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REVIEWED BY

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Indonesia University of Education, Indonesia
Nuriyati Samatan,
Universitas Nasional, Indonesia

*CORRESPONDENCE

Harry Fajar Maulana
✉ harryfajarmaulana@gmail.com

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Formulation of a model for the dissemination of government policy issues in online media and YouTube in Indonesia

Harry Fajar Maulana^{1*}, Rando Rando², Hastuti Hastuti¹,
La Ode Muh. Zaitullah¹ and Zalfa Zarifah Ferizka¹

¹Department of Communication Science, Universitas Muhammadiyah Buton, Bau-bau, Indonesia,

²Department of Computer Systems Engineering, Universitas Muhammadiyah Buton, Bau-bau, Indonesia

The rapid expansion of digital media has reshaped political communication in Indonesia, creating fragmented pathways through which issues diffuse across mainstream and participatory platforms. Despite this transformation, limited research has examined how public debates surrounding major government programs spread within hybrid media systems or what mechanisms determine issue centrality. This study addresses that gap by analyzing discourse dynamics related to Free Nutritious Meals (MBG) and Danantara. Using a sequential explanatory mixed-methods design, the study first mapped structural patterns quantitatively and then deepened interpretation through qualitative analysis. The dataset comprised 1,696 online news articles, 363 YouTube videos, more than 26 million user comments, and survey responses from 620 participants, offering a comprehensive representation of Indonesia's digital discourse landscape. Structural Topic Modeling (STM) was used to identify dominant issues, while Social Network Analysis with QAP and MRQAP assessed co-occurrence patterns. Engagement metrics captured audience polarization, and thematic plus Critical Discourse Analysis (CDA) examined contrasts between institutional and participatory framing. Findings reveal that issue frequency—not semantic similarity—is the strongest predictor of diffusion. High-frequency issues consistently emerged as hubs in discourse networks. Mainstream media largely legitimized policy through socio-economic frames, whereas YouTube channels amplified criticism, satire, and counter-narratives, reflecting sharp audience polarization. Qualitative analysis reinforced these divergences, demonstrating how institutional and participatory media construct competing interpretations of the same policies. The integrated findings produced a conceptual model—"Frequency-Driven Co-occurrence"—which explains how mention intensity drives issue centrality and narrative evolution. The model advances agenda-setting and framing theories by shifting emphasis from semantic similarity to issue salience as the primary diffusion mechanism in hybrid media environments. Practical implications highlight the need for transparency, stronger digital literacy, and collaboration with credible influencers to reduce polarization, while future research should examine longitudinal trajectories, algorithmic amplification, and affective dynamics in digital discourse.

KEYWORDS

issue diffusion, social network analysis, critical discourse analysis, digital polarization, YouTube politics

1 Introduction

The rapid development of digital media has fundamentally transformed the ecosystem of political communication, enabling faster, more dynamic, and decentralized information dissemination. Platforms such as YouTube and Twitter have emerged as central arenas where public discourse is not only generated but continuously negotiated, often bypassing traditional editorial filters. While such platforms democratize access to information, they also accelerate the spread of misinformation, intensifying political polarization and affecting public perception and policymaking. This phenomenon is particularly salient in contexts with emerging democratic institutions, where the regulatory mechanisms for digital platforms are often underdeveloped. As Casero-Ripollés (2021) and Moukarzel et al. (2021) suggest, the diffusion of politicized narratives through digital platforms challenges the normative boundaries of accountability and truth long upheld by traditional media.

In Indonesia, the hybrid media landscape has become especially contentious in the post-election context of 2025. The administration of Prabowo-Gibran has faced growing public scrutiny over two major national programs: the state-owned superholding Danantara and the Free Nutritious Meals initiative. These cases were selected based on their media prominence, degree of public controversy, and widespread engagement across traditional and social platforms—thereby providing fertile ground for analyzing issue diffusion and framing polarization. These tensions are mirrored in market and digital responses; for instance, the Jakarta Composite Index fell 3.84% and the Rupiah depreciated by 2% in March 2025 (Kholid, 2025), accompanied by viral hashtags such as #IndonesiaGelap and #KaburAjaDulu (Fernandes et al., 2025; Indonesia, B. P. S., 2020; Kholid, 2025). National opinion surveys indicate that 56.5% of the public now relies on social media, particularly YouTube, as their primary source of political information, while 71.5% report exposure to AI-generated or manipulated political content. This climate has raised concerns about disinformation's growing influence on democratic legitimacy and institutional trust (Fernandes et al., 2025).

The key problem addressed in this study is the nonlinear, cross-platform nature of political issue diffusion. Political narratives no longer follow a singular, top-down media trajectory but instead traverse various digital spaces, where the same issue is reframed and recontextualized through diverse content formats and ideological lenses. Notably, political content that originates in mainstream media is often echoed, reinterpreted, or contested on popular YouTube channels. Social media is thus not merely a passive conduit of information but an active agent in shaping public opinion through selective framing and audience-aligned discourse (Soares and Recuero, 2021; Suarez-Lledo and Alvarez-Galvez, 2021). The rise of “parasitic news” and digital echo chambers further exacerbates ideological segmentation, as users increasingly engage only with information that confirms their pre-existing beliefs (Herrera-Peco et al., 2021; Schaller et al., 2021).

One promising approach to addressing this challenge lies in the use of Social Network Analysis (SNA), which offers powerful tools for mapping the flow and interaction of issues, actors, and platforms in digital discourse. SNA facilitates visualization of relationships among media entities, YouTube channels, and individual users, thus revealing structural patterns in the diffusion of political content (Broadbent and Thompson, 2021; Tian et al., 2020). In this study, SNA is combined with

QAP and MRQAP regression techniques to test hypotheses regarding co-occurrence and influence across issue networks (Cinelli et al., 2020; Wang et al., 2022). Additionally, data is collected from online media platforms and social networks to analyze the real-time impact of issue dissemination on public perception (Kirk and Schill, 2021; Lestari et al., 2024), while temporal network modeling captures the dynamic evolution of political discourse (Martin, 2021; Martínez et al., 2024).

Recent advances in SNA methodologies have significantly broadened their application, particularly in studies of public health, elections, and misinformation (Moukarzel et al., 2021; Yang and Saffer, 2020). Within the Indonesian context, Hastuti et al. (2023) examined how political buzzers amplify partisan narratives via keyword clustering, while Suherman et al. (2024) identified mechanisms of information manipulation through disinformation campaigns. Maulana and Hastuti (2022) observed public responses to key political events such as presidential debates, reinforcing the role of online participation in shaping issue salience. However, these studies predominantly focus on text-based platforms like Twitter. Researchers such as Broadbent and Thompson (2021) and Surya Negara et al. (2021) highlight YouTube's distinct ecosystem, which includes algorithmic mediation, audiovisual storytelling, and highly participatory audience dynamics.

Addressing this gap, Wan (2024) emphasizes YouTube's emergence as a meso-level ideological space for political narratives. Raja et al. (2024) and Rafiq et al. (2021) further illustrate how social media algorithms intensify confirmation bias and facilitate echo chambers, particularly in Indonesia. Political YouTube channels have become influential actors in shaping public discourse Wan (2024) and Smith (2022) underscore the importance of recognizing digital authorities in this process. Wan (2024) advocates for integrating network analysis with contextual interpretation, while (Gao et al., 2023) call for deeper exploration of temporal dynamics in issue diffusion, an area often neglected in existing literature.

This study advances the field through three core innovations: (1) the integration of QAP and MRQAP techniques in the context of Indonesian political communication, (2) an explicit focus on meso-level actors (e.g., YouTube channels) as hubs in issue networks, and (3) the application of temporal network modeling to trace the evolution of political discourse over time. These innovations respond to key gaps in Political Communication theory, particularly the lack of integrative methodological frameworks and empirical insight into nonlinear narrative dynamics in hybrid ecosystems.

Thus, the research not only enriches academic literature but also supports national development strategies as outlined in the Indonesian National Research Master Plan 2017–2045. It contributes to the realization of the Asta Cita goals in democratic governance and digital literacy, and aligns with the Sustainable Development Goals (SDGs), particularly those related to public access to information, institutional trust, and innovation-driven policy making. By incorporating netnography, the study also aligns with emerging research calls for ethnographically informed digital analysis, bridging structural models with lived, contextual user experiences.

2 Methodology

2.1 Research design

This study adopts a sequential explanatory mixed-methods design to examine political issue diffusion in hybrid digital ecosystems. The

design is theoretically anchored in Political Communication—combining agenda-setting (salience/visibility) and framing (interpretive schemas) within a hybrid media system perspective—thus requiring a two-phase workflow that first maps structural salience and then interprets discourse. It begins with the identification of diffusion patterns using Structural Topic Modeling (STM), Social Network Analysis (SNA), and Quadratic Assignment Procedure / Multiple Regression QAP (QAP/MRQAP), followed by qualitative interpretation through Thematic Analysis, Critical Discourse Analysis (CDA), and Netnography. This theory-driven, dual-phase approach ensures generalizability of patterns and contextual depth of meanings, aligning with the complexity of issue circulation in digital media (Sathana, 2022; Smajic et al., 2022; Felder et al., 2021; Taha, 2021).

2.2 Data sources

Data were drawn from three triangulated sources to reflect institutional, participatory, and public perspectives. First, 1,696 online news articles were collected from mainstream outlets (Kompas, CNN Indonesia, Detik). Second, 363 YouTube videos were scraped from political channels (Akbar Faisal, Bocor Halus, Narasi) selected via purposive sampling using explicit criteria: (i) relevance to MBG/Danantara, (ii) high engagement (views/comments), and (iii) consistent topical focus across the study period. Third, an online survey of 620 respondents captured behavioral and attitudinal data on media use, polarization, and trust. All data were collected within a defined window (August 2024–March 2025) to enable temporal comparability across sources (Auza, 2023; Sa'adawisna and Putra, 2023; Syam, 2022).

2.3 Data collection procedures

2.3.1 Content extraction

Automated web scraping and APIs were used to extract 1,696 news articles, 363 videos, and ~2.69 million YouTube comments. The extraction prioritized keyword relevance (e.g., “MBG,” “Danantara”), topical salience, and high interaction counts. All text was language-normalized (Indonesian → English for labels/metadata in figures) and de-duplicated; boilerplate and spam were removed via rule-based filters prior to modeling. This provided a robust corpus for STM, SNA, and netnographic analysis (Darmawan et al., 2022; Cárcamo-Ulloa et al., 2023).

2.3.2 User interaction metrics

Interaction metrics such as likes, shares, views, and comment frequency were gathered for both primary videos and related news reposts. These data were used to assess audience reception and track engagement trends across platforms.

2.3.3 Survey design

A structured online survey targeting a demographically diverse Indonesian sample captured user trust in media, exposure to MBG and Danantara, and perceived political bias. Sampling used stratified quotas (province, gender, age bands) and included attention checks; items were pre-tested for clarity in Indonesian. Responses were linked (at aggregate level) to platform metrics and triangulated with SNA/sentiment findings (Himawan et al., 2020; Levy, 2021).

2.4 Quantitative analysis

2.4.1 Structural topic Modeling (STM)

Structural Topic Modeling was applied to textual data from both news articles and YouTube transcripts to identify dominant topics and their prevalence across platforms. Pre-processing included tokenization, lemmatization, and stopword removal for Indonesian and English; covariates (platform/source, month) were included to estimate topical prevalence differences over time and media type. STM is well-suited for uncovering latent themes within large corpora and provides comparative insights into how issues are differently emphasized across institutional and participatory media (Liu et al., 2023).

2.4.2 Social network analysis (SNA)

SNA was used to map co-occurrence networks of political issues. Nodes represented issues or actors, while edges indicated co-mentions or thematic links. Issue labels were translated/standardized to English prior to graphing; edges were thresholded (top quantile of co-mentions) to reduce noise. Centrality (degree/betweenness) identified hubs, while modularity and clustering highlighted communities of interconnected issues (Broadbent and Thompson, 2021; Tian et al., 2020).

2.4.3 QAP and MRQAP regression

To test hypotheses about issue interrelationships, Quadratic Assignment Procedure (QAP) and Multiple Regression QAP (MRQAP) were employed. Frequency similarity was operationalized as the correlation between issue-wise mention vectors across platforms/time; semantic similarity was computed from sentence embeddings (Indonesian transformer model) averaged per issue. These matrices predicted co-occurrence edges, isolating whether intensity (frequency) or meaning (semantics) better explains network formation (Cinelli et al., 2020; Wang et al., 2022).

2.4.4 Engagement and sentiment analysis

Engagement data were cross-tabulated with sentiment polarity to assess alignment across ideological narratives. A domain-adapted Indonesian sentiment pipeline (lexicon + supervised checks) was used; a 10% sample was hand-validated to confirm polarity cues (sarcasm/irony) common on YouTube. MBG was found to be framed more positively by institutional media, while Danantara attracted criticism and satire on YouTube.

2.5 Qualitative analysis

2.5.1 Thematic analysis

Thematic analysis was conducted on selected YouTube videos, news articles, and comment threads to explore recurring narrative frames. Coding proceeded in two cycles (open → axial); 20% of units were double-coded and discrepancies adjudicated to stabilize the codebook (economic, social-welfare, elite-critique, satire). This approach highlighted how media and users framed issues in economic, social, or critical terms (Kharel, 2024).

2.5.2 Critical discourse analysis (CDA)

Drawing on Van Dijk (2015) CDA framework, the study examined how discourse reproduces power and ideology. Units of analysis included

article leads, video transcripts, and audience interactions. Analytic foci comprised lexicalization, actor representation, and evaluative polarity, linking discursive patterns to network hubs (e.g., personification around key figures). This lens revealed how framing strategies positioned issues as “people’s programs” or “elite projects,” thus legitimizing or contesting political authority (Setiawan et al., 2024).

2.5.3 Netnography

Following Kozinets (2020), this study employed a five-stage netnographic process to analyze political discourse on YouTube. (1) *Entrée*: purposive selection of communities/channels discussing MBG and Danantara using relevance, engagement, and topical consistency criteria. (2) *Immersion & Data Collection*: non-participatory observation alongside scraping of 363 videos and ~2.69 M comments; digital fieldnotes captured vernaculars, memes, and interaction rituals. (3) *Interpretation*: thematic/discourse reading of threads to surface cultural codes, alignment cues, and counter-narratives. (4) *Ethics*: strict anonymization, respect for community norms, and adherence to platform ToS. (5) *Reflexivity*: researcher memos noted algorithmic affordances (recommendations, pinning) and visibility dynamics that may shape interaction. Netnography complemented CDA by revealing micro-level participatory meaning-making within polarized spaces (Dineva, 2022; Kozinets, 2020).

2.6 Integration of quantitative and qualitative findings

The integration followed a meta-inference strategy: quantitative structures (issue hubs, centrality; QAP $r \approx 0.39$, MRQAP $\beta \approx 0.70$) were contextualized with qualitative themes (narrative polarity, user resistance). This theory-linked synthesis (agenda-setting + framing in a hybrid media system) underpins the ‘Frequency-Driven Co-occurrence’ model, positing that diffusion is propelled by mention intensity and cross-platform repetition rather than semantic proximity (Gao et al., 2023; Luo et al., 2021).

2.7 Validity, reliability, and ethical considerations

Triangulation, detailed documentation of scraping processes, and double-coding with adjudication enhanced credibility. Figure/table labels were translated to English to ensure clarity for international audiences. Ethical safeguards included comment anonymization, opt-out exclusions, and alignment with YouTube’s community guidelines; only publicly accessible content was analyzed, with sensitive identifiers removed.

2.8 Scope and limitations

The scope is limited to Indonesian mainstream media and selected YouTube channels within Aug 2024–Mar 2025. While offering cross-platform insights, the analysis does not explicitly model algorithmic ranking, emotional valence beyond polarity, or longer-term longitudinal dynamics. Netnography was observational (no direct interaction), and sentiment tools—despite manual checks—may

under-detect sarcasm/irony. Future work should extend the time window, incorporate algorithm-aware analytics, and compare with other platforms (Martin, 2021; Martinez-Rico et al., 2024).

In sum, the methodological framework integrates advanced quantitative techniques and interpretive qualitative methods to provide a holistic understanding of political issue diffusion in Indonesia’s hybrid media environment. Explicit theoretical anchoring (agenda-setting, framing, hybrid media systems) and the addition of a structured netnography protocol strengthen coherence. By systematically linking issue frequency, co-occurrence networks, framing strategies, and audience participation, the study establishes a rigorous foundation for analyzing the interplay of media platforms, political discourse, and public perception.

3 Results

We organize the findings according to the sequential explanatory design with clear transitions across subsections. First, we describe the dataset and collection period; second, we present quantitative results (STM, SNA, QAP/MRQAP, engagement/sentiment); third, we provide qualitative and CDA insights; finally, we integrate both strands.

3.1 Description of research data

The study collected data from mainstream online news outlets and political YouTube channels. From mainstream media, 1,696 articles were gathered (Kompas = 257; CNN Indonesia = 205; Detik = 249). In parallel, YouTube data were collected from Akbar Faisal, Bocor Halus, and Narasi, yielding 363 videos and ~ 2.69 million user comments. All scraping and survey fieldwork were conducted during August 2024–March 2025, enabling temporal comparability. The dataset was complemented by an online survey of 620 respondents from diverse demographic backgrounds.

The survey underscored the centrality of social media in contemporary political communication. Overall, 56.5% identified YouTube as their primary political news source and 71.5% reported exposure to AI-generated/manipulated content, reinforcing the need to examine cross-platform diffusion and misinformation risks in Indonesia’s hybrid media ecosystem (Casero-Ripollés, 2021; Moukarzel et al., 2021). These figures emphasize the urgent need for examining issue diffusion across digital and institutionalized media (Table 1).

3.2 Quantitative analysis

We first report topic prevalence (STM), then cross-platform distribution, followed by issue networks (SNA) and QAP/MRQAP tests, and conclude with engagement/sentiment. Each subsection begins with an orienting sentence to ensure smooth transitions.

3.2.1 Topic prevalence

Using STM, seven dominant issues were identified. The most salient topics include MBG, Danantara, and Prabowo. CNN Indonesia and Kompas framed MBG as social welfare, Detik emphasized Danantara within economic/investment frames, while YouTube

channels amplified humor-infused counter-narratives. All labels in Figure 1 are translated into English (Topic Distribution by Platform) (Soares and Recuero, 2021; Suarez-Lledo and Alvarez-Galvez, 2021).

3.2.2 Cross-platform distribution

Cross-platform comparison shows Detik concentrating on investment narratives; CNN Indonesia consistently emphasizing MBG; and Kompas showing a coverage spike in August 2024 on Danantara. Bocor Halus offered critical commentary, Akbar Faisal hosted long-form personalized discussions, and Narasi combined investigative approaches with alternative discourse. Figure 2 (Platform \times Topic Heatmap) now uses English scales and standardized platform names.

3.2.3 Network analysis of issues

SNA revealed 433 significant co-occurrence pairs among 27 issues. High-frequency issues—Danantara, Government, Prabowo, People, Program—served as hubs (highest degree). The network displayed density = 0.157 and clustering = 0.430, indicating modular communities. All node/edge labels were translated into English in Figure 3 (Issue Co-occurrence Network; Broadbent and Thompson, 2021; Tian et al., 2020).

3.2.4 QAP and MRQAP results

QAP showed a significant correlation ($r \approx 0.39$; $p < 0.001$) between co-occurrence and frequency similarity, while semantic similarity was not significant. MRQAP confirmed frequency as the strongest predictor ($\beta \approx 0.70$; $p \approx 0.01$). In our operationalization, “frequency similarity” is the correlation of issue-wise mention vectors; “semantic similarity” is derived from sentence-embedding averages per issue. These results underpin the Frequency-Driven Co-occurrence mechanism (Cinelli et al., 2020; Wang et al., 2022; Table 2).

3.2.5 YouTube engagement and sentiment analysis

Analysis of 363 videos revealed asymmetrical engagement: MBG ($n = 249$) \approx 38 k views/video; Danantara ($n = 114$) \approx 70 k views/video. Sentiment diverged: MBG = -0.018 (more negative); Danantara = $+0.011$ (slightly positive). Channel differences persisted (Bocor Halus: 35% negative; Akbar Faisal: 60% positive). Figures 4–6 have English captions and axes (Comment Volume, Sentiment Distribution, and Video Performance).

TABLE 1 Summary of research data by platform.

Source	Data type	Total
News Portals		
Kompas	Articles	257
CNN Indonesia	Articles	205
Detik	Articles	249
Subtotal-News Articles		1,696
YouTube (Akbar Faisal; Bocor Halus; Narasi)		
Channels (combined)	Videos	363
Channels (combined)	Comments	2,695,812
Survey	Respondents	620

Source: Author's compilation. Bold values indicate statistically significant results.

3.3 Qualitative analysis

We contextualize the quantitative patterns by examining thematic frames, audience participation, and discursive power relations; interpretations are informed by netnographic principles of observing naturally occurring interactions in social media communities (e.g., meaning co-construction, vernacular practices).

3.3.1 Thematic analysis

Thematic analysis revealed distinctive cross-platform framing. Detik framed Danantara through an economic-developmental lens (“investment opportunities,” “strategic projects”), consistent with legitimization via growth narratives (Larsen and Adu, 2021).

In contrast, Kompas and CNN Indonesia emphasized MBG as a social-welfare policy (education, nutrition). Coverage peaked around August 2024, consistent with agenda-setting effects in mainstream media. These narratives reflect the political economy of mainstream media, positioning government policies as tools for legitimizing state authority (Blevins and Lee, 2021).

YouTube channels introduced alternative, participatory discourses: Akbar Faisal foregrounded personal commentary, Bocor Halus deployed satire/critique, Narasi adopted an investigative style. This aligns with netnographic perspectives that online communities co-produce meaning through vernaculars, humor, and symbolic practices (see, Kozinets, 2020; Robles-Morales and Córdoba-Hernández, 2019).

3.3.2 Audience participation and sentiment

The participatory nature of YouTube discourse highlighted how audiences actively co-construct narratives via satire, critical humor, and personal storytelling, including the “elite project” counter-frame for Danantara. This is consistent with netnographic observations of naturally occurring interactions in social media communities (Kozinets, 2020).

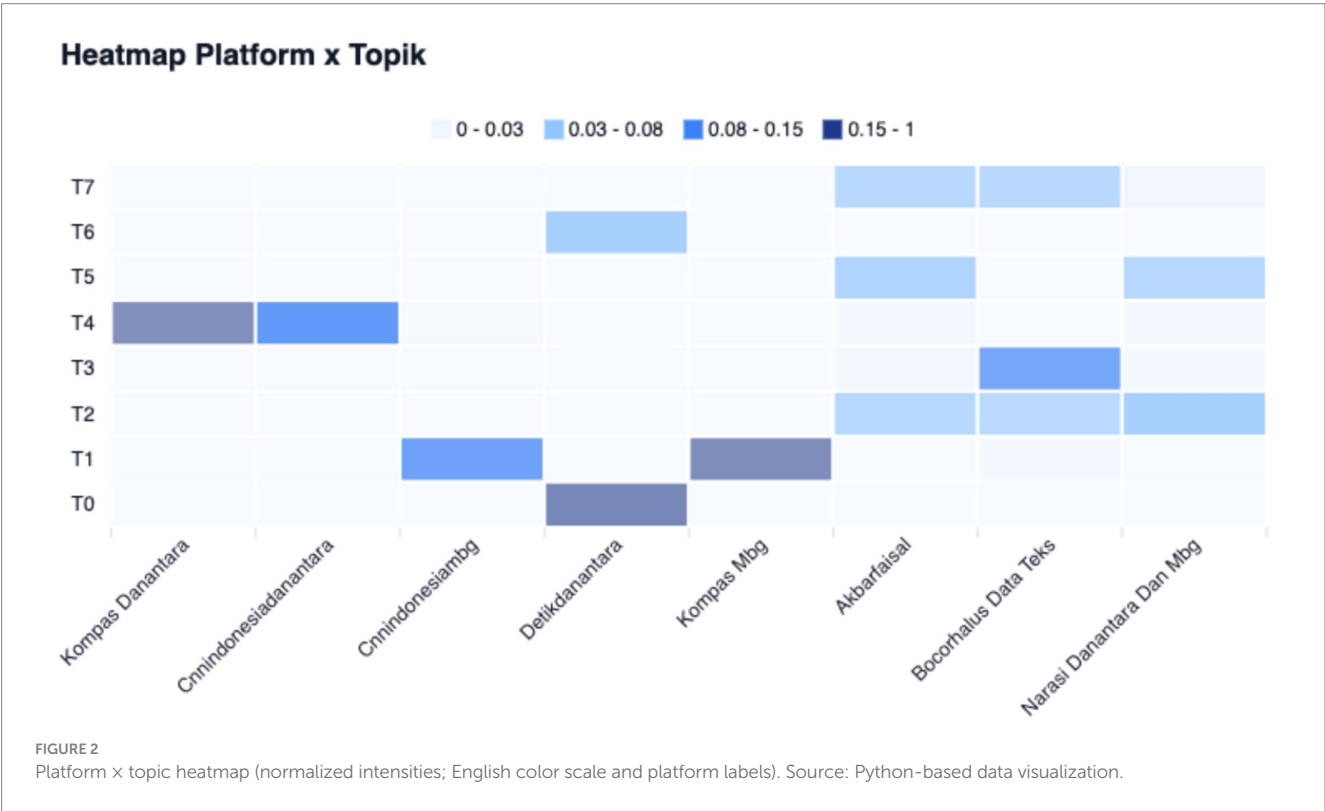
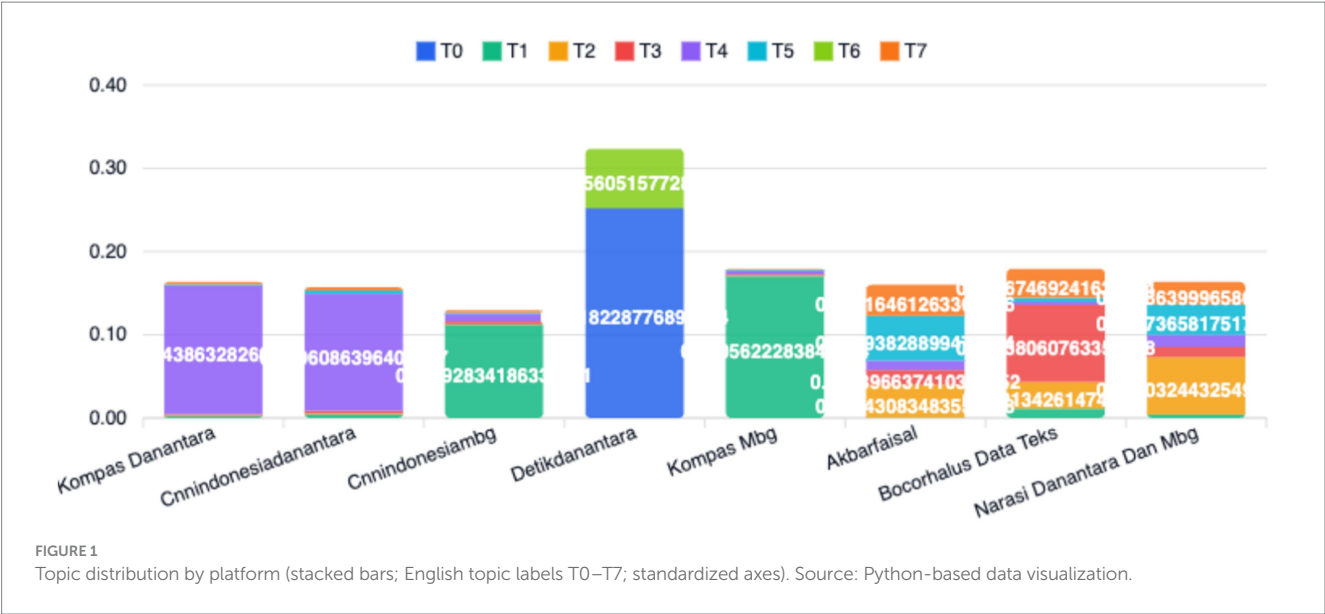
3.3.3 Critical discourse analysis (CDA)

Applying Van Dijk's framework, three discursive patterns emerged: (1) MBG as a “people's program” (welfare/equity topoi) in mainstream media; (2) Danantara as an “elite project” (satire/irony/corruption cues) on YouTube; (3) Prabowo as a personified hub bridging economic and political narratives (Setiawan et al., 2024).

These CDA findings corroborate the SNA hubs, confirming Prabowo, MBG, and Danantara as structural and discursive centers of the conversation. Figure 7 has English labels and a clarified legend. Moreover, the divergence in evaluative modalities between platforms underscores how discursive struggles over meaning shape public perceptions of legitimacy and accountability (Van Dijk, 2015).

3.4 Integration of quantitative and qualitative findings

To bridge the quantitative and qualitative strands, we show how frequency-driven co-occurrence produces structural salience and why framing/audience practices give it meaning. Quantitatively, frequency similarity significantly predicts co-occurrence; qualitatively, institutional frames and participatory counter-frames explain why high-frequency issues cluster around key figures (e.g., Prabowo), thereby extending agenda-setting and framing in a hybrid media context (Kozinets, 2020; Gao et al., 2023; Luo et al., 2021).



The integration yields the Frequency-Driven Co-occurrence model. Figure 8 (all labels translated into English) operationalizes: (1) nodes = issues/actors; (2) edges = co-mention strength; (3) frequency layer = normalized mentions by platform/time; (4) hubs = nodes exceeding network means on frequency and co-occurrence; (5) dashed feedback loop = repetition → higher centrality → greater exposure → further repetition. Participatory media (e.g., YouTube) reshape sentiment/reframing via vernacular practices observed netnographically, reinforcing or contesting institutional frames (cf. Kozinets, 2020; Gao et al., 2023; Luo et al., 2021).

3.4.1 Frequency indicators

The left legend encodes baseline incidence—high (red), medium (orange), low (blue)—that functions as a prior on visibility: frequently recurring topics are surfaced more often, attract producers, and enter amplification circuits; low-frequency topics face higher discovery thresholds.

3.4.2 Issue origin

The node captures heterogeneous sources (events, administration/legislation, movements/culture, macroeconomy,



TABLE 2 QAP and MRQAP results (English labels; two-tailed *p*-values; standardized coefficients).

Analysis	Predictor	Coefficient (Std.)	<i>p</i> -value (two-tailed)
QAP	Frequency similarity	0.391	< 0.001
QAP	Semantic similarity	0.072	0.112
MRQAP	Frequency similarity	0.699	0.012
MRQAP	Semantic similarity	−0.021	0.457

Source: Author's analysis. Frequency similarity = correlation of issue-wise mention vectors across platforms/time. Semantic similarity = sentence-embedding similarity averaged per issue. QAP reports matrix correlations; MRQAP reports standardized regression coefficients predicting issue co-occurrence. Bold values indicate statistically significant results.

and politics). At this pre-discursive stage, signals are unstructured; salience depends on recognition and initial interpretation within the information environment.

3.4.3 Content creation

Raw signals are transformed into communicable artifacts (news, analysis/opinion, multimedia, UGC). Framing, modality, timeliness, and evidence are constitutive choices that condition algorithmic ranking and audience uptake.

3.4.4 Platform distribution (hub)

The purple hub represents parallel, multi-channel routing (cross-posting, embedding, syndication) and recommender systems that

broker exposure at scale; it is the locus where feedback from engagement re-enters distribution decisions.

3.4.5 Channel nodes (Social Media, Traditional Media, News Portal, and YouTube)

Orange = institutional curation (editorial standards, stable audiences). Red = participatory networks (creator-led video, interpersonal sharing, engagement-tuned ranking). No single node is decisive, but cross-platform presence is consequential.

3.4.6 Co-occurrence detection and amplification

The green node detects temporal/topical co-presence (simultaneous mentions, synchronized spikes) and triggers amplification (trending lists, recommendation boosts, cross-media references, influencer relays, and echo-chambers). Detection is descriptive and performative—measuring attention while producing it.

3.4.7 Engagement metrics

Likes, shares, comments, reach quantify response and feed ranking/recommendation. They are both outcomes and inputs, increasing the probability of further distribution and closing the feedback loop.

3.4.8 Working mechanism (process logic)

Six stages: (1) issue emergence; (2) content rendering; (3) parallel distribution; (4) co-occurrence detection; (5) amplification via engagement-sensitive algorithms/social relays; (6) network



effects → viral spread. Arrows show information flow; dashed lines depict the feedback loop where engagement-driven exposure updates hub-level distribution decisions (boosts, re-promotion, and cross-posting).

3.4.9 Color semantics

Blue = origins; Orange = content processing & institutional news; Purple = distribution hub; Red = high-engagement environments & outcomes; Green = detection/boosting.

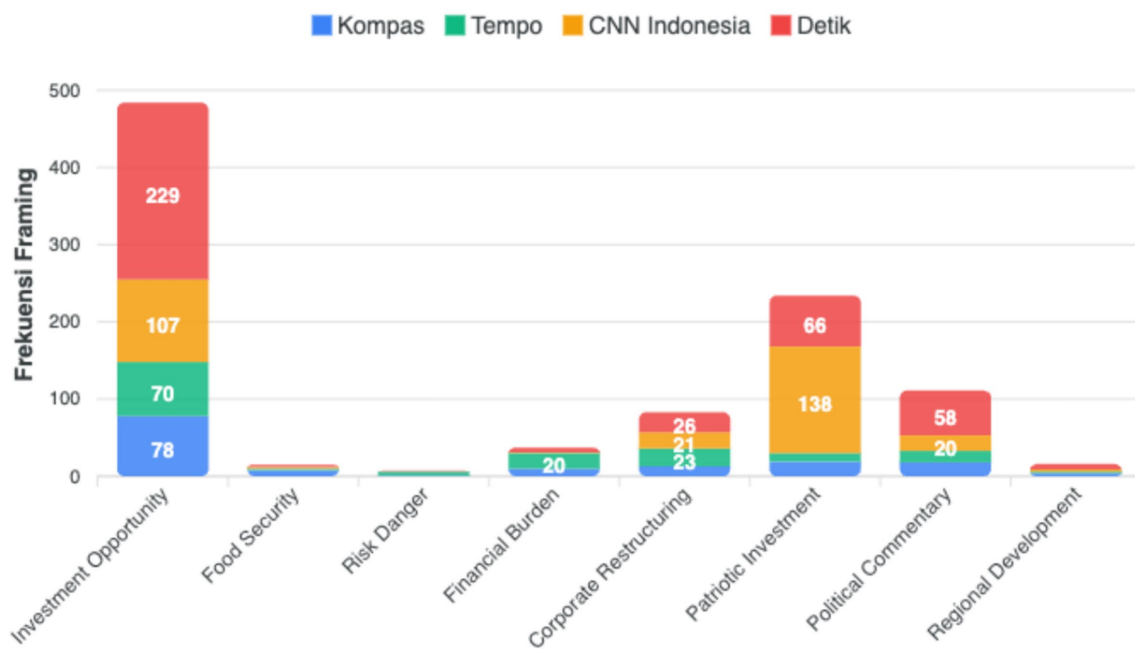


FIGURE 5

Distribution of thematic frames across platforms. Source: Author's thematic analysis by Python.

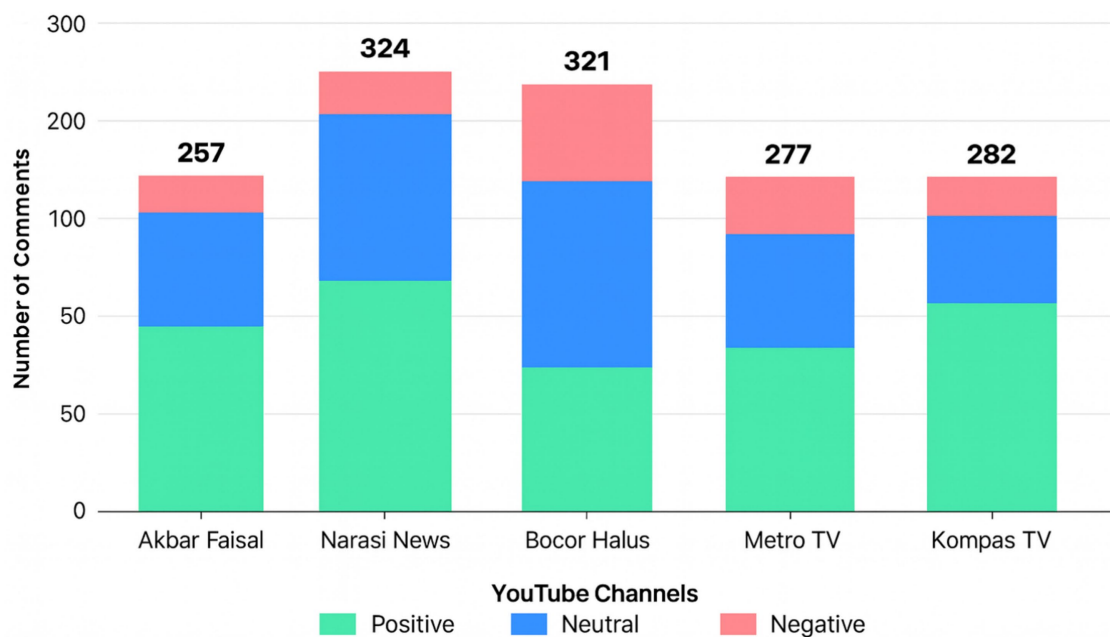


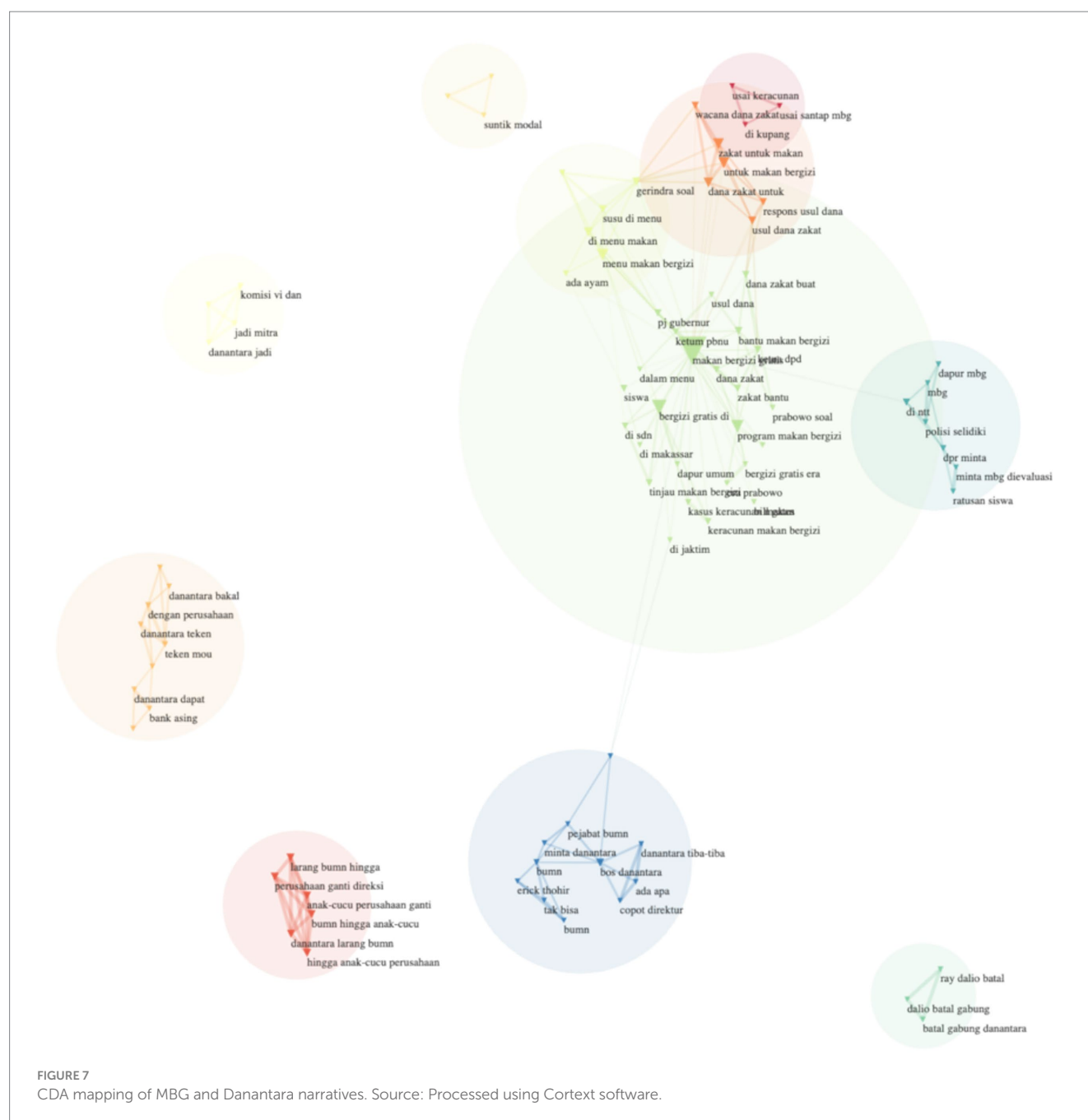
FIGURE 6

Sentiment distribution across YouTube political channels. Source: Author's netnographic Visualisasi by Python.

3.4.10 Interpretive payoff

(i) Visibility is frequency-dependent and platform-mediated; (ii) cross-platform co-occurrence cues algorithmic prioritization and public salience; (iii) engagement metrics convert audience reaction into a governing signal, creating path-dependent diffusion that can culminate in viral spread.

In sum, diffusion is primarily frequency-driven rather than semantics-driven in Indonesia's hybrid media system. Mainstream outlets privilege legitimizing frames, whereas YouTube facilitates satire/critique and participatory counter-narratives captured through netnographic observation (Kozinets, 2020). High-frequency issues (MBG, Danantara) and key figures (Prabowo) function as hubs that connect otherwise separate narratives.



4 Discussion

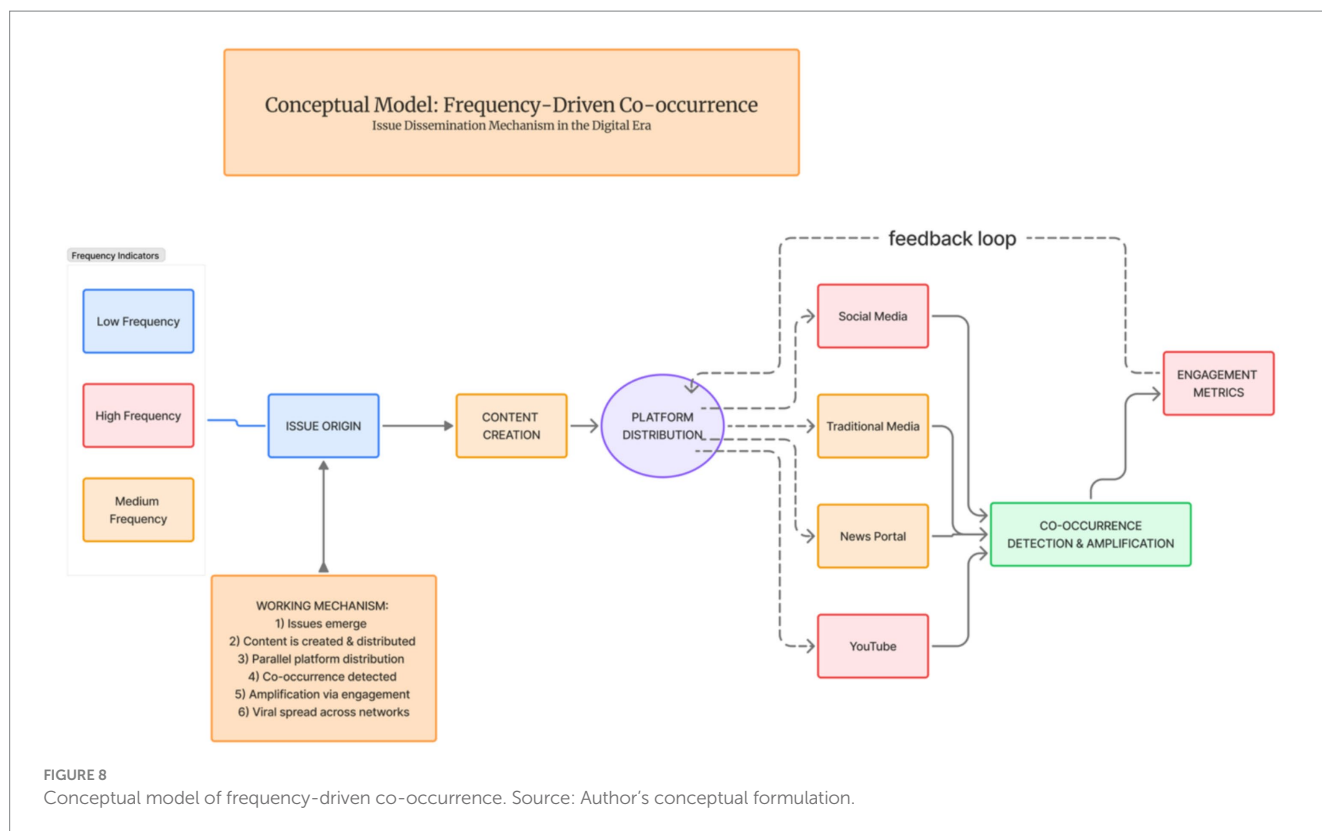
4.1 Issue frequency and the dynamics of political discourse

Our results show that mention frequency—not semantic proximity—is the primary engine of diffusion across platforms. Repetition elevates salience and visibility, creating feedback loops that mobilize engagement (e.g., MBG and Prabowo as hubs). By contrast, Danantara's lower repetition limits its hub status, consistent with evidence that infrequently reiterated issues struggle to gain traction (Otieno, 2024). These patterns extend classic agenda-setting logic by specifying that repeated cues, rather than thematic coherence alone, drive issue centrality in hybrid media systems (Brady et al., 2020; Geiß, 2022).

Strategically, communicators should prioritize sustained, cross-platform repetition of a small set of salient cues; consistent exposure strengthens issue centrality and perceived legitimacy (Conover et al., 2021). We therefore specify frequency-driven co-occurrence as the mechanism through which repetition not only raises salience but also binds issues into hubs that structure subsequent narratives.

4.2 Divergent framing across media platforms

We observe a clear split in framing. Mainstream outlets (e.g., Kompas, CNN Indonesia) embed MBG and



Danantara in social-welfare and economic-development frames that legitimize government action, emphasizing stability and policy delivery (Aljabri et al., 2021).

Conversely, participatory channels (e.g., Akbar Faisal, Bocor Halus) employ informal, satirical, and critical styles that invite audience co-production (Kaur et al., 2022; Wu et al., 2022). From a framing perspective, institutional media privilege legitimizing frames, whereas YouTube foregrounds counter-frames that question motives and implementation. This divergence clarifies where frequency effects operate: repeated cues circulate within distinct framing ecologies, producing different meanings despite shared topics; such vernacular practices are visible in netnographic observation (Kozinets, 2020).

4.3 The dual representation of Prabowo

Prabowo functions as a cross-platform hub. Mainstream outlets personify policy through him—linking proposals, coalitions, and authority—consistent with personification in political discourse (Van Dijk, 2015; Muhassin, 2021).

Participatory media, however, circulate skeptical and satirical counter-frames that foreground inconsistency and past controversies (Kadju and Gusfa, 2021). This duality shows that hubs gain salience via frequency but gain meaning via framing, advancing a hybrid-media account of legitimacy where institutional reinforcement coexists with participatory contestation.

4.4 Sentiment divergence and affective polarization

Sentiment patterns indicate affective polarization. Bocor Halus concentrates skeptical/negative tones, whereas Akbar Faisal hosts more supportive comments. Emotionally charged user-generated discourse heightens partisan divides and fosters distrust (Wilson et al., 2020; Boxell et al., 2024).

User-generated content and selective exposure reinforce these affective splits: as audiences cluster into like-minded communities, echo-chamber dynamics entrench identities and discount opposing views (Maulana and Situngkir, 2021; Kolczyński and Norström, 2022; Kubin and Sikorski, 2021). YouTube's participatory affordances magnify these processes during contentious moments.

4.5 Toward a frequency-driven co-occurrence model

We formalize a model in which repetition increases the probability that issues co-appear, creating hubs that organize discourse. Frequency not only elevates issues (e.g., MBG, Prabowo) but also conditions downstream sentiment by repeatedly exposing audiences to aligned frames—thereby reinforcing biases and, at times, polarization (Cheng et al., 2021; Tak et al., 2024).

Integrating network structure (co-occurrence) with framing, the model extends agenda-setting by specifying how repetition converts to network centrality and why frames travel: hubs arise where frequency is high, and frames attached to those hubs diffuse more easily across connected communities. Practically, communicators

should pair clear frames with sustained, cross-platform repetition to gain durable centrality (Meriläinen, 2022; Zhao et al., 2024).

4.6 Theoretical and practical implications

Theoretically, we advance agenda-setting and framing by locating frequency as a first-order mechanism that generates hubs and channels frame travel in hybrid media. Our contribution links SNA (hub dynamics) to CDA (interpretive frames), clarifying when repetition becomes communicative power. Practically, strategies should combine concise frames with repeated exposure and early monitoring of counter-frames in participatory arenas. Emotional and moral appeals can amplify reach, but they must be calibrated to avoid backlash (Brady et al., 2020; Wu et al., 2022).

Limitations and future directions. Our model does not explicitly parameterize algorithmic ranking, emotion trajectories over time, or long-run temporal cycles; these likely moderate frequency effects and warrant longitudinal, cross-platform analyses. Overall, Indonesian political discourse appears driven less by semantic closeness than by repeated cues, divergent framing ecologies, and affective engagement—insights that inform both theory and practice.

5 Conclusion

This article makes three core contributions: (1) it provides empirical evidence that mention frequency—rather than semantic similarity—drives cross-platform diffusion; (2) it introduces the Frequency-Driven Co-occurrence model to explain how repetition creates hubs that organize discourse; and (3) it clarifies the dual role of institutional and participatory media in shaping legitimacy and polarization. In Indonesia's hybrid media system, high-frequency issues (e.g., MBG, Danantara) and salient figures (e.g., Prabowo) become hubs whose repeated co-mentions elevate centrality, while mainstream outlets privilege social-economic legitimacy frames and YouTube channels amplify critique and satire that intensify engagement.

Theoretically, the model refines agenda-setting and framing by identifying frequency as a first-order mechanism that builds hubs and channels frame travel across connected communities. Practically, the results support transparent messaging, partnerships with credible creators, and early detection of narrative shifts via integrated monitoring (including engagement and co-occurrence dashboards). Future work should extend longitudinally and cross-nationally, and directly test algorithmic influences (e.g., ranking, recommendation) on frequency-driven diffusion. Collectively, these advances strengthen both theory and practice in digital political communication.

5.1 Limitations and future directions

This study is bounded by its time window, purposive platform selection (news portals and selected YouTube channels), and reliance on observational data; algorithmic processes and emotion dynamics are not explicitly modeled. Subsequent research should integrate longer time series, additional platforms, and design-sensitive methods (e.g., algorithm audits, experiments, and mixed-method netnography) to assess how frequency interacts with recommendation systems and audience segmentation.

Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

Ethics statement

Ethical approval was not required for the study involving human data in accordance with the local legislation and institutional requirements. Written informed consent was not required, for either participation in the study or for the publication of potentially/indirectly identifying information, in accordance with the local legislation and institutional requirements. The social media data was accessed and analyzed in accordance with the platform's terms of use and all relevant institutional/national regulations.

Author contributions

HF: Conceptualization, Formal analysis, Investigation, Methodology, Validation, Writing – original draft, Writing – review & editing. RR: Data curation, Formal analysis, Investigation, Software, Validation, Visualization, Writing – review & editing. HH: Data curation, Formal analysis, Funding acquisition, Resources, Supervision, Validation, Writing – review & editing. LM: Formal analysis, Funding acquisition, Project administration, Resources, Visualization, Investigation, Writing – review & editing. ZZ: Investigation, Supervision, Validation, Visualization, Writing – review & editing.

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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