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Research Article

Dynamics and Trends of Political Communication Research in the Information Technology Landscape: Bibliometric Analysis with VOSviewer

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Abstract

This study aims to analyze the dynamics and trends of political communication research in the information technology landscape through a bibliometric approach. Data were obtained from the Scopus database with selection criteria consisting of journal articles and proceedings published between 2016 and 2026 using Publish or Perish 8. The analysis process was carried out through the stages of data collection, filtering based on relevance, and mapping and visualization using VOSviewer software. The analysis focused on publication patterns, author collaborations, and the development of emerging research themes. The results show that political communication studies have experienced significant developments along with the rapid transformation of information technology, particularly related to social media, disinformation, and digital political participation. The bibliometric map indicates the existence of main clusters reflecting the research focus on issues of digital democracy, platform-based political campaigns, and the influence of algorithms on public opinion. Furthermore, recent trends point to the integration of technologies such as big data and artificial intelligence in political communication analysis. These findings contribute to identifying future research directions and open up opportunities for developing more interdisciplinary and contextual studies. This research contributes to identifying future research directions that are more technology-based.

Keywords: Political Communication, Bibliometric Analysis, Vosviewer, Information Technology, Bibliometrics.

INTRODUCTION

Information technology has fundamentally transformed political communication practices around the world. Digital transformation, particularly through social media, has created new spaces for interaction between political actors and the public. This phenomenon has not only influenced the way political messages are delivered but has also shaped more dynamic and decentralized patterns of political participation.

Political communication is a rapidly developing field of study. Various studies highlight issues such as disinformation, digital propaganda, social media algorithms, and public engagement in the digital space. However, the increasing number of publications also raises the need to systematically map the direction of research development [1]. The rapid innovation in information and communication technology has contributed significantly to the paradigm shift in political communication in the digital era. This is especially true for the current generation, accustomed to growing up and developing in the rapid flow of digital technology[2]. The increase in digital political participation, however, also gives rise to new challenges such as disinformation, opinion polarization, and algorithm-based manipulation [3]. Furthermore, the use of big data allows for more precise political campaign strategies through analysis of voter behavior. Technological advances not only expand democratic space but also demand digital literacy and adaptive regulations to maintain healthy and transparent political communication [4].

Political communication in the information technology landscape shows a shift from a linear communication model to a network model that is participatory and dynamic [5]. Digital technology not only accelerates the distribution of political information, but also reshapes the relationship between political actors and society, thus creating a new public space that is more open but vulnerable to information distortion [6]. This change has not only shifted the way political actors convey messages, but also transformed the structure, dynamics, and relationships between the state, political elites, and the public [7]. While political communication was previously dominated by one-way mainstream media, the ecosystem has now evolved into an interactive, open, and network-based digital space [8].

Digital platforms such as Instagram, TikTok, and Twitter (X) have become key arenas in the battle for political narratives. Political actors, from governments and political parties to individual candidates, utilize these platforms to build their image, convey their agendas, and mobilize public support directly, bypassing traditional media gatekeepers [9]. This phenomenon is known as the disintermediation of political communication, where control over the production and distribution of messages increasingly rests with political actors themselves.[10] The rapid influence of technology in constructing political communication narratives is also marked by the increasing use of data-driven strategies (data-driven politics). Through big data analysis, people's digital behavior can be mapped in detail to produce more personalized and segmented messages (microtargeting) [11] This makes political campaigns more effective, but also raises concerns about data privacy and the potential for manipulation of public opinion. On the other hand, the information technology landscape also presents serious challenges in the form of rampant disinformation, hoaxes, and digital propaganda. [12]

The speed of information dissemination on social media often doesn't match people's digital literacy, leading to the formation of echo chambers and sharp political polarization [13]. In this environment, truth becomes relative, and public perception is more easily influenced by emotions, algorithms, and the virality of content than by objective facts. Furthermore, the emergence of non-traditional actors such as influencers, political buzzers, and digital communities has both enriched and complicated the political communication ecosystem. They act as new opinion leaders capable of significantly shaping public discourse, sometimes even more influential than conventional media

institutions.[14] The bibliometric approach is an effective method for identifying trends, collaboration patterns, and knowledge structures within a field. A conceptual map of the dynamics and trends in information technology-based political communication research is essential for in-depth exploration of research needs [15]

METHODS

This study employed the Scopus database as the sole source of bibliographic data due to its extensive coverage of high-quality, peer-reviewed international publications and its compatibility with bibliometric analysis software such as VOSviewer**.** Scopus indexes a broader range of journals across multidisciplinary fields compared to many other databases and provides standardized metadata, including citation information, author affiliations, keywords, and abstracts, which are essential for ensuring the reliability and consistency of bibliometric mapping. Moreover, several previous bibliometric studies have demonstrated that Scopus alone is sufficient to generate robust knowledge structures and trend analyses because of its comprehensive indexing and high-quality data curation.

The decision not to combine Scopus with other databases, such as Web of Science (WoS) **or** Google Scholar**,** was made to minimize data redundancy, duplicate records, and inconsistencies in metadata formatting that frequently arise when integrating multiple databases. In addition, Google Scholar includes a broad range of non-peer-reviewed materials, potentially affecting the quality and reproducibility of bibliometric results. Therefore, the exclusive use of Scopus was intended to maintain data consistency and methodological transparency throughout the analysis process.

To ensure the quality and relevance of the dataset, a set of inclusion and exclusion criteria was established. The inclusion criteria comprised: (1) documents indexed in the Scopus database; (2) publications related to the topic of *strategic defense communication* and associated keywords; (3) documents published between 2016 and 2026; (4) peer-reviewed journal articles and conference papers; and (5) publications written in English to ensure consistency in text mining and keyword analysis. Meanwhile, the exclusion criteria included: (1) duplicate records; (2) book chapters, editorials, notes, errata, and non-scholarly documents; (3) publications without complete bibliographic metadata; and (4) documents published in languages other than English. The restriction to English-language publications was adopted because English serves as the dominant language in international scientific communication and allows for a more consistent bibliometric analysis.

This research design uses a bibliometric approach utilizing data mining techniques in the Scopus database. This descriptive quantitative approach with bibliometric analysis methods identifies publication trends, citation patterns, and intellectual structure within a field of study based on scientific publication data [16]. Data collection was conducted through a systematic search using keywords related to political communication in the information technology landscape, consistent with the research focus, to obtain a collection of relevant articles for further analysis. Data mining using the Publish or Perish (PoP) workflow consists of several systematic stages [17].

First, the researcher defines a query by entering keywords, author names, and publication year ranges to define the scope of the analysis. Next, the software collects bibliographic data from

academic databases such as Scopus [18]. The obtained data then undergoes a cleaning process to remove duplication and ensure relevance. The filtered dataset is analyzed to generate bibliometric indicators, such as the number of publications, citations, and impact indices (h-index and g-index). The analysis can then be presented in tables and statistical summaries that can be exported for further analysis.

The final stage is the interpretation of the results to identify research trends, citation patterns, and scientific impact in the field under study. This study adopted a bibliometric analysis model structured in five main stages, as illustrated in Figure 1. Flowchart of methodology step by step.

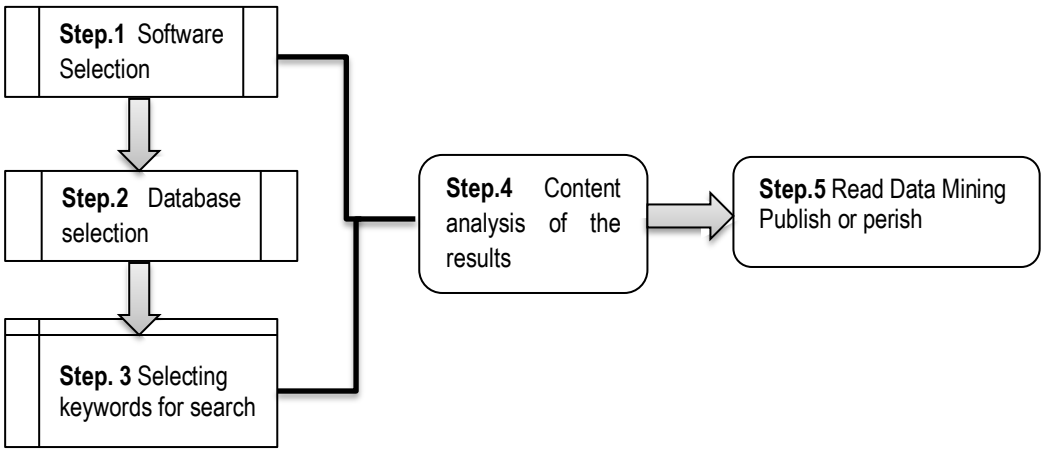

Figure 1. Flowchart of methodology steps by steps

This research process was carried out through several systematic stages, the first stage began with software selection, where the researcher determined the tool used for bibliometric analysis, namely Publish or Perish as the main media in processing citation data [19]. The second stage continues with database selection, which in this study uses Scopus as the main data source because it has broad coverage and standardized publication quality [20].

The third stage involves selecting search keywords, namely by defining the keyword "Political Communication" within the "Information Technology" landscape, to obtain data that aligns with the focus of the study. The fourth stage continues with content analysis of the results, where the obtained data is analyzed descriptively to identify patterns, themes, and the relevance of publications in the research field [21].

The final stage involves reading and mining data (read data mining) using Publish or Perish, which is the process of further exploration of bibliographic data to produce bibliometric indicators such as the number of publications, citations, and impact index [22]. This stage allows researchers to understand research trends and scientific contributions in more depth

Design

This study uses a descriptive quantitative analysis design through a data mining process using Publish or Perish which is integrated with the Scopus database [23]. The research design is explained in Figure 2. Bibliometric research design Research Trend Analysis The process begins by accessing the Scopus database to obtain relevant publication data. Next, the researcher enters

predetermined keywords and filters them based on the publication year range, namely 2016–2026. The obtained data is then downloaded in RIS or CSV format to facilitate further analysis [24].

The next stage involves validating and selecting data, which involves screening titles and abstracts to ensure they align with the research topic. Data cleaning is then performed, including normalizing author names and keywords to avoid data inconsistencies that could impact the analysis results. Next, the validated data was analyzed using a bibliometric analysis approach to generate various indicators such as the number of publications, citations, and impact index. To strengthen the analysis, this study utilized VOSviewer in the bibliometric visualization stage, which aims to map relationships between research elements, such as keyword co-occurrence, author collaboration, and co-citation relationships [25]. The visualization results are then interpreted to create a knowledge map that depicts the structure and development of the research field. The final stage is an analysis of research trends and directions, which is conducted to identify dominant themes, topic developments over time, and future research opportunities [26].

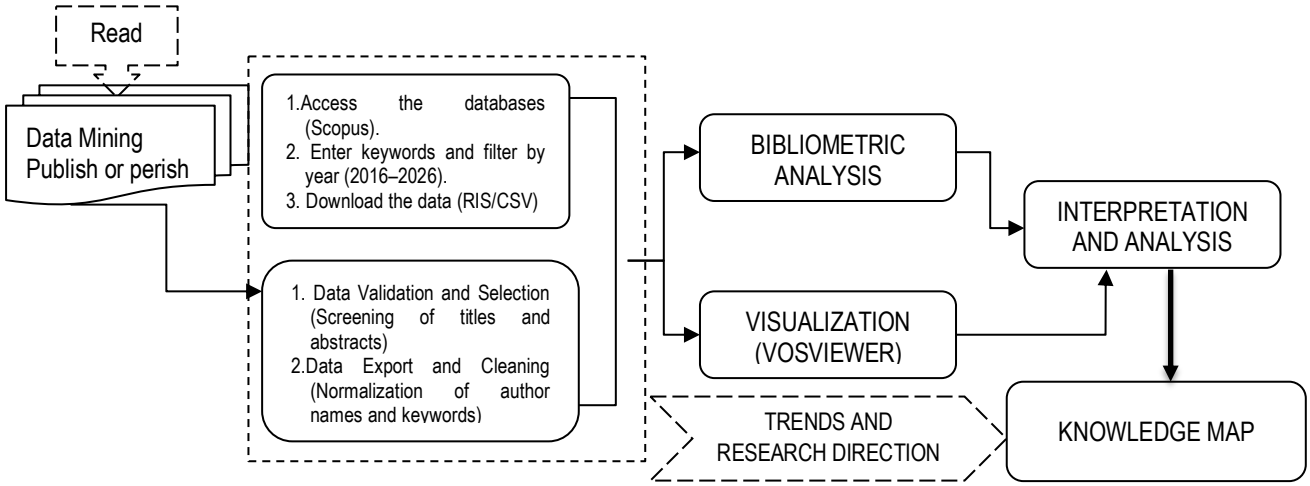

Figure 2. Bibliometric Research Design Research Trend Analysis

Instrument

The instrument in this study took data sourced from Publish or Perish (PoP) as described in Figure 3. Analysis in the Publish or Perish application. Figure 3 displays the results of the bibliometric data search and analysis using the Publish or Perish software connected to the Scopus database. The search was conducted using the keyword "political communication" within the "information technology" landscape with a publication year range of 2015–2025 [27]. The search results show that there are approximately 200 published documents relevant to the research topic.

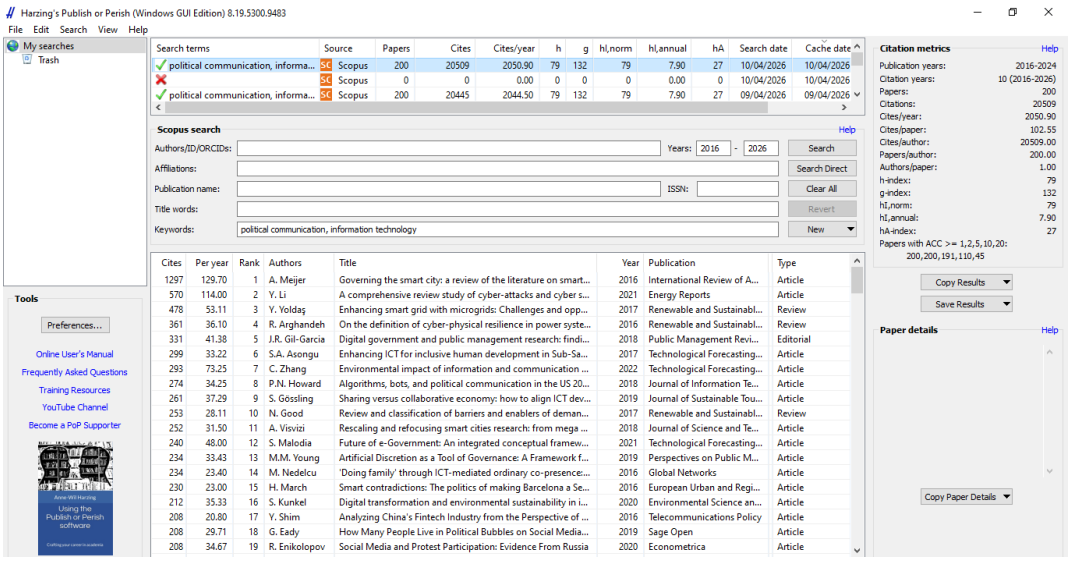

Figure 3. Analysis on the Publish or Perish application

In terms of scientific performance, the total number of citations reached over 20,000, with a high average annual citation rate. This demonstrates that the topic of information technology-based political communication enjoys significant relevance and attention within the academic community. Furthermore, high h-index values indicate that most publications have a strong scientific impact and are frequently cited by other researchers. The list of publications presented in the table shows various articles from reputable international journals, covering a variety of topics, including disinformation, social media, political participation, and the development of digital technology in political communication. This reflects the multidisciplinary nature of this research field and its continued development in line with the dynamics of information technology [28].

Furthermore, metrics such as the g-index and other citation indicators indicate the presence of a number of highly cited articles, which play a significant role in shaping the knowledge structure in this field. Thus, the results of this analysis illustrate that research in political communication and information technology has made significant scientific contributions and is a primary focus of contemporary academic studies.

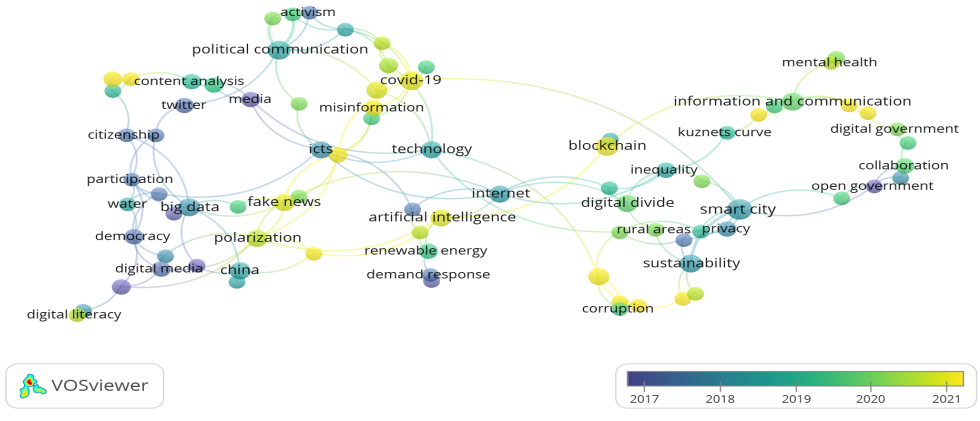

Figure 4. Results of the analysis of VOSviewer's annual Political Communication Research Trends

Figure 4 displays a bibliometric network visualization that illustrates the development and interrelationships of research topics in the fields of political communication and information technology during the period 2017 to 2021. This visualization was generated using VOSviewer software, which is capable of mapping relationships between keywords (co-occurrence) based on scientific publications. In general, this map is divided into several main, interconnected clusters. On the left, research focuses on political communication, social media, and democracy. Topics such as Twitter, content analysis, citizenship, and participation demonstrate that early research focused more on the role of social media in political participation and digital democracy. Furthermore, issues such as fake news, polarization, and digital media are beginning to emerge as important concerns, particularly in the context of disinformation. In the middle, there is a shift towards the integration of more advanced technologies, such as artificial intelligence, big data, ICTs, and the internet. The presence of keywords such as misinformation and COVID-19 indicates that research is beginning to respond to global phenomena and information crises, particularly during the pandemic. This signals a shift from mere media analysis to leveraging technology to understand the dynamics of political communication.

Meanwhile, the right side of the map shows the development of more contemporary and complex topics, such as digital government, smart cities, blockchain, and sustainability. Issues like the digital divide, privacy, inequality, and corruption demonstrate that research focuses not only on technology but also on its social, economic, and ethical impacts. Furthermore, the emergence of open government and collaboration concepts reflects the direction of research toward transparent and participatory digital governance. The color gradient on the map (from blue to yellow) shows the evolution over time, with blue representing earlier topics (around 2017), while yellow represents more recent topics (approaching 2021). This indicates that research is evolving from basic issues of political communication towards the integration of advanced technologies and sustainability issues.

Overall, this figure shows a significant transformation in the landscape of political communication research in the digital era, from conventional social media-based approaches to a more complex ecosystem involving advanced technology, digital governance, and multidimensional global issues.

RESULTS AND DISCUSSION

The visualization of the interconnected research themes shows that the research landscape is dominated by several main, interconnected clusters. These results are presented in Figure 6, where the first cluster (in red) focuses on the theme of political communication, which is closely related to activism, media, and Twitter. This indicates that political communication in the digital era is largely studied through social media activities as a means of disseminating political messages and mobilizing the public [34].

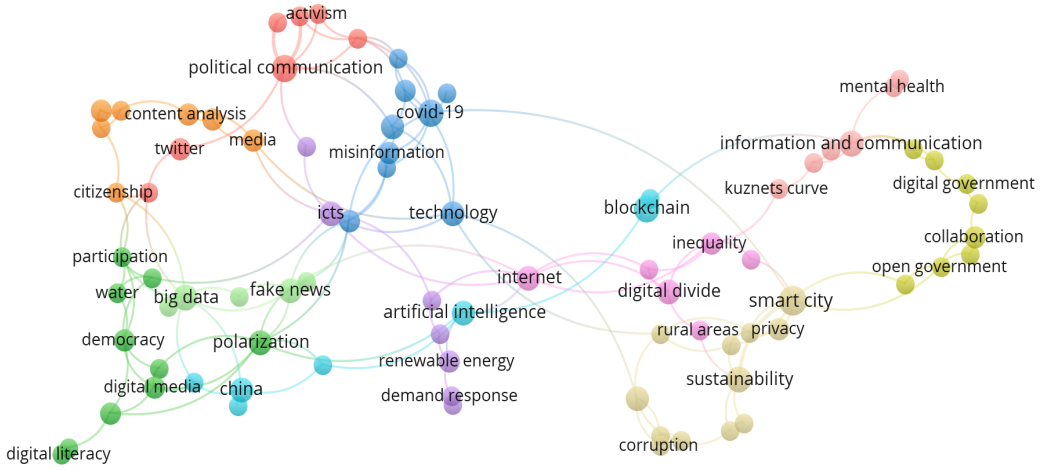

Figure 6. VOSviewer network map visualization of research theme relationships

The second cluster (blue) highlights the issues of COVID-19, misinformation, and technology. This interconnectedness demonstrates that the pandemic has become a crucial moment in the study of digital communication, particularly regarding the spread of misinformation and the role of technology in accelerating the flow of information. This theme is also linked to Information and Communication Technologies (ICTs), highlighting the importance of digital infrastructure in the dynamics of global communication [35].

Next, the green cluster presents the themes of digital media, democracy, participation, and digital literacy. This cluster emphasizes the relationship between digital media and public participation in democracy, where digital literacy is a key factor in determining the quality of public participation and reducing polarization and the spread of fake news [36].

The purple and light blue clusters connect artificial intelligence, the internet, and renewable energy with concepts like demand response. This demonstrates the expansion of technology research toward integrating artificial intelligence into various sectors, including energy and internet-based systems [37]. On the other hand, the yellow and brown clusters address development issues such as smart cities, sustainability, privacy, and corruption. This theme emphasizes that digital transformation is not only about technology but also has social implications such as the digital divide, inequality, and governance challenges [38]. The final cluster (yellowish green) highlights digital government, open government, and collaboration, which indicates a research trend towards more transparent and collaborative digital-based governance.

Overall, this map demonstrates that political communication research within the information technology landscape is developing multidisciplinaryly. Key issues extend beyond communication and media to encompass technology, health, the environment, and even governance. The interconnectedness of these clusters demonstrates that today's digital phenomena are complex, interconnected, and require an integrative approach to their study.

Figure 7. density map visualization of keyword intensity density

Based on the visualization of the VOSviewer density map presented in Figure 6, the keywords "information and communication," "political communication," and "smart city" exhibit the highest density levels, as indicated by the bright yellow areas on the map. This concentration suggests that these themes have become the primary intellectual center of gravity in the evolution of political communication research over the past decade. The prominence of *information and communication* reflects the growing impact of digital transformation, which has shifted political communication from conventional media-centered approaches toward technology-driven and network-based communication systems. Likewise, the high occurrence of the keyword *political communication* confirms its central role as an umbrella concept that integrates studies on media, political participation, digital democracy, and interactions between governments and citizens. The emergence of *smart city* as another high-density theme further indicates an increasing scholarly interest in the application of digital technologies to governance, public service delivery, and citizen engagement through smart urban ecosystems.

The observed density pattern also reveals that contemporary political communication research is increasingly shaped by the convergence of communication studies, political science, and digital technology. In other words, the intellectual focus of the field has gradually shifted from traditional topics such as electoral campaigns and political messaging toward broader issues related to digital public communication, data-driven governance, and the strategic use of digital platforms to foster civic engagement. This finding supports the argument that modern political communication can no longer be understood independently of the rapid advancement of information technology and digital innovation, both of which are transforming the relationships among political actors, media institutions, and the public.

The results of the density visualization analysis using VOSviewer in Figure 6 show that the political communication research landscape has undergone a significant transformation over the past five years, moving toward a complex, integrated, and multidisciplinary digital ecosystem. The density of keywords such as information and communication, political communication, and smart

city confirms that information technology has become central to the dynamics of contemporary political communication [39].

The Dominance of Technology in Political Communication

The high intensity of keywords like "information and communication" indicates that digital infrastructure is a key foundation for modern political communication. This aligns with Manuel Castells's network society theory, which states that power in modern society lies in the ability to manage the flow of information within digital networks. In this context, political communication is no longer linear, but rather distributed through digital platforms that enable multidirectional interactions [40].

Furthermore, the presence of the keyword "political communication" in close proximity to media systems and technology indicates that digital media has become a primary arena for shaping public opinion. Media plays a role in shaping public opinion and combines traditional and digital media to shape the dynamics of political power [41].

Integration of Advanced Technology in Communication

The emergence of buzzwords like artificial intelligence, big data, and blockchain indicates a paradigm shift toward utilizing advanced technology in political communication and governance. This technology enables big data analysis to understand voter behavior, audience segmentation, and predict political trends. From an Artificial Intelligence perspective, the use of AI in political communication can increase the efficiency of message dissemination, but also poses ethical risks such as the manipulation of public opinion through algorithmic targeting [42]. Meanwhile, blockchain technology is starting to be seen as a solution to increase transparency and accountability in digital government systems.

Smart Cities and Digital Governance

The high density of keywords like smart city and sustainability demonstrates that political communication is inseparable from the contribution of technology-based development. The smart city concept integrates information technology into city management to improve the quality of life for the community [43].

According to Caragliu, Del Bo, and Nijkamp [44], *A smart city is a city that optimizes investment in information and communication technology to achieve sustainable economic growth, political communication plays a role in building public participation and legitimacy of technology-based policies. However, issues such as privacy, digital divide, and inequality show that digital transformation also presents serious challenges, the digital divide is not only related to access to technology, but also the ability to utilize the technology effectively* [45].

Overall, the analysis shows that political communication in the digital era is at the intersection of technology, information, and power. The integration of network society theory (Castells) [46] *hybrid media system* (Chadwick) [47] and the concept of modern disinformation shows that the current phenomenon of political communication is complex and dynamic.

These findings confirm that political communication research can no longer be separated from the development of digital technology. Instead, a multidisciplinary approach combining communication science, political science, and information technology is needed to comprehensively understand the phenomenon.

CONCLUSION

Based on the results of Table 1, the Publish or Perish (PoP) data set shows that research on political communication in the information technology landscape has experienced very significant development in the 2016–2026 period [29]. The high number of publications, citations, and impact indices such as the h-index and g-index indicate that this field has become a major focus in contemporary communication studies. This phenomenon can be understood through various theoretical perspectives on political communication through digital media.

Table 1. Bibliometric Analysis Results

Description	Results Overview
Political Communication, Information Technology from 2016 to 2026	
Scopus	200
Citations	20527
Cites_Year	2052.70
Cites_Paper	102.64
Cites_Author	20527.00
h_index	79
g_index	132
Cites_Author_Year	2052.70
AWCR	3196.46
Keywords	788
Author	578
AWCRpA	3196.46

Within the framework of the digital public sphere theory [30] influenced by the thinking of Jürgen Habermas [31], Digital media is seen as a new arena for society to discuss, participate, and shape public opinion. The high number of citations and keywords in the analysis results indicates that discourse on political communication is no longer centered on conventional media, but has shifted to digital spaces such as social media and online platforms. This strengthens the argument that technological transformation has expanded public access to political information while increasing citizen participation.

Furthermore, from the perspective of network society introduced by Manuel Castells, the development of information technology creates a network-based societal structure, where information flows quickly and decentralized. The finding of a high number of authors (578) and diversity of keywords (788) reflects the existence of global and multidisciplinary collaboration in digital political communication research. This indicates that knowledge production in this field is no longer linear, but rather connected within a broad academic network. The high citation rate per article (Cites_Paper) can be explained by the concept of virality and social media algorithms, where political information can spread exponentially in a short time. In this context, the agenda-setting theory developed by Maxwell McCombs and Donald Shaw has undergone a transformation. While previously mass media played a major role in setting the public agenda, in the digital era, algorithms and user interactions also determine which issues become dominant.

High h-index and g-index values indicate the presence of a number of highly cited publications. This can be linked to the theory of digital political engagement, which emphasizes that public political engagement is now largely mediated by digital technology. Highly cited studies generally address phenomena such as digital campaigns, disinformation, microtargeting, and the role of artificial intelligence in political communication [32]. In this context, Eli Pariser's thoughts on filter bubbles are also relevant. Digital platform algorithms tend to filter the information users receive based on their preferences, thus polarizing public opinion. The high number of keywords in the analysis results indicates that this issue is a primary focus of digital political communication research [33]. Furthermore, a high Age Weighted Citation Rate (AWCR) indicates that both old and new publications remain relevant. This indicates that classic theories of political communication are still in use, but have been adapted to the digital context. In other words, there is an integration process between traditional theories and new, technology-based approaches.

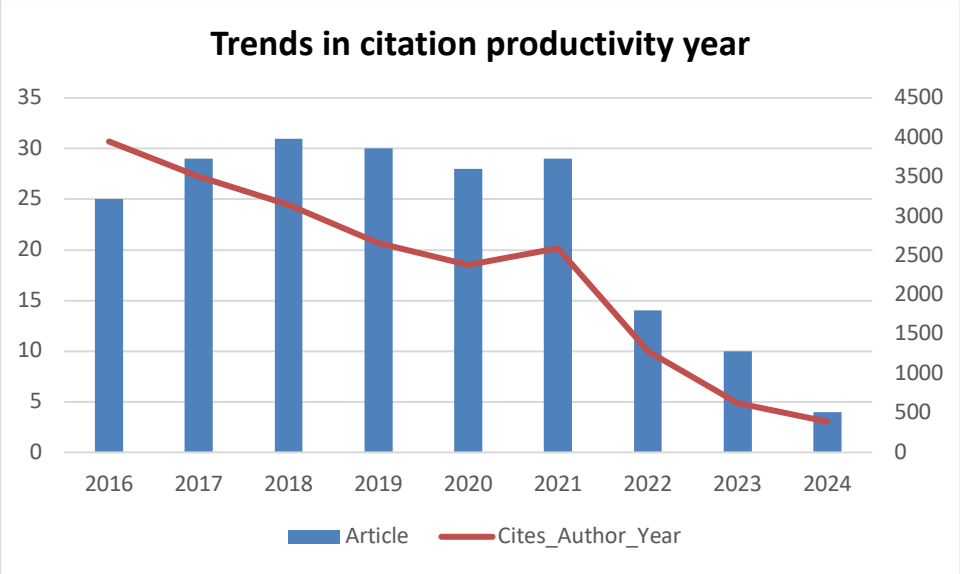

Figure 5 Graph Trends in citation productivity year

Figure 5 The graph shows the trend in article productivity and the number of citations per year from 2016 to 2024. In general, there are different dynamics between the number of publications (articles) and the citation rate (cites per author per year). In the initial period, from 2016 to 2018, the number of publications increased significantly, from approximately 25 articles in 2016 to a peak of approximately 31 articles in 2018. This trend indicates an increase in research interest in the topic under study. However, after 2018, the number of publications tended to fluctuate and gradually decline until reaching its lowest point in 2024 with approximately 4 articles. On the other hand, the citation trend shows a different pattern. In 2016, the number of citations reached its peak, then declined consistently until 2020. Despite a slight increase in 2021, the citation trend declined sharply again from 2022 to 2024. This phenomenon indicates a time-lag effect in scientific citations, where older publications tend to have higher citation counts than more recent publications. Furthermore, the decline in citations in recent years may also be due to the lack of time for recent articles to gain recognition and be cited by other researchers. Overall, this graph shows that although

publication productivity has increased in certain periods, scientific impact, as measured by citations, has tended to decline in recent years. This underscores the importance of increasing not only the quantity of publications but also the quality and relevance of research to significantly contribute to the advancement of science.

REFERENCES

[1] M. Muntasir and M. Aminullah, "FROM THE RELIGIOUS STAGE TO THE POLITICAL STAGE: TEUNGKU DAYAH'S POLITICAL COMMUNICATION STUDY IN ACEH," *al-Balagh J. Dakwah dan Komun.*, vol. 5, no. 1, 2020, doi: 10.22515/al-balagh.v5i1.2166.

[2] T. R. Sari, "Kualitas Hidup Generasi Z Di Tengah Kemajuan Teknologi," *DAWUH Islam. Commun. J.*, vol. 5, no. 3, 2024, doi: 10.62159/dawuh.v5i3.1592.

[3] V. Stein, C. Pentzold, S. Peter, and S. Sterly, "Digital political participation for rural development: Necessary conditions and cultures of participation," *Inf. Soc.*, vol. 41, no. 1, 2025, doi: 10.1080/01972243.2024.2407339.

[4] Z. Ku, M. Bertani, L. Ivan, and H. Mert, "Developing a Digital and Traditional Political Participation (DTPP) Scale for Youth: A Validity and Reliability Study," *Rom. J. Commun. Public Relations*, vol. 25, no. 1, 2023, doi: 10.21018/rjcpr.2023.1.351.

[5] S. Papathanassopoulos and I. Giannouli, "Political Communication in the Age of Platforms," *Encyclopedia*, vol. 5, no. 2, 2025, doi: 10.3390/encyclopedia5020077.

[6] S. C. McGregor *et al.*, "Dialogue on difference: Identity and political communication," *Commun. Monogr.*, vol. 92, no. 2, 2025, doi: 10.1080/03637751.2025.2459648.

[7] N. Soo, A. Anderson, and C. Heywood-Heath, "The promiscuous public? Exploring public opinion and why it matters to political actors," *Politics*, vol. 43, no. 1, 2023, doi: 10.1177/02633957211007706.

[8] A. Pineda, A. Hermida, and E. Bellido-Pérez, "Visualizing political communication on Spanish social media: an analysis of Andalusian political parties' communication on Instagram," *Vis. Commun.*, 2025, doi: 10.1177/14703572241307305.

[9] L. Hagen, L. Hong, P. Fichman, M. Matsubayashi, M. Chong, and M. L. Dowell, "Social Media and Politics Around the World: Navigating the Era of AI-Generated Content," *Proc. Assoc. Inf. Sci. Technol.*, vol. 62, no. 1, 2025, doi: 10.1002/pra2.1372.

[10] N. MAJID, "Strategi Komunikasi Politik Dalam Pemilihan Umum Di Era Digital," *PERSEPTIF J. Ilmu Sos. dan Hum.*, vol. 1, no. 2, 2023, doi: 10.62238/perseptifjurnalilmusosialdanhumaniora.v1i2.34.

[11] Y. Zhu and K. wa Fu, "How Propaganda Works in the Digital Era: Soft News as a Gateway," *Digit. Journal.*, vol. 12, no. 6, 2024, doi: 10.1080/21670811.2022.2156366.

[12] C. Lin, "Digital propaganda is not simply propaganda in digital garb: toward an expanded theory of propaganda," *Commun. Theory*, vol. 34, no. 4, 2024, doi: 10.1093/ct/qtae017.

[13] "Erratum: Accessibility and generalizability: Are social media effects moderated by age or digital literacy? (Research & Politics)(8)(2)(10.1177/20531680211016968)," 2025. doi: 10.1177/20531680251326800.

[14] "Effects of Political Predispositions, Media Use, and Media Evaluation on Policy Malaise among Indonesian and German People," *J. Komun. Indones.*, vol. 14, no. 1, 2025, doi: 10.7454/jkmi.v14i1.1307.

[15] M. Kuštelega, I. Gregurec, and L. Hrustek, "The Impact of Customer Lifetime Value in Customer Relationship Management: A Bibliometric Analysis," *TEM J.*, vol. 14, no. 3, 2025, doi: 10.18421/TEM143-72.

[16] M. Turmuzi and R. Y. Tyaningsih, "A Bibliometric Analysis of the Development of Artificial Intelligence (AI) Research in Education in Scopus Indexed Journals: What are the Future Trends of this Research?," *TEM J.*, vol. 14, no. 1, 2025, doi: 10.18421/TEM141-60.

[17] I. Passas, "Bibliometric Analysis: The Main Steps," *Encyclopedia*, vol. 4, no. 2, 2024, doi: 10.3390/encyclopedia4020065.
[18] M. Puspita and S. Sujarwo, "Pusat Kegiatan Belajar Masyarakat dalam Penelitian Akademik: Pemetaan Tren dan Analisis Bibliometrik Lima Dekade Terakhir," *Diklus J. Pendidik. Luar Sekol.*, vol. 9, no. 1, 2025, doi: 10.21831/diklus.v9i1.89061.
[19] E. Weyant, "Research Design: Qualitative, Quantitative, and Mixed Methods Approaches, 5th Edition," *J. Electron. Resour. Med. Libr.*, vol. 19, no. 1–2, 2022, doi: 10.1080/15424065.2022.2046231.
[20] M. S. Charli, S. K. Eshete, and K. L. Debela, "Learning How Research Design Methods Work: A Review of Creswell's Research Design: Qualitative, Quantitative and Mixed Methods Approaches," *Qual. Rep.*, 2022, doi: 10.46743/2160-3715/2022.5901.
[21] J. P. Takona, "Research design: qualitative, quantitative, and mixed methods approaches / sixth edition," 2024. doi: 10.1007/s11135-023-01798-2.
[22] A. Scalcău, ""RESEARCH METHODS IN DISCOURSE ANALYSIS: QUANTITATIVE, QUALITATIVE AND MIXED-METHODS APPROACHES "," *Prof. Commun. Transl. Stud.*, vol. 14, 2023, doi: 10.59168/krla6949.
[23] J. Vasconez-Gonzalez, J. S. Izquierdo-Condoy, P. Naranjo-Lara, M. Á. Garcia-Bereguiain, and E. Ortiz-Prado, "Integrity at stake: confronting 'publish or perish' in the developing world and emerging economies," *Front. Med.*, vol. 11, 2024, doi: 10.3389/fmed.2024.1405424.
[24] S. O. Ajwang and A. P. Ikoha, "Publish or perish in the era of artificial intelligence: which way for the Kenyan research community?," *Libr. Hi Tech News*, vol. 41, no. 9, 2024, doi: 10.1108/LHTN-04-2024-0065.
[25] U. A. Bukar, M. S. Sayeed, S. F. A. Razak, S. Yogarayan, O. A. Amodu, and R. A. R. Mahmood, "A method for analyzing text using VOSviewer," *MethodsX*, vol. 11, 2023, doi: 10.1016/j.mex.2023.102339.
[26] A. Kirby, "Exploratory Bibliometrics: Using VOSviewer as a Preliminary Research Tool," *Publications*, vol. 11, no. 1, 2023, doi: 10.3390/publications11010010.
[27] Intan Dwi Permatasari, Halimatus Sa'diyah, and Ach Syafiq Fahmi, "Variable Compilation Techniques, Research Instruments and Data Collection in Quantitative Research," *INTERDISIPLIN J. Qual. Quant. Res.*, vol. 2, no. 1, 2025, doi: 10.61166/interdisiplin.v2i1.64.
[28] E. Dawson and S. Lock, "Science communication, politics and power: Social justice perspectives," *Public Underst. Sci.*, vol. 34, no. 4, 2025, doi: 10.1177/09636625251330837.
[29] G. Priyowidodo and Inri Inggrit Indrayani, "Strategic Communication and Political Candidate's Image in Digital Campaigns," *J. ILMU Komun.*, vol. 21, no. 2, 2024, doi: 10.24002/jik.v21i2.7779.
[30] M. Murphy and C. Costa, "The digital public sphere, universities and intellectualising the public," *Stud. High. Educ.*, 2025, doi: 10.1080/03075079.2025.2500694.
[31] L. Sorensen, "Populist disruption and the fourth age of political communication," *Eur. J. Commun.*, vol. 39, no. 1, 2024, doi: 10.1177/02673231231184702.
[32] J. C. Velasco, J. J. C. Manguera, E. J. V. Navalan, J. N. C. Limchiko, T. A. M. D. Bayot, and M. G. V. Mercado, "The Digital Dynamics of Political Engagement Among Filipino Youth: Examining Participation in Social Media Platforms," *Pertanika J. Soc. Sci. Humanit.*, vol. 32, no. 3, 2024, doi: 10.47836/pjssh.32.3.12.
[33] A. Moustapha, "The Challenges of Digital Platforms' Algorithms and Their Impact on the Freedom of Expression – A Normative Assessment of the Digital Services Act," *Erasmus Law Rev.*, vol. 18, no. 1, 2025, doi: 10.5553/ELR.000291.
[34] L. Cervi, S. Tejedor, and F. G. Blesa, "TikTok and Political Communication: The Latest Frontier of Politainment? A Case Study," *Media Commun.*, vol. 11, no. 2, 2023, doi: 10.17645/mac.v11i2.6390.

[35] S. Sitalaksmi, N. Indarti, G. Anggadwita, and A. D. Sambudi, "Knowledge leakage and collaborative innovation: a systematic literature review," *Knowl. Manag. Res. Pract.*, vol. 23, no. 6, 2025, doi: 10.1080/14778238.2024.2431111.
[36] A. B. Duche-Pérez, E. N. A. Chávez-Urquizo, and A. V. Camargo-Riega, "Digital Democracy and Social Media: Between Participation, Disinformation, and Accountability in the 21st Century," *J. Cult. Anal. Soc. Chang.*, vol. 10, no. 2, 2025, doi: 10.64753/jcasc.v10i2.2177.
[37] A. Asrijal and Z. Larisu, "Digital Participation in Democracy: The role of Social Media in the 2024 Political Campaign," *Socious J.*, vol. 2, no. 1, 2025, doi: 10.62872/9fwp7844.
[38] L. Nikitenko, "Crowdsourcing as an instrument of participatory democracy," *Law Rev. Kyiv Univ. Law*, no. 2, 2020, doi: 10.36695/2219-5521.2.2020.22.
[39] D. Gandasari, D. Tjahjana, D. Dwidienawati, and M. Sugiarto, "Bibliometric and visualized analysis of social network analysis research on Scopus databases and VOSviewer," 2024. doi: 10.1080/23311975.2024.2376899.
[40] M. Rahmadani Lubis, I. Zulkarnain, Mailin, and U. Chandrasekar, "Analysis of Critical Theory on Communication Technology as a Space of Resistance," *Int. J. Islam. Educ. Res. Multicult.*, vol. 7, no. 3, 2025, doi: 10.47006/ijierm.v7i3.437.
[41] B. Gede Ari Rama, D. Krisna Prasada, and K. Julia Mahadewi, "Urgensi Pengaturan Artificial Intelligence (AI) Dalam Bidang Hukum Hak Cipta Di Indonesia," *J. RECHTENS*, vol. 12, no. 2, 2023, doi: 10.56013/rechtens.v12i2.2395.
[42] B. Bukhori, N. Shabrina, and I. Irwansyah, "Framing Pemberitaan Etika dan Regulasi Penggunaan Foto Artificial Intelligence (AI) pada Kampanye," *Komuniti J. Komun. dan Teknol. Inf.*, vol. 17, no. 2, 2025, doi: 10.23917/komuniti.v17i2.11236.
[43] N. Evita and A. A. Mukhaer, "Evaluasi Komunikasi dan Literasi Digital Warga Jakarta dalam Implementasi Society 5.0," *J. Ris. Komun.*, vol. 5, no. 2, 2022, doi: 10.38194/jurkom.v5i2.541.
[44] A. Caragliu, A. Chagas, H. J. Jun, N. Reid, and T. Sabadini Carvalho, "New goals and challenges for Regional Science, Policy and Practice," 2025. doi: 10.1016/j.rspp.2024.100166.
[45] Aditya Gaur, "Smart Cities: Intelligence, Framework and Machine Learning Algorithm," *Int. J. Adv. Res. Sci. Commun. Technol.*, 2022, doi: 10.48175/ijarsct-4834.
[46] A. Miconi, "The Network and the Society: Structure and Agency in Castells' Theory," *Am. Behav. Sci.*, vol. 67, no. 7, 2023, doi: 10.1177/00027642221092805.
[47] R. Smrdelj and M. Pajnik, "Enhancing the hybrid media system model: The role of critical theory in media and communication research," *Eur. J. Commun.*, vol. 40, no. 1, 2025, doi: 10.1177/02673231241306249.