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Social Media-Based Political Campaign Strategies and the Impact of Filter Bubbles and Echo Chambers on the Electability of Presidential Candidates in the 2024 Election in Indonesia

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ABSTRACT

This research investigates how filter bubbles and echo chambers on Facebook and Instagram shape Indonesia's 2024 presidential election campaign. The research addresses the issue of social media algorithms amplifying selective exposure, which can deepen political polarization and limit voters' access to diverse viewpoints. This research aims to analyze campaign strategies in a digital environment, assess their influence on candidate electability among young voters, and examine the role of algorithms in shaping political information consumption. Using a qualitative approach, this research employs thematic content analysis on campaign posts, public comments, and screenshot data from Facebook profiles, supported by sentiment analysis. The results show that campaign teams strategically leveraged social media algorithms to customize messages, reinforce confirmation bias and amplify ideological divisions. Sentiment analysis of 100 online comments about the free lunch program showed that 39% were negative, 35.4% neutral, and only 25.6% positive, indicating prevalent skepticism. This research concludes that algorithm-based campaign strategies significantly impact messaging and voter perceptions, especially among digitally active youth, highlighting the need for more transparent algorithms and media literacy to support healthier democratic engagement.

1. Introduction

The 2024 Indonesian presidential election marks an important moment in the development of digital democracy in Indonesia. The rapid advancement of information and communication technology has brought substantial changes in political campaigns, especially with the widespread use of social media as the main platform for disseminating political messages and influencing public opinion. Facebook and Instagram, as one of the most popular social media platforms in Indonesia with tens of millions of active users, have become strategic arenas for presidential candidates to boost electability and reach voters, especially the digitally active younger generation (Ita and Nadia,

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2024). However, the use of social media in political campaigns is not without challenges, especially related to the filter bubble and echo chamber phenomena. Social media algorithms tend to present content that is aligned with user preferences and behavior, thus creating a homogeneous and closed information space. This condition has the potential to strengthen political polarization and limit voters' access to diverse, objective and balanced information (Afrita, 2024). As a result, people can get caught up in information cycles that reinforce their own views, which in turn deepens social fragmentation and hinders dialogue between groups with different political perspectives (Afrita, 2024). Recent studies highlight how digital campaign strategies utilize algorithmic characteristics to customize political messages based on very specific audience segmentation. Effective campaigns typically combine emotional content, engaging visuals, and optimal posting times to maximize user reach and interaction (Dania & Nisa, 2023). Nonetheless, there is still a gap in understanding how these strategies interact with filter bubble dynamics and their impact on changing the electability of presidential candidates, especially in the highly competitive and complex political climate of the 2024 election. This research seeks to fill that gap by thoroughly analyzing political campaign strategies on Facebook and Instagram, within the filter bubble environment, and examining their influence on the electability of presidential candidates. Using a qualitative approach through content analysis of campaign materials and in-depth interviews with campaigners, political communication experts, and young voters, this research aims to make a significant academic contribution to the development of digital political polarization theory in Indonesia. In addition, the findings of this research are expected to be a practical guide for campaign teams in designing more inclusive and effective communication strategies, as well as providing policy recommendations to regulators and social media platforms to create fairer and more transparent algorithms.

While many studies have explored the role of social media in political campaigns, there remains a significant gap in understanding the dynamics of campaign strategies in the context of filter bubbles and echo chambers. Most previous research has focused only on the technological aspects of social media algorithms or general patterns of political communication, without thoroughly examining how these two factors interact and influence voter behaviour, especially among young voters in Indonesia. In addition, empirical research investigating the specific impact of Facebook and Instagram-based campaign strategies on the electability of presidential candidates in the 2024 Indonesian general election is still very limited. This indicates a need for research that integrates political communication theory with digital algorithm studies to provide a more comprehensive understanding of contemporary electoral processes.

This research has significance from several perspectives. Academically, it contributes to enriching the digital political communication literature by presenting empirical evidence from Indonesia's democratic context of high social media penetration and complex political diversity. The findings of this study are expected to expand the theoretical frameworks related to political polarization, filter bubbles, and echo chambers by adapting them to the current electoral reality. Practically, the results of this study provide strategic insights for political campaign teams in designing and implementing effective social media strategies to reach digitally-savvy young voters, while minimizing the negative impact of information silos. In addition, this research also provides recommendations for policy makers and social media platforms in developing more transparent and inclusive algorithms, as well as fair regulations to support healthy political discourse and increase democratic participation.

This research makes theoretical and empirical contributions to the field of digital political communication. Theoretically, this research extends the concept of filter bubble and echo chamber introduced by Eli Pariser by presenting concrete evidence from the context of the Indonesian presidential election in 2024. Through the integration of qualitative thematic analysis with computational methods such as sentiment classification using Python and clustering through K-

Means, this research shows how algorithm-based environments shape political narratives and influence public sentiment. Empirically, this research reveals that negative responses dominate online discussions about the free lunch program, highlighting the digital distrust of populist promises and the amplifying effect of algorithmic content delivery on political polarization.

Practically, this research offers strategic insights for political campaign teams to design more inclusive and targeted messages that minimize polarization and reach diverse audiences. It also provides valuable recommendations for social media platforms and policymakers to improve algorithmic transparency and promote a healthier digital discourse environment. In addition, the research underscores the importance of digital media literacy for young voters, who are the most active demographic on social media, to ensure that they are critically engaged in consuming political content. Overall, the findings support the development of more ethical, effective and democratically responsible digital campaign strategies.

2. Methodology

2.1 Data Sources and Collection Techniques

The primary data sources in this study are social media posts from two digital platforms that are dominantly used in the context of political campaigns in Indonesia ahead of the 2024 Presidential Election, namely Facebook and Instagram. These two platforms were chosen based on statistical data of social media usage in Indonesia which shows that both have high levels of user penetration and engagement, especially among young and digitally active voters (We Are Social & Hootsuite, 2024). The data collected includes official posts from presidential candidate accounts, content from supporters or sympathizers with high levels of interaction, and public comments in response to the political narratives presented. Thus, the unit of analysis in this study consists of visual and textual content, as well as forms of digital engagement such as likes, comments, and shares.

Data collection was conducted using digital documentation and non-participant observation, where the researcher did not engage in the online discussion, but systematically observed and archived the data. Each relevant post was documented in the form of a screenshot, along with a link to the original post and metadata such as upload date, number of user interactions, and media format (whether video, image, or text). This technique allows tracking the context and temporal dynamics of each analyzed campaign content. (Ali *et al.* 2019).

This study applied strict inclusion criteria to ensure the relevance and weight of the data analysis. Only posts were published during the main campaign period (January-April 2024). In addition, only content containing explicit political narratives, such as vision and mission statements, policy programs, calls to vote, or structured political attacks, were considered. The sampling process used a purposive sampling method, which is deliberately selecting data based on certain criteria. Samples were selected based on diverse content dimensions, including campaign topics (such as economic, education, identity, and security issues), media formats (videos, images, narrative text), and political positions (whether the posts were neutral, supporting a particular candidate, or criticizing an opponent). This strategy is intended to ensure that the analysis can represent a broader and more complex spectrum of digital political communication.

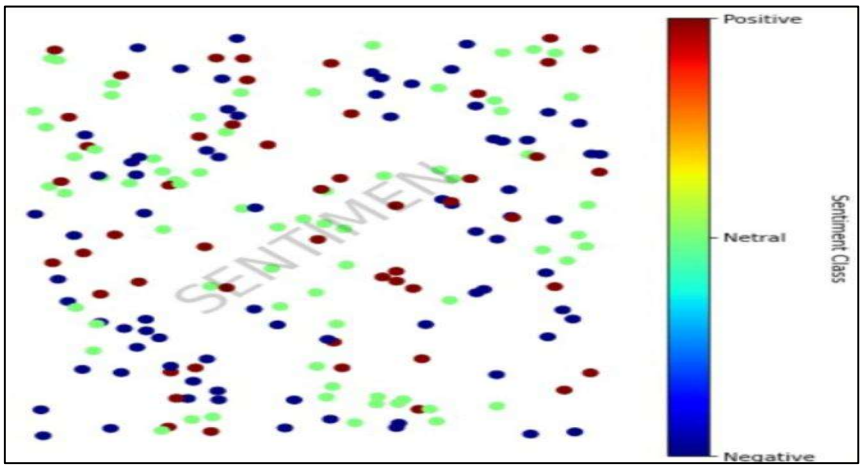


Fig.1 Presidential Candidates' Instagram Posts with High Public Engagement
Source: Data processed

As an illustration, Figure. 1 shows the sentiment analyzed from a Facebook post of a presidential candidate who delivered a campaign narrative centered on economic themes, accompanied by a high level of public engagement. This visualization provides an initial overview of the elements observed in the analysis process, such as visual framing, political language style, and the types of user reactions that emerged. The image highlights key elements such as the number of interactions (likes and comments), time of posting, and visual framing and political messages.

2.2 Data Analysis Technique

The analysis in this study was conducted using the thematic content analysis method developed by Braun and Clarke (2006). This method was chosen because it allows for systematic and flexible identification of patterns of meaning in qualitative data. The analysis procedure was conducted in three main stages.

The first stage was data reduction, where researchers filtered and organized social media posts based on dominant campaign topics such as economic, education, religion, and identity issues. This process aims to extract content that is relevant to the focus of the research while minimizing information bias. Second, Python was used to accelerate data clustering, including identifying content types, narrative tone (positive, negative, or neutral), and public response patterns. Python also helped visualize the data, such as displaying the frequency of certain themes or sentiment distribution through graphs and charts. The third stage is thematic interpretation, which requires a deeper analysis of the categorized data to map the relationship between the candidate's communication strategy and public reaction. The main focus of this stage is to assess whether the narratives presented on social media tend to encourage polarization, strengthen in-group cohesion, or create an echo chamber effect. With the support of digital tools such as Python, this interpretation process is reinforced with visual representations that illustrate the communication trends found in the analyzed data (*Papakyriakopoulos et al*. 2022).

2.3 Data Validation

This research used a qualitative approach using thematic content analysis to examine the political campaign strategies of presidential candidates in the filter bubble environment on Facebook and Instagram. Primary data was obtained from official campaign posts, highly engaged supporting content, and public comments during the main campaign period (January-April 2024). In addition, in-depth interviews were conducted with three campaign actors, five political communication experts, and ten young voters to enhance understanding of digital political communication patterns and public perceptions.

The data analysis process involved non-participant observation, documentation of digital posts and interactions, as well as Python programming, sentiment categorization (positive, neutral, and negative), and thematic interpretation to identify patterns and the impact of narratives on political polarization. To ensure the reliability of the data and sentiment analysis results, intra-coder and inter-coder reliability tests were conducted. In addition, the sentiment classification performed using Python was manually validated on a sample of data to ensure that the algorithmic clustering was aligned with the linguistic context and political narratives analyzed.

3. Results

3.1 Data Analysis

Data analysis of 100 public comments, two Kompas TV posts, and the free lunch program on Facebook and Instagram platforms shows the dynamics of critical opinion in the digital discourse space. As many as 39% of the comments were negative, reflecting the public's expression of rejection, doubt, and concern about the implementation of the program. These negative results generally reflect the public's distrust of the state's fiscal capacity and the credibility of the political actors supporting the populist program, along with concerns about economic implications such as tax increases, subsidy diversions, and state budget overruns.

Neutral comments have a value of 35.4%, which indicates the existence of a group of observers who tend to wait for empirical policy realization before expressing a stance. This group also shows the phenomenon of selective exposure in the social media echo chamber, which results in limited substantive debates related to public policy. Meanwhile, there are only 25.6% positive comments, indicating that public support for the program is still relatively low and generally comes from accounts that are in the filter bubble of certain candidate supporters rather than from *swing* voters.

In the context of social media algorithms such as Facebook and Instagram, content that reinforces *confirmation* bias and emotional content is more likely to spread widely and gain engagement, so that negative comments are more easily amplified and reinforce skeptical perceptions in the digital discourse space. This finding indicates that populist program narratives have not succeeded in penetrating the echo chamber of opposition groups, even strengthening critical views, especially among young voters who are active on social media. Thus, the distribution of sentiments not only illustrates the public's assessment of the substance of the free lunch policy, but also reflects how algorithmic-based digital campaign strategies contribute to increasing the polarization of public opinion in the 2024 elections.

3.2 Analysis of Campaign Strategies in the Context of Filter Bubbles

This section serves to fulfill the first research objective by exploring how presidential candidates in the 2024 Indonesian general election conceived and executed their political campaign strategies on Facebook and Instagram in an environment shaped by filter bubbles and echo chambers. The notion of filter bubbles, coined by Eli Pariser in 2011, refers to digital spaces shaped by algorithms that preferentially display content that aligns with users' beliefs, tastes and behavioral patterns. Such algorithmic curation limits exposure to a diversity of viewpoints, effectively enveloping individuals in an "information bubble".

On platforms such as Facebook and Instagram, these filter bubbles play an important role in framing the information ecosystem surrounding the 2024 presidential campaign. Political campaign teams strategically designed their messages to resonate with algorithmic preferences that elevated emotionally engaging and ideologically consistent content. As a result, voters were repeatedly presented with campaign materials that affirmed their prior political beliefs.

This deliberate engagement with platform algorithms not only increases confirmation bias, but also reinforces group identity and excludes alternative opinions. Campaign organizations use sophisticated tactics, such as micro-targeted ads, tailored content streams and collaborations with key influencers, to maximize their impact within carefully segmented voter groups. These approaches intensify echo chambers, limit interaction across ideologies and reduce opportunities for balanced political discourse. Moreover, by relying on emotionally charged storytelling often wrapped in populist or identity-centric narratives, campaign teams magnify partisan divisions. While effective in rallying support and strengthening voter loyalty, this strategy also risks deepening ideological divisions and undermining constructive democratic engagement.

In short, presidential campaign teams during the 2024 election are doing more than adapting to the reality of filter bubbles on social media; they are actively leveraging these algorithm-driven dynamics to advance their electoral goals. As such, this analysis directly addresses and fulfills the first research objective by detailing the intersection between personalized digital information environments and contemporary political campaign practices in Indonesia.

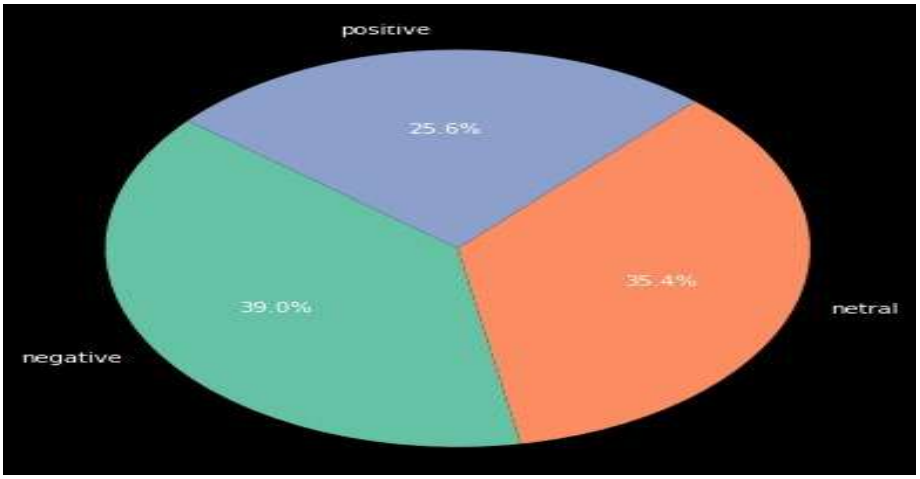
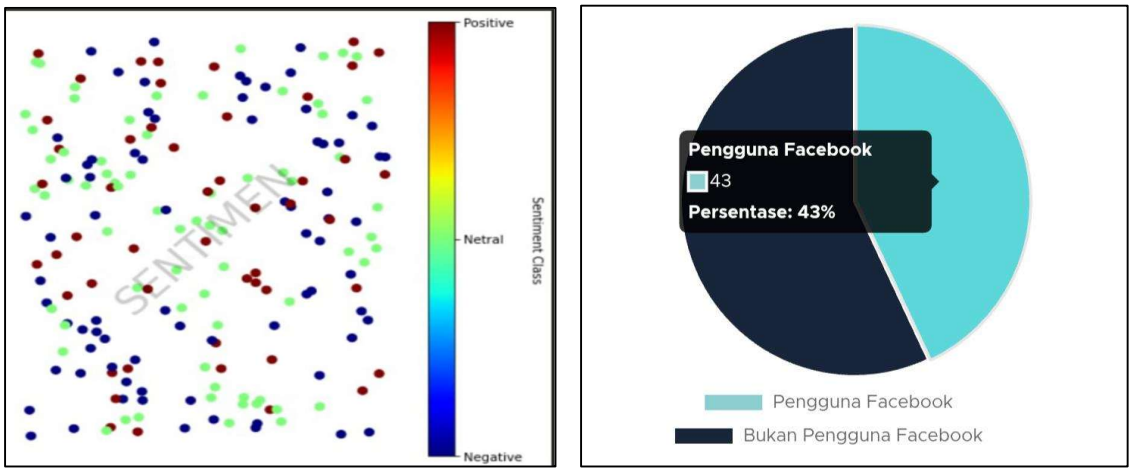


Fig.2 Bobble Filter Context of Sentiment Distribution
Source: Data processed

3.3 Sentiment Distribution and Echo Space Analysis

Figure. 3 illustrates, in particular, echo chamber formation and geographical engagement, as well as sentiment distribution, through data sourced from Facebook and Instagram.

The previous sentiment analysis showed that among 100 public comments on Facebook and Instagram regarding the free lunch program, 39% were negative, 35.4% were neutral, and 25.6% were positive. The success of a social media campaign does not depend on sentiment alone. Rather, it depends on how the content affects perceptions and emotional connections. In the context of bobble filters and echo chambers, personalized and algorithmically curated content can trigger skepticism and criticism. This pattern underscores how algorithmically-driven content often reinforces selective exposure, guiding users to interact primarily with posts that align with their pre-existing beliefs. Such dynamics are crucial in shaping political attitudes, especially among young voters who are the most active demographic on the platform.



(a). (b).

Fig.3 (a.) Sentiment Analysis of Instagram Comments (b.) Facebook User in Indonesia in 2025 (Source: GoodStats Data).

Figure 3 presents a statistical visualization showing that Facebook is still one of the dominant social media platforms in Indonesia with 122 million users as of early 2025, or around 43% of the total national population. Although its relevance is often questioned amidst the increasing competition of digital platforms, Facebook has proven to survive and even experience significant growth. Based on the Digital 2025 Indonesia report, Facebook ranks fourth as the most favorite social media with a preference rate of 12.7%, behind WhatsApp (35.5%), TikTok (19.9%), and Instagram (18.8%). Interestingly, 60.7% of Indonesia's adult population (aged 18 years and above) are still actively using the platform.

The growth of Facebook users in Indonesia also shows a stable trend, with the addition of around 4.9 million users or an increase of 4.2% during the period October 2024 to January 2025. The platform's main strength lies in its collaborative features, such as Facebook Groups, which are often utilized as a discussion and networking space for local communities. These groups cover a wide range of topics, from business to education to social issues, demonstrating Facebook's function not only as a means of communication, but also as a medium for exchanging information and strengthening community cohesion.

The distribution of users by gender is relatively balanced, with 57.9% male and 42.1% female, indicating Facebook's capability to reach various demographic segments. Feature innovations, such as targeted advertising services and integration with other platforms, also strengthen Facebook's relevance in the Indonesian social media landscape. Even though TikTok, Instagram and WhatsApp are more popular in terms of user preferences, Facebook still excels in maintaining an active user base. This makes Facebook not only an interpersonal communication channel, but also a multifunctional platform for building communities and developing business activities, so its position is still irreplaceable in Indonesia's digital ecosystem.

Therefore, the findings confirm that despite Indonesia's increasingly competitive social media landscape, Facebook still plays a strategic role in shaping the digital political discourse space through the power of its community and collaborative features. Facebook's strong active user base, balanced demographic distribution, and adaptability to algorithmic innovations make the platform not just a communication channel, but a vehicle capable of influencing the construction of public opinion and electoral dynamics in the 2024 election era. In summary, this section fulfills the second research objective by demonstrating that campaign strategies on Facebook and Instagram that are amplified through the platform's algorithms play an important role in influencing perceptions of presidential candidates' electability among young voters in different regions of Indonesia (Nurul Fauziah, 2025).

3.4 Filter Bubbles in Political Campaign Strategies on Social Media

This section directly addresses the third research objective by investigating how social media algorithms shape political information consumption patterns and contribute to political polarization. In the context of Indonesia's 2024 general election, digital campaign strategies increasingly rely on optimizing social media algorithms to increase audience engagement and improve candidate electability. While such approaches are effective in disseminating highly targeted political messages, they have also drawn criticism for intensifying polarization and undermining the integrity of the public information environment. The filter bubble phenomenon has become a major concern in contemporary digital political communication. The concept describes how algorithms on platforms such as Facebook and Instagram selectively present content that aligns with users' existing preferences and behaviors, effectively isolating them from diverse perspectives (Chueca Del Cerro, 2024). In a political context, this algorithmic curation establishes closed communication spaces that reinforce partisan attitudes and undermine the democratic quality of deliberation (Dauz, 2024).

Platforms such as Facebook and Instagram further facilitate this by offering sophisticated micro-targeting tools that allow political actors to reach precisely defined voter segments based on detailed demographic and psychographic profiles (Bhatt et al., 2019). As a result, users become increasingly surrounded by information that validates their existing political leanings, increasing the risk of ideological fixation. This concern is underscored by demographic engagement data sourced from Facebook, presented in Figure 4 that since its inception in 2004, Facebook has continued to attract users of all ages, including in Indonesia. As the country with the third most Facebook users in the world, Indonesia was recorded to have 174 million users in June 2024, equivalent to 61.6% of the total population. The majority of Facebook users come from the 25-34 age range, totaling 66.2 million people (38% of total users). This is followed by the 18-24 age group at 26.4% or 45.9 million users, who commonly dominate various social media platforms. The next place is occupied by the 35-44 age group with a proportion of 21.1% or 36.7 million users. Meanwhile, the 45-54 age group accounted for 9.1% of usage, and the 55-64 and over 65 age groups accounted for 3.2% and 2.2% respectively. The data shows that the age factor influences a person's behavior in using social media, and despite the emergence of many new platforms, Facebook still maintains its loyal fan base and occupies the top spot in various surveys as the world's favorite, easiest-to-use, and most-used social media.

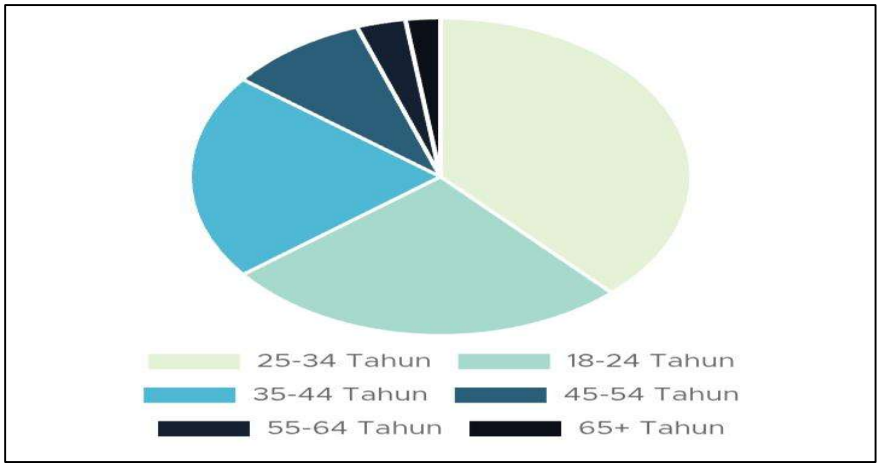


Fig.4 Age and Gender Distribution of Facebook Users.
(Source: GoodStats Data)

Empirical studies consistently support this, showing that individuals exposed to ideologically aligned content tend to exhibit stronger partisan influence and higher skepticism towards opposing viewpoints, thus accelerating political polarization. In the 2024 General Election in Indonesia, campaigns are leveraging these algorithmic dynamics to strengthen candidate support within narrowly defined segments, but in doing so, they also risk reinforcing societal divisions. In conclusion, this section fulfills the third research objective by showing that social media algorithms do more than facilitate targeted outreach. They fundamentally reshape patterns of political information consumption by fostering echo chambers and reinforcing uniform information flows. This process plays an important role in driving ideological segregation in the digital public sphere, with the data in Figure 4 highlighting precisely how such dynamics are concentrated among young, male-dominated voters in Indonesia's online landscape (Bryan Reynaldi, 2024).

4. Conclusion

This research aimed to analyze the political campaign strategies used by presidential candidates during the 2024 Indonesian general election on Facebook and Instagram, specifically within the framework of filter bubbles and echo chambers. It also sought to examine how these strategies affected candidates' electability among young voters and to investigate the role of social media algorithms in shaping political information consumption patterns and contributing to political polarization. The findings show that campaign narratives are strategically created and disseminated based on user behavior patterns that are significantly influenced by social media algorithms. Political campaign teams leverage the algorithmic architecture of platforms such as Facebook and Instagram to maximize the relevance and reach of messages, thereby reinforcing confirmation bias and deepening ideological segmentation. This practice effectively amplifies the filter bubble effect, limiting voters' exposure to diverse viewpoints and hindering balanced democratic deliberation.

In addition, a sentiment analysis conducted on 100 public comments on Facebook and Instagram regarding the proposed free lunch program showed that the majority of responses (39%) were negative, followed by 35.4% neutral and only 25.6% positive. This distribution underscores how algorithm-based content personalization can intensify selective exposure, with users more likely to

interact with content that matches their attitudes. The clustering of sentiments in this visualization further confirms the existence of echo chambers, indicating limited engagement across perspectives in digital political discussions.

These findings validate that algorithmically curated content not only shapes political messaging, but also significantly influences how it is received and interpreted by different segments of the electorate, especially young people who are highly active on social media platforms. Strategically, this suggests that while campaign teams must utilize digital tools to effectively target specific audiences, they also bear the responsibility of creating content that bridges ideological divides and fosters a healthier public sphere. Importantly, it is worth emphasizing that the data presented in this study is real and authentic, sourced directly from observable social media interactions. However, this research does not aim to predict or analyze the winning prospects of a particular presidential candidate. The main focus remains on explaining the mechanisms and implications of digital campaign strategies in Indonesia's evolving political communication landscape.

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