UNVEILING OPPORTUNITIES AND CHALLENGES OF THE METAVERSE IN THE TOURISM AND THE HOSPITALITY SECTOR: A QUALITATIVE INVESTIGATION

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Abstract

Purpose – Owing to recent technological advancements and the growing use of virtual communication tools, particularly during and after the COVID-19 period, this research has investigated the usefulness of immersive technologies in the hospitality industry. Moreover, this research has obtained a deep and comprehensive understanding of how the metaverse can pose challenges and opportunities for employers and users in the tourism sector.

Design/methodology/approach – We utilized an exploratory qualitative approach and conducted interviews with fifteen industry experts who were actively involved in Morocco's tourism and hospitality sector. Based on the use of a thematic analysis approach, the findings have been presented.

Findings – The findings suggest that the metaverse has provided numerous benefits for promoting tourist destinations through immersive and personalized virtual experiences. However, it has also presented challenges related to cost, security, data protection, and accessibility. Overall, this research contributes to the understanding of the possibilities offered by immersive technologies in the field of hospitality and will serve as a foundation for further research in this ever-evolving domain.

Originality/value – Extensive research has examined the metaverse's theoretical applications in tourism and hospitality. However, empirical validation remains scarce. This study addresses this gap, being one of the first in North Africa to leverage qualitative methods for in-depth exploration. We validate theoretical propositions and provide unique insights into the metaverse's impact on both tourism employers and users. Our analysis informs recommendations for successful hotel adoption, particularly in emerging economies facing a spectrum of opportunities and challenges.

Keywords Metaverse; Immersive experiences; Virtual experiences; Hospitality; Challenges; Opportunities;

INTRODUCTION

The tourism sector plays a vital role in the socioeconomic structure by contributing significantly to value creation and employment opportunities in many countries (Fayissa et al., 2008; Rasool et al., 2021). In Morocco, tourism has been given significant importance in its development policies over the past two decades (Almeida-García, 2018). Visitor expenses, including accommodation, transportation, meals, and leisure activities, inject substantial funds into the local economy, leading to increased income and investment opportunities, thereby promoting economic development (El Menyari, 2021). Tourism has been crucial in providing direct and indirect employment for many Moroccans in areas such as hospitality, restaurants, transportation, and tourist attractions (Alberini, 2021). However, the hotel and tourism industry has undergone radical transformations, especially after the Covid-19 pandemic (Laachach et al., 2023), due to technological advancements and changes in consumer behavior. Travellers now seek new experiences, personalized services, and innovative ways to interact with their surroundings (Ezzaouia & Bulchand-Gidumal, 2020; El Azyzy & Sabri, 2022). Despite these changes, the tourism sector continues to progress and remains an integral aspect of economic growth in Morocco.

An emerging trend in the hospitality sector that has piqued considerable interest is the concept of the metaverse. The metaverse holds the promise of revolutionizing our interaction with the virtual world (Buhalis et al., 2023). This innovative concept is venturing into unexplored territory, much like the early stages of disruptive technologies such as the internet, cell phones, smart infrastructure, and smart tourism which emerged in the past twenty-five years (Buhalis, 2020). The metaverse is essentially a virtual universe that enables individuals to have immersive experiences. Imagine a hotel offering its customers the ability to virtually explore rooms, discover local attractions through augmented reality (AR) or even book unique experiences in this virtual realm (Pamucar et al., 2022). While some literature focuses on integrating the metaverse and virtual experiences within the service and hospitality sectors to attract more visitors and provide extraordinary experiences (Gursoy et al., 2022; Buhalis et al., 2022), there remains limited guidance on the challenges and opportunities of the metaverse across various contexts (Buhalis et al., 2022, 2023).

Based on the significance and popularity of the Moroccan hospitality sector (Bouichou et al., 2022), it has the potential to offer virtual tours of its establishments. This would allow prospective customers to explore and visualize various rooms, restaurants, pools, and other facilities from the comfort of their own homes. Additionally, the use of the metaverse provides opportunities for personalized experiences. Hotels could create virtual environments where guests can customize aspects such as decoration, ambient music, and even interact with virtual characters based on their preferences. This approach would result in unique and tailored experiences for each customer, ultimately increasing their engagement and satisfaction. However, it is important to address the challenges associated with adopting the metaverse in the Moroccan hotel industry. Factors like accessibility and internet connectivity need to be considered to ensure a smooth experience for users. While integrating the metaverse into tourist organizations offers exciting opportunities to enhance the overall tourist experience, it also poses challenges such as data security, reliance on technology, and the creation of high-quality immersive content (Dwivedi et al., 2022; Njoku et al., 2023).

Moreover, to ensure smooth and uninterrupted access to the metaverse, significant investments in internet infrastructure are required. Data security and client confidentiality are also major concerns in this virtual environment. Hotels must implement robust cybersecurity systems to protect clients' personal information and create a sense of safety during interactions with the hotel in the metaverse (e.g., Chow et al., 2023; Pooyandeh et al., 2022). Despite recent studies highlighting the metaverse's potential to transform various sectors (Chen, 2023; Dwivedi, et al., 2022), a significant knowledge gap persists in translating these theoretical frameworks into practical applications within the hospitality industry. Existing research has provided valuable insights at a conceptual level (e.g., Koo, et al., 2023; Dwivedi, et al., 2022), but empirical studies testing these theoretical assumptions within the hospitality sector are scarce. This study addresses this gap by conducting a qualitative investigation focused on the Moroccan hotel and tourism industry. Our research emphasizes the importance of field research in exploring both the challenges and opportunities presented by the metaverse. We aim to understand how tourist organizations can effectively leverage this technology to enhance the guest experience, while also addressing potential drawbacks. By analyzing the implications for tourist organizations both internally and externally, we seek to answer the following research question: 'How can tourist organizations integrate the metaverse and immersive technologies to enhance the tourist experience, while addressing the challenges that arise?

This research has made three significant contributions. Firstly, owing to the differences between virtual reality (VR), AR and metaverse, which relate to the simulated environment, digital content and user-created online space, respectively (Samala et al., 2023), it explores the use of immersive technologies in the tourism industry, and how metaverse offers an integrated platform for understanding role of various technologies, which has been rarely examined for specific industries in the existing literature. Drawing support from existing literature, it provides a comprehensive understanding of the key concepts and challenges associated with employing these technologies in the tourism sector. Secondly, the research employs a qualitative approach to explore the in-depth application of metaverse concepts, combining established theoretical knowledge with interview data. In-depth interviews with hospitality professionals will provide valuable insights, allowing for the evaluation of opportunities and challenges associated with implementing the metaverse within the industry. Lastly, the research integrates the analysis results to develop practical recommendations. These recommendations serve as guidance and offer potential strategies for hospitality professionals interested in utilizing immersive technologies, specifically the metaverse, to enhance traveler experiences and drive innovation within the industry.

1. REVIEW OF THE LITERATURE

This section provides a concise explanation of key concepts based on a review of relevant literature from the domains of technology and hospitality. Additionally, the subsequent sub-sections delve into the unique contributions of VR, AR and Metaverse in the tourism and hospitality sector.

1.1. The contributions of VR in the tourism and hospitality sector

VR is an incredibly captivating technology that transports users into computer-generated environments, mimicking real-life experiences. VR leverages media richness theory (Rather, 2023) by stimulating sight and hearing to create immersive experiences. Users can physically navigate and interact with objects within the VR environment, fostering a sense of presence and engagement. This remarkable technology fully engrosses users, replicating multiple senses and offering a truly realistic sensory journey (Gandhi & Patel, 2018; Rebbani et al., 2021). These interactions are then transmitted to a computer, which interprets them as requests for modifying the simulated environment.

The potential of VR in tourism was recognized as early as the 1990s (Williams and Hobson, 1995; Cheong, 1995). VR plays a vital role in sparking travellers' desire to explore and helps them decide on a destination (Tussyadiah et al., 2018; Tom Dieck & Jung, 2018; Gibson & O'Rawe, 2018). Preview experiences through VR have proven essential in shaping customer reactions towards brands and contribute to co-creating value for both tourism businesses and visitors (Jung and Tom Dieck, 2017). Moreover, VR can directly serve as an entertaining tourist attraction, elevating immersive tourism experiences (Wei et al., 2019). By replicating authentic environments, VR technology can provide access to cultural sites that may otherwise be challenging for visitors to experience (Han et al., 2020).

Despite its significant potential, the use of VR as a promotional tool in the tourism industry is still in its early stages (Gibson and O'Rawe, 2018). VR offers various applications within the tourism and hospitality industry. One key area involves creating immersive customer experiences. Filimonau et al. (2024) highlight the value chain perspective, where VR can benefit different stakeholders: business professionals, policymakers, customers, and suppliers. Companies can develop virtual tours of tourist destinations, allowing customers to explore and gain a more accurate idea of what to expect when travelling (Sarkady et al., 2020). Additionally, virtual versions of hotels can be created, enabling customers to visit rooms and common areas before making a reservation. These virtual hotels can also offer interactive features, allowing customers to personalize their experience and choose their preferred room (Israel et al., 2019). Metaverse hoteling offers the potential for significant improvements in the tourism industry by enabling realistic environmental simulations, fostering high customer engagement, and delivering personalized services (Chen, 2023). Furthermore, VR not only provides immersive experiences but also aids in travel planning and increasing sales. For instance, customers can utilize VR to virtually explore tourist destinations and hotels, helping them make better-informed decisions when making reservations (Wiastuti & Susilowardhani, 2016). While VR has garnered interest in tourism literature for its potential to create unique experiences, there's a gap in understanding tourists' social and emotional responses, particularly within the Moroccan tourism industry. As a rapidly growing market for high-tech integration, Morocco presents a valuable case study for exploring this under-researched area.

1.2. The contributions of AR to the tourism and hospitality sector

AR is a cutting-edge technology that combines the real and virtual worlds, enabling real-time interaction and 3D representation (Azuma, 1997). A recent systematic literature review (Yawised et al., 2023) highlights AR's transformative power. AR integrates computer-generated elements into our physical world, creating a more immersive and realistic experience. This technology seamlessly merges real-world elements with virtual components, creating an enhanced version of our surroundings. Users can observe their environment in real-time, consisting of a blend of real objects and virtual overlays (Rebbani et al., 2021). With these capabilities, AR can add or remove physical objects from view, replace them with alternative content, or even generate entirely artificial environments (Kipper & Rampolla, 2012).

AR provides users with an immersive visual experience by overlaying digital elements onto the physical reality. Scientifically and theoretically, this concept refers to "the hybridization in a continuum connecting the physical world to the digital world" (Bottecchia, 2010, p. 25). By combining AR with other technologies, businesses in the tourism industry can offer more engaging and immersive experiences, enhancing visitors' interactions with their surroundings. Notably, several devices support AR, such as glasses, tablets, and smartphones. According to Statista's projections for 2023, the number of smartphone users worldwide is expected to steadily increase from 2024 to 2028, reaching an impressive 496.7 million users (Statista, 2023).

A recent qualitative study by Ali (2022) suggests that AR mapping projections can be used in restaurants to create a unique visual atmosphere. These projections can transform surfaces with dynamic visuals, potentially enhancing the dining experience. It has various applications, such as projecting images onto walls, ceilings, tables, menus, and dishes, enabling the creation of themed parties, photo exhibitions, and fashion shows (Suzuki et al., 2021). AR is a valuable tool for tourists when they are exploring unfamiliar environments. Studies have shown that VR offers valuable information and enhances user experiences (Ali, 2022; Cranmer et al., 2020). For instance, VR can be used to create playful and immersive experiences for both locals and visitors through internet-based platforms and digital technologies (Prandi et al., 2023). AR captures and retains tourists' attention by providing information in various formats (Özkul & Kumlu, 2019). Museums, in particular, can benefit from modernizing their offerings through AR, as it enables them to provide more engaging and interactive content (He et al., 2018; Serravalle et al., 2019).

In the context of cultural heritage tourism, AR has demonstrated its ability to enhance tourists' experiences and create business advantages such as generating additional sources of revenue and reducing seasonality challenges (Jung et al., 2018). Therefore, tourism providers should explore the value of AR to remain competitive, attract modern tourists, and address market challenges. However, gaps exist in understanding technological barriers and challenges that relate to the widespread adoption of AR in the tourism sector. Moreover, privacy and security issues related to the use of AR in the tourism sector have been insufficiently studied.

While VR and AR have garnered significant research interest within the hospitality sector (Lodhi et al., 2024), the nascent concept of the metaverse presents a unique and under-explored opportunity. Existing studies explore VR's impact on hospitality, tourist satisfaction, and destination image (Kusumah et al., 2022; Polishchuk et al., 2023). However, the metaverse goes beyond simple virtual experiences, offering a persistent, interconnected network of 3D virtual worlds with the potential to revolutionize how we plan, experience, and share travel. This qualitative investigation delves into this under-researched area, unveiling the opportunities and challenges the metaverse presents for the tourism and hospitality industry.

1.3. The contributions of Metaverse to the tourism and hospitality sector

Metaverse involves a collective shared space and merges the physical and virtual worlds, thus combining the benefits of AR and VR technologies to create a seamless user experience (Dwivedi et al., 2023). Hence, the holistic role of the metaverse and its contributions towards the tourism sector are briefly elaborated in light of the existing literature. Existing definitions commonly describe the metaverse as a virtual world that is immersive and realistic, enabling people to work, socialize, play,

conduct transactions, and relax using technologies like MR/VR headsets and smart glasses (Dwivedi et al., 2022; Mystakidis, 2022; Kovacova et al., 2022). The metaverse can be understood as an online space where three-dimensional graphics are present, either on a screen or in VR. While some consider the metaverse as solely a virtual universe, most definitions view it as a merging of virtual and physical realms, providing an immersive environment for interacting with other users (Chakraborty et al., 2023; Dincelli & Yayla, 2022; Koohang et al., 2023). In the metaverse, transactions can be diverse, involving the buying and selling of virtual goods such as clothing, accessories, and virtual properties, as well as the exchange of cryptocurrencies and other digital assets (Osivand, 2021). The metaverse presents exciting possibilities for the hospitality sector, potentially improving operational efficiency, marketing tactics, and creating immersive travel experiences for tourists (Thapa, 2023). As the metaverse continues to develop, its impact on the industry will become clearer. The concept of the metaverse presents exciting opportunities for immersive tourism. By allowing visitors to explore virtual worlds and realistically interact with them, it offers a unique and novel experience of various tourist destinations. Imagine being able to visit historical sites, museums, natural wonders, or amusement parks without ever leaving the comfort of your own home (Volchek & Brysch, 2023). Furthermore, the metaverse can provide access to locations that are typically off-limits to the public, such as archaeological sites currently undergoing excavation (Dwivedi et al., 2022). However, it's crucial to acknowledge that the metaverse will never fully replace the value of real-life tourism experiences (Jafar & Ahmad, 2024). Physical visits offer a more comprehensive immersion in the culture and environment of a destination, along with the irreplaceable human interactions that virtual experiences simply cannot replicate. Instead, the metaverse should be seen as a complement to physical tourism, providing a convenient alternative for those unable to travel or those seeking to enhance their travel experiences with virtual visits (Monaco & Sacchi, 2023).

The emergence of the metaverse presents both exciting prospects and significant hurdles for the tourism industry. A key challenge in virtual tourism is to create captivating and immersive travel experiences that cater to users' interests and preferences. Tourism businesses must provide highly interactive and engaging experiences (Tsai, 2022). Dutta et al. (2023) leverage practice theory to explore how hospitality organizations can modify structures, norms, and practices to integrate the metaverse into learning and development. Additionally, ensuring user safety is a major concern in the metaverse, given the rise in cyberattacks and online fraud. Tourism companies must employ measures to protect users from malicious activities and scams. Moreover, regulating virtual tourism poses a significant challenge due to a lack of clear guidelines on governing tourism activities within the metaverse (Monaco & Sacchi, 2023).

The metaverse is a dynamic three-dimensional virtual space where users can interact with virtual environments and characters in real-time (Zhang et al., 2024). While this technological concept offers numerous opportunities for the tourism sector, it also presents challenges. Technical complexity stands as a major hindrance to tourism in the metaverse. Navigating complex interfaces and understanding platform-specific features may require users to possess certain technical skills, potentially creating barriers to the widespread adoption of the metaverse within the tourism industry (Monaco & Sacchi, 2023; Yang & Wang, 2023). A major challenge for the tourism sector is the limited awareness of metaverse tools. Many organizations are still evaluating this technology, and the lack of certainty hinders their ability to exploit its potential benefits (Fazio et al., 2023). Furthermore, the development of the metaverse raises ethical concerns that demand attention. The use of VR and artificial intelligence technologies raises issues surrounding user data privacy, potential manipulation of the virtual experience for commercial or political purposes, and the risk of perpetuating stereotypes and discrimination in virtual environments. Clearly defined ethical guidelines are essential to ensure that tourism in the metaverse upholds users' rights and fundamental values (Chen et al., 2023; Hassan & Saleh, 2023). Despite existing literature highlighting the potential for enhanced tourist experiences through metaverse integration (e.g., Koo et al., 2023), a gap remains in understanding how these technologies can be effectively embedded across various tourism contexts. Furthermore, research is limited on the challenges and opportunities the metaverse presents for employers within the tourism sector.

2. METHODOLOGY

To explore the potential and challenges of integrating metaverse into the hotel industry, a qualitative research approach was employed. This choice was driven by the suitability of qualitative methods in revealing how immersive technologies can enhance customer experiences (Weinberger, 2022), particularly given the inherent subjectivity of such experiences (Wilson & Hollinshead, 2015). Furthermore, qualitative research is well-suited for understanding the nuanced nature of tourism experiences (Rihova et al., 2015).

Fifteen industry professionals with extensive tourism sector experience were interviewed between May and September 2023. Semi-structured, open-ended questions were employed to guide the conversation and elicit insightful perspectives on the metaverse's potential impact within the Moroccan hospitality context.

Semi-structured interviews provided a rich tapestry of perspectives from the participants. To fully unravel the nuances of this data, we employed the rigorous methodology of content analysis. This established technique in tourism research (Veal, 2006) allowed us to transcend the surface level of respondents' statements and delve into the deeper layers of meaning beneath. By systematically identifying recurring themes and uncovering latent patterns within the data, we gained valuable insights into the underlying motivations and experiences that shaped participants' narratives.

The interview script consisted of 14 questions categorized into three key thematic areas:

• Metaverse understanding:

This section assessed participants' level of knowledge about the Metaverse concept and its potential applicability to the hospitality industry. Examples of questions included: "To what extent are you familiar with current Metaverse developments and trends within the global hotel sector?"

• Metaverse integration benefits:

This section explored the potential advantages and opportunities associated with integrating Metaverse technologies into hotel operations. Example questions included: "In your opinion, how might Metaverse integration impact customer experiences and expectations within hotel settings?"

• Implementation challenges and barriers:

This section investigated potential obstacles and concerns related to implementing Metaverse technology in the Moroccan hospitality industry. Example questions included: "Are there any potential risks or challenges associated with Metaverse integration within the Moroccan hotel industry that warrant consideration?"

Our study employed a balanced approach to participant recruitment, ensuring both diverse perspectives and specific knowledge of the Moroccan hospitality industry and the Metaverse. We combined inclusive and exclusive criteria (Major & Savin-Baden, 2012; Robinson, 2014) to achieve this, resulting in a representative sample with relevant expertise.

Inclusive criteria:
   • Hotel size and type: We included hotels across the spectrum, from intimate inns to sprawling resorts, to capture the industry's breadth.
   • Geographic location: Representation from various Moroccan regions ensured our sample reflected the diverse preferences and travel patterns of guests.
   • Establishment category: Budget hotels, international chains, and luxury accommodations were all included to cater to a range of budgets and preferences.

Participant selection criteria:
   • Domain Expertise: Participants were prioritized based on their demonstrated expertise in the Moroccan hospitality sector. This ensured their insights were grounded in a profound understanding of the industry's dynamics and challenges.
   • Technological Savvy: Familiarity with the emerging technologies was a key selection factor. This ensured participants could effectively evaluate the potential and limitations of these advancements within the hospitality context.
   • Active Engagement: A strong emphasis was placed on participant availability and commitment. This ensured we received comprehensive and insightful responses that contributed to the study's rigor.

While the selected experts have a basic understanding of the metaverse, the first thematic area on "Metaverse Comprehension" goes beyond a simple knowledge check. It delves deeper to explore how they perceive the metaverse's relevance to this specific study. Through a thorough exploration of the experts' nuanced understanding of the metaverse, the study seeks to gather a diverse range of perspectives and specialized knowledge. This multifaceted approach facilitates the construction of a more comprehensive and comprehensive view of the subject matter. Furthermore, this in-depth exploration serves an additional purpose: a posteriori validation of the selection criteria. Identifying any experts with a limited understanding of the metaverse allows for a critical assessment of their suitability for participation in the panel.

To gather data, we conducted 15 face-to-face interviews with Moroccan hotel managers, using a semi-structured format (see Table N° 1). We chose hotel managers who were easily reachable and available, as this allowed us to collect data quickly. However, we recognize that this approach, known as convenience sampling, has limitations, as discussed by Clark et al. (2007). While the accepted range for qualitative research participant numbers falls between 1 and 30 (Bengtsson, 2016; Rachão et al., 2021), our study demonstrated that data saturation was achieved with only 15 semi-structured interviews. This efficiency can be attributed primarily to the effectiveness of face-to-face interactions. These interactions facilitated deeper responses, enabled insightful follow-up questions, and ultimately enriched the data collection process (Creswell et al., 2007). We carefully monitored data saturation during the interviews, making sure we captured a wide variety of perspectives before concluding (Altinay & Paraskevas, 2008). Detailed descriptions of the participants are provided in Table I.

Table 1: **Profile of the Interviewees**

Sr. no.	Gender	Age (years)	City	Occupation	Categories of hotels	Duration of interview
1	Female	[25-35]	Tangier	Guest Service Representatives	5-star Palaces	40 min
2	Male	[35-45]	Tangier	IT Manager	4-star Hotels	35 min
3	Male	[45-60]	Agadir	Assistant Manager	5-star Palaces	40 min
4	Female	[45-60]	Marrakech	Guest Service Representatives	5-star Palaces	45 min
5	Male	[35-45]	Agadir	Sales and Marketing Manager	5-star Palaces	40 min
6	Male	[35-45]	Casablanca	Assistant Manager	5-star Palaces	35 min
7	Male	[25-35]	Marrakech	Sales director	5-star Palaces	30 min
8	Male	[45-60]	Casablanca	Assistant Manager	4-star Hotels	35 min
9	Female	[35-45]	Agadir	General Manager	5-star Palaces	45 min
10	Male	[45-60]	Marrakech	IT Manager	4-star Hotels	35 min
11	Male	[35-45]	Tangier	Sales and Marketing Manager	4-star Hotels	30 min
12	Female	[25-35]	Casablanca	General Manager	5-star Palaces	45 min
13	Male	[35-45]	Tangier	Front Desk Agent	Riad*	30 min
14	Male	[35-45]	Casablanca	General Manager	5-star Palaces	35 min
15	Female	[35-45]	Tangier	Guest Service Representatives	4-star Hotels	45 min

*Traditional Moroccan guesthouses with charming courtyards, often located in medinas (old town centers).

3. DATA ANALYSIS

The interviews were recorded and transcribed, then coded both manually and with software. Careful attention to methodology guided the subsequent qualitative data analysis, which followed steps outlined by Kallio et al. (2016) and Adeoye-Olatunde & Olenik (2021):

- Data organization and preparation: The interviews were transcribed, then coded manually to anonymize the participants. They were then organized into a corpus.
- Reading of all data: The researchers carefully read the transcripts to familiarize themselves with the data and develop a comprehensive understanding of the participants' experiences.
- Detailed analysis of the textual corpus: The researchers used the IRAMUTEQ software to conduct a quantitative analysis of the data. This analysis identified common themes and concepts in the interviews. Figure 1 shows the word clouds that were produced.
- Use of coding to generate categories: The researchers used the themes and concepts identified in the quantitative analysis to generate thematic categories.
- Presentation of results with interconnected themes: The researchers presented the results of the analysis by highlighting the relationships between the different themes.
- Interpretation of data: The researchers interpreted the results of the analysis by comparing them to the existing literature.

Figure 1: **Result of keyword cloud analysis**

Source: Author's own work

The keyword cloud analysis (Figure 1) revealed a fascinating interplay between challenges and opportunities surrounding metaverse adoption in tourism and hospitality. Terms like "skills" and "security" highlight potential challenges. The industry will need to address workforce upskilling to ensure employees possess the necessary technical expertise to navigate the metaverse. Additionally, robust cybersecurity protocols will be critical to protect customer data and mitigate potential security threats within the metaverse environment.

On the other hand, terms like "marketing," "innovation," and "customer experience" point towards exciting opportunities. The metaverse presents a unique platform for innovative marketing strategies, potentially allowing for immersive virtual experiences that showcase destinations and services in captivating new ways. Furthermore, the metaverse holds the potential to revolutionize customer experiences, offering interactive and personalized interactions that can redefine how tourists and guests engage with the industry.

4. RESULTS

Based on the findings, it is worth mentioning that the utilization of metaverse is still in the early stages of progress. It's possible that certain players within the industry might not be familiar with this emerging trend. Nevertheless, it is intriguing to delve into the potential opportunities and challenges that these immersive technologies could bring to these well-established hotels. This section presents the key opportunities and challenges derived from the analysis of the interviews.

4.1. Potential challenges of metaverse in the tourism and hospitality sector

When hotels contemplate using immersive technologies, it is crucial to acknowledge the difficulties they might encounter. Interviews have shed light on several key points in this regard. Firstly, the concept of the metaverse is still not well-defined, leading to limited familiarity and understanding among hotels. This lack of understanding poses challenges for those who wish to explore the opportunities offered by this emerging technology. Additionally, high costs associated with using the metaverse present a major hurdle. To establish a virtual presence and develop the necessary technical skills, hotels need significant financial investments, which is challenging for establishments with limited financial resources.

According to one interviewee, the current technological era allows for the creation of hotels in the metaverse. While significant progress has been made in digitalization since the pandemic, successfully integrating artificial intelligence and VR into websites and promotions requires substantial investment. Several interviewees expressed concerns that failing to do so has resulted in a loss of reputation and market share. To make the most of this opportunity, several hotels have hired experts in the field of the metaverse and blockchain technology who can facilitate hotel bookings and cultivate customer loyalty. Furthermore, the limited human interaction in the metaverse is an important challenge to consider. For instance, the interviews revealed a concern among hoteliers regarding the need for workforce upskilling to prepare for the metaverse. For example, one hotelier stated, "The skills needed to operate in the metaverse are completely different from what we currently have. We'll need to invest in training programs to ensure our staff is equipped to handle this new technology." This quote highlights the perceived gap between current skillsets and the demands of the metaverse.

Hotels are finding it challenging to ensure a satisfactory customer experience in addition to the virtual environment by offering personalized service and opportunities for live interaction. Moreover, it is also crucial to provide training and hire professionals specialized in the metaverse and blockchain to develop and manage the necessary technological solutions, however, awareness and adoption of the metaverse within the Moroccan hospitality sector pose a challenge as only technology experts and individuals working in the web industry seem to have a good understanding of this concept. To encourage its effective use in attracting more tourists and enhancing the visitor experience in Morocco, it is important to highlight the value and benefits of the metaverse to industry entities. Numerous interviewees have emphasized the importance of effective communication and widespread promotion through various channels, such as traditional media and tourism events, to address the current challenges. It is also crucial to develop user-friendly tools and platforms that facilitate interaction with the metaverse, thereby encouraging greater adoption.

4.2. Potential opportunities of metaverse in the tourism and hospitality sector

Despite some obstacles, there are exciting opportunities for the hotel industry in the metaverse as identified by the interviewees. Based on the analysis of qualitative data, nearly all the interviewees agreed that professionals in the hospitality sector, especially in Morocco, are becoming increasingly familiar with the concept of metaverse. The front office manager mentioned that digital marketing has played a significant role in spreading awareness about the metaverse, but it remains relatively unknown among the general public. This observation was supported by the acting sales manager, who expressed that the metaverse presents a valuable opportunity for enhancing the brand image. They also emphasized the importance of improving the online presence and brand image on social media. By being the first to capitalize on this opportunity, they believe they can establish a favourable position in both national and international markets. It was evident from findings that the idea of the metaverse has already made its way into the discussions within most Moroccan hotels. One interviewee remarked that the metaverse represents the new world of digitalization and cutting-edge technology.

One of the interviewees, who is the director of the hotel, expressed this view on the importance of trained individuals in the field of immersive technologies and digitalization, particularly in Morocco. Some interviewees acknowledged that finding such individuals is challenging but emphasized that digitalization has made everything possible, especially in the world of artificial intelligence (AI). It has been discovered that the utilization of immersive technologies has offered hotels the opportunity to create captivating virtual experiences for their customers. These experiences included virtual tours of the hotel facilities, simulated rooms and common areas, and the ability to organize special virtual events. By providing these virtual experiences, hotels have enhanced the customer's overall experience by offering a unique way to explore the hotel and generate excitement even before physical arrival.

Another interviewee highlighted the rich cultural and historical heritage of the city of Fes, Morocco. They suggested that the metaverse, AR and VR could be utilized to create immersive virtual experiences for travelers to discover and explore the hidden treasures of the city even before their actual visit. Through interactive virtual tours of Fes in the metaverse, travelers could get a realistic glimpse of iconic sites like the medina, palaces, and historic gardens. Additionally, they could interact with virtual guides who would provide contextual information and interesting anecdotes about these sites. The interviewee firmly believed that these immersive virtual experiences would generate interest and enthusiasm among potential travelers, encouraging them to personally explore Fes.

The interviews also highlighted the potential for the metaverse to revolutionize customer experiences. One sales director enthusiastically stated, "Imagine offering virtual tours that let potential guests explore destinations in a completely immersive way. The metaverse could completely transform how we showcase travel packages!" This quote exemplifies the excitement some industry professionals hold regarding the metaverse's potential to enhance customer engagement.

In addition, the use of immersive technologies was mentioned by several interviewees as a potential way for hotels to expand their reach and target an international audience. By establishing a virtual presence, hotels would be able to attract customers from all around the world, breaking free from the limitations of geographical boundaries. As a result, efforts are being made to build a strong online presence and improve e-reputation through social networks. This shift towards the metaverse has the potential to create exciting opportunities for marketing and business growth, enabling hotels to connect with potential customers who might not be able to visit the physical location. Specifically, in the context of Morocco, one interviewee highlighted the metaverse as an opportunity for market positioning that should not be overlooked. Moreover, the metaverse offers a unique chance to create immersive virtual experiences that showcase the rich cultural heritage of Morocco. Visitors would have the opportunity to explore historical medinas, iconic landmarks, and gain a deeper understanding of the country's vibrant culture. This innovative approach has the potential to attract new tourists and further enhance Morocco's appeal as a desirable destination.

Additionally, immersive technologies offer new possibilities for the creation and sale of digital products like non-fungible tokens (NFTs). One interviewee proposed the idea of organizing a dedicated virtual exhibition for NFTs, featuring local artists' works, as a means to diversify offerings and establish the hotel as a trailblazer in the emerging digital economy. Ultimately, the objective is to position the hotel as an innovative leader prepared to embrace technological advancements and deliver extraordinary experiences to its customers. According to the sales manager, integrating the metaverse, AR and VR into the hospitality industry creates opportunities to offer travelers unique and immersive encounters. By combining VR and AR, hotels can provide interactive virtual tours of popular tourist destinations, enabling customers to explore iconic sites even before physically visiting them. This approach aims to foster a strong emotional connection with travelers and generate their interest in booking their stays.

This research delves deeper by identifying specific themes that emerged from the interviews with industry experts in Morocco. Some of these themes go beyond the basic "challenges" and "opportunities" framework and highlight unique considerations for an emerging country:
- Digital infrastructure limitations: The interviews revealed concerns about the potential limitations of Morocco's existing digital infrastructure to fully support widespread adoption of the metaverse. This highlights the need for investment in infrastructure development to ensure equitable access for all stakeholders.
- The digital divide: Experts highlighted the potential for the metaverse to exacerbate the existing digital divide between urban and rural areas in Morocco. Strategies to bridge this gap are crucial to ensure all tourism stakeholders can benefit from the metaverse.
- Democratizing access to tourism: The metaverse can act as a powerful equalizer, allowing those with limited physical travel options to virtually explore tourist destinations in Morocco. Interviewees emphasized the potential for the metaverse to expand access to tourism experiences.
- Showcasing unique heritage: The metaverse opens a unique window to showcase Morocco's rich cultural heritage and lesser-known destinations. This can attract a wider tourist base and support the diversification of the tourism industry.
- Skill development needs: Effectively utilizing the metaverse within the Moroccan tourism industry necessitates developing new skills among tourism professionals. Training programs will need to be implemented to prepare the workforce for this technological shift.

5. DISCUSSION

The metaverse is frequently envisioned as the next iteration of the internet, a persistent virtual world where people can interact in real-time. This research delves into how the metaverse acts as a platform that converges various extended reality technologies, fostering these interactive experiences. Moreover, these findings are also aligned with the recent literature which suggests how many businesses have realized its immense potential and are actively involved in its growth, aiming to maximize the advantages it brings (Koohang et al., 2023). The hospitality industry has undergone a major transformation in recent years due to advancements in technology. These advancements, highlighted by Stylos et al. (2021), include the implementation of automated systems and improved connectivity (Buhalis & Leung, 2018). Artificial intelligence has also played a key role in optimizing various industry processes (Jabeen et al., 2022). Furthermore, there has been a growing trend toward immersive experiences using virtual and AR (Hsu & Tseng, 2022). To ensure the safety of personal and financial data, the use of blockchain technology has allowed for the encryption of sensitive information (Bustard et al., 2019; Hsu & Tseng, 2022; Leung, 2019; Shafiee et al., 2021). Despite selecting participants familiar with technology, our research revealed a surprising lack of understanding regarding metaverse and AI integration within their tourism businesses. This can be attributed to the increased uncertainty surrounding these new technologies and limited exposure to similar integrations. To bridge this gap, hotels can implement in-depth virtual training programs utilizing virtual scenarios and simulations. These programs would equip employees with the knowledge and skills to grasp the potential of these platforms, embrace new trends, and ultimately enhance customer engagement.

Furthermore, our findings highlight the nascent understanding of the metaverse's usefulness within the tourism sector. Concerns exist regarding effective governance, ethical considerations, data privacy, and data accuracy (Monaco & Sacchi, 2023). However, the metaverse holds immense potential to revolutionize hospitality. Imagine travelers engaging with virtual reality experiences, creating a fully immersive experience (Dwivedi et al., 2022). This research underscores the need for the tourism sector to address knowledge gaps and prepare for the transformative possibilities of the metaverse. Smart hotels that embrace this concept can exceed guest expectations by creating virtual scenarios within the metaverse, accommodating non-physical tourists, and promoting accessibility and inclusivity (Gursoy et al., 2022; Casais & Ferreira, 2023). Additionally, these advancements have the potential to generate economic value by leveraging cryptocurrencies. The rapid expansion of the metaverse has triggered widespread discussions about its capacity to bring about a societal revolution. Supporters envision the metaverse as a pioneering advancement that will deeply influence people's daily existence, much like how the internet has transformed our lives (Koos, 2021).

In our investigation into how the metaverse can be utilized in the hotel industry, we interviewed representatives from different hotels. The results showed that the use of the metaverse in this sector is still in its early stages, with some people involved in the industry unaware of this emerging trend. Despite the exciting potential of the metaverse for luxury hotels, our research revealed a limited understanding among Moroccan hotel employers. As expected, integrating the metaverse is perceived as challenging due to the need for additional resources and infrastructure. However, during interviews, hotel managers were introduced to the metaverse's concept and its potential benefits for the tourism sector. The idea of virtually showcasing hotel properties resonated strongly, as it could allow tourists to develop a clearer picture of amenities and surroundings, ultimately boosting sales. Some expressed their belief that the metaverse is the future of the industry, but they also pointed out challenges such as the lack of skilled professionals in this field. Overall, these findings are consistent with the literature which reflects how digitization has opened up new possibilities for growth through artificial intelligence and the metaverse in the hospitality sector (Monaco & Sacchi, 2023). These findings align with similar research (e.g., Monaco & Sacchi, 2023; Koohang et al., 2023) that suggests companies are beginning to comprehend the impact of the metaverse and how it can increase profits, leading to exploration in various areas. In this regard, hotels are recommended to create enhanced awareness about metaverse through initiation of virtual events in the metaverse. Moreover, creation of virtual marketplaces in metaverse would facilitate hotels in offering souvenirs and special products to a wide range of customers.

Additionally, in the hospitality and tourism industry, researchers have been investigating existing practices that align with the concept of the metaverse. In a recent study by Buhalis and Karatay (2022), they conducted interviews to delve into how Generation Z experiences cultural heritage in the context of mixed reality. The findings indicated that cultural heritage destinations should consider adopting mixed reality to enhance consumer experiences, thus laying the groundwork for the future metaverse. Furthermore, another study by Um et al. (2022) explored the connection between the metaverse and the development of smart tourism through an early case study in Incheon, South Korea. The researchers expanded the concept of the metaverse in the context of smart tourism, emphasizing both reality-based and virtuality-based metaverse, and provided examples of smart tourism development in Incheon. We recommend future research to delve deeper into the socio-psychological impacts of the metaverse on consumer preferences. This could involve investigating factors like user experience, perceived risk, and sense of presence within the metaverse, and how these factors influence tourist decision-making and engagement levels. New forms of interaction between people and technology are pointing towards a future where traditional methods of collecting data and information will be overshadowed by interactive and human-like AI agents. These agents can engage with customers on a personal level, appearing as 3D virtual AI agents in VR or holograms in AR (Dwivedi et al., 2021). According to volchek and Brysch (2023), hospitality services in the metaverse are gaining popularity. What's interesting is that metaverse destinations can transcend their virtual boundaries and become real physical places (Um et al., 2022). This integration opens up exciting possibilities for technologically advanced and enriched tourist experiences.

On the demand side, consumers are already showing interest in virtual supplements (Elmasry et al., 2022). Additionally, there is a growing demand for more immersive cultural experiences, learning opportunities, self-realization within society, and a focus on ethical and sustainable tourism. This increasing demand creates room for the development of new technology-based services (Lundy, 2015). Metaverse tourist destinations are already emerging, evident from the efforts made by places like Incheon in Korea and the Deutsches Museum in Munich. They have begun incorporating metaverse experiences as part of their offerings to visitors. In a study conducted by Gursoy et al. (2022), they examined the development of metaverse experiences considering people's motivations (whether driven by pleasure or practicality) and the level of interactivity (low or high). This research provides valuable insights for those studying hospitality. Given the potential and significance of the metaverse, it is expected that researchers will continue to focus on this topic in the future (Gursoy et al., 2022Building on our research and insights from the literature, we suggest future research integrate qualitative methods like case studies and in-depth interviews. This would provide deeper understanding of consumer preferences and expectations regarding hotel services within the metaverse. Additionally, exploring revenue generation models and new business models based on infrastructure requirements is crucial. This would equip the hospitality sector with a clearer picture of the resources needed to successfully implement metaverse technologies. After thoroughly discussing and analyzing the topic, it is clear that the idea of the metaverse is becoming increasingly popular in various industries. However, our analysis indicates that we have not observed any advancements or initiatives related to the metaverse as of yet in the context of Morocco. On the other hand, immersive experiences, particularly VR, are already quite prevalent and widely used. Nonetheless, it may still take a significant amount of time for the concept of the metaverse to be actively explored and integrated into the hospitality sector in Morocco. However, industry authorities recognize the metaverse's potential to address some key challenges within the hospitality sector. For instance, the metaverse could offer 3D virtual tours and detailed hotel information, potentially reducing customer dissatisfaction by minimizing issues like room switches. The findings suggest that those responsible agree that the metaverse offers an opportunity for the sector by enabling decentralization and the creation of a vast data repository, attracting a larger customer base from all corners of the globe. Moreover, the metaverse's accessibility has the ability to address the issue of overcrowding resulting from seasonal tourism in certain regions, as emphasized by Go and Kang (2023). Furthermore, the increasing preference of people for digital assets instead of physical possessions indicates a transition towards a more sustainable future without the need for physical materials, as indicated by Jauhiainen et al. (2023). Nevertheless, it is crucial to recognize that specific scholars (Allam et al., 2022; Pandey et al., 2020) have expressed apprehensions regarding the ecological viability of the metaverse. The rapid expansion of its user community requires substantial computational capabilities and fast internet speeds, leading to heightened energy usage, predominantly sourced from non-renewable resources. In addition, it is vital to contemplate other important aspects since previous studies have unveiled certain constraints. A key challenge for hotel adoption is the limited understanding of the metaverse concept. This lack of familiarity with this emerging technology hinders hotels' ability to effectively integrate it. Additionally, using the metaverse incurs significant costs, which present a major hurdle. Establishing a virtual presence and developing the necessary technical skills require substantial investments, which can be particularly challenging for hotels with limited financial resources. Our findings align with previous research conducted by Chen (2022), Zhang (2022), and Dwivedi et al. (2023). It is also crucial to consider the limited interpersonal interactions within the metaverse. Hotels need to come up with strategies that ensure a superior customer experience that goes beyond the virtual realm. This can be achieved by offering personalized services and opportunities for real-time interactions. Based on the same idea, future researchers are suggested to explore long term outcomes of metaverse on the behavior and attitude of tourists, and how industrial trends are likely to be changed within a few years.

Having strong ICT skills is crucial for accessing and exploring the metaverse. Since the metaverse involves various technical aspects, not everyone currently possesses the required know-how. If we don't take proactive steps to bridge this gap, individuals who find it difficult to adapt or lack the necessary resources will be excluded from the amazing opportunities for connection and collaboration that the metaverse provides. Ultimately, they will miss out on engaging in new forms of communication, interaction, and research as well (Zhang, 2022).

The concept of the metaverse is still in the early stages, and there are several technological challenges that need to be addressed. In order to attract users, tourism organizations should invest in developing their virtual presence and utilize gamification techniques. However, the lack of a comprehensive master plan and the high costs involved present significant obstacles to this effort (Dwivedi et al., 2023; Xu & Buhalis, 2021; Xu et al., 2017). Alongside the technological challenges, there are also economic challenges that limit access to the metaverse in the hospitality industry. Technological advancements and their associated costs prevent poorer regions and businesses from participating in this virtual world. Additionally, the high cost of necessary equipment and the problem of motion sickness can hinder the immersive experience for certain users. These financial barriers lead to inequalities and create a digital divide, particularly affecting underrepresented groups (Buhalis et al., 2023). It's important to understand that virtual environments bring about ethical and legal challenges, especially within the hospitality sector where laws differ between locations. These challenges include issues like harassment, cybercrime, fraud, and sexual exploitation, which raise significant concerns in these digital spaces (Qin et al., 2022; Soon, 2002). A significant aspect to think about is the potential for addiction in the metaverse, which blurs the boundaries between the real and virtual realms. The metaverse provides experiences that may appear lifelike, making it challenging to distinguish them from reality. Consequently, this can lead to behaviors that are addictive and detrimental, as mentioned by experts (Buhalis et al., 2023; Yang & Wang, 2023).

6. PRACTICAL IMPLICATIONS

Based on the findings of this research, some practical implications regarding the usefulness of metaverse in the hospitality sector, and ways of its implementation are offered in this section. It is essential to invest in the necessary digital infrastructure to ensure fast and reliable connectivity, especially in tourist areas. This will create a seamless virtual immersive experience, adding value to customers. Also, it is crucial to train and recruit professionals specialized in the field of the metaverse and blockchain. These experts will be able to develop and manage the technological solutions necessary for the successful integration of the metaverse in hotels. Strong expertise in this field will also facilitate the implementation of more efficient hotel bookings and customer loyalty. Moreover, hotels can leverage NFT technology as an innovative way to build customer loyalty and provide a unique experience upon arrival. NFTs are unique digital assets that can represent artworks, collectibles, or exclusive access rights. Hotels can create special NFTs for their loyal customers. These NFTs can be awarded to clients based on their loyalty level or stay history. NFT holders can benefit from exclusive perks such as room upgrades, special discounts, priority services, or tailored experiences on their next stay. This will incentivize customers to return regularly and engage more with the hotel. Instead of a traditional welcome drink, hotels can offer their customers a personalized NFT representing a digital artwork or a unique experience related to Morocco.

In addition, hotels can identify influencers specializing in travel, tourism, and cultural discovery, and invite them to experience their virtual tours. By working closely with influencers, hotels can arrange personalized virtual tour sessions, showcasing the unique aspects of their establishment. Influencers can share their experience with their followers, using their social media platforms and blogs to promote virtual tours of Moroccan hotels. They can post photos, videos, and stories on platforms such as Instagram, YouTube, TikTok, etc., using relevant hashtags and tagging the relevant Moroccan hotels. This will help reach a wider audience and increase the visibility of virtual tours to potential travelers. The hotel can reserve a specific space, such as a game room or lounge, where visitors can access and participate in metaverse activities. This space should be equipped with VR equipment, headsets, and necessary peripherals for an immersive experience. It is important to offer this metaverse experience at an affordable cost for hotel guests. This can be achieved through various approaches, such as special packages that include access to the metaverse space, preferential rates for hotel guests, discounts for longer stays, or even the option to purchase daily passes for access to the metaverse space. Hotels can consider offering VR headsets for rent or loan to their guests. This would allow guests to enjoy virtual tours in the comfort of their hotel room without having to invest in purchasing a virtual headset. Hotels can negotiate preferential rates with virtual headset companies to minimize the costs associated with this offering.

Furthermore, hotels can explore sponsorship or partnership opportunities with VR headset manufacturers. These partnerships can help receive virtual headsets for free or at a reduced cost in exchange for promoting the manufacturer's brand in the hotel's virtual tours. This can help minimize costs associated with the use of virtual headsets and strengthen the relationship between the hotel and the manufacturing company. Each tourist entity, such as a hotel, restaurant, or travel agency, can consider developing its own cryptocurrency. This digital currency would be specific to the establishment and could be used for internal payments, such as accommodation fees, meals, activities, and additional services. Blockchain technology would be at the core of this customized cryptocurrency. It would ensure the security, transparency, and traceability of transactions made. Cryptocurrency transactions could be recorded in a decentralized manner, thereby reducing the risks of fraud or manipulation. It would be important to raise awareness among potential customers about the existence of this customized cryptocurrency and encourage them to adopt it while respecting upcoming legal regulations in the years to come. Tourist entities can promote the benefits of this solution through their communication channels, such as websites, social media, and partnerships with travel agencies.

Finally, it would be important to raise awareness among the Moroccan government about the potential economic benefits of using customized cryptocurrency in the hospitality sector. This would involve highlighting the positive contribution of this solution to the increase in Moroccan GDP. By emphasizing economic growth opportunities and attractiveness to investors, it would be possible to convince authorities of the relevance of allowing digital transactions. It would be necessary to work closely with government authorities to develop regulatory frameworks suitable for the use of customized cryptocurrency in the tourism sector. This would involve defining rules and procedures for cryptocurrency transactions, consumer protection, anti-money laundering, and other relevant legal aspects. It would be crucial to implement robust security measures to ensure users' trust and the protection of their personal data during cryptocurrency transactions. This could include the use of advanced encryption technologies, security protocols, and rigorous verification mechanisms.

The rapid growth of the metaverse as a ground-breaking technology may require rethinking the traditional concept of tourism. In the near future, it could transform into a much broader phenomenon encompassing social, cultural, and economic aspects. This new form of tourism would involve individuals, or even their digital counterparts, exploring real or virtual locations beyond their everyday surroundings, whether for personal or professional reasons. In order to deal with certain challenges, businesses and platforms should take proactive steps to reduce privacy and security risks within the metaverse. This involves not only addressing concerns surrounding intellectual property and copyright infringement, but also determining who is responsible for ensuring the privacy and security of users in situations involving multiple entities (Buhalis et al., 2023).

7. LIMITATIONS AND FUTURE RESEARCH

This study on the opportunities and challenges of the metaverse in hospitality has certain limitations that need to be considered. Qualitative research, which is the approach used in this study, often relies on a small group of participants to gain a deeper understanding of their experiences and perspectives. However, this means that the findings may not be applicable to larger populations, limiting their generalizability. Indeed, when employing a convenience sampling method in scientific research, it is crucial to consider both its advantages and limitations. One advantage of convenience sampling is its ease of implementation and cost-effectiveness, making it a practical choice for studies with limited resources or time constraints. However, convenience sampling comes with inherent limitations such as limited representativeness, undercoverage bias, observer bias, restricted external validity, and sampling frame constraints (Emerson, 2021).

To enhance the study, it would be beneficial to conduct interviews with technologically advanced hotels in countries other than Morocco. This would provide diverse and insightful results. However, it is important to acknowledge that cultural and contextual differences among these countries should be taken into account. Therefore, the findings cannot be universally generalized.

Furthermore, the quality of qualitative research hinges on participants' ability to effectively articulate their experiences and opinions. Factors such as language barriers or difficulties in expressing complex ideas can impact the richness and depth of the collected data.

The metaverse presents potential for enhancing halal tourism experiences (Islam et al., 2023) by enabling virtual exploration of destinations and services compliant with sharia principles. However, further research is needed to assess the efficacy of such virtual experiences in influencing travel decisions and ensuring adherence to religious guidelines in actual travel settings.

Experts have suggested that the introduction of the metaverse will bring about significant changes in the hospitality and tourism industry. However, there is a crucial juncture where both academia and industry must strive to comprehend this emerging phenomenon. In order to effectively navigate the challenges and opportunities presented by the metaverse, it is imperative to acquire further knowledge. Nevertheless, this knowledge must be approached with a balanced perspective, fostering additional research on potential issues such as social exclusion, the reliability of data, and the negative impacts on vulnerable users from ethical and behavioral standpoints. To gain a better understanding, qualitative research could concentrate on identifying marketing opportunities specific to the hospitality sector in Morocco within the metaverse. This could involve assessing how the metaverse can be utilized to promote Moroccan destinations, create immersive experiences for visitors, and capture new market segments. Additionally, exploring how the metaverse can contribute to the preservation of Moroccan cultural heritage and national identity would also be intriguing.

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