

A BIBLIOMETRIC ANALYSIS OF DIGITAL MARKETING IN SPECIFIC TO SOCIAL MEDIA TRENDS

Vibha Sharma, IIMT College of Engineering, Greater Noida
Amit Kumar, IIMT College of Engineering, Greater Noida

ABSTRACT

Social media are modes of communication by which users generate online societies to share information, ideas, personal messages and digital marketing. This usage has enlarged with the growing social media trends. Today's youth are excessive users of social media. This study designed a map of trends in publications, attention on social networks, and social media trends over the last 20 years in the field of digital marketing. The software VOSviewer is used to map the occurrence of publications, keywords, and clusters of researchers active in the field in different regions. The results reveal a long history of research on social networks and social media trends. This paper aims to analyse and report published documents related to social media based on the data obtained from the Google Scholar database. As of August 2021, a total of 800 documents have been covered and analysed. This paper conducted the research documents and source types, source title, authorship, keywords, title and abstract analysis, and citation analysis. The results reflect improved progress effects of literature on social media trends from 2000 up to 2021.

Keywords: Bibliometric Analysis; Social Network; Social Media; Digital Marketing.

INTRODUCTION

Social media has exploded as a class of online discourse wherever folks produce content, share, marker and network at a prodigious rate the term “*social media*” refers to the big selection of Internet-based and mobile services that permit users to participate in online exchanges, contribute user-created content, or be part of on-line communities. The primary network social network website (SixDegrees.com) appeared in 1997. By the late 2000s, social media had gained widespread acceptance and a few services gained immense numbers of users (Dewing, 2010). The growth of the internet has led to new channels for social networking, which have evolved and adapted to meet the needs and resources of the population (Erfani, & Abedin, 2018). In the digital era, online social networks have become a central node through which individuals link and interact with other people (Penni, 2017) by allocation, viewing, or mentioning concepts and content posted by other users (Anwar, et al. 2019; Boyd & Ellison 2007). In the last few decades, Internet applications such as email, social media, and the Web have offered several opportunities to enrich global connectivity for individuals and organizations. Social media has become a new trend that is universal and acknowledged by almost every person in this world. social media usage started when Randy Conrads created the first social networking application, which was called Classmates.com A complete version of the social networking site called Six Degrees was introduced in 1998, where this application allows its users to generate profiles and list friends, functions that cannot be done with Classmates.com (Boyd & Ellison, 2007). Since then, several other social media applications have been developed, especially during the dot.com years in the early 2000s. Applications such as Wikipedia, LiveJournal, WordPress, Friendster, and Blogger continue to grow in popularity and attract thousands of handlers, especially youngsters.

The term social media was only first used officially in 2005 to symbolize several usages of internet-based applications that are generated on top of the more modern version of the World Wide Web. The role of social media is the clear-cut sense in the working environment which is also trending (Razmerita, et al., 2014; Weber, et al., 2016). This study aims to explore the expansion of research related to the trend of social media giving out of bibliometric maps and research/publication trends on the Google scholar database using VOS Viewer software. Bibliometrics is effective for giving datasets that can be used by policymakers and researchers to improve the quality of research. The bibliometric map distribution exhibited involves the form of publication, the topic area being considered, and the journal in which the publication was published in the last few decades.

METHODS

This paper attempts to estimate recent trends and the latest enlargement of academic literature on social trends among the youth with the help of the bibliometric analysis method. Network visualization and bibliometric indicators are used in this paper to present the results. To hit data pertinent to the present study, knowledge was retrieved in July 2021 from the web of science, Scopus platform which is the world's premier info for revealed articles and citations. It includes publications in top-tier journals and is most fitted to bibliometrics' search was conducted in July 2021 and knowledge from the amount 2000-2021 square measure was analysed. A string of acceptable search terms "*social media and trend and social media network*" is employed to go looking the papers within the title, abstract or keywords, yielding 800 initial results. It can provide good scientific academic information. according to the criteria titles, keywords and abstract. Sample articles are downloaded in *.ris format and the VOS viewer is used to visualize and analyse trends in the form of bibliometric maps (Van Eck & Waltman, 2010).

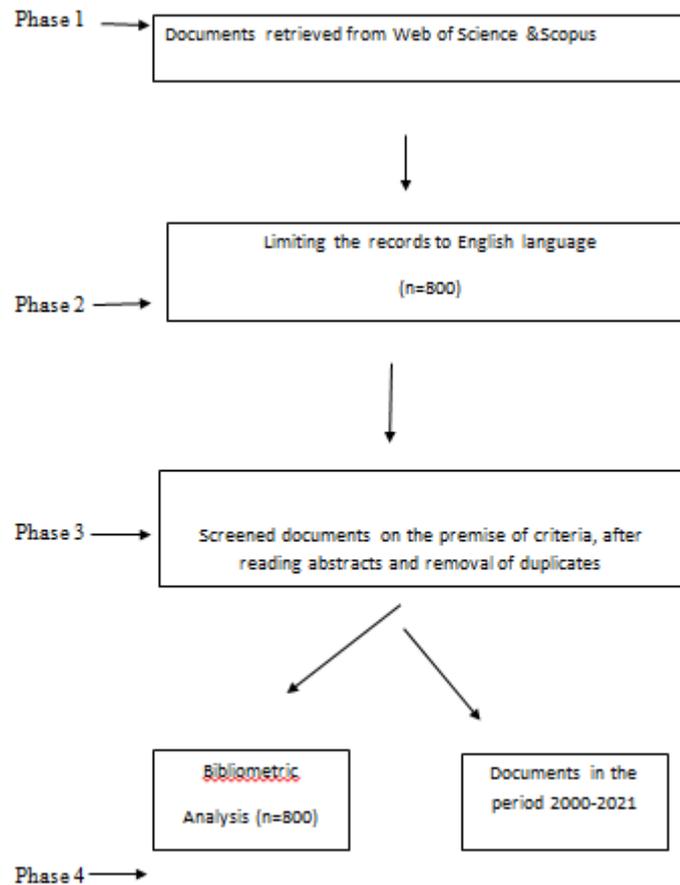


FIGURE 1
DATA RETRIEVAL PROCESS

Analysis Method: There are several types of systematic review papers, including structured reviews focusing on widely used methods, theories, and constructs (Rosado et al., 2018), framework-based reviews (Rosado-Serrano, Paul, & Dikova, 2018), and framework-based reviews (Rosado-Serrano, Paul, & Dikova, 2018). (Paul & Benito, 2018), Bibliometrics is the most widely used method for tracing a research field's knowledge anatomy (Li, et al. 2017). The most widely used bibliometric methods for demonstrating similarity (Small, 1973).

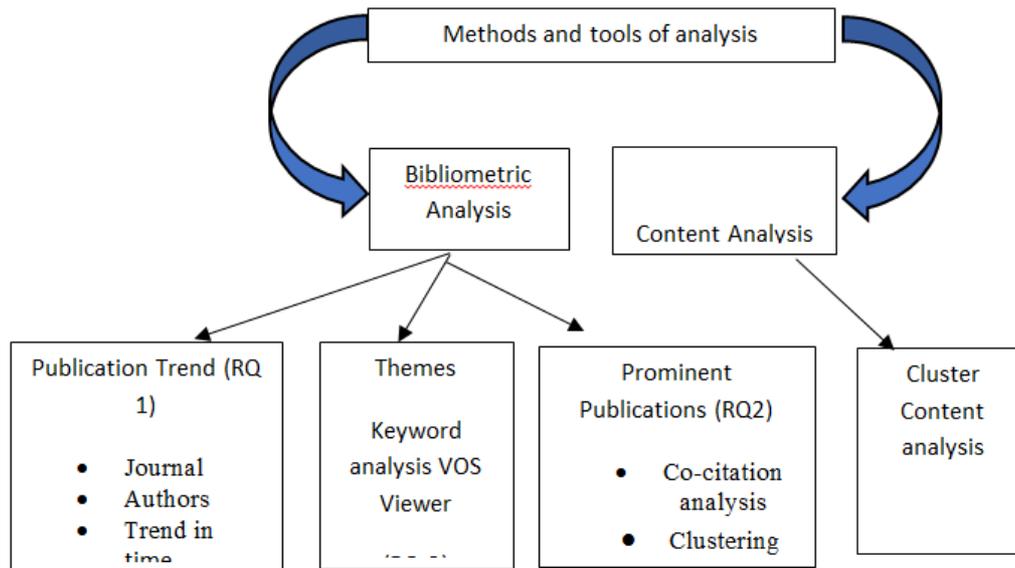


FIGURE 2
SCHEME OF ANALYSIS USED IN THE PRESENT STUDY

Bibliometric Analysis

Zhang, Chen, Wang, and Ordóñez de Pablos (2016) define bibliometric research as a method that utilizes a precise statistical technique to analyse published papers. The bibliometric analysis offers insights into persistent research areas by useful exhaustive facts about the collection of publications from specified databases, such as publication type, location of publication, h-index, authors, keyword frequency, and the number of citations (Ahmi & Nasir, 2019). The analysis is done using the VOS viewer, a freely accessible tool to paradigm and visualises the relationship between networks. The VOS viewer makes a visualization of network co-occurrence based on the term extracted from the literature review. Using the g VOS viewer, this analysis also scrutinises publications' effects based on citation counts, impact publications, and citations per publication.

Source and Data Collection

The web of science, the Scopus platform is the most prominent academic databases available today. With approximately 800 published documents, this study uses the Google scholar database as the primary source for data collection. Tools such as Microsoft Excel and VOS viewer are used for further analysis Carr & Hayes (2015).

Results and Discussion

The analysis of the extracted academic work in the search process was based on the following attributes between 2000-2021: document and source type, subject area, most active source title, distribution of publication by keywords analysis, title, and abstract analysis, and citation analysis. Research on social media trends has published 800 documents in the years from 2000 to2021. Research on social media started to be published in the year 2000-2001with three publications documents. After that, there were no publication activities on

this matter. This subject has become the hottest topic from year to year. But 2010-2012 was the highest year for publication in this area, with a total of 180 out of 800. Figure 1 shows the progression of publication activities on this theme from 2000 to 2021.

Figure 1 indicates the growth of publication movements on this subject from 2000 to 2021. Created on the shape and growth, it seems that the social media research theme makes a good shape for academics to investigate. The research shows that these documents are categorised into sources: journals, books, and book series. Table 1: Year of Publications.

Visualization focus area using VOS viewer: Network visualization map of the co-authorship. The number of authors per publication is presented in figure-2. The analysis shows that the minimum number of authors per document of the 1508 authors meets the threshold and the number of authors to be selected 59. There are 2 clusters (red, green). There are 2 clusters, 4-link and the total link strength was 9.

Text Analysis: The title and abstract of the documents are analysed with the binary counting method via VOSviewer software. The Binary counting method is a method where the occurrence of a noun in an article is analysed based on a specific number of times (van Eck & Waltman, 2013). The visualization of the noun occurrences based on the title and abstract is exhibited in Figure 3. The strength of the occurrences is denoted by the size of the nodes, whereas the strength of the relationship is shown by the thickness of the lines between nodes. Related words are grouped to show their relationship. The size of the circle is positively correlated with the appearance of keywords in the titles and abstracts. The results of the analysis show that social networking, social media, sites, and networks are thoroughly interrelated although performance, capability, evidence, and empirical research often arise together Kietzmann et al. (2010).

The minimum number of relationships with terms in the use of VOSviewer was set at 25 terms. After being analysed with VosViewer, there were 2 clusters (red, green, blue). The results extracted from titles, keywords, and abstracts found 5439 documents. Figure 3 shows clusters in each of the topic areas studied. It can be seen that the keywords social network, network, and site are in the same cluster (red area). This shows that there is a close relationship between them Hamidah et al. (2020). Meanwhile, Figure 3 shows the trend from year to year related to this research and indicates that research documents were published at a maximum level of 22%. Meanwhile, Figure 3.3 shows the depth of research, showing that the more concentrated the colours that appear, the more the research increases in number Kaplan & Haenlein (2010).

Citation Analysis: The citation metrics data from 2009 – 2020 generated by Harzing's Publish and Perish software. There are 800 papers with 673091 citations averaging 32051.95 citations per year of publications on social media and social networking sites. Each paper is cited 841.36 times, and the total h-index is 463 Kwak, et al. (2010).

The top 10 most cited articles on social media are presented in Table 3 below. The article that discussed users of the world, unite! The challenges and opportunities of social media are the most cited article to date, with 23617 total citations altogether. The top 10 most cited articles in social media

TC – Total Citations, CY – Citations/Year, CA – Citations/Author.

Keyword Analysis

Keyword analysis is performed using the VOS Viewer to investigate the most common themes in social media trends. In 800 documents, a total of 80 keyword terms has been identified.

Discussion and Conclusion

The trend of research on social media and social networking sites is analysed in this research by applying a bibliometric analysis method Sharif, et al. (2020). The efficiency of research and publications in a particular area can be evaluated by bibliometric analysis. Bibliometric analysis can also direct us to take vital decisions before embarking on a particular field, as the results of the bibliometric analysis can show the performance and impact of the analysed research area (Ellegaard & Wallin, 2015). Making on the significance of social media trends. This research is persistent on social media and social networking sites data collected from the Google Scholar database. The vital progress in the number of publications in this area can be perceived from 2000. This study also shows that each year, more authors are working together, suggesting that the significance of social media extends across different sections. The findings recommended that social media is a notable topic that needs more exploration and, more importantly, association with many other different frameworks. The publication effect can be evaluated based on the citation metric, as displayed in Table 2. This was created in the years of publications (2000–2021). 800papers have been formed by researchers around the world with a total of 673091 citations. On average, the topic generated 32051.95 citations and each paper was cited 841.36 times.

Despite the results collected from the bibliometric analysis, the quality of the results can still be enhanced in future research. The first attribute is in the context of keyword use in the search process. In this analysis, the results are collected based on the keywords "*social media*" and "*social networking sites*", which is based on the title of the paper. As social media is a common term, some social media researchers may use a more particular keyword, such as "*Facebook*," "*Twitter*," or "*social network*." The use of more keywords linked to social media can provide more comprehensive search results, so it can get better quality of the findings. Furthermore, no search query is 100% perfect in capturing all scholarly works in this area. This study at least offers an attractive trend in social media and social networking site research up to 2021. This study also contributes to the extension of the body of knowledge in social media literature through the bibliometric approach.

REFERENCES

- Ahmi, A., & Mohamad, R. (2019). Bibliometric Analysis of Global Scientific Literature on Web Accessibility. *International Journal of Recent Technology and Engineering*, 7(6), 250–258
- Asur, S., & Huberman, B.A. (2010, August). Predicting the future with social media. In *2010 IEEE/WIC/ACM international conference on web intelligence and intelligent agent technology* 492-499.
- Boyd, D.M., & Ellison, N.B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-mediated Communication*, 13(1), 210–230.
- Carr, C.T., & Hayes, R.A. (2015). Social media: Defining, developing, and divining. *Atlantic Journal of Communication*, 23(1), 46– 65.
- Chen, X., Wang, S., Tang, Y., & Hao, T. (2018). A bibliometric analysis of event detection in social media. *Online Information Review*.
- Dewing, M. (2010). *Social media: An introduction* (Vol. 1). Ottawa: Library of Parliament.
- Ellegaard, O., & Wallin, J.A. (2015). The bibliometric analysis of scholarly production: How great is the impact? *Scientometrics*, 105(3), 1809–1831
- Erfani, S.S., Abedin, B. (2018) Impacts of the use of social network sites on users' psychological well-being: A systematic review. *J. Assoc. Inf. Sci. Tech.* 2018, 69, 900–912.
- Hamidah, I., Sriyono, S., & Hudha, M.N. (2020). A Bibliometric analysis of Covid-19 research using VOSviewer. *Indonesian Journal of Science and Technology*, 5(2), 209-216.
- Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons*, 53(1), 59-68.

- Kietzmann, J.H., Hermkens, K., McCarthy, I.P., & Silvestre, B.S. (2011). Social media? Get serious! Understanding the functional building blocks of social media. *Business Horizons*, 54(3), 241-251.
- Kwak, H., Lee, C., Park, H., & Moon, S. (2010). What is Twitter, a social network or a news media?. In *Proceedings of the 19th international conference on World wide web* (pp. 591-600).
- Penni, J. (2017) The future of online social networks (OSN): A measurement analysis using social media tools and applications. *Telemat. Inform.* 2017, 34, 498–517
- Razmerita, L., Kirchner, K., & Nabeth, T. (2014). Social media in organizations: leveraging personal and collective knowledge processes. *Journal of Organizational Computing and Electronic Commerce*, 24(1), 74–93.
- Sharif, M.H.M., Ahmi, A., & Rosli, K. (2020). Measuring the Trend of the Research on Social Media in SMEs: A Bibliometric Evaluation.
- Van Eck, N.J., Waltman, L., Dekker, R., & van den Berg, J. (2010). A comparison of two techniques for bibliometric mapping: Multidimensional scaling and VOS. *Journal of the American Society for Information Science and Technology*, 61(12), 2405-2416.
- Weber, M.S., Fulk, J., & Monge, P. (2016). The emergence and evolution of social networking sites as an organizational form. *Management Communication Quarterly*, 30(3), 305–332.

Received: 07-Apr-2022, Manuscript No. AMSJ-22-11700; **Editor assigned:** 09-Apr-2022, PreQC No. AMSJ-22-11700(PQ); **Reviewed:** 22-Apr-2022, QC No. AMSJ-22-11700; **Revised:** 25-Apr-2022, Manuscript No. AMSJ-22-11700(R); **Published:** 28-Apr-2022