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Research Paper

A Media Ecology Study of Community Radio in Yogyakarta

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Abstract

Indonesia's media sector has undergone rapid evolution amid social, economic, political, and technological changes. Community radio expanded after the enactment of Broadcasting Law No. 32/2002, but declined sharply as 2020 approached, threatening the citizen-run alternative public sphere. Despite Yogyakarta's historical centrality, adaptation within its community-radio ecology remains underexplored. This study examines transformations in Yogyakarta from the post-Reformasi period through 2024, analyzing how regulation and technology have influenced them. Using a qualitative design, we examine Angkringan FM, Saka FM, Swaka FM, and BBM FM through in-depth interviews with managers, presenters, and local stakeholders; participant observation of on-air practice, content production, and community relations; and analysis of policy documents and organizational archives. Guided by media-ecology theory, we map interactions among actors, technologies, regulations, and social environments across three phases: pre-2002, post-2002, and the internet/social-media era. Findings indicate that the 2002 law reconfigured organizational structures and practices; however, its implementation constrained innovation in funding, licensing, and reach, resulting in a relatively stagnant ecosystem. Concurrently, the rise of the internet and social media expanded capacities for production and distribution, shifted audiences to digital platforms, and demanded multimodal formats. To persist, many stations interpret regulatory limits flexibly, generating tensions between legal compliance and sustainability. We propose revisiting definitions, licensing regimes, and success indicators so that community radio aligns with today's digital ecology while supporting citizen-based information democracy. The study advances Indonesian media-ecology scholarship and provides policy foundations for the inclusive and sustainable revitalization of Yogyakarta's community radio.

Keywords *Media Ecology, Community Radio, Broadcasting Regulation, Digital Technology, Yogyakarta*

INTRODUCTION

Indonesia's media landscape has undergone a significant transformation since the Reformasi era, marked by media liberalization and the emergence of new formats (Hill, 2007; Hollander et al., 2009). Among these dynamics, community radio stands out as a key phenomenon. As a non-profit and community-based medium, it plays a crucial role in information democracy by providing a space for local and marginalized voices that are often excluded by mainstream media. These stations bridge communication needs related to unique, place-based issues relevant to everyday life (Nirmala, 2015).

Following the enactment of Broadcasting Law No. 32/2002, the number of community radio stations in Indonesia increased significantly. Around the mid-2000s, there were approximately 1,000 community-based media outlets (Putra & Damayanti, 2021). However, the trend sharply reversed by 2020, when the number of active stations declined significantly (Silfianingrum, 2020). This fluctuation suggests a dynamic and challenging adaptation process rather than linear growth. The initial legal framework, while enabling establishment, may not sufficiently support long-term sustainability amid a rapidly evolving media environment. There

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may be misalignment between the regulation's intended goals and practical outcomes, or new environmental pressures that were not anticipated by the law.

The Broadcasting Law is the principal legal framework for broadcasting in Indonesia, including community radio. It governs principles, objectives, and functions of broadcasting and established the Indonesian Broadcasting Commission (KPI) as the regulatory body (Iswari & Herawati, 2020; Singarimbun et al., 2023). For community radio, Article 21 is pivotal, as it explicitly prohibits commercial profit-seeking—such as selling advertising—and only allows donations or community self-help funding. While intended to formalise and protect community radio, this framework inadvertently creates a dilemma. The law grants legal recognition, yet imposes commercial restrictions that hinder financial sustainability and adaptive capacity in a competitive media market. This produces a fundamental tension between legal status and economic viability. By design, the law restricts stations' ability to compete economically, pushing them toward uncertain funding models (such as donations and grants) or encouraging operations outside the strict letter of the law (e.g., via digital platforms not explicitly covered by the 2002 statute). Consequently, the ecosystem tends toward stagnation.

Digital technologies and social media have created a new media ecosystem operating largely beyond the scope of the 2002 law. This dual reality presents community radio with a strategic dilemma: comply with restrictive legacy regulations or adapt to less-regulated, dynamic digital spaces—often at the cost of its traditional radio identity. The shift to digital is not merely a technological upgrade; it can be a strategic detour around constraining regulation, giving rise to a 'shadow media ecology' where stations can grow with fewer regulatory constraints. The gap highlights a fundamental weakness in the existing framework, which has not kept pace with technological advancements. A review of definitions and provisions related to community radio is therefore urgent to ensure clarity, viability, and relevance within a hybrid media environment.

Against this backdrop, this study asks: (1) How has the media ecology of community radio in Yogyakarta changed from the post-Reformasi period through 2024? (2) In what ways have media regulation and technological developments shaped that ecology over the same period? Yogyakarta is selected for its historical significance as an early base for community radio in Indonesia, offering rich empirical terrain for understanding how ecological change has affected a hub of the movement.

Although community radio plays a vital role in delivering local information and strengthening information democracy, research on its ecological change in Indonesia—particularly in Yogyakarta—remains limited. Prior work tends to emphasize both technical and social aspects (Birowo, 2010; Effendy, 2013; Kusuma, 2020), with less attention paid to how broadcast regulation affects operational sustainability or how stations address the challenges of digital technology. Existing studies on technology and social media (Birowo, 2010; Eddyono, 2011) seldom examine in depth how the 2002 law structures the ecology of Yogyakarta's community radio. Additionally, changing youth preferences and succession challenges sharpen the need to explore how stations endure in an increasingly digital and tightly regulated environment. This study fills those gaps by analysing ecological change since Reformasi and identifying the roles of regulation and technology in shaping that ecology. The findings offer a deeper understanding of community radio dynamics in the digital age and provide a policy-relevant reference for the adaptive and sustainable development of community media.

LITERATURE REVIEW

Theoretical Lens: Media Ecology

Media ecology studies how media technologies shape and are shaped by human environments. Building on McLuhan and Postman, it treats media as environment-forming forces rather than neutral channels, with systemic effects on perception and action (Islas & Bernal, 2016;

Logtens & Rodríguez, 2021; Alonso, 2024; Strate, 2004). Core "laws" (extension/amputation, obsolescence, retrieval, reversal) explain how technologies extend specific capacities, render others obsolete, and morph under "overheating" (Laskowska & Marcyński, 2019; Logan, 2010; Strate, 2004).

Community Radio and Regulation

Broadcasting Law No. 32/2002 granted community radio legal status but imposed tight constraints—notably a ban on commercial activity and cumbersome licensing (Hollander et al., 2008; Masduki, 2023; Singarimbun et al., 2019). The sector expanded after the law, yet contracted sharply around 2020, indicating that an enabling framework for entry has not ensured sustainability amid intensifying digital competition. This produces an operational dilemma between strict compliance and alternative (often extra-analog) funding or practices.

Technological Convergence and Medium Shift

Internet and social platforms have shifted audiences from over-the-air to over-the-top, prompting a renegotiation of identity for community radio. In media-ecology terms, accelerated information flows can trigger reversal of overheated analog forms; digital migration may also "retrieve" balance while trading extension for amputation—greater reach and interactivity but fragile business models and potential erosion of community cohesion (Lunga & Musvipwa, 2024; Musvipwa & Lunga, 2023; Gutiérrez-García & Barrios-Rubio, 2019; Gordon, 2019; Sompie et al., 2024). Yogyakarta, as the early hub of Indonesia's community radio movement, serves as an ideal site to examine how regulatory stagnation, frequency and licensing costs, and commercial restrictions interact with platform migration to create hybrid or parallel operations beyond the analog system.

Gaps and Contributions

Indonesian scholarship rarely (a) maps longitudinal ecological change from Reformasi into the platform era or (b) links regulatory design/implementation to digital adaptation in Yogyakarta. Using media ecology, this study: (1) conceptualises community radio as an ecological actor; (2) explains analog-to-digital dynamics via extension–amputation, retrieval, and reversal; and (3) advances a policy agenda that identifies regulatory misalignments pushing practice beyond formal rules and calls for updated definitions and governance suited to hybrid media realities.

RESEARCH METHOD

This study employs a qualitative design to examine the experiences, perceptions, and adaptive dynamics of community radio within Yogyakarta's evolving media ecology. In qualitative research, sampling is purposive—that is, it seeks participants who can illuminate the central phenomenon under investigation. Unlike quantitative research, in this study, individuals were selected because they represented a particular group. The researcher considered three components in doing so: who would be chosen as informants, the sampling strategy to be employed, and the number of individuals to be interviewed (Creswell, 2013).

First, informants were chosen because they were directly involved in and knowledgeable about the ecology of each community radio station. In other words, they understood the founding, aims, and dynamics of community radio, especially with respect to social, cultural, and technological aspects. Consequently, the informants selected for this study were owner-founders, station managers, or senior broadcasters from BBM FM, Angkringan FM, Swaka FM, and Saka FM. Second, after identifying a key contact at each station with the requisite competence and rich information, the researcher visited each station and conducted in-depth interviews. This process enabled the researcher to address the research questions and to gain access to the natural setting of each community radio station. Third, the number of informants was not predetermined. Interviews continued until the data were sufficient and ceased when interviewing additional individuals yielded depth alongside repetition or similar patterns. In other words, when no further novelty emerged, the interviews were deemed adequate.

After completing all interviews and observations, the researcher conducted data analysis. First, the raw data were coded to facilitate categorization. Second, all interview and observation data were grouped into themes that referred back to the research questions as well as to new issues that emerged during the study. As a result, the researcher organized the findings into three main themes: (1) the general condition of community radio in Yogyakarta—including BBM FM, Angkringan FM, Swaka FM, and Saka FM; (2) changes related to media ecology; and (3) participation and regeneration.

Focusing on four stations—BBM FM, Angkringan FM, Swaka FM, and Saka FM—the research combines in-depth interviews with station managers and structured field observations of activities and operational settings to capture social, cultural, and technological contexts. Findings are analysed through thematic and content analysis to identify recurring patterns and explicit meanings across cases, ensuring results are systematically grounded rather than anecdotal. The media-ecology lens frames the interpretation.

FINDINGS AND DISCUSSION

Community Radio in Yogyakarta

Community radio is defined as a non-profit broadcasting institution operating on a community basis, oriented to local information, education, and entertainment (Fraser & Estrada, 2001). Law No. 32/2002 sets three functions of broadcasting—information, education, and healthy entertainment—alongside social control, social cohesion, and economic and cultural functions. In practice, community stations play a vital role in information democracy and local empowerment, preserving culture through content tailored to everyday life. This section outlines the histories, foci, and challenges of the four stations studied.

This subsection identifies three overarching tendencies. First, the four stations examined—BBM FM, Angkringan FM, Swaka FM, and Saka FM—were founded on both shared and station-specific ideals. As community radio outlets, they positioned themselves as distinctive within the community radio landscape, each pursuing its own priorities. Nevertheless, each station ultimately embodies different ideals, which in turn shape the strategies by which it sustains its existence as a community medium within a dynamic media ecology. Second, the capacity to remain continuously relevant to the community is crucial; when stations can no longer connect to the interests of their surrounding audiences, the presence of community radio becomes challenging to maintain. Third, the management's ability to secure funding for the station's continuity is vital, particularly because, by regulation, community radio stations are not permitted to carry advertising, and public interest in consuming community media has declined relative to other media.

Across Yogyakarta, four stations illustrate divergent yet interconnected trajectories of community radio amid regulatory constraints and digital adaptation. BBM FM—founded c. 1995 as Radio Suketeki—positions itself as a bottom-up public space for cultural expression and marginalised voices; after a 1999 shutdown owing to frequency interference with the Air Force, it resumed in 2000, joined the Yogyakarta Community Radio Network (JRKY), and today blends Javanese cultural content (*wayang, karawitan, macapat*) and interactive shows (e.g., "Mbah Tromulur") with YouTube live streaming and university partnerships (UGM) as a lab site. Its finances are supported by Dana Indonesiana (≈IDR 998 million for one year), LPDP, donations, community self-help, and gamelan rentals. However, succession, limited digital production capacity, and advertising bans remain significant constraints, underscoring the commitment to community-owned media that is independent of political and economic power.

A different trajectory characterizes Angkringan FM. Angkringan FM began as a local bulletin in January 2000 (Timbulharjo, Bantul), shifted to radio in August 2000 to reach illiterate audiences, and moved from soft news to critical coverage (aid-program corruption, village transparency) including live BPD sessions; it became a crucial information hub during the 2006 Bantul earthquake and, with Internews support, built a studio using simple tools (e.g., HT), but succession difficulties, social-media competition, and lightning damage in 2011 ended broadcasts amid perceptions that the 2002/2004 law afforded limited protection. This situation illustrates that the strong idealism characterizing the founding of Angkringan FM was insufficient to ensure its institutional sustainability. A range of external factors—including natural disasters, limited community engagement, the emergence of new communication technologies, and managerial inefficiencies—have collectively contributed to the station's declining relevance and diminishing role within the local sociocultural landscape.

By contrast, Swaka FM and Saka FM are relatively younger than Angkringan FM and BBM FM. Swaka FM, formally licensed on November 11, 2019, from the Suara Kauman initiative, arose during COVID-19 to sustain local arts (*ketoprak, macapat, "Tekbung"*) and public knowledge through traditional music, religious programming, and interactive talks on health and agriculture; funded by voluntary presenter- and listener-contributions (licensing/equipment ≈IDR 30 million), it has streamed on Facebook and YouTube since 2023 to overcome a ~2 km frequency limit, yet faces irregular funding and youth-recruitment challenges mitigated by solidarity and volunteerism. To date, although Swaka FM's programming does not substantially engage younger audiences, the station has remained viable. The presence of loyal listeners and the management's persistence in securing funds—through both donations and advertising—have kept it on the air. Its management team is smaller than BBM FM's and older than Saka FM's. However, they have been able to sustain this community station within a residential neighborhood because its content remains aligned with listeners' preferences.

Meanwhile, SAKA FM, on air since April 2011 near Masjid Gedhe Kauman, expanded from Islamic preaching and mosque activities to education and local culture with an approachable style foregrounding Javanese language and culinary heritage; it extends reach via TikTok, Instagram, YouTube, and website streaming, while managing turnover through internships as student-presenters graduate, sustaining operations at roughly IDR 3 million per month with mosque-board support and weighing a stronger pivot to digital streaming amid burdensome licensing fees and fatigue over unresolved regulatory debates. Support from Masjid Gedhe Kauman has been crucial to Saka FM's sustainability and to the management's efforts to cultivate a sense that Saka FM "belongs" to everyone. The management has created opportunities for university students to participate as announcers or in other roles through internship arrangements. Indirectly, this has provided Saka FM with the momentum to stay on the air with a sense of renewal. Maintaining listener relevance and institutional backing are therefore key issues for Saka FM.

Shifts in the Media Ecology of Community Radio

The rapid rise of the internet and social media has fundamentally reshaped patterns of media consumption. Platforms such as Facebook, Twitter, YouTube, TikTok, and Instagram now serve as primary sources of information and entertainment, displacing interest in conventional radio (Aji et al., 2021; Cui & Li, 2024; Kassymbekova et al., 2025). In Yogyakarta, stations respond by moving online: BBM FM streams on YouTube; Swaka FM and SAKA FM use Facebook Live, YouTube, TikTok, and Instagram to widen reach and interactivity; Swaka FM now attracts listeners beyond the ±2 km over-the-air radius (e.g., Palembang, Bali) via social streaming. Some, like SAKA FM, consider prioritizing digital to avoid costly and complex licensing, while Angkringan FM, unable to digitize after equipment damage, ceased operations in 2011.

This evidence indicates that the environment is a process that transforms content in its entirety. Hence, within media ecology, the environment is not merely a container but something more consequential (Logan, 2010). Taken to an even more extreme position, McLuhan argues that new media neither fully supplant nor entirely abandon older media. In this context, Angkringan FM, BBM FM, Saka FM, and Swaka FM are seeking new forms and positions. The advent of the internet and its derivative technologies does not erase community radio; rather, these technologies can assist and sustain its presence.

Accordingly, the fact that Angkringan FM is no longer on the air is more plausibly attributed to a breakdown in managerial succession than to the rise of the internet. Even at mid-trajectory, Angkringan FM leveraged other media, such as short message service (SMS), which listeners used to communicate and share information. In other words, a complementary relationship has long characterized the reality of community radio. Furthermore, the emergence of digital technologies—often referred to as the "digital turn"—has introduced compelling dynamics for community radio, particularly in relation to regulation, specifically Law No. 32 of 2002 concerning Broadcasting. This "digital turn" renegotiates the medium itself: not just adding a channel, but enabling stations to bypass analog constraints and build a parallel, less-regulated model—a "digital exit" that exposes the obsolescence of current rules and the waning grip of the 2002 Broadcasting Law. As regulation stagnates, stations increasingly "operate beyond the provisions of the broadcasting law to persist," underscoring the need for reform that recognizes hybrid community media. Consequently, "community radio" must be redefined beyond frequency-based transmission; the gap between law and practice grows; and survival hinges on embracing a hybrid identity. Combined with shifts in the youth audience and succession difficulties, inflexible regulation threatens sustainability and the grassroots public sphere, making legal and operational reimagination urgent to safeguard information democracy.

Media Regulation and Technological Developments in a Media Ecology Perspective

Broadcasting Law No. 32/2002 reconfigured Indonesia's media landscape and formally recognized community radio entities that had often operated in a "cat-and-mouse" fashion. However, Article 21 simultaneously imposed strict limits by prohibiting advertising and permitting only donations or community self-help funding. In practice, high licensing costs and procedural complexity (including the OSS/NIB systems post-2020), combined with commercial restrictions, render legality difficult or uneconomic, prompting many stations to adopt informal operations. Illustratively, SAKA FM pays approximately IDR 1 million annually in frequency fees. The law's democratizing intent is thus undercut by implementation that forces stations to choose between compliance and survival.

Despite these constraints, Yogyakarta's community stations remain resilient through diverse yet fragile funding models: donations; member contributions (e.g., Swaka FM's \~IDR 30 million pooled for licensing and equipment); government/NGO grants (Dana Indonesiana and LPDP for BBM FM); and cultural income (BBM FM's gamelan rentals). The advertising ban directly encourages this reliance on donations. Stations sustain relevance with niche content—addressing local issues overlooked by mainstream media (e.g., Angkringan FM's reporting on BLT corruption) and advancing cultural or religious preservation (BBM FM, SAKA FM, Swaka FM)—while presenters and managers often work voluntarily without honoraria (BBM FM, Swaka FM, SAKA FM).

This dependence on uncertain funding, combined with a strong volunteer ethos, exposes a structural tension: community radio is socially indispensable yet financially marginalized by its governance framework. Survival relies on an informal economy of goodwill and grants, leaving stations vulnerable to shocks and policy neglect. Regulatory stagnation not only inhibits adaptation but also entrenches dependence on unstable mechanisms, turning long-term existence into an exercise in resilience rather than planned, sustainable development.

From a media-ecology perspective, technologies extend human capacities—enabling expansion, replacement, enhancement, acceleration, and intensification (Islas & Bernal, 2016). The internet thus increases, accelerates, and intensifies resource use while transforming social life; its deployment to circumvent regulatory limits can be read as a process of "returning to balance" (Islas & Bernal, 2016). In the post-law period, transmitter-based operations have reached practical limits, and adaptation via the internet and social platforms signals "overheating" of legacy transmitter technology (Teja, 2023).

This study finds that all of the community stations examined are undergoing a process of "returning to balance." This is evident in their technological adaptations. BBM FM, for example, uses the Radio Garden application to reach a broader audience. When technology can facilitate the operations of community radio, its presence helps restore equilibrium to each station. At this juncture, regulations that fail to keep pace with technological advancement become obsolete. By the same token, regulation should be capable of anticipating and interpreting societal dynamics beyond present realities, so that it can govern and safeguard the public interest.

A static regulatory regime has therefore become obsolete and requires renewal. In this new ecology, the speed of information is a defining marker that heightens complexity; program design must match the accelerated tempo of public life. In this context, "the medium is the message" becomes newly vivid: media technologies shape not only communication but also cognition, perception, social organization, ways of life, and worldviews (Mason, 2018).

Community Participation Dynamics and Regeneration Challenges

Beyond regulatory and technological factors, community radio in Yogyakarta faces declining participation and a succession crisis, especially among younger audiences. Programming centered on traditional culture, which is prominent at BBM FM, draws limited interest from the youth, who increasingly prefer visual, entertainment-oriented formats. This is not merely demographic attrition but a media-ecological shift: the classic appeal of community radio (local information and cultural preservation via audio) clashes with preferences for visual, interactive, short-form content, producing gaps in both talent and audience. Recruitment of new managers and presenters is hampered by competing time commitments, limited incentives, and shifting youth interests. Illustratively, BBM FM struggles with leadership renewal as its founding manager is now over 70; Angkringan FM failed to build a post-2010 cadre; and at SAKA FM, many student presenters depart upon graduation.

Stations have adopted adaptive measures. BBM FM and SAKA FM actively involve students, with SAKA FM operating a regular internship to develop technical skills and presenter pipelines. Swara Kota FM prioritizes the commitment of a small core management team rather than an extensive presenter roster. The challenge, therefore, is not simply "insufficient interest," but a structural transformation in media consumption driven by new technologies.

Angkringan FM acknowledges that inadequate generational renewal renders the challenges faced by community radio all the more concrete. This confirms earlier findings presented in this study: from a media-ecology perspective, technology does not "kill" community radio. A state of balance can emerge, albeit through a demanding process. Conversely, the absence of a successor generation in management deprives community radio of pathways to adapt to technological change.

This is illustrated by BBM FM, Swaka FM, and Saka FM, which have adapted to technology because their managers have overcome ongoing ecological constraints. Their indifference to regulatory constraints, as signaled by their use of the internet, can also be read as a response to a changing ecology. Thus, regeneration is essential to sustain adaptation.

CONCLUSIONS

Yogyakarta's community radio ecology has been reshaped by the combined effects of Broadcasting Law No. 32/2002 and digitalisation. The law grants legal recognition but restricts commercial activity, involving complex licensing, which contributes to stagnation and a decline in active stations. Some stations operate beyond statutory boundaries to survive (Broadcasting Law No. 32/2002). Meanwhile, the internet and social platforms both divert audiences and offer adaptive lifelines by extending reach outside frequency-based regulation. Generational shifts toward visual and interactive media intensify succession challenges, so surviving stations rely on self-help funding and digital pivots that often conflict with full compliance. These dynamics signal the need to revisit the definition of "community radio" and update related legal provisions.

This research offers three recommendations. First, a regulation that is attuned to shifting times is urgently needed. Governments and community radio stakeholders should therefore advocate regulatory revisions that protect the public interest—the philosophical rationale for the very existence of community radio. Second, technology should not be feared as a force that will erode community radio. The findings indicate that technology enriches the development of community radio, provided it is aligned with participatory regulation that is meaningful to the public. Third, future studies should examine community radio in Indonesia's outermost islands more thoroughly, so that marginalized realities can be acknowledged within academic discourse.

LIMITATIONS & FURTHER RESEARCH

The limitations of this study can be summarized in two respects. First, because the analysis focuses on community radio in Yogyakarta, the explanations and findings cannot be used to generalize the entire phenomenon. Second, the fact that Angkringan FM is no longer broadcasting constrained the researcher's ability to describe its natural setting through observation.

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