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Behavioral Patterns of Social Media Users toward Policy: A Scientometric Analysis

Abstract

This research explores the behavioural patterns of social media users in response to policies, bridging a gap in the literature by providing in-depth insights into the interaction between user behaviour and public policies relating to social media. An important contribution of this research lies in its holistic approach to understanding how social media users respond to various public policies and their impact on their behaviour. This research aims to explore the influence of the interaction between social media and public policy, understanding how user behaviour on these platforms affects responses to government policies. This study uses qualitative research methods with a scientometric approach. The main results underline the crucial role of social media not only as a communication channel but also as a significant influence tool in shaping public opinion and policy. These studies show that social media has a dual potential, which can support professional and community development, as well as influence government policies and actions through social interaction and information dissemination. However, negative impacts are also evident, such as in the spread of fake news that can significantly alter political views. The practical implications of this research emphasise the need for proactive and systematic government strategies in using social media for the dissemination of accurate information and combating fake news, thereby improving the effectiveness of policy communication and responsiveness to public needs.

Keywords:

scientometrics; behavior; social media; policy

Introduction

In the digital era, social media has emerged as one of the most powerful instruments for communication in disseminating information, including in the context of government. Alam

(2021) states that social media is very effective in political communication. The emergence of information technology has revolutionized the current communication model. Social media, such as Twitter, has the

potential to broadcast valuable content and build relationships between citizens and institutions (Marino & Lo Presti, 2018). The purpose of social media as a communication tool is to encourage users to actively engage by providing feedback and participating in an open manner, as well as sharing content and replying promptly on the platform (Budiyo, 2016). Governments around the world are increasingly utilizing social media as a tool to inform the public about public policies. In the Indonesian context, this is also happening with the high role of government in the use of social media, both at the national level and at the regional level.

The implementation of social media in the public policy-making process promotes learning and understanding, focusing on the impact of networks on learning and knowledge media in various aspects (Basyal et al., 2018). In the modern world, social media is significant and can provide useful information for the formulation of public policy (Loukis et al., 2020). When the government uses social media to convey public policy information, many factors need to be considered. One of them is how government behavior in using social media affects the effectiveness of public policy communication.

In general, policy refers to directives and actions taken to modify, preserve, or establish living circumstances that are favorable to human well-being (Vargas-Hernandez et al., 2013). Public Policy made by the government can refer to economic policy and social policy (Vargas-Hernandez et al., 2013). Public policy-making aims to create a safe and prosperous society and eliminate problems that disturb the community or cause harmful chaos (Nurmandi et al., 2023). Making good public policy involves communication related to the delivery of various information to be filtered before being established as public policy (Nurmandi et al., 2023). Regarding social media in policy-making, governments, citizens, groups, organizations, stakeholders, and

individuals have important roles (Nurmandi et al., 2023). Public policy making with social media influences the outcome of decisions determined by various considerations (Wang & Medaglia, 2017). Various influences that develop in society show that social media has a role in public policy (Selwyn, 2012). Public policies are needed to provide better protection to social media users and require greater transparency on how data is used (Boatwright & White, 2020).

The development of social media has created complexity in the communication dynamics between government and society. However, the lack of understanding of how interactions on social media influence public policy decision-making is a major concern. This research aims to explore the influence of interactions between social media and public policy, understanding how user behaviour on these platforms influences responses to government policies. Through a literature review, this research aims to highlight knowledge gaps that need to be addressed and identify effective communication strategies for the government in disseminating policy information through social media. The study is conducted in the context of the digital era, where social media has become the main platform for information exchange and public opinion. The focus is on the use of social media in disseminating and managing public policies. The unit of analysis in this study is the behaviour, interaction, and response of social media users to public policies delivered by the government through various social media platforms.

The government needs to adopt social media in service delivery and involve the public in decision-making, as social media is a complementary platform for information dissemination, connectivity, and public engagement to make informed decisions (Jansen et al., 2010). Social media has influenced the way government agencies interact with the public and manage communications. Through social

media, people get the opportunity to speak, express themselves and their thoughts, including criticizing the government directly and openly (Hastrida, 2021). The government now uses social media as one of its channels for public outreach and to fulfill its mandate to provide public services (Hastrida, 2021). Social media may, in this situation, encourage community involvement, encourage accountability, and improve cooperation between the government, public administration, and other stakeholders (Picazo-Vela et al., 2016).

Social media is being used by the government to communicate with the public as well as to provide information. Additionally, social media networks provide an affordable, focused means of communication (Anand et al., 2013). Social media users can create and share content, making it easily discoverable or communicable to the intended audience (Shwartz-Asher et al., 2017). Due to social media's ability to facilitate two-way communication, citizens are now active co-creators rather than only passive recipients of government services (Bertot et al., 2012), enhancing the awareness of public action (Gil-Garcia et al., 2016), and changing how public institutions and technology platform providers interact (Mergel, 2014). Government behavior in social media includes aspects such as content management (Hsiao & Bomhold, 2013), government response to public input (Li et al., 2022), and participation initiatives (Bawack et al., 2018). Some studies examine the extent to which the government is able to build public trust and engagement through social media (Widya, 2021).

This article has significant relevance given the central role of social media in modern governance. Its presence not only affects communication and information dissemination but also influences the way governments interact with the public. By understanding how social media influences behaviour and perceptions of public policy, this article offers insights that are important for

improving transparency, accountability, and public participation in decision-making processes. This is crucial in addressing current challenges related to public opinion, personal data protection, and improving the quality of democracy in Indonesia. One significant gap in the literature is the lack of focus on the concrete influence of social media on user behaviour regarding public policy. While many studies explore aspects of communication and participation, there is rarely an in-depth analysis of how behaviour and interactions on social media influence policy-related perceptions and decisions. The research is expected to fill this gap by exploring the real impact of social media on decision-making and changes in user behaviour toward government policies, which can provide important insights for practitioners and researchers in this field.

This research focuses on an in-depth analysis of the influence and dynamics of the interaction between social media and public policy. More specifically, it focuses on understanding how the behaviour of social media users influences, is influenced by and responds to policies delivered by the government. It also highlights the role of social media as a communication tool that influences people's perception, participation, and response to public policies. This research serves as an in-depth analysis of the changing communication paradigm in the context of public policy, particularly in the digital era. It also aims to understand the role of social media in influencing people's interactions, perceptions, and responses to government policies. As such, this research provides important insights for the development of effective government communication strategies through social media platforms. This research exposes the complexity of communication dynamics between the government and the public through social media. It includes an analysis of how these platforms become interactive platforms, enabling the delivery of public policies and direct responses from citizens. In addition,

this research also illustrates the transformation of behaviour from a one-way communication model to a two-way dialogue, where citizens have an active role in the process of receiving and shaping policies.

The research also analyses how interactions between governments and citizens on social media platforms influence responses to public policies. In addition, the focus is on how social media user behaviour, such as sharing content, providing feedback, and participating in online discussions, impacts how public policies are understood, accepted, or even modified by society. This research builds a framework that explains the complex interactions between social media, user behaviour, and public policy implementation. The framework highlights the role of social media in shaping opinions, influencing decision-making, and creating the dynamics of interaction between government and society. It also explores effective communication strategies for the government in using social media as a tool to disseminate information and respond to public feedback.

From several previous studies related to the use of social media, the concepts used are often participation and communication and there are still not many who discuss and focus on the influence

of social media. In line with this, Gil de Zúñiga et al. (2012) mentioned that news consumption through social media affects social capital and political participation. In his research, Vitak et al. (2011) also discussed the use of Facebook in the context of the 2008 US presidential election and found that interactions on social media can contribute to political participation. In the meta-analysis study of Boulianne (2015) evaluating the correlation between social media use and political participation, the results show that there is still a lack of understanding of the specific mechanisms linking social media to political behaviour.

Stephens et al. (2020), in their study, provide a perspective on how organisations use social media for communication during the COVID-19 pandemic, focusing on communication practices used to manage organisational change and uncertainty. Ali-Hassan et al. (2015) look from the perspective of how the various dimensions of social media use in the workplace can be linked to job performance through the social capital built through social media interactions. Tsay-Vogel et al. (2018) explore how social media affects society, culture, and communication patterns. It presents a comprehensive overview of how these digital platforms are changing the way we interact

Table 1.
Taxonomy

No	Author/Years	Finding	Concept		
			Participation	Communication	Influence
1.	(Nurmandi et al., 2023)	The use of social media significantly affects public governance and policymaking	✓	✓	✓
2.	(Appel et al., 2020)	Social media in meaningful themes: consumers, industry and public policy	✓	✓	x
3.	(Wang & Medaglia, 2017)	Collaboration between government and non-government stakeholders is reconfigured along four dimensions: time, task, team, and transition when external social media is used	✓	✓	x
4.	(Giacomini & Simonetto, 2020)	Web 2.0 and social media technologies have the power to affect the usefulness and reason of the public policy cycle	✓	x	✓
5.	(Hastrida, 2021)	Information sharing, widespread cooperation, and social transactions as a mutually beneficial partnership between the community and the government are characteristics of effective social media use	✓	✓	x

Source: Processed by the author

and shaping our understanding of the world. Oeldorf-Hirsch & Sundar (2015), in their study, explain that news-sharing activities on social media such as posting, commenting, and tagging influence public perception and discussion. The researcher examined the impact of these social interactions on public information and opinion. So there is still a lack of knowledge about how social media influences the behavior of its users toward a policy.

Methods

This research uses qualitative research with a scientometric approach. The qualitative approach was chosen for its ability to explore the deep context and meaning behind the data, which is crucial in understanding the nuances of complex human behaviour. Meanwhile, the scientometric approach was used for its ability to measure and visualise trends and patterns in the scientific literature in an objective and measurable manner, enabling this research to identify and analyse trends in social media influence on policy at a large scale. This research analyses social media users' information on a policy based on the Scopus database from 2018 to 2022. The use of Scopus as a data reference is based on the consideration that Scopus-indexed publications are standard scientific publications that are widely used in bibliometric analysis (Falagas et al., 2008), which provide search facilities on specific subjects and the ability to conduct citation analysis. This was achieved by analysing Scopus-indexed journals using text search result analysis data using the keywords "behaviour", "social media", and "policy". The data was then filtered through keywords based on the last five-year period. The information was stored in RIS format and processed using Citespace software.

In the qualitative approach with scientometric methods used in this study, the indicators chosen to measure social media policy behaviour include users' adherence to policies, their reactions to

policy changes, and the impact of these policies on users' work ethics and productivity. Data was collected from the Scopus database and processed using Citespace software, enabling in-depth analysis of the influence of public policies related to social media on user behaviour. The results of this method are expected to show how policies affect work ethics and productivity and illustrate the complex relationship between public policies and social media user behaviour. This paves the way for more effective policy formulation that is sensitive to user behaviour, supporting ethical and productive social media practices.

We used a systematic review flowchart that matched the most recent changes to adhere to the PRISMA criteria to improve the accuracy of selecting the sample database (Haddaway et al., 2022). This method (Figure 1) outlines three phases for finding and extracting data for a bibliometric evaluation. 2,264 documents were produced when we included the phrases "Behavior", "Social Media", and "Policy," which were found by title, abstract, and keywords. At the screening stage, we limited the time with a modified database search from 2018 to 2022; a time limit chosen to obtain the most recent references on the issue of social media user behavior towards a policy. At this stage, the investigation resulted in 1,401 documents. Next, we omitted documents of type "Proceedings Papers, Corrections, News, Book Reviews, Letters, Editorial Materials, Meeting Abstracts" and included documents of type "Articles" into the study focus. Following this phase, 315 documents were collected. After carefully going over every item, we eliminated 95 that had nothing to do with the examination of how social media users behave toward a policy. As a result, the study contained a total of 220 articles.

Results and Discussion

In today's digital age, the use of social media has skyrocketed and become an integral part of

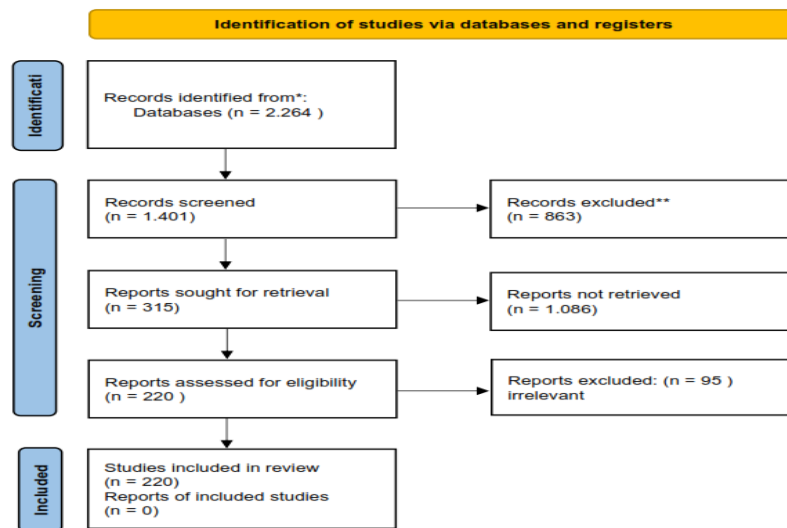


Figure 1. Prism Diagram

Source: Scopus Database

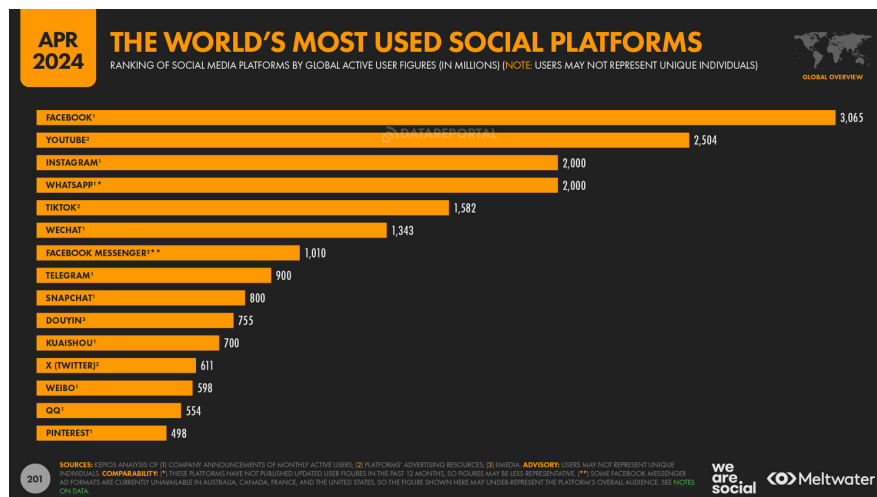


Figure 2. The World's Most Used Social Platforms

Source: datareportal.com

the daily lives of the global community. Platforms such as Facebook, Instagram, Twitter, and TikTok are not only a means of communication and social interaction but have also transformed into effective centres of information, entertainment, and business promotion. Every second, millions of contents are uploaded and shared, creating a never-ending flow of information. This phenomenon indicates that social media is not just a tool to connect people from all over the world, but has also become an important factor in shaping public opinion, trends, and even government policies.

This shows how important social media is in shaping the social, economic, and political pillars of modern society.

In Figure 2, we see that the active users of social media platforms demonstrate the dominance of digital technology in contemporary communication and interaction. Facebook leads with 3,065 billion active users, followed by YouTube with 2,504 billion, and Instagram with 2 billion active users. These figures not only reflect the global reliance on social media for daily life but also highlight its role in shaping public and social

policy. Social media has become an important tool in disseminating information, influencing public opinion, and galvanising support or opposition to certain policies. This massive presence of users signals a significant shift in the way governments and organisations communicate and interact with the public, illustrating the far-reaching social transformation that social media has triggered in the policy-making process.

In further analyses, this research will delve deeper into how social media users influence their responses to government policies. To this end, the analysis will include mapping collaboration networks between authors of scholarly articles that focus on the interaction between social media and public policy. The research will identify authors with the highest number of citations as well as affiliated institutions with the highest number of publications, signaling influence, and credibility within the academic community. Furthermore, the research will also analyse collaboration networks between countries and map articles based on keyword clusters to clarify the relationship between social media user behaviour and reactions to government policies.

1. Analysis of Number and Subject Area of Publications

We utilised the "analyse search results" feature on Scopus to examine annual publications to understand the development of social media user behaviour towards a policy through literature analysis. In 5 (five) years starting from 2018 to 2022, the total research related to the behavior of social media users towards a policy in general experienced significant fluctuations and had a positive trend starting from 2019 to 2021 and dropping in 2022. This indicates a change in research interest over the period, which may have been influenced by the development of new research trends or foci in recent years. These dynamics can provide insights into the development and shifts in academic attention in

the study of social media user behaviour towards policy. Using the keywords and article search techniques employed, we were able to locate 220 articles that were pertinent to the text using the Scopus database.

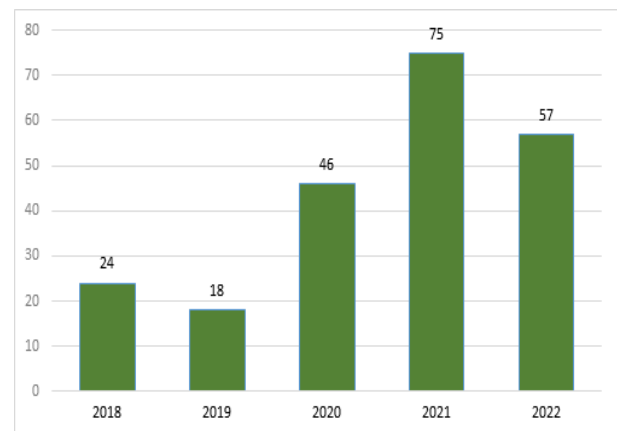


Figure 3. Publication by Year

Source: Scopus Database

In 2018, there were 24 publications related to social media user behavior towards a policy that discussed whether social media increases racist behavior, social media's function as a platform for communication, political communication via bots, and using social media for group learning. In 2019, interest in this research decreased to 18 publications discussing interactions on social media, sustainable development communication in the digital era, and the role of social media in sustainable development. In 2020, the study of social media user behavior towards a policy increased to 46 publications. The goal of this fascinating 2020 study is to determine how people behave while reading privacy regulations and terms of service for social networking sites and how much they disregard them. The results show that service users view privacy policies as a nuisance, ignoring policies in favor of achieving digital production goals, uninhibited by existing means (Obar & Oeldorf-Hirsch, 2020).

In 2021, this study has increased quite rapidly to 75 publications with discussions on social media's effects on productivity and reputation, social media filtering, e-professionalism and social media use,

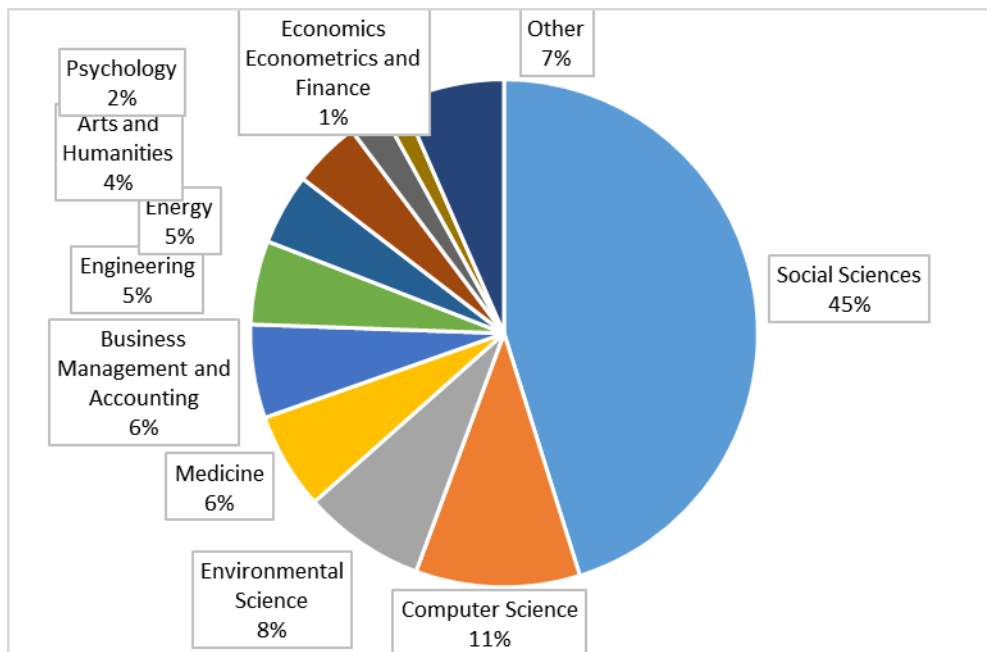


Figure 4. Documents by subject area

Source: Scopus Database

social media, public opinion, and behavior in international studies, as well as social media use in health institutions and government policies and attitudes toward it. The use of social media as a technological platform for e-Government services is a topic of interest study in 2021, even though public confidence in the usage of these services is currently low. Khan et al. (2021) discovered a substantial correlation between people's intention to use government social media services and their level of trust. Research on social media user behavior toward policies fell to 57 publications in 2022. These publications covered topics such as the use of social media from the perspective of information literacy, the advantages, difficulties, and social effects of healthcare providers adopting social media, and the relationship between social media use and users' mental health. Interestingly, in this 2022 review (Apoorva et al., 2022), it was found that increased social media use has the potential to make users socially anxious. Apoorva et al. (2022) also provide input to policy-makers, academics, and practitioners to understand the gravity of the situation and develop appropriate policies to address the problem.

The number of publications on the behavior of social media users towards a policy in the 2018-2022 period was mostly dominated by the field of social science with a percentage of (45%), computer science (11%), environmental science (8%), the field of medicine (6%), business management and accounting (6%), engineering (5%), energy (5%), arts and humanities (4%), psychology (2%), economics and econometrics (2), and other sciences (7%). There are a total of 10 fields in this discussion (Figure 4). These results illustrate that this research took a multidisciplinary approach in exploring the complex interactions between behaviour on social media and its policy implications, reflecting that understanding this phenomenon requires insights across diverse disciplines to provide a comprehensive perspective.

Social science dominates the study of social media user behaviour because it is intrinsically concerned with human interactions and relationships, which are the primary focus of social science. The exponential growth of social media use reinforces the need to understand how identities, opinions, and social relationships

II. Author Collaboration Network Analysis

that the authors' collaboration is not so close. In this analysis, it can be seen that the level of cooperation between authors does not reach full density (1), indicating that author collaboration in this field is still widely distributed.

The collaborative authorship density not reaching the maximum value in the author collaboration network is mainly due to the diversification of research themes and author specialisations that limit collaboration to groups with similar interests. In addition, factors such as geographical constraints, availability of time and resources, as well as personal and professional preferences in choosing collaborative partners are important. This low density is also influenced by the large size and scope of the network, where not all potential relationships are practical or relevant to realise, and sometimes limitations in data collection may lead to an underestimation of the true density in these collaborations. This could indicate the potential to further develop collaboration or identify more specific focal points for future collaboration.

We examined the corresponding data according to Figure 5 to better understand the

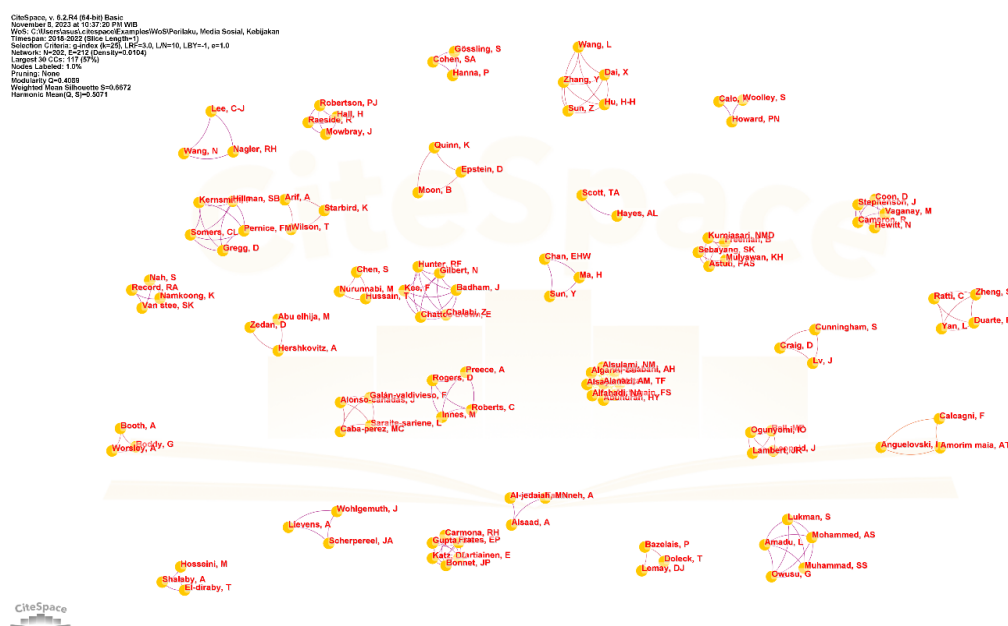


Figure 5. Author's collaboration network visualization.

Source: Scopus Database processed using Citespace

overview with the highest authors. As a result, we exported the 10 most prolific authors regarding behaviors in policy-related social media usage (Table 2). The findings show that Xia Zheng from Stony Brook University, United States, frequently covered topics on Social Media, Social Media Use, and Political Participation; Qichao Zhang from Beijing University of Information Science & Technology, China, covered the topic of the impact of social media use on job creation; and Camelia Delcea from Buchanan University of Economic Studies contributed a lot on the themes of uncovering emotions of social media users, evaluation of corporate image using social media, influence of consumer opinions on social media, and semantic web-based social media analysis.

In addition to looking at the authors with the most publications, we also present a discussion of the most popular articles related to social media user behavior towards a policy indicated by the highest number of citations. The article titled "The biggest lie on the Internet: ignoring

privacy policies and terms of service policies of social networking services" written by Jonathan A. Obar and Anne Oeldorf-Hirsch was published in the Journal of Information Communication and Society. This article has the highest citations and shows that social media users view policies as a nuisance, ignoring policies in favor of achieving digital production goals, and uninhibited by existing means (Obar & Oeldorf-Hirsch, 2020). The findings illustrate that privacy policies are often perceived as intrusive by users, leading to their abandonment in favour of fulfilling objectives in digital production environments. This signals the need for further attention to the way these policies are presented and implemented to match users' expectations and needs.

Table 3. Shows a list of the five articles with the highest number of citations related to social media users' behavior towards a policy. The article titled "The biggest lie on the Internet: ignoring the privacy policies and terms of service policies of social networking services" has the

Table 2.
Top Author in The behavior of social media users towards a policy

Rank	Count	Year	Author	Rank	Count	Year	Author
1	2	2020	Zheng, X	6	1	2022	Alfahadi, NA
2	2	2022	Zhang, Q	7	1	2022	Abunurah, HY
3	2	2022	Delcea, C	8	1	2022	Alsulami, NM
4	1	2022	Alanazi, AM	9	1	2022	Alsayari, SS
5	1	2022	Alotaibi, TF	10	1	2022	Alkhonain, FS

Source: Scopus Database processed using Citespace

Table 3.
Articles with the most citations

Author, (Year)	Title	Year	Source Title	Cited by
Obar & Oeldorf-Hirsch, (2020)	"The biggest lie on the Internet: ignoring the privacy policies and terms of service policies of social networking services"	2020	"Information Communication and Society"	237
Henry & Powell, (2018)	"Technology-Facilitated Sexual Violence: A Literature Review of Empirical Research"	2018	"Trauma, Violence, and Abuse"	229
Howard et al., (2018)	"Algorithms, bots, and political communication in the US 2016 election: The challenge of automated political communication for election law and administration"	2018	"Journal of Information Technology and Politics"	164
Starbird et al., (2019)	"Disinformation as collaborative work: Surfacing the participatory nature of strategic information operations"	2019	"Proceedings of the ACM on Human-Computer Interaction"	157
Hargittai, (2020)	"Potential Biases in Big Data: Omitted Voices on Social Media"	2020	"Social Science Computer Review"	135

Source: Scopus Database

most citations, with a total of 237 citations. The article titled "Technology-Facilitated Sexual Violence: A Literature Review of Empirical Research" with a total of 229 citations. The article "Algorithms, bots, and political communication in the US 2016 election: The challenge of automated political communication for election law and administration" with a total of 164 citations. The article titled "Disinformation as collaborative work: Surfacing the participatory nature of strategic information operations" with a total of 157 citations. And the article titled "Potential Biases in Big Data: Omitted Voices on Social Media" with a total of 135 citations. The high number of citations of these articles has become an important reference for further research in this area, demonstrating their relevance and impact on studies related to the interaction between social media user behaviour and policy.

The article "The Internet's biggest lie: ignoring social networks' privacy policies and terms of service" is becoming increasingly relevant in the context of global concerns over data privacy, as revealed in the Cambridge Analytica scandal. The scandal highlighted how personal data can be unethically exploited by large platforms, sparking widespread discussion on responsibility and transparency in privacy policies. Meanwhile, "Technology-Facilitated Sexual Violence" delves into the social consequences of modern technology, where easy internet access increases the risk and prevalence of online violence, as examined by Henry & Powell, (2016). Furthermore, "Algorithms, bots, and political communication in the 2016 US election" criticises the manipulation of information and its role in changing political views, a phenomenon described by Allcott & Gentzkow (2017), identifying this as a threat to the integrity of modern democracy.

III. Institutions and Countries Analysis

Affiliated institutions with the highest number of publications as shown in Figure 6

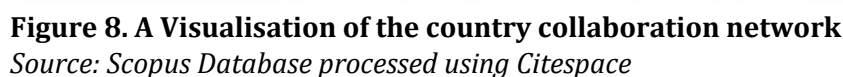
include the University of Toronto (6) contributing to studies on socio-semantic analysis of transit rider debates on social media, the impact of virtual teleworking, and new frontiers in platform policy; the University of Haifa (4) contributing to studies on parasocial relationships in political contexts, cross-generational environmental behaviors and motivations, and ethnic origin and health participation on social media; University of Oxford (4) contributing to a study on right-wing actors on twitter on islamophobia, the role of social media for sustainable development in tourism, and political communication challenges for election law and administration; and University of Southern California (4) contributing to a study on social network analysis in e-cigarette brands and influencers on social media, how world leaders use social media during controversial politics, China's live streaming industry on platforms, politics and vulnerability and opportunities and challenges from a situational perspective in technology acceptance research.

The high productivity of some universities in publishing social media studies can be explained through several key factors. Significant research funding from both public and private sources enables access to resources and advanced technologies, as well as the ability to attract the best researchers. Academic programmes that focus on digital communication and information technology also strengthen this research capacity. In addition, the high integration of social media into social and political life in some countries motivates further research to understand its impact. International collaborations enrich the exchange of methodologies and government policies support research in information technology, strengthening this academic framework. The unique social and cultural dynamics of each location also provide an important context that directs the research focus and outputs.

To see the network of institutional collaborations, we used Citespace so that it shows

Utilizing Citespace, a network of Country collaborations was created to show the level of contribution made by each Country in the sector. There are 53 countries and 134 collaborative relationships in Figure 7 (Signature, Network: N = 53, E = 134, Density = 0.0972). The United States, United Kingdom, Australia, China, and Canada are the 5 countries that have collaborative relationships in the discussion of social media user behavior towards a policy. The strong collaborative relationship between these countries also demonstrates a shared commitment to investigating and exploring issues relating to social media and policy in the international sphere, making a substantial contribution to the global literature and thinking on the subject. Furthermore, the strong involvement of these countries in the collaboration also reflects a shared commitment to investigating and deepening issues around social media and policy at the international level, making a substantial contribution to the global literature and thinking on the subject. As such, these cross-country collaborations are not only beneficial in terms of local knowledge development but also result

The United States, which has the most contribution to the study of social media user behavior towards a policy, illustrates how this study is discussed. Some of the studies discussed are the use and consequences of visual-based new media platforms by applying the Narrative Policy Framework (NPF) to the Dakota Access Pipeline (DAPL) case. Boscarino (2020) suggests that social media users are very interested in visual posts. Then in terms of using social media in the context of museum visits, Villaespesa & Wowkowych (2020) found that social media users are interested in museum content and advocate for the active role of museum managers to have policies and opportunities that respond to this behavior and learn from the content shared to provide interpretation information and learning materials. Furthermore, in a study on citizens' daily communication practices through storytelling agents associated with sustainable development behavioral intentions that can influence public and environmental policies, Kang (2019) found that citizens do not use social media for sustainable urban development behavior. Finally, a study on



the interaction model of social media users on fake news by Shirsat et al. (2022) suggests that social media users try to distinguish between fake news and real news using fact-checking sites and news sources and interact with social media users who post fake news and become part of the echo chamber.

IV. Analysis of Keyword Clusters

The landscape view in (Figure 9) shows an overview of the network based on cited references generated by the top 20 per 1-year section between 2018 and 2022. The network contains 240 cited nodes (references) divided into 8 clusters related to social media users' behavior towards a policy. Each cluster has a different number of items and topics. These clusters reflect the broad diversity of analyses conducted over the five years. Each cluster highlights different foci and themes, indicating the diversity of perspectives and issues relevant to the study of social media user behaviour toward policy. For example, some clusters may highlight aspects of social media use in the context of e-Government services, while others may focus more on social interaction, network analysis, or concrete case studies of such behaviour.

Cluster analysis can be used to divide relevant research into major research areas at a macro level to capture research trends (Figure 9). Q modularity and Weighted average silhouette are two important variables to assess the rationality of clustering structure; $Q > 0.3$ indicates a strong clustering structure and $S > 0.5$, a high degree of homogeneity in clustering findings (Y. Chen et al., 2015). The related keyword map clusters quite well, as shown in Figure 9 ($Q = 0.4438$, $S = 0.7172$), and the cluster structure is acceptable. Figure 9 displays the top 8 clustering modules, which are as follows: #0 E-Government Service (45) items, #1 Social Media Behavior (34) items, #2 Social Network Analysis (32) items, #3 Using Flickr (21) items, #4 Case Study (20) items, #5 Sexual Harassment (19) items, #6 Using Social Media (16) items, #7 Virtual Living Tab (15) items.

We exported the details of the top 8 clusters in Table 4 below using Citespace's LSI (Latent Semantic Indexing) technique to learn more about each cluster. Table 4's internal uniformity (profile) scores of 0.706 to 0.932 indicate cluster grouping using Citespace's Latent Semantic Indexing (LSI) technique is high. These values signify strong consistency and cohesion within each cluster, showing that the words and key terms defining

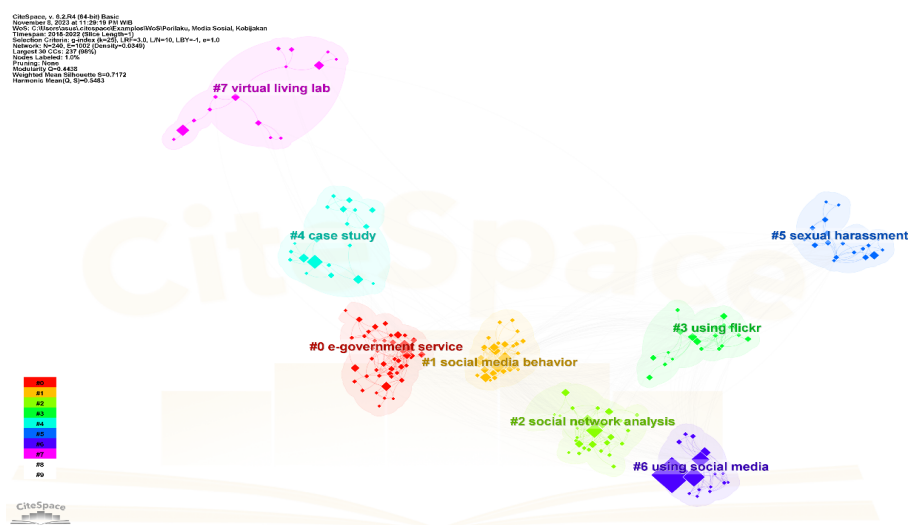


Figure 9. Map of Keywords Clusters in Terms of The behavior of social media users towards a policy

Source: Scopus Database processed using Citespace

Table 4.
Details of keywords in clusters

#	Size	Silhouette Value	Mean Year	Top Term in LSI
0	45	0.793	2020	social media use; e-government service; platforms politics;
1	34	0.737	2019	social media; social media behavior; social media behavior;
2	32	0.706	2019	social media; social network analysis; digital marketing;
3	21	0.802	2020	covid-19 preventive behavior; using flickr; using flickr;
4	20	0.819	2019	social media; case study; digital marketing;
5	19	0.793	2019	systematic review; sexual harassment; threat-coping appraisal;
6	16	0.901	2019	social media; e-government service; digital marketing;
7	15	0.932	2019	virtual living lab; virtual living lab; litmus test;

Source: Scopus Database processed using Citespace

each cluster are highly related and complementary. This indicates that each cluster has a consistent and focused coverage of topics, showing close interrelationships between elements within the cluster. This consistency strengthens the reliability and meaningfulness of the analysis conducted on each topic cluster in the context of social media user behaviour towards a policy.

Clusters #1, #2, #4, and #6 on "social media," and "digital marketing," are comparable and mostly focus on social media behavior and e-government services. Such studies focus on the use of social media data; the relationship between social media and policy; the benefits, challenges, and social impacts of social media adoption; and government policies and attitudes toward social media use. For example, Griffin et al. (2021) examined how social media impacts and offered five significant benefits in the use of social media 1). improved communication between healthcare professionals and their patients, 2). community support, 3). enabled e-learning, 4). increased professional networks, and 5). accelerated health promotion. Then Liao et al. (2022) examined how social media impacts job creation; the results showed that work-related social media use harmed job creation, while social media use related to social activities had a positive effect. In line with research by Benedict & Ariestya (2020), this shows that the use of social media can be used to donate through crowdfunding platforms such as @Kitabisacom.

The use of Social Media can also influence the attitudes and actions of its users towards a policy. In their study, Allcott & Gentzkow (2017) explored how fake news spread through social media can influence political views and policy choices. The study found that social media has become a major source of news for many people, and has significant potential to influence public opinion and election outcomes. In addition, social media can also influence large audiences by social media influencers. In their study, Jiang et al. (2024) emphasises that social media influencers who have different skills and performance levels can maximise their influence on targeted social media users by 1). strengthening their specific content style by varying their content style and leaving their comfort zone, 2). trade-offs between early and late strategic actions. In social media content creation, this refers to the choice or decision that must be made between emphasising efforts early in the content creation process, such as planning and strategy, versus focusing on the final steps, such as promotion and content performance analysis.

Apart from being a tool used to influence the public, social media can also be a tool to influence actions taken by governments and non-governmental organisations. Delcea et al. (2020), in their research on the case of Romania, found that demographic variables, such as age and gender, can contribute to predicting the pro-recycling behaviour of the public. Based on these findings,

policymakers can gain a better understanding of the e-waste recycling phenomenon and its key drivers, resulting in better policies to maintain a proper e-waste management system. Thus, the aforementioned studies underscore the important role of social media not only as a communication platform but also as a tool of influence capable of shaping public opinion and policy.

Our analysis identifies that certain aspects of social media interactions and user behaviour towards policy remain limited in the literature. Our findings fill this gap by deepening our understanding of how social media influences individuals' behaviour and their policy-related actions. This research also expands the scope and depth of our understanding of the influence of social media on policy views and actions. Our results provide new perspectives that enrich current understanding and strengthen arguments about the significant influence of social media that have been outlined in previous literature. Our data and analyses provide new insights into the specific mechanisms through which social media influences policy attitudes and actions. The findings reinforce the need for further investigation, especially in identifying aspects that may not have been revealed in depth before. It also provides a solid basis for further research, to explore the specific areas we identified, and explore the possible deeper implications of our findings.

Conclusion

Research on the behaviour of social media users towards policy has increased rapidly in 2021 with 75 articles. The United States, United Kingdom, and Australia are the main publication centres, with institutions such as the University of Toronto, University of Haifa, University of Oxford, and University of Southern California prominent in influencing and studying this issue. The findings of this research underscore the crucial role of social media not only as a communication channel but also as a significant influence tool in shaping

public opinion and policy. These studies show that social media has dual potential, supporting professional and community development, as well as influencing government policies and actions through social interaction and information dissemination. However, negative impacts are also evident, such as the spread of fake news that can significantly alter political views.

The practical implications of this research suggest that the government should proactively utilise social media as a strategic tool for policy communication. Firstly, to increase the effectiveness of information dissemination, the government needs to develop a strategy that focuses on using influencers and established online communities to disseminate accurate and credible information. Second, a systematic approach is needed to monitor and counter the spread of false information, including cooperation with social media platforms to identify and minimise fake news that can influence public opinion and policy responses. Thus, the government can more effectively utilise social media not only as an information channel but also as a tool to support decision-making and policies that are responsive to people's needs. Further research is needed to explore the influence of demographics and psychological factors in social media users' interaction with policy, as well as to monitor changes in user behaviour over time and in various policy contexts. The study also emphasises the importance of developing effective strategies to manage information dissemination and counter misinformation, which will support policymakers and practitioners in formulating more appropriate actions in the digital space. This will deepen our understanding of social media dynamics and strengthen its use as a tool of policy influence.

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