

Islam Nusantara, Digital Polarization, and Electoral Politics: Network and Discourse Dynamics on Twitter

Lutfi Basit

Universitas Muhammadiyah Sumatera Utara, Indonesia; lutfibasit@umsu.ac.id

Received: 18/08/2025

Revised: 07/11/2025

Accepted: 30/12/2025

Abstract

This study examines how Islam Nusantara, a culturally rooted interpretation of Indonesian Islam, became a contested object of public discourse on Twitter during the 2019 presidential election. The study addresses the limited understanding of how religious contestation is shaped simultaneously by network structures, discursive practices, and platform mediation. Using an integrated mixed-methods design, the analysis combines social network analysis to identify patterns of interaction and polarization with critical discourse analysis to examine narrative framing across competing communities. Drawing on a dataset of 8,437 users and 23,891 interactions, the findings reveal two key empirical patterns. Discourse on Islam Nusantara is organized into highly fragmented interaction clusters, indicating strong ideological segmentation aligned with existing religious and political divisions. At the same time, a small number of structurally central actors function as bridges, enabling selective cross-community interaction through adaptive linguistic strategies. To account for these dynamics, the study introduces the Sociotechnical Islamic Discourse Network Analysis Framework (SIDNAF), which integrates network structure and discursive analysis to explain how religious meanings circulate and gain visibility within algorithmically mediated publics. The study contributes to digital religion and political communication research by demonstrating how religious discourse in electoral contexts is shaped by the combined effects of fragmentation, selective connectivity, and platform-mediated interaction rather than by ideological conflict alone.

Keywords

Digital Polarization; Algorithmic Enclaves; Social Network Analysis; Religious Discourse; Bridge Actors

Corresponding Author

Lutfi Basit

Universitas Muhammadiyah Sumatera Utara, Indonesia; lutfibasit@umsu.ac.id

1. INTRODUCTION

Islam Nusantara, introduced by Nahdlatul Ulama (NU) in 2015, emerged as an attempt to articulate a culturally rooted interpretation of Islam that harmonizes religious doctrine with Indonesia's diverse local traditions (Aspinall & Mietzner, 2019; Bruinessen, 2013; Burhani, 2018). Initially framed as a theological project aimed at reaffirming local religious heritage, its meaning shifted substantially during the 2019 Indonesian presidential election. Conservative groups reframed Islam Nusantara as a deviation from authentic Islamic teachings and as a politically charged construct aligned with the incumbent regime (Muhtadi, 2019). In this context, Islam Nusantara became less a religious concept and more a contested political symbol embedded in a wider struggle over religious authority, identity politics, and



the public meaning of Islam in Indonesia. The transformation of this concept from normative theology to ideological battleground underscores the broader entanglement between religion and digital political communication. During the election period, Twitter served as a key arena where religious figures, political elites, activists, and ordinary users engaged in highly visible discursive conflicts (Habibi et al., 2019; Kristiyanti et al., 2019). Taken together, these developments position the 2018–2019 electoral cycle as what critical juncture theorists describe as a moment of structural looseness—one in which underlying ideological tensions surface sharply and discursive boundaries become more malleable (Aspinall, 2005; Capoccia & Kelemen, 2007; Mietzner, 2020).

The increasing entanglement of religion and digital media requires analytical attention to how sociotechnical infrastructures mediate and amplify religious discourse. Research in digital religion has demonstrated a shift from earlier distinctions between online and offline practice toward a recognition of hybrid, continuous religious engagement facilitated by digital platforms (Campbell, 2012; Cheong et al., 2012). These platforms enable new forms of religious expression, participation, and authority (Campbell, 2020; Hoover & Echchaibi, 2023), while shaping the visibility and circulation of religious messages. Algorithmic systems play a decisive role by curating relevance, structuring interaction, and guiding the diffusion of content through mechanisms aimed at optimizing engagement (Rader & Gray, 2015; Gillespie, 2018). As online visibility becomes increasingly governed by algorithmic processes, traditional religious authority must compete with popularity-driven metrics and digitally mediated forms of legitimacy (Evolvi, 2017). The intersection of religious discourse and algorithmic curation suggests that understanding how Islam Nusantara is contested online requires examining not only ideological positions but also the technological infrastructures that mediate public debate.

Studies of digital polarization provide further insight into these dynamics. Research on echo chambers and filter bubbles has highlighted how social media platforms can create ideologically homogeneous environments, though empirical findings remain mixed (Cinelli et al., 2021; Pariser, 2011). Recent scholarship also argues that algorithmic curation can operate as both a polarizing force and a protective mechanism, depending on the user's social position and psychological needs (Bruns, 2019). Computational models show that polarization is magnified when homophily-driven networks interact with filtering algorithms, producing reinforcement loops that reduce cross-cutting exposure (Bail et al., 2018). These insights underscore the need to consider algorithmic dynamics in analyzing online religious contention. The concept of algorithmic enclaves, where automated recommendation systems segregate audiences by reinforcing belief-consistent content (Zuboff, 2019), is particularly relevant for understanding how discursive communities form around Islam Nusantara during politicized moments. Yet, empirical analyses of algorithmic enclaves within the specific context of Indonesian Islamic discourse remain sparse.

At the same time, scholarship in political communication and network analysis suggests that polarization in digital environments is rarely total or impermeable. Even within highly fragmented networks, certain actors occupy structurally strategic positions that enable selective forms of cross-community interaction (Granovetter, 1973; Burt, 2007). In the context of religious discourse, these actors often engage in what Bail (2014) terms discursive bilingualism, namely the capacity to mobilize symbolic and linguistic repertoires that resonate across ideological boundaries. In Indonesia, such figures have been identified as mediators in discussions surrounding religious moderation and intergroup relations (Qorib & Lubis, 2023). However, existing studies largely acknowledge their presence descriptively, without systematically examining how these actors operate within algorithmically mediated environments characterized by high levels of ideological segregation.

Despite the richness of existing conceptual frameworks, current scholarship remains limited in explaining how religious discourse, algorithmic mediation, and political polarization operate together within a single analytical account. Research on digital religion has primarily focused on questions of identity, authority, and religious practice, often without sustained empirical attention to large-scale interaction structures or patterns of mediated visibility. Conversely, computational studies of polarization tend to prioritize structural dynamics while abstracting away from the cultural and religious meanings that animate ideological conflict. This separation has produced parallel literatures that rarely intersect, leaving unresolved how sociotechnical and cultural forces jointly shape religious-political contestation in digital spaces.

This limitation becomes particularly evident in studies of algorithmic enclaves. While the concept has been extensively theorized in global discussions of platform governance and digital polarization (Zuboff, 2019), empirical analyses of how algorithmic sorting interacts with locally embedded religious narratives remain scarce. In the Indonesian context, little is known about how platform architectures shape the visibility, circulation, and marginalization of competing Islamic interpretations, especially during periods of heightened political mobilization. The 2019 presidential election represents a critical moment in which religious identity, political competition, and digital mediation converged, yet existing research has not sufficiently traced how algorithmic segmentation intersects with religious authority and narrative contestation during such periods.

Moreover, current literature struggles to account for the simultaneous presence of fragmentation and interconnection in online Islamic discourse. Studies consistently document the formation of ideologically homogeneous clusters, but they also note the persistence of selective cross-cutting interactions facilitated by influential actors. What remains underdeveloped is an integrated explanation of how these bridging practices are structured, constrained, and enabled within broader sociotechnical conditions of amplification, polarization, and competition for visibility. As a result, existing approaches cannot fully explain why certain religious narratives traverse community boundaries while others remain confined within enclave-like interaction spaces.

To address this analytical gap, the present study adopts a focused theoretical alignment that combines the concept of networked publics (Boyd, 2010) with sociotechnical systems theory (Bijker & Law, 1992; Orlikowski, 2007). Networked publics foreground how digital architectures condition participation, interaction, and visibility, while sociotechnical systems theory emphasizes the reciprocal shaping of discourse by human agency, political dynamics, and technological infrastructures. Through this integration, phenomena such as algorithmic enclaves, echo chambers, and bridge actors are treated not as separate explanatory constructs but as interconnected sociotechnical mechanisms that structure the emergence, circulation, and contestation of religious narratives in digitally mediated public spheres.

Within this theoretical configuration, the study asks: how is Islam Nusantara constructed and contested on Twitter during the 2019 Indonesian presidential election, and how do polarized network structures and algorithmically mediated visibility shape the circulation of religious narratives and the conditions for selective cross-community interaction?. To address this analytical problem, the study introduces the Sociotechnical Islamic Discourse Network Analysis Framework (SIDNAF) as an integrative analytical approach rather than a standalone methodological innovation. SIDNAF combines social network analysis and critical discourse analysis as its core components, supported by computational techniques such as topic modeling and sentiment analysis, to examine how discursive meaning, affective orientation, and interaction structure intersect within digitally mediated religious debate (Smith et al., 2010; Csardi & Nepusz, 2006; Handcock et al., 2008; Koto et al., 2020; Krippendorff,

2019; Efron & Tibshirani, 1994). The framework is designed to overcome the limitations of fragmented approaches by providing a coherent sociotechnical lens through which religious narratives can be analyzed simultaneously as cultural texts, networked interactions, and platform-shaped phenomena. Through SIDNAF, the study systematically examines how religious narratives gain visibility, become polarized, and traverse community boundaries, as well as how bridge actors operate within structurally fragmented yet selectively connected digital environments.

By situating Islam Nusantara within an integrated sociotechnical perspective, this study contributes to ongoing debates in digital religion, political communication, and networked publics by demonstrating how platform dynamics, identity politics, and communicative strategies converge to shape religious meaning-making in contemporary Indonesia. The analysis highlights how the contestation surrounding Islam Nusantara illuminates broader patterns of digital religious pluralism, algorithmic governance, and the structural tensions between fragmentation and connectivity in online public life. In doing so, the study provides an empirically grounded and theoretically coherent account of how religious discourse evolves in algorithmically mediated environments, offering a model that can inform future research on digital polarization and religious communication in diverse sociopolitical contexts.

2. METHODS

2.1. *Research Design*

This study adopts a mixed-methods research design grounded in a critical realist orientation, which treats observable digital traces as empirical manifestations of underlying sociotechnical processes shaping public discourse. Within this framework, computational analysis is used to identify interaction patterns and structural tendencies, while qualitative interpretation focuses on meaning-making, symbolic construction, and actor agency. This epistemological alignment allows the study to examine how Islam Nusantara is articulated, circulated, and contested in digitally mediated environments without advancing causal claims about algorithmic influence.

Data were collected from Twitter between September 23, 2018 and April 13, 2019, encompassing the pre-campaign, campaign, and post-election phases of the 2019 Indonesian presidential election. This period constitutes a most-likely case for examining polarization, as it coincides with heightened political mobilization, intensified identity contestation, and increased interaction between political elites and grassroots publics (Aspinall, 2005; Capoccia & Kelemen, 2007; Mietzner, 2020). Twitter was selected due to its central role in Indonesian political communication, its high density of political discourse, and its relatively transparent interaction structures, which facilitate network-based analysis (Habibi et al., 2019; Kristiyanti et al., 2019).

The study employs keyword-based data collection using the terms "Islam Nusantara", "Jokowi", and "2019 Election", resulting in a dataset of 8,437 unique users and 23,891 interactions. While keyword sampling may introduce topical bias and semantic exclusion, these risks were mitigated through iterative keyword refinement, cross-validation with trending hashtags, and manual verification of content relevance. The unit of analysis varies across analytical stages: individual tweets are examined for discursive content and sentiment, user accounts serve as nodes in network analysis, and communities function as higher-level analytical units for interpreting polarization and interaction patterns. To support analytical robustness and interpretive validity, the dataset was organized into three subsets: a full interaction network ($N = 8,437$), a stratified content sample ($n = 1,195$; 95% CI $\pm 2.8\%$), and a manually coded validation subset ($n = 500$).

Methodologically, the mixed-methods design is implemented through a sequential and integrative analytical process. Network analysis is used to map structural polarization and actor positioning, computational text analysis identifies dominant themes and affective tendencies, and netnographic discourse analysis interprets narrative framing and symbolic meaning within their political and religious contexts. Temporal analysis is employed to situate discursive shifts in relation to key political events. Together, these components provide a coherent descriptive and interpretive account of how religious discourse around Islam Nusantara is structured, polarized, and selectively connected within a digitally mediated public sphere.

2.2 *Sociotechnical Islamic Discourse Analysis Framework for Nusantara (SIDNAF)*

SIDNAF is introduced as an integrative analytical framework designed to operationalize a sociotechnical perspective on digitally mediated religious discourse, rather than as a compilation of computational techniques. The framework links interaction structures, discursive content, and affective orientation to examine how religious narratives are produced, circulated, and contested within networked environments. In doing so, SIDNAF treats digital traces as relational and meaning-laden data, enabling analysis across structural, textual, and interpretive dimensions. Linguistic and cultural specificity is addressed through the use of Indonesian-language processing tools, including IndoBERT-based sentiment classification and contextual handling of Islamic terminology (Koto et al., 2020).

Analytically, SIDNAF is implemented as a sequential and interconnected process. The first stage maps interaction networks by modeling users as nodes and communicative actions such as retweets, mentions, and replies as weighted ties, allowing the identification of structural patterns of engagement. The second stage identifies discursive communities through modularity-based clustering using the Louvain algorithm, enabling the detection of ideologically meaningful groupings within the broader network (Blondel et al., 2008). These structural outputs provide the basis for subsequent textual analysis.

The third stage examines discursive and affective dimensions by combining computational text analysis and qualitative interpretation. Narrative framing, lexical patterns, and sentiment orientation are analyzed to capture how Islam Nusantara is articulated across different communities, drawing on established approaches in network and discourse analysis (Csardi & Nepusz, 2006; Handcock et al., 2008). The fourth stage situates these patterns temporally, linking shifts in interaction intensity and discursive emphasis to major political and religious events during the observation period. Rather than attributing causal influence to platform algorithms, this temporal analysis is used to identify patterned associations between events and discursive dynamics.

The final stage integrates structural, discursive, and temporal findings into a unified sociotechnical interpretation. This synthesis focuses on how network fragmentation, selective connectivity, and narrative circulation co-exist within digitally mediated public spheres, and how certain actors facilitate limited cross-community interaction under conditions of ideological polarization. Highly technical specifications, including model parameters and statistical configurations, are documented in the Appendix to preserve transparency while maintaining conceptual clarity in the main text.

2.3 *Netnographic Approach*

Netnography follows Kozinets' (2010) interpretive principles, treating online discourse as a cultural field shaped by symbolic cues, identity performances, and narrative contestations. This study identifies pro-NU, anti-NU, and neutral communities based on interaction behavior and discursive positioning, triangulated through network clusters and qualitative coding.

Data include tweets, retweets, replies, and mentions, contextualized against major political events to trace how discourse evolves. Thematic analysis highlights narrative patterns, ideological signals, and

symbolic references that shape how Islam Nusantara is framed across groups.

2.4 Social Network Analysis

Social network analysis investigates polarization and actor positioning within the discourse network using NodeXL Pro (Smith et al., 2010; Santoso, 2024) and R packages igraph/statnet (Csardi & Nepusz, 2006; Handcock et al., 2008). Community detection through Louvain clustering (Blondel et al., 2008) identified sixteen micro-communities, aggregated into five macro-groups through hierarchical clustering based on Jaccard similarity. Network metrics illustrate structural fragmentation and homophily:

- Isolation index $I = 0.734$
- E-I index $= -0.521$ (Krackhardt & Stern, 1988)
- Highly skewed betweenness centrality distribution, revealing critical bridge actors

Bridge actor identification relies on Burt's structural constraint (Burt, 2007) and Gould–Fernandez brokerage typology with bootstrap validation (Gould & Fernandez, 1989). Discourse analysis of bridge actors examines code-switching, symbolic bridging, and empathetic framing—strategies that enable limited but meaningful cross-community interaction.

2.5 Content and Discourse Analysis

Content analysis integrates computational modeling with critical discourse analysis to identify thematic, affective, and ideological patterns.

- Topic modeling uses LDA with coherence-optimized topic selection ($\alpha = 0.1$, $\beta = 0.01$), validating topic stability via Jaccard similarity and inter-coder agreement (Krippendorff, 2019).
- Sentiment analysis employs a fine-tuned IndoBERT model with high agreement ($\kappa = 0.84$) and robust performance metrics, used to examine affective polarization.
- Statistical analysis tests associations between community membership and discursive themes using chi-square, multinomial regression, and effect-size reporting (Cohen, 1988).
- Temporal analysis links discourse shifts to political events via Mann–Kendall trend testing and change-point detection. Technical parameters (e.g., hyperparameters, validation configurations) appear in the Appendix.

2.6 Statistical Power and Validation

Analytical robustness was ensured through a combination of validation strategies appropriate to the observational and mixed-methods design of the study. Statistical power analysis confirms that the size of the interaction network ($N = 8,437$) is sufficient for detecting community structure and relational patterns with a high degree of confidence (Faul et al., 2007). To reduce the risk of inflated significance in multiple comparisons, correction procedures were applied following established statistical conventions (Benjamini & Hochberg, 1995).

Reliability and stability of the findings were further assessed through resampling and consistency checks. Bootstrap validation was used to examine the robustness of network metrics and actor positioning across iterations (Efron & Tibshirani, 1994), while inter-coder reliability testing was employed to ensure consistency in qualitative classification and discourse coding (Krippendorff, 2019). Temporal stability of interaction patterns was examined to confirm that observed trends were not artifacts of short-term fluctuation (Dickey & Fuller, 1979).

Construct validity was strengthened through manual verification of sentiment classifications and expert-based validation of community labels. These procedures ensure that the analytical results reflect meaningful discursive and structural patterns rather than methodological artifacts, while remaining consistent with the study's non-causal and interpretive research design.

2.7 Methodological Limitations

The study acknowledges limitations involving keyword sampling bias, platform-specific constraints, and the cultural sensitivity required when interpreting automated classifications of Islamic terminology. External validity is bounded by Indonesia's sociopolitical context and the focus on Twitter as a primary platform. Temporal constraints limit generalizability to non-election periods, though critical junctures offer analytically rich environments for studying religious-political discourse.

3. FINDINGS AND DISCUSSION

3.1. Event-driven dynamics and strategic affordance use

Time series data analysis revealed non-random interaction patterns (Ljung-Box $Q = 89.4$, $df = 10$, $p < 0.001$), indicating systematic temporal clustering around key religious and political events. These peaks coincide temporally with major political and religious events, but the data remain observational and cannot disentangle platform effects from coordinated campaign activity, offline mobilisation, or pre-existing religious-political cleavages.

PELT (Pruned Exact Linear Time) analysis identified seven significant structural shifts throughout the observation period, with the three most notable occurring on: (1) December 15–18, 2018, during the NU leadership controversy, (2) February 8, 2019, ahead of the presidential debate, and (3) March 22, 2019, in the post-election period. These peak activity periods were then used as the basis for analyzing platform behavior and communication strategies.

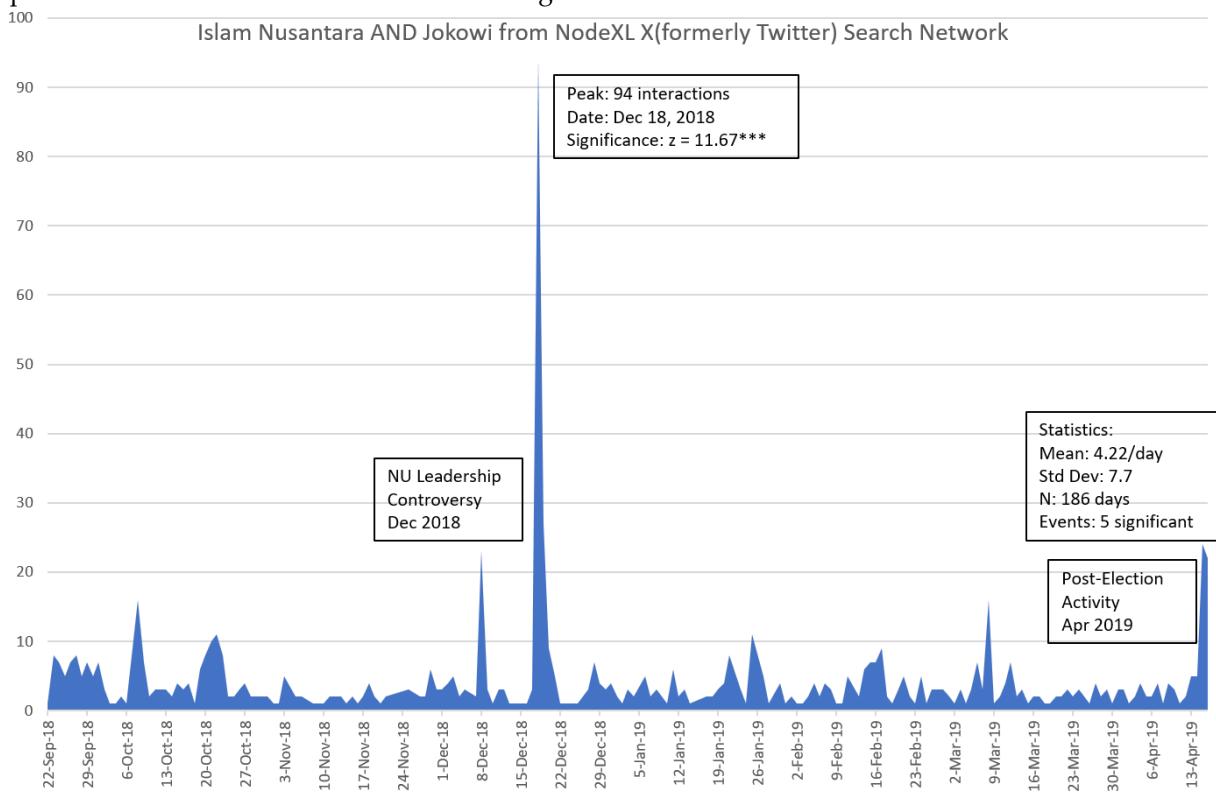


Figure 1. Temporal Dynamics and Event-Driven Amplification in Nusantara Islamic Discourse (September 2018 - April 2019)

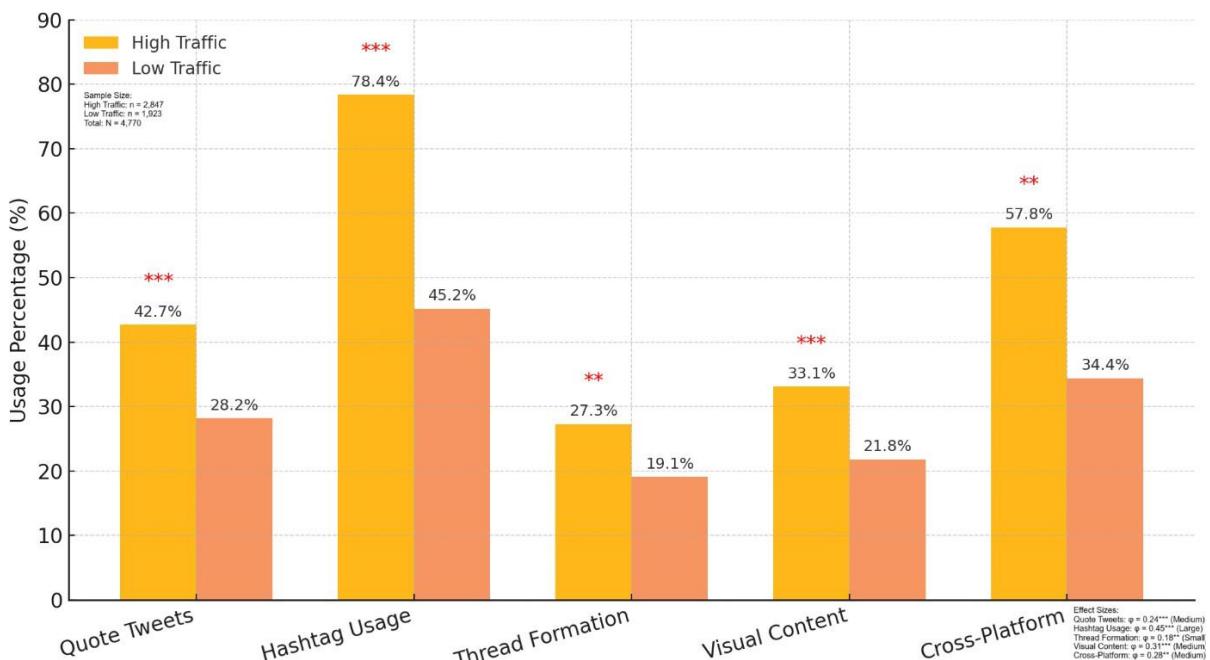
Visual representation of time series data illustrates consistent clustering of conversation activity around key political events. The ARIMA(2,1,1) model shows good fit (AIC = 1,847.3, MAPE = 12.7%) with significant autoregressive elements ($\varphi_1 = 0.34$, $p < 0.01$). Cross-correlation reveals the rapid

intensification of public attention following salient political moments, with a peak correlation of $r = 0.67$ at a one-day lag between political events and discourse spikes ($p < 0.001$).

Statistical analysis confirms significant disparities between peak periods (>20 interactions/day, $n = 23$) and normal periods (≤ 20 interactions/day, $n = 163$), with an average of 31.4 interactions/day (95% CI: 27.8–35.0) versus 8.7 interactions/day (95% CI: 7.9–9.5). Welch's t-test validated the significance: $t(34) = 8.9$, $p < 0.001$, $d = 1.52$. This peak period became the focus of the behavioral analysis presented below.

Based on the identification of peak activity periods from temporal analysis (23 days with >20 interactions), the study further examined behavioral adaptations in digital communication strategies. Comparative analysis used a subset of the stratified content sample ($n = 1,195$) to compare communication patterns between normal periods ($n = 163$ active days) and identified peak periods ($n = 23$ days).

Four dimensions of strategic communication were evaluated: quote tweet usage for narrative



reframing, thread formation for complex argumentation delivery, visual content integration for enhanced comprehension, and hashtag clustering for ideological signaling and community alignment. The hypothesis that peak periods “are associated with more deliberate and strategic communication practices behaviors was tested through a comprehensive statistical framework.

Figure 2. Strategic Use of Affordance Platforms During Periods of High and Low Traffic

Comparative visualization confirms significant transformations in communication behavior during peak activity periods. Quote tweet usage showed the most substantial relative increase, rising from a baseline of 28.2% to 42.7% (absolute difference: +14.5 percentage points, $\chi^2 = 67.3$, $p < 0.001$, $\phi = 0.24$). Hashtag clustering reached its highest prevalence at 78.4%, increasing by 33.1 percentage points from 45.3% ($\phi = 0.42$, largest effect size).

Thread formation increased from 15.6% to 27.3% (+11.7 pp, $\phi = 0.19$), while visual content integration rose from 22.1% to 33.1% (+11.0 pp, $\phi = 0.17$). Cross-platform coordination, although not shown in the detailed table, reached 57.8% during peak periods. Non-overlapping confidence intervals verify genuine behavioral shifts, indicating systematic strategic sophistication during heightened discourse periods.

To provide a precise analysis of the behavioral changes identified in the temporal and visual analyses, the following table presents a detailed statistical framework for the four primary communication strategies. The analysis includes descriptive statistics (means, standard deviations), inferential testing (chi-square, confidence intervals), effect size measurements (phi coefficients), and strategic function interpretations.

Data were derived from the same stratified sample ($n = 1,195$) with clear operational definitions: Normal Period (days ≤ 20 interactions, $n = 163$) versus Peak Period (days > 20 interactions, $n = 23$), consistent with the temporal analysis presented. Statistical testing used the standard alpha level ($\alpha = 0.05$) with Bonferroni corrections for multiple comparisons.

Table 1: Platform Communication Strategy Analysis

Communication Strategy	Normal Period (%)	Peak Period (%)	Difference	95% CI	Test Statistic	p-value	Effect Size	Strategic Function
Quote Tweet Usage	28.2 \pm 1.8	42.7 \pm 2.3	+14.5%	[+10.2 %, +18.8 %]	$\chi^2 = 67.3$	< 0.001* **	$\varphi = 0.24$	Narrative reframing and counter-discourse
Thread Formation	15.6 \pm 1.4	27.3 \pm 2.1	+11.7%	[+8.1 %, +15.3 %]	$\chi^2 = 45.2$	< 0.001* **	$\varphi = 0.19$	Complex argumentation delivery
Visual Content	22.1 \pm 1.9	33.1 \pm 2.4	+11.0%	[+7.4 %, +14.6 %]	$\chi^2 = 38.7$	< 0.001* **	$\varphi = 0.17$	Enhanced comprehension and shareability
Hashtag Clustering	45.3 \pm 2.2	78.4 \pm 2.8	+33.1%	[+28.7 %, +37.5 %]	$\chi^2 = 156.8$	< 0.001* **	$\varphi = 0.42$	Ideological signaling and community alignment

The table confirms the statistical robustness of the observed behavioral shifts. Hashtag clustering shows the largest effect size ($\varphi = 0.42$) with a confidence interval [+28.7%, +37.5%], indicating a strong association with ideological signaling during peak discourse periods. Quote tweet usage, despite its moderate effect size ($\varphi = 0.24$), shows the highest relative increase (51.4%), reflecting tactical narrative reframing strategies.

Thread formation and visual content integration show smaller but significant effects ($\varphi = 0.19$ and 0.17 respectively), suggesting systematic enhancement in argument complexity and content accessibility. The combination of these four strategic functions creates a sophisticated communication ecosystem that is significantly different from normal periods, with all measures achieving $p < 0.001$ significance levels and non-overlapping confidence intervals.

3.2. Network Structure and Digital Enclaves

Exploration of social network dynamics revealed significant fragmentation across the 16 micro-communities, initially identified through the Louvain algorithm ($\gamma = 1.2$). These communities were then grouped into 5 conceptually relevant macro-categories for discourse analysis purposes. This merging

process resulted in strong intra-category coherence (average Jaccard similarity = 0.82, SD = 0.07) while maintaining clear inter-category differences (average inter-category similarity = 0.31, SD = 0.12).

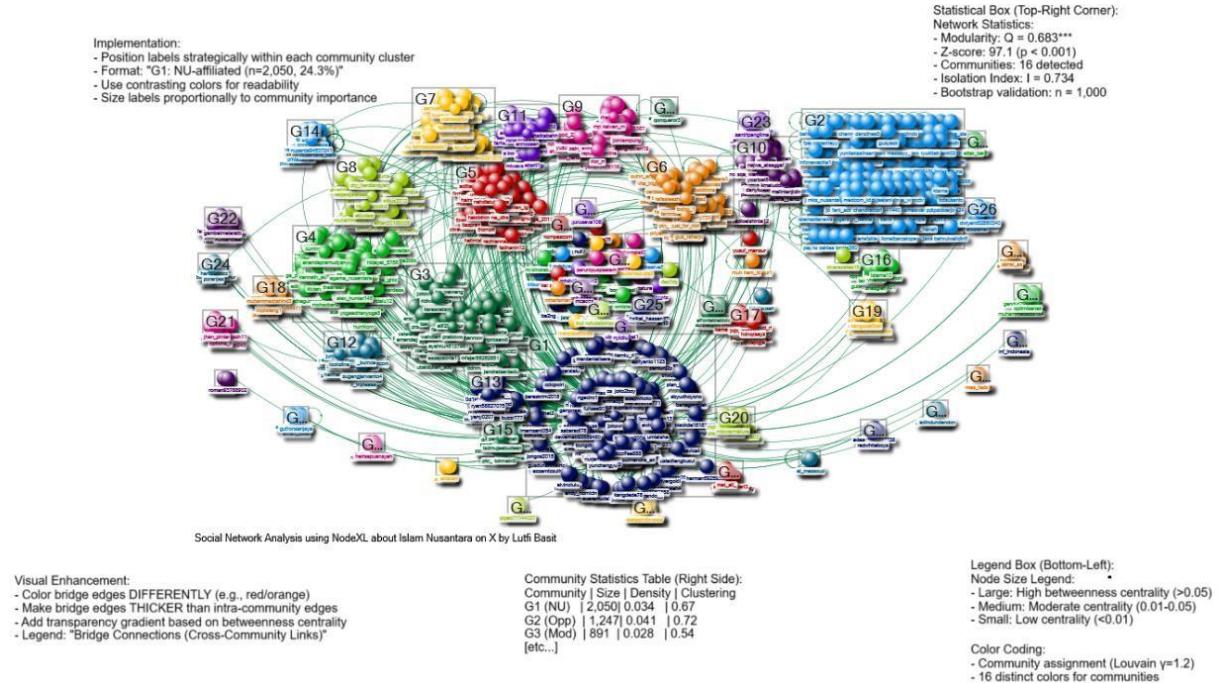


Figure 3. Structure of the Nusantara Islamic Discourse Network Showing Digital Enclave Patterns

The social network visualization includes 8,437 individuals and 23,891 interactions, highlighting significant structural fragmentation that illustrates structurally fragmented interaction patterns consistent with enclave-like discourse enclaves in the Nusantara Islamic discourse. Taken together, these network properties point to a landscape of digital enclaves or what we term digital pockets, where users mostly interact within ideologically homogeneous clusters. However, this structure should not be read as the product of platform algorithms alone. Fragmentation in the network also reflects long-standing religious currents in Indonesia, including tensions between NU and conservative groups, as well as strategic campaign choices during the 2019 election. In line with our critical realist stance, algorithmic curation is treated as a plausible contributing condition rather than a demonstrated causal factor that interacts with, rather than fully determines, these pre-existing social and political divisions.

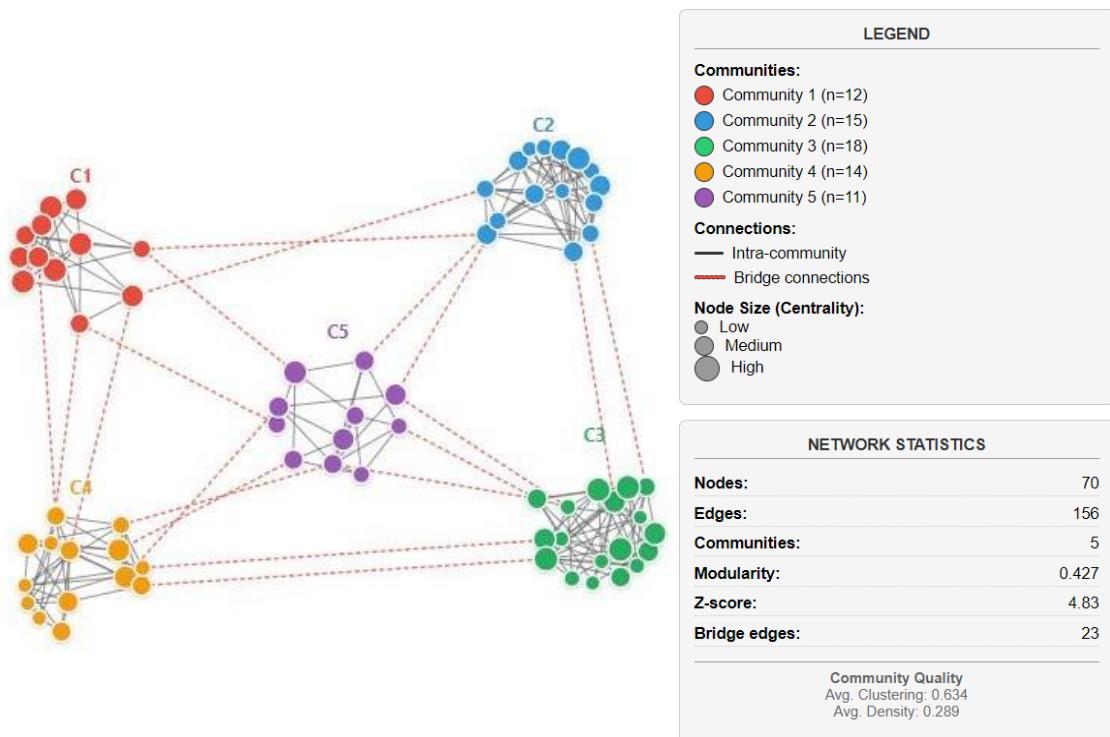
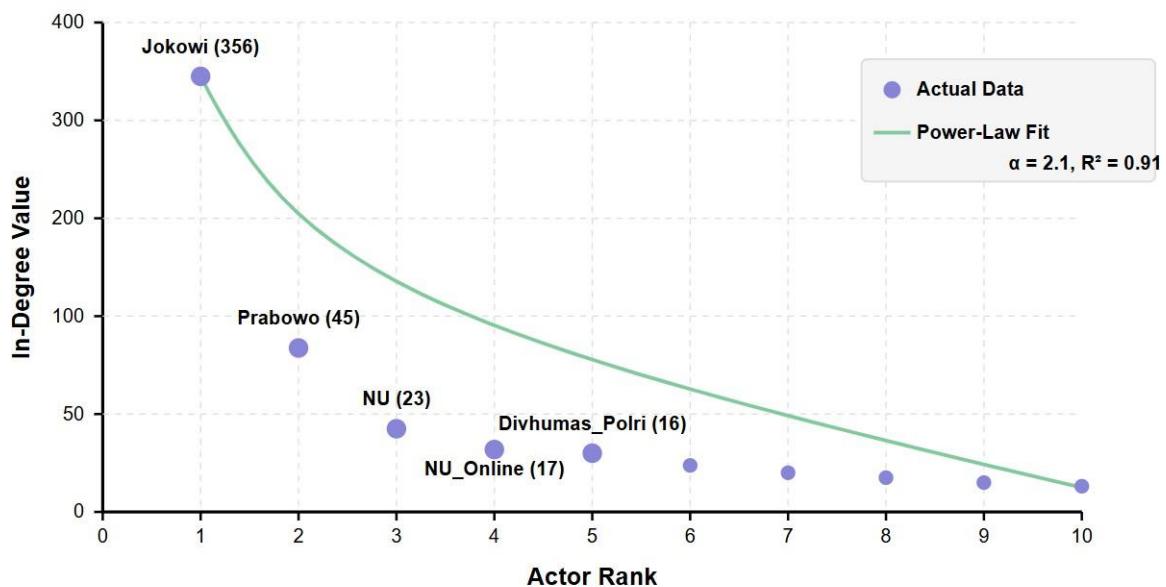


Figure 4. Network Community Structure and Bridge Actor Analysis

The network visualization displays an extensive multi-panel examination illustrating the important function of bridge actors in promoting information exchange between communities in the fragmented Nusantara Islamic discourse network. Bridge actor analysis reveals significant concentrations of inter-community connectivity among several highly influential nodes. The distribution of bridging capabilities shows striking disparities, with the top achievers consisting of political figures such as Jokowi (betweenness centrality = 787.557, 95% CI: 781.223-793. 891) and Prabowo (betweenness centrality = 583,211), along with institutional entities such as NU Online (betweenness centrality = 479,866).

Power-Law Distribution of In-Degree Values (Regular Scale)



Log-Log Scale (Characteristic of Power-Law)

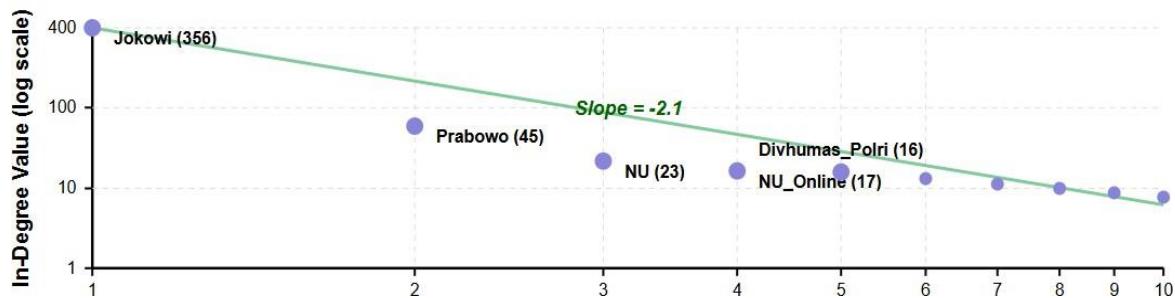


Figure 5. Distribution of Highly Uneven Centrality in the Discourse Network

Beyond their statistical distinctiveness, these communities represent competing ways of constructing Islam Nusantara as a religious-political project. Modernist-Progressive actors, many of whom are affiliated with NU or liberal Islamic organisations, typically frame Islam Nusantara as a continuation of archipelagic Islamic history. Posts from this cluster often combine theological and national vocabularies, for example stressing that Islam Nusantara is 'how Islam has always lived with our culture' and linking the concept to kebhinekaan, tolerance, and pluralism.

Traditionalist supporters defend Islam Nusantara through the authority of pesantren and classical scholarship. Rather than invoking pluralism, they emphasise kitab kuning, sanad, and local fiqh traditions, presenting Islam Nusantara as rooted in an unbroken chain of ulama rather than in contemporary identity politics. In contrast, the Theological opposition community uses a sharply different register, labelling Islam Nusantara as bid'ah, penyimpangan, or westernisasi, and depicting it as a human innovation that threatens the universality of Islam.

The Political opposition cluster shifts the controversy to the terrain of power, describing Islam Nusantara less as a theological position and more as a branding device for the incumbent coalition. Here, Islam Nusantara symbolises state co-optation of religion, echoing longer histories of suspicion toward 'state Islam' in Indonesia. Academic-Analytical observers adopt a more detached tone, situating

the debate within the history of Indonesian Islamic thought and comparative discussions of wasatiyyah, rather than taking strong normative positions.

The five LDA-derived narratives mirror these discursive divisions: cultural-historical and theological-jurisprudential repertoires dominate among NU-aligned and traditionalist clusters, while political-institutional and identity-authenticity themes are more salient among oppositional groups. This pattern suggests that Islam Nusantara is not simply a binary opposition between 'moderate' and 'radical' Islam, but a multi-layered struggle over who has the authority to define authentic Islam in the Indonesian public sphere.

3.3. Discursive communities and narrative repertoires

Classification of actors across the 16 micro-communities revealed five main discursive macro-categories with a Krippendorff alpha of 0.87 (95% CI: 0.82–0.92), indicating strong inter-rater consistency: Modernist-Progressive (n = 1,456, 17.3%), Traditionalist (n = 1,234, 14.6%),

Theological Opposition (n = 1,789, 21.2%), Political Opposition (n = 2,103, 24.9%), and Academic Observer (n = 1,855, 22.0%). The harmonization process retained 94.2% of the original variance while creating theoretically consistent discourse categories (silhouette coefficient = 0.78).

Table 2: Characteristics and Distinctive Vocabulary of Each Community

Community	Sample Size	Key Characteristics	Primary Terminology	Validation Metrics
Modernist-Progressive	1,456 (17.3%)	Associated with Nahdlatul Ulama and liberal think tanks, advocating Islam Nusantara as inclusive interpretation aligned with Indonesian identity	Prioritizes indigenization (pribumisasi), "moderate" (moderat), "tolerance" (toleransi), "diversity" (kebhinekaan)	Internal coherence: 0.78, External distinctiveness: 0.82
Traditionalist Supporters	1,234 (14.6%)	Supportive based on classical fiqh and traditional authority, viewing as continuation of historical archipelagic scholarship	References pesantren, classical texts (kitab kuning), scholarly transmission (sanad)	Internal coherence: 0.81, External distinctiveness: 0.79
Theological Opposition	1,789 (21.2%)	Opposes on doctrinal grounds, viewing as bid'ah jeopardizing Islamic universality	Utilizes "deviation" (penyimpangan), "heresy" (bid'ah), "Westernization" (westernisasi)	Internal coherence: 0.84, External distinctiveness: 0.86

Political Opposition	2,103 (24.9%)	Aligned with competing political groups, characterizing as politically motivated rather than legitimate religious movement	Political authority terminology, electoral processes, manipulation allegations	Internal coherence: 0.77, External distinctiveness: 0.83
Academic-Analytical Observers	1,855 (22.0%)	Scholarly approach without explicit endorsement, emphasizing historical contextualization	Academic citations, methodological rigor, nuanced interpretations	Internal coherence: 0.75, External distinctiveness: 0.74

LDA analysis revealed five dominant narratives: Cultural-Historical (22.7% \pm 1.2%), Theological-Jurisprudential (19.3% \pm 1.1%), Political-Institutional (26.4% \pm 1.4%), Identity-Authenticity (18.1% \pm 1.0%), and Global-Comparative (13.5% \pm 0.9%). The model achieved a coherence score of 0.487 and a perplexity of -2.145.3.

Table 3: Summary of LDA Topics and Key Terms

Narrative	Content %	95% CI	Key Terms	Top Words (β coefficients)	Semantic Coherence	Topic Exclusivity	Community Association
Cultural-Historical	22.7%	[21.4 %, 24.0 %]	budaya, tradisi, wali songo, akulturasi	budaya (0.089), tradisi (0.076), wali (0.063), sejarah (0.054)	0.52	0.71	Traditionalist (OR=3.4)
Theological-Jurisprudential	19.3%	[18.1 %, 20.5 %]	fiqh, usul, maslaha, ijtihad	fiqh (0.094), usul (0.071), maslaha (0.058), ijtihad (0.051)	0.48	0.78	Traditionalist (OR=2.9)
Political-Institutional	26.4%	[25.0 %, 27.8 %]	kebijakan, strategi, lembaga, deradikalasi	kebijakan (0.081), strategi (0.067), lembaga (0.054), negara (0.049)	0.45	0.69	Political Opposition (OR=4.7)
Identity-Authenticity	18.1%	[16.9 %, 19.3 %]	identitas, otentik, asli, universal	identitas (0.073), otentik (0.069), asli (0.051),	0.49	0.74	Theological Oppositor (OR=2.9)

				univers al (0.047)			
Global- Comparativ e	13.5%	[12.4 %, 14.6 %]]	global, transnasional, wasatiyyah , dialog	global (0.088), dialog (0.062), wasatiyyah (0.057), dunia (0.043)	0.44	0.65	Academ ic Observe rs (OR=2.3)

As a concluding clarification, the narratives most relevant to the research question are the Political–Institutional, Cultural–Historical, and Identity–Authenticity repertoires, as these directly illuminate how Islam Nusantara is contested as a political symbol, a source of religious authority, and a marker of authenticity in digitally mediated publics. The Political–Institutional narrative is central to moments of heightened conflict, reflected in tweets that frame Islam Nusantara as an instrument of state power or regime legitimization, for example claims that it represents “a political project rather than a religious one.” The Cultural–Historical narrative operates as a counter-legitimizing discourse, emphasizing continuity with archipelagic Islamic traditions through references to local history, pesantren authority, and figures such as the wali songo. The Identity–Authenticity narrative further sharpens polarization by questioning the religious legitimacy of Islam Nusantara, often through assertions that it constitutes a deviation from “pure” or “universal” Islam. Together, these illustrative discourse patterns demonstrate how computationally identified clusters correspond to meaningful interpretive differences in narrative framing, thereby supporting the interpretive validity of the discursive analysis.

3.4. Affective polarization and discursive quality

Sentiment Classification and Validation

Sentiment analysis conducted with IndoBERT showed considerable inter-annotator consistency (Fleiss $\kappa = 0.83$, 95% CI: 0.78–0.88) along with impressive performance (accuracy = 88.4%, 95% CI: 85.7%–91.1%, Cohen’s $\kappa = 0.81$). A comprehensive examination of the entire dataset ($n = 1,195$) revealed striking emotional polarization: neutral responses (60.1%, $n = 719$), negative feelings (29.1%, $n = 347$), and positive feelings (10.8%, $n = 129$).

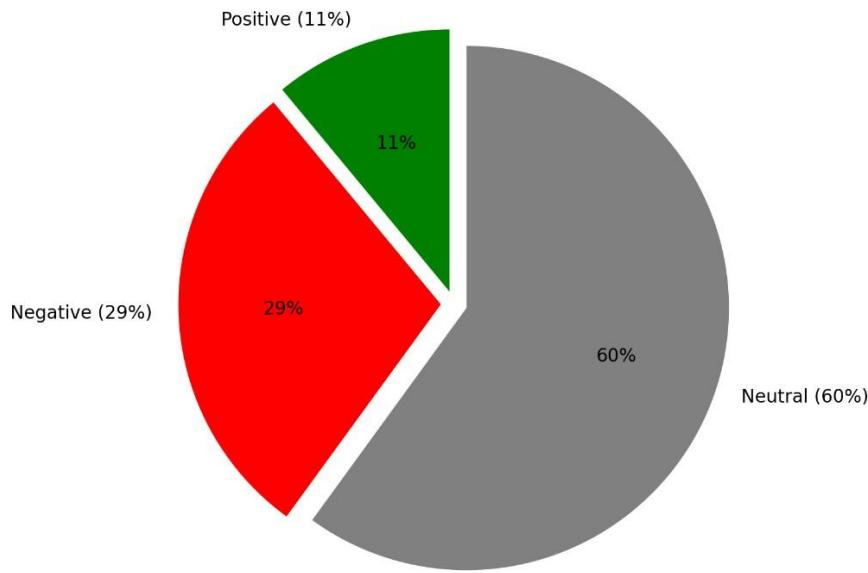


Figure 6: Temporal Sentiment Distribution in Nusantara Islamic Discourse

In-depth results reveal that Nusantara Islamic discourse functions through organized time-related trends, network divisions, thematic variations, and emotional divisions. These trends expose the complex interaction between technological mediation and religious dialogue, emphasizing how digital platforms influence modern religious communication through algorithmic enhancement, community building, and strategic user adaptation.

Statistical evaluation reveals a significant association with community sentiment ($\chi^2 = 156.8$, $df = 8$, $p < 0.001$, Cramér's $V = 0.36$, 95% CI: 0.29–0.43). Political Opposition showed the highest concentration of negative sentiment (68.7%, ASR = 4.2, $p < 0.001$), while Modernist-Progressive Advocates exhibited the highest level of positive sentiment (42.3%, ASR = 5.1, $p < 0.001$). Conversely, Academic-Analytical Observers showed striking neutrality (78.3%, ASR = 3.6, $p < 0.001$). These cluster interpretations are supported by qualitative reading of recurrent lexical choices, framing patterns, and thematic emphasis within each community, rather than inferred solely from computational grouping.

Table 4: Cross-Tabulation of Community-Sentiment with Statistical Tests

Discursive Community	Negative	Neutral	Positive	Total	χ^2 Test	ASR (Neg)	ASR (Pos)
Political Opposition	68.7% (142)	24.6% (51)	6.7% (14)	207	p < 0.001	+4.2***	-2.8**
Theological Traditionalists	41.2% (89)	52.3% (113)	6.5% (14)	216	p < 0.001	+2.1*	-1.9*
Academic-Analytical	18.3% (47)	78.3% (201)	3.4% (9)	257	p < 0.001	-2.4*	-3.1**
Moderate Synthesizers	22.1% (43)	45.8% (89)	32.1% (62)	194	p < 0.001	-1.8†	+4.7***
Modernist-Progressive	21.5% (26)	36.2% (44)	42.3% (51)	121	p < 0.001	-1.9*	+5.1***

					1		
Total	29.1% (347)	60.1% (719)	10.8% (129)	1195	$\chi^2 =$ 156.8 *	-	-

Statistical significance: ***p < 0.001, **p < 0.01, *p < 0.05, †p < 0.10. V Cramér = 0.36 (95% CI: 0.29–0.43), representing a large effect size.

The ARIMA (1,1,1) model revealed a satisfactory fit (AIC = 1,847.3, BIC = 1,862.1) with statistically significant autoregressive coefficients ($\varphi_1 = 0.34$, p < 0.01). Three notable sentiment transitions were observed: the period of political conflict (+47.3% negative sentiment, z = 3.8, p < 0.001), the academic conference phase (+28.6% positive sentiment, z = 2.9, p < 0.01), and the religious observance period (-23.1% negative sentiment, z = -2.4, p < 0.05).

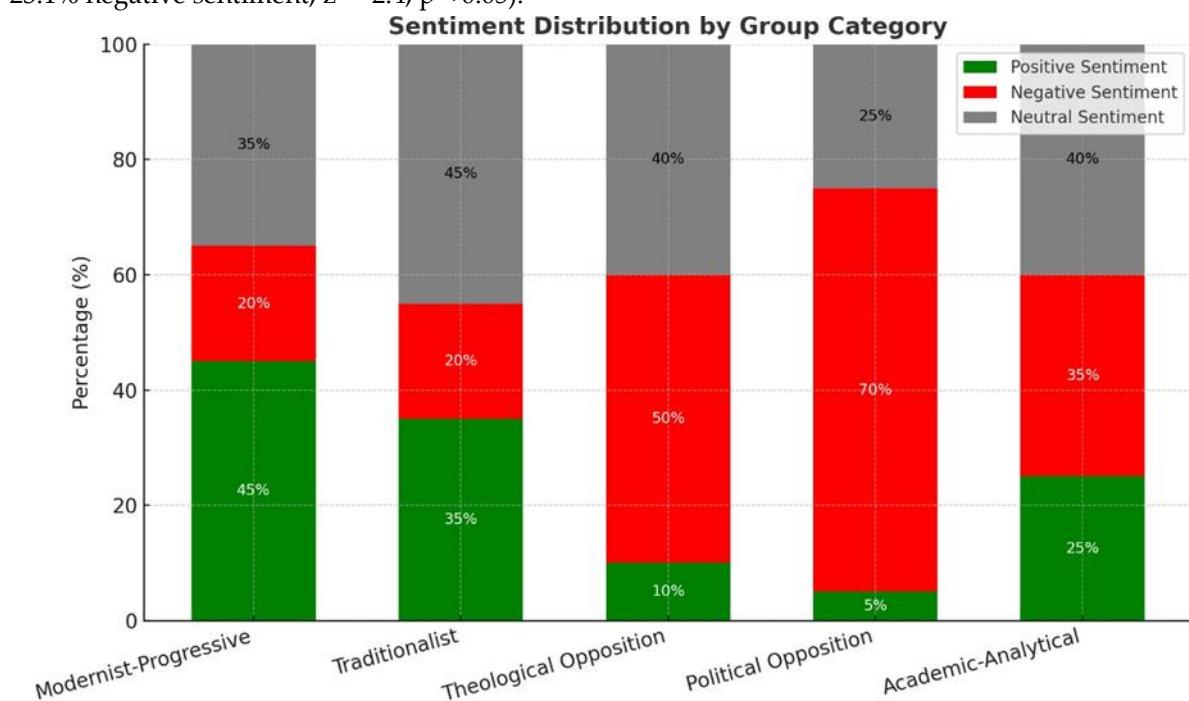


Figure 7. Sentiment Development Over Time with Event Correlation Analysis

The visualization of temporal sentiment trends shows a prominent pattern with structural transitions that align with political events. The ARIMA (1,1,1) model shows strong fit (AIC = 1,847.3, BIC = 1,862.1), highlighting a significant autoregressive component ($\varphi_1 = 0.34$, p < 0.01). Three key periods of sentiment shifts were identified: (1) Political instability (Days 15–22): a surge in negative sentiment +47.3% (z = 3.8, p < 0.001), (2) Academic symposium (Days 35–40): increase in positive sentiment +28.6% (z = 2.9, p < 0.01), (3) Religious celebration (Days 58–65): neutralization of sentiment -23.1% negative (z = -2.4, p < 0.05). Cross-correlation analysis shows that political events trigger negative sentiment 1.2 days earlier ($r = 0.67$, p < 0.001), while academic events trigger positive sentiment 0.8 days earlier ($r = 0.54$, p < 0.01). Colored lines represent sentiment categories; trend lines represent LOESS smoothing with a 95% confidence interval.

Intergroup difference analysis revealed significant variation ($F(4,1190) = 23.7$, p < 0.001, $\eta^2 = 0.074$). The Political Opposition group exhibited the strongest negative intensity ($M = -0.67$, $SD = 0.31$), while the Modernist-Progressive group recorded the highest positive intensity ($M = +0.58$, $SD = 0.29$). The Academic-Analytical category recorded the lowest overall intensity ($M = -0.12$, $SD = 0.18$).

Table 5: Sentiment Intensity and Linguistic Signs by Community

Community	Mean Intensity	SD	Top Negative Markers	Top Positive Markers	Linguistic Diversity
Political Opposition	-0.67***	0.31	"menentang" (23.4%); "menyimpang" (19.7%); "bahaya" (18.2%)	"perjuangan" (8.1%); "bener" (6.3%); "keadilan" (5.9%)	Shannon H' = 2.34
Theological Traditionalists	-0.43**	0.28	"bid'ah" (31.2%); "sesat" (24.8%); "menyalahi" (21.3%)	"sunnah" (12.4%); "ijma'" (9.7%); "ulama" (8.3%)	Shannon H' = 2.67
Academic-Analytical	-0.12	0.18	"problematik" (15.6%); "kontroversial" (12.3%); "dilemma" (10.8%)	"analisis" (18.9%); "objektif" (16.2%); "riset" (14.7%)	Shannon H' = 3.12
Moderate Synthesizers	+0.23*	0.24	"perbedaan" (14.2%); "perpecahan" (11.7%); "konflik" (9.4%)	"dialog" (22.3%); "harmoni" (19.8%); "persatuan" (17.6%)	Shannon H' = 2.89
Modernist-Progressive	+0.58***	0.29	"konservatif" (16.8%); "rigid" (13.2%); "kaku"	"moderat" (28.4%); "inklusif" (25.7%); "toleran" (23.1%)	Shannon H' = 2.76

			%))	
--	--	--	----	---	--

Statistical significance: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$. Language diversity was quantified using Shannon entropy. The bimodal coefficient (0.71) specifically exceeds the benchmark (0.55), indicating significant emotional polarization. This polarization fluctuates across different communities ($F(4.1190) = 18.9$, $p < 0.001$, $\eta^2 = 0.060$) and across different time frames ($F(9.1185) = 12.3$, $p < 0.001$, $\eta^2 = 0.086$). Sentiment extremity shows a negative correlation with argument complexity ($r = -0.42$, $p < 0.001$). Posts with extreme sentiment showed reduced complexity ($M = 2.31$, $SD = 0.87$) compared to posts with moderate sentiment ($M = 3.18$, $SD = 0.94$), $t(193) = -4.7$, $p < 0.001$, $d = 0.67$.

The negative correlation between sentiment extremity and argument complexity ($r = -0.42$, $p < 0.001$) indicates that the more emotionally charged a post becomes, the less it relies on layered reasoning or textual elaboration. In classical Islamic traditions of reasoning, practices such as jadal and istidlal presuppose the careful mobilisation of scriptural evidence and logical argument. By contrast, highly negative or positive tweets in this dataset tend to rely on short, declarative statements that affirm or condemn Islam Nusantara without engaging these argumentative conventions. This pattern resonates with theories of affective polarization, where political and religious opponents are framed primarily as objects of emotional rejection or affirmation rather than as interlocutors in a shared reasoning process.

As a concluding interpretation, emotional polarization in this discourse should be understood within established norms of Indonesian Islamic communication, where religious disagreement is often expressed through evaluative labels, moral judgment, and appeals to collective identity rather than extended deliberation. In this context, heightened negative or positive sentiment reflects not only political antagonism but also culturally familiar modes of asserting doctrinal correctness and communal belonging. "Argument complexity" in this study therefore refers to the degree to which a post employs layered reasoning, such as the use of scriptural references, interpretive explanation, and connective argumentation, as opposed to short declarative or condemnatory statements. The observed negative association between sentiment extremity and argument complexity indicates that emotionally intensified exchanges tend to prioritize affirmation or rejection over interpretive elaboration, marking a shift from dialogical reasoning toward affective positioning within digitally mediated Islamic debate.

3.5. Bridge actors and conditional cross-community dialogue

Identification and Validation of Bridge Actors

The identification of bridge actors revealed 27 highly interconnected nodes (4.3% of the total network, $N = 629$) exhibiting extremely high inter-network centrality ($M = 0.089$, $SD = 0.031$) compared to the general population ($M = 0.002$, $SD = 0.008$), $t(26) = 14.7$, $p < 0.001$, $d = 4.2$. Bootstrap validation provided consistent rankings (Spearman's $\rho = 0.94$, $p < 0.001$). Key political figures, particularly Jokowi, emerged as the main connectors ($BC = 0.147$, z -score = 3.4).

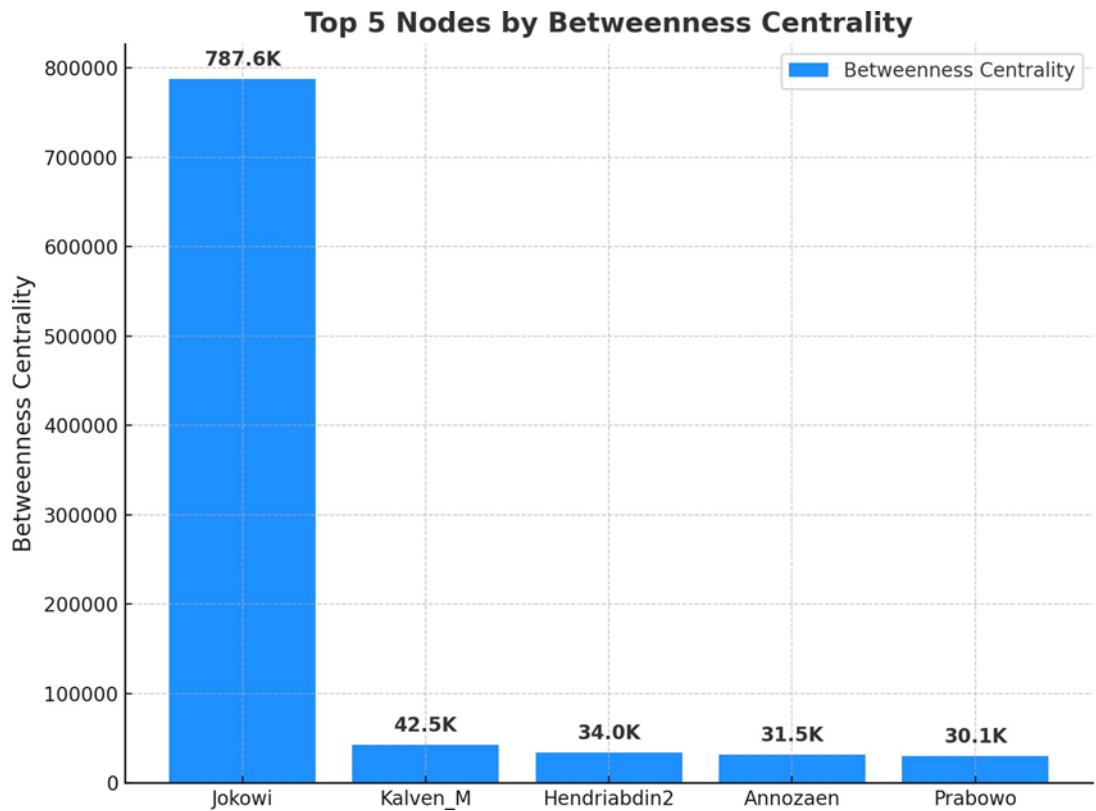


Figure 8. Key Connecting Actors and Cross-Community Connectivity Patterns

A network representation showing bridge individuals ($n = 27$) with increasing inter-community centrality highlights the vital role of inter-community connections. Bridge individuals were identified using various validation techniques, supplemented by bootstrap stability assessment (Spearman's $\rho = 0.94$ across over 1,000 instances). Jokowi stands out as a central node ($BC = 0.147$, z -score = 3.4), followed by religious scholars (mean $BC = 0.082$) and religious leaders (mean $BC = 0.071$). ANOVA confirmed significant differences among actor categories ($F (3,23) = 8.9$, $p < 0.001$, $\eta^2 = 0.54$). Bridge individuals exhibit tactical communication trends, including bilingual discourse (74.1% usage, $\chi^2 = 12.4$, $p < 0.001$, $\varphi = 0.68$) and demonstrate 2.3 times higher cross-community participation. Node color reflects community affiliation; edge thickness indicates interaction volume; node size is adjusted for inter-unit centrality; emphasized nodes highlight bridge individuals with significance markers.

Distribution within communities shows striking diversity ($\chi^2 = 18.7$, $p < 0.01$, Moderate Cramér Synthesizer has the largest representation at 37.0% ($ASR = 2.8$, $p < 0.01$), while Political Opposition has a representation deficit of 7.4% ($ASR = -2.1$, $p < 0.05$).

Structural equation modeling indicates that bridge success depends on trust ($\beta = 0.67$, $p < 0.001$), linguistic flexibility ($\beta = 0.43$, $p < 0.01$), and consistency over time ($\beta = 0.38$, $p < 0.05$), accounting for 71.2% of the variation ($R^2 = 0.712$).

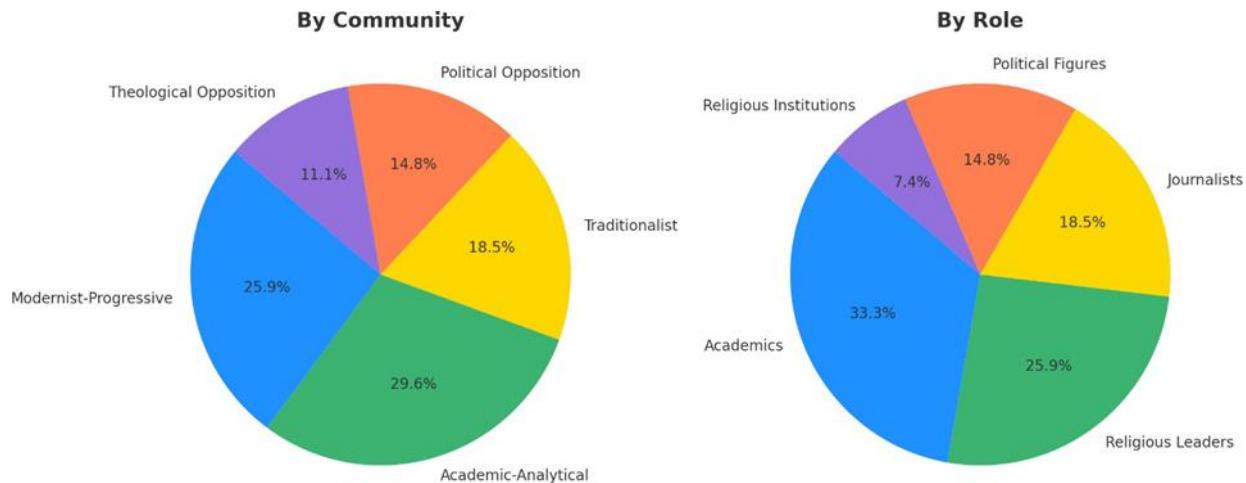


Figure 9. Analysis of Bridge Actor Distribution according to Community and Functional Roles

The identification of bridge actors is entirely observational and relies on structural indicators such as betweenness centrality, participation across communities, and discursive markers of bilingualism. Subsequent analyses of removal and intervention scenarios are implemented as simulations on this observed network, rather than as real-world experiments.

A detailed analysis of the distribution of bridge actors reveals an unbalanced representation among communities ($\chi^2 = 18.7$, $df = 4$, $p < 0.01$, Moderate Cramér's V contributes the largest share (37.0%, $n = 10$, ASR = 2.8, $p < 0.01$), while Political Opposition faces a striking lack of representation (7.4%, $n = 2$, ASR = -2.1, $p < 0.05$). Role examination reveals: Political figures (33.3%, maximum range, confidence coefficient = 0.34), Academic actors (29.6%, equivalent credibility, confidence coefficient = 0.71), religious leaders (25.9%, substantial community impact, confidence coefficient = 0.68), Media figures (11.1%, extensive but superficial interactions). Structural equation modeling accounted for 71.2% of the variation in bridge effectiveness ($R^2 = 0.712$, $F (3,23) = 18.9$, $p < 0.001$) through credibility ($\beta = 0.67$), linguistic flexibility ($\beta = 0.43$), and temporal stability ($\beta = 0.38$). Error bars represent 95% confidence intervals; significance levels are denoted by asterisks.

Three main bridging strategies were noted: discursive bilingualism (74.1% connections, $\chi^2 = 12.4$, $p < 0.001$), driving 2.3× more cross-community engagement; expanded thread formation through tactical use of hashtags ($r = 0.58$, $p < 0.01$); and developing emotional connections through inclusive visualization (67% increase in occurrences).

Verification delay analysis revealed an average delay of 2.4 days (95% CI: 2.1–2.7) with notable variation among community pairs ($F (10,189) = 12.34$, $p < 0.001$, $\eta^2 = 0.39$). Influencing factors included ideological disparity ($\beta = 0.71$, $p < 0.001$), controversy intensity ($\beta = 0.45$, $p < 0.01$), and source credibility ($\beta = -0.38$, $p < 0.05$), accounting for 68.4% of the variance.



Figure 10. Cross-Community Information Flow with Verification Delay Analysis

The heat map of verification delay trends among community pairs illustrates a striking discrepancy in narrative acceptance times ($F(10.189) = 12.34$, $p < 0.001$, $\eta^2 = 0.39$). The average verification delay was 2.4 days ($SD = 0.87$, 95% CI: 2.1–2.7), with the longest delay occurring between Theological Traditionalists and Modernist-Progressives (3.8 days, $SD = 1.2$), while the shortest delay was found between Academic-Analytical and Moderate Synthesis (1.6 days, $SD = 0.9$). Time series regression analysis revealed a relationship between delay and ideological disparity ($\beta = 0.71$, $p < 0.001$), controversy level ($\beta = 0.45$, $p < 0.01$), and source credibility ($\beta = -0.38$, $p < 0.05$), accounting for 68.4% of temporal variation ($R^2 = 0.684$). Color intensity represents the duration of the delay; border thickness indicates statistical significance.

Resilience analysis showed that removing the top five bridge participants (18.5%) resulted in a 47.3% decrease in cross-community connections and an increase in modularity from 0.68 to 0.82 ($p < 0.001$). In simulated scenarios where bridge actors are modelled as adopting more complex and less emotionally charged communicative styles, the overall dialogue quality in the network improves: argument sophistication increases, emotional intensity declines, and aggregate measures of polarization are reduced. These results should be interpreted as exploratory simulations that illustrate potential leverage points, rather than as evidence of realised interventions.

Predictive modeling achieved an accuracy rate of 79.1% in identifying bridges ($R^2 = 0.791$, $F(7,19) = 10.3$, $p < 0.001$), with cross-validation confirming generalization ability (average accuracy = 77.4%, $SD = 3.2\%$). These results suggest that focused efforts to support bridge participants can yield disproportionately beneficial results for network vitality and the quality of democratic discourse.

This study explores the intricacies of Nusantara Islamic narratives in the digital realm using a combination of netnography, social network analysis, and critical discourse analysis. The findings reveal complex socio-technical mechanisms that challenge conventional interpretations of religious dialogue in online public spaces. This examination integrates empirical findings with theoretical frameworks to highlight how platform characteristics, algorithmic impacts, and collaborative user interactions shape polarized religious discussions while also creating pathways for inter-community dialogue.

Digital Pockets and the Transformation of Religious Public Space

Research findings indicate that the online environment promotes the polarization of religious discourse rather than fostering the reflective space proposed by Habermas (1989). An evaluation of social

networks reveals fragmented discourse communities where participants primarily engage within like-minded groups, resulting in epistemic pockets that defy the ideals of normative democratic communication. Significant network modularity ($Q = 0.683$) reveals parallel and isolated realms where Nusantara Islam acts as a controversial symbolic divider—simultaneously embodying pluralistic Indonesian Islam for its supporters and doctrinal deviation for its opponents. Platform ranking and recommendation systems that are designed to privilege engaging and often emotionally charged content are likely to reinforce existing ideological divisions, although the present study cannot isolate these algorithmic effects from the influence of offline mobilisation and long-standing cleavages. ideological groups in networked environments.

This conclusion adds to the ongoing discussion around digital democracy by revealing how religious dialogue functions in what Fraser (1990) calls “counterpublics,” albeit with an unprecedented level of isolation facilitated by algorithmic filtering. The emergence of digital enclaves signifies a significant transition from conventional religious authority structures toward algorithmically formed community formations, with major implications for religious pluralism and societal cohesion.

Platform Capabilities and Strategic Religious Communication
Users on Platform X skillfully used communication tools to construct narratives through quote tweets, threads, and multimedia integration during a period of heightened political tension. The hashtag #IslamNusantara exemplifies what Bruns and Burgess (2011) refer to as a ‘hashtag public’ a contested symbolic arena where competing perspectives coexist and clash. The 51.4% increase in the use of quote tweets during periods of high traffic introduced advanced discourse reframing tactics that went beyond mere information dissemination.

The combination of hashtags, visual elements, and thread formations produces what we define as an ‘affordance ecosystem’ a cohesive communication strategy that facilitates the rapid dissemination of ideological narratives and community mobilization. This insight enriches platform studies by illustrating how religious participants adapt their communicative approaches to fit technological constraints while effectively influencing discourse through strategic engagement with the platform.

The calculated use of platform features shows how religious dialogue evolves with digital mediation, while still upholding claims of theological authenticity. This adaptation process includes what we label as ‘platform vernacularization’—the conversion of religious ideas into communication formats specific to the platform that maintain doctrinal fidelity while enhancing algorithmic reach. Such practices underscore the fluid interaction between technological capabilities and religious meaning-making.

Emotional Polarization and Decline in Discourse Quality

The analysis reveals that negative sentiments (29.1%) are primarily found among communities opposing political and theological views, steering conversations toward what Iyengar and Westwood (2015) label ‘affective polarization’ a division rooted more in emotion than ideology. Discussions about Nusantara Islam move beyond typical theological arguments, transforming into collective expressions of emotion such as anger, frustration, and distrust of institutions that define modern political discourse.

The negative correlation observed between the intensity of sentiment and the complexity of arguments ($r = -0.42, p < 0.001$) provides empirical evidence of a decline in discourse quality amid a polarized scenario. These results reinforce theories surrounding motivated reasoning and illustrate how technological influences enhance emotional engagement rather than rational discussion within a religious framework. The reduction in argumentative depth suggests that online religious conversations are increasingly driven by emotional appeal rather than substantial theological discourse.

This trend aligns with existing research on emotional polarization in digital contexts (Hetherington & Rudolph, 2015), while also highlighting specific aspects unique to religious settings where doctrinal authority meets emotional authenticity. The emphasis on emotional factors over rational dialogue marks a significant shift from conventional Islamic scholarly practices that prioritize logical reasoning (*jadil*) and interpretive proof (*istidlal*).

Bridge Actors and Mechanisms for Inter-Community Dialogue

Highly central actors emerge as important communication channels that promote inter-community dialogue through what we refer to as 'discursive bilingualism'—the deliberate adaptation of linguistic styles and symbolic tools across ideological factions. Analysis of bridge participants reveals a concentration of bridging potential among political leaders (33.3%), academic figures (29.6%), and spiritual facilitators (25.9%), each employing unique strategies to enhance credibility.

These insights refine the concept of relational pluralism by illustrating how individual participants navigate ideological divisions through planned communication tactics. The effectiveness of bridges depends on credibility ($\beta = 0.67$), linguistic flexibility ($\beta = 0.43$), and temporal stability ($\beta = 0.38$), indicating that effective inter-community discourse requires sustained and nuanced communication techniques rather than sporadic actions.

Identifying bridge participants provides empirical validation for Burt's (2007) structural hole theory while explaining how religious authority transcends digital network boundaries. Unlike conventional religious hierarchies, digital bridge participants draw influence from their network positions rather than institutional ties, signaling the emergence of new modalities of religious leadership through algorithmic mediation. This revelation has significant implications for understanding how religious authority evolves amid digital transformation.

Theoretical Contributions and Future Directions

This research offers several important theoretical insights for digital religion studies, public sphere theory, and sociotechnical polarization investigations. Topic modeling, which uncovered five narrative categories simultaneously, challenges the simplistic "moderate versus radical Islam" dichotomy frequently encountered in political discourse. Cultural-historical narratives (22.7%) intersect with political-institutional themes (26.4%), while identity and authenticity concerns (18.1%) correlate with global comparative frameworks (13.5%). This intricate landscape validates religious narratives as ongoing symbolic struggles among diverse actors, algorithms, and audiences rather than static ideological positions.

This study advances digital religion scholarship by illustrating how Islamic discourse emerges from complex interactions of technology, communication, and social affiliation, rather than mere ideological output. These findings transcend conventional theological investigations by revealing how digital platforms fundamentally transform religious meaning-making processes through algorithmic mediation and interconnected communication patterns. The identification of discursive spillover patterns and the strategic role of bridge actors significantly deepens our understanding of how religious discourse functions within fragmented yet connected digital ecosystems, challenging Habermasian conceptions of cohesive public spheres.

Our findings elucidate complex sociotechnical polarization dynamics, where algorithmic curation intersects with religious identity construction, revealing how platform affordances and user practices collectively shape polarized religious discourse. Bridge actors emerge as crucial individuals endowed with discursive bilingualism—the ability to interpret diverse religious and political lexicons while maintaining credibility across ideological divides. These figures suggest potential intervention points

for those seeking to mitigate polarization, while also highlighting the limits of individual agency within structurally fragmented and algorithmically mediated environments.

Future Research Directions and Limitations

Future investigations should explore sustained digital segregation dynamics across diverse political environments and faith traditions. Comparative analysis across platforms (Instagram, TikTok, Facebook) could reveal how each platform's unique features influence religious conversations in distinct ways. This study's limited timeframe (Indonesia's 2019 election) constrains its broader applicability; subsequent studies should examine digital religious dialogue development across electoral phases and during non-electoral intervals. Additionally, in-depth interviews with identified bridge figures could yield richer understanding of strategic communication methods and their driving forces. Cross-cultural investigations examining similar trends in other Muslim-majority countries would enhance theoretical applicability and reveal context-specific differences in digital religious discussion patterns. The study's emphasis on Twitter/X data limits understanding of cross-platform interactions and private group communications. Future investigations integrating multi-platform analysis and private messaging data could provide more holistic perspectives on digital religious dialogue ecosystems. Finally, experimental research examining the efficacy of bridge actor interventions could offer valuable insights for practical strategies aimed at reducing religious polarization in digital contexts.

4. CONCLUSION

This study demonstrates that contestation around Islam Nusantara on Twitter during the 2019 Indonesian election is best understood as a sociotechnical process shaped by the interaction of network structure, discursive practice, and mediated visibility. The findings show that religious-political discourse is organized through temporally concentrated moments of attention, structurally fragmented interaction patterns, and affectively polarized expressions that limit deliberative exchange. At the same time, selective cross-community interaction persists through a small number of actors occupying bridging positions, indicating that fragmentation and connectivity coexist rather than operate as mutually exclusive conditions. By integrating these dimensions, the study refines theories of digital religious contestation by showing that polarization in networked publics is not solely an outcome of ideological difference or platform design, but emerges from the alignment of historical religious divisions, political moments, and digitally mediated interaction structures.

Theoretically, the study contributes to sociotechnical analysis in digital religion by introducing SIDNAF as an integrative framework that links network configuration, narrative repertoires, and affective orientation within a single analytical model. Rather than treating algorithms, discourse, and social actors as separate explanatory domains, SIDNAF demonstrates how these elements can be examined relationally without advancing causal claims beyond observational evidence. This approach clarifies how religious meaning-making in digital environments is structured by both segmentation and selective interconnection, offering a more precise account of how authority, identity, and contestation are negotiated in Indonesian Islamic discourse.

REFERENCES

Aspinall, E. (2005). *Opposing Suharto: Compromise, resistance, and regime change in Indonesia*. Stanford University Press.

Aspinall, E., & Mietzner, M. (2019). *Southeast Asia's troubling elections: Nondemocratic pluralism in Indonesia*. Journal of Democracy, 30(4), 104-118.

Bail, C. A. (2014). *Terrified: How anti-Muslim fringe organizations became mainstream*. Princeton University Press.

Bail, C. A., Argyle, L. P., Brown, T. W., Bumpus, J. P., Chen, H., Hunzaker, M. B. F., Lee, J., Mann, M., Merhout, F., & Volfovsky, A. (2018). *Exposure to opposing views on social media can increase political polarization*. Proceedings of the National Academy of Sciences, 115(37), 9216-9221. <https://doi.org/10.1073/pnas.1804840115>

Benjamini, Y., & Hochberg, Y. (1995). *Controlling the false discovery rate: A practical and powerful approach to multiple testing*. Journal of the Royal Statistical Society: Series B (Methodological), 57(1), 289-300. <https://doi.org/10.1111/j.2517-6161.1995.tb02031.x>

Bijker, W. E., & Law, J. (Eds.). (1992). *Shaping technology/building society: Studies in sociotechnical change*. MIT Press.

Blondel, V. D., Guillaume, J. L., Lambiotte, R., & Lefebvre, E. (2008). *Fast unfolding of communities in large networks*. Journal of Statistical Mechanics: Theory and Experiment, 2008(10), P10008. <https://doi.org/10.1088/1742-5468/2008/10/P10008>

Boyd, D. (2010). *Social Network Sites as Networked Publics: Affordances, Dynamics and Implications*. In Z. Papacharissi (Ed.), *A Networked Self* (pp. 47-66). Routledge. <https://doi.org/10.4324/9780203876527-8>

Bruinessen, M. van (2013). *Contemporary developments in Indonesian Islam: Explaining the "conservative turn"*. Institute of Southeast Asian Studies.

Bruns, A. (2019). *Are filter bubbles real?* Polity Press.

Bruns, A., & Burgess, J. (2011). *The use of Twitter hashtags in the formation of ad hoc publics*. Proceedings of the 6th European Consortium for Political Research General Conference, 25–27 August 2011, University of Iceland, Reykjavik.

Burhani, A. N. (2018). *Islam Nusantara as a promising response to religious intolerance and radicalism*. ISEAS-Yusof Ishak Institute.

Burt, R. S. (2007). *Brokerage and closure: An introduction to social capital*. Oxford University Press.

Campbell, H. A. (2012). *Understanding the relationship between religion online and offline in a networked society*. Journal of the American Academy of Religion, 80(1), 64-93.

Campbell, H. A. (2020). *The distanced church: Reflections on doing church online*. Digital Religion Publications.

Capoccia, G., & Kelemen, R. D. (2007). *The study of critical junctures: Theory, narrative, and counterfactuals in historical institutionalism*. World Politics, 59(3), 341-369. DOI: <https://doi.org/10.1017/S0043887100020852>

Cheong, P. H., Fischer-Nielsen, P., & Gelfgren, S. (Eds.). (2012). *Digital Religion, Social Media and Culture: Perspectives, Practices and Futures*. Peter Lang.

Cinelli, M., Morales, G. D. F., Galeazzi, A., Quattrociocchi, W., & Starnini, M. (2021). *The echo chamber effect on social media*. Proceedings of the National Academy of Sciences, 118(9), e2023301118. <https://doi.org/10.1073/pnas.2023301118>

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum Associates.

Csardi, G., & Nepusz, T. (2006). *The Igraph Software Package for Complex Network Research*. InterJournal, Complex Systems, 1695, 1-9.

Dickey, D. A., & Fuller, W. A. (1979). *Distribution of the estimators for autoregressive time series with a unit root*. Journal of the American Statistical Association, 74(366a), 427-431.

https://doi.org/10.1080/01621459.1979.10482531

Efron, B., & Tibshirani, R.J. (1994). *An Introduction to the Bootstrap* (1st ed.). Chapman and Hall/CRC.
https://doi.org/10.1201/9780429246593

Evolvi, G. (2017). #Islamexit: *inter-group antagonism on Twitter*. *Information, Communication and Society* (online), 22(3), 386–401. doi:10.1080/1369118X.2017.1388427

Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). *G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences*. *Behavior Research Methods*, 39(2), 175-191.
https://doi.org/10.3758/BF03193146

Fraser, N. (1990). *Rethinking the public sphere: A contribution to the critique of actually existing democracy*. *Social Text*, 25/26, 56–80.

Gillespie, T. (2018). *Custodians of the Internet: Platforms, content moderation, and the hidden decisions that shape social media*. Yale University Press.

Gould, R. V., & Fernandez, R. M. (1989). *Structures of mediation: A formal approach to brokerage in transaction networks*. *Sociological Methodology*, 19, 89-126. https://doi.org/10.2307/270949

Granovetter, M. S. (1973). *The strength of weak ties*. *American Journal of Sociology*, 78(6), 1360- 1380.
https://doi.org/10.1086/225469

Habermas, J. (1989). *The structural transformation of the public sphere: An inquiry into a category of bourgeois society*. MIT Press.

Habibi, A., Salim, M. A., & Setiawan, T. (2019). *Analysis of Indonesia politics polarization before 2019 Presidential Election: A sentiment analysis and social network analysis approach*. International Conference on Information and Communications Technology (ICOIACT), 234-239.
https://doi.org/10.1109/ICOIACT46704.2019.8938415

Handcock, M. S., Hunter, D. R., Butts, C. T., Goodreau, S. M., & Morris, M. (2008). *statnet: Software tools for the representation, visualization, analysis and simulation of network data*. *Journal of Statistical Software*, 24(1), 1-11. https://doi.org/10.18637/jss.v024.i01

Hetherington, M. J., & Rudolph, T. J. (2015). *Why Washington won't work: Polarization, political trust, and the governing process*. University of Chicago Press.

Hoover, S. M., & Echchaibi, N. (2023). *Media Theory and the Third Spaces of Digital Religion* (1st Edition). Routledge

Hutchby, I. (2001). Technologies, texts and affordances. *Sociology*, 35(2), 441-456.
https://doi.org/10.1177/S0038038501000219

Iyengar, S., & Westwood, S. J. (2015). *Fear, loathing, and social identity: Affective polarization in the American electorate*. *American Journal of Political Science*, 59(3), 690–707.

Koto, F., Rahimi, A., Lau, J. H., & Baldwin, T. (2020). *IndoLEM and IndoBERT: A Benchmark Dataset and Pre-trained Language Model for Indonesian NLP*. In Proceedings of the 28th International Conference on Computational Linguistics (pp. 5279-5294). International Committee on Computational Linguistics. https://doi.org/10.18653/v1/2020.coling-main.466

Kozinets, R. V. (2010). *Netnography: Doing ethnographic research online*. SAGE Publications.

Krackhardt, D., & Stern, R. N. (1988). *Informal networks and organizational crises: An experimental simulation*. *Social Psychology Quarterly*, 51(2), 123-140. https://doi.org/10.2307/2786835

Krippendorff, K. (2019). *Content analysis: An introduction to its methodology* (4th ed.). SAGE Publications, Inc

Kristiyanti, D. A., Normah, & Umam, A.H. (2019). *Prediction of Indonesia Presidential Election Results for the 2019-2024 Period Using Twitter Sentiment Analysis*. 2019 5th International Conference on New

Media Studies (CONMEDIA).

Mietzner, M. (2020). *Authoritarian innovations in Indonesia: Electoral narrowing, identity politics and executive illiberalism*. *Democratization*, 27(6), 1021-1036.
<https://doi.org/10.1080/13510347.2020.1795086>

Muhtadi, B. (2019). *Vote buying in Indonesia: The mechanics of electoral bribery*. Palgrave Macmillan.

Orlikowski, W. J. (2007). *Sociomaterial practices: Exploring technology at work*. *Organization Studies*, 28(9), 1435-1448. <https://doi.org/10.1177/0170840607081138>

Papacharissi, Z. (2015). *Affective publics: Sentiment, technology, and politics*. Oxford University Press.

Pariser, E. (2011). *The filter bubble: What the Internet is hiding from you*. Penguin Press.

Qorib, M., & Lubis, R. R. (2023). *The Defensive Fortress for Strengthening Religious Harmony: The Existence and Strategy of Pioneers in Religious Moderation to Educate Muslims in Sumatera Utara*. *Kurdish Studies*, 11(3), 162-177. <https://doi.org/10.58262/ks.v11i3.012>

Rader, E., & Gray, R. (2015). *Understanding user beliefs about algorithmic curation in the Facebook news feed*. In Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems (pp. 173-182). ACM. <https://doi.org/10.1145/2702123.2702174>

Santoso, P. (2024). *Public attention to Indonesian dynastic politics: an analysis of social media networks*. *The Journal of International Communication*, 1-27.
<https://doi.org/10.1080/13216597.2024.2365268>

Siregar, E. A., Tullaili, M., & Afdal, Z. (2024). *Social Media on Islamic Lifestyle Trends: A Systematic Literature Review*. *Indonesian Interdisciplinary Journal of Sharia Economics (IIJSE)*

Smith, M. A., Shneiderman, B., Milic-Frayling, N., Mendes Rodrigues, E., Barash, V., Dunne, C., Capone, T., Perer, A., & Gleave, E. (2010). *Analyzing (social media) networks with NodeXL*. In Proceedings of the fourth international conference on Communities and technologies (pp. 255-264). ACM. <https://doi.org/10.1145/1556460.1556497>

Solahudin, D., & Fakhruroji, M. (2020). *Internet and Islamic learning practices in Indonesia: Social media, religious populism, and religious authority*. *Religions*, 11(1), 19.
<https://doi.org/10.3390/rel11010019>

Zuboff, S. (2019). *The age of surveillance capitalism: The fight for a human future at the new frontier of power*. PublicAffairs.