AI-Driven Data Journalism and Agenda-Setting Reconfiguration: A Case Study of Bacaini.ID's Coverage of the 2024 Kediri Mayoral Election

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Abstract
The integration of artificial intelligence (AI) and big data into journalistic practice has significantly reconfigured the conventional mechanisms of gatekeeping and agenda-setting. However, empirical studies examining this transformation within the context of local media in developing countries such as Indonesia remain relatively limited. This study analyzes how the Indonesian local news outlet Bacaini.ID leveraged AI-based data journalism to reconfigure its agenda-setting strategy during the 2024 Kediri Mayoral Election. Employing a convergent mixed-methods design—combining quantitative analysis of 414 news articles retrieved from approximately 3,000 online media portals, in-depth interviews with editorial practitioners, and direct newsroom observation—the research addresses three interrelated questions: how AI systems reconfigure journalists' gatekeeping practices; how AI-based data journalism facilitates an alternative agenda-setting strategy; and what professional and ethical implications arise from this reconfiguration. The findings indicate a fundamental transformation in the gatekeeper's role, shifting from a reactive information filter to a proactive, data-driven issue explorer. This approach enabled Bacaini.ID to identify critical information gaps—characterized by high issue visibility but low substantive depth—within the dominant media narrative, and to construct counter-narratives through a systematic data-to-story process that generated over 20 million views. Nevertheless, this reconfiguration also introduces new dependencies on algorithmic accuracy and raises complex ethical challenges concerning transparency, accountability, and professional autonomy. Theoretically, the study extends the Mediated Data Model of Communication Flow (Veglis & Maniou, 2018) into a non-Western local media context, while offering a more contextual analytical framework for understanding algorithmic gatekeeping transformation and professional boundary dynamics in contemporary digital journalism.

Keywords: AI-based journalism, data journalism, agenda-setting, algorithmic gatekeeping, local media, Indonesia

INTRODUCTION

Regional head elections (Pilkada) in Indonesia are among democracy's most consequential events, and mass media play a decisive role in shaping public discourse, political orientation, and voter behavior. The 2024 simultaneous Pilkada produced unprecedented digital activity: national data traffic surged to 61.57 petabytes, social media usage rose 5.41%, and video consumption increased 13.89% (Barlian, 2024). Social media now influences the political preferences of approximately 59.3% of voters, making digital media the primary arena of political communication in Indonesia (Hariyani & Rahmawati, 2024). This mobilization intensifies pressure on journalistic institutions—especially local outlets—to produce timely, accurate, and substantive coverage that serves genuine democratic functions.

Local media in Indonesia operate under acute structural constraints. Small editorial teams, limited financial resources, and localized audiences leave most outlets unable to independently investigate the full spectrum of electoral issues (Nielsen, 2015). During Pilkada campaigns, these constraints intensify: with multiple candidates competing for visibility, journalists often rely on press materials supplied by campaign teams. This dependency carries epistemic consequences. When content is substantially shaped by candidates' public relations apparatuses, the media's function shifts from accountability journalism toward the reproduction of political image narratives, marginalizing substantive policy discourse (Coddington, 2015; Waisbord, 2013). The result is a coverage ecosystem in which issue visibility decouples from policy substance, leaving citizens well-informed about candidate personalities but poorly informed about governance platforms and track records.

Artificial intelligence (AI) and big data have introduced transformative potential into journalism. International and large national outlets increasingly integrate AI for automated reporting, large-scale data processing, predictive issue analysis, and audience engagement measurement (Diakopoulos, 2019; Broussard, 2018). This has generated substantive scholarly debate on professional boundaries, accountability challenges, and the normative implications of algorithmically mediated news production (Porlezza & Di Salvo, 2020; Zamith, 2019; Ahmad et al., 2024). Yet this literature has been produced predominantly in Western, high-resource contexts, where structural conditions differ substantially from those facing local media in developing countries. Research on AI adoption in resource-constrained local media in the Global South remains a significant gap.

This gap matters democratically. Local media serve irreplaceable functions in sub-national accountability journalism: they monitor local government, amplify community voices overlooked by national media, and provide hyper-local information relevant to citizens' lived experiences (Carlson, 2015; Nielsen, 2015). When local media cannot fulfill these functions, the deficit is not merely organizational but a failure of the informational infrastructure on which meaningful political participation depends. Understanding how AI and big data can be strategically deployed to strengthen—rather than undermine—this democratic function is therefore a research priority of both academic and civic importance.

This study examines Bacaini.ID, a local digital outlet in Kediri, East Java, that adopted AI and big data systems in its coverage of the 2024 Kediri Mayoral Election. Kediri

constitutes a typical case (Yin, 2018) of Indonesian local electoral dynamics: a mid-sized city with a contested political environment, a saturated and often superficial media landscape, and a journalistic ecosystem dominated by press release reproduction. Bacaini.ID's strategy of using AI-based data analysis to identify information gaps and construct counter-narratives emphasizing policy substance makes it an empirically rich site for examining technology-enabled local journalism.

Three research questions guide this investigation. First, how do AI and big data systems reconfigure journalists' gatekeeping practices in local electoral coverage? Second, how does AI-based data journalism facilitate an alternative agenda-setting strategy that diverges from candidate-controlled narratives? Third, what professional and ethical implications arise from AI-driven agenda-setting in local journalism? This study contributes at three levels. Theoretically, it extends the Mediated Data Model of Communication Flow (Veglis & Maniou, 2018) by providing empirical evidence of the model's operationalization in a non-Western, resource-constrained local media context. Methodologically, it demonstrates the analytical value of a convergent mixed-methods design for studying newsroom practices. Practically, it offers strategic insights for local media organizations in the developing world considering AI adoption, and for policymakers invested in local democratic accountability journalism.

LITERATURE REVIEW

This study's theoretical framework integrates three bodies of scholarship: agenda-setting theory in the digital age, gatekeeping theory reconfigured by data journalism, and the Mediated Data Model of Communication Flow. The synthesis is constitutive rather than additive: each theoretical layer transforms the others, producing a framework better suited to capturing the complexity of AI-mediated local journalism than any single theory could provide.

Classical agenda-setting theory holds that mass media shape public opinion not by telling audiences what to think but by influencing which issues they think about (McCombs & Shaw, 1972). This capacity to structure public attention derived primarily from the editorial decisions of journalists and news organizations, which functioned as the dominant mediators between social reality and public consciousness. Subsequent research expanded the theory to include second-level effects (how media frame issue attributes), intermedia agenda-setting (how media influence each other's priorities), and network agenda-setting (how clusters of issues are associated in coverage and public cognition) (McCombs, 2004, 2014). These elaborations complicated the theory's initial linearity without displacing its core premise: that organized editorial institutions occupy positions of structural power in forming public political knowledge.

The digital media environment challenges this premise fundamentally. Audience fragmentation, disintermediation of traditional distribution, algorithmic curation on social platforms, and the collapse of journalism's sustaining economic models have disrupted the conditions under which classical agenda-setting operated (Valenzuela & McCombs, 2019; Bodrunova, 2019). In the contemporary ecosystem, the agenda is no longer solely the product of editorial deliberation; it emerges from a multi-actor system in which journalists,

algorithmic recommendation systems, platforms, audience engagement patterns, and political communication actors jointly shape which issues receive sustained attention (Trielli & Boczkowski, 2022; Napoli, 2014). Scholars now argue for reconceptualizing agenda-setting as a distributed, contested, and data-mediated process in which the boundaries between journalistic agency and algorithmic influence are difficult to delineate (Anderson, 2013; Tandoc & Vos, 2016).

Gatekeeping theory provides the second pillar. White (1950) originally described gatekeeping as the process through which individual journalists filtered potential news events into the bounded set of stories reaching the public. Shoemaker and Vos (2009) subsequently developed a multilevel model that expanded this framework to organizational, institutional, and societal factors—editorial routines, ownership structures, professional norms, and market pressures. The rise of algorithmic systems capable of processing information at scales beyond human cognition has introduced algorithmic gatekeeping: the participation of automated systems in selecting, ranking, and distributing journalistic content (Gillespie, 2014; Coddington, 2015). Rather than eliminating human gatekeeping, this development transforms its character, shifting journalists from primary selectors to supervisory interpreters who evaluate algorithmic outputs.

In data journalism, gatekeeping undergoes further transformation. Data journalism—journalistic practice using quantitative data as the primary basis for news production (Bounegru & Gray, 2021)—reorganizes gatekeeping around data analysis rather than event observation. Instead of witnessing events and selecting newsworthy ones, data journalists analyze datasets to identify patterns, trends, and anomalies that constitute news. This reorientation enables systematic investigation of phenomena unfolding across large populations and long timeframes, which event-based journalism cannot readily capture. However, it also raises concerns about methodological transparency, the reproduction of dataset biases, and the black box character of some analytical algorithms that complicates journalistic accountability (Ananny, 2016; Zamith, 2019; Lewis & Westlund, 2015).

The ethical dimensions of AI integration have attracted growing attention as AI tools move from experimental to routine deployment (Cools et al., 2025; Møller, 2024). Central concerns include the risk that algorithmic reliance may erode journalists' critical judgment, that AI opacity may preclude news organizations from auditing their own decision-making, and that automated systems may reproduce structural biases disadvantaging marginalized communities (Gutiérrez-Caneda et al., 2024; Ahmad et al., 2024). In Indonesia, Press Council Regulation Number 1 of 2025 stipulates that journalistic works involving AI assistance must comply with the Journalistic Code of Ethics and remain under human supervision (Dewan Pers, 2025). This framework affirms human oversight as non-negotiable, positioning AI as a tool that augments rather than replaces professional journalistic judgment.

The Mediated Data Model of Communication Flow (Veglis & Maniou, 2018) provides the integrative bridge between reconfigured gatekeeping and agenda-setting. The model holds that in data-driven media environments, mass communication flow is no longer linear—from event to journalist to audience—but is mediated by layers of data

collection, algorithmic analysis, and editorial interpretation that collectively shape how social reality is perceived and narrated. Data functions not merely as source material but as a mediating layer structuring the entire communicative process, from what journalists investigate to how they communicate their conclusions. The model is particularly valuable here because it accommodates AI-augmented local journalism: it explains how outlets like Bacaini.ID can leverage data systems to overcome the structural limitations of small editorial teams, enabling more systematic coverage than traditional manual monitoring would permit.

The synthesis of these three frameworks generates a conceptual architecture greater than the sum of its parts. Agenda-setting theory identifies the democratic stakes of media attention allocation and provides normative criteria for evaluating electoral coverage quality. Gatekeeping theory illuminates the organizational and technological processes through which attention allocation decisions are made, and how AI participation transforms them. The Mediated Data Model explains the specific mechanisms through which data and algorithmic systems mediate the relationship between journalistic practice and public communication. Together, these frameworks position this study to analyze not only what Bacaini.ID did—how it leveraged AI to reconfigure its coverage practices—but why it matters theoretically and practically: because the capacity of local media to exercise independent agenda-setting power, free of political actors' narrative control, is a foundational condition for democratic accountability journalism at the local level..

METHODOLOGY

Research Design

This study employs a convergent mixed-methods design as articulated by Creswell and Plano Clark (2017). This design allows for the parallel collection and analysis of quantitative and qualitative data, which are subsequently integrated during interpretation to produce a more comprehensive and robust understanding of the phenomenon under investigation than either approach could generate independently. The convergent design is particularly well suited to this study's research questions, which require both the systematic measurement of media coverage patterns (addressed through quantitative methods) and the contextual exploration of editorial practices and journalists' professional perceptions (addressed through qualitative methods). The integration of these two data streams through triangulation enables the research to achieve the complementary virtues of breadth and depth—generating generalizable patterns while simultaneously capturing the interpretive richness of human experience within complex organizational settings.

Case Selection and Justification

Bacaini.ID was selected as the primary research site using a critical case study approach (Yin, 2018). This selection is grounded in two main considerations. First, Bacaini.ID represents a rare instance of a local Indonesian media outlet that has actively and systematically adopted AI and big data systems as core components of its journalistic workflow—a characteristic that makes it a theoretically significant case for examining AI-driven journalism in a local media context. Second, the outlet's explicit editorial commitment to substantive policy journalism—focusing on governance issues, candidate

accountability, and public interest analysis—positions it as an exemplar of the kind of journalistic practice that AI adoption might theoretically enable, but which requires empirical investigation to validate. The 2024 Kediri Mayoral Election was selected as the temporal and thematic focus because it provides a high-intensity, politically consequential context in which the contrasts between press release-dependent coverage and AI-augmented investigative journalism are most sharply visible. Kediri, as a typical case of local Indonesian electoral dynamics, offers contextual generalizability that a highly atypical political environment would not.

Data Collection

Quantitative data were obtained through the Intelligence Media Analytics (IMA) platform, which was used to systematically retrieve and analyze 414 news articles related to the 2024 Kediri Mayoral Election published across approximately 3,000 national and local online media portals. Complementing this, Intelligence Social Analytics (ISA) was employed to compile and analyze audience interaction data from four major social media platforms, enabling the measurement of issue visibility, coverage intensity, and audience engagement patterns throughout the research period. These quantitative datasets provided the empirical foundation for mapping the information landscape within which Bacaini.ID's editorial decisions operated and against which its alternative agenda-setting strategy can be evaluated (Product information of IMA and ISA, 2023).

Qualitative data were collected through semi-structured in-depth interviews with two key informants: the editor of Bacaini.ID, whose perspectives illuminate the strategic rationale, operational challenges, and editorial principles governing the AI-augmented newsroom; and the former Chairman of the Alliance of Independent Journalists (AJI) Kediri, who provides an independent professional evaluation of Bacaini.ID's practices from a journalistic ethics standpoint. These interviews were designed to explore journalists' experiential understanding of AI integration, changes in their gatekeeping role, and the professional and ethical tensions they navigate in AI-driven electoral coverage. Participant observation was additionally conducted within the Bacaini.ID newsroom to directly observe the journalistic workflow, the interaction patterns between journalists and the AI system, and the editorial decision-making process as it unfolds in daily practice. This ethnographic dimension of the data collection enables an understanding of AI-mediated journalism that cannot be captured through interviews alone, which are inevitably subject to retrospective reconstruction and professional self-presentation.

Data Analysis

Quantitative data were analyzed using descriptive statistics to characterize the distribution of issues, the visibility levels of coverage across the 414 articles, and the patterns of audience engagement across online and social media platforms. This analysis was oriented toward identifying the structural features of the information ecosystem—the dominance of candidate-controlled narratives, the gaps between issue visibility and policy substance—that provided the context for Bacaini.ID's editorial interventions. Qualitative data were analyzed using thematic coding techniques as developed by Braun and Clarke (2006), through which key themes concerning gatekeeping reconfiguration, agenda-setting strategy, and professional-ethical implications were identified, refined, and interpreted.

The convergence of quantitative and qualitative analyses was achieved through triangulation: findings from both data streams were systematically compared to assess consistency, identify complementarities, and resolve apparent contradictions, thereby producing a more reliable and comprehensive account of AI-mediated journalistic practice at Bacaini.ID than either dataset could provide independently. Data credibility was further ensured through member-checking of key interview findings with informants and through thick description in the reporting of qualitative results (Lincoln & Guba, 1985).

RESULTS AND DISCUSSION

Reconfiguration of Gatekeeping Practices (RQ1)

The integration of IMA and ISA systems has fundamentally reconfigured gatekeeping practices at Bacaini.ID, transforming processes that were previously manual, reactive, and constrained by individual journalistic capacity into a proactive, data-driven, and systematically scalable editorial workflow. Three distinct mechanisms characterize this reconfiguration. First, manual issue monitoring—previously dependent on journalists' individual networks, editorial judgment, and the limited reach of their direct observation—has been replaced by algorithmic filtering that continuously tracks coverage patterns across approximately 3,000 media portals, generating real-time intelligence about which issues are receiving attention, which are being neglected, and how coverage intensity is shifting over time. Second, data-driven news triage has been introduced as a systematic mechanism for prioritizing editorial resources: rather than relying on individual journalists' intuitions about newsworthiness, the editorial team uses IMA data to make evidence-based decisions about which stories warrant investment and which apparent issues reflect genuine public interest rather than mere candidate-driven visibility inflation. Third, a human-in-the-loop mechanism governs the verification and final editorial decision-making process, ensuring that algorithmic outputs are subjected to professional journalistic judgment before they shape publication decisions.

This tripartite reconfiguration aligns precisely with the transformational trajectory described in the Mediated Data Model (Veglis & Maniou, 2018), wherein data serves as a new mediation layer that structures the entire journalistic communication flow. The gatekeeping process at Bacaini.ID is no longer concentrated at the single threshold of story selection; it has become a layered, iterative process involving algorithmic filtering, data-driven prioritization, and human editorial validation at multiple stages. This finding is consistent with Coddington's (2015) typology of data journalism, which identifies systematic data analysis as a form of gatekeeping that operates upstream of traditional story selection—shaping not just which events become news but which patterns and anomalies journalists choose to investigate. It also resonates with Carlson's (2015) analysis of automated journalism as a practice that reconfigures rather than eliminates journalistic agency, relocating it from the first stage of information selection to the interpretive and evaluative functions that algorithmic systems cannot replicate.

Crucially, the final editorial decision at Bacaini.ID regarding the suitability, framing, and perspective of coverage remains with the human editor. This practice demonstrates that AI adoption has not displaced journalistic professionalism but rather repositioned it within a technologically augmented workflow—consistent with the mandate of the Press Council,

which requires that AI-assisted journalistic works remain under human supervision to ensure compliance with the Journalistic Code of Ethics (Dewan Pers, 2025). This finding challenges both techno-optimist narratives that treat AI as a straightforward efficiency multiplier and techno-pessimist accounts that frame AI integration as an inherent threat to journalistic autonomy, suggesting instead that the implications of AI adoption are substantially determined by the organizational design choices that govern how human and algorithmic agency are distributed across the editorial process.

Figure 1. How Gatekeepers Create Data Journalism Using the Mediated Data Model of Communication Flow
(Source: Veglis & Maniou 2018)

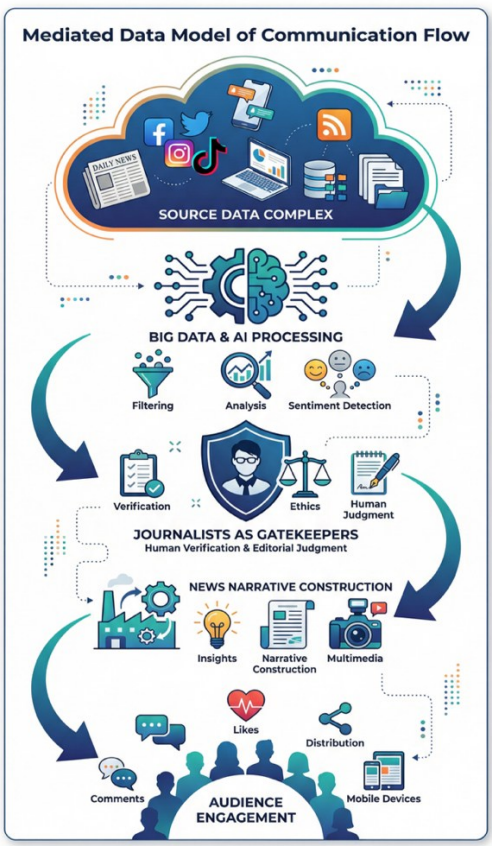

Figure 2. Data Journalism Concept at Bacaini.ID Using the Mediated Data Model of Communication Flow with Big Data and AI Technology
(Source: Dokumentasi peneliti, 2024; generated using AI-assisted visualization tools)

Figure 3. Big Data Characteristics
(Source: Bounegru & Gray, 2021)

Facilitation of Alternative Agenda-Setting Strategy (RQ2)

The data-driven reconfiguration of gatekeeping described above provided the operational foundation for Bacaini.ID's most significant editorial intervention: the deliberate construction of an alternative agenda-setting strategy that diverges systematically from the candidate-controlled dominant narrative of the 2024 Kediri Mayoral Election. Through IMA data analysis, Bacaini.ID's editorial team was able to identify a defining structural feature of the existing coverage ecosystem: a pronounced information gap characterized by high issue visibility coupled with minimal policy substance. The quantitative analysis of 414 news articles revealed that coverage of the three mayoral candidates was dominated by campaign event reporting, candidate profile pieces derived from press materials, and personality-focused narratives, while in-depth analysis of governance records, policy platforms, and accountability issues was conspicuously absent. This gap between the quantity and the quality of electoral information represents precisely the kind of coverage failure that agenda-setting theory identifies as epistemically and democratically costly (McCombs, 2014).

Bacaini.ID responded to this identified gap through a systematic data-to-story process that operationalizes the alternative agenda-setting function the Mediated Data Model theorizes but which existing empirical literature has rarely documented in local media contexts. The editorial team used IMA-derived data on coverage patterns to identify underreported dimensions of the candidates' public records and governance performance, then invested editorial resources in producing substantive content addressing these gaps—including podcast episodes featuring in-depth candidate interviews focused on policy commitments, and a series of investigative articles analyzing candidates' administrative track records and accountability to prior electoral promises. This approach represents what McCombs (2014) and Anderson (2018) describe as corrective agenda-setting: the media strategically intervenes in public discourse not merely to reflect existing patterns of attention but to redirect that attention toward issues of greater policy substance.

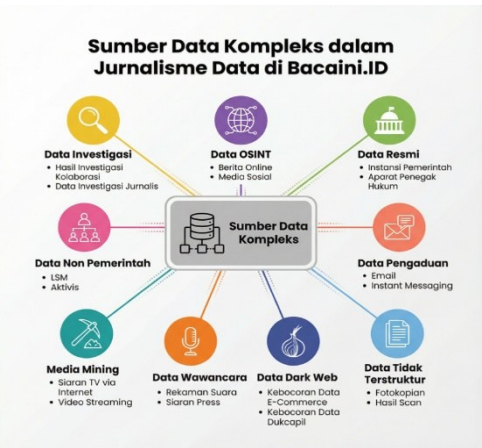

Figure 4. Source Data Complex in Data Journalism at Bacaini.ID
(Source: Dokumentasi peneliti, 2024)

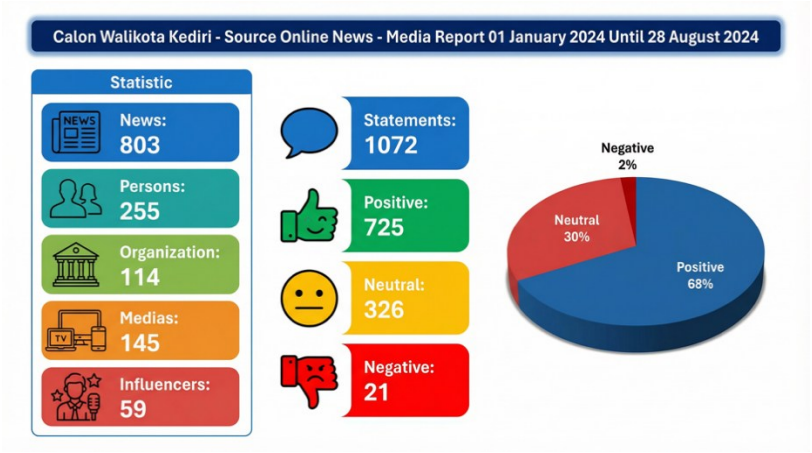

Figure 5. Number of Media Outlets and News Articles Related to 'Kediri Mayoral Candidates
(Source: Intelligence Media Analytics (IMA) — ATEL Inc., 2024)

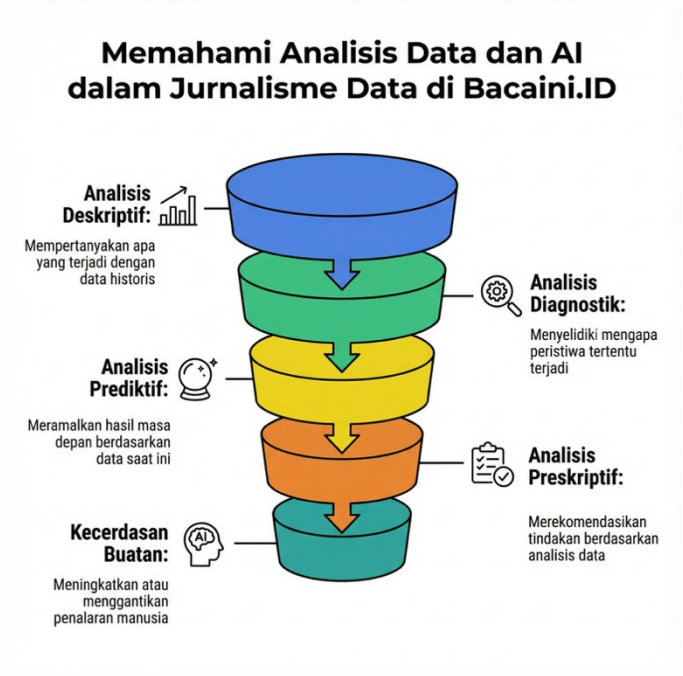

Figure 6. Data Flow Supporting Data Journalism to News Narrative with the Mediated Data Model of Communication Flow
(Source: Veglis & Maniou (2018); dokumentasi peneliti, 2024)

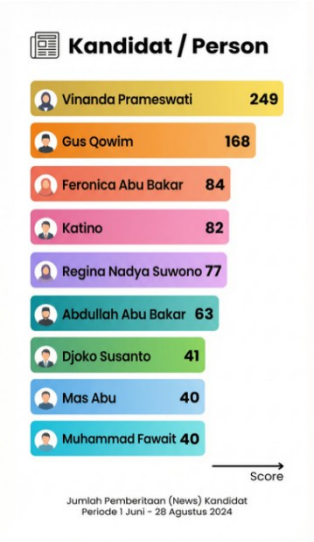

Figure 7. Number of News Articles for Each Candidate, June 1–August 28, 2024 (Source: Intelligence Media Analytics (IMA) — ATEL Inc., 2024)

Figure 8. Summary of News Topics, June 1–August 28, 2024, Regarding Kediri Mayoral Candidates (Source: Intelligence Media Analytics (IMA) — ATEL Inc., 2024)

The empirical effectiveness of this strategy is evidenced by the audience engagement data: Bacaini.ID's investigative and accountability-focused content generated over 20 million views during the research period—a figure that substantially exceeds the engagement generated by conventional electoral reporting from competing local outlets. These findings are significant for two reasons. First, they demonstrate that substantive, data-driven policy journalism can attract and sustain large audiences even at the local level, challenging the prevalent assumption that electoral audiences are primarily interested in personality-focused campaign reporting. Second, they provide empirical support for the argument that AI-enabled alternative agenda-setting represents a viable competitive differentiation strategy for local media organizations facing resource constraints: by focusing their limited editorial capacity on the coverage gaps that AI analysis has identified as most substantively significant, local outlets can carve out distinctive audience relationships that conventional press-release-dependent reporting cannot replicate.

Figure 9. Bacaini.ID's First Agenda-Setting Initiative
(Source: Dokumentasi lapangan peneliti; tangkapan layar platform Bacaini.ID, 2024)

Figure 10. Bacaini.ID's Second and Third Agenda-Setting Initiatives,
(Source: Dokumentasi lapangan peneliti; tangkapan layar platform Bacaini.ID, 2024)

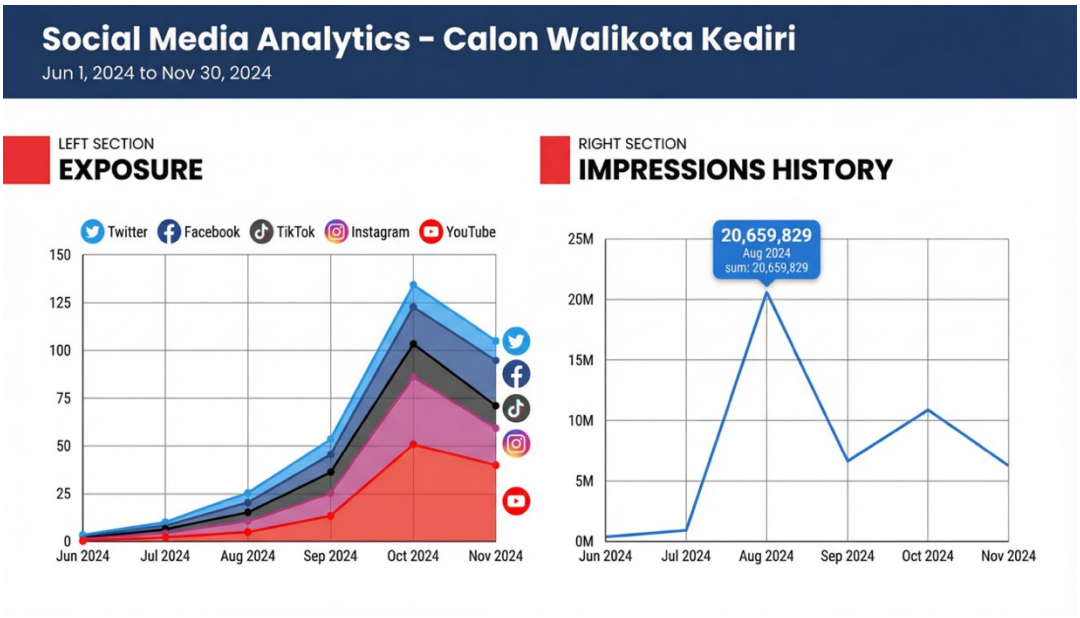

Figure 11. Number of Readers of Bacaini.ID's Agenda-Setting News Articles
(Source: Intelligence Social Analytics (ISA) — ATEL Inc., 2024)

Professional and Ethical Implications (RQ3)

The reconfiguration of gatekeeping and agenda-setting practices at Bacaini.ID carries significant professional and ethical implications that extend beyond the specific case to raise broader questions about the future of local journalism in AI-augmented media environments. At the professional level, the journalist's role has been fundamentally redefined in practice, even where organizational titles and formal role descriptions remain

unchanged. Journalists at Bacaini.ID are no longer primarily information gatherers who observe events and translate them into news stories; they are increasingly data-informed analysts who must possess the competence to read, interpret, and critically evaluate the outputs of AI systems—assessing the reliability of algorithmic conclusions, identifying potential sources of bias or error in dataset construction, and determining where human investigation is needed to supplement or correct machine-generated analysis. This reconfiguration demands new competencies that journalism education has only recently begun to address systematically: data literacy, statistical reasoning, and the capacity for critical algorithmic auditing (Cools et al., 2025; Møller, 2024).

This professional evolution is consistent with the theoretical trajectory described by Shoemaker and Vos (2009) and Carlson (2015), who argue that technological transformation in journalism tends to reconfigure rather than eliminate professional agency—creating new divisions of labor between human and machine capacities rather than simply replacing one with the other. At Bacaini.ID, this reconfiguration is visible in the sustained importance of editorial judgment, source cultivation, and ethical deliberation in the newsroom workflow: AI systems provide the analytical intelligence that enables journalists to identify what to investigate, but the investigative and interpretive work of understanding why identified patterns are significant, how they should be framed for public understanding, and what ethical constraints govern their publication remains irreducibly human. This finding resonates with Møller's (2024) analysis of how AI reconfigures professional projects in journalism, suggesting that the profession's claim to social legitimacy is being renegotiated around new competencies even as its foundational values—accuracy, accountability, public service—remain operative.

The ethical dimension of this reconfiguration raises challenges that Bacaini.ID's editorial team acknowledges navigating with ongoing uncertainty. Three ethical tensions are particularly salient. First, the black box character of some AI analytical functions means that the basis for certain editorial recommendations may not be fully transparent even to the journalists who act upon them—raising accountability concerns about whether news organizations can adequately explain and defend publication decisions that were substantially shaped by algorithmic outputs. Second, the use of data analysis to construct candidate accountability narratives—particularly those highlighting discrepancies between candidates' self-presentation and their governance records—involves a constant balancing act between the public's right to accurate political information and the legal and ethical risks of character damage to political subjects. Third, the increasing speed and volume of data-driven content production creates pressure to publish ahead of traditional verification timelines, potentially compromising the accuracy standards that define professional journalism's legitimacy. The Press Council's regulatory framework (Dewan Pers, 2025), which mandates human oversight throughout AI-assisted journalistic processes, provides a normative scaffold for navigating these tensions but cannot resolve them in advance of specific editorial situations.

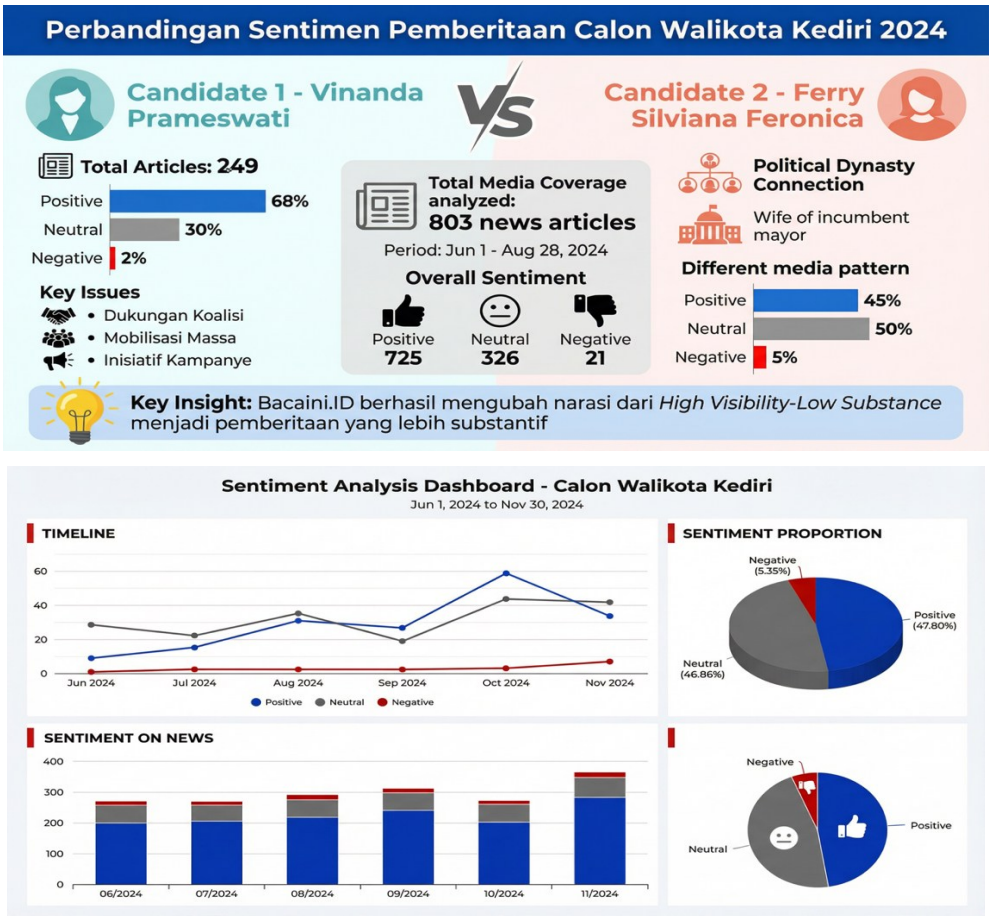

Figure 12. Timeline, Sentiment Proportion, and Sentiment in News from Bacaini.ID's Big Data and AI Analysis,

(Source: Intelligence Social Analytics (ISA) — ATEL Inc., 2024; generated using AI-assisted visualization tools)

Discussion

Taken together, the findings of this study provide strong empirical support for the Mediated Data Model of Communication Flow (Veglis & Maniou, 2018) as a framework capable of explaining how data and analytical systems re-mediate the flow of journalistic communication not only in well-resourced national media organizations but also in the resource-constrained contexts of local media in developing countries. The Bacaini.ID case demonstrates that the model's core proposition—that data functions as a mediating layer structuring the entire journalistic communication process—holds empirically in a context that differs substantially from the Western media environments in which most prior data journalism research has been conducted. This contextual extension of the model's empirical scope constitutes a meaningful theoretical contribution.

Furthermore, the findings challenge a widely held assumption in media studies and journalism research: that the adoption of sophisticated AI and data analytics is primarily the domain of well-funded national and international media organizations, and that local

media in developing contexts must remain structurally excluded from the transformations these technologies enable. The Bacaini.ID case suggests that this assumption is empirically incorrect and normatively misleading. With appropriate tool selection, editorial commitment, and regulatory support, local media organizations can leverage AI and big data to overcome some of the structural constraints that have historically limited their capacity for independent investigative journalism. This is not to suggest that technology eliminates resource constraints—editorial teams still require training, analytical capacity, and time—but that it can substantially alter the ratio between editorial investment and investigative output, enabling small teams to achieve analytical reach that was previously accessible only to much larger organizations.

The study also contributes to ongoing theoretical debates about journalistic autonomy and professional identity in AI-augmented newsrooms (Porlezza & Di Salvo, 2020; Zamith, 2019). The Bacaini.ID case suggests that AI adoption need not erode professional autonomy when the organizational design of the AI-augmented workflow preserves human editorial authority at every critical decision point. The human-in-the-loop mechanism that characterizes Bacaini.ID's practice is not merely a compliance response to regulatory requirements but reflects a deeply held editorial commitment to ensuring that data-driven insights are subjected to professional judgment before they shape publication. This finding has practical implications for media organizations considering AI adoption: the normative question is not whether to integrate AI but how to design the human-machine interface within editorial workflows to ensure that professional values remain operative and that accountability for publication decisions remains clearly and unambiguously human.

CONCLUSION

This study concludes that the strategic implementation of AI and big data systems has the potential to empower local media organizations to transcend the structural constraints that have historically limited their capacity for independent electoral journalism, enabling them to move beyond reactive press-release reproduction toward proactive, data-driven agenda-setting focused on public accountability. The empirical findings from Bacaini.ID's coverage of the 2024 Kediri Mayoral Election demonstrate that this potential is realizable in practice: through the deliberate use of AI-based analytical platforms, a small local editorial team was able to identify systematic gaps in the dominant media coverage ecosystem, construct counter-narratives emphasizing policy substance and candidate accountability, and achieve audience engagement—over 20 million views—that significantly exceeded the reach of conventional local electoral coverage.

In response to the three research questions, this study yields several substantive conclusions. First, AI and big data reconfigure gatekeeping practices at Bacaini.ID by transforming the editorial workflow from a reactive, judgment-dependent manual process into a proactive, evidence-based, data-informed system that retains essential human editorial authority at its critical decision points. This reconfiguration does not replace journalistic professionalism but repositions it within a technologically augmented workflow, consistent with the principle of human oversight mandated by the Press Council (Dewan Pers, 2025). Second, AI-based data journalism facilitates the formation of an

alternative agenda-setting strategy by enabling journalists to systematically identify the gap between issue visibility and policy substance in the dominant media landscape, and to invest editorial resources in substantive content that addresses this gap. This alternative agenda-setting function—what this study terms corrective agenda-setting—represents a significant democratic contribution of AI-enabled local journalism that has received insufficient theoretical and empirical attention. Third, this reconfiguration process carries significant professional and ethical implications: it demands new data literacy competencies from journalists, introduces novel accountability challenges associated with the opacity of some AI analytical functions, and requires ongoing ethical deliberation about the limits of data-driven accountability journalism.

This study acknowledges methodological limitations inherent in its single-case design. The findings describe the conditions under which AI-enabled alternative agenda-setting was possible and effective in a specific organizational and political context; they are not intended to support claims of generalization across the full diversity of Indonesian local media or global comparative contexts. Future research is advised to conduct comparative analyses across multiple local media organizations with varying resource levels, editorial orientations, and political environments—in Indonesia and in other developing-country contexts—to identify the structural conditions under which AI adoption is most likely to strengthen rather than undermine local journalism's democratic functions. Longitudinal research tracking the evolution of AI-augmented newsroom practices over election cycles would also enrich understanding of how these practices develop and institutionalize over time.

Beyond these specific recommendations, this study offers a constructive counter-narrative to prevalent anxieties about AI's impact on journalism. The Bacaini.ID case suggests that the future of local democratic accountability journalism need not be determined by the resource constraints that have historically limited local media's investigative ambitions. When AI is integrated thoughtfully, ethically, and under human editorial authority, it can function as an instrument for strengthening the democratic mission of journalism—enabling local media to serve as more effective and independent watchdogs over the exercise of political power at the level where that power most directly affects citizens' everyday lives.

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REFERENCES

Ahmad, N., Al-Zoubi, O., & Hamid, N. A. (2024). Artificial intelligence in newsrooms: Ethical challenges facing journalists. Jurnal Komunikasi: Malaysian Journal of Communication, 40(1), 401–409. https://doi.org/10.17576/JKMJC-2024-4001-22

Ananny, M. (2016). Toward an ethics of algorithms: Convening, observation, and forensics. Science, Technology, & Human Values, 41(1), 93–117. https://doi.org/10.1177/0162243915606523

Anderson, C. W. (2013). Towards a sociology of computational and algorithmic journalism. New Media & Society, 15(7), 1005–1021. https://doi.org/10.1177/1461444812465137

Anderson, C. W. (2018). Apostles of certainty: Data journalism and the politics of doubt. Oxford University Press.

Barlian, J. K. (2024, December 5). Telkomsel jaga kualitas jaringan dengan lonjakan trafik 11,36% selama Pilkada. SWA. https://www.swa.co.id

Bodrunova, S. S. (Ed.). (2019). Internet-trolling: Theory and practice. Springer.

Bounegru, L., & Gray, J. (Eds.). (2021). The data journalism handbook: Towards a critical data practice. Amsterdam University Press.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology, 3(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Broussard, M. (2018). Artificial unintelligence: How computers misunderstand the world. MIT Press.

Carlson, M. (2015). The robotic reporter: Automated journalism and the redefinition of labor, compositional forms, and journalistic authority. Digital Journalism, 3(3), 416–431. https://doi.org/10.1080/21670811.2014.976412

Coddington, M. (2015). Clarifying journalism's quantitative turn: A typology for data journalism, computational journalism, and computer-assisted reporting. Digital Journalism, 3(3), 331–348. https://doi.org/10.1080/21670811.2014.976400

Cools, H., De Dobbelaer, R., & Paulussen, S. (2025). From automation to transformation with AI-tools. Journalism Practice, 1–19. https://doi.org/10.1080/17512786.2024.2384622

Creswell, J. W., & Plano Clark, V. L. (2017). Designing and conducting mixed methods research (3rd ed.). Sage.

Dewan Pers. (2025). Peraturan Dewan Pers Nomor 1/Peraturan-DP/I/2025 tentang pedoman penggunaan kecerdasan buatan dalam karya jurnalistik.

Diakopoulos, N. (2019). Automating the news: How algorithms are rewriting the media. Harvard University Press.

Gillespie, T. (2014). The relevance of algorithms. In T. Gillespie, P. Boczkowski, & K. Foot (Eds.), Media technologies: Essays on communication, materiality, and society (pp. 167–193). MIT Press.

Graefe, A. (2016). Guide to automated journalism. Columbia Journalism School.

Gutiérrez-Caneda, B., Vázquez-Herrero, J., & López-García, X. (2024). Ethics and journalistic challenges in the age of artificial intelligence: Talking with professionals and experts. Frontiers in Communication, 9, Article 1465178. https://doi.org/10.3389/fcomm.2024.1465178

Hariyani, N., & Rahmawati, A. Y. (2024). Media sosial dan aplikasi kecerdasan buatan dalam preferensi dan partisipasi pemilih di pemilihan umum. Jurnal Administrasi Publik dan Ilmu Komunikasi, 11(2), 102–111.

Lewis, S. C., & Westlund, O. (2015). Big data and journalism: Epistemology, expertise, and ethics. Digital Journalism, 3(3), 447–466. https://doi.org/10.1080/21670811.2014.976418

Lincoln, Y. S., & Guba, E. G. (1985). Naturalistic inquiry. Sage.

McCombs, M. E. (2004). Setting the agenda: The mass media and public opinion. Polity Press.

McCombs, M. E. (2014). Setting the agenda: Mass media and public opinion (2nd ed.). Polity Press.

McCombs, M. E., & Shaw, D. L. (1972). The agenda-setting function of mass media. Public Opinion Quarterly, 36(2), 176–187. https://doi.org/10.1086/267990

Møller, L. A. (2024). Reinforce, readjust, reclaim: How artificial intelligence reconfigures professional projects in journalism. New Media & Society. Advance online publication. https://doi.org/10.1177/14614448241269300

Napoli, P. M. (2014). Automated media: An institutional theory perspective on algorithmic media production and consumption. Communication Theory, 24(3), 340–360.

Nielsen, R. K. (Ed.). (2015). Local journalism: The decline of newspapers and the rise of digital media. I.B. Tauris.

Porlezza, C., & Di Salvo, P. (2020). The "missing piece": Ethics and the ontological boundaries of automated journalism. Digital Journalism, 8(7), 846–864. https://doi.org/10.1080/21670811.2020.1788266

ATEL Inc. (2023). Product information of IMA and ISA.

Shoemaker, P. J., & Vos, T. P. (2009). Gatekeeping theory. Routledge.

Tandoc, E. C., Jr., & Vos, T. P. (2016). The journalist is marketing the journalist: Social media in the gatekeeping process. Journalism Practice, 10(8), 950–966.

Trielli, D., & Boczkowski, P. J. (2022). Algorithmic agenda-setting: The shape of search media during the 2020 US election. #ISOJ Journal, 12(1), 45–67.

Valenzuela, S., & McCombs, M. (2019). The agenda-setting role of the news media in the new media environment. In K. Kenski & K. H. Jamieson (Eds.), The Oxford handbook of political communication. Oxford University Press.

Veglis, A., & Maniou, T. A. (2018). The mediated data model of communication flow: Big data and data journalism. KOME: An International Journal of Pure Communication Inquiry, 6(2), 32–43. https://doi.org/10.17646/KOME.2018.23

Waisbord, S. (2013). Reinventing professionalism: Journalism and news in global perspective. John Wiley & Sons.

White, D. M. (1950). The "gate keeper": A case study in the selection of news. Journalism Quarterly, 27(4), 383–390. https://doi.org/10.1177/107769905002700403

Yin, R. K. (2018). Case study research and applications: Design and methods (6th ed.). Sage.

Zamith, R. (2019). The "computational turn" in journalism and the challenge to normative theories. Communication Theory, 29(1), 98–117. https://doi.org/10.1093/ct/qty021