



Mapping The Knowledge Domain of Metaverse The New Marketing Universe: A Bibliometric Analysis

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Abstract

“Metaverse” is the idea of a shared virtual environment that is “parallelized” to the real world thanks to advances in technology. The metaverse world is currently not only used as a platform for playing games but has also been used as a place for doing business. The purpose of this research is to identify articles that study the metaverse in marketing and provide an overview of the Metaverse knowledge domain as a new marketing world and to show and explain the research mapping. This mapping will help researchers explore and develop research related to the metaverse as a new marketing world landscape. Marketing is a promotional activity that can attract consumers to increase sales. Metaverse is a virtual universe that imitates real world procedures. In this 3D virtual environment, users can carry out activities in the digital world like in the real world, as is done with the Gucci brand which uses the metaverse as a marketing medium based on blockchain TheSandbox. This will have a major impact on how companies implement marketing in the future and how people communicate with each other. In Industry 5.0, metaverse has entered the world of marketing and has begun to be used by several companies. So, metaverse becomes a new world in marketing. This research uses qualitative methods with bibliometric techniques by utilizing Visualization of Similarities (Vosviewers) as an application. By entering keywords such as Metaverse; Metaverse marketing; Digital Marketing; New Marketing Universe; Gen z to search for articles via Publish or Perish with a total of 940 articles which were then processed using VosViewers. The results of the analysis found scientific mapping and possible future studies regarding the metaverse as a new marketing world that can be used as variable recommendations for future researchers as a reference for subsequent articles.

Keywords: *Metavers, Marketing Universe, Bibliometric, Scientific Mapping.*

1. Introduction

Technological developments will create the concept of a shared virtual space that is "parallelized" with the physical world known as the "Metaverse". This research aims to present and explain research mapping, to provide an overview of the Metaverse knowledge domain as a New Marketing World. This mapping will help researchers explore and develop research related to the metaverse as a new marketing world landscape [1].

Metaverse will trigger a shift from industrial revolution 4.0 to industry 5.0. Era 5.0. aims to create human-centered technology and balance economic progress with solving social problems through a system that deeply integrates virtual space and physical (real) space. In the 5.0 era. can do any activity in the virtual space like in the real world, such as working, exercising and playing [2].

In the 5.0 era, the metaverse world will turn into a virtual copy of the physical world. These conditions will shift the market to the virtual world. Apart from that, the need for virtual products will continue to increase. Likewise, various marketing activities can interact in it [3]. The existence of this revolution requires research and studies that provide thinking tools and produce scientific knowledge to increase understanding related to marketing activities in the 5.0 era or the metaverse era [4].

Researchers and practitioners currently continue to conduct research in order to control, predict, explain and increase insight related to marketing implementation in the metaverse era. Without research activities on the development of the metaverse as a new world of marketing, the existence of science will no longer be relevant for use in understanding the continuously developing macro environment. Therefore, it is necessary to carry out a deeper review to find out the extent of the development of research and trends related to the metaverse, as a new marketing world landscape [5].



2. Literature Review

Bibliometric analysis is a fundamental methodological basis for research analysis and originates from the fields of library science and informatics. There are several publications in the literature that provide comprehensive bibliometrics in various research areas, including management [6]. Bibliometrics is a method of analyzing books and other information tools using mathematical and statistical methods [7]. This bibliometric analysis uses a four-step approach. First, define the search database and keywords. Then, carry out initial analysis of the data, followed by bibliometric network analysis. Finally, carry out thematic analysis and conceptual structure analysis. To facilitate this analysis, we use various tools, such as R software, bibliometrix, ggplot2, rentrez, and wordcloud [8].

Citation analysis and content analysis are widely used bibliometric techniques. Bibliometric techniques are most commonly used in the fields of library and information science, but have a wide range of applications. Since 2020, researchers have become increasingly interested in the metaverse concept and have begun initial research on this topic [9]. Different from previous research, this research conducts a bibliometric study and proposes a conceptual model of metaverse technology [10].

Since the second half of the 20th century, rapid advances in information and communication technology (ICT) have had a major impact on social construction, especially in the economic and social fields. This ICT acceleration causes structural changes, transforming industrial society into an information society, and encouraging the emergence of innovative economic systems [11]. Society 5.0 is defined as "an effort to connect physical space and cyberspace by making full use of information, communication and technology (ICT)." agrarian society (Society 2.0), industrial society (Society 3.0), and information society (Society 4.0)[12]. Metaverse technology adapts to Society 5.0, integrates virtual worlds and physical spaces, and allows students to experience virtual classes through 3D virtual world applications [13].

The Metaverse platform is not just for spending free time, communicating, shopping, even working because there are almost no boundaries. We found in this research that customers also want some kind of regulation on how marketing and experiential marketing is done on the Metaverse platform.

Digital marketing is the term used for digital technologies used for meaningful, measurable and interactive marketing of products and services to reach, convert and retain customers [14]. Like the internet, Metaverse platforms have the power to drastically change economic and social life for all parties involved [15]. Tinjauan terbaru terhadap literatur pemasaran digital menemukan adanya fragmentasi disiplin ilmu [16]. This fragmentation is not surprising when we realize that the Internet is a very complex system [17]. This complexity is a natural consequence of a complex history, and fragmentation results from a lack of a comprehensive view of the Internet [18]. Research related to this metaverse began in 2007 with the title article "Video Game Technologies and Virtual Design: A Study Of Virtual Design Teams In A Metaverse" author: S. Bardzell, K. Shankarr, which continues to develop to this day. In fact, in 2023 the number of articles about the metaverse will reach 937 articles.

Metaverse is a large-scale, real-time interoperable network of 3D virtual worlds that can be accessed synchronously and continuously by a nearly unlimited number of users, providing information about an individual's whereabouts and identity, history, rights, and items. Achieve continuity of data such as communications and payments [19]. Metaverse can be defined as a connected digital world that is expected to revolutionize the way consumers, brands and businesses interact and transact in the near future [20]. Metaverse is an innovation that creates and integrates the real and virtual worlds that we live in, into a "virtual world community" that can combine objects and the environment around us into one whole. (Meepong and Kannikar 2022). Metaverse is a virtual example of what happens in the real world. Users can communicate with each other in this 3D virtual environment by using avatars that resemble themselves. This will have a major impact on how companies use the marketing function in the future and how we interact [19]. It's important for brands to strategize for a metaverse-driven future and recognize that there will be challenges along the way. For now, hardware is still an obstacle, especially on the AR side. In many ways, this will be an experimental gateway to the Metaverse. Mobile devices are still in short supply and headsets are still not available. However, this problem can be resolved immediately and the game will start once the problem is resolved. And it's also a glimmer of hope that we can better define what a metaverse is. Hardware manufacturers are in a unique position to act as stewards of the metaverse by determining the types of interactions possible and how users access the platform [21].

Metaverse is a form of technology that is starting to be used frequently by members of Gen Z because it allows them to communicate with friends while at home. Gen Z are digital natives who cannot imagine a world without the Internet. One of the key factors of the generation is widespread access to digital technology for digital communication. With the development of Wi-Fi and cell phone technology, Gen Z views this constant connection as a commodity, like electricity, and not a luxury. They don't just want to consume media, they also want to create media [21].

A study conducted by Razorfish in collaboration with VICE Media found that Gen Z users tend to spend more time with friends in the metaverse than in the real world. When all is said and done, it is important to note that this research shows that Gen Z users spend more than twelve hours each week playing metaverse with their friends. Compare that to the less than seven hours they spend meeting their friends in real life, and you can see how the metaverse is starting to become a core aspect of the way you currently choose to live your life. Metaverse is a technological change that aims to create an extraordinary atmosphere for its customers, who often use virtual reality or augmented reality to interact with the surrounding environment .

Metaverse business opportunities are largely based on how effectively these companies can adapt to an open environment, as they can use a metaverse environment, that is, an open, shared, and permanent virtual environment. Metaverse can also facilitate this with unique and immersive experiences for users. users are offered an exciting shopping, trading and storage experience, the metaverse can also facilitate the purchase, trade and storage of goods [15]. Metaverse is now also the latest challenge for fashion brands and some of them have successfully entered this platform through advertising, marketing or entertainment; but in all cases, this process requires complex strategies that must respond to developments in virtual marketing and communication between fashion brands and their customers.

Big investors and companies are betting that the younger generation will be interested in the Metaverse and will be the main drivers of the virtual future. However, a survey conducted by American market research and analysis company Harris Poll shows otherwise. Only 38% of Gen Z, or those born between 1997 and 2012, think Metaverse will be a big thing in the future. Therefore, Gen Z should be more convinced of the Metaverse's potential to connect with everyone who uses avatars, works, builds, and buys and sells. However, 48% of millennials, or those aged 25-40, agree that the Metaverse is a promising future. Additionally, according to the survey, 37% of Gen Z believes that Metaverse is worth spending their money to have unique digital products .

Table 1. Keywords

Factor	Description	Source
Metaverse	Metaverse is a collection of virtual spaces that you can create and explore together with other people who are not in the same physical space.	(Andrew Bosworth VP 2021; Hollensen, Kotler, and Opresnik 2023a)
Digital Marketing	Digital marketing refers to digital technologies that provide targeted, measurable, and interactive marketing of products and services to reach, acquire, and retain customers.	(Reddy and Reinartz 2017; Hollensen, Kotler, and Opresnik 2023a)
Gen Z	Gen Z, who make up 40% of the world's consumers, spends most of their time online.	(Hollensen, Kotler, and Opresnik 2023a; Rahmadhani et al. 2023; Polyviou and Pappas 2022; Weking et al. 2023)
Technology Transformation 4.0 to 5.0	Industry 5.0 was developed as a way to overcome the challenges of Industry 4.0 by placing humans at the center and meeting society's needs.	(Leng et al. 2022; Hollensen, Kotler, and Opresnik 2023a)

3. Method

This research uses qualitative research methods with a historical approach. This approach was taken to determine the development or mapping of research on the metaverse as a digital marketing tool. This research was carried out in two steps. The first stage is data collection. The data obtained is available in the form of papers published in reputable international journals.

The next step is to analyze the collected papers using bibliographic analysis. Bibliographic analysis is used to uncover current trends and identify potential topics for further research. This analysis helps to understand current developments and mapping of metaverse research as a marketing tool. Therefore, research results can also help provide recommendations regarding research topics and variables to future researchers. Therefore, bibliographic data sources were identified by conducting research content analysis. Eleven studies were conducted. Bibliographic data were obtained by running VOSviewer. VOSviewer is used to analyze bibliographic data sources because it allows visual mapping. Finally, a conceptual model is proposed based on the retrieved research results .

3.1. Method of collecting data

Data collection consists of research papers from well-known journal publishing groups: 1) Elsevier, 2) Emerald, 3) Springer, 4) Taylor and Francis, 5) Atlantis Press. articles were collected from accessible databases from six journal publishing groups. Article search based on Publish or Perish (PoP) (Setiawan and Yudi Mahadianto Alwi Budi Agung Prasetya, n.d.; José de Oliveira et al. 2019; Di Vaio et al. 2020). This software helps you find papers on related research topics. The stages of data collection with Publish or Perish are:

1. Open the Publish or Perish software.
2. Enter keywords / phrases that match the use of the title taken "Metaverse", "Digital Marketing", "New Marketing Universe"
3. The combination of words used consists of 5 combinations, namely [Metaverse; Metaverse marketing; Digital Marketing; New Marketing Universe; Gen z]
4. Next, articles are collected based on the keywords used, to be used as data processing material. Limit the year of publication from 2000-2024.
5. Articles that will be used as research material are analyzed for completeness of content related to the presence of "keywords", "title" and "abstract".
6. The selection of articles to be processed must pay attention to; publishing journal, DOI, GS Ranking, AuthorCount, CitesPerYear, and Cites PerAuthor.

There were 937 articles obtained via Publish or Perish. With a combination of keywords and titles shown in the table.

Table 2. Combination of Search and Number of Articles.

Keywords	Number of articles
Metaverse; Marketing Metaverse; Digital Marketing; New Marketing Universe; Gen z	937 Article

3.2. Data Analysis Method: Bibliometric

This bibliometric analysis uses the Vosviewers application to display the results in the form of mapping data. Similarity Visualization (Vosviewers) uses text mining capabilities to identify combinations of relevant component concepts/phrases in an integrated mapping and grouping approach to cite and analyze data to explore the network. This is an analysis application which brings together events.

The results of the analysis are used to map the field and create a bibliography. Vosviewer can provide up-to-date information and the scope of research conducted in this area .

4. Result and Discussion

4.1. Number of Years of Publication

Metaverse is a second life that brings many new changes to your life. Technology brings great benefits to its users, and in the 2000s there was an increase in internet/social media use. The presence of smartphones as a tool to connect to the internet is increasingly increasing the metaverse phenomenon..

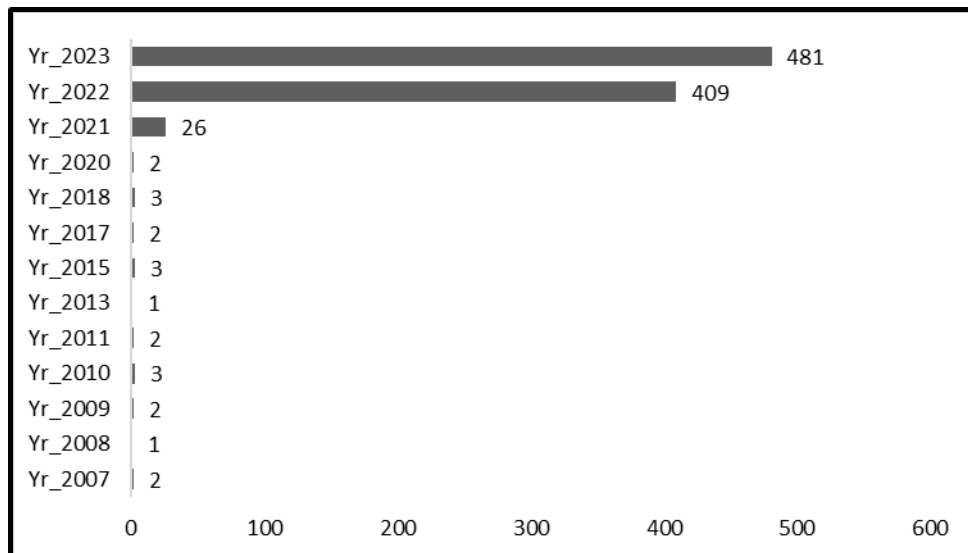


Fig 1. Number of Publication Years 2007-2023

In this situation, many researchers are conducting research on the metaverse as a business marketing tool, both for article titles and for keywords in an article. From 2007 to 2023, there were 937 articles discussing this metaverse. The value continues to increase from year to year. Technological developments do not necessarily have a positive impact, but can also have a negative impact. The development of this technology brings advantages and disadvantages. With the emergence of these advantages and disadvantages, researchers are motivated to carry out research related to this metaverse so that they can provide explanations, control and utilize this metaverse well to minimize the shortcomings of this metaverse.

4.2. Co Author Analysis

In his analysis the author used the Google Scholar (GS) ranking. Basically GS has the same function as Thomson ISI Web of Knowledge, namely creating a Journal Impact Factor (JIF). JIF is used to evaluate the impact factor of a paper. GS has a ranking advantage because it has free access to articles. Free access to articles gives researchers the opportunity to use them as references.

Table 2. Active Publications Per Year 2000 – 2023

Nama Penulis	Judul	Peringkat GS
Oxford Analytica (2022)	Metaverse 'Brandtech' Will Redefine Online Advertising	166
Oxford Analytica (2022)	Commercial Metaverse to Expand Fast but Unevenly	730
Oxford Analytica (2022)	Metaverse Holds Unknowable Societal Risks	877
Oxford Analytica (2021)	'Metaverse' Concept Gains Traction in China	901
Y Wang, Z Su, N Zhang, R Xing, D Liu H. Luan, X. Shen (2022)	A Survey on Metaverse: Fundamentals, Security, and Privacy	547
D Mourtzis (2022)	The Metaverse in Industry 5.0: A Human-Centric Approach Towards Personalized Value Creation	318
D Mourtzis, N Panopoulos, J Angelopoulos, B. Wong, L. Wang (2023)	Human Centric Platforms for Personalized Value Creation In Metaverse	892
K Rani, S Singh (2023)	Metaverse: An Innovative Platform for Digital Marketing	48
S Singh, H Sisodia (2023)	Building Blocks For The Metaverse: Virtual Worlds, Marketplaces, and Tools	549
S Kim, E Kim (2023)	Emergence of The Metaverse and Psychiatric Concerns in Children and Adolescents	874
Hk Lee, S Park, Y Lee (2022)	A Proposal of Virtual Museum Metaverse Content for The MZ Generation	100
S Park, S Kim (2022)	Identifying World Types to Deliver Gameful Experiences for Sustainable Learning in The Metaverse	501
J Park, N Kim (2023)	Examining Self-Congruence Between User and Avatar In Purchasing Behavior From The Metaverse to The Real World	286
Uk Lee, H Kim (2022)	UTAUT In Metaverse: An "Ifland" Case	544
K Israfilzade (2022)	Marketing in The Metaverse: A Sceptical Viewpoint of Opportunities and Future Research Directions	148
K Israfilzade (2023)	Decoding The Hype: A Pragmatic Investigation of Marketing Opportunities Within The Metaverse and Future Research Agendas	804
M Wang, H Yu, Z Bell, X Chu (2022)	Constructing An Edu-Metaverse Ecosystem: A New and Innovative Framework	567
W Xu, N Zhang, M Wang (2023)	The Impact of Interaction on Continuous Use in Online Learning Platforms: A Metaverse Perspective	836
P Henz (2022)	The Societal Impact of The Metaverse	612
P Henz (2022)	The Psychological Impact of The Metaverse	686

Nama Penulis	Judul	Peringkat GS
A Pangarkar, P Shukla (2023)	Conspicuous and Inconspicuous Consumption of Luxury Goods in A Digital World: Implications for Advertisers	373
A Pangarkar, P Shukla (2023)	Conspicuous and Inconspicuous Consumption of Luxury Goods in A Digital World: Insights, Implications, and Future Research Directions	531
S Ioannidis, Ap Kontis (2023)	The 4 Epochs of The Metaverse	414
J Lee, Mc Kim, Y Kim (2023)	Brand Exploration in Metaverse: Effects of Self-Avatar Resemblance on Brand Attitude and Purchase Intention, and Moderated Mediation of Copresence	903
Y Kim, H Jung (2022)	Beauty Industry's Strategic Response to Metaverse Evolution: Focused on Generation MZ	553
M Goldberg, F Schär (2023)	Metaverse Governance: An Empirical Analysis of Voting Within Decentralized Autonomous Organizations	807
J Lee (2022)	A Study on The Intention And Experience Of Using The Metaverse	647
J Lee, I Yeo, H Lee (2022)	Metaverse Current Status and Prospects: Focusing on Metaverse Field Cases	791
J Lee, Kh Kwon (2022)	Future Value and Direction of Cosmetics in The Era of Metaverse	291
J Lee, Kh Kwon (2022)	Novel Pathway Regarding Good Cosmetics Brands by NFT in The Metaverse World	371
J Lee, Kh Kwon (2022)	The Significant Transformation of Life Into Health and Beauty in Metaverse Era	574
J Lee, Mc Kim, Y Kim (2023)	Brand Exploration in Metaverse: Effects of Self-Avatar Resemblance on Brand Attitude and Purchase Intention, and Moderated Mediation of Copresence	903

Through the GS ranking, it can be seen from the author's contribution in producing articles each year. Based on the data collected, there are around 50 active writers. The table discusses the authors who contribute articles each year by looking at the GS rating.

4.3. Co Author Analysis

This citation analysis will help you determine how many papers are cited and whether the papers are useful to other researchers. The number of researchers studying the world of digital marketing in the metaverse continues to increase, especially in 2021, and will likely continue to increase in the future.

Table 3. Top Authors and Articles Cited in Digital Marketing Metaverse Publications.

Author's Name	Publisher	Cited Frequency
J Kim (2021)	Journal of Interactive Advertising	381
S Hollensen, P Kotler, MO Opresnik (2022)	Journal of Business Strategy	281
M Damar (2021)	Journal of Metaverse	237
B Falchuk, S Loeb, R Neff (2018)	IEEE Technology and Society	218
E Dincelli, A Yayla (2022)	The Journal of Strategic Information Systems	189
NG Narin (2021)	Journal of Metaverse	178
KG Barrera, D Shah (2023)	Journal of Business Research	157
A Joy, Y Zhu, C Peña, M Brouard (2022)	Strategic change	117
E Gadalla, K Keeling, I Abosag (2013)	Journal Of Marketing	114
KG Nalbant, Ş UYANIK (2021)	Journal of Metaverse	53
J Weking, KC Desouza, E Fielt (2023)	Journal of Business	41
P Fernandez (2022)	Library Hi Tech News	32
A Kemec (2022)	International Journal of Management and Accounting	30
T Hennig-Thurau, B Ognibeni (2022)	NIM Marketing Intelligence Review	17
J Oláh, E Nica (2022)	Journal of Self-Governance & Management Economics	11
IH Efendioglu (2023)	in Metaverse and the Adoption of a Virtual World	3

4.4. Bibliometric Analysis

1. Coauthoring Analysis

The results of the analysis show that there is collaboration between authors in the study of the metaverse as a new marketing world. Kreutzer, rt collaborated with other authors. Likewise with Mckenna, B, Volchek, K, Periyasami, and also Klos, HP who collaborated with other authors.

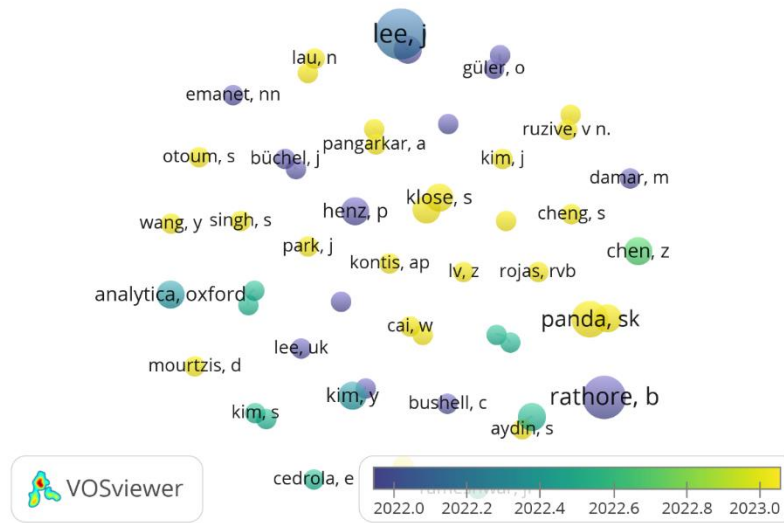


Fig 1. Researcher Network

The authors' collaboration demonstrates a strong commitment to the continuation of metaverse research. This is the name of the research conducted by the author of the study.

Table 4. Author Collaboration

AUTHORS	TITLE
J Lee. Kwon KH (2022)	(a). the significant transformation of life info health and beauty in Metaverse. (b). Novel pathway regarding good cosmetics brands by NFT in the Metaverse World. (c). Future value and direction of cosmetics in the era of Metaverse .
SK Panda. DK Murala (2023)	(a). Articial Intelligence in the Development of Metaverse. (b). The role of Immersive Reality (AR/VR/MR/XR) in Metaverse. (c). The Internet of Things in Developing Metaverse. (d). Metaverse: A study on Immersive Technologies.
KG Nalbant. S Aydin (2022)	(a). Literature review on the relationship between Artificial Intelligence Technologies with Digital Sports Marketing and Sports Management. (b). The significance of artificial intellegence in the realms of marketing, advertising, and brands inside the Metaverse.
S Kim. S Park (2022)	Identifying World Types To Deliver Gameful Experiences For Sustainable Learning in the Metaverse .
P Shukla. A Pangkar (2023)	(a). Conspicuous and Inconspicuous Consumption Of Luxury Goods In A Digital World: Insights,Implications, And Future Research Directions. (b). Conspicuous and inconspicuous consumption of luxury goods in a digital world: implications for advertisers.
H Jung , Y Kim (2022)	Beauty industry’s Strategic Response to Metaverse Evolution: Focused on Generation MZ .
AP Periyasamy, S Peritasami (2023)	Metaverse as future promosi g platform business model: case study on fashionshow value chain .

2. Bibliometric Network Visualization Analysis

Based on the results of the analysis using VOSViewer which carried out co-occurrence analysis, 96 keywords related to the metaverse as the New World of Marketing were found. To get more specific keywords, keyword frequency is limited to 5 occurrences. From these limitations, 52 keywords were obtained which were divided into 9 clusters.

Table 5. Keyword Grouping.

Cluster	Kata Kunci
Cluster 1	Consumer behavior, consumption, current metaverse, digital environment, future research direction, influencer marketing, online, social value, younger generation
Cluster 2	Facebook, immersive virtual world, interact, meta, metaverse application, next generation, online marketing, virtual reality headset, virtual reality platform
Cluster 3	Digital asset, dimensional virtual world, fashion industry, luxury, nft, nfts, purchase intention, virtual economy
Cluster 4	Digital marketer, digital transformation, new era, online virtual world, second life, term metaverse, virtual reality space
Cluster 5	Blockchain technology, digital marketing strategy, marketing strategy, metaverse ecosystem, metaverse tourism
Cluster 6	Digital native, human, online advertising, virtual influencer
Cluster 7	Application, digital technology, industrial metaverse, metaverse era

Cluster 8	Augmented reality techno, customer experience, marketer, metaverse marleting
Cluster 9	Gen z consumer, web3

The results of the Network Visualization Analysis show that there are still many small nodes that represent keywords obtained from an analysis. This visualization shows that there are still nodes that have a long reach or many that are not yet connected. For example, the “Digital Technology” node is not yet linked to “Applications” and the “Virtual Reality Space” node is not yet linked to “Digital Transformation”.

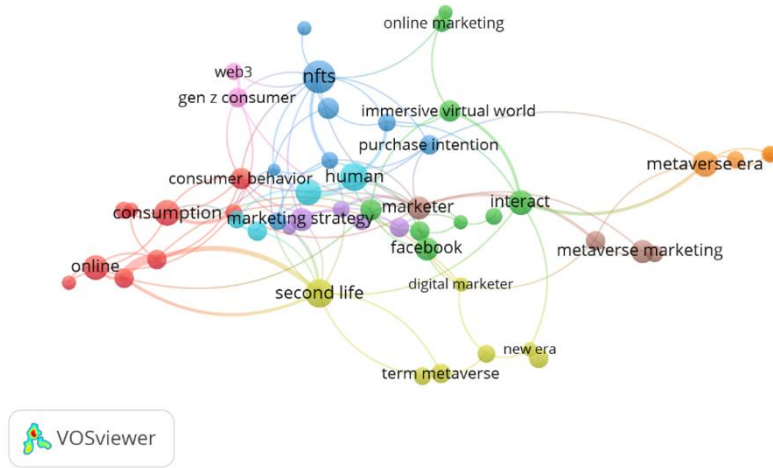


Fig 2. Network Visualization in Digital Transformation Publications

3. Analisis Visualisasi Overlay

Overlay Visualization Analysis shows that most of the themes have blue node colors. The blue color shows the majority of articles published in 2022. Based on the results of this analysis, it can be interpreted that topics related to the metaverse as a digital marketing tool are current topics.

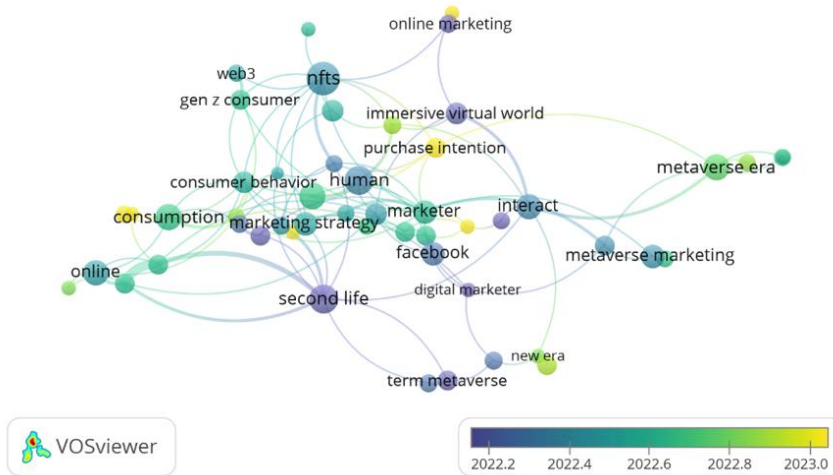


Fig 3. Overlay Visualization in Digital Transformation Publications

Based on the Overlay Visualization above, it can be said that topics related to the metaverse of the marketing world are the latest research. In line with previous results showing that meta version research has increased significantly in the market world since 2021 as a whole.

4. Density Visualization Analysis

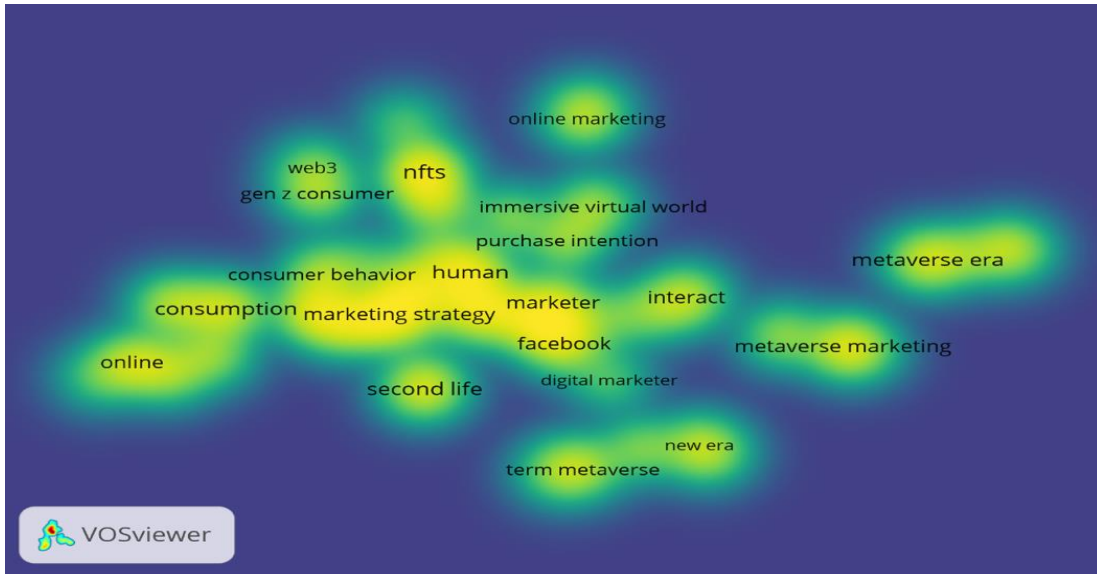


Fig 4. Density Visualization in Digital Transformation Publications

Desnity Visualization's analysis shows that metaverse-related research exists in the marketing world. This is visible in the yellow focus in the Desnity Visualization output. The color seen in each variable is usually brighter. This means that researchers have studied this subtopic. This also confirms the results of the analysis in Network Visualization Analysis and Overlay Visualization. This visualization shows the importance of metaverse research in the world of marketing. Based on research, assists in developing information related to the metaverse of the marketing world.

5. Conclusion

Metaverse is expected to become a major trend in the new marketing world. Business activities in the Metaverse will be created through efficient communication and careful consideration of business-related factors. Researchers are increasingly turning to the transformative potential of the Metaverse, despite the lack of infrastructure and technology to facilitate the construction of virtual worlds. With the development of technology, industry has also slowed down, perhaps due to human workers who are poorly trained and lack understanding. Research using bibliometric data also shows that the Metaverse idea is still “in development”. Five main countries that produce a lot of research related to the Metaverse. The five countries include Singapore, Japan, the United States, China and the United Kingdom. The importance of technological empowerment needs to be emphasized more to increase economic impact. The coverage was also guided by this research. Only a few countries continue to conduct extensive scientific research, and the topic is still not in-depth enough. The idea is still in its early stages and does not yet have a specific research specialty.

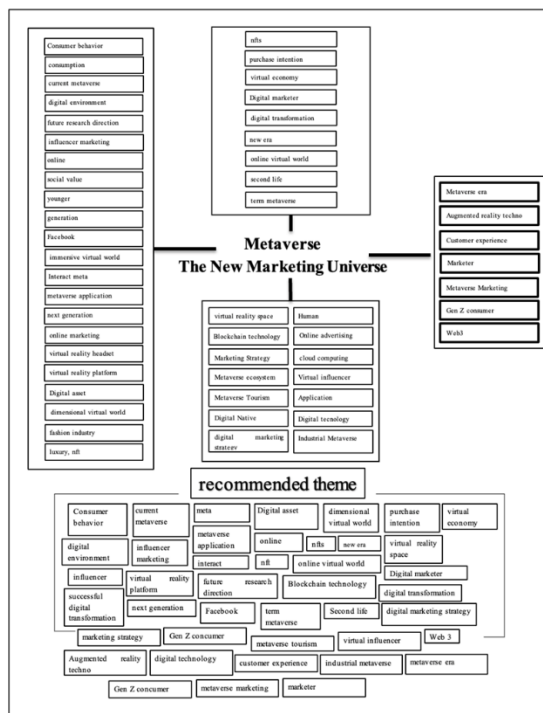


Fig 6. Recommended Theme

These variables or topics come from selected articles published in the 2022–2023 period. By using bibliometric analysis, it can be seen that there are still many who have not studied the metaverse in the world of marketing. This research gap is a signal for future researchers to conduct metaverse research in the marketing world of the future. Several themes are proposed to explore the metaverse of the marketing world.

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