Mapping the impact of social media marketing on customer loyalty: Bibliometric analysis

Tan Ray Agung[1], Nuryakin[2]
[1,2]Universitas Muhammadiyah Yogyakarta, Yogyakarta, Indonesia

ABSTRACT

This study aims to evaluate and discuss the progress made in writing research articles that focus on the relationship between social media marketing and consumer loyalty. It also looks at how to visualize VOSviewer data to look at author cooperation and keywords in journal articles that Scopus has indexed. The influence of social media marketing on customer loyalty is investigated bibliometrically in this study using quantitative descriptive technique and systematic mapping methodology. One hundred twenty-six relevant articles were located among the 308 articles in the initial search results when the database was initialized by specifying the phrases "social media marketing" and "customer loyalty" on the Scopus website. Using the VOSviewer program, it is known that 542 authors are related with 5 clusters and 36 keywords. Notably, American writers are responsible for most of the research on this subject, which was published in Scopus. In VOSviewer's mapping, some key terms that come up often include digital marketing, Facebook, trust, client loyalty, and brand loyalty. It is important to emphasize that this study's scope is restricted to the Scopus database, which suggests that the results' completeness may be constrained. This paper is significant because it adds something new to our knowledge of how social media marketing influences customer loyalty and because of the inventive use of VOSviewer visualization.

Keywords: Bibliometrics; scopus; social media marketing; customer loyalty; VOSviewer

Memetakan dampak pemasaran media sosial terhadap loyalitas pelanggan: Analisis bibliometrik

ABSTRAK

Tujuan *dari penelitian ini adalah untuk mengevaluasi dan mendiskusikan kemajuan yang dibuat dalam menulis artikel penelitian yang berfokus pada hubungan antara pemasaran media sosial dan loyalitas konsumen. Selain itu juga melihat bagaimana memvisualisasikan data VOSviewer untuk melihat kerjasama penulis dan kata kunci dalam artikel jurnal yang telah terindeks Scopus. Pengaruh social media marketing terhadap loyalitas pelanggan diteliti secara bibliometris dalam penelitian ini dengan menggunakan teknik deskriptif kuantitatif dan metodologi pemetaan sistematis. 126 artikel yang relevan terletak di antara 308 artikel yang muncul di hasil pencarian awal ketika database diinisialisasi dengan menentukan frasa "pemasaran media sosial" dan "loyalitas pelanggan" di situs web Scopus. Menggunakan program VOSviewer, diketahui bahwa 542 penulis terkait dengan 5 cluster dan 36 kata kunci. Khususnya, penulis Amerika bertanggung jawab atas sebagian besar penelitian tentang hal ini yang telah dipublikasikan di Scopus. Dalam pemetaan VOSviewer, beberapa istilah kunci yang muncul sering kali mencakup pemasaran digital, Facebook, kepercayaan, loyalitas klien, dan loyalitas merek. Penting untuk ditekankan bahwa ruang lingkup penelitian ini terbatas pada database Scopus, yang menunjukkan bahwa kelengkapan hasil mungkin dibatasi. Makalah ini penting karena menambahkan sesuatu yang baru pada pengetahuan kita tentang bagaimana pemasaran media sosial memengaruhi loyalitas pelanggan dan karena penggunaan inventif visualisasi VOSviewer.*
Kata-kata kunci*: Bibliometrik; scopus; pemasaran media sosial; loyalitas pelanggan; VOSviewer*

Correspondence: Tan Ray Agung S.E. Master of Management, University of Muhammadiyah Yogyakarta. Brawijaya street, Tamantirto, Kasihan, Bantul. *Email:* tan.ray.psc22@mail.umy.ac.id

INTRODUCTION

The evolution of the economic landscape, driven by intense competition, necessitates creativity and innovation from companies to thrive. This competitive environment compels entrepreneurs to enhance their capabilities to stay ahead of similar businesses (Walangare, 2019). Customer loyalty is crucial for maintaining a competitive edge, as it is a key factor in sustaining business success. According to Woodruff, customer loyalty is vital for long-term competition, involving customer retention, repeat purchases, and enduring relationships with customers. To foster loyalty, businesses must implement effective strategies that cultivate and reinforce customer satisfaction (Walangare, 2019).

Loyal customers are invaluable assets, providing free promotion for the company's products and services. Through repeat purchases and positive word-of-mouth, these customers contribute significantly to the company's reputation and market presence. Therefore, businesses should focus on developing strategies that not only attract but also retain loyal customers by ensuring high levels of satisfaction and positive experiences. This approach helps create a sustainable competitive advantage and supports long-term business success in a challenging economic environment (Elmetwaly et al., 2021)the (AMOS.

According to Kotler and Keller (2016), customer loyalty is characterized by a deep-seated and long-lasting dedication to consistently buy or advocate for a favored product or service in the future, despite external influences and marketing efforts that may tempt customers to switch.

Consumer loyalty signifies the steadfast allegiance of consumers towards companies, brands, and products. Consumer loyalty is characterized by a positive attitude towards a prominently presented brand. In essence, consumer loyalty can be construed as an attitude that transforms into a behavioral inclination to engage in repeated purchase transactions of products or services from a particular company, particularly by those who consistently and regularly make such purchases with unwavering constancy (Fitri & Yasri, 2024).

Purchasing interest reflects consumer behavior towards a perceived item, suggesting a potential for acquisition (Aditi, Silaban, & Edward, 2023). This interest is a critical factor in understanding consumer intentions and preferences. Repeat purchases are often viewed as a key indicator of customer loyalty, a primary goal for companies seeking sustainable growth and competitive advantage. Companies that establish enduring relationships with their customers can differentiate themselves from

competitors and secure a more stable market position (Suwarno, Prassetyawan, & Abbas, 2023). However, it is important to recognize that repeated transactions with the same vendor do not always equate to true customer loyalty. In some cases, these repeat purchases may simply result from a lack of better alternatives rather than a genuine preference for the vendor.

Customers might continue buying from a particular vendor out of convenience or necessity rather than strong brand loyalty. It highlights the complexity of consumer loyalty and suggests that businesses need to go beyond just encouraging repeat transactions. Companies must focus on delivering exceptional value and creating meaningful connections with their customers to cultivate genuine loyalty. It involves understanding customer needs, addressing pain points, and providing unique experiences that differentiate the company from competitors. By doing so, businesses can foster true loyalty, where customers choose to return not just out of convenience but because they have a strong affinity for the brand and its offerings (Khoa & Huynh, 2023).

The landscape of consumer decision-making, especially in the post-pandemic era, has been significantly influenced by social media platforms, elevating their role as potent marketing tools (Mason, Narcum, & Mason, 2021). As an effective marketing tool, social media facilitates economic and social exchange, meeting users' needs and desires through enhanced analysis of product/service marketing effects, relationship maintenance, social interaction, and quality (Alanazi, 2023)(1692. Social media is a powerful advertising tool that helps businesses achieve commercial goals and improve performance. Most companies utilize social media to strengthen brand awareness and image (Barkha & Aggarwal, 2022). "Social media marketing" lacks a universally accepted definition; researchers offer varied interpretations. In a business context, it entails utilizing diverse social media platforms to promote products or services (Khoa & Huynh, 2023). Notably, global social media users witnessed a growth of 190 million in the past year, totalling 4.74 billion at the commencement of October 2022. It represents a 4.2 percent increase over the last 12 months, with social media users now constituting 59.3 percent of the world's population (Aditi et al., 2023).

Digital marketing stands out as a lucrative and widely favored marketing approach due to its swifter and more interactive communication capabilities than traditional methods. It enables the presentation of goods and services in a digital environment (Akgün, 2023). The rapid evolution of technology has led to a surge in the popularity of selling and marketing goods and services through social media platforms,

offering a quick and instantaneous means to build equity (Khoa & Huynh, 2023).

Social media serves as a global connector, facilitating interactions through various channels such as social networks, sharing websites, blogs, and more. It allows unrestricted online engagement in quantity and quality (Yadav, 2017).

Social media marketing encompasses both direct and indirect promotional activities to establish awareness, visibility, recall, and engagement for a brand, company, product, individual, or entity. It involves leveraging tools on the social web, including but not limited to blogs, micro-blogs, social networks, social bookmarking, and content sharing, as a means of presentation and communication (Yadav & Rahman, 2018)perceived SMMAs of e-commerce comprise five dimensions, namely, interactivity, informativeness, word-of-mouth, personalization and trendiness. Second, perceived SMMAs of e-commerce have significantly and positively influenced all the drivers of customer equity (CEDs. The pervasive use of social media applications extends to marketing tools, including the fashion industry, where creativity plays a pivotal role in driving profitability (Akgün, 2023)

According to Yadav and Rahman (2018)perceived SMMAs of e-commerce comprise five dimensions, namely,

interactivity, informativeness, word-of-mouth, personalization and trendiness. Second, perceived SMMAs of e-commerce have significantly and positively influenced all the drivers of customer equity (CEDs, fashion, with its multifaceted meanings, serves as a symbol for establishing the identity of social groups, as articulated by Lypovetsky. The contemporary function of fashion transcends its original purpose of body protection, transforming it into a means of expressing community identity within the context of changing times. This contextual shift in fashion's role underscores researchers' interest in exploring the evolving landscape of social media marketing. The exploration involves an article search conducted through Scopus, acknowledged as the world's largest provider of abstract collections encompassing diverse literature, with citations offering summaries of rigorously reviewed scientific literature (Yadav & Rahman, 2018)perceived SMMAs of e-commerce comprise five dimensions, namely, interactivity, informativeness, word-of-mouth, personalization and trendiness. Second, perceived SMMAs of e-commerce have significantly and positively influenced all the drivers of customer equity (CEDs

In recent years, social media has revolutionized how businesses interact with consumers, fundamentally altering the landscape of marketing and customer

engagement. The pervasive nature of social media platforms such as Facebook, Instagram, Twitter, and TikTok has provided businesses unprecedented opportunities to connect with their audience in real time and personally. This direct line of communication has allowed companies to build stronger relationships with their customers, fostering a sense of community and loyalty that was previously unattainable through traditional marketing channels (Akgün, 2023). Social media platforms have become integral in shaping consumer behavior by influencing purchasing decisions, enhancing brand awareness, and driving engagement (Puspaningrum, 2020).

The ability to share experiences, reviews, and recommendations with a vast network of friends and followers has amplified the impact of word-of-mouth marketing. Consumers increasingly rely on social media to inform their buying decisions, seeking product reviews, recommendations, and user-generated content to guide their choices. This shift has underscored the importance of maintaining a positive online presence and engaging with customers to build trust and credibility (Khoa, 2020).

Social media enables businesses to collect valuable data on consumer preferences, behaviors, and trends. By analyzing this data, companies can tailor their marketing strategies better to meet the needs and desires of their target audience. This data-driven approach allows for more personalized marketing efforts, which can significantly enhance customer satisfaction and loyalty. Targeted advertising on social media platforms can deliver personalized content to specific demographics, increasing the likelihood of conversion and repeat purchases (Yadav & Rahman, 2018).

Customer loyalty is a critical component of long-term business success, and social media has emerged as a powerful tool in cultivating and maintaining this loyalty. Engaging with customers on social media platforms helps businesses build stronger relationships, providing a platform for direct communication, feedback, and customer support. This interaction can increase customer satisfaction, as consumers feel heard and valued by the brands they support (Suwarno et al., 2023).

Social media also allows businesses to create and share content that resonates with their audience, strengthening the emotional connection between the brand and its customers. Entertaining, informative, or inspirational content can foster a sense of community and loyalty among followers. For example, behind-the-scenes videos, customer testimonials, and interactive posts can all contribute to a positive brand image and increased customer loyalty (Aditi et al., 2023).

Social media provides a platform for

businesses to address customer concerns and resolve issues promptly. Effective customer service on social media can turn a negative experience into a positive one, reinforcing customer loyalty. When customers see that a brand is responsive and attentive to their needs, they are more likely to remain loyal and recommend the brand to others (Aditi et al., 2023). With the rise of social media, companies aim to engage with their consumers and influence their perceptions of their products. Businesses strive to establish communication with customers through content created by the firm. Firm-created content refers to communications controlled by the brand, whether produced by brand representatives or through marketing efforts (Khair & Ma'ruf, 2020).

Social media marketing offers numerous advantages for businesses, including the open sharing of ideas and information among consumers. Additionally, it facilitates two-way communication between consumers and brands, allowing for more interactive engagement (Khairunnisa & Juliadi, 2023)

While social media offers numerous benefits for businesses, it also presents several challenges that must be addressed to maximize its potential. One of the primary challenges is the ever-changing landscape of social media platforms. Algorithms, user behaviors, and platform features constantly evolve, requiring

businesses to stay agile and adapt their strategies accordingly. Keeping up with these changes can be resource-intensive, but it is essential for maintaining a competitive edge. Another challenge is the saturation of content on social media. With millions of posts being shared daily, it can be difficult for businesses to cut through the noise and capture the attention of their target audience. It requires a strategic approach to content creation and distribution, ensuring that posts are relevant, engaging, and aligned with the brand's values and goals (Mason et al., 2021)

Despite these challenges, social media marketing presents vast opportunities. The ability to reach a global audience, engage with customers in real time, and leverage user-generated content are just a few of the advantages that social media offers. Businesses that can effectively navigate the complexities of social media marketing will be well-positioned to build strong, loyal customer bases and achieve long-term success.

Given the dynamic nature of social media and its profound impact on consumer behavior, there is a growing need for continued research in this field. Future studies could explore the long-term effects of social media marketing on customer loyalty, investigating how sustained engagement over time influences brand perception and customer retention. Longitudinal

studies could provide valuable insights into the lasting impact of social media interactions on consumer behavior (Ajina, 2019)

Research could examine the role of emerging social media platforms and technologies in shaping marketing strategies. As new platforms gain popularity, it is important to understand how they differ from existing ones and how businesses can leverage them to reach their target audience effectively. The rise of short-form video content on platforms like TikTok has opened up new avenues for creative marketing campaigns, and understanding the nuances of these platforms can help businesses stay ahead of the curve. Cultural and demographic factors also warrant further exploration. Understanding how different cultural backgrounds and demographic segments respond to social media marketing can help businesses tailor their strategies (Khoa & Huynh, 2023)

This research focuses on bibliometric exploration within the field of social media marketing. The primary aim is to provide an interdisciplinary examination of the current landscape of social media marketing research and to identify potential future research directions using bibliometric analysis. Bibliometry, a methodology that falls under the domain of information and library science, is utilized to extract meaningful insights from the existing literature on social media marketing.

By applying bibliometric techniques, this paper addresses several key research questions: (1) How has social media marketing research evolved across different countries? (2) What are the recent trends observed in the past year? (3) Which journals and authors influence social media marketing research most? and (4) What are the dominant research topics within this domain? The study aims to map out the development of social media marketing research, highlighting leading contributors and key topics. This approach helps understand the progression of research and identify areas that require further exploration. By examining these aspects, the paper seeks to offer valuable insights into the field, thereby guiding future research and enhancing the comprehension of social media marketing dynamics.

RESEARCH METHOD

Commencing the process entails accessing the website www.scopus.com through a subscription account, ensuring comprehensive access to intact data. The literature exploration involves searching titles, abstracts, and keywords. The preliminary search employs the string "Customer loyalty" AND Social AND Media, with no exceptions for bibliography types. This initial database inquiry using the specified keywords yielded 308 documents, including articles, books, and conference

documents.

The second step involves determining the research sample using the following search string: TITLE-ABS-KEY (customer AND loyalty AND social AND media AND marketing) AND PUBYEAR > 2006 AND PUBYEAR < 2023 AND (LIMIT-TO (EXACTKEYWORD, "Social Media") OR LIMIT-TO (EXACTKEYWORD, "Social Media Marketing") OR LIMIT-TO (EXACTKEYWORD, "Customer Loyalty")) AND (LIMIT-TO (PUBSTAGE, "final")) AND (LIMIT-TO (LANGUAGE, "English")) AND (LIMIT-TO (DOCTYPE, "ar")) AND (LIMIT-TO (SRCTYPE, "j")) AND (LIMIT-TO (SUBJAREA, "BUSI") OR LIMIT-TO (SUBJAREA, "ECON")).

After applying these filters, the resulting data will be exported in RIS file format. Subsequently, the exported file will be analyzed using VOSviewer software to visualize and interpret the research findings effectively.

This methodical approach ensures that the analysis is grounded in relevant literature and provides insights into the relationship between social media marketing and customer loyalty. Following the filtration and processing of article data, comprehensive findings emerge, encompassing the evolution of research articles concerning social media and customer loyalty. The outcomes detail key aspects, including the leading authors in social media and customer loyalty research, predominant topics addressing the interplay between social media and customer loyalty, highly-cited articles, influential publishers and journals, and additional essential data for thorough analysis.

Research will also highlight emerging trends and gaps in the existing literature, providing a clearer understanding of areas that require further exploration. This analysis not only contributes to the academic community's knowledge but also offers practical implications for businesses seeking to enhance their social media marketing strategies and foster greater customer loyalty. By identifying effective practices and potential pitfalls, this study aims to guide companies in leveraging social media to build stronger relationships with their customers.

A bibliometric analysis was conducted utilizing VOSviewer software. VOSviewer effectively handles substantial data sets and offers engaging and informative data visualization, analysis, and exploration features (Eck & Waltman, 2023). Furthermore, VOSviewer can generate publication, authorship, or journal maps by utilizing shared citation networks or exhibiting keyword maps based on interconnected networks (Eck & Waltman, 2023).
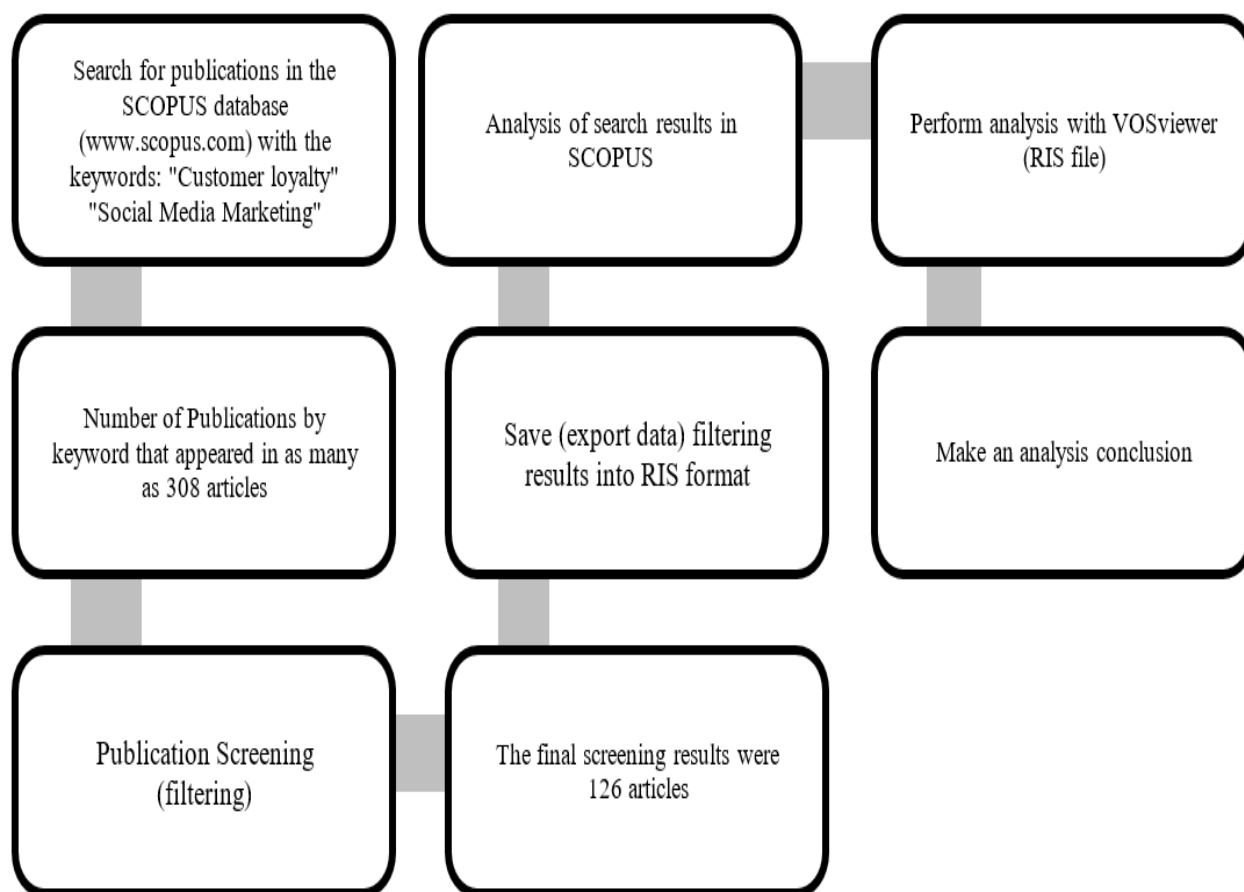
Source: Scopus, 2023

Figure 1 Research Process

RESULTS AND DISCUSSION

Trends in annual publications on social media marketing engagement in building customer loyalty have shown a steady rise over the past decades. Utilizing Scopus search criteria relevant to keywords associated with social media and customer loyalty yielded 308 articles. Notably, the earliest publication, dating back to 1998, was titled "Charity Shops in the UK," authored by Suzanne Horne. As depicted in Figure 2, there is an observable upward trend in the average annual publication rate. Significant increases were noted in 2016, 2018,

and 2020, followed by a notable decline in 2022.

However, the peak of publications was achieved in 2023, which could be linked to the various effects brought on by the COVID-19 pandemic. The notable rise in the years preceding the pandemic can be attributed to efforts by institutions and scholars to recognize and capitalize on social media marketing's potential as a crucial instrument for client acquisition and retention.

Nevertheless, COVID-19 related disruptions most likely impacted the drop in 2022. Businesses and research institutions may

have faced significant challenges during the early stages of the pandemic, including operational limitations, shifting customer preferences, and economic uncertainty, all of which could have led to a decrease in research activities. Nonetheless, the peak in publications in 2023 may represent an adaptive response to the new circumstances brought about by the pandemic. In the post-COVID-19 era, organizations and researchers may explore more deeply how social media marketing can play a more significant role in establishing and maintaining consumer loyalty. As a result, while COVID-19 may have temporarily reduced publication rates, a robust adaptive response to changing conditions may manifest as a notable increase in subsequent years.

Top journals in the field of social media marketing and customer loyalty have played a crucial role in disseminating research on these topics. Figure 2 lists the top journals that publish articles on the use of social media to engage customers and foster loyalty. Leading the publication scene with four articles annually is the *Journal of Retail and Consumer Services*. This journal's prominence reflects its primary focus on disseminating the latest findings regarding the relationship between social media and consumer loyalty, particularly in retail and customer service. It plays a significant role in sharing information and ideas about effective strategies for using social media to strengthen customer connections.

Additionally, two notable journals that

Documents by year
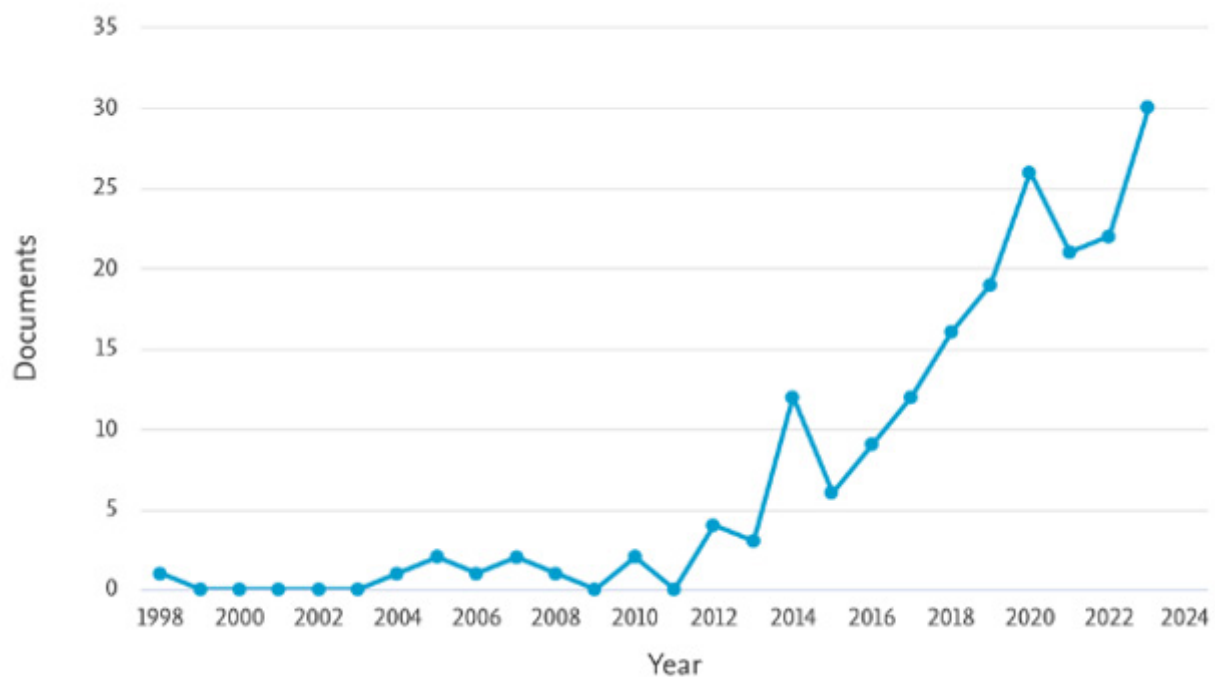
Source: Scopus, 2023

Figure 2 Annual Trends

publish three papers annually are the *Journal of Business Ethics* and the *International Journal of Contemporary Hospitality Management*. Their presence highlights the importance of understanding social media usage, business ethics, and hospitality management. The articles in these journals address the ethical considerations of using social media for marketing and brand-building initiatives and provide valuable insights into how social media influences consumer behavior and business decisions within the hospitality industry.

Furthermore, the *International Journal of Internet Marketing and Advertising* and the *Asia Pacific Journal of Marketing and Logistics* each release two articles annually, significantly contributing to the field. Their presence underscores the importance of understanding social media usage in the Asia Pacific region and its impact on modern consumer behavior in the digital age. These journals offer diverse perspectives on the topic and enhance our understanding of how social media affects consumer loyalty.

Top Author Affiliations on the Role of Social Media Engagement in Building Customer Loyalty highlight the global academic contributions in this field. The distribution of scholarly papers in social media marketing and customer loyalty across international organizations demonstrates the

range of contributions from various academic institutions. According to the summary, Bina Nusantara University leads with six publications, indicating a major contribution to Indonesia's understanding and advancement of knowledge about social media marketing and customer loyalty.

Significant contributions also come from The Hong Kong Polytechnic University, Iowa State University, University of Delaware, California State University, and Amity University, each with five, three, and three publications, respectively. Additionally, the SRM Institute of Science and Technology, Universitat Politècnica de Valencia, King Abdulaziz University, and Universitat de València contribute significantly with two publications each. This diversity reflects the international research and collaboration to understand better how social media marketing affects customer loyalty worldwide.

Contributions from various institutions are expanding our knowledge of this phenomenon, leading to deeper and more comprehensive insights into social media's role in building and maintaining customer relationships across various cultural and professional contexts.

Top countries in the field of social media marketing and consumer loyalty studies highlight the global landscape of academic contributions. Based on Figure 4, it is evident

Documents by affiliation ⓘ
Compare the document counts for up to 15 affiliations.
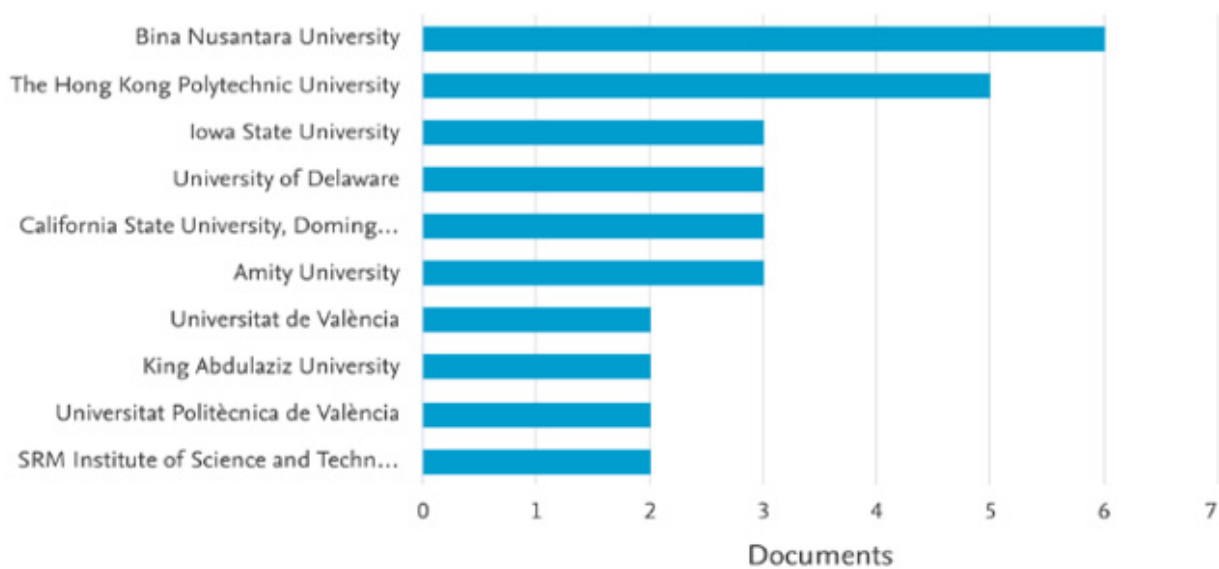
Source: Scopus, 2023

Figure 3 Top Affiliates

that certain nations have made significant contributions to the field of social media marketing and consumer loyalty studies. The United States, with 40 papers, ranks at the top, reflecting its dominance in business and technology, as well as its focus on innovative marketing strategies such as social media marketing. India follows in second place with 19 articles, indicating the nation's growing role in global academic research. China is in third place with 17 publications, highlighting its rapid economic development and increasing interest in technology and marketing research. With 16 articles, Indonesia jumps to the fourth spot, showing that, although on a smaller scale than other major nations, it also substantially contributes to social media marketing and consumer loyalty research.

While not as prominent as the leading nations, countries such as Taiwan, Saudi Arabia, Spain, the United Kingdom, and Australia also contribute a significant number of articles. It demonstrates how research in social media marketing and customer loyalty has attracted interest from around the world, with various nations providing fresh ideas and insights to the field.

The highest citation articles in the realm of social media marketing and customer loyalty showcase the most impactful research in the field. Table 1 presents the top 10 articles with the highest citation counts in the Scopus database. The article by Yadav and Rahman, titled "The Influence of Social Media Marketing

Documents by country or territory

Compare the document counts for up to 15 countries/territories.
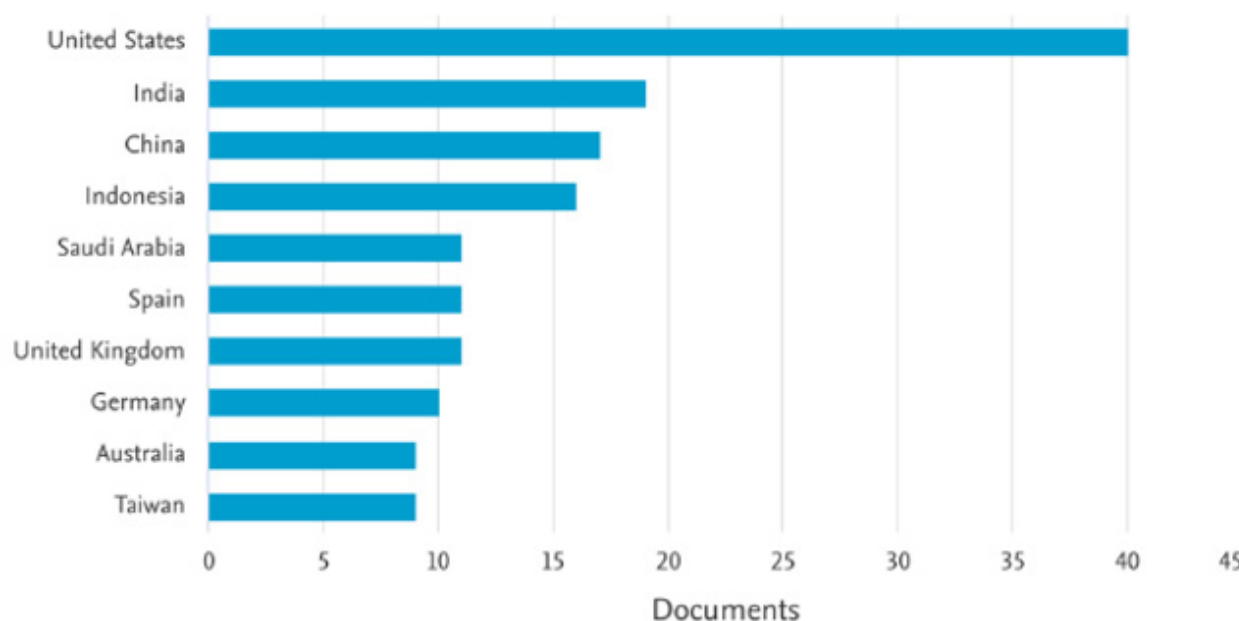
Source: Scopus, 2023

Figure 4 Top 10 Countries or Teorrity

Activities on Customer Loyalty: A Study of the E-Commerce Industry," holds the highest citation count, totalling 84, and was published in Benchmarking.

This study explores the impact of social media marketing activities (SMMA) on customer loyalty within the e-commerce sector, examining the role of customer equity drivers (CEDs). Another highly cited work is "The Perceived Value of Social Media Marketing: An Empirical Study of Online Word of Mouth in the Saudi Arabian Context," authored by Ajina, which has accumulated 40 citations. This paper investigates the effect of perceived value on online consumer behavior, specifically examining its influence on word-of-mouth (WOM) and behavioral allegiance.

These two articles underscore the significance of social media marketing research in understanding consumer behavior and fostering client loyalty. Their substantial number of citations reflects their significant contribution to the academic literature and their relevance to business and marketing practices. It highlights the importance of continuing in-depth research in social media marketing to gain a deeper understanding of how social media platforms can influence consumer behavior and enhance client loyalty.

Table 1 Articles with the Highest Citations

Writer	Title	Year	Publisher	Number of citations
(Yadav & Rahman, 2018)	The influence of social media marketing activities on customer loyalty: A study of e-commerce industry	2018	Benchmarking	84
(Ajina, 2019)	The perceived value of social media marketing: An empirical study of online word of mouth in the Saudi Arabian context	2019	Entrepreneurship and Sustainability Issues	40
(B T Khoa, 2020)	The antecedents of relationship marketing and customer loyalty: A case of the designed fashion product	2020	Journal of Asian Finance, Economics and Business	38
(Khan et al., 2019)	Role of social media marketing activities (SMMAs) in apparel brands customer response: A moderated mediation analysis	2019	Sustainability (Switzerland)	24
(Cole et al., 2017)	Small service businesses: Advertising attitudes and the use of digital and social media marketing	2017	Services Marketing Quarterly	21
(Gainsbury et al., 2015)	Social media marketing and gambling: An interview study of gambling operators in Australia	2015	International Gambling Studies	21
(Vinerean & Opreana, 2021)	Measuring customer engagement in social media marketing: A higher-order model	2021	Journal of Theoretical and Applied Electronic Commerce Research	19
(Puspaningrum, 2020)	Social Media Marketing and Brand Loyalty: The Role of Brand Trust	2020	Journal of Asian Finance, Economics and Business	18
(A. Killick & D. Griffiths, 2020)	A Content Analysis of Gambling Operators' Twitter Accounts at the Start of the English Premier League Football Season	2020	Journal of Gambling Studies	18
(Ho &Wang, 2020)	Does social media marketing and brand community play a role in building a sustainable digital business strategy?	2020	Sustainability (Switzerland)	10

Source: Research Result, 2023

Productive writers in the field of digital marketing and consumer loyalty illustrate the diverse contributions of authors in this area. According to the study's findings, 542 authors have publications concerning digital marketing and consumer loyalty indexed in Scopus. Several authors stand out for their noteworthy contributions to this topic. The top authors, each with two works published, include Agnihotri, R.; Ajina, A.S.; Attar, R.W.; Berezan, O.; Cheng, T.C.E.; Daugherty; Gica, O.A.; P.J.; Khoa, B.T.; Moisesu, O.I.; and Popp, B. Their significant presence attests to their dedication and contributions to the literature on consumer loyalty and digital marketing.

These authors have made substantial

contributions, providing valuable insights into how digital marketing influences consumer loyalty and behavior. Through their publications, scholars and industry professionals can access relevant and current knowledge for developing effective marketing strategies in the digital era. Additionally, their research serves as a source of inspiration for other scholars to explore this subject further and expand our understanding of the impact of digital marketing on customer loyalty across various industries and regions.

These authors' contributions have been crucial to advancing our understanding of the relationship between consumer loyalty and digital marketing. Their ongoing research and publications are anticipated to continue to offer a more comprehensive perspective on the evolving dynamics of consumer behavior and marketing strategies in the rapidly changing

Table 2 Authors with the Most Publications

No	Writer's Name	Number of Articles
1	Agnihotri, R.	2
2	Ajina, A.S.	2
3	Attar, R.W.	2
4	Berezan, O.	2
5	Cheng, T.C.E.	2
6	Daugherty, P.J.	2
7	Gica, O.A.	2
8	Khoa, B.T.	2
9	Moisesu, O.I.	2
10	Popp, B.	2

Source: Research Result, 2023

digital landscape.

Table 2 highlights the prolific writers in social media marketing research. These prolific authors are recognized not only for their impact on the industry but also for their unique contributions to the existing body of information and literature. Examining the writers who regularly contribute to influential journals allows us to identify trends indicating a sustained focus on this area of research.

Documents by author
Compare the document counts for up to 15 authors.
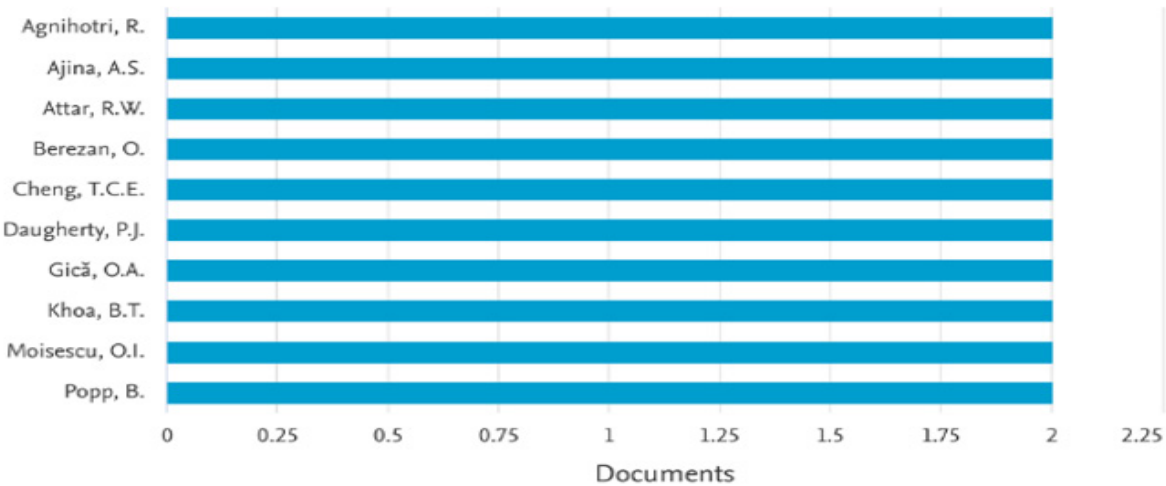
Source: Scopus, 2023

Figure 5 Author with the Most Publications

Additionally, recognizing these eminent academics helps us appreciate the variety of perspectives and approaches within the field of social media marketing and consumer loyalty.

Through data analysis, researchers can identify trends and patterns in the works produced by these prolific writers. It enables researchers to recognize each author's distinctive contributions and understand how their methods and perspectives influence the direction of social media marketing research.

A visualization map provides a valuable framework for analyzing the landscape of research in social media engagement and customer loyalty. The mapping process utilizes the VOSviewer application to generate insights into trending titles and frequently occurring keywords. By mapping these trends using the VOSviewer tool, researchers can obtain comprehensive insights into patterns in popular article titles and keywords that frequently appear in scientific publications.

Through the analysis of the network of relationships among keywords, authors, and publications, VOSviewer facilitates the identification of study subjects that garner significant interest. It enables scholars to monitor the evolution of a certain subject over time and recognize the connections and trends that emerge in the literature. Consequently, the VOSviewer program proves to be a handy tool for mapping and examining dynamics and trends in the research area.

VOSviewer presents three distinct visualizations. The first is network visualization, which shows the relationship between keywords or other examined network elements. In this visualization, each element (keyword or author) is represented as a node, and the connections or lines that connect nodes indicate the relationships between these elements. This graphic aids in understanding the relationships between these components and can be used to identify potential patterns or clusters in the data (Figure 6).

Overlay Visualization: The purpose of overlay visualizations is to display differences or variances between network components according to certain properties. For instance, in an overlay representation, factors such as keyword weight, relatedness, and frequency of occurrence might be represented by the color or size of the nodes. Overlay visualizations allow us to observe how these attributes change or differ based on the chosen properties (Figure 7).

Density Visualization: Density visualization provides insight into the geographic distribution or density of components within a network. Items closely associated or related tend to cluster in a compact region, while less related components are dispersed more broadly or independently. In addition to offering insight into the density or

dispersion of components in the data, density visualization aids in identifying clusters or key regions within the network (Figure 8).

The VOSviewer software has proven to help group keywords in bibliometric analysis. This analysis involves gathering information from selected articles' abstracts, titles, and keywords. Relevant keywords are extracted, and the configuration is set for a "full count" with a minimum occurrence threshold of 10. Consequently, 46 keywords and 5 clusters meeting the predetermined criteria were identified.

By employing this approach, researchers can gain a deeper understanding of the linkages and structure between relevant themes in the literature on customer loyalty and digital marketing. This research systematically examines large volumes of data by analyzing abstracts, titles, and keywords. It provides a more comprehensive grasp of the subject matter and helps identify trends and patterns within the scientific literature.

The analysis's findings, which include the identification of five clusters and forty-six pertinent keywords, offer a strong foundation for further study on consumer loyalty and digital marketing. Researchers can use the data produced by VOSviewer to understand key themes in the literature better and uncover

Source: VOSviewer Result, 2023

Figure 6 Network Visualization

connections that might not be immediately obvious. As a result, the VOSviewer program significantly facilitated a more thorough and in-depth bibliometric analysis in this research.

Social media marketing engagement in building customer loyalty research network visualization map offers a comprehensive overview of the interconnectedness of key themes in this field. This visualization is a valuable tool for understanding how various concepts and topics related to social media marketing and customer loyalty are interrelated, providing insights into research dynamics within this area.

The network visualization in Figure 6 shows six distinct groups, each denoted by a distinct hue, such as red, green, blue, purple, or yellow. The network visualization shows six distinct groups, each denoted by a unique color, such as red, green, blue, purple, or yellow. Different groupings of studied items are distinguished and identified using variations in cluster colors. Each hue represents a cluster or clusters made up of closely linked nodes in the network. These groupings are easily distinguished from one another by color differences, which also reveal the relationships or connections between the items within a group. It facilitates the recognition of potentially hidden linkages between the pieces and aids in understanding the structures and patterns found in the data.

Every cluster is a grouping of terms or subjects that are related to one another in some way. This graphic depiction illustrates how various subjects are interrelated.

The size of each circle in the network visualization reflects the frequency with which a particular keyword appears in the literature. A larger circle indicates a higher frequency of usage of the keyword in the examined articles. Keywords in the same cluster, marked with the same color, suggest a significant association or correlation. It implies that, within the context of the study, terms inside a cluster often have a relationship or mutual relevance.

The overall visualization provides a broad overview of the relationships between different study subjects or concepts, organizing them into collections or clusters that can be examined in more detail. Using this visual representation, researchers can quickly identify patterns and trends in the scientific literature related to their study area.

Overlay visualization map of social media marketing engagement in building customer loyalty research provides a dynamic representation of publication trends over time, illustrating the evolution of this field.

According to the founder of the VOSviewer application (Eck & Waltman, 2023), overlay visualization is used to show the progress of publications over time. In this study, the authors

Table 3 Network Visualization

Cluster	Color	Items	Keywords
1	Red	11	Advertising, article, communication, consumer behaviour, corporate social responsibility, human, marketing, perceived value, social media, social responsibility
2	Green	10	Commitment, customer engagement, customer loyalty, customer satisfaction, loyalty, quality, satisfaction, social networks, sustainability, trust
3	Blue	10	Commerce, customer relationship, public relationship, retailing, sales, sentiment analysis, service quality, service sector, social media platforms, social networking (online)
4	Yellow	8	Brand loyalty, customer retention, digital marketing, e-commerce, Facebook, online shopping, social media marketing, Twitter
5	Purple	7	Brand community, customer value, identification, media role, perception, social network, websites

Source: Research Result, 2023

set the year range on the overlay visualization from 1998 to 2023, as shown in Figure 7. A darker circle (blue) indicates an older publication year, while a lighter circle (yellow) indicates a more recent publication year. For example, Figure 7 presents a publication about Social Media Marketing Engagement in Building Customer Loyalty. Many publications about social media marketing in the new era are represented by a green circle, indicating that the publication occurred around 2016.

Interestingly, publications on this topic are connected to other publications, either from previous years or several years later. It suggests
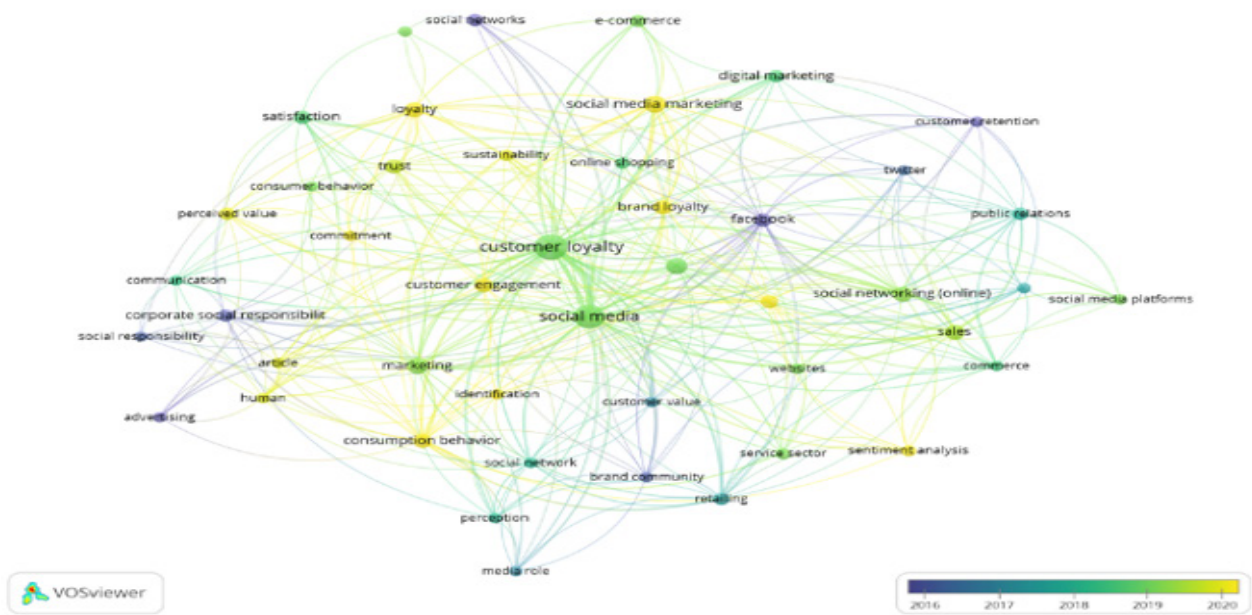
Source: VOSviewer Result, 2023

Figure 7 Overlay Visualizations

that research on Social Media Marketing Engagement in Building Customer Loyalty remains of significant interest.

As the internet becomes more widely used and social media usage increases globally, the importance of social media in marketing also grows. Consequently, one of the key goals of marketing research remains understanding how social media affects consumer behavior and cultivates brand loyalty. The dynamic nature of consumer behavior, particularly social media consumption and online interaction, necessitates learning about audience engagement strategies and customer relationship building. With the introduction of new social media platforms, technologies, and marketing tactics, the field of digital marketing is evolving rapidly. Thus, further study is required to recognize and comprehend how these developments and trends affect client loyalty. Understanding the relationship between social media marketing, engagement, and consumer loyalty can significantly benefit businesses.

By investigating and comprehending social media usage, businesses can create more effective marketing campaigns and enhance consumer satisfaction. Through overlay visualization, scholars can gain a deeper understanding of the evolution of a particular topic over time, as well as the relationships and changes between articles. It provides valuable insights for scholars examining knowledge development in social media marketing and consumer loyalty.

The analysis's top 30 keywords clearly show the volume and caliber of research on using social media marketing to engage customers and foster loyalty. Key concepts in this field include social media, brand loyalty, digital marketing, online social networking, Facebook, social media marketing, and customer loyalty. It is evident from the visualization map shown in Figure 8.

The high frequency of these terms suggests that the scientific community is highly interested in understanding the relationship between efforts to establish and retain customer loyalty and the use of social media in marketing strategies. As a result, a deeper understanding of the dynamics and interactions between these factors is expected to provide a solid foundation for developing more sustainable and effective marketing strategies in the current digital era.

It demonstrates how social media use has emerged as a crucial component of marketing strategy in the digital age. As social media becomes more widely used and ingrained in people's lives, its significance in fostering customer connections, shaping consumer behavior, and bolstering brand loyalty becomes more evident. Digital marketing, on the other hand, extends beyond social media to include
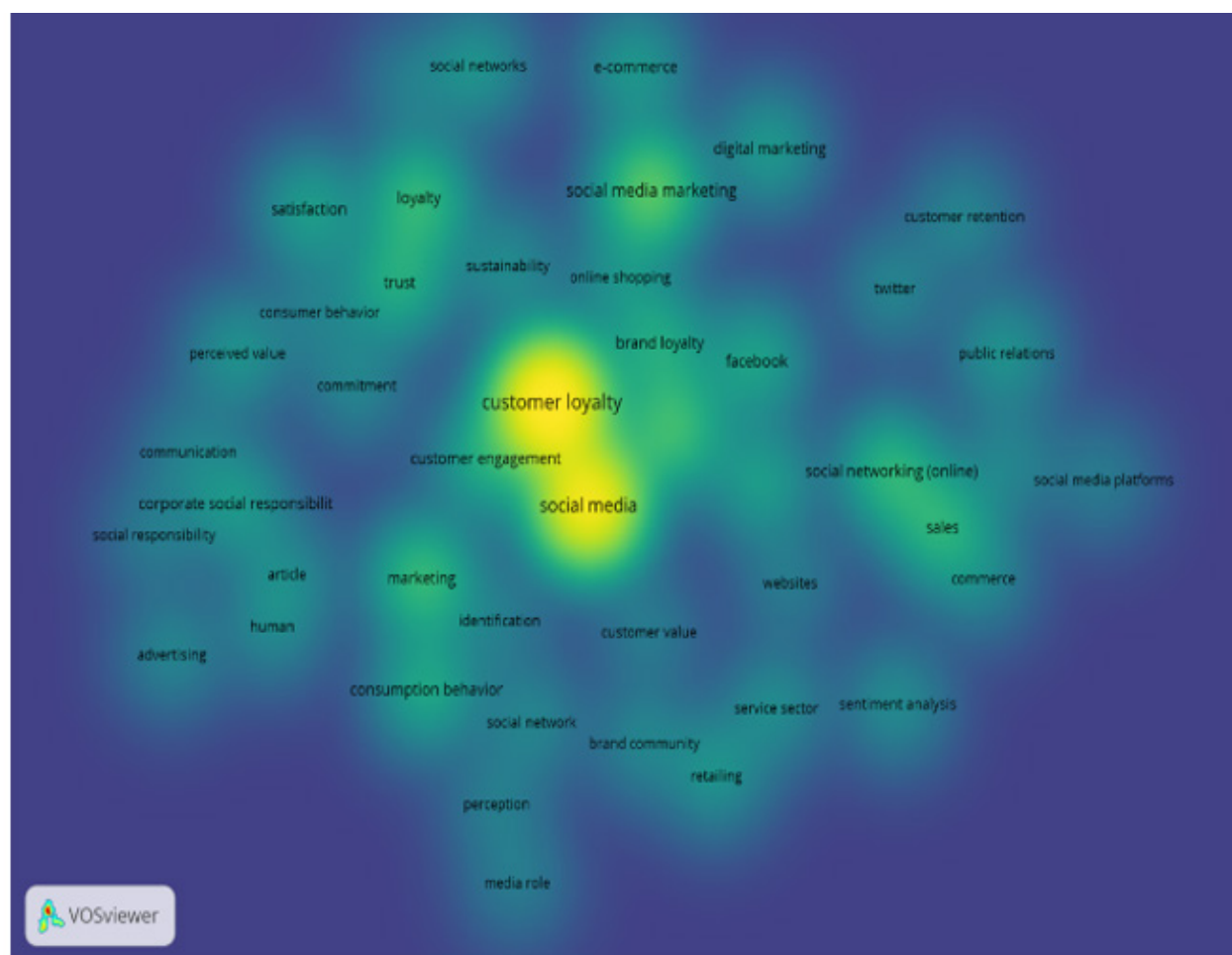
Source: VOSviewer Result, 2023

Figure 8 Density Visualizations

a range of online tactics such as search engine optimization, online advertising, and digital content creation.

In light of this, digital marketing is becoming increasingly crucial for successfully connecting with and engaging consumers in the rapidly evolving digital environment, with social media emerging as a key element of contemporary digital marketing tactics. From this data, researchers can identify novel insights into social media marketing research. These terms reflect the topic's intensity or density in the scholarly literature. The scholarly community pays particular attention to these terms, highlighting their significance in social media marketing and customer loyalty.

By examining this data, researchers can gain fresh and comprehensive insights into the dynamics and patterns in social media marketing research. It enables them to identify areas that may require further examination and to acquire a more thorough understanding of how social media marketing can impact and promote customer loyalty. Consequently, this data offers academics a strong foundation for investigating and advancing the subject of social media

marketing and for spotting potential areas for relevant and innovative future study.

The author's collaboration visualization map illustrates the collaborative efforts of researchers in the field of social media marketing engagement in customer loyalty. Figure 9 illustrates how 20 authors collaborated to create 5 clusters related to Social Media Marketing Engagement in Customer Loyalty. This visualization highlights the close collaboration among scholars as they work together to explore and deepen their understanding of the subject. The image shows how the authors' collaboration results in clusters representing related research topics or concurrent methodological approaches.

Table 4 lists the names of the group members involved in this collaboration. This information helps to better comprehend the connections between these writers and their contributions to understanding Social Media Marketing Engagement and Customer Loyalty. It also provides detailed insight into who is participating in the research efforts.

Figure 13 shows how the 20 collaborating authors formed a cluster. This graphic offers a clearer view of how interactions between these writers influence the formation of clusters. It provides a comprehensive picture of the collaboration structure among scholars and its impact on the overall understanding
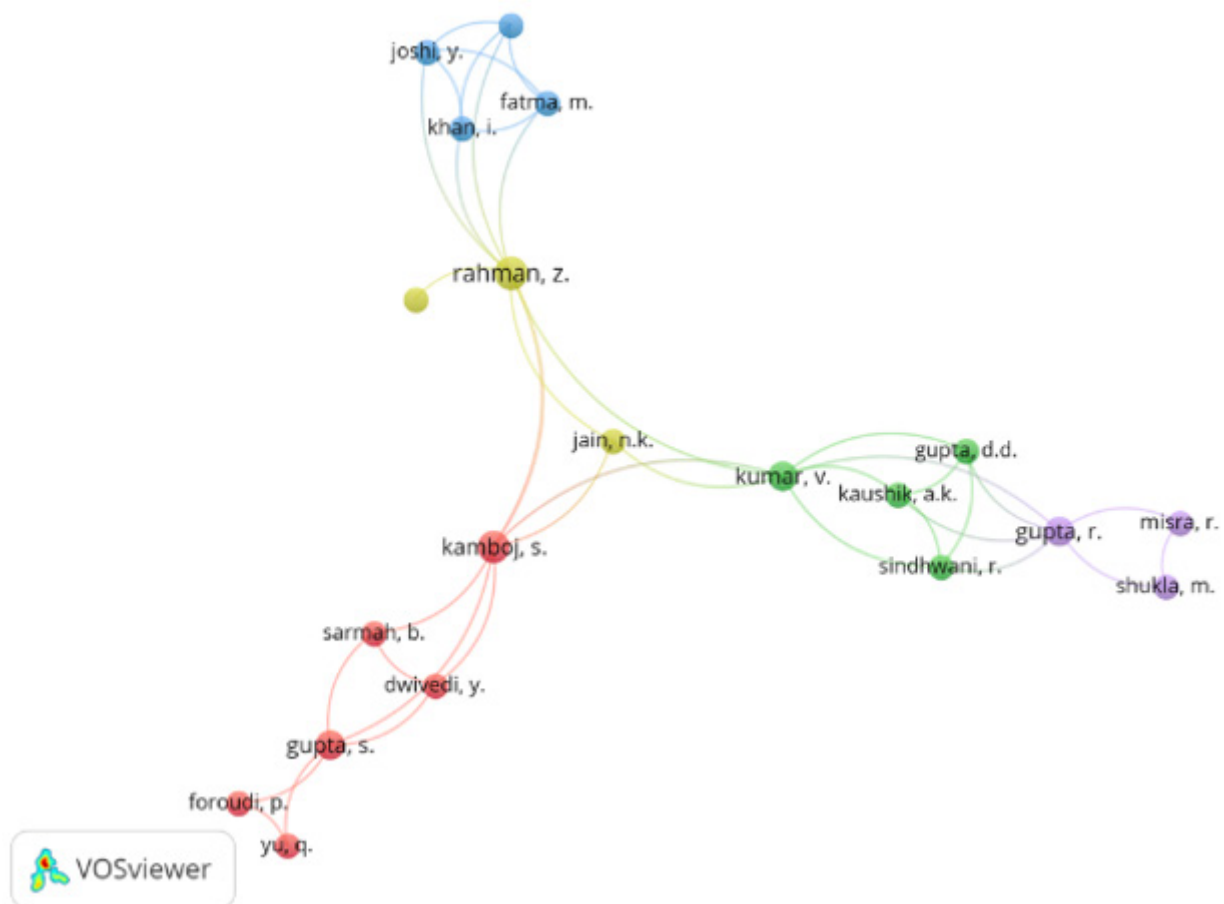
Source: VOSviewer Result, 2023

Figure 9 Author Collaboration

Table 4 Author Collaborations

Cluster	Color	Author
1	Red	Dwivedi, y; Foroudi, p; Gupta, s; Kamboj, s; Sarmah, b; Yu, q.
2	Green	Gupta, d.d; Kaushik, a.k; Kumar, v; Sindhwani, r.
3	Blue	Fatma, m; Joshi, y; Khan, I; Shamim, a.
4	Yellow	Jain, n.k; Rahman, z; Yadav, m.
5	Purple	Gupta, r; Misra, r; Shukla, m.

Source: Research Result, 2023

of the subject. Consequently, these data offer valuable perspectives for scholars and industry professionals to grasp the dynamics of cooperation in social media marketing research and customer loyalty, as well as their potential influence on advancing knowledge in the field.

CONCLUSION

This study highlights the growing importance of social media marketing in shaping customer loyalty, as evidenced by the increasing volume of research in this area. Through a comprehensive bibliometric analysis, the study uncovers key trends and future research opportunities in the field of social media marketing. VosViewers mapping highlights frequently associated keywords such as social media marketing, customer loyalty, Facebook, digital marketing, trust, and brand loyalty. The analysis identified 126 articles focused on the theme of Social Media Marketing Involvement in Cultivating Customer Loyalty, authored by 160 researchers. The United States emerged as a major contributor to this research, as reflected

in publications indexed in Scopus. This bibliometric study provides a comprehensive overview of the current research landscape and serves as a strong foundation for future exploration.

The study investigates the impact of positive and negative sentiments expressed on social media on customer loyalty. The findings suggest that positive sentiments tend to enhance customer loyalty, while negative sentiments can undermine it. The study employs machine learning-based sentiment analysis to identify patterns in customer interactions on social media, enabling businesses to take proactive steps to improve customer engagement and foster stronger relationships.

The research also highlights the importance of considering social and demographic factors when evaluating the effectiveness of social media marketing strategies. Cultural differences, such as those observed between Asia, Europe, and the Americas, can significantly impact customer preferences and behaviors. It necessitates a tailored approach to social media marketing,

considering the unique characteristics of different global markets. Understanding these variations can help businesses design more effective marketing campaigns that resonate with specific audiences.

Furthermore, the study emphasizes the need for future research to focus on the long-term impact of social media engagement on customer loyalty. While much of the current research focuses primarily on short-term effects, understanding the long-term implications is critical to developing sustainable marketing strategies. Longitudinal studies that track customer interactions with brands over extended periods can provide valuable insights into how these interactions impact loyalty over time. Such research would not only enhance academic understanding but also offer practical applications for businesses seeking to build stronger, more lasting relationships with their customers.

The insights gained from this study have the potential to guide the development of best practices across industries, ultimately leading to improved customer engagement and long-term business success. As social media platforms and consumer behavior evolve, research in this area will be essential for effectively uncovering new strategies and solutions to manage customer loyalty in a dynamic environment. This study emphasizes the importance of ongoing research

to deepen our understanding of the complex relationship between social media marketing and customer loyalty. By doing so, companies can harness the power of social media to create more meaningful and lasting relationships with their customers, thereby generating greater value not only for their businesses but also for society as a whole. The research presented here catalyzes future exploration and innovation in the field of social media marketing, paving the way for more in-depth and impactful studies that will shape the future of customer loyalty in the digital age.

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