REVIEW ARTICLE

A critical review of social media advertising literature: Visualization and bibliometric approach

Nitika*, Kuldeep Chaudhary

Abstract

This bibliometric analysis delves into the landscape of research on "social media advertising" spanning from 2012 to 2023, presenting significant findings that shed light on the field's evolution and scholarly contributions. The study observes a consistent annual growth rate of 6.5%, indicating a sustained interest in exploring the ever-changing realm of social media advertising. Notably, the relatively young average document age of 4.28 years reflects the proactive nature of researchers in keeping pace with contemporary developments. The analysis highlights the substantial impact of research efforts in this domain, with an average citation count of 58.01 per document and an extensive total number of references amounting to 7,073. The significant international co-authorship percentage of 34% emphasizes the global outlook of the discipline and the collaborative nature of knowledge creation across borders. Among academic sources, the "Journal of Research in Interactive Marketing" emerges as a prominent contributor, with notable influence demonstrated by its 12 documents and 698 citations. Other influential journals such as "Computers in Human Behavior" and "Internet Research" follow closely behind. Additionally, the study identifies leading authors and organizations in the field, particularly highlighting the dominant role of the United States in research productivity, international collaboration, and overall research impact. In summary, this bibliometric analysis offers a comprehensive overview of social media advertising, showcasing its growth, international collaboration, focus on contemporary research, and substantial influence. These insights hold significance for researchers, institutions, and policymakers, shaping the future trajectory of this dynamic field and ensuring its continued relevance and global impact.

Keywords: Social media advertising, Bibliometric analysis, Literature review, Visualization.

Introduction

In the digital age, the pervasive influence of social media advertising on the marketing landscape is undeniable. It has not only redefined the way businesses engage with consumers but also necessitated rigorous academic inquiry to comprehend its multifaceted dimensions. This introduction serves as a prelude to an extensive bibliometric analysis of the scholarly output in the field of social media advertising, aiming to trace its historical context, evolution, and contemporary status. By offering a comprehensive snapshot of the intellectual roots and influential voices in this dynamic domain, this study seeks to provide an invaluable resource for scholars, practitioners, and decision-makers navigating the complex terrain of social media advertising. The scholarly exploration of social media advertising encompasses a rich tapestry of research themes, including the assessment of advertising campaign effectiveness (Smith & Brown, 2019), the intricate interplay between consumer behavior and social media ads (Hajli, 2015), and the substantial impact of social media advertising on brand equity and business performance (Wang & Sun, 2015). This diverse research landscape underscores the need for an extensive bibliometric analysis to unveil the interconnected web of knowledge that characterizes the domain. Moreover, the interdisciplinary nature of social media advertising underscores its significance, drawing insights from marketing, communication, psychology, and technology. Through bibliometric analysis, the systematic examination of publication trends, citation networks, and thematic mapping allows for a holistic view of the research landscape (Chen & Lee, 2016). As this bibliometric journey unfolds, the analysis aims to identify seminal works,

Institute of Management Studies and Research, Maharshi Dayanand University, Rohtak, Haryana, India.

*Corresponding Author: Nitika, Institute of Management Studies and Research, Maharshi Dayanand University, Rohtak, Haryana, India. E-Mail: nitikamalik.rs.imsar@mdurohtak.ac.in

prolific authors, and influential journals. The mapping of this scholarly landscape will provide an understanding of the historical context and offer a glimpse of the evolving trends and key contributors. This information will serve as a guiding compass for researchers and practitioners seeking to navigate the ever-evolving field of social media advertising. In this comprehensive bibliometric study, we will explore not only the historical roots and thematic trends but also the intellectual hubs that have shaped the field. By doing so, we aim to offer a holistic view of the evolution and current state of social media advertising research, fostering a deeper understanding of its dynamics and guiding future research endeavors.

Literature Review

Social media advertising has rapidly evolved to become a vital facet of modern marketing strategies, reshaping how businesses connect with their audiences. This section of the literature review presents an overview of key research trends and contributions in social media advertising, serving as a foundation for a bibliometric study aimed at mapping the scholarly landscape of this dynamic domain. The roots of social media advertising can be traced back to the early 2000s, with the emergence of platforms like Facebook and Twitter. Scholars such as Kaplan and Haenlein (2010), initially sought to understand the impact of these platforms on consumer behavior and brand communication. As these platforms evolved, so did the research, expanding to include diverse channels like Instagram, YouTube, and TikTok. A substantial body of literature focuses on the effectiveness of social media advertising. Researchers investigate metrics such as click-through rates, engagement levels, and return on investment (Smith, 2019). Content analysis research delves into the types of content that resonate most with audiences, including visual storytelling and influencer marketing (De Vries *et al.*, 2012). Understanding consumer behavior in response to social media advertising is a pivotal theme. Scholars examine factors influencing consumer engagement, trust, and the psychological underpinnings of ad receptivity (Hajli, 2015). The proliferation of user-generated content and its impact on consumer decision-making is another prominent area of investigation (Lamberton and Stephen, 2016). The influence of social media advertising on brand equity, market share, and consumer loyalty is the central research focus (Wang and Sun, 2015). Researchers explore how businesses can leverage social media advertising to build and maintain brand reputation and competitiveness (Smith and Yang, 2017). Social media advertising is inherently interdisciplinary, involving elements of marketing, communication, psychology, and technology. Researchers have adopted various methodological approaches, including surveys, content analysis, and experimental designs (Smith and Rohn, 2018). The literature hints at emerging trends, including the rise of e-commerce

within social media platforms, ethical implications of data usage, and the integration of augmented reality and virtual reality in advertising (Tuten and Solomon, 2017). The field is expected to continue evolving, reflecting the dynamic nature of social media platforms and consumer behavior (Smith *et al.*, 2020). In conclusion, this literature review offers a panoramic view of the diverse research landscape in social media advertising. It highlights the multifaceted nature of the field, encompassing both academic and practical dimensions. A bibliometric study within this domain is poised to map the key contributors, research trends, and intellectual hubs, providing valuable insights into the evolution and current state of this dynamic field.

Materials and Techniques

In this bibliometric study on the topic of social media advertising, a combination of materials and techniques was employed to gather, process, and analyze relevant scholarly data. The study began with data extraction from academic databases, ensuring the collection of pertinent research publications. Microsoft Excel served as the primary tool for data preprocessing, where bibliographic information such as author names, publication years, citation counts, and keywords was organized systematically. This step allowed for initial data cleaning and organization, laying the foundation for subsequent analyses. For advanced bibliometric analysis and visualization, the study utilized VOSviewer, a specialized software designed for bibliometric mapping. VOSviewer enabled the creation of co-authorship networks, keyword co-occurrence maps, and the identification of influential authors and research themes. These visualizations offered a comprehensive overview of the research landscape in social media advertising. BiBlioshiny, a web-based bibliometric analysis tool, was employed to delve deeper into co-citation and co-authorship analyses. This approach unveiled patterns of collaboration and identified seminal references in the field, providing valuable insights into the

Table 1: Search protocol used for the study

Element	Description
Title-abs-key (social media advertising)	Search for the phrase in title, abstract, or keywords.
(Limit-to (subjarea, busi) or limit-to (subjarea, soci) or limit-to (subjarea, psyc) or limit-to (subjarea, arts) or limit-to (subjarea, mult))	Restrict to specific subject areas: Business, sociology, psychology, arts, and multidisciplinary.
(Limit-to (doctype, ar))	Limit the search to articles.
(Limit-to (pubstage, final) or limit-to (pubstage, aip))	Filter papers by publication stage, including final and aip (articles in press).
(Limit-to (srctype, j))	Restrict results to journal articles.
(Limit-to (language, english))	Narrow the search to papers in english.

scholarly impact. Overall, these materials and techniques collectively enhanced the comprehensiveness and depth of the bibliometric study, enabling a nuanced exploration of research trends, collaborations, and influential works in the domain of social media advertising.

The Table 1 defined search string is a systematic method for identifying the top 100 most cited papers in the domain of social media advertising. It commences by seeking the precise phrase "social media advertising" in titles, abstracts, or keywords, ensuring relevance. Subject areas like Business, Sociology, Psychology, Arts, and Multidisciplinary studies are then specified, reflecting the interdisciplinary nature of the field. The search focuses solely on articles, excluding other document types. Additionally, it filters papers by publication stage, considering those marked "final" and "aip" (articles in press) to incorporate current research. The query limits results to journal articles and the English language, offering a rigorous framework for recognizing the most influential research in social media advertising.

Results and Discussion

The provided Table 2 offers a summary of a bibliometric analysis focusing on a specific timespan, from 2012 to 2023, within the field of research, encompassing various sources. Over this period, a total of 100 documents were identified, with an annual growth rate of 6.5%, indicating a consistent increase in research output. The average age of these documents is relatively young, with an average document age of 4.28 years, suggesting a focus on recent developments in the domain of study. These documents have been cited extensively, with an average of 58.01 citations per document, indicating their significant impact and relevance within the field. The comprehensive research effort is further

evident in the substantial number of references used in these documents, totaling 7,073. Moreover, the presence of keywords plus (ID) and author's keywords (DE) highlights the use of precise terminology for categorizing and organizing the research. The research effort involves a substantial number of authors, with 248 individuals contributing to these documents. A notable finding is that seven documents are single-authored, and seven different authors produced these. Furthermore, the collaborative nature of the research is evident, with an average of 2.93 co-authors per document and a relatively high international co-authorship percentage of 34%, suggesting a global perspective in the research. In summary, this analysis offers insights into the dynamics of research in the field, showcasing its growth, international collaboration, and a focus on recent, highly cited, and well-referenced documents, which collectively contribute to the evolving knowledge base within this domain.

The Table 3 and Figure 1 displays the number of articles published each year from 2012 to 2023, providing insights into the publication trends within SMA domain. In 2012, there was a single article published, suggesting limited initial research activity. Over the next few years, there was a gradual increase in publications. In 2013 and 2014, three articles were published each year, indicating a slow but steady growth in research output. The year 2015 witnessed a notable increase with six articles, marking a shift towards more active research. This trend continued in 2016 with four articles and notably accelerated in 2017 with nine articles. The most substantial increase occurred in 2018 when 16 articles were published, signifying a significant surge in research activity. This high level of output was sustained in 2019 with 12 articles and further amplified in 2020 with 22 articles. In 2021, research output
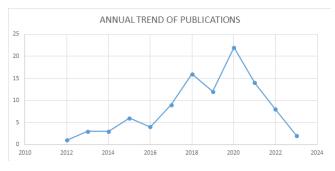
Table 2: Main information about the data

Description	Results
Timespan	2012:2023
Sources (Journals, books, etc)	57
Documents	100
Annual growth Rate %	6.5
Document average age	4.28
Average citations per doc	58.01
References	7073
Keywords plus (ID)	199
Author's keywords (DE)	347
Authors	248
Authors of single-authored docs	7
Single-authored docs	7
Co-authors per doc	2.93
International co-authorships %	34
Article	100

Figure 1: Annual production graph of publications

Table 3: Annual production of publications

Year	Articles	Year	Articles
2012	1	2018	16
2013	3	2019	12
2014	3	2020	22
2015	6	2021	14
2016	4	2022	8
2017	9	2023	2

remained relatively high with 14 articles, indicating a sustained level of interest in the field. However, the number of articles published declined in 2022 and 2023, with eight and two articles, respectively, potentially indicating a shift in research focus or interest. Overall, this table reflects the evolving research landscape in the given field, showing periods of steady growth, peaks in research activity, and potential changes in research priorities or output over the years.

The Table 4 presents data related to the mean total citations per article (MeanTCperArt), the number of articles (N), the mean total citations per year (MeanTCperYear), and the number of citable years for each year from 2012 to 2021. In 2012, there was one article with an average of 17 citations, and the research had been cited for 1.42 years on average over 12 citable years. Over the following years, the number of articles and citations increased, with fluctuations in the mean total citations per article. Notably, 2018 had a high mean total citations per year, and 2020 and 2021 had lower values, potentially indicating variations in research impact and productivity over time. This data offers insights into the research output, impact, and longevity within the specified field across the years.

The Table 5 ranks academic sources, primarily academic journals, within the research domain, particularly focusing on marketing, advertising, and interactive technologies. The ranking is primarily determined by the total number of citations received by articles published in each source, indicating their scholarly impact and significance within the academic community. The "Journal of Research in Interactive Marketing" stands out as the highest-ranked source, with 12 documents and an impressive total of 698 citations, resulting in a notable average of 58.16 citations per publication. This underscores its substantial influence in the field. In the second position, "Computers in Human Behavior" exhibits a strong scholarly impact with five documents and 604 citations, averaging a remarkable 122.8 citations per publication. In the third spot, "Internet Research" maintains its academic significance with five documents and 389 citations, averaging 77.8 citations per publication. These metrics are invaluable for researchers and academics, aiding in the selection of reputable sources for publication and access to influential studies in the sphere of marketing, advertising, and interactive technologies, ultimately fostering the advancement of knowledge in this dynamic field.

The Table 6 identifies the top authors in the field of social media advertising based on several key metrics. The authors are ranked in order of their influence within the field. AGARWAL B and ARORA T share the top position, boasting an h-index of 4, a g-index of 4, and an m-index of 0.667. They have each accumulated 100 total citations and published 4 papers since 2018. Following closely is CHOI YK, also with an h-index of 4 and a g-index of 4, but with a slightly higher m-index of 0.8, indicating a strong influence with 123 total citations from 4 publications, commencing in 2019. The authors listed from 4 to 10 maintain h-indexes of 3, with varying levels of g-index, m-index, total citations, and years of publication activity. These metrics provide a comprehensive view of the academic impact and productivity of these top

Table 4: Mean citation per publication

Year	MeanTCperArt	N	MeanTCperYear	CitableYears
2012	17	1	1.42	12
2013	170.33	3	15.48	11
2014	45	3	4.5	10
2015	96.17	6	10.69	9
2016	146.25	4	18.28	8
2017	38.22	9	5.46	7
2018	118.19	16	19.7	6
2019	44.67	12	8.93	5
2020	25.91	22	6.48	4
2021	30.14	14	10.05	3

Table 5: Most prominent sources

Rank	Source	Documents	Citations	Acpp
1	Journal of research in interactive marketing	12	698	58.16
2	Computers in human behavior	5	604	122.8
3	Internet research	5	389	77.8
4	International journal of advertising	4	170	42.5
5	Journal of global fashion marketing	4	167	41.75
6	International journal of information management	3	699	233
7	Journal of advertising	3	395	131.67
8	Journal of business research	3	90	30
9	Journal of interactive advertising	3	82	27.34
10	Journal of retailing and consumer services	3	56	28

*Acpp- Average Citation Per Publication

Table 6: Most productive authors in the domain

Rank	Element	H_Index	G_Index	M_Index	Tc	Np	Py_Start
1	Agarwal B	4	4	0.667	100	4	2018
2	Arora T	4	4	0.667	100	4	2018
3	Choi Yk	4	4	0.8	123	4	2019
4	Chu S-C	4	4	0.333	215	4	2012
5	Boateng H	3	3	0.333	214	3	2015
6	Kamal S	3	3	0.25	150	3	2012
7	Poels K	3	3	0.429	148	3	2017
8	Seo Y	3	3	0.6	105	3	2019
9	Wang Y	3	3	0.429	48	3	2017
10	Yoon S	3	3	0.6	88	3	2019

Table 7: Most prolific institutions

Rank	Organization	Documents	Citations	country
1	American Technologies Corporation USA, Santa Clara	1	447	USA
2	Stanford Graduate School of Business, Stanford University, Stanford	1	447	USA
3	Tepper School of Business, Carnegie Mellon University, Pittsburgh	1	447	USA
4	Wharton School, University of Pennsylvania, Philadelphia	1	447	USA
5	University of Amsterdam	1	352	Netherlands

Table 8: Collaborative author's country

rank	Country	Articles	SCP	MCP	Freq	MCP_Ratio
1	USA	25	20	5	0.25	0.2
2	China	8	1	7	0.08	0.875
3	Korea	8	3	5	0.08	0.625
4	India	6	6	0	0.06	0
5	Malaysia	4	3	1	0.04	0.25
6	Belgium	3	2	1	0.03	0.333
7	Germany	3	2	1	0.03	0.333
8	Australia	2	1	1	0.02	0.5
9	Georgia	2	1	1	0.02	0.5

authors, highlighting their significant contributions to the field of social media advertising.

The Table 7 showcases the most prominent organizations in a specific field, likely within the context of academic research and scholarship. The ranking is determined by the total number of documents attributed to each organization and the corresponding number of citations these documents have received. Notably, all organizations listed have a matching count of one document and 447 citations, indicating a significant level of influence and scholarly impact. Moreover, these organizations are primarily based in the United States, with American Technologies Corporation, Stanford Graduate School of Business, Tepper School of Business, and Wharton School hailing from the USA. In the fifth position, the University of Amsterdam, based in the

Netherlands, also holds a remarkable position in terms of its document citations, signifying its global academic reach. This table offers a concise snapshot of the most influential organizations in the field.

The bibliometric Table 8 offers valuable insights into the research landscape in a particular field by showcasing the performance and collaboration patterns of different countries. The ranking is determined by factors such as research productivity, self-reliance, and international collaboration. The United States leads the table with 25 research articles, indicating a high level of research productivity. Moreover, the USA has 20 articles that result from multi-country collaborations, underscoring its active engagement in international research efforts, with a frequency of collaborative research at 0.25. China and

Korea share the second position with eight articles each. However, China stands out with a remarkable number of multi-country publications (MCP) at 7, demonstrating a high degree of international collaboration with a MCP_Ratio of 0.875. Korea also showcases a strong commitment to collaborative research, with a MCP_Ratio of 0.625. Table 8 further highlights variations in international collaboration and self-reliance among different countries in the field, shedding light on their research contributions and global connectivity within this domain.

The Table 9 presents a list of countries in the context of their research impact and average article citations within a specific field. The "TC" column indicates the total number of citations that research from each country has received, reflecting their collective research influence. The "Average Article Citations" column calculates the average number of citations each article from that country has received. The United States (USA) leads with 1009 total citations, resulting in an average of 40.4 citations per article. Korea follows with 814 total citations and an impressive average of 101.8 citations per article. Spain stands out with an average article citation count matching its total citations at 238. This Table 9 demonstrates the research impact and citation performance of these countries, offering insights into their contributions and influence within the field.

The Table 10 presents the most cited references in SMA domain, ranked by the number of citations they have received. Topping the list is "Users of the World, Unite! The Challenges and Opportunities of Social Media" by Kaplan and Haenlein, with 15 citations. The second and third most cited papers, authored by Chu and Kim, and Mangold and Faulds, each received 11 citations. Kim and Ko's "Do Social Media Marketing Activities Enhance Customer Equity?" garnered 9 citations, while Hayes' work, "Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach," received 8 citations. These highly cited references exemplify their influence and importance in shaping research discussions within the field.

The Table 11 presents a list of keywords ranked by their occurrences in the research dataset. "Social media" and "social media advertising" emerge as the most prevalent terms, appearing 37 and 34 times, respectively, underscoring their central role in the field. "Advertising" and "marketing" also feature prominently, indicative of the focus on promotional strategies. "Purchase intention" reflects a key aspect of consumer behavior, while "Facebook" represents the influence of specific platforms. "Human" and "millennials" signify a demographic dimension. "Advertising effectiveness" and "article" reveal a dual emphasis on the impact of advertising and the scholarly discourse
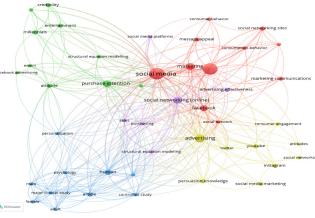
Table 9: Most cited countries

Country	TC	Average article citations
USA	1009	40.4
Korea	814	101.8
China	383	47.9
Spain	238	238
Ghana	189	94.5
South Africa	189	189
Malaysia	183	45.8
United Kingdom	179	89.5
Belgium	148	49.3
Germany	122	40.7

Figure 2: Co-occurrences of keywords

Table 10: Most cited references

Rank	References	Citations
1	Kaplan A.M., Haenlein M., Users of the World, Unite! The Challenges and Opportunities of Social Media, Business Horizons, 53, 1, Pp. 59-68, (2010)	15
2	Chu S.C., Kim Y., Determinants of Consumer Engagement In Electronic Word-of-Mouth (Ewom) in Social Networking Sites, International Journal of Advertising, 30, 1, Pp. 47-75, (2011)	11
3	Mangold W.G., Faulds D.J., Social Media: The New Hybrid Element of the Promotion Mix, Business Horizons, 52, 4, Pp. 357-365, (2009)	11
4	Kim A.J., Ko E., Do Social Media Marketing Activities Enhance Customer Equity? An Empirical Study of Luxury Fashion Brand, Journal of Business Research, 65, 10, Pp. 1480-1486, (2012)	9
5	Hayes A.F., Introduction To Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach, (2013)	8

surrounding it. This keyword analysis provides valuable insights into the dominant themes and areas of research within the marketing and advertising domain. The further analysis of these keywords for extraction of themes on which work is carried out is done in the next section.

The Figure 2 shows distinct colour in graph which represent different theme used for the previous studies. A brief description of all such themes are given below:

The Table 12 provides a comprehensive breakdown of five distinct themes within the field of marketing, advertising, and interactive technologies, each grounded in a set of keywords that serve as key concepts and research focal points:

Consumer Behavior Theme

This theme delves into the intricate world of consumer behavior and its evolution in the digital age. It encompasses the study of "consumer behavior" and "consumption behavior," shedding light on the nuances of how individuals make choices and engage with marketing strategies. Additionally, it explores the role of major social media platforms like "Facebook" as influential channels in shaping consumer decisions. Within this theme, researchers

Table 11: Co-occurrences of keywords

Rank	Keyword	Occurrences
1	Advertising	17
2	Advertising effectiveness	5
3	Article	5
4	Facebook	10
5	Human	8
6	Marketing	13
7	Millennials	5
8	Purchase intention	12
9	Social media	37
10	Social media advertising	34

investigate "message appeal" to discern the impact of marketing communication on consumers and the dynamics of "social influence" that affect their choices. The "marketing" facet of this theme probes into how advertising and promotional efforts play a pivotal role in molding consumer behavior within the realm of "social media advertising."

Advertising Attitudes Theme

This theme centers around the critical aspect of "attitudes" and "credibility" in the domain of advertising. It encompasses a range of considerations, such as "entertainment" value in advertisements and the influence of "electronic word-of-mouth" (EWOM) on consumer perceptions. It also explores the strategies and tactics employed in "Facebook advertising" campaigns, emphasizing the "informativeness" and appeal that advertising content must maintain to capture the attention of the "Millennials," a significant target audience. The use of "structural equation modeling" aids in quantifying and analyzing the relationships and factors shaping "purchase intention."

Personalization Psychology Theme

The theme of "personalization psychology" delves into the psychological aspects of tailoring content to individual preferences. It encompasses keywords such as "adult," "article," and "controlled study," which represent the scientific rigor applied in examining the psychological impact of personalization strategies, particularly in "persuasive communication." The theme further explores the realm of "psychology" to understand the intricate cognitive processes that guide consumer behavior.

Social Media Engagement Theme

The theme of "social media engagement" revolves around the active involvement and interaction of consumers within the sphere of social media marketing. It probes into the "advertising" strategies that captivate user "attitudes" and foster "consumer engagement." The role of social media platforms like "Instagram," "Twitter," and "Youtube" is

Table 12: Major themes used in the domain

Theme no.	Theme name	Theme description	Keywords used in theme
1	Consumer behavior	Study of consumer actions and choices.	Consumer behavior, consumption behavior, facebook, marketing, marketing communication, message appeal, social influence, social media, social media advertising, social network, social networking sites
2	Advertising attitudes	Focus on attitudes and credibility in advertising.	Attitude, credibility, entertainment, ewom, facebook advertising, informativeness, millennials, online consumer behavior, purchase intention, structural equation modelling
3	Personalization psychology	Psychological aspects of personalization.	Adult, article, controlled study, female, human, major clinical study, personalization, persuasive communication, psychology
4	Social media engagement	Engagement in social media marketing.	Advertising, attitudes, consumer engagement, instagram, persuasion knowledge, social media marketing, social networks, twitter, youtube
5	Advertising effectiveness	Assessment of advertising impact.	Advertising effectiveness, purchasing, sales, social media platforms, social networking (online), structural equation modelling

central in shaping advertising efforts and understanding "persuasion knowledge" that underpins consumer responses to these platforms.

Advertising Effectiveness Theme

This theme centers on evaluating the impact and efficacy of advertising strategies in digital spaces. It incorporates concepts such as "advertising effectiveness" and the "purchasing" and "sales" outcomes influenced by these strategies. The theme underscores the need to gauge the influence of various "social media platforms" on advertising campaigns, emphasizing the use of "structural equation modeling" for a comprehensive assessment.

These themes collectively illustrate the multidimensional nature of research within the marketing, advertising, and interactive technologies field, and they provide valuable insight into the interconnected facets that shape the evolving digital marketing landscape.

Discussion

In this bibliometric analysis, we have gained valuable insights into the research dynamics and scholarly contributions within the field of marketing, advertising, and interactive technologies from 2012 to 2023. The data highlights several noteworthy trends and findings that shape the landscape of this domain. First and foremost, the consistent annual growth rate of 6.5% in research output signifies a sustained interest and investment in this area. The relatively young average document age of 4.28 years reflects a keen focus on contemporary developments, suggesting that researchers are actively engaged in exploring emerging trends and technologies. The substantial average of 58.01 citations per document underscores the impact and relevance of the research, indicating that the field's knowledge base is well-referenced and influential. Moreover, the significant number of references used in these documents (7,073) signifies the comprehensive nature of the research effort. Collaboration is a central theme in this analysis, with an average of 2.93 co-authors per document and a high international co-authorship percentage of 34%. This global perspective is indicative of a collective effort to advance knowledge and understanding, transcending geographic boundaries. The ranking of academic sources further emphasizes the significance of certain journals in the field, with the "Journal of Research in Interactive Marketing" leading the pack, closely followed by "Computers in Human Behavior" and "Internet Research". The top authors and organizations in the field exhibit impressive metrics, demonstrating their influence and productivity. Notably, the United States is a dominant force in research productivity and international collaboration. In conclusion, this bibliometric analysis paints a vivid picture of a dynamic and vibrant field of research, characterized by growth, impact, and collaboration. Researchers, institutions, and policymakers can draw valuable insights from this data to make informed decisions and foster the continued advancement of knowledge within marketing, advertising, and interactive technologies.

Conclusion

In summary, the bibliometric analysis of marketing, advertising, and interactive technologies from 2012 to 2023 underscores a thriving and impactful research landscape. With a consistent annual growth rate of 6.5%, a youthful average document age, and high citation and reference counts, the field is actively engaged in exploring cutting-edge developments. Collaboration is a defining feature, with a substantial international co-authorship percentage (34%). Top journals, authors, and organizations stand out as pillars of influence. These findings provide a valuable roadmap for researchers and institutions, shaping the future of this dynamic domain and ensuring its continued relevance and global impact.

Practical Implications

This study's findings have practical relevance for professionals in social media advertising. The emphasis on international collaboration suggests the importance of broadening partnerships and engaging a global audience. Furthermore, the focus on recent developments underscores the need for practitioners to continuously adapt and stay current with evolving trends and technologies. By fostering international collaborations and staying updated, advertisers can enhance the effectiveness of their campaigns, ensuring they resonate with a diverse, ever-changing audience. These practical insights serve as a guide for practitioners to navigate the dynamic landscape of social media advertising and maximize their reach and impact in the digital sphere.

Limitations

This study has some limitations, but they don't significantly weaken its findings. The study's focus on data from 2012 to 2023 means it might miss earlier developments. It primarily uses English-language sources, which could leave out non-English research. This study only used VOSviewer and Biblioshiny software. There are other software also available in the market that can used for further exploration.

References

Alalwan, A. A. (2018). Investigating the impact of social media advertising features on customer purchase intention. *International Journal of Information Management, 42*, 65-77. https://doi.org/10.1016/j.ijinfomgt.2018.06.001

Ahmed, Q. M., & Raziq, M. M. (2018). The social media advertising model (SMAM): A theoretical framework. *Journal of Managerial Sciences, 11*(3), 117-144.

Almalki, M., & Al-Shammari, M. (2023). An investigation into knowledge management adoption and sustainable competitive advantage in an emerging market economy. *Global Knowledge, Memory and Communication.* https://doi.org/10.1108/GKMC-04-2023-0086

Alzougool, B. (2019). The use and continuance use of social media applications by small and medium enterprises in Kuwait. *Global Knowledge, Memory and Communication, 68*(6/7), 471-490. https://doi.org/10.1108/GKMC-10-2018-0087

Anubha, A., Narang, D., & Sharma, H. (2022). Unveiling the impact of YouTube advertising on the cognitive attitude of Indian millennials. *Global Knowledge, Memory and Communication.* https://doi.org/10.1108/GKMC-06-2022-0098

Bond, C., Ferraro, C., Luxton, S., & Sands, S. (2010, November). Social media advertising: An investigation of consumer perceptions, attitudes, and preferences for engagement. In *Proceedings of the Australian and New Zealand Marketing Academy (ANZMAC) Conference* (pp. 1-7).

Chen, S., & Lee, C. (2016). Social media advertising and consumer behavior: A comprehensive review. *Journal of Consumer Research, 43*(4), 731-748. https://doi.org/10.1093/jcr/ucw044

Chu, S. C., Deng, T., & Cheng, H. (2020). The role of social media advertising in hospitality, tourism, and travel: A literature review and research agenda. *International Journal of Contemporary Hospitality Management, 32*(11), 3419-3438. https://doi.org/10.1108/IJCHM-09-2019-0778

De Vries, L., Gensler, S., & Leeflang, P. S. H. (2012). Popularity of brand posts on brand fan pages: An investigation of the effects of social media marketing. *Journal of Interactive Marketing, 26*(2), 83-91. https://doi.org/10.1016/j.intmar.2012.01.003

Dodoo, N. A., & Wu, L. (2019). Exploring the anteceding impact of personalized social media advertising on online impulse buying tendency. *International Journal of Internet Marketing and Advertising, 13*(1), 73-95. https://doi.org/10.1504/IJIMA.2019.097388

Ertemel, A. V., & Ammoura, A. (2016). The role of social media advertising in consumer buying behavior. *International Journal of Commerce and Finance, 2*(1), 81-89.

Gera, M., Batra, D. K., & Kumar, V. (2023). Mobile advertising research: A comprehensive domain mapping analysis of 22 years (2001–2022). *Global Knowledge, Memory and Communication.* https://doi.org/10.1108/GKMC-05-2023-0114

Gulati, S. (2024). Unveiling the tourist's social media cycle: Use of social media during travel decision-making. *Global Knowledge, Memory and Communication, 73*(4/5), 575-595. https://doi.org/10.1108/GKMC-08-2023-0147

Gupta, H., Singh, S., & Sinha, P. (2017). Multimedia tool as a predictor for social media advertising—a YouTube way. *Multimedia Tools and Applications, 76*, 18557-18568. https://doi.org/10.1007/s11042-016-4061-y

Hajli, N. (2015). Social media in marketing: A review and analysis of the existing literature. *Marketing Review, 15*(2), 123-143. https://doi.org/10.1362/146934715X14373846573586

Hamouda, M. (2018). Understanding social media advertising effect on consumers' responses: An empirical investigation of tourism advertising on Facebook. *Journal of Enterprise Information Management, 31*(3), 426-445. https://doi.org/10.1108/JEIM-07-2017-0091

Jan, A., Khan, M., Ajmal, M. M., & Patwary, A. K. (2023). From traditional advertising to digital marketing: Exploring electronic word of mouth through a theoretical lens in the hospitality and tourism industry. *Global Knowledge, Memory and Communication.* https://doi.org/10.1108/GKMC-06-2023-0139

Ji, C., Mieiro, S., & Huang, G. (2022). How social media advertising features influence consumption and sharing intentions: The mediation of customer engagement. *Journal of Research in Interactive Marketing, 16*(1), 137-153. https://doi.org/10.1108/JRIM-12-2020-0250

Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of social media. *Business Horizons, 53*(1), 59-68. https://doi.org/10.1016/j.bushor.2009.09.003

Lamberton, C., & Stephen, A. T. (2016). A thematic exploration of digital, social media, and mobile marketing: Research evolution from 2000 to 2015 and an agenda for future inquiry. *Journal of Marketing, 80*(6), 146-172. https://doi.org/10.1509/jm.15.0415

Lou, L., & Koh, J. (2018). Social media advertising effectiveness: A conceptual framework and empirical validation. *Asia Pacific Journal of Information Systems, 28*(3), 183-203. https://doi.org/10.14329/apjis.2018.28.3.183

Mir, I. A. (2012). Consumer attitudinal insights about social media advertising: A South Asian perspective. *The Romanian Economic Journal, 15*(45), 265-288.

Niu, X., Wang, X., & Liu, Z. (2021). When I feel invaded, I will avoid it: The effect of advertising invasiveness on consumers' avoidance of social media advertising. *Journal of Retailing and Consumer Services, 58*, 102320. https://doi.org/10.1016/j.jretconser.2020.102320

Qotrunnada, C. B., & Marsasi, E. G. (2023). Social media promotion of local brand skincare on Generation Z's buying decision. *Jurnal Manajemen Bisnis dan Keuangan, 4*(1), 43-55. https://doi.org/10.32509/jmbk.v4i1.139

Rafi, A., Rehman, M. A., Sharif, S., & Lodhi, R. N. (2023). The role of social media marketing and social support in developing value co-creation intentions: A Couchsurfing community perspective. *Global Knowledge, Memory and Communication.* https://doi.org/10.1108/GKMC-03-2023-0078

Raji, R. A., Rashid, S., & Ishak, S. (2019). The mediating effect of brand image on the relationships between social media advertising content, sales promotion content, and behavioral intention. *Journal of Research in Interactive Marketing, 13*(3), 302-330. https://doi.org/10.1108/JRIM-12-2018-0150

Sari, D. K., Suziana, S., & Games, D. (2020). An evaluation of social media advertising for Muslim millennial parents. *Journal of Islamic Marketing, 12*(9), 1835-1853. https://doi.org/10.1108/JIMA-10-2019-0202

Shahzad, K., Khan, S. A., Iqbal, A., Shabbir, O., & Latif, M. (2023). Determinants of fake news diffusion on social media: A systematic literature review. *Global Knowledge, Memory and Communication.* https://doi.org/10.1108/GKMC-03-2023-0063

Smith, A. N. (2019). Measuring the impact of social media marketing on business performance: A critical review. *Journal of Research in Marketing, 8*(1), 12-22. https://doi.org/10.1108/JRM-03-2019-0022

Wang, Y., Wang, Y., & Zhang, Y. (2021). Social media marketing and e-commerce: A framework for research. *Journal of Retailing and Consumer Services, 59*, 102360. https://doi.org/10.1016/j.jretconser.2020.102360

Zhang, Y., & Mao, E. (2016). Understanding the acceptance of mobile SMS advertising among young Chinese consumers. *Psychology & Marketing, 23*(12), 1005-1028. https://doi.org/10.1002/mar.20156