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Review Article

A Systematic Bibliometric Review on Metaverse as a Disruptive Technology Reforming Destination Marketing Practices

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ABSTRACT

In recent years, the role of technology in improving information and communication within the hospitality industry has evolved significantly and is considered one of the strategic resources that enable enterprise businesses to shape superior customer experiences by becoming more engaging and informative. Due to shifting consumer behavior-where an ever-increasing amount of consumers seek to purchase on the internet-the current paper examines the use of the metaverse for destination marketing and builds a base for further research into this aspect. Through a bibliometric analysis of articles indexed in WoS, this study identifies the emergent themes, the structure of the field, and the collaboration patterns. A systematic review of the selected 15 articles which are refined through the PRISMA model with a Boolean proximity search strategy is presented. Bibliometric maps were constructed using the VOSviewer software. The findings also prove that the development of metaverse tourism enhances the attractiveness of destinations by adding more value to the tourist experience. Digital activities in the metaverse provide much-needed insights into customer needs and preferences, thus enabling proactiveness in engaging and informed decision-making.

Keywords: Bibliometric, destination, disruptive, metaverse, systematic

INTRODUCTION

Consumer behavior is changing tremendously and more people are using the internet to buy things. At the same time, companies are spending more money on websites and apps to make online shopping easier. This is creating something called the 'metaverse,' which is like a super-connected online world. In this world, people and businesses can interact and do business in new ways, like using virtual reality. It's like a peek into what the future of the internet might look like.

Neal Stephenson first introduced the notion of the 'metaverse' in his novel "Snow Crash," portraying a virtual space accessible through terminals featuring virtual reality technology, allowing users to embody avatars (The Economist, 2020). Ball (2022) delineates the metaverse as an expansive network of real-time rendered 3D virtual worlds, accommodating an essentially infinite number of users concurrently, each experiencing a distinct sense of presence and continuity of data. This immersive digital space, facilitated by augmented reality (AR) and virtual reality (VR) technologies (Bansal et al., 2022), enables users to engage socially through digital avatars, fostering value generation and collaborative experiences.

Employing mixed reality technology, the metaverse integrates various technologies via ambient intelligence, bridging the divide between digital and physical realities, thereby facilitating the amalgamation of resources and holistic experiences (Buhalis, 2020). Characterized by three-dimensional (3D) immersive environments and robust social interaction components, the metaverse is propelling towards a state of blended living (Buhalis & Karatay, 2022).

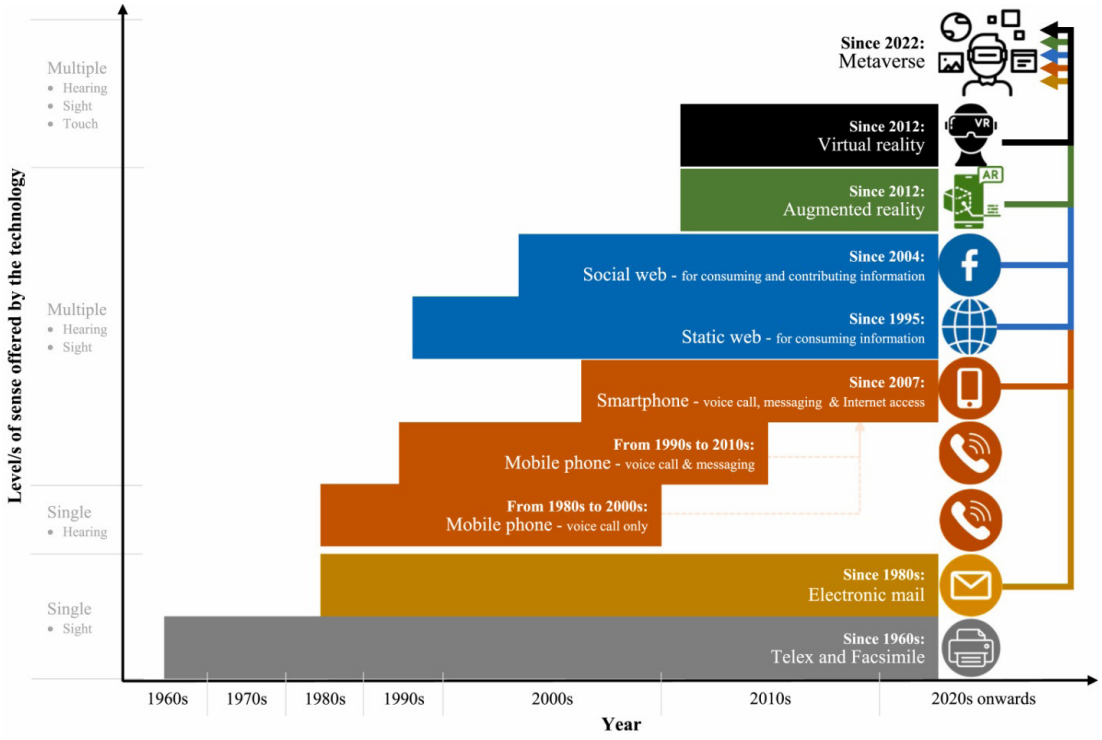
The initiation of the metaverse signifies a paradigm shift in the global market landscape(Hwang & Lee, 2022), marking it as a transformative frontier for businesses worldwide. Many proponents argue that the metaverse harbors the potential to revolutionize both business operations and social interactions on a scale alike to the transformative impact of the Internet.

The potential impact of the metaverse extends across various facets of individuals' professional endeavors and personal lives, introducing an array of functionalities, tasks, and experiences. Anticipated as a harbinger of innovation and disruption across all spheres of human activity, the metaverse holds profound societal and cultural implications while offering transformative prospects and challenges for global marketplaces and communities (Dwivedi et al., 2023).

Studies suggest that the metaverse serves as a technology that intertwines real and

virtual environments for retailers. It not only enriches in-store experiences through features like augmented reality but also translates physical shopping experiences into 3D virtual environments. This dual functionality creates fresh investment avenues for retailers in both the physical and virtual realms, enabling deeper consumer engagement and insights. Embracing the metaverse necessitates retailers to prioritize customer-centric approaches in shaping their strategic decisions. This shift will lead to the emergence of diverse customer segments, including avatars, which reflect their individual preferences. These avatars, essentially digital personas managed by users, will introduce new sets of preferences and needs.

As a disruptive technological phenomenon, the metaverse encompasses a three-dimensional virtual environment that emphasizes interpersonal interactions, delivering users an immersive and spatially-oriented experience through cutting-edge technology (Buhalis et al., 2023b; Hollensen et al., 2022; Kim et al., 2023).



Source: (Buhalis et al., 2023)

The importance of technology has grown significantly information and communication within the hospitality sector, offering essential strategic resources for businesses to improve customer experiences through enhanced engagement and intelligence. (Buhalis & Karatay,

2022) conducted 18 semi-structured interviews to explore how Generation Z engages with cultural heritage in mixed reality (MR) environments. Their findings suggest that cultural heritage sites could benefit from incorporating MR technology to enhance visitor experiences, laying the groundwork for future developments in the metaverse. Meanwhile, (Um et al., 2022) conducted a case study in Incheon, South Korea, examining the intersection of the metaverse and smart tourism. They differentiated between reality-based and virtuality-based metaverse contexts, showcasing examples of smart tourism initiatives in Incheon. Additionally, (Gursoy et al., 2022)delved into the creation of metaverse experiences, analyzing motives (hedonic vs. functional) and interactivity levels (low vs. high) to offer insights for researchers in the hospitality field. The growing potential and significance of the Metaverse are likely to attract increased attention from scholars in the coming years (Gursoy et al., 2022) .

This research endeavors to elucidate the role of the metaverse in destination marketing and to lay the groundwork for future exploration in this area. By offering tourism practitioners foundational knowledge, it aims to facilitate the integration of this technology into their business strategies and future endeavors. Given the nascent stage of the metaverse, this study concentrates on identifying potential opportunities rather than dwelling on established practices. The significance of this study lies in its contribution to advancing research on the impact of the metaverse on destination marketing. It encompasses trend analysis, impact assessment, landscape mapping, performance benchmarking, evaluation of collaboration patterns, and decision support. Through an examination of publication output, citations, and collaborations, this study unveils emerging themes, evaluates research impact, illustrates field structures, compares performance metrics, discerns collaboration patterns, and offers insights for academia, policymaking, and industry. These insights serve to guide future research endeavors, foster collaboration, and optimize resource allocation, thereby enhancing research efficiency and progress. Acknowledging the scarcity of scientific literature on the metaverse across various disciplines, this study considers all available publications.

DATA AND METHODS

Among the various online databases, Web of Science (WoS) was used in this study because it is globally considered as one of the most reliable, trustworthy and strong database. The primary and vast dataset, which included 968 publications, was subjected to bibliometric analysis to determine the most relevant research in the field of metaverse. Concurrently, datasets of 15 articles was used in the literature review to study the impact of metaverse in marketing field.

Moreover, these 15 reviewed articles served the dual purpose of identifying research gaps and delineating opportunities for future investigations. The outcomes from each phase of the review process in systematic way are visually presented in Figure 1.

To comprehensively gauge the extent of literature referencing the term "Metaverse," a topic search employing the term "Metaverse" was conducted, yielding 968 articles. In the course of this search, a Boolean Proximity search strategy was applied to identify words closely associated with metaverse (i.e., "metaverse", "artificial reality"). Subsequently, to refine the focus in alignment with our research objectives, quantity of documents was delimited based on criteria such as type, citation databases, date range, languages used, and categories. The exclusion criteria and selection process are explicated in the flow chart diagram, as depicted in Figure 1.

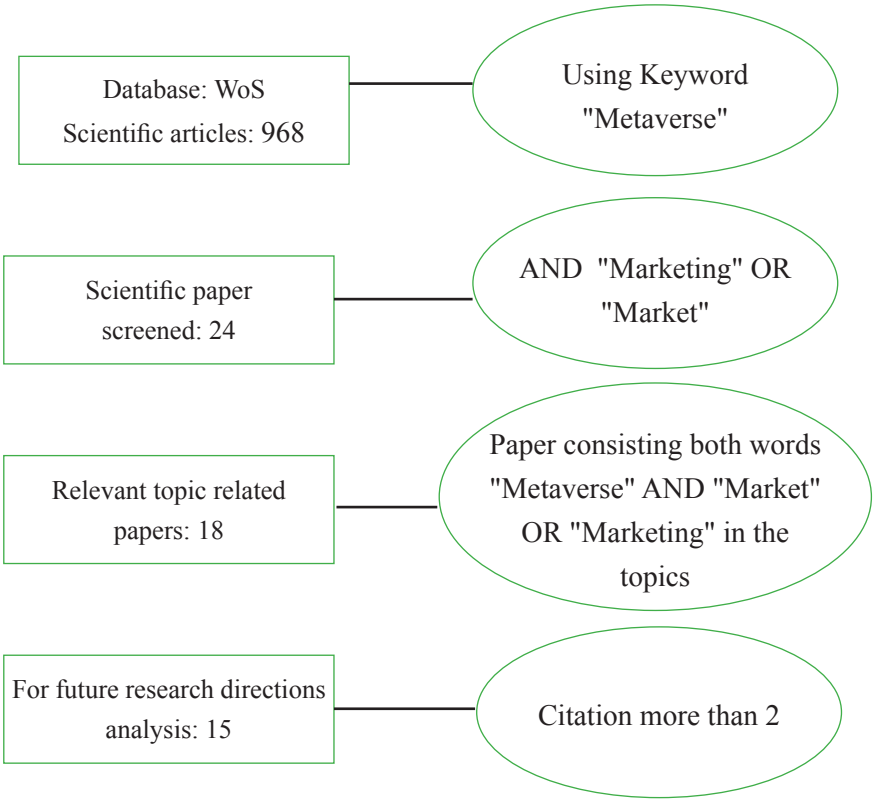
The researcher examined all articles related to "metaverse" to monitor how the term is used in academic literature. Web of Science database was used to provide statistics on research productivity (Birkle et al., 2020), including the historical development of publications, the most impactful articles, the main journals where they were published, and the articles cited most frequently. Moreover, researcher employed "VOSviewer" software for a bibliometric mapping approach (Van & Waltman, 2014) to analyze patterns and pinpoint key topics in the area of metaverse.

VOSviewer software allows the generation and visualization of maps, considering co-citations of authors or journals, as well as bibliometric networks involving citation, co-citation, co-authorship, bibliographic coupling, and other factors. This tool is highly beneficial for presenting extensive bibliometric maps in a user-friendly and understandable manner (van Eck & Waltman, 2014). We used supplemental filtering techniques to establish a link between metaverse and its impact on tourism or destination marketing, as well as to preserve the correctness of our study. (Santos et al., 2023).

The study identified relevant records in the WoS core collection on April 2, 2024 at 1 PM (GMT +5:45) time. They used a topic search with the term "metaverse*" and found 968 articles. To focus on the impact of metaverse in marketing industry, unrelated articles were filtered using terms like "Marketing" and excluded 944 documents. After further screening, 18 articles met the review criteria. However to include more cited articles among those 18 articles, 15 articles have more than 2 citations (without self-cited). Finally those 15 articles were finalized for the review process. PRISMA flow diagram was used for systematic selection of relevant studies from the WoS database.

Figure 1

PRISMA Flowchart of Identifying Relevant Papers for Future Research Direction.



RESULTS AND DISCUSSIONS

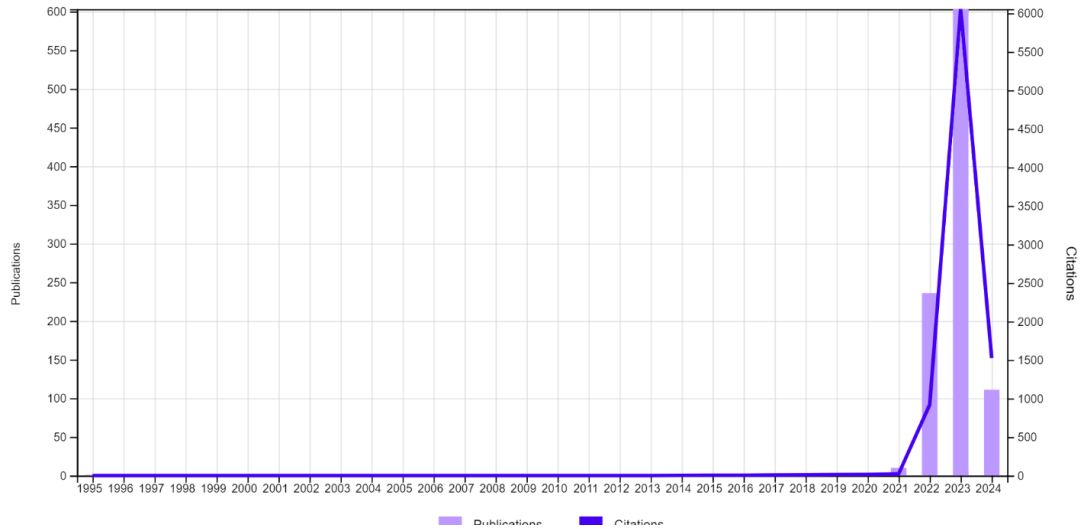
Trend Analysis

Figure 1 illustrates the progression of metaverse articles alongside yearly citations. The inaugural article surfaced in 1999 within the New Scientist Journal under the title "How to build a metaverse". The graph delineates three distinct phases of development concerning studies on "Metaverse" spanning from 1995 to 2021, 2021 to 2022, and 2022 to 2023. Initially, there is minimal publication activity and citation count. Subsequently, a modest uptick in publications is discernible until 2022. However, a substantial surge in growth is evident from 2022 to 2023, with the number of publications escalating from approximately 90 to around 600 within a one-year timeframe. This flourishing trend primarily reflects mounting concerns surrounding

the Metaverse in conjunction with the rapid expansion of internet services, digitalization, and information and communication technologies (ICT).

Figure 2

The Trends of Metaverse Articles and Yearly Citations.



Publications by Country

As per the WoS Science core collection, among the top ten nations contributing to metaverse research, the People's Republic of China leads with 289 articles, accompanied by 1453 citations, of which 1323 are without self-citations. Following closely are the USA and South Korea, with 189 and 146 articles, respectively. Notably, the bulk of research activity is concentrated in advanced economies, indicating a lack of investigative efforts in developing nations. Some publications demonstrate collaborative efforts across multiple countries, visually depicted in the accompanying figure. The hierarchical arrangement of nodes in Figure 3 reflects the volume of articles originating from each country, with China's node occupying a prominent position, underscoring its status as the most productive nation.

Moreover, the collaboration among researchers from different countries are measured through the distances between nodes. As a result, five main co-authorship groups between nations are apparent. The initial group (highlighted in red) includes India, Taiwan, Lebanon, Malaysia, and Pakistan. The second group (depicted in green) consists of the United States, Australia, England, Spain, and Germany. The third group (represented in blue) incorporates

China, Singapore, and South Korea.

Figure 3

Co-authorship from Countries

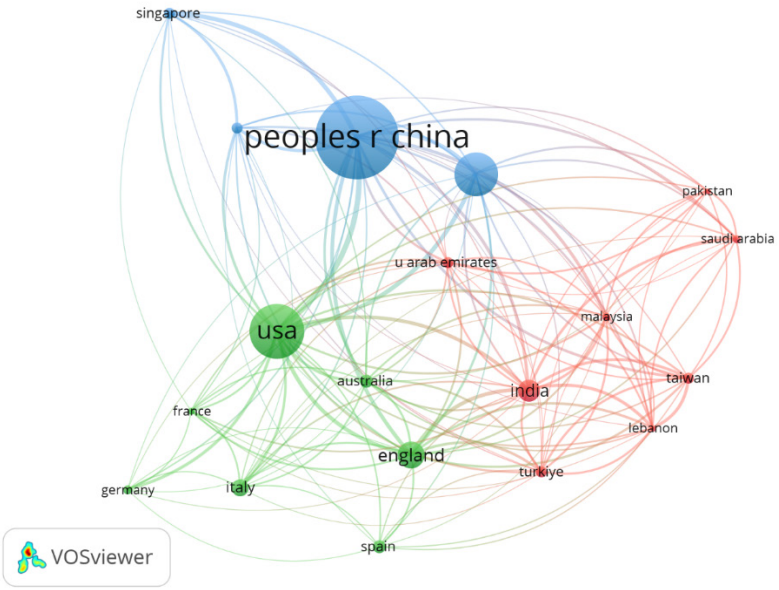


Table 1

Top 11 Countries with Articles Featuring Metaverse.

Country	Documents	Citations
Peoples R China	289	1453
USA	189	1482
South Korea	146	1155
England	91	1044
India	77	785
Italy	56	646
Australia	45	714
Spain	44	595
Canada	38	455
U Arab Emirates	38	381
Singapore	36	370

Publications by Research Area

Table 2 illustrates that the majority of research on the metaverse is concentrated in computer science, with 327 documents. Engineering closely follows with 240 documents, while Telecommunication and Business economics are represented by 152 and 128 documents, respectively. There are also 300 documents categorized under other topics. However, fields like sociology, transportation, food science technology, and biology exhibit relatively limited research on the metaverse. This underscores a potential gap in understanding metaverse applications within these disciplines, emphasizing the necessity for further exploration and consideration.

Table 2

Top 10 Research Areas Regarding the Concept of "Metaverse"

Research Area	Record Count
Computer Science	327
Engineering	240
Telecommunications	152
Business Economics	128
Science Technology Other Topics	57
Social Sciences Other Topics	57
Psychology	52
Education Educational Research	48
Chemistry	44
Environmental Sciences Ecology	42

Publications by Journal

Among the 268 references analyzed, 96 journal articles garnered over 100 citations, with an additional 39 journal articles accumulating more than 85 citations. The remaining top 10 publications, comprising 56 journals, collectively accumulated 151 citations. Table 3 visually represents the top ten journals that have made significant contributions to the metaverse literature. Despite the dispersion of 576 articles across 171 sources, a substantial portion is concentrated within these key journals. Notably, approximately 19.93% of all identified articles were published in the top 10 journals, which collectively host around 39.45% of the cited articles. This underscores their particular significance in the field of metaverse research. IEEE Access emerges as the most impactful research journal, featuring 32 publications on the subject, while Sustainability and Cyber psychology, Behavior, and Social Networking trail with 26 and 22 publications, respectively.

Table 3

Top 10 Journals with Larger Number of Articles Featuring Metaverse

Publication Titles	Documents	Citations
IEEE Access	32	534
Sustainability	26	217
Cyber psychology Behavior And Social Networking	22	120
Applied Sciences Basel	20	88
IEEE Wireless Communications	19	88
Electronics	16	125
Journal Of Public Health	16	47
IEEE Transactions On Learning Technologies	14	46
International Journal Of Human Computer Interaction	14	43
Internet Research	14	15

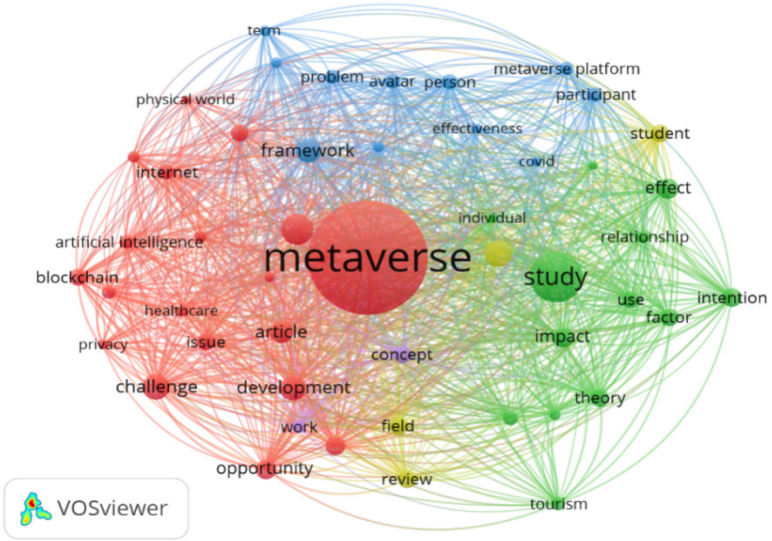
Keyword Analysis

The research examined 2,786 distinct keywords, of which 201 appeared at least 5 times. Through analyzing these words, significant themes and research trends were uncovered. The objective was to identify popular subjects and track the evolution of keyword trends over time, utilizing a tool called VOSviewer. Employing a method known as "full counting," three primary keywords emerged: Metaverse, Destination or Tourism, and Marketing. Each of these terms signifies a cluster or category of associated keywords.

In Figure 4, we observe four distinct groups highlighted with different colors. The red group (Cluster 1) pertains to the field of investigation, encompassing terms such as internet, artificial intelligence, healthcare, and block chain. This cluster illustrates the primary concerns surrounding the metaverse. The green group (Cluster 2) focuses on the various approaches to studying the metaverse, including its impacts, uses, effects, intentions, and relationships. It provides insights into the study's objectives. Meanwhile, the blue and yellow groups (Clusters 3 and 4) revolve around diverse methods of visualizing networks and connections within the research. These clusters aid in comprehending the interrelationships within the studies.

Figure 4

Keywords Visualization



Metaverse and Tourism

The Metaverse is like a super cool digital world where you can explore awesome places, events, and hotels. For businesses in tourism, it's a great way to show off what they offer in a really fun and engaging way. It helps them learn more about what people like and want. Places and companies in tourism can use this cool tech to show how amazing they are in the virtual world. As outlined by Gomes et al. (2012), the virtual environment encompasses both tangible and intangible tourism assets, including elements such as food, transportation, and entertainment, mirroring traditional tourist experiences. This novel approach to experiencing travel without physical displacement does not signify the demise of traditional tourism; rather, virtual tourism can complement conventional travel by providing result-driven experiences. If virtual destinations effectively meet the expectations of tourism consumers, they may be inclined to explore or seek alternative options for future travel. Virtual reality has the potential to serve as a valuable marketing tool for both tourism destinations and the hospitality industry by capturing travelers' interest and drawing attention to various destinations (Lee et al., 2020).

Metaverse tourism' or 'Meta tourism' refers to a novel form of travel that enables individuals to experience overseas destinations virtually, even when physical travel is not possible. This immersive approach allows guests to explore touristic locations through

virtual reality within digital realms, offering them a preview of destinations before making reservations or confirming travel plans (Özdemir Uçgun & Şahin, 2023). The emergence of the Metaverse significantly impact hospitality and tourism by reshaping how guests interact with services before, during, and after their travels. These industries encompass a wide array of offerings, spanning accommodation, dining, entertainment, and event planning, including meetings and conferences.

Navitaire, a subsidiary of Amadeus, pioneered the inaugural virtual reality expedition, offering tourists the opportunity to rotate a digital representation of the globe and promptly transport themselves to desired destinations, such as the London Eye. This immersive experience empowers travelers to browse air travel options, handpick their preferred airplane seating, explore various car rental selections, finalize their travel arrangements, and complete payments seamlessly within the virtual reality environment (Betia et al., 2023). New technologies like 'better booking for guests,' 'realistic virtual tours,' and 'exciting virtual experiences' are expected to really help hotels. They should help hotels make more money, retain customers, and give guests a special experience. Buhalis & Karatay, (2022) highlight that integrating the Metaverse into tourism and cultural heritage realms will assist Generation Z in jointly crafting impactful experiences.

Tourism destinations aim to maintain their edge over competitors and strengthen their competitiveness in the market. Destination competitiveness is defined as a destination's effectiveness in attracting tourists and delivering satisfying experiences, increasing tourism spending, enhancing residents' welfare, and preserving resources in a financially beneficial manner. This concept has received considerable scholarly attention, resulting in the development of various measurement models and indicators to analyze it and uncover its driving forces(S. Chen et al., 2023). The growth of metaverse tourism can make a destination more appealing by providing tourists with richer experiences. It also opens up new marketing opportunities for tourism providers, allowing them to connect with potential visitors in different ways. Moreover, embracing metaverse technologies can prompt tourism businesses to rethink and improve how they operate, from strategic planning to day-to-day tasks, ultimately enhancing a destination's ability to showcase its unique tourism assets (Buhalis et al., 2023).

Table 4

Research Gap and Future Agenda of Latest Eight Articles

Title	Research Gap	Future Research Agendas
Metaverse in services marketing: an overview and future research directions **(Gursoy et al., 2023)**	Research on how the Metaverse affects marketing and buying experiences is just starting, especially in terms of collaborative shopping and reducing decision risks, which needs more exploration.	Future research should explore how the Metaverse has transformed management practices, service delivery, and purchase decision-making across different stages of development, enabling businesses to make informed decisions and harness its potential effectively.
Collaborative Driving Mode of Sustainable Marketing and Supply Chain Management Supported by Metaverse Technology **(Zhong & Zhao, 2024)**	This study uniquely explores how metaverse technology facilitates sustainable marketing strategies and supply chain management trends, examining their impact on decision-making and operational practices in enterprise project engineering while aiming to create a collaborative model integrating these efforts.	Future research should delve deeper into how metaverse technology is applied in various industries, particularly in sustainable marketing and supply chain management, focusing on real-world examples and exploring ways to mitigate any negative effects on sustainability while optimizing connections to enhance efficiency.

Augmented reality in the metaverse market: the role of multimodal sensory interaction **(Chen et al., 2024)**	Does the combination of sensory interactions in augmented reality (AR) enhance consumers' experiences while engaging in shopping within the metaverse, and if so, how?	Future studies could enrich our understanding by exploring additional attributes of augmented reality (AR) within suitable theoretical frameworks, while also considering the contributions of other reality-enhancing technologies like virtual reality (VR) and neuro-enhanced reality (NeR) to elucidate the concept of the metaverse
Metaverse in marketing and logistics: the state of the art and the path forward **(Tan et al., 2023)**	What are the prospects, obstacles, and forthcoming areas of research regarding the metaverse's role in marketing and logistics?	Future studies should explore establishing decentralized trust in the Web 3.0 metaverse while integrating marketing ethics, pseudonymous economy, decentralized identity, and society, potentially examining how decentralized trust mechanisms can inform informal regulations for consumer protection and empowerment within this emerging digital landscape.
Investigating metaverse marketing-enabled consumers' social presence, attachment, engagement and (re) visit intentions **(Ghali et al., 2024)**	Given the exciting shifts in the attitudes and behaviors of younger generations, there has been scant research examining how their reliance on emerging virtual platforms, such as the metaverse, influences their social activities.	The study initially concentrated on tourism and destination aspects of the metaverse, prompting the question of generalizability to other sectors in tourism, travel, and hospitality, necessitating further exploration, especially in diverse cultural contexts beyond India.

Metaverse as a disruptive technology revolutionizing tourism management and marketing **(Buhalis et al., 2023)**	Conceptualize Metaverse in tourism and to build its foundations leading to a future research agenda.	The study advocates for further research to enhance blended tourism experiences in the upcoming Metaverse era, exploring disruptions in tourist behavior and experiences and their implications for tourism management and marketing strategies.
Marketing in the Metaverse: Conceptual understanding, framework, and research agenda **(Giang, Barrera & Shah, 2023)**	What is the metaverse? (b) How has its definition, role, and scope evolved over time? (c) How can marketers design and develop consumer experiences in the metaverse? (d) What are the implications for future marketing academic research?	A more comprehensive approach would have involved incorporating keywords related to other technological components and aspects of the metaverse ecosystem, such as Block chain, NFTs, avatars, and so forth.
Transforming metaverse marketing into strategic agility in SMEs through mediating roles of IMT and CI: theoretical framework and research propositions **(Abrokwah-Larbi, 2024)**	A research gap exists in the need for further theoretical development to formulate research propositions exploring how metaverse marketing can evolve into strategic agility through immersive marketing technologies, with customer immersion serving as a mediating factor.	Future research can be conducted on the impact of metaverse marketing on strategic agility.

Metaverse Disruptions to Tourism Management and Marketing

In the late 1990's, the internet causing significant disruption and fundamental changes to the strategic and operational methods within the tourism industry (Buhalis, 2003). Planning trips

undergo significant transformation with the emergence of the Metaverse, offering resources to spark travel inspiration and facilitate decision-making through digital replicas. User-generated visual content, shared by previous explorers across social platforms, has long been acknowledged as invaluable material for potential travelers, igniting their wanderlust and shaping their itinerary choices.

Customers have the chance to collaboratively shape products, services, and experiences alongside businesses within the virtual realm. The metaverse presents a platform for continuous digital and physical service delivery, enriching the overall customer journey. Buhalis(2020) highlights the importance for businesses to use interconnected technologies effectively to improve their operations and create new and valuable offerings. This helps them meet the needs of all involved parties. As a result, the metaverse becomes a new place where tourism destinations and companies compete

Travel-related user-generated content is typically posted post-travel, which may not accurately portray the current conditions of locations, accommodations, attractions, or dining establishments. Consequently, travelers face challenges in obtaining timely and pertinent information for effective trip planning. They depend on visual imagery and narratives from past travelers for inspiration, albeit in a predominantly passive role, awaiting contributions from others. Moreover, this content is often dispersed across multiple applications and platforms, posing difficulties in locating and accessing it

Destinations have the potential to digitally recreate their landmarks and attractions, enriching them with historical information and attraction (Bec et al., 2021). By employing photorealistic rendering to craft immersive virtual experiences, they can spark interest among potential travelers to visit these real-world destinations and avail themselves of tourism offerings. Engaging storytelling within these immersive experiences not only fosters involvement but also educates and entertains. Moreover, the metaverse can serve sustainability efforts by showcasing lesser-known attractions to prospective tourists, thus alleviating overcrowding at popular spots (O'Regan et al., 2022). Destination marketing organizations can also leverage the metaverse to emulate global brands like Ralph Lauren, Hermès, and Nike, establishing digital storefronts to vend digital travel products such as attraction tickets and tours. These efforts extend to promoting products and services both pre-arrival and on-site at the destination.

Many wonder if the Metaverse will replace or encourage actual travel, a question similar to those raised about virtual reality (VR). During COVID-19, when travel was restricted, we

relied heavily on virtual options for things like work meetings, socializing, and even leisure activities like watching travel videos. As restrictions eased, business travel bounced back faster than vacations, showing that being there in person still matters. Yet, we also saw the benefits of blending virtual and real experiences for convenience and cost savings. Despite all this, technology can't completely replace the feeling and richness of actual travel (Dwivedi et al., 2022).

The Metaverse enables rapid and cost-effective development of virtual prototypes for tourism facilities and services. Destinations can gather feedback from users, improving designs before physical construction. This collaborative approach fosters consumer-centric innovation and enhances value co-creation. In addition to this the Metaverse serves as a platform for gathering market intelligence and conducting research and development in the tourism industry. Users' digital activities within this virtual space offer valuable insights for tourism suppliers to understand customer needs and preferences, enabling proactive engagement and informed decision-making (Buhalis & Volchek, 2021).

Future Research Directions

Based on the insights provided by various scholars in the field, a comprehensive future research agenda can be outlined to further explore the implications of the metaverse across different domains. Firstly, future studies should prioritize the use of a more comprehensive sample encompassing both supply and demand side participants, as suggested by (Kılıçarslan et al., 2024). This would facilitate a holistic understanding of the metaverse's impact on various stakeholders within the tourism industry. Moreover, researchers should focus on investigating the possible negative impacts of the Metaverse on tourist behavior and the tourism industry, as highlighted by Ramadan (2023), to develop effective mitigation strategies.

Quantitative research with users regarding their virtual experiences across applications, as proposed by Ramadan (2023), would provide valuable insights into usage patterns and preferences, guiding the design and development of metaverse platforms. Additionally, the study also suggested that, exploring potential platforms and devices that may emerge in the near future is crucial for anticipating technological advancements. Gursoy et al. (2023) emphasize the importance of investigating how the metaverse has transformed critical management practices and strategies, such as employee training and remote work, to optimize organizational performance. Similarly, periodic investigations into how the metaverse reshapes service delivery, co-creation, purchase decisions, and post-purchase behavior are essential for understanding evolving consumer behavior and preferences.

Furthermore, future research should explore the specific application scenarios of metaverse technology in various industries, particularly in sustainable marketing and supply chain management, as suggested by Zhong & Zhao (2024), This would facilitate the development of practical solutions to overcome the negative impact of digital resources on sustainability performance, enhancing efficiency and sustainability. Additionally, reengineering the hospitality services cape and experiences cape to capitalize on the new potential of the metaverse, as suggested by Buhalis et al. (2023), is crucial for enhancing tourist engagement and satisfaction in the forthcoming era. Moreover, future research should explore the creation of decentralized trust in the Web 3.0 Metaverse, as well as its implications for marketing ethics and consumer protection, as emphasized byTan et al. (2023). This would foster trust in the pseudonymous economy and pave the way for the development of soft laws to ensure consumer influence and protection. By addressing these research areas, scholars can contribute to a deeper understanding of the Metaverse's implications across various domains, facilitating its strategic integration into business practices and societal frameworks.

Limitations and Final considerations

As with any bibliometric analysis or literature review, this study has its set of constraints. To start, documents were amassed on a specific date solely from the Web of Science (WoS) database. Although WoS is deemed reliable, as asserted by Saleem et al. (2021) the potential absence of pertinent papers indexed in alternative databases like Scopus must be acknowledged. Consulting additional databases might alleviate data bias and enrich the comprehension of metaverse research. Furthermore, this study exclusively concentrates on journal articles, omitting other forms of scholarly works such as book chapters and conference proceedings papers. Despite the rigorous peer review process journal articles undergo, it's crucial to acknowledge this limitation. Lastly, the literature review only takes into account the total citation count and restricts the analysis to articles published within the past five years. This approach may inadvertently overlook the true quality of documents. However, prioritizing citations offers a more robust measure of an author's impact and influence.

Many review papers have delved into the realm of the metaverse, but only a handful have undertaken a thorough exploration of its impact on destination marketing. This study fills this void by conducting a comprehensive investigation, thus enriching the comprehension of the topic. It contributes to the existing pool of knowledge by providing in-depth insights into the current research landscape, identifying trends, pinpointing gaps, and paving the way for future research avenues.

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