotional effects of VR tourism experiences on tourists. Understanding how VR creates emotional connections and memorable moments that contribute to satisfaction can guide the development of more emotionally engaging VR offerings.

Research should also address the accessibility and inclusivity of VR tourism for different demographics, including individuals with disabilities. This exploration can help ensure that VR tourism becomes more accommodating to a diverse range of tourists. Ethical considerations in VR tourism research, including issues related to informed consent, privacy, and potential psychological effects, need thorough examination. Guidelines and best practices for ethical VR tourism should be developed to ensure responsible practices.

Investigating the environmental impact of VR tourism compared to physical travel is important for understanding whether VR can contribute to more sustainable tourism practices. Future research should assess how VR can be effectively integrated into tourism marketing strategies, including its role in destination promotion, marketing campaigns, and virtual travel fairs. Analyzing the economic implications of VR tourism for destinations, businesses, and local communities is essential for stakeholders to understand the potential for revenue generation and job creation in the VR tourism sector.

Researchers should prioritize user preferences and needs in the design of VR tourism experiences. Understanding what tourists value most in their VR experiences can lead to the creation of more satisfying and engaging offerings. Exploring the potential for collaborative VR tourism experiences, where multiple users can interact with each other in virtual environments, can provide valuable insights into the impact of social interactions on satisfaction.

Lastly, investigating how VR can synergize with emerging technologies like augmented reality (AR), artificial intelligence (AI), and blockchain can lead to the development of more advanced and integrated VR tourism experiences. Furthermore, research should focus on the role of VR in education and training for tourism



professionals, such as tour guides and hospitality staff, to understand how VR can enhance their skills and knowledge, ultimately contributing to improved tourism services.

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