

# The Algorithm of Digital Technology for Communication

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**Abstract:** This paper explores effectively utilize digital technology for a campaign or communication. A solid algorithm-driven approach can be implemented to ensure data-driven decisions, targeted messaging, and high engagement. Citizens can easily actively disseminate political issues through existing social media platforms. This research uses descriptive research with a qualitative approach with a literature study approach. The data collection technique in this research is to conduct a literature search that is current and compatible with the research theme. The results of the study show that social media plays an important role in political participation in the digital era. Digital technology can also trigger opinion polarization. Political participation in the digital era has positive impacts and real challenges that must be addressed properly and wisely. Awareness of digital literacy and being critical are the main keys to maintaining inclusive political participation in this digital age. Collect data from social media, surveys, website analytics, and polling. Ensure that the data collected adheres to privacy and data protection regulations. Use machine learning algorithms like k-means clustering to segment the audience based on demographic, psychographic, geographic, and behavioral factors. Based on the segmentation, create voter personas (such as "young urban voters" or "female first-time voters") to tailor campaign messages effectively. Use natural language processing (NLP) to analyze sentiments around PSI and specific campaign topics. This will help identify areas of improvement and potential voter concerns. Employ tools like IBM Watson or Google Cloud Natural Language to monitor conversations around key issues and track public sentiment in real time.

**Keywords:** Algorithm; Digital Technology; Communication.

## Introduction

Digital communication for campaigns using information technology can increase the efficiency and reach of the campaign, especially among young voters who are active on social media. The following is a digital campaign strategy using information technology. The information society is an outcome of the digital revolution that continues to this day. The information society is often identified as post-industrial society, postmodern society, network society and most recently, or digital democracy (Hartanto, 2016).

The advent of digital technology has changed the way people interact with the government and affect the dynamics of politics. The development of digital

technology opens up new spaces that allow for more inclusive political participation and enables citizens to participate in the political decision-making process in an easier and faster way. Internet utilization has become a crucial aspect of technological development, and the level of internet usage in various parts of Indonesia has increased significantly (Elizamiharti & Nelfira, 2023).

Social media allows citizens to share their opinions, mobilized support, and convey their political aspirations to political leaders and authoritative institutions (Hodzi & Zihnioğlu, 2024). Through these digital tools, political participation has become more inclusive, allowing citizens from diverse backgrounds to have a voice and influence public decisions. The presence of social media platforms and information-sharing applications has also

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changed the dynamics of political campaigns. Political candidates and political parties can use digital platforms to build a support base, deliver political messages, and get feedback from citizens. Political campaigns that were previously limited to traditional media can now reach a wider audience and capitalize on the virality of social media.



**Figure 1.** AI the Digital Intelligent Tools (Source: Google.com)

However, along with opportunities, the digital age also poses serious challenges to democracy. With greater access to political information and political participation through digital platforms, challenges such as disinformation or the spread of false information that can influence citizens' political perceptions and decisions have become increasingly troubling.

Information technology, which is characterized by electronization, digitalization, and networking, has advanced quickly throughout the world since the turn of the twenty-first century. Information technology has already impacted a number of areas, including the economy and society, changing the political, social, cultural, and economic landscape of the world (Xie, 2022).

The spread of disinformation can confuse the public, reinforce polarization, and affect the integrity of critical and healthy political discussions. In addition, electoral manipulation is also a serious threat, where political actors or parties may utilize manipulation techniques, such as cyberattacks or influencing social media algorithms, to sway public opinion or gain an unfair advantage in elections (Elizamiharti & Nelfira, 2023).

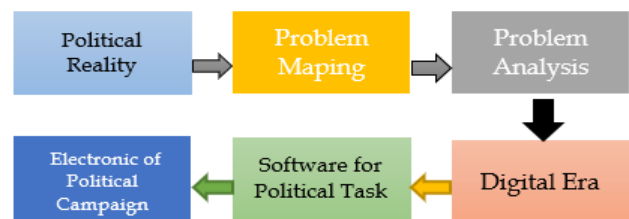
Digital politics refers to the use of digital technologies, particularly the internet and social media, to influence political processes, mobilize public opinion, and engage citizens in governance. In the modern era, political campaigns, activism, and policymaking have increasingly shifted to online platforms, where information spreads rapidly and reaches a global audience. Social media platforms like Twitter, Facebook, and Instagram have become essential tools for

politicians and political organizations to communicate directly with the public, bypassing traditional media. Additionally, digital politics has enabled grassroots movements to gain momentum, allowing ordinary citizens to participate in discussions, advocate for causes, and even challenge established power structures. However, the rise of digital politics also comes with challenges, such as misinformation, cyber threats, and concerns over data privacy, which require careful regulation and public awareness.

Digital voting, also known as e-voting, refers to the use of electronic systems to cast and count votes in elections. This technology can streamline the voting process, making it more efficient, accessible, and secure, especially for remote voters or those with disabilities. Various forms of digital voting exist, including electronic voting machines at polling stations and internet-based voting, which allows voters to cast their ballots from anywhere. While digital voting offers advantages such as faster results and reduced human error, it also raises concerns regarding cybersecurity, voter privacy, and the potential for hacking or manipulation. Ensuring transparency, robust security measures, and public trust is crucial for the successful implementation of digital voting in modern democracies.

## Method

The type of research used in this study is descriptive research with a qualitative approach (Hantono et al., 2018). The data taken, identified in the following order: data collection; data sorting; data analysis; conclusion making. As for data analysis, there is a predetermined sequence in accordance with the empirical steps taken, namely as follows: Examination of data; suspected data findings; Data confirmation; Diagnosis; and Action (Grieshaber, 2020).



**Figure 2.** Flow of Logic

This research is qualitative research with a case study approach (Raco, 2018). The case study approach is a research strategy in which researchers carefully investigate a program, event, activity, process or group of individuals (Roosinda et al., 2021; Rukhmana et al., 2022; Subagyo & Kristian, 2023). In case study research, the data collected comes from various sources and the

results of the research only explain the case under study. Researchers chose this type of qualitative research because they wanted to analyze more deeply the phenomenon of digital democratization.

## Result and Discussion

### *The Reality of Digital Mass*

Recently, the political party has become the centre of attention of the Indonesian people with its massive advertisements. We can find various types of advertisements in various print media such as billboards, brochures, conventional electronic media such as television, radio and digital media that are implemented in various platforms provided. President Jokowi's party, which is currently led by Kaesang Pangarep, who is the Chairman of the Party, gives the slogan 'Santuy Politics'.

The world and political activities in it are full of pressure, difficulties, seriousness and other heavy things, suddenly the perception is changed by this party into a world that is fun and can be relaxed when dealing with the problems in it. According to Guy Debord, the originator of the theory of the Society of the Spectacle, the era of the Society of the Spectacle is characterized by conditions when people are busy competing to represent themselves in various media, especially social media such as Instagram, Facebook, Youtube, and Tiktok to be watched and interpreted by anyone.

As if not alive, if not displaying or representing all forms of self-creativity to various media, especially social media. How much or how interested people watch has become the main measure of the existence and social relations that a person has successfully built. Since the 1970s, the world has experienced and felt the existence of a digital revolution where there is a change in electronic and mechanical technology towards higher technology, namely digital technology. The revolution in technology, characterized by the mass production and widespread use of computers, mobile phones, the internet and other devices, has led to changes in the pattern of relationships and social interactions between citizens, businesses and governments (Hartanto, 2016).

In an information society, people have unprecedented access to data on government operations, business practices, and social issues. This transparency enables citizens to hold power structures accountable, as information on both achievements and misconduct is easily shared and widely accessible. Social media platforms and other digital forums allow citizens to report issues and mobilize for causes, making it difficult for authorities to ignore public grievances. This promotes a more open and accountable society. Digital democracy interacts people, groups of people,

governments, businesses, local communities and social networks. Digital democracy is a dialectical interaction between society and technology (Castells, 1997).

Digital democracy is a concept that describes how information and communication technologies (ICTs) reshape democratic engagement, influence political processes, and redefine the relationship between citizens and governing bodies. Theoretically and practically, digital democracy encompasses both the potential benefits and the challenges that arise from integrating digital tools into democratic practices. A number of experts believe that ICTs are a potential factor to foster democratic development, and facilitate a quantum leap in the context of political democracy (Becker, 1998).

Theoretically, digital democracy aligns with Jürgen Habermas's concept of the "public sphere," where open dialogue among citizens fosters political debate and opinion formation. ICTs create a more accessible public sphere by providing digital platforms for citizens to discuss political matters, voice concerns, and advocate for change. There are various forms of political participation, including participating in elections, demonstrating on the streets, participating in political campaigns, and most recently uploading politically charged content to the Internet/social media (Carpini et al., 2004).

The theory of deliberative democracy emphasizes the importance of informed, reflective dialogue in decision-making. ICTs, through forums, social media, and online platforms, support this by allowing citizens to engage in discussions, debate policies, and provide input on governance matters, potentially leading to more informed and participatory decision-making processes. This fact is partly driven by the low sensitivity of net citizens to the truth of information or news, lazy to do fact checking so that any information/news received is taken for granted and even disseminated to a wider circle of friends. Not to mention problems related to anonymity on the Internet (Zainal & Megasari, 2019).

Communication through digital media intermediaries, such as social media platforms, news aggregators, and messaging apps, has indeed become a primary channel for people seeking political information or engaging with democratic processes. These intermediaries play a pivotal role in shaping public understanding, discourse, and participation in political life. Here are some key ways in which digital media intermediaries influence political communication and democratic engagement:

The communication process with digital media intermediaries begins with the process of creating information through video, news, or audio media that is transmitted using digital media with a minimum delay so that people can easily and quickly access various information on digital media (Febriani & Ritonga, 2022;



González-Tosat & Sádaba-Chalezquer, 2021; Sevignani, 2022).

Social media platforms allow political candidates, parties, and activist groups to reach a broader audience quickly and cost-effectively. Campaigns use targeted ads, live-streamed debates, and multimedia content to engage with voters, making political messaging more dynamic and interactive. This has democratized access to political information but also introduced challenges, such as misinformation and manipulation. In the political realm, these hoaxes are used to attack political rivals because they have the potential to defame a person's image and credibility (Akbar et al., 2021).

The rapid growth of digital campaigns since the 2014 elections has indeed pushed election organizers to adapt quickly to new methods, tools, and challenges in the electoral process. With more candidates and parties using social media, targeted ads, and data analytics, election organizers have had to address a range of issues. For Bawaslu, the challenge lies in monitoring forms of election violations considering that the digital space as a new interaction space has great potential to give birth to forms of election violations (Sarengat & Mahadwartha, 2021). Many political figures use platforms like Twitter, Instagram, and TikTok to connect directly with constituents, allowing for more personal, real-time engagement. This makes political figures seem more accessible and can foster a sense of closeness between leaders and the public. Platforms that encourage sharing and commenting allow users to contribute to political discussions, creating a participatory environment where anyone can become a content creator, commentator, or activist.

Platforms that offer live-streaming and Q&A features, such as Facebook Live or Instagram Live, let politicians or activists engage directly with the public, answer questions, and respond to feedback, facilitating two-way communication. The presence of the Gowaslu platform is also expected to make it easier for Bawaslu to carry out its duties and functions (Imawan, 2022). Digitalization has transformed public participation by opening up new channels for engagement, making it easier for people to access information, communicate their views, and take collective action. Here's how digitalization has reshaped public participation: Wider Reach: Digital platforms allow people to participate from anywhere, eliminating geographic barriers (Arifudin, 2025; Stallkamp & Schotter, 2021). This has been particularly important for engaging rural communities, people with disabilities, and diaspora communities. More Inclusive Voices: Digital tools provide a platform for marginalized groups and underrepresented voices, who may have limited access to traditional public forums. Social media, for instance, allows these groups to share their experiences and

advocate for issues directly. Thus, digitalization has provided opportunities for individuals to be actively involved in the political process, strengthening public participation in democracy (Hartiwiningsih, 2017).

#### *Democracy mediated by digital constellations*

Digital democracy is indeed emerging at a time when traditional, once-dominant forms of political action, such as voting in person, attending rallies, or engaging with physical party structures, are in decline. This shift is driven by several factors, including changes in technology, lifestyle, and public expectations for participation. Here's how digital democracy is reshaping political engagement amid these changing forms of political action: Decline of Traditional Political Institutions and Party Structures. Lower Voter Turnout in Physical Polls: In many democracies, voter turnout for in-person elections has declined, especially among younger generations, who may feel disengaged from traditional party structures. Digital democracy offers new avenues for involvement, like online voting or participatory budgeting, which can make political engagement more accessible and relevant.

Reduced Influence of Political Parties: As digital platforms allow individuals to organize around specific issues or movements rather than aligning strictly with political parties, traditional party structures are losing their centrality. Many people now prefer to support causes or campaigns through issue-based organizations or online movements, often sidestepping formal party affiliation. Digital democracy is taking shape at a time when once-privileged forms of political action are in decline: political parties are suffering membership losses, the emancipatory aura of electoral suffrage is fading, and passive citizen audiences have evolved into active "prosumer" audiences. A rebalancing has taken place between the "two forces of democratic sovereignty", the public sphere as a space for discussion and the institutional decision-making space, where the former has gained relevance over the latter.

People increasingly organize and participate around single issues (e.g., climate change, social justice, human rights) through online campaigns and digital advocacy groups. This shift allows individuals to support multiple causes without committing to a single party's broad platform. Micro-Mobilizations: Platforms like Twitter, Instagram, and TikTok enable individuals to create and join small-scale campaigns focused on specific issues within hours. These micro-mobilizations draw attention to local or niche issues, sometimes leading to national or global attention, even if they don't align with a major party's priorities.

Social media, which has grown rapidly in recent years, seems to create a public sphere as a place for people to be able to play an active role in carrying out

their political participation. The interactive nature of social media allows users to act more actively in a communication activity in the media, including in participatory political activities. Participatory politics can be carried out with a variety of activities, from pioneering ones such as forming online discussion forums, participating in spreading political content, to simply commenting on content or in a discussion forum (Karim et al., 2020).

Social media significantly influences the political participation of novice voters, particularly through its integration with information and communication technologies (ICT) that span electronic, print, and online media. For these first-time voters—often younger and more digitally native than older generations—social media serves as a primary gateway to political information, engagement, and community. Here's how social media shapes the political participation of novice voters: Real-Time Updates and News: Social media platforms provide continuous streams of political news and updates, often faster than traditional media. This real-time access helps novice voters stay informed about candidates, issues, and election developments. Diverse Sources and Perspectives: Through social media, novice voters can access a wide range of perspectives, from mainstream news outlets to independent journalists, activists, and influencers. This variety encourages young voters to explore multiple viewpoints and become more critical of the information they consume. Thus, it can be stated that overall social media has an effect on voter political participation (Andriyendi & Dewi, 2023).

## Conclusion

The use of social media in political campaigns can increase people's political participation. In conclusion, digital democracy is reshaping how citizens participate in political life, offering new ways to engage as traditional forms of political action decline. While these changes offer exciting possibilities for more accessible, transparent, and responsive governance, they also present challenges that require careful attention to ensure that digital democracy truly serves and represents the entire public. Social media serves as a powerful tool for engaging novice voters, making political information more accessible, interactive, and tailored to their needs and preferences. However, challenges like misinformation, echo chambers, and the need for digital literacy must be addressed to ensure that social media's influence is positive and constructive for novice voters' political participation.

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This study was conducted by me personally, so the content presented is my full responsibility. The single author provides a space for free expression so that the satisfaction of pouring thoughts can be accommodated.

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## Conflicts of Interest

There is no interest conflict in this research. this research is conducted for scientific studies that are widely disseminated through this journal. Writings that are free of conflicts of interest will be disseminated without fear of the author, so that they can be free to continue working.

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