



Research Article

Algorithmic Curation and Information Visibility on Social Media: Implications for Public Discourse in Nigeria

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About Article

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ABSTRACT

Social media algorithms have become central to contemporary communication by shaping how information is curated, prioritised, and made visible on digital platforms. Through algorithmic filtering and personalisation, these systems influence users' exposure to content, patterns of interaction, and the formation of public discourse. This study examines the implications of algorithmic curation for information visibility, audience engagement, and meaning construction in Nigeria. Adopting a qualitative conceptual research design, the study is based on a systematic review and critical analysis of relevant Nigerian and international scholarly literature. Anchored in Agenda-Setting Theory, gatekeeping theory and Algorithmic Governance Theory, the study argues that while social media algorithms enhance personalized communication, participation, and connectivity, they also reinforce selective exposure, facilitate the spread of misinformation, and contribute to polarisation. By functioning as automated gatekeepers, algorithms determine which issues and voices gain prominence, thereby reshaping agenda-setting processes and influencing the quality and diversity of public discourse. The paper concludes by highlighting implications for communication practice, scholarship, and digital governance. It recommends enhanced media literacy, greater algorithmic transparency, and platform designs that promote exposure to diverse perspectives and balanced public discourse. The study also underscores the importance of strengthening ethical and civic online communication to address misinformation and polarization in Nigeria. The study contributes a Nigeria-focused perspective to understanding how algorithmic curation shapes information visibility and public communication in digital environments.



1.0 INTRODUCTION

The rapid growth and widespread adoption of social media platforms such as Facebook, X (formerly Twitter), Instagram, TikTok, and YouTube have fundamentally transformed the nature of communication on a global scale. Gillespie (2014) explains that unlike traditional mass media, where content production and dissemination were largely controlled by human editors and institutional gatekeepers, social media platforms operate through algorithmic systems using complex automated processes that select, rank, and recommend content based on users' data, behavior, and the platform's operational goals. These algorithms determine not only what information users encounter, but also the frequency, sequence, and contextual framing of content, thereby exerting a significant influence over communication flows, audience attention, and public perception (Gillespie, 2018; Napoli, 2019).

In contemporary society, communication is increasingly mediated by algorithmic logics rather than human editorial judgment, signaling a paradigmatic shift in the ways knowledge, opinions, and narratives circulate. Scholars assert that social media algorithms have evolved into powerful gatekeepers that can prioritize certain messages, suppress others, and systematically shape the visibility of content. This influence extends to agenda-setting, issue salience, and public discourse, traditionally functions of journalistic and editorial oversight (Gillespie, 2018; van Dijck et al., 2018). Engagement-based algorithms, in particular, often prioritize content that is sensational, emotionally charged, or highly interactive, thereby increasing the reach of certain information while inadvertently marginalizing other perspectives (Tandoc, Lim, & Ling, 2018).

Empirical studies conducted provides further evidence of the communicative implications of algorithmic curation. Eslami et al. (2018) demonstrated that users' limited understanding of algorithmic processes can influence trust, perception, and engagement, highlighting the

opacity of social media governance. van Dijck, Poell & de Waal (2018) observe that algorithmic personalization fragments audiences into niche publics, weakening the shared spaces necessary for collective communication and deliberation. From a political communication perspective, Kreiss and McGregor (2019) argue that algorithms amplify certain political actors and issues over others, thereby influencing agenda-building processes and shaping public perception of political realities. Bossetta (2018) similarly found that algorithmic ranking systems significantly influence political campaigning strategies, voter engagement, and the visibility of political messages across social media platforms.

In Nigeria and other developing contexts, social media platforms have become crucial arenas for political discourse, activism, public relations, and interpersonal communication (Oso & Pate, 2018). The rapid uptake of platforms among digitally active populations, especially youth, has created opportunities for participatory engagement, civic mobilization, and public debate. However, the algorithmic structures that govern content dissemination introduce complex challenges. Studies show that algorithms often prioritize engagement over accuracy, which can amplify misinformation, reinforce divisive narratives, and compromise the credibility of digital communication ecosystems (Olatunji, et al, 2021; Adekunle & Adnan, 2022). In addition, algorithmic personalization fosters filter bubbles and echo chambers, whereby users are predominantly exposed to content that aligns with their prior beliefs and preferences, potentially limiting exposure to diverse perspectives and reducing deliberative discourse (Pariser, 2011; Sunstein, 2018).

The implications of algorithmic mediation are not solely negative. Social media algorithms can enhance participation, engagement, and connectivity, enabling users to interact with information, communities, and public figures in ways previously impossible through traditional mass media. In Nigeria, these platforms facilitate political activism, civic engagement, and social

mobilization, particularly among younger populations and digitally literate users (Oso & Pate, 2018). Yet, the dual nature of algorithmic influence simultaneously enabling connectivity while potentially undermining credibility and public trust underscores the need for careful examination of its role in shaping communication patterns.

Algorithmic Governance Theory offers a conceptual framework for understanding these phenomena. The theory posits that algorithms act as socio-technical governance mechanisms, regulating content visibility, mediating user behavior, and shaping the contours of public discourse without overt human editorial intervention (Caplan, 2018; van Dijck et al., 2018). Through this lens, social media algorithms are seen as active agents of communication control, influencing what information is accessible, how users interact with content, and how meanings are constructed in digital spaces. Consequently, users' experiences are not purely determined by personal choice but are structured and mediated by platform priorities, which reflect commercial, political, and social imperatives embedded within algorithmic design (Gillespie, 2018).

Given the widespread influence of algorithms on information exposure, interaction, and meaning-making, this study investigates how social media algorithms shape communication processes, public discourse, and user engagement in both global and Nigerian contexts. Empirical research shows that algorithmic design significantly affects content visibility and democratic engagement by amplifying some messages while marginalising others, both internationally and in Nigeria (Ubong *et al.*, 2024; Williams, 2025; Conti *et al.*, 2024).

Understanding these dynamics is particularly critical in developing contexts like Nigeria, where media literacy is uneven, regulatory oversight is limited, and social media platforms are central to political and civic communication. This research therefore contributes to the

growing body of knowledge on algorithmic mediation, providing insights for scholars, media practitioners, policymakers, and social media platforms seeking to balance engagement, participation, and information integrity in digital communication ecosystems. Ultimately, the study situates social media algorithms as both enablers and regulators of contemporary communication, highlighting the complex interplay between technology, society, and information dissemination.

1.1 Statement of the Problem

Despite the increasing reliance on social media for communication, the algorithmic processes that curate and structure information visibility remain largely opaque to users (Gillespie, 2014). Through engagement-driven mechanisms that prioritize likes, shares, comments, and viewing time, social media algorithms determine which content gains prominence and which is obscured (Bucher, 2018; Tufekci, 2015). While such algorithmic curation enhances user engagement and platform participation, it also raises critical concerns regarding selective exposure, the amplification of misinformation, and the fragmentation of public discourse (Pariser, 2011; Sunstein, 2017).

In the Nigerian context, social media platforms play a critical role in political mobilization, crisis communication, and public opinion formation (Aina & Afolaranmi, 2025; Ogunderu & Afolaranmi, 2024). However, algorithm-driven visibility may amplify sensational or misleading content while marginalizing credible but less engaging information (Ibrahim & Adamu, 2022). This situation poses challenges for effective communication, democratic participation, and social cohesion. The problem, therefore, lies in the limited scholarly understanding of how algorithmic curation shapes information visibility and communication processes in developing media environments such as Nigeria, as documented by Ogunbadejo *et al.* (2025), who found that research on AI and algorithmic systems within Nigerian communication studies remains fragmented and under-theorized.

Addressing this gap is essential for advancing theoretical insight, improving digital communication practices, and informing evidence-based policy and regulatory frameworks aimed at strengthening the quality and integrity of public discourse in Nigeria.

2.0 RESEARCH QUESTIONS

1. How do social media algorithms influence the visibility of communication content among users in Nigeria?
2. What effects do algorithmically curated social media feeds have on users' communication experiences, public discourse and social cohesion in Nigeria?

3.0 THEORETICAL FRAMEWORK

This study is anchored on agenda-setting theory, algorithmic governance theory and gatekeeping theory.

3.1 Agenda setting theory

Originally proposed by McCombs & Shaw (1972), agenda-setting theory posits that the media influence what audiences think about by emphasizing certain issues over others. In the context of social media, algorithms extend the agenda-setting function by determining which topics and messages are prioritized for individual users.

Algorithmic agenda-setting operates through personalization, engagement metrics, and recommendation systems. By repeatedly exposing users to selected content, social media algorithms shape issue salience and public discourse. This theory is relevant to the study because it explains how algorithmic curation influences communication visibility, audience attention, and meaning construction.

3.2 Gatekeeping Theory

The gatekeeping theory was first introduced by social psychologist Kurt Lewin in 1943, and later expanded by David Manning White, it explains how information is filtered before reaching audiences, traditionally through editorial

decisions made by journalists and media institutions (Shoemaker & Vos, 2009). In digital media environments, social media algorithms have effectively replaced human editors as primary gatekeepers of information.

Algorithmic gatekeeping operates through automated processes that determine which content is promoted, deprioritized, or excluded from users' feeds. These processes influence not only the volume and speed of content circulation but also whose voices are amplified or marginalized. In the Nigerian media landscape, where social media plays a central role in political communication and civic engagement, algorithmic gatekeeping has significant implications for information diversity, credibility, and democratic participation.

Gatekeeping Theory is therefore useful for understanding how algorithmic systems control access to communication content and structure public discourse in contemporary digital environments.

3.3 Algorithmic Governance Theory

Algorithmic Governance Theory was propounded in 1962 by Alexander Kharkevich. The theory explains how algorithms function as mechanisms of regulation and control within digital media environments. It extends the idea of algorithmic influence beyond technical filtering to the governance of communication behavior, visibility, and public discourse (Van et al., 2018; Caplan, 2018). The theory conceptualizes algorithms as socio-technical systems embedded with the values, priorities, and power relations of the platforms that design them. In this way, algorithms not only curate content but also govern how information is produced, distributed, and consumed.

On social media platforms, algorithmic governance manifests through:

1. Personalization and Filtering – Algorithms decide what users see based on engagement metrics, behavior patterns, and preferences, creating individualized “information

environments” (Gillespie, 2018).

2. Amplification and Suppression – Certain content is promoted or hidden according to algorithmic rules, influencing public attention, visibility, and discourse salience (Napoli, 2019).
3. Behavioral Regulation – Algorithms guide user interactions, encouraging certain behaviors (e.g., liking, sharing, commenting) while reducing exposure to less engaging content (Van et al., 2018).

In developing countries such as Nigeria, algorithmic governance is particularly significant because social media has become a central avenue for political participation, civic engagement, and public discourse (Oso & Pate, 2018; Ojebuyi & Adegbola, 2020). Engagement-driven algorithms often amplify misinformation, sensational content, and political propaganda, shaping user experience and public opinion in ways that traditional gatekeeping or editorial practices once controlled.

Algorithmic Governance Theory complements Agenda-Setting and Gatekeeping theories by providing a modern framework to understand how automated systems regulate communication, influence content visibility, and shape public discourse. It allows the study to explain not just what information is visible, but also how user behavior, perception, and communication experiences are governed by social media platforms.

3.4.1 Conceptual Review Social Media Algorithms

Social media algorithms refer to computational systems designed to filter, rank, and recommend content to users based on data-driven predictions of relevance and engagement. According to Gillespie (2018), algorithms are not neutral technologies but socio-technical systems embedded with values and institutional priorities. They shape communication by determining which messages gain prominence and which remain unseen.

Communication in the Digital Age

Communication in the digital age is characterized by interactivity, convergence, and personalization. Social media enable users to be both producers and consumers of content, often described as “prosumers” (Jenkins, 2006). In Nigeria, digital communication has expanded opportunities for participation but has also increased exposure to misinformation and unverified content (Ojebuyi & Adegbola, 2020).

Algorithmic Mediation of Communication

Algorithmic mediation refers to the process by which algorithms structure communication environments by shaping information exposure and interaction patterns. Through personalization and recommendation systems, algorithms influence what users know, discuss, and believe, thereby affecting interpersonal and mass communication outcomes.

Effects of Social Media Algorithms on Users' Communication and Vice Versa

Social media algorithms have become central to contemporary communication processes, determining how information is selected, ranked, and distributed on digital platforms. By analysing user data such as likes, shares, comments, and viewing time, algorithms curate personalised content feeds, functioning as new forms of gatekeepers that shape both content visibility and the nature of user communication (Gillespie, 2014; Bucher, 2018).

Effects of Algorithms on Users' Communication

One primary effect of algorithms is the prioritisation of content based on engagement metrics. Messages that attract more interaction through emotional appeal, novelty, or controversy are amplified, while less engaging but credible information may receive limited visibility (Tufekci, 2015; Bucher, 2018). This mechanism directly influences users' communication experiences and the flow of information in public discourse.

Algorithms also reinforce selective exposure, repeatedly presenting users with content similar to what they have previously engaged with, which reduces encounters with diverse perspectives (Pariser, 2011). Such patterns can foster echo chambers and reinforce existing beliefs, limiting deliberative communication and the exchange of alternative viewpoints (Sunstein, 2017). Users may also adapt their communication strategies to maximise algorithmic visibility, framing messages in ways that are more emotionally appealing or sensational, which affects message tone, style, and frequency (Tufekci, 2015).

In the Nigerian context, these dynamics have significant implications. Social media platforms are key tools for political mobilisation, crisis communication, and public opinion formation (Aina & Afolaranmi, 2025; Ogunderu & Afolaranmi, 2024). However, algorithm-driven visibility can amplify misleading or sensational content while marginalising credible information, challenging effective communication, democratic participation, and social cohesion (Ibrahim & Adamu, 2022).

Effects of Users' Communication on Algorithms

The relationship between algorithms and communication is reciprocal. Users' interactions, likes, comments, shares, or ignores provide feedback that algorithms use to refine content prioritisation (Bucher, 2018). Collective user behaviours, such as trending hashtags or viral posts, can temporarily influence algorithmic processes, signalling content relevance and shaping the circulation of information (Gillespie, 2014; Tufekci, 2015). Therefore, users are not passive recipients but active participants in shaping their communicative environment, even if the underlying processes remain largely opaque.

Conceptual Implications

This dynamic relationship can be conceptualised as a feedback loop in which algorithms and users continuously influence one another. Algorithms

affect communication visibility, flow, and engagement, while user interactions guide algorithmic adaptation, collectively shaping public discourse. In developing media environments such as Nigeria, research on these interactions remains limited. A systematic review of AI and communication studies in Nigeria revealed that scholarship on algorithmic mediation is fragmented and under-theorised (Ogunbadejo et al., 2025).

Understanding this reciprocal relationship is therefore critical for both theory and practice. Conceptually, it challenges linear models of communication and calls for frameworks that account for algorithmic mediation, selective exposure, and feedback loops. Practically, it informs strategies to enhance digital communication practices, improve information quality, and guide policy or regulation aimed at mitigating the social and political risks of algorithmic curation.

4.0 LITERATURE REVIEW

Social media has become a dominant force in contemporary communication, reshaping how information is produced, disseminated, and consumed. At the heart of these transformations are social media algorithms, which determine the content users see, the order in which it appears, and how it is prioritized based on complex computational logic (Gillespie, 2018; Napoli, 2019). Recent scholarship has increasingly emphasized the role of these algorithms in shaping communication processes, information exposure, and public discourse, highlighting both opportunities for engagement and risks for misinformation and bias (van Dijck et al., 2018).

Algorithms are no longer neutral technical tools; they are socio-technical systems embedded with economic, social, and political priorities, influencing not only user engagement but also the broader dynamics of public communication. Gillespie (2018) argued that platforms such as Facebook and YouTube act as algorithmic gatekeepers, exercising editorial authority without the transparency traditionally associated

with mass media institutions. Napoli (2019) similarly noted that the control algorithms exert over information distribution has redefined media power relations, shifting influence from journalists to technology companies. This represents a significant transformation in communication systems globally, where the mechanisms of visibility and attention are increasingly algorithm-driven.

Empirical research conducted after 2017 highlights the communicative implications of algorithmic curation. Tandoc et al., (2018) demonstrated that engagement-based algorithms tend to prioritize sensational and emotionally charged content, which increases the visibility of misinformation and can distort public perception. Similarly, van Dijck, Poell, & de Waal (2018) observed that algorithmic personalization fragments audiences into niche publics, weakening shared spaces for collective communication and public deliberation. Eslami et al., (2018) further highlighted that users' limited understanding of algorithmic operations affects trust, interaction, and the perception of information credibility. These studies collectively show that algorithms not only mediate content distribution but also influence how users interpret, engage with, and trust information online.

4.1 The Influence of Social Media Algorithms on the Visibility, Prioritization, and Circulation of Communication Content among Users in Nigeria

Social media algorithms play a central role in determining the visibility and prioritization of communication content by controlling which posts appear in users' feeds and the order in which they are displayed. These algorithmic systems typically prioritize content based on engagement metrics such as likes, shares, comments, and viewing time (Gillespie, 2018). In this way, algorithms function as contemporary gatekeepers, replacing traditional editorial judgment with automated decision-making processes that shape users' exposure to information and public access to discourse (Shoemaker & Vos, 2009).

From a political communication perspective, algorithmic curation significantly influences agenda-setting and issue visibility. Kreiss and McGregor (2019) argue that social media algorithms amplify certain political actors, narratives, and issues over others, thereby shaping what becomes salient in public discourse. Similarly, Bossetta (2018) demonstrates that algorithmic ranking systems affect political campaign strategies and patterns of voter engagement on social media platforms. These studies suggest that algorithms are not neutral conduits of information but active agents that structure the flow, prominence, and circulation of communication content.

In the Nigerian context, algorithmic influence is particularly pronounced given the growing reliance on social media as a primary source of news and political information. Oso and Pate (2018) note that digital platforms have become important spaces for political debate, civic engagement, and activism in Nigeria. However, algorithmic prioritization often favors emotionally charged, sensational, or controversial content, increasing its visibility and speed of circulation. This dynamic has contributed to the widespread dissemination of misinformation and fake news during election periods and national crises (Ojebuyi & Adegbola, 2020; Olatunji et al., 2021).

Furthermore, studies indicate that the effects of algorithmic amplification are intensified in developing contexts such as Nigeria. Adekunle and Adnan (2022) argue that weak regulatory frameworks, low levels of media literacy, and limited public understanding of algorithmic processes create conditions in which information disorder thrives. As a result, misleading or false content may circulate more rapidly and gain greater prominence than credible information, shaping public opinion and social interactions in problematic ways.

Overall, the literature demonstrates that social media algorithms significantly influence the visibility, prioritization, and circulation of

communication content among Nigerian users. By privileging engagement over accuracy or public value, algorithms determine which voices are amplified, which perspectives are marginalized, and how information spreads across digital networks. These dynamics have important implications for democratic communication, civic participation, and the quality of public debate in Nigeria, where social media platforms play an increasingly central role in everyday communication.

4.1 2 Effects algorithmically curated social media feeds have on users' communication experiences and public discourse, and social cohesion in Nigeria

Social media platforms rely on sophisticated algorithms to personalize content feeds in ways designed to maximize user engagement. While such personalization enhances user interaction and platform stickiness, it often produces filter bubbles, information environments in which users are predominantly exposed to content that aligns with their existing beliefs, interests, and preferences (Pariser, 2011; Sunstein, 2018). These filter bubbles shape users' communication experiences by limiting exposure to alternative viewpoints, reinforcing selective exposure, and reducing opportunities for critical reflection. As a result, algorithmic curation has significant implications for the inclusiveness and deliberative quality of public discourse.

Scholars argue that algorithmic personalization fragments audiences into smaller, ideologically homogeneous micro-publics. van Dijck, Poell, & de Waal (2018) contend that such fragmentation weakens shared communicative spaces and reduces opportunities for collective discussion and mutual understanding. By curating content according to user behavior and engagement history, algorithms reduce the likelihood of encountering diverse perspectives, thereby intensifying polarization and constraining meaningful civic dialogue. Bossetta (2018) further demonstrates that algorithmic ranking systems shape political visibility by determining which actors, messages, and narratives gain

prominence on social media platforms. These mechanisms influence how political campaigns are structured, which messages gain traction, and how citizens interpret political realities, underscoring the centrality of algorithmic logic in contemporary communication processes.

In Nigeria, algorithmically curated feeds play a dual and often contradictory role in users' communication experiences. On the one hand, social media platforms have expanded opportunities for youth participation, political debate, and digital activism, offering alternative spaces for civic engagement beyond traditional media structures (Oso & Pate, 2018). On the other hand, the prioritization of content based on engagement metrics rather than accuracy or public value has intensified the circulation of sensational, emotionally charged, and polarizing content. During elections, security crises, and public controversies, algorithmic amplification has been shown to favor divisive narratives that distort public perception, undermine informed decision-making, and heighten social tensions (Ojebuyi & Adegbola, 2020; Olatunji et al., 2021).

These dynamics have direct implications for social cohesion in Nigeria's ethnically, religiously, and politically diverse society. Algorithmic reinforcement of homogeneous viewpoints can deepen existing social cleavages by amplifying identity-based narratives and limiting cross-group communication. As users increasingly interact within ideologically aligned networks, opportunities for dialogue across social, political, or cultural divides diminish, weakening the integrative function of public communication and potentially exacerbating conflict.

Empirical studies also indicate that users' limited understanding of algorithmic operations affects trust, communication behavior, and perceptions of credibility. Eslami et al. (2018) found that when users lack insight into how content is ranked or personalized, they may perceive social media feeds as biased or manipulative. In

Nigeria, such perceptions are reinforced by the algorithmic prioritization of engagement over accuracy, which undermines journalistic norms and erodes public trust in digital information ecosystems (Olatunji et al., 2021). Adekunle and Adnan (2022) further argue that low levels of media literacy and weak regulatory oversight intensify these challenges, fostering information disorder and increasing the susceptibility of users to misinformation and manipulation.

Algorithmic Governance Theory offers a critical framework for understanding these effects by conceptualizing algorithms as socio-technical systems that regulate visibility, structure user interactions, and shape communication environments (Caplan, 2018; Van et al., 2018). From this perspective, users' communication experiences are not solely the outcome of individual choice but are actively shaped by platform priorities embedded in algorithmic design. While algorithms can enhance accessibility, participation, and connectivity, they may simultaneously constrain discourse diversity, amplify misinformation, and privilege commercial or political interests over the public good.

Overall, the literature demonstrates that algorithmically curated social media feeds profoundly shape users' communication experiences, the quality of public discourse, and social cohesion in Nigeria. Although these systems have enabled unprecedented levels of engagement and participatory communication, they also pose significant risks to information diversity, trust, and democratic deliberation. Nigerian and African scholarship highlights that these risks are amplified by structural factors such as low media literacy, weak regulatory frameworks, and limited algorithmic transparency. Consequently, there remains a critical need for empirical research that systematically examines how algorithmic curation influences communication outcomes and social cohesion in developing contexts such as Nigeria.

5.0 METHODOLOGY

This study adopts a qualitative research approach and utilised the conceptual research design based on a systematic review of existing literature. Relevant books, peer-reviewed journal articles, and conference papers by Nigerian and foreign scholars were analyzed. Sources were selected based on their relevance to social media algorithms, communication processes, and digital media studies as well as theoretical and empirical contributions addressing algorithmic influence on public discourse. The study employed thematic analysis to synthesize the literature, focusing on the identification of recurring concepts, theoretical perspectives, and empirical patterns related to algorithmic mediation of communication. Through iterative reading, coding, and comparison of selected texts, key themes were developed to explain how algorithmic systems shape content visibility, user communication experiences, and public discourse. This analytical approach is particularly suitable for examining abstract concepts and theoretical issues, where the objective is to integrate existing scholarship, clarify conceptual relationships, and advance understanding rather than to generate primary empirical data. To empirically demonstrate the systematic nature of the literature review, the study followed a structured and transparent review process involving database searching, screening, eligibility assessment, and thematic synthesis. The results of the review process are presented below. The literature search was conducted across multiple academic databases commonly used in communication and media studies, including Google Scholar, Scopus, Web of Science, JSTOR, and ResearchGate. Search strings combined keywords such as social media algorithms, algorithmic curation, agenda-setting, gatekeeping, public discourse, Nigeria, and digital media using Boolean operators (AND/OR). Only studies published in peer-reviewed journals, academic books, and reputable conference proceedings were considered to ensure scholarly quality. The review followed a stepwise screening process adapted from PRISMA guidelines to ensure transparency and replicability.

Table 1: Summary of Literature Selection Process

Stage of Review	Description	Number of Studies
Initial search results	Records identified through database searching	186
Removal of duplicates	Duplicate records excluded	42
Title and abstract screening	Studies screened for relevance	144
Excluded after screening	Irrelevant to algorithms or communication focus	79
Full -text articles assessed	Articles reviewed in full	65
Excluded after full -text review	Did not meet inclusion criteria	27
Final studies included	Studies used for thematic analysis	38

Inclusion and Exclusion Criteria

The studies were selected based on explicit criteria.

Inclusion criteria:

- Focus on social media algorithms, algorithmic curation, or digital platforms
- Address communication processes, public discourse, agenda-setting, or gatekeeping
- Empirical or theoretical studies relevant to Nigeria or comparable developing contexts
- Published in English

Exclusion criteria:

- Opinion pieces or non-academic sources
- Studies focused solely on technical

computer science without communication relevance

- Articles lacking clear methodological or theoretical grounding

5.1 Thematic Analysis Results

Following full-text review, the selected studies were subjected to thematic analysis. Recurrent patterns, concepts, and arguments were coded and grouped into dominant analytical themes aligned with the study objectives.

Table 2: Emergent Themes from the Systematic Literature Review

Theme	Description	Key Supporting Studies
Algorithmic Visibility & Prioritization	Algorithms determine content prominence and exposure	Gillespie (2018); Napoli (2019)
Agenda-Setting Effects	Repeated exposure shapes issue salience	McCombs (2018); Kreiss & McGregor (2019)
Misinformation Amplification	Engagement-driven spread of false or sensational content	Tandoc et al. (2018); Ojebuyi & Adegbola (2020)
Algorithmic Gatekeeping	Replacement of editorial control by automated systems	Shoemaker & Vos (2009); van Dijck et al. (2018)
Nigerian Contextual Dynamics	Political communication and crisis-related misinformation	Olatunji et al. (2021); Adekunle & Adnan (2022)

6.0 DISCUSSION OF FINDINGS

Objective One: Influence of Social Media Algorithms on the Visibility, Prioritization, and Circulation of Communication Content among Users in Nigeria

Findings from the reviewed literature indicate that social media algorithms play a decisive role in shaping the visibility, prioritization, and circulation of communication content across digital platforms. Algorithmic systems determine which posts appear in users' feeds, the order in which they are displayed, and the extent to which they are repeatedly exposed, thereby functioning as automated gatekeepers of information (Gillespie, 2018; Napoli, 2019). By prioritizing content based on engagement indicators such as likes, shares, comments, and viewing time, algorithms significantly influence patterns of information flow and user attention.

The findings further reveal that algorithmic curation directly reinforces agenda-setting processes in digital communication environments. Through repeated exposure to

selected topics, narratives, and viewpoints, social media algorithms shape issue salience and public perception, aligning with the core assumptions of Agenda-Setting Theory (McCombs, 2018). This suggests that algorithms do not merely distribute information passively but actively structure public agendas by determining which issues gain prominence and sustained visibility.

Evidence from the literature also indicates that algorithmic prioritization often favors emotionally charged, sensational, and trending content over informative but less engaging messages (Tandoc et al., 2018; Van et al., 2018). Consequently, public-interest information may receive reduced visibility, while misleading, exaggerated, or polarizing content gains prominence and circulates rapidly. In the Nigerian context, this dynamic has been shown to intensify the spread of political propaganda, rumors, and crisis-related misinformation, particularly during election periods and moments of social tension (Ojebuyi & Adegbola, 2020; Olatunji et al., 2021).

Overall, the findings demonstrate that the structural logic of social media algorithms profoundly reshapes information flow in Nigeria by redefining traditional gatekeeping functions and concentrating communicative power within digital platforms. Algorithmic systems determine which voices are amplified, which perspectives are marginalized, and how communication content circulates across networks. These dynamics have significant implications for public discourse, democratic communication, and information credibility, highlighting the central role of algorithms in shaping contemporary communication environments in Nigeria.

Objective Two: Effects of Algorithmically Curated Social Media Feeds on Users' Communication Experiences, Public Discourse, and Social Cohesion in Nigeria

The Findings from the reviewed literature indicate that algorithmically curated social media feeds significantly shape users' communication experiences through personalized content exposure. Algorithmic personalization enhances content relevance and user engagement by tailoring information to individual preferences and behavioral patterns. However, the studies of Pariser, (2011) and Sunstein, (2018) states that the process simultaneously promotes selective exposure, whereby users are repeatedly exposed to content that reinforces their existing beliefs and viewpoints. Recent studies demonstrate that such personalization contributes to the formation of echo chambers and heightened ideological polarization, limiting encounters with diverse perspectives and constraining meaningful dialogue (Bossetta, 2018; Kreiss & McGregor, 2019).

In the Nigerian context, algorithm-driven communication has expanded opportunities for participation, visibility, and voice, particularly among youths and marginalized groups. Social media platforms have facilitated civic engagement, political discussion, and digital

activism, enabling users to participate in public discourse beyond traditional media structures (Oso & Pate, 2018). These developments reflect the empowering potential of algorithmic systems in enhancing communicative inclusion and participatory engagement.

Nevertheless, the findings also reveal significant challenges associated with algorithmic curation. Engagement-driven algorithms tend to amplify sensational, emotionally charged, and polarizing content, which accelerates the spread of misinformation, hate speech, and divisive narratives. In Nigeria's ethnically, religiously, and politically plural society, such amplification undermines public trust, distorts public discourse, and poses threats to social cohesion (Ojebuyi & Adegbola, 2020; Adekunle & Adnan, 2022). Rather than fostering inclusive deliberation, algorithmically mediated communication environments may intensify social fragmentation and exacerbate existing societal tensions.

Overall, the findings suggest that while algorithmically curated feeds enhance interaction, connectivity, and participatory communication, they simultaneously reshape public discourse in ways that challenge ethical communication practices, democratic deliberation, and responsible media consumption. These effects underscore the ambivalent role of social media algorithms in Nigeria, highlighting the need for greater algorithmic transparency, media literacy, and regulatory oversight to mitigate their negative consequences for public discourse and social cohesion.

7.0 CONCLUSION

This study examined how algorithmic curation on social media platforms shapes information visibility, communication flows, and users' communication experiences, with particular emphasis on its implications for public discourse in Nigeria. The findings demonstrate that social media algorithms perform a dual and

consequential role. On one hand, algorithmic curation enhances connectivity, user engagement, and access to diverse information by tailoring content to users' interests and behaviors. On the other hand, it systematically structures information visibility in ways that can constrain exposure to alternative viewpoints, reinforce selective exposure, and amplify sensational or misleading content.

The study confirms that social media algorithms function as powerful forms of automated gatekeeping, determining which issues, narratives, and voices gain prominence within digital spaces. In doing so, they reshape traditional agenda-setting processes and redefine how public discourse is formed, sustained, and contested in networked communication environments. Rather than being neutral intermediaries, algorithms actively influence the circulation and prioritization of information, with significant consequences for opinion formation and collective understanding.

Within the Nigerian context, these dynamics carry heightened significance given the central role of social media in political communication, civic engagement, and news consumption. While algorithmic systems facilitate broader participation and rapid information exchange, they also pose serious challenges to democratic deliberation and social cohesion by fostering echo chambers, amplifying misinformation, and privileging engagement-driven content over accuracy and public interest. Such patterns risk distorting public discourse and undermining informed civic participation.

The integration of Algorithmic Governance Theory, Agenda-Setting Theory, and Gatekeeping Theory provides a theoretical explanation of these dynamics, highlighting how algorithmic systems govern communication processes and influence public opinion and how algorithmic curation governs information visibility and shapes public discourse in Nigeria.

Overall, the study underscores the need to view social media algorithms as socio-technical systems whose design and operation have far-reaching implications for the quality, diversity, and integrity of communication in digital public spheres.

7.1 RECOMMENDATIONS

The study recommends the following:

- 1. Media Literacy Programs:** Governments, NGOs, and educational institutions should implement media literacy initiatives to help users critically evaluate algorithmically curated content, recognize misinformation, and navigate echo chambers effectively.
- 2. Regulation of Algorithmic Transparency:** Social media platforms should be required to provide greater transparency regarding their algorithms, including how content is ranked, filtered, and personalized, to promote accountability and responsible communication.
- 3. Promotion of Diverse Content Exposure:** Platforms should design algorithms to encourage exposure to diverse perspectives, reduce polarization, and support balanced public discourse.
- 4. Strengthening Civic and Ethical Communication in Nigeria:** Policymakers, civil society organizations, and media houses should collaborate to promote ethical standards in online communication, discourage the spread of hate speech and misinformation, and encourage fact-checking initiatives.

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