



Research Article

A Bibliometric Analysis of Marketing in Metaverse

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Abstract

The emergence of the Metaverse, a digital platform that seamlessly integrates virtual and physical realities, has garnered significant attention in marketing. This concept combines various Information and Communication Technologies (ICTs) to create a synergistic platform where users can participate in a wide range of activities including socializing, creation, asset trading, work, and learning. The Metaverse offers distinct marketing opportunities that allow brands to engage with consumers innovatively, gain a competitive edge, and obtain valuable insights into user behavior. This article presents a comprehensive bibliometric analysis of marketing within the Metaverse, exploring its historical origins, real-time operations, and potential to revolutionize marketing through immersive experiences and a virtual economy. Through this review, key research themes and trends are identified, shedding light on the necessity for further academic exploration in this rapidly evolving field. The study emphasizes the potential of Metaverse to shape digital marketing strategies and its broader societal implications. As a result, this research serves as a valuable resource for academics and practitioners seeking to comprehend the impact of the Metaverse on marketing research and practice.

Keywords: Metaverse, Metaverse Marketing; Disruptive Technology; Digital Marketing; Virtual Marketing.

Introduction

In the rapidly evolving landscape of marketing, the Metaverse has emerged as a groundbreaking concept, capturing significant attention in recent years. Defined as an augmented digital world seamlessly integrating physical and virtual realms through XR and artificial intelligence (Cho *et al.*, 2023), its origins can be traced back to the concept of virtual reality from the 20th century (Zhou *et al.*, 2023). Metaverse is poised to facilitate connections between individuals who are not co-located physically. It is

anticipated to enhance the sense of shared presence, thereby approximating the experience of in-person interactions ([CSL STYLE ERROR: reference with no printed form.]). This visionary groundwork has evolved into a contemporary World Wide Web hosting parallel world, where a global community engages in socializing, creation, asset trading, work, and learning.

Author Neal Stephenson first coined the term "metaverse" in his 1992 science fiction novel *Snow Crash* (Crichton,

2022; 2023a). In Stephenson's novel, common people may put on virtual reality goggles, step into a virtual world, go shopping, hang out with friends, and engage in social interactions in an incredibly lifelike parallel reality to their own (Crichton, 2022).

The Metaverse includes immersive settings, frequently employing virtual- or augmented-reality technology. It operates continuously and is present in real-time. Covering both virtual and physical realms across various platforms, the Metaverse functions through a fully operational virtual economy, commonly incorporating cryptocurrency and digital goods, including nonfungible tokens (NFTs). This environment empowers individuals with virtual identities, presence, and "agency," facilitating peer-to-peer interactions, transactions, user-generated content, and "world-building"(Hazan *et al.*, 2022).

The Metaverse is not an isolated technology; it functions within a convergent universe where various Information

and Communication Technologies (ICTs) integrate seamlessly (see Fig. 1). Rather than being a separate entity, the Metaverse has the capacity to unify a multitude of pre-existing ICTs, facilitating simultaneous operation by users. This highlights the Metaverse's role as a synergistic platform in the realm of digital technology (Buhalis *et al.*, 2023).

The Metaverse represents a novel and unique digital marketing channel that extends beyond traditional platforms such as the web, mobile, search engines, email, and social media. It can be seen as a network of virtual worlds, platforms, and experiences that allow users to engage in various activities, such as socializing, gaming, learning, shopping, and even conducting business. The Metaverse presents marketers with the best opportunity to interact with consumers and create a competitive edge on a new platform (Lu and Mintz, 2023) (Table 1).

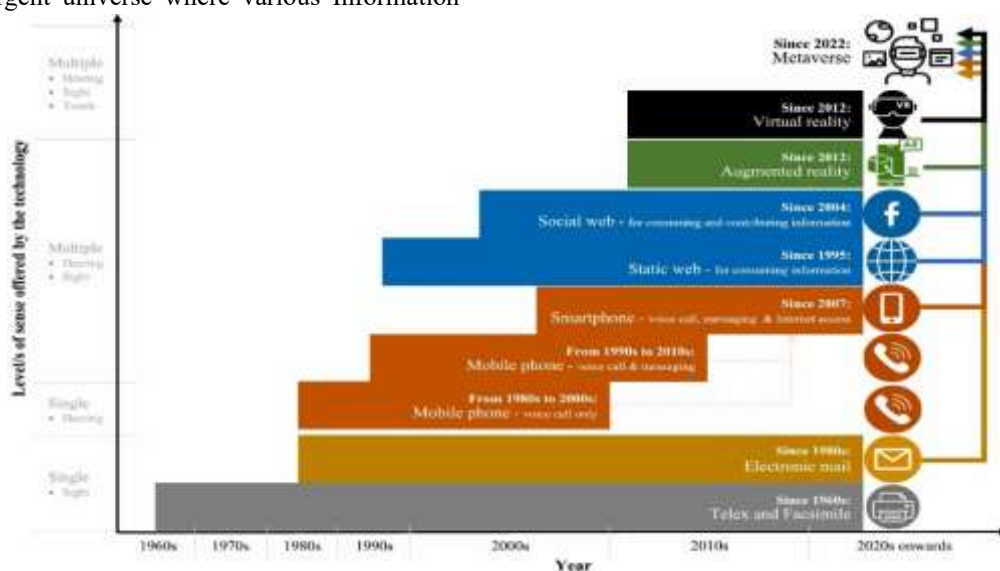


Fig 1: Evolution of information and communication technologies (Buhalis *et al.*, 2023)

Table 1: Definition of Metaverse in Marketing Communication

Date	Source	Definition
2005	Julian Dibbell	A vast and sprawling network of commercial spaces where users can engage in commerce and advertising.
2006	Cory Ondrejka (Second Life)	A new media opportunity for marketers to reach audiences in immersive, interactive ways.
2007	B. Joseph Pine II and James H. Gilmore	A platform for creating authentic experiences that allow marketers to engage customers in real and meaningful ways.
2010	Erik Qualman	A natural evolution of the Internet that presents new opportunities for marketing and advertising.
2019	Cathy Hackl	An immersive platform that allows brands to create empathy-driven experiences for customers
2021	JP Morgan & Chase Co	A new channel for commerce and advertising, where brands can "create and sell virtual products and services" and reach consumers through virtual experiences, games, and other activities.
2022	Epic Games	A next-generation social and entertainment experience that enables new forms of communication, entertainment, and commerce for brands and consumers alike.

Source: Mishra & Dharmavaram (2023)

As technology brings opportunity for both organization and customers, marketing in the Metaverse also provides an opportunity for business and brands to connect with users globally (Gurav *et al.*, 2023) without any boundary in new and exciting ways, reach a wider audience, and gain valuable insights into user behavior and preferences (<https://echoworks.io/blog/advantages-of-metaverse-marketing/>). It is a cutting-edge tech-driven marketing platform, which is gaining popularity as a preferred method for executing marketing strategies (Gurav *et al.*, 2023). However, there are also some disadvantages to marketing in the Metaverse. One of the biggest challenges is the lack of standardization, which makes it difficult for marketers to create a consistent experience across different platforms (Zhang *et al.*, 2022).

Several technology firms are striving to enhance the immersive nature of digital interactions. Although Metaverse anticipated to be a project with a long-term trajectory, Facebook (now META), Epic Games, Roblox, Unity, Microsoft and NVIDIA are working and developing the platforms and tools for Metaverse (Cross, 2021). Nike has expressed its plans to produce and market virtual branded sneakers and apparel (Golden, 2021).

Nike is actively working on a blockchain-based platform named Swoosh, designed to enable user connections with fellow athletes and consumers, procure virtual products, and participate in immersive experiences (Ciment, 2022). Job opportunities have also been posted, including roles like a virtual material designer for footwear and other virtual design positions (Golden, 2021). Nike's venture into the Metaverse is anticipated to introduce innovative avenues for the company to engage with its consumer base (Ibrahim, 2023). Disney is also planning to create theme park Metaverse where "physical and digital world converge" (Milmo, 2021; Faughnder, 2022). Fast food industry is also not behind as Wendy, Chipotle, and McDonald are also following the mega trend and are opening virtual locations and restaurants accessible through VR headsets (Meisenzahl, 2022).

By the end of the decade, the Metaverse's reach is projected to be 700 million people worldwide, with the highest penetration rate forecast for South Korea (Armstrong, 2023). The global value creation opportunity from the Metaverse could be in the trillions (Hazan *et al.*, 2022) making it a strategic imperative for businesses aiming to stay ahead in the digital age. The largest segments in terms of revenue in 2030 will be gaming (\$163 billion) and e-commerce (\$201 billion). Citigroup Inc., a Wall Street player and global diversified financial services holding

company, estimates that by 2030, the Metaverse would provide a \$13 trillion revenue opportunity (Denton, 2022).

Significance of Study

The Metaverse, a disruptive technology, is set to reshape our society in the years ahead. It promises to blend virtual and real-world experiences, offering a level of immersion never seen before. The future potential clients of the business are the GenZ and Gen Alpha (Hollensen *et al.*, 2023) and are tech-savvy. This will open up a world of possibilities and hurdles for marketers, consumers, and companies in a range of sectors, such as tourism, entertainment, education, and healthcare. Currently, the Metaverse is an emerging (Mishra and Dharmavaram, 2023) platform and "still conceptual, rather than operational" (Buhalis *et al.*, 2023). It has limited scholarly research (Tan *et al.*, 2023; ÇeliK *et al.*, 2022) specifically focused on its marketing aspects. This scarcity of academic investigation, however, highlights the enormous potential for further exploration in this area (Dwivedi *et al.*, 2022). The metaverse, with its innovative and rapidly evolving nature, offers a plethora of untapped topics and questions that can greatly enhance our comprehension of digital marketing strategies and their societal impacts. Therefore, embarking on academic research on marketing in the Metaverse is not only crucial but also a promising and thrilling avenue for marketers and scholars alike.

To the best of our knowledge, it is the first bibliometric analysis of marketing in Metaverse on Dimensions database, which will address the following research questions:

RQ 1: Which author, journal and countries are the most prolific in Marketing in Metaverse research?

RQ 2: Which are the most cited authors, and journals in the research of Marketing in Metaverse?

RQ 3: What are the research themes and trends in marketing and metaverse

Material and Methods

Bibliometric analysis is a variant of systematic literature reviews. Quantitative and statistical techniques intended to performance analysis and science mapping on bibliographic data (e.g., publications and citations) (Donthu *et al.*, 2021) for data analysis can be done and used in the field of marketing (Palmatier *et al.*, 2018). This study adopted the *Scientific Procedures and Rationales for Systematic Literature Reviews* (SPAR-4-SLR) protocol as suggest by Paul *et al.*, (2021) to carryout SLR using bibliometric analysis shown in Fig. 2.

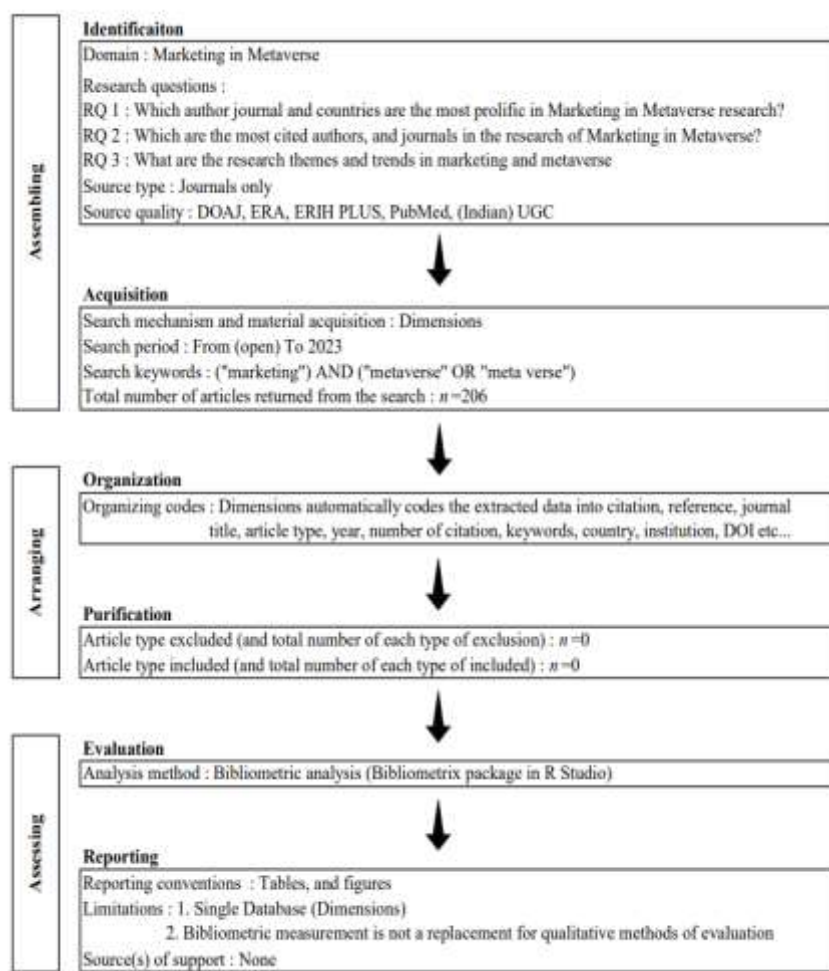


Fig. 2: The SPAR-4-SLR protocol

Assembling

Assembling is the preliminary phase of identification and acquisition of the articles for the review. Identification is the sub-stage for the criterion of defining the domain which includes setting of the area, outlet and topic that will lead the whole article. Further, assembling stage of SPAR-4-SLR protocol includes defining the research question, defining the source type (inclusion and exclusion of sources), and source quality. The acquisition sub-stage of assembling focuses on search mechanism and material acquisition.

To *identify the domain* of the review, the authors focused on marketing in the metaverse. The introduction section presented the *research question* that underpins the review, which pertains to articles, journals, methods, theories, themes, and constructs in the field. The authors only considered journals as the *source type* since they contribute to scholarly advancement and undergo rigorous peer review (Paul *et al.*, 2021).

In terms of the *source quality*, article published in journals published by the Directory of Open Access Journals (DOAJ), Excellence in Research for Australia (ERA), European Reference Index for the Humanities (ERIH Plus),

Nature Index Journals, PubMed, UGC maintained by Indian University Grant Commission- Consortium for Academic and Research Ethics (UGC-CARE) and other listed in Dimensions database are incorporated.

For *search mechanism and material acquisition* criterion of *acquisition* sub-stage, Dimensions database reckoned apropos (Table 2) and was used as it is a reasonable alternative to Scopus and the Web of Science (Thelwall, 2018). Web of Science is selective whereas Dimensions database is a promising source due to its wider and extensive coverage (Singh *et al.*, 2021). Dimensions offer data of other types also like grants, data sets, clinical trials, patents, and policy documents which can be a great value (Visser *et al.*, 2020) for analysis although it falls outside the latitude of this paper.

As the Metaverse is emerging and the literature for the domain is scant, the start date was set open and the end date was set to 2024 to know the trend upto the year end (Paul *et al.*, 2021). Search string ("marketing") AND ("metaverse" OR "meta verse") in *Title and Abstract only* was used to retrieve the list of publications. AND Boolean was used to limit the search unified with the keyword marketing and the Metaverse or "meta verse" for the study of the niche.

Table 2: Number of journals and publication records indexed in the three databases

	Web of Science	Scopus ^a	Dimensions
No of journals indexed	13,610*	40,385*	77,471**
Approximate number of publication records (article + review) indexed in the three databases (2010-18)	13,218,007	18,054,418	28,130,484

^a Includes SCIE (9397 journals), SSCI (3497 journals), AHCI (1843 journals)

*Updated June 2020; **Updated May 2020

Source: Singh *et al.* (2021)

Arranging

Arranging stage comprises of organizing and purification of the retrieved articles which were performed side by side within the Dimensions database web interface. For the inclusion and exclusion phase, all language type and access types (Open Access, Closed, Gold, Hybrid, Bronze, and Green) were selected for the analysis purpose. Only *articles* were selected from *publication type* which limited the search results to 206. In terms of organizing, the results were exported to the excel via the save/export of option of the Dimensions database web interface and was later downloaded for further purification. The downloaded dataset was extracted in excel and cross verified for the quality of the data. 1 akin title was found but with the different DOI (Digital Object Identifier) with separate number of citation and was included for the analysis.

Assessing

Methods to analyze the articles under review, and identifying best practices and gaps based on the literature review (agenda proposal method) are the sub-stages of *assessing* stage of SPAR-4-SLR protocol. For this purpose, Analytical tools available on dimensions.ai and Bibliometrix package (Aria and Cuccurullo, 2017) in R Studio software were used for the performance analysis and science mapping to reveal the publication trend as well as major articles and journals in the field of marketing in metaverse. The outputs as the Figures and Tables were included for the *reporting* sub-stage and the *limitations* and *source of support* are acknowledged at the end of the paper.

Results and Discussion

Descriptive Data

While setting open start date for the timespan, the result showed the articles starting from 2009 only. Total 478 author's name are extracted for 206 numbers of all type of (open, closed, gold, hybrid, bronze, and green) articles.

Table 3: Summary of extracted data for bibliometric analysis

Timespan	2009:2024
Sources (Journals, Books, etc)	156
Documents	206
Annual Growth Rate %	41.58
Average citations per doc	15.56
Authors	478
Single-authored docs	55
Co-Authors per Doc	2.81
International co-authorships %	15.05
Total Number of Articles	206

Most Prolific Author, Journal and Countries in Marketing in Metaverse Research

Most prolific authors

The core concept of the fractional counting method asserts that every action, such as co-authoring a paper or citing a publication, should be assigned equal importance. This principle applies regardless of the number of authors, citations, or references associated with a given publication. This approach ensures a fair distribution of credit across all academic contributions (Perianes-Rodriguez *et al.*, 2016).

Table 4: Top 10 authors of Marketing in Metaverse

Authors	No of Articles	Articles Fractionalized
Lee J	7	3.17
Rathore B	3	3.00
Kwon K H	4	2.00
Aydin S	4	1.67
Nalbant K G	4	1.67
Dwivedi Y K	8	1.51
Karabacak Z I	2	1.50
Kim H	2	1.33
Chu C	2	1.25
Kim J	5	1.23

Table 4 presents the top 10 authors in the field of on Marketing in Metaverse. Lee J and Dwivedi YK has found dominating the research as they have 7 and 8 number of articles published respectively under their authorship (corresponding author). Although, based on fractional counting, Lee J, Rathore B, and Kwon KH's has dominated the list.

Most prolific journals

The h-index, g-index, and m-index are all metrics used to evaluate the impact of a journal's scholarly output. The h-index is a measure that quantifies both the actual scientific productivity and the apparent scientific impact of a scientist. On the other hand, the g-index is calculated based on the total number of citations received by a particular journal. It provides a more comprehensive view of a journal's influence by considering the citation count of all its published papers. Lastly, the m-index is derived by dividing the h-index by the length of a journal's active career. This metric provides a normalized measure of a journal's impact, considering the duration of its existence. Thus, these indices

collectively provide a robust measure of a journal's cumulative effect and performance in the academic world.

Journals such as Psychology and Marketing, International Journal of Contemporary Hospitality Management, International Journal of Information Management, Internet Research, and Journal of Business Research are amongst the top 10 journals and are also listed as First Quartile (Q1) and Asia Pacific Journal of Marketing and Logistics, Journal of Cosmetic Dermatology, and Sustainability are listed as Q2. Not listed as the top influential journal as mentioned in Table 5, BCP Business & Management is a notable journal which has published total 8 publications related to Marketing in Metaverse.

Most prolific countries

Collaboration between USA, China, Australia, India, Germany are on higher side (Fig. 3) for the publication of the articles related to Marketing in Metaverse. Considering the single country publication (SCP) and multiple country publication, South Korea leads the ranking by 16 and 15 number of publications respectively. Australia and USA as

ranked second and third where as China and India are at fourth and fifth position (Fig. 4).

Most Cited Author and Journal

Most cited author

Dwivedi YK with most publication (8) in his name has 40 co-authorship link and 75 total co-authorship. Similarly, Buhalis D had published 6 articles and has 53 co-authorship link and 57 total co-authorship and Hughes L had published 5 articles on the topic related to marketing and Metaverse and has 39 co-authorship links and 69 total co-authorships (Fig. 5). Citation of these top three (Table 6) are also in higher side.

Most cited journals

Although the most prolific title (Table 5) goes to *Sustainability* (h-index: 3, g-index:5, m-index :1.5 and NP :5), the most cited journal is IEEE Access followed by the International Journal of Information Management and Psychology and Marketing.

Table 5: Top 10 most influential journal in Marketing in Metaverse

Journal	h-index	g-index	m-index	NP
Asia Pacific Journal of Marketing and Logistics	3	3	3	3
Journal of Cosmetic Dermatology	3	3	1.5	3
Psychology and Marketing	3	3	1.5	3
Sustainability	3	5	1.5	5
Businesses	2	2	1	2
Eduzone: International Peer Reviewed/Refereed Academic Multidisciplinary Journal	2	2	0.333	2
International Journal of Contemporary Hospitality Management	2	2	1	2
International Journal of Information Management	2	2	1	2
Internet Research	2	3	2	3
Journal of business Research	2	2	1	2

Note. TC=Total Citation, NP = Number of publications

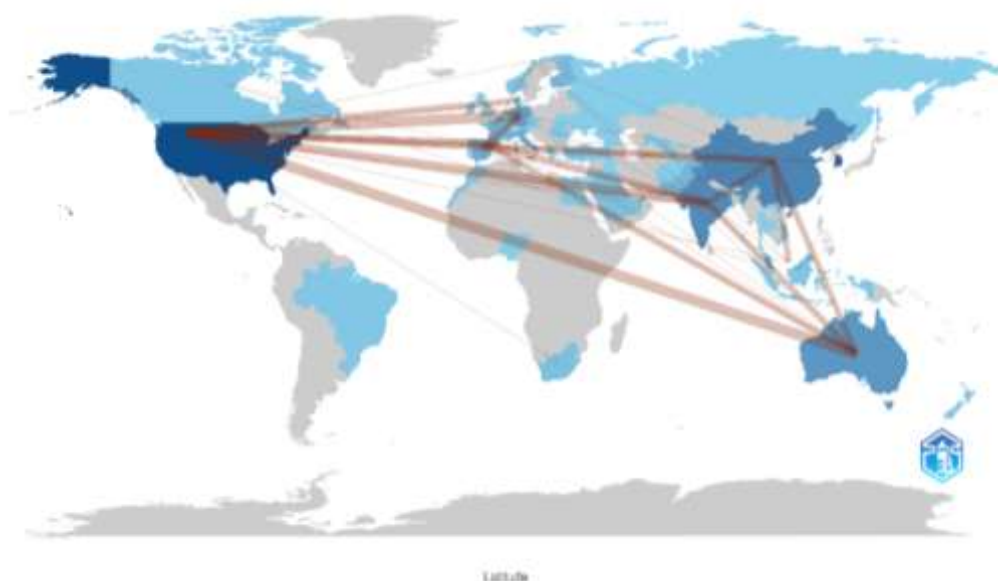


Fig. 3: Country Collaboration Map

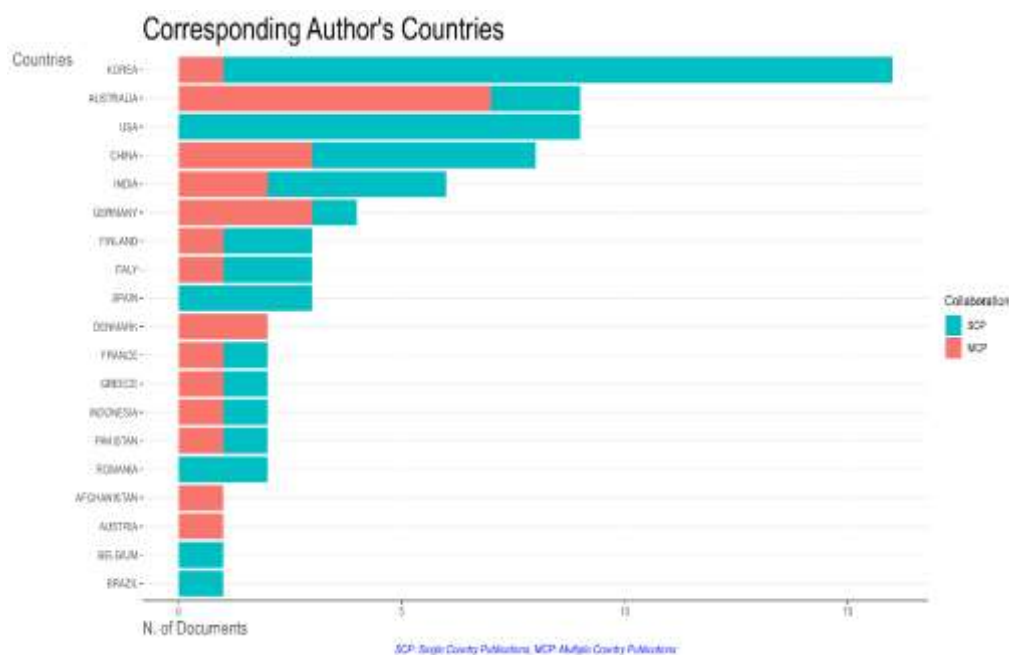


Fig. 4: Global contribution by country of corresponding author

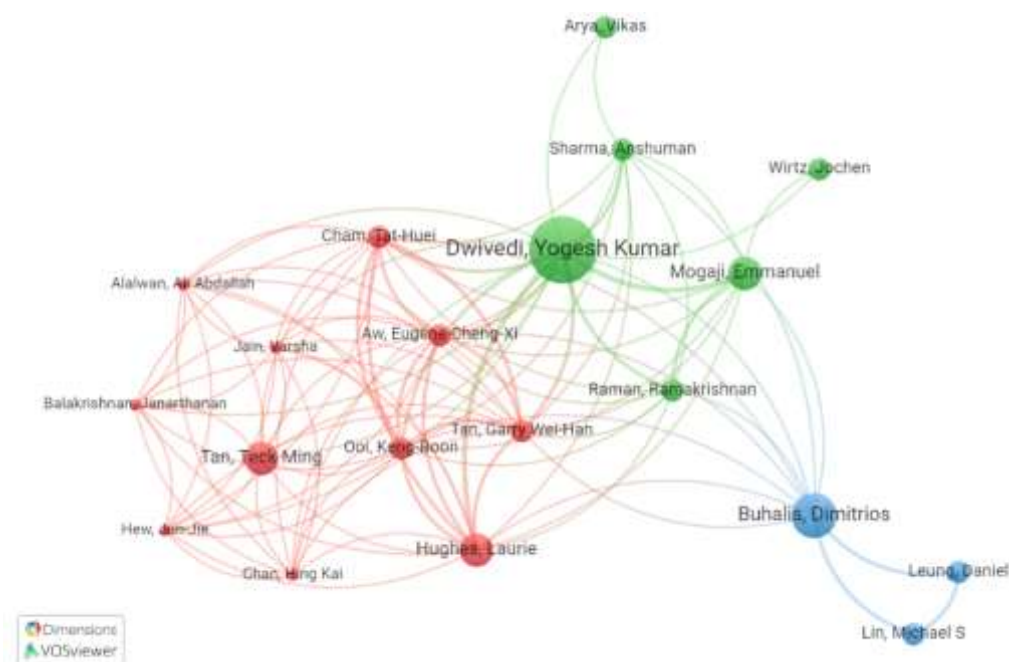


Fig. 5: Visualization of most frequent co-citers and co-citing reference work

Research Themes and Trends

Centrality of research theme is in the vicinity development; challenges related to marketing and Metaverse and is around tourism. Likewise, the development degree shows the growth of basic themes like fashion and brand towards digital, marketing and Metaverse (Fig. 6). When examining for the research trend on marketing and metaverse, the most frequently used words for Metaverse are nft(s), roblox, virtual, digital, technologies, media, online, reality, and blockchain whereas for marketing is fashion, brand(s),

experiences, market, companies, consumer, content, advertising, and strategies (Fig. 7).

To get the larger view on themes and trends, data are analyzed based on the abstract field instead of keywords as keywords limits the scope of the actual study and are fixed to 5 or 6 words specific to the journals. A tree map of the 50 most frequent bigrams (Fig. 8) of research titles is plotted in Fig. 8. Among these research titles, the term “metaverse” was seen in most published papers (~23% of the documents). The second most published title was marketing (13%) followed by tourism, future, digital and reality (3%).

Table 6: Top 10 authors in the field of “Marketing in Metaverse”

Authors	Organization	Country	Publication	Citations	Citation Mean
Yogesh Kumar Dwivedi	Swansea University	UK	8	856	107
Dimitrios Buhalis	Bournemouth University	UK	6	1,096	182.67
Laurie Hughes	Swansea University	UK	5	827	165.4
Kemal Gökhan Nalbant	Beykent University	Turkey	4	27	6.75
Sevgi Aydın	Beykent University	Turkey	4	27	6.75
Ki Han Kwon	Kookmin University	South Korea	4	46	11.5
Philipp Alexander Rauschnabel	Bundeswehr University	Germany	4	865	216.25
Jinkyung Lee	Dongguk University	South Korea	4	46	11.5
Ramakrishnan Raman	Symbiosis International University	India	4	818	204.5
Garry Wei-Han Tan	UCSI University	Malaysia	3	669	223

Table 7: Top 10 most cited journals

S. No	Journal	Total Citations	TC per Year
1	IEEE Access	589	294.50
2	International Journal of Information Management	567	283.50
3	Psychology and Marketing	157	78.50
4	Journal of Business Strategy	146	73.00
5	Electronic Commerce Research	139	9.27
6	Journal Of Hospitality Marketing & Management	137	68.50
7	Journal of Business Research	134	67.00
8	International Journal OF Contemporary Hospitality Management	116	58.00
9	Tourism Management	115	115.00
10	Journal of Business Research	110	110.00

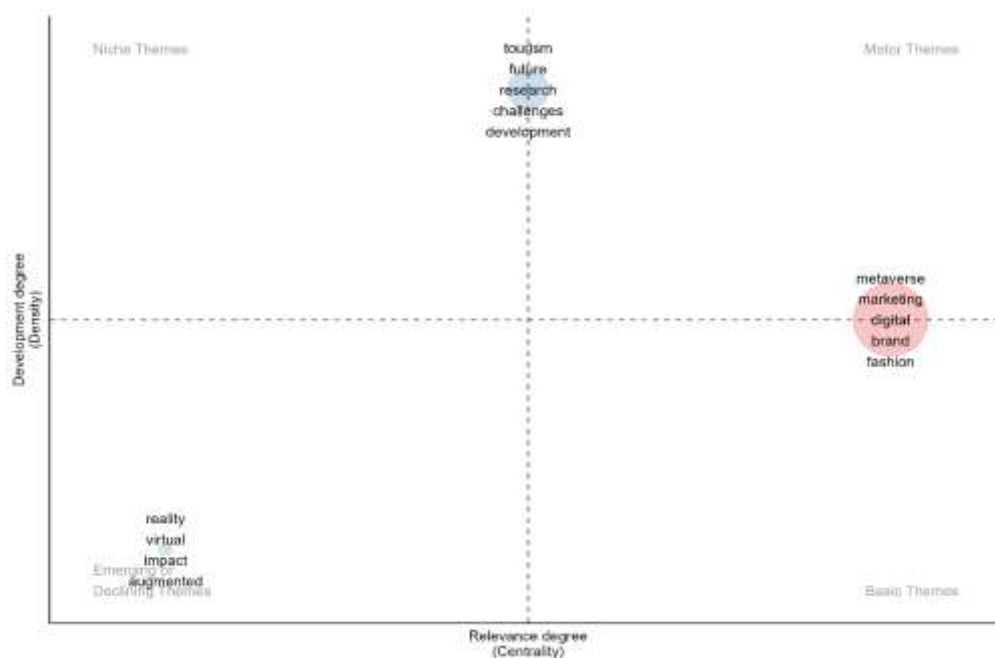


Fig. 6: Visualization of thematic mapping

has published a significant number of articles on marketing in the metaverse.

Collaboration between countries such as the USA, China, Australia, India, and Germany is prominent in the publication of articles related to marketing in the metaverse. South Korea emerges as a leading contributor in terms of both single-country and multi-country publications, followed by Australia and the USA.

Dwivedi *et al.* (2022) have made substantial contributions to this field, with high publication counts and significant co-authorship links. Moreover, these top researchers have received notable citations, indicating the impact of their work.

The research theme in marketing and Metaverse predominantly revolves around development, challenges, and their implications in the context of tourism. The analysis of frequently used words highlights the significance of terms like NFTs, Roblox, virtual, digital, and blockchain in the metaverse, while fashion, brands, experiences, and consumer behavior are prominent in the marketing aspect.

Overall, this bibliometric analysis provides valuable insights into the landscape of marketing in the metaverse, showcasing the contributions of researchers, the influence of journals, collaboration patterns, and key themes shaping this emerging field.

Conflict of Interest

I, Rajendra Gautam Jaishi, affirm that there are no financial, personal, or intellectual relationships with any individual, group, or institution that could create a conflict of interest concerning the research and content presented in this article entitled "A Bibliometric Analysis of Marketing in Metaverse"

Regarding financial conflicts, I confirm that I do not have any affiliations or arrangements such as employment, consultancies, stock ownership, funding sources, or grants received from any organization that might compromise my personal interests and the accuracy and credibility of the submitted work.

In terms of personal conflicts, I assert that there are no relationships with individuals or organizations that could unduly influence aspects such as research design choices, methodology selection, data interpretation procedures, or conclusions drawn from the study. There are no known associations with parties who may directly or indirectly benefit from the publication of this article.

Regarding intellectual conflicts, I declare that there are no commitments to specific theories, ideologies, political beliefs, or other biases which may impact how the research findings are presented within this manuscript.

References

- Aria M and Cuccurullo C (2017) bibliometrix : An R-tool for comprehensive science mapping analysis. *J Informetr* **11**: 959–975.
- Armstrong M (2023) How big a marketplace will the metaverse become? *World Econ. Forum*, <https://www.weforum.org/agenda/2023/02/chart-metaverse-market-growth-digital-economy/>
- Buhalis D, Leung D and Lin M (2023) Metaverse as a disruptive technology revolutionising tourism management and marketing. *Tour Manag* **97**: 104724.
- ÇeliK Z, Dölek B, Aydın İ and Saydan R (2022) Metaverse: Bibliometric Analysis, A Conceptual Model Proposal, And A Marketing-Oriented Approach. *Bingöl Üniversitesi Sos Bilim Enstitüsü Derg* 383–394.
- Cho J, Tom Dieck MC and Jung T (2023) *What is the Metaverse? Challenges, Opportunities, Definition, and Future Research Directions*. In: T Jung, MC Tom Dieck, SM Correia Loureiro, eds, Ext. Real. Metaverse. Springer International Publishing, Cham, pp 3–26
- Ciment S (2022) Nike Launches. Swoosh, a New Metaverse Marketplace and Community – Footwear News. Nike Launches New Metaverse Marketpl. Community, <https://footwearnews.com/business/business/nike-launches-metaverse-experience-swoosh-1203369168/>
- Crichton M (2022) Marketing in the Metaverse: What to Expect and How to Prepare. AMASF
- Cross T (2021) Who Is Trying to Build the Metaverse? VideoWeek
- Denton J (2022) Metaverse May Be Worth \$13 Trillion, Citi Says. What's Behind the Bullish Take on Web3. *barrons*, <https://www.barrons.com/articles/metaverse-web3-internet-virtual-reality-gaming-nvidia-51648744930>
- Donthu N, Kumar S, Mukherjee D, Pandey N and Lim WM (2021) How to conduct a bibliometric analysis: An overview and guidelines. *J Bus Res* **133**: 285–296.
- Dwivedi YK, Hughes L, Baabdullah AM, Ribeiro-Navarrete S, Giannakis M, Al-Debei MM, Dennehy D, Metri B, Buhalis D, Cheung CMK, *et al* (2022) Metaverse beyond the hype: Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice and policy. *Int J Inf Manag* **66**: 102542.
- Eggert A, Ulaga W, Frow P and Payne A (2018) Conceptualizing and communicating value in business markets: From value in exchange to value in use. *Ind Mark Manag* **69**: 80–90.
- Faughnder R (2022) From 2D to Web3: Disney is working on a metaverse game plan. 2D Web3 Disney Work. Metaverse Game Plan, <https://www.latimes.com/entertainment-arts/business/story/2022-04-27/disney-begins-formulating-a-metaverse-strategy>
- Golden J (2021) Nike is quietly preparing for the metaverse. CNBC, <https://www.cnbc.com/2021/11/02/nike-is-quietly-preparing-for-the-metaverse-.html>

- Gurav Y, Ingawale V, Bhagat H, Yadav A (2023) Marketing on metaverse: An emerging trend in digital marketing. *J Stat Manag Syst* **26**: 1735–1743
- Hazan E, Kelly G, Khan H, Spillecke D and Yee L (2022) Marketing in the metaverse: An opportunity for innovation and experimentation. *McKinsey Quarterly*.
- Hollensen S, Kotler P and Opresnik MO (2023) Metaverse – the new marketing universe. *J Bus Strategy* **44**: 119–125.
- Ibrahim D (2023) Nike Metaverse: Virtual Designs, Digital Shoes & More [2023]. <https://metaverseinsider.tech/2023/03/16/nike-metaverse/>
- Kotler P, Kartajaya H and Setiawan I (2021) Marketing 5.0: technology for humanity. Wiley, Hoboken, New Jersey
- Lu S, Mintz O (2023) Marketing on the metaverse: Research opportunities and challenges. *AMS Rev* **13**: 151–166.
- Meisenzahl M (2022) See inside the virtual worlds created by Wendy's, Chipotle, and McDonald's as the metaverse becomes the latest battleground for fast food. *Bus. Insid.*, <https://www.businessinsider.com/chipotle-mcdonalds-wendys-metaverse-virtual-worlds-photos-2022-4>
- Milmo D (2021) A whole new world: Disney is latest firm to announce metaverse plans. *The Guardian*
- Mishra DO and Dharmavaram VG (2023) Metaverse and Marketing Communication: A Systematic Literature Review. *J Content Community Commun* **17**: 46–57.
- Palmatier RW, Houston MB and Hulland J (2018) Review articles: purpose, process, and structure. *J Acad Mark Sci* **46**: 1–5.
- Paul J, Lim WM, O'Cass A, Hao AW and Bresciani S (2021) Scientific procedures and rationales for systematic literature reviews (SPAR-4-SLR). *Int J Consum Stud*. doi: 10.1111/ijcs.12695
- Perianes-Rodriguez A, Waltman L and Van Eck NJ (2016) Constructing bibliometric networks: A comparison between full and fractional counting. *J Informetr* **10**: 1178–1195.
- Singh VK, Singh P, Karmakar M, Leta J and Mayr P (2021) The journal coverage of Web of Science, Scopus and Dimensions: A comparative analysis. *Scientometrics* **126**: 5113–5142.
- Tan GW-H, Aw EC-X, Cham T-H, Ooi K-B, Dwivedi YK, Alalwan AA, Balakrishnan J, Chan HK, Hew J-J, Hughes L, *et al* (2023) Metaverse in marketing and logistics: the state of the art and the path forward. *Asia Pac J Mark Logist* **35**: 2932–2946.
- Thelwall M (2018) Dimensions: A competitor to Scopus and the Web of Science? *J Informetr* **12**: 430–435.
- Visser M, van Eck NJ and Waltman L (2020) Large-scale comparison of bibliographic data sources: Scopus, Web of Science, Dimensions, Crossref, and Microsoft Academic. doi: 10.48550/ARXIV.2005.10732
- Zhang D, Chadwick S and Liu L (2022) The Metaverse: Opportunities and Challenges for Marketing in Web3. *SSRN Electron J*. doi: 10.2139/ssrn.4278498
- Zhou Z, Chen Z and Jin X-L (2023) A review of the literature on the metaverse: definition, technologies, and user behaviors. *Internet Res*. <https://doi.org/10.1108/INTR-08-2022-0687>