

Bridging the Invisible Gap: AI-Driven Journalism in Shaping Digital Inclusion for 'Orang Asli' or Indigenous Elders

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Abstract: This paper examines the policy and ethical challenges of AI-driven journalism, defined here as news production and dissemination shaped by algorithmic curation, automated summarisation, and platform-based recommender systems in shaping digital inclusion among Orang Asli (Indigenous) elders in Malaysia. It asks how institutional regulation, algorithmic systems and social media journalistic practices reinforce or mitigate digital inequality for this marginalised older population. Drawing on critical media policy theory and socio-technical approaches to the digital divide, the study conceptualises digital exclusion as an outcome of interacting regulatory, infrastructural and generational factors. Using a triangulated virtual methodology comprising (1) content analysis of algorithmically curated news feeds on major social media platforms, (2) digital ethnography of public online spaces related to Orang Asli issues, and (3) analysis of relevant policy and regulatory documents, the study finds that AI-driven journalism systematically privileges content formats and dissemination practices that presuppose high digital literacy and stable connectivity. These dynamics disproportionately disadvantage Orang Asli elders and raise ethical concerns regarding algorithmic governance and informational justice. The paper concludes with policy recommendations aimed at inclusive AI journalism regulation and age-sensitive digital inclusion.

Keywords: AI Journalism, Digital Divide, Orang Asli (Indigenous), Media Policy, Digital Ethics

1. Introduction

The rapid integration of artificial intelligence into contemporary journalism has fundamentally altered how news is produced, distributed and consumed (Diakopoulos, 2019; Beckett, 2019). Across global media ecosystems, AI technologies are increasingly embedded in newsroom routines, shaping content generation, personalisation and audience targeting through automated systems and algorithmic decision-making (Carlson, 2018; Thurman et al., 2019). Social media platforms such as Facebook, TikTok and YouTube have become central conduits for AI-driven journalism, relying heavily on algorithmic curation to maximise engagement, visibility and circulation of news content (Gillespie, 2018; Napoli, 2019). While these developments are often celebrated for enhancing efficiency, scalability and audience reach, they simultaneously raise concerns regarding uneven access to information and the reinforcement of existing social inequalities through algorithmic bias and platform governance (Noble, 2018; van Dijck et al., 2018).

In Malaysia, the expansion of digital journalism has occurred alongside persistent disparities in digital access, skills and literacy (George, 2017; Malaysian Communications and Multimedia Commission, 2023). Among the most affected groups are the Orang Asli, the country's indigenous peoples, who have historically experienced social, economic and informational marginalisation within national development and media systems (Nicholas, 2000; Jawan and Chin, 2014). Within these communities, the baby-boomer generation faces compounded challenges arising from age-related digital exclusion, geographical isolation, infrastructural limitations and limited exposure to dominant digital cultures (van Dijk, 2006; Ragnedda, 2017). Although national digitalisation initiatives frequently emphasise connectivity and technological innovation, comparatively less attention has been paid to how AI-driven journalistic practices may inadvertently exclude older indigenous users through design assumptions and regulatory blind spots (Freedman, 2008; Gillespie, 2018).

The core problem addressed in this paper lies at the intersection of AI-driven journalism, social media governance and digital inequality. Specifically, it interrogates how institutional regulations, algorithmic systems and platform-based journalistic practices shape the informational experiences of Orang Asli elders. Rather than viewing the digital divide solely as an issue of access, this study conceptualises it as a socio-technical

phenomenon embedded within regulatory frameworks, technological design and cultural norms that structure participation and exclusion in digital news environments (van Dijck et al., 2018; Diakopoulos, 2019).

Guided by this context, the paper addresses the following central research question:

- How do institutional regulations, algorithms and social media journalistic practices reinforce or mitigate digital inequality among Orang Asli elders in Malaysia?

This question foregrounds the structural and ethical dimensions of AI-driven journalism, moving beyond individual user deficits to examine systemic factors that shape inclusion and exclusion.

2. Literature Review

2.1 The Digital Divide in a Socio-Technical Context

Early scholarship on the digital divide focused primarily on access to technology, often conceptualised as a binary distinction between those with and without internet connectivity (van Dijk, 2006). However, subsequent research has emphasised second and third-level divides, which encompass disparities in digital skills, usage patterns and socio-economic outcomes (Hargittai, 2010; Ragnedda, 2017). These perspectives recognise that access alone does not guarantee meaningful participation in digital spaces.

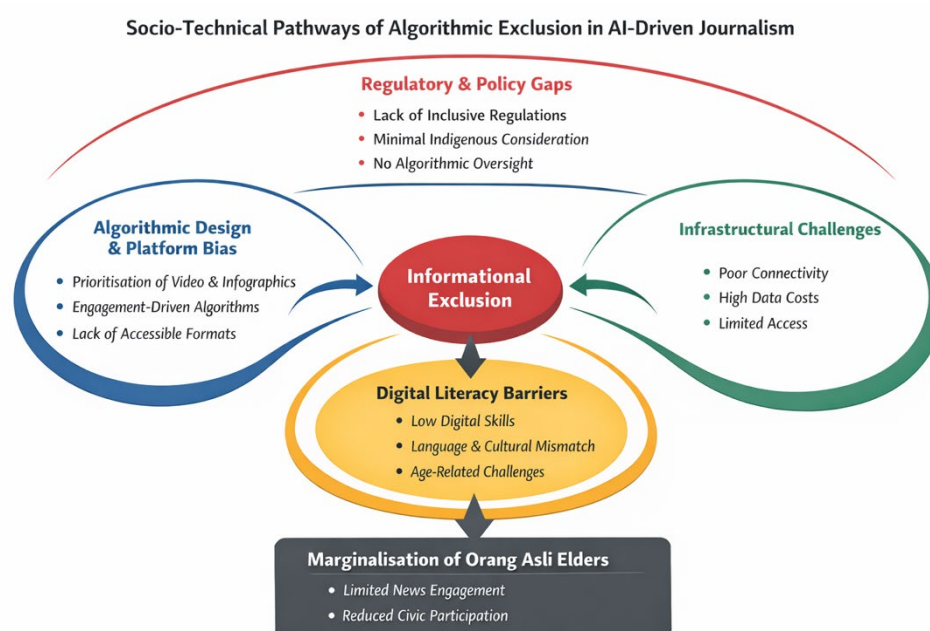


Figure 1: Socio-technical pathways of algorithmic exclusion in ai-driven journalism

This conceptual diagram illustrates the interaction between (1) algorithmic design priorities, (2) infrastructural limitations, (3) digital literacy gaps, and (4) regulatory omissions. Together, these layers produce a reinforcing cycle of exclusion, whereby Orang Asli elders are systematically marginalised from meaningful engagement with AI-curated news content.

Figure 1 conceptualises how AI-driven journalism contributes to digital exclusion among Orang Asli elders through interacting socio-technical layers. In indigenous contexts, digital inequality is further shaped by historical marginalisation, cultural displacement and uneven development. Studies on Orang Asli communities highlight persistent infrastructural limitations, limited representation in mainstream media and cultural disconnects with dominant communication practices (Nicholas, 2000; Jawan and Chin, 2014). For older generations, these challenges are intensified by age-related barriers, including limited digital literacy and scepticism towards digital media.

2.2 Critical Media Policy and Platform Governance

Critical media policy theory examines how regulatory frameworks shape media systems and power relations (Freedman, 2008). Rather than treating policy as a neutral administrative process, this approach foregrounds issues of inclusion, representation and social justice. In the context of digital platforms, governance extends beyond state regulation to include corporate policies, algorithmic design and content moderation practices (Gillespie, 2018).

In Malaysia, media regulation has historically prioritised political stability and economic development, with limited emphasis on inclusivity for marginalised communities. While recent digital policies promote innovation and connectivity, critics argue that they insufficiently address cultural and generational disparities (George, 2017).

2.3 AI-Driven Journalism and Algorithmic Bias

In this study, AI-driven journalism refers to journalistic processes in which artificial intelligence systems play a substantive role in the production, selection, prioritisation or presentation of news content. This includes algorithmic curation and recommender systems on social media platforms, automated news summarisation and captioning, and data-driven optimisation of news visibility based on user engagement metrics (Diakopoulos, 2019; Napoli, 2019). Unlike ordinary user-generated content, AI-driven journalism involves institutional or professional news content whose circulation and prominence are shaped by opaque algorithmic decision-making rather than editorial judgment alone.

AI-driven journalism encompasses automated content production, algorithmic curation and data-driven personalisation (Diakopoulos, 2019). Social media platforms rely heavily on engagement-based metrics, favouring visually dynamic, fast-paced and emotionally resonant content. Research on algorithmic bias demonstrates that such systems often privilege users who already possess high digital literacy and connectivity, while marginalising those who do not (Noble, 2018).

For older users, particularly those from indigenous backgrounds, these dynamics can result in exclusion from meaningful news consumption. Content formats requiring rapid scrolling, video literacy or complex visual interpretation may be inaccessible, reinforcing informational inequality.

2.4 Ethical Responsibility in Information Dissemination

Ethical discussions surrounding AI journalism increasingly emphasise transparency, accountability and fairness (Floridi et al., 2018). From an ethical standpoint, media institutions and regulators bear responsibility for ensuring that technological innovation does not exacerbate social inequalities. This includes recognising the needs of vulnerable populations and integrating inclusivity into policy and design.

3. Method

3.1 Research Design and Rationale

Given the geographical dispersion of Orang Asli communities and the sensitivities involved in engaging older indigenous populations, this study adopts a triangulated virtual methodology. This approach enables the examination of digital environments and policy frameworks without imposing additional burdens on vulnerable communities.

This study adopts a triangulated virtual qualitative methodology to examine AI-driven journalism without direct intrusion into vulnerable indigenous communities. Given the geographical dispersion of Orang Asli settlements and ethical considerations surrounding elder participation, a platform- and document-based approach allows systematic analysis of algorithmic practices, user interaction and regulatory frameworks while minimising harm.

3.2 Data Collection Strands

The analysis focuses on three major social media platforms widely used in Malaysia for news consumption: Facebook, YouTube and TikTok. Data were collected over a six-month period from January to June 2025, capturing routine news circulation rather than event-driven anomalies. These platforms were selected due to their heavy reliance on algorithmic curation and their centrality in Malaysian digital news ecosystems.

3.2.1 Content Analysis of Algorithmic News Feed

A simulated generic Malaysian user profile was created to observe AI-curated news feeds without personalised interaction history. News items appearing in the feed were manually logged and analysed based on content format, language complexity, engagement prompts and accessibility features. Examples were selected through purposive sampling, focusing on posts that appeared repeatedly across observation sessions, indicating high algorithmic prioritisation.

3.2.2 Digital Ethnography (Netnography)

The second strand involved digital ethnography of publicly accessible online spaces, including Facebook groups, comment threads and pages discussing Orang Asli or indigenous-related issues. Threads were selected based on relevance, visibility and evidence of participation by older users (e.g., language cues, self-identification). The analysis focused on expressions of difficulty, disengagement or reliance on intermediaries in news interpretation.

3.2.3 Policy and Document Analysis

Policy documents were selected through relevance-based sampling and included national digital inclusion policies, journalism ethics codes, AI governance frameworks and platform governance statements. Documents were analysed for explicit or implicit attention to age, literacy, cultural accessibility and indigenous inclusion in AI-driven news dissemination.

3.3 Ethics Declaration

This study relies on publicly available data and simulated observation, which limits insight into private news consumption practices. While this approach enhances ethical safety, it cannot fully capture offline interpretive processes among Orang Asli elders. All data were analysed without recording personal identifiers, and cultural sensitivity guided interpretation. The study does not claim representativeness of all Orang Asli communities but aims to identify systemic patterns of exclusion in AI-driven journalism.

4. Results

This section presents findings derived from the triangulated virtual methodology, synthesising insights from algorithmic content analysis, digital ethnography, and policy document review. Rather than treating technological systems, user practices and regulation as separate domains, the findings demonstrate how these dimensions interact to shape the informational exclusion of Orang Asli elders within AI-driven journalistic environments.

4.1 Algorithmic Bias and Content Format Favouritism

Table 1 summarises the dominant content formats identified through the algorithmic news feed content analysis across major social media platforms commonly accessed in Malaysia. The table demonstrates that AI-driven journalism systematically prioritises formats that presuppose high digital fluency, thereby structurally disadvantaging older indigenous users whose access and literacy profiles diverge from platform assumptions.

The content analysis of AI-curated news feeds across major social media platforms reveals a consistent privileging of specific content formats that implicitly assume high levels of digital literacy, cognitive agility and network stability. Algorithmic news distribution overwhelmingly prioritises short-form video, visually dense infographics, automated captions, and rapid news updates optimised for scrolling behaviour. These formats are typically accompanied by engagement prompts such as “watch till the end,” “share now,” or “comment below,” reinforcing a tempo of consumption that favours digitally fluent users.

For Orang Asli elders, these formats pose multiple barriers. First, video-based news content requires stable bandwidth and familiarity with platform navigation, including sound controls, subtitles and embedded links. Second, algorithmically generated captions often rely on abbreviated language, hashtags and mixed linguistic registers, which complicate comprehension for users with limited formal schooling or limited exposure to dominant digital vernaculars. Third, the absence of culturally contextualised explanations further alienates indigenous elders whose interpretive frameworks differ from mainstream urban audiences.

Importantly, the analysis shows that AI-driven journalism rarely provides alternative low-bandwidth or text-based options designed for older users. Plain-language summaries, audio-only news, or culturally localised explanations are largely absent from algorithmically prioritised feeds. As a result, AI systems effectively render certain populations invisible—not through explicit exclusion, but through design choices that normalise a particular type of “ideal user.”

Table 1: Dominant AI-Driven Journalism content formats on social media platforms

Content Format	Algorithmic Priority Indicators	Digital Literacy & Access Requirements	Implications for Orang Asli Elders
Short-form video news (≤60 seconds)	High engagement rate, autoplay, visual optimisation	Stable internet, visual navigation skills, familiarity with captions and symbols	Exclusion due to weak connectivity, difficulty interpreting fast-paced visuals
Infographic-based news	Shareability, compressed information density	Visual literacy, abstract interpretation skills	Cognitive overload; reduced comprehension among low-literacy users
Live-stream or “breaking news” updates	Real-time engagement, algorithmic boosting	Constant connectivity, rapid information processing	Missed information due to intermittent access
Algorithmically summarised captions	Automated language compression	Familiarity with hashtags, abbreviations, mixed-language registers	Misinterpretation and confusion among older indigenous users
Text-only or long-form news	Low algorithmic prioritisation	Reading comprehension, patience for longer content	Marginal visibility despite being more accessible

4.2 Infrastructural and Skill Barriers Evident in Indigenous Online Spaces

Table 2 presents recurring themes identified through digital ethnography of public online spaces related to Orang Asli and indigenous discourse. Rather than isolated challenges, these barriers function cumulatively, producing a layered form of digital exclusion that limits both access and agency among Orang Asli elders.

The netnographic analysis of public online spaces related to Orang Asli and indigenous advocacy reveals recurring expressions of digital frustration and disengagement, particularly among older users. Comment threads frequently contain remarks indicating difficulty accessing video content due to weak connectivity, limited data plans, or unfamiliarity with platform interfaces. Some users explicitly request explanations in simpler language or express confusion regarding news visuals and automated summaries.

Beyond explicit complaints, exclusion is also evident through silence. Older users are significantly underrepresented in comment participation, suggesting passive consumption or complete disengagement rather than active interaction. This absence should not be interpreted as a lack of interest in news or public affairs; rather, it reflects structural barriers that prevent meaningful engagement.

Furthermore, digital ethnography reveals a pattern of reliance on intermediaries, such as younger family members or community leaders, to interpret digital news. While this practice mitigates exclusion to some extent, it also reinforces dependency and limits autonomy in information access. News consumption becomes mediated through social relationships rather than direct engagement with journalistic content, thereby weakening individual agency and critical participation.

Table 2: Digital barriers experienced by Orang Asli (indigenous) elders in online News engagement

Identified Barrier	Observed Online Indicators	Manifestation in News Engagement	Consequences for Informational Inclusion
Limited internet connectivity	Comments referencing slow loading or inability to view videos	Partial or failed access to AI-curated news	Reduced exposure to current affairs
Low digital literacy	Requests for explanations, confusion over symbols or captions	Passive consumption or avoidance of content	Dependence on intermediaries
Language and cultural mismatch	Difficulty understanding urban-centric or English-dominant content	Disengagement from mainstream news	Reinforced cultural marginalisation
Interface complexity	Minimal interaction with comment features	Lack of participation in public discourse	Reduced civic visibility

Identified Barrier	Observed Online Indicators	Manifestation in News Engagement	Consequences for Informational Inclusion
Generational learning gaps	Reliance on younger family members	Indirect news access	Loss of autonomy and critical engagement

4.3 Regulatory Omissions and Institutional Inattention

Table 3 synthesises findings from policy and document analysis, highlighting omissions relevant to AI-driven journalism governance. The regulatory environment treats AI-driven journalism as a neutral innovation, overlooking its differentiated social impacts and reinforcing systemic exclusion.

The policy document analysis reveals significant gaps in Malaysia's digital governance frameworks concerning age- and culture-sensitive inclusion. While national digitalisation policies emphasise infrastructure expansion and innovation, they largely conceptualise digital inclusion in technical terms, focusing on connectivity and device ownership. Issues such as algorithmic transparency, age-related usability, cultural accessibility and indigenous epistemologies receive minimal attention.

Journalism codes of ethics and platform governance documents similarly lack provisions addressing how AI-driven news dissemination may disproportionately exclude older or indigenous users. Content moderation guidelines prioritise harm prevention and misinformation control but rarely consider whether content is intelligible, accessible or culturally resonant for marginalised audiences.

These omissions suggest a regulatory orientation that privileges economic efficiency and platform scalability over social equity. By failing to recognise the differentiated impacts of AI-driven journalism, institutional frameworks inadvertently legitimise exclusionary practices as neutral or unavoidable outcomes of technological progress.

Table 3: Regulatory and policy gaps affecting Orang Asli (indigenous) elder digital inclusion

Policy Domain	Existing Regulatory Focus	Identified Gap	Implications for Orang Asli Elders
Digital inclusion policy	Infrastructure expansion, broadband penetration	Lack of age- and culture-specific provisions	Connectivity without usability
Journalism ethics codes	Accuracy, harm prevention, misinformation	Absence of accessibility and inclusivity criteria	Ethical blind spots in AI journalism
Platform governance	Content moderation, user safety	No obligation for algorithmic inclusivity audits	Structural exclusion remains unaddressed
AI governance frameworks	Innovation and economic growth	Minimal attention to indigenous rights	Technological progress prioritised over equity

4.4 Triangulated Evidence of Algorithmic and Regulatory Exclusion

Building on the individual findings presented earlier, Table 4 synthesises evidence across the three methodological strands on algorithmic content analysis, digital ethnography, and policy document analysis to demonstrate how exclusion operates as a systemic and reinforcing process rather than an isolated technological failure. This triangulated perspective reveals that the marginalisation of Orang Asli elders is produced through the interaction of design assumptions, user constraints and regulatory inattention.

4.4.1 Content Accessibility as a Structural Barrier

Evidence from the content analysis indicates that AI-driven journalism on social media platforms overwhelmingly prioritises video-first and visually intensive news formats. These formats are algorithmically rewarded due to higher engagement metrics, autoplay functionality and shareability. When examined in isolation, such prioritisation may appear content-neutral; however, when triangulated with ethnographic observations, its exclusionary effects become evident.

Digital ethnography shows that Orang Asli elders frequently encounter difficulties accessing video-based news due to unstable connectivity, limited data plans and unfamiliarity with platform navigation. Policy analysis further reveals that existing digital inclusion frameworks do not mandate accessibility-oriented content standards for AI-curated news. Together, these findings indicate that accessibility is treated as an individual

responsibility rather than a structural obligation, resulting in AI journalism systems that systematically disadvantage older indigenous users.

4.4.2 *Linguistic Complexity and Cognitive Load*

Table 4 also highlights linguistic design as a key site of exclusion. Algorithmically generated captions and summaries often rely on compressed language, hashtags and hybrid linguistic registers combining Malay, English and platform-specific shorthand. While efficient for rapid consumption, these features impose a high cognitive load on users with limited formal education or digital exposure.

Ethnographic evidence shows repeated requests for clarification and instances of misinterpretation among older indigenous users. Crucially, policy documents governing journalism ethics and AI deployment do not address linguistic accessibility or plain-language requirements. This triangulated evidence demonstrates that language operates as an invisible filter, shaping who can meaningfully interpret news and who remains excluded despite nominal access.

4.4.3 *Participation and Algorithmic Visibility*

Another critical finding emerging from Table 4 concerns participation affordances. AI-driven journalism platforms encourage rapid interaction through likes, shares and short comments, which function as signals of relevance within algorithmic ranking systems. However, digital ethnography reveals minimal participation by Orang Asli elders in these spaces, not due to political apathy but because of interface complexity, uncertainty about norms and fear of misinterpretation.

Policy analysis shows that civic participation is discussed in abstract terms within digital policy discourse but is rarely operationalised in platform governance requirements. As a result, low engagement by elders is interpreted algorithmically as lack of relevance, leading to further deprioritisation of accessible or culturally relevant content. This finding underscores how algorithmic systems translate social inequality into data-driven invisibility.

4.4.4 *Algorithmic Opacity and Normalisation of Exclusion*

Table 4 further reveals that algorithmic opacity plays a central role in normalising exclusion. From the perspective of Orang Asli elders, the logic governing news visibility is largely inscrutable. Users are rarely informed why certain news items appear repeatedly while others disappear from their feeds.

Policy analysis confirms that there are no enforceable requirements for algorithmic explainability in the context of news dissemination. Consequently, exclusion is perceived as a personal limitation rather than a systemic issue. These dynamic shifts responsibility away from institutions and platforms, reinforcing the perception that digital marginalisation is a natural outcome of technological progress rather than a governance failure.

4.4.5 *Cultural Relevance and Symbolic Marginalisation*

Finally, Table 4 illustrates how cultural relevance is marginalised within AI-driven journalism systems. Content analysis shows that news framing is predominantly urban-centric and nationally homogenised, with limited contextualisation for indigenous experiences. Ethnographic observations reveal a perceived disconnect between news narratives and the lived realities of Orang Asli elders, contributing to disengagement and scepticism.

Policy frameworks addressing indigenous inclusion tend to remain symbolic, offering general acknowledgements without embedding cultural responsiveness into media governance. The triangulated evidence suggests that symbolic inclusion without structural accommodation perpetuates cultural marginalisation, reinforcing the sense that AI-driven journalism does not speak to or for indigenous elders.

Taken together, the findings presented in Table 4 demonstrate that the exclusion of Orang Asli elders from AI-driven journalism is not accidental, temporary or technologically inevitable. Rather, it is the outcome of interlocking socio-technical mechanisms in which algorithmic design choices, user constraints and regulatory omissions mutually reinforce one another.

This triangulated analysis strengthens the central argument of the paper: AI-driven journalism, when governed by engagement-centric and culturally neutral assumptions, systematically privileges dominant user groups while rendering older indigenous populations informationally invisible. The implications of this exclusion extend beyond access to news, affecting civic participation, cultural recognition and democratic inclusion.

Table 4: Triangulated evidence of algorithmic and regulatory exclusion affecting Orang Asli elders

Analytical Dimension	Evidence from Content Analysis	Evidence from Digital Ethnography	Evidence from Policy Analysis	Consolidated Result
Content accessibility	Dominance of video-first, fast-paced AI-curated news formats	Older users avoid or fail to engage with video-based news	No requirement for accessibility-oriented news formats	AI journalism structurally disadvantages low-literacy and low-bandwidth users
Linguistic complexity	Automated captions rely on compressed, mixed-language registers	Requests for clarification; misinterpretation of news content	Absence of plain-language standards in journalism guidelines	Language design reinforces informational exclusion
Participation affordances	Engagement features prioritise rapid interaction (likes, shares)	Minimal comment participation by elders	Civic participation not addressed in platform regulation	Older indigenous users rendered digitally invisible
Algorithmic transparency	Content prioritisation opaque and engagement-driven	Users unaware of why certain news appears	No obligation for algorithmic explainability	Exclusion normalised as a "technical outcome"
Cultural relevance	Generic national or urban-centric framing of news	Perceived disconnect between news narratives and lived realities	Indigenous cultural needs absent in policy discourse	Cultural marginalisation reproduced through AI systems

5. Discussion

The findings demonstrate that digital exclusion among Orang Asli elders is not the result of isolated technological shortcomings or individual limitations. Rather, it emerges from the convergence of algorithmic design choices, infrastructural inequality and regulatory neglect. This section situates these findings within broader theoretical and ethical debates on digital inclusion and AI governance.

5.1 The Reinforcement of the Generational Digital Divide

From a socio-technical perspective, the digital divide experienced by Orang Asli elders reflects second- and third-level digital inequalities that extend beyond access to include skills, patterns of use and social outcomes (van Dijk, 2006; Ragnedda, 2017). AI-driven journalism amplifies these inequalities by embedding assumptions about speed, engagement and technological fluency into algorithmic systems, assumptions that disproportionately favour younger, urban and digitally literate users (Diakopoulos, 2019; Napoli, 2019). For older indigenous users, such systems intensify existing structural marginalisation, as algorithmic news formats prioritise immediacy and visual complexity over accessibility and contextual explanation (Hargittai, 2010; Noble, 2018).

This exclusion is simultaneously generational and cultural. Orang Asli elders occupy a marginal position shaped by age-related learning barriers and historical exclusion from mainstream media systems (Nicholas, 2000; Jawan and Chin, 2014). Rather than compensating for these disadvantages, AI-driven journalism often accelerates information flows and compresses meaning, limiting opportunities for reflective and inclusive news engagement (van Dijck et al., 2018).

5.2 Ethical Responsibility of Media Institutions and Platforms

The ethical implications of AI-driven journalism extend beyond content accuracy to questions of fairness, representation and informational justice. Journalism has traditionally been grounded in public service values, including the responsibility to inform diverse audiences and support democratic participation (McQuail, 2010). When news dissemination is increasingly mediated by opaque algorithmic systems, ethical responsibility necessarily expands to include platform governance, algorithm design and regulatory oversight (Gillespie, 2018; Floridi et al., 2018).

The systematic exclusion of Orang Asli elders from algorithmically curated news environments raises ethical concerns related to distributive justice and digital citizenship. Scholars argue that algorithmic systems, even when not intentionally discriminatory, can reproduce structural inequalities through design choices that normalise dominant user profiles (Noble, 2018; Eubanks, 2018). From this perspective, the absence of age- and culture-sensitive design in AI journalism constitutes an ethical failure, as it undermines equal access to information and participation in the public sphere (Napoli, 2019).

5.3 Cultural Disjuncture and the Limits of Global Digital Norms

The findings further reveal a cultural disjuncture between globalised norms of AI-driven journalism and indigenous epistemologies. Platform-centred journalism prioritises standardised formats, engagement metrics and data-driven optimisation, often at the expense of local knowledge systems and culturally embedded modes of communication (Couldry and Mejias, 2019). For Orang Asli elders, whose communicative practices have historically relied on oral traditions, communal knowledge sharing and contextual storytelling, algorithmic abstraction and acceleration can be alienating (Nicholas, 2000; Smith, 2012).

This disjuncture highlights the limitations of digital inclusion frameworks that focus narrowly on technical adaptation. Scholars of indigenous media and decolonial communication argue that genuine inclusion requires cultural recognition and respect for alternative ways of knowing and communicating (Smith, 2012; George, 2017). Without such recognition, AI-driven journalism risks reproducing colonial patterns of marginalisation under the guise of technological neutrality (Couldry and Mejias, 2019).

6. Conclusion

This paper has examined how AI-driven journalism, as practised on social media platforms, shapes digital inclusion among Orang Asli elders in Malaysia. Drawing on a triangulated virtual methodology, the study demonstrates that algorithmic content prioritisation, infrastructural limitations and regulatory omissions collectively reinforce digital inequality for older indigenous users.

The findings challenge celebratory narratives of AI innovation in journalism by revealing its uneven social consequences. Rather than expanding access universally, AI-driven journalism often privileges users who already possess digital capital, while marginalising those who do not. For Orang Asli elders, this exclusion is both generational and cultural, reflecting deeper structural inequalities embedded within media systems.

6.1 Policy Recommendations for Inclusive AI Journalism Governance

To address these challenges, several policy interventions are recommended:

First, age and literacy-sensitive content standards should be incorporated into journalism guidelines and platform governance frameworks. This includes the provision of plain-language summaries, audio-based news formats and low-bandwidth alternatives.

Second, algorithmic transparency and accountability must be strengthened. Regulators should require platforms to assess and disclose how algorithmic systems impact marginalised populations, including indigenous elders.

Third, targeted digital inclusion programmes should be developed in collaboration with Orang Asli communities. These programmes must go beyond basic digital skills training to include culturally responsive content engagement and critical media literacy.

Finally, ethical oversight mechanisms should be expanded to explicitly address algorithmic exclusion. Independent audits and participatory policy consultations involving indigenous representatives can help ensure that AI-driven journalism aligns with principles of equity and social justice.

6.2 Limitations and Future Research

This study is limited by its reliance on virtual and document-based methods, which may not fully capture the lived experiences of Orang Asli elders offline. Future research should adopt participatory and community-based approaches, enabling indigenous elders to articulate their own informational needs and preferences. Comparative studies across indigenous communities in Southeast Asia would also enrich understanding of how AI-driven journalism interacts with diverse cultural contexts.

AI Declaration

AI tools have been used in developing this paper such as Grammarly for grammar check, Quillbot for paraphrasing, Gemini and ChatGPT for refining academic tone, developing figures based on the data collections, and re-arranging referencing style.

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