# The Issue of Social Media in Library: A Bibliometric Analysis

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Abstract. Web 2.0 affects adaptive libraries to become 2.0 libraries. As a form of implementation of library 2.0, most use it to provide services to users. The purpose of this article is to find out the mapping of publications on the use of social media in libraries. This article uses bibliometric analysis assisted by VOSviewer software. The data is taken from the Scopus database with the keyword "social media in library". From Scopus data found 1301 journal article documents. The articles were first sorted from the metadata that were deemed appropriate so that 230 articles were found. The second sort of full paper which is assessed according to the problems discussed so that 115 articles are obtained. The findings obtained from the literature review show that social media is used as a medium for delivering information such as news on library operations and library management. The forms of social media used by the library include Facebook, WhatsApp, Telegram, Twitter, Instagram, and blogs. According to users, it is necessary to have the ability to interact between social media managers and users, and it is necessary to pay attention to credible and useful social media content.

Keywords: Social Media Library; Publications; Bibliometrics; Vosviewer; Communication Technology

#### 1 Introduction

Libraries always try to keep up with technological developments that are booming for their users. Libraries do not only present physical collections where users have to come to the library to read or borrow library collections. However, many libraries provide ball pick-up services, for example in the Covid-19 era, libraries had time to close their physical services (Temiz & Salelkar, 2020; Tsekea & Chigwada, 2020; Fritz, et.al., 2020). Thus, does the library function have to stop and its existence is no longer needed? It turns out that many libraries are adaptive to these conditions. Libraries provide online and interactive services to carry out their function as information providers (Mbambo-Thata, 2020; Peruginelli, Conti, Fioravanti, 2021; Winata, Fadelina, Basuki, 2020).

The development of increasingly sophisticated technology, information and communication gave birth to a new innovation in the form of Web 2.0 technology. This technology improves the provision of information services so that access to information becomes faster (Tredinnick, 2008). Examples of Web 2.0 technologies are social media applications such as Wikipedia, Blogs, Facebook, RSS, Twitter, YouTube, and other new social media (Tim O'Reilly, 2005). Social media is a medium for exchanging information easily and quickly using the internet network without any restrictions, which are usually in the form of sites, websites and applications (Greenwood et al., 2016). Therefore, the use of social media can show that people are networking with one another. The many features that provide fun and convenience offered by social media, make people increasingly unable to escape from social media, it can be said that society is hegemonic in it. There are many benefits from the use of social media topics. The purpose of this article is to find out the mapping of publications on the study of the use of social media in libraries. This article uses bibliometric analysis assisted by VOSviewer software.

## 2 Methodology

The bibliographic analysis in this article is used to evaluate bibliographic data regarding keywords from publications that discuss the use of social media in libraries and the year and country of origin of the publication. Data was taken from 10 December 2020 to 27 January 2021 from the Scopus database with the keyword "social media in library". The time span applied is the last 5 years, starting from 2016 - 2020. Based on the search, 1301 documents were found. After that, export the data in the form of .csv. From these results, re-sorting was carried out based on the completeness of the metadata so that 230 documents were obtained. After that, sorting was carried out based on the availability of full paper so that 115 documents were obtained. The available data is then processed using VOSviewer with analysis based on co-authorship and co-occurance. The study design looks like Figure 1.

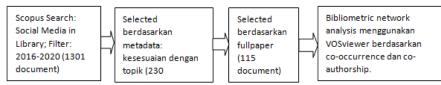


Fig. 1. Design of Study

## **3** Results and Discussion

#### 3.1 Publication Year

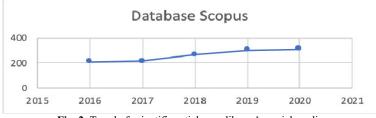
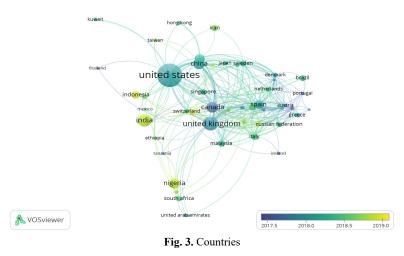


Fig. 2. Trend of scientific articles on library's social media

Based on figure 2, it can be seen that the trend of articles about social media in the library has increased. From the Scopus database, the number of documents in 2016 was 212, in 2017 there were 213, in 2018 as many as 265, in 2019 as many as 301 and in 2020 as many as 310 documents. This shows that research on social media in libraries is an important research and is in great demand.

# 3.2 Countries



By country, Publications from the United States mostly discuss social media in libraries. Likewise with the United Kingdom, India, China and Canada. Indonesian researchers have only started to trend in discussing social media topics starting in 2019.

# 3.3 Main Topics

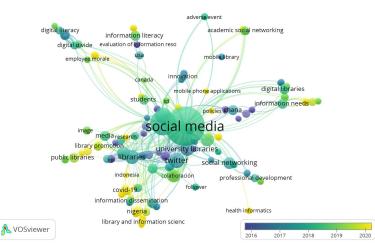


Fig. 4. Co-Occurrence of author keywords

	Keywords	Total link strenght	Occurances
1	Social media	250	45
2	Academic libraries	98	19
3	Twitter	54	7
4	Marketing	47	8
5	Library services	35	5
6	Collaboration	31	3
7	Facebook	28	5
8	User studies	21	2
9	Social networking	20	4
10	Information need	20	3

Tabel 1. The Most Common and Influential Keywords

Source: Data processed using VOSviewer

Based on figure 4 and table 1 shows that social media keywords have the most relationship with other keywords. Likewise, academic libraries, twitter, and marketing keywords are also widely used. Social media is very different from mass media such as television or radio which carry out one-way communication, users cannot provide feedback. Social media provides facilities that allow users to express opinions or network with other users (Boyd and Ellison, 2007). Social media in libraries shows a new definition of the relationship between libraries and users (Johannsen, 2015). Users usually have to come to the library physically to communicate with the librarian, with social media these activities can be done easily without having to come to the library. Not only that, libraries use social media to deepen relationships with users and expand the library's reach to be accessible from anywhere (Garczynski, 2016).

Studies on social media in libraries are widely studied in academic libraries when compared to other types of libraries. Social media in academic libraries is used for library marketing and promotion (Chan, Lam, & Chiu, 2020; Elkins, et.al., 2020; Magoi, Abrizah, Aspura, 2020; Fong, et. al., 2020; Harisanty, 2018). Social media in academic libraries is used as a medium in providing reference services to users. Libraries create virtual reference services/online reference services/digital reference services. Virtual reference services are referral services that are carried out electronically, sometimes in real time, where library users use technology to communicate with reference librarians without having to be physically present to meet information needs (Godfrey, 2008). Virtual reference services in Indonesian libraries use many media, whether real time or not, such as library websites, library social media, E-mail, SMS, or instant messaging (Qomariah & Kusuma, 2015).

Social media will be the best tool to promote library resources and services (Anwar & Zhiwei, 2020). Libraries have accounts on each type of social media, such as Facebook, Twitter, and Instagram. The use of social media as a promotional medium was chosen based on the consideration of the relative advantages of social media. The active use of library social media accounts should be encouraged to provide better promotion of libraries, especially their resources and services (Balog, Badurina, and Lisek, 2018). Librarians must devise strategies to create trust in social media content and direct action towards the goal of achieving social media authority as information experts. Twitter social media is considered to have a greater influence on library use when compared to other types of social media. Social media is useful for improving communication between users and librarians, where on Facebook there is a chat application that allows the librarian to ask questions directly about the information needed to the librarian without having to come directly to the library. In addition, it not only improves communication between users but also for sharing and exchanging information resources among them.

Social media is used to improve the quality of library services. Libraries try to adapt to the ever-changing characteristics of users, one of which is by adopting social media for libraries. Social media in libraries is a source of information that can be utilized by users (Vanwynsberghe & Boudry, 2014). Characteristics of users now prefer social media as the main source of information (Westerman, Spence, & Heide, 2014; Ankrah, and Atuase, 2018). Libraries can take the opportunity to get closer to users through social media. Therefore, it is important to pay attention to the content disseminated through the library's social media (Faba-Pérez & Infante-Fernández, 2018). Three themes relate to trust-creating activities by individual librarians: (a) posting credible and useful social media content; (b) provide relevant and responsive feedback; and (c) have official identification or social media icons. The successful implementation of social media in libraries is not only related to the ability of librarians to use social media, but also how they build social media content through trust-creating activities (Elkins et.al. 2020).

## 4 Conclusion

Issues related to social media in the library from year to year have increased in publications. A lot of research focuses on social media, academic libraries, marketing, twitter, and library services. Most of the articles discuss about the social media academic library. This social media is a form of library service and is effectively used to inform the library's resources. The most studied social media is Twitter. The limitation of this research is that it only publishes articles in the Scopus database, even though many other databases also publish articles on social media in the library. Suggestions for further research are systematic literature review by taking article publications from all existing databases and focusing on one type of library.

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