Reconfiguring the Global Communication Ecology: China, Platform Geopolitics, and Communication Inequalities in the Global South

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ABSTRACT

Global communication inequalities concern not only connectivity but also the distribution of authority over communication systems. This paper develops an ecological–Habermasian framework linking technological infrastructure, socio-cultural practices, regulatory arrangements, and environmental conditions. An exploratory documentary comparison examines Kenya's infrastructure maintenance and school-connectivity arrangements and Indonesia's regulation and restructuring of TikTok Shop. Nine institutional documents and assessments provide a bounded evidence set, interpreted alongside political-economy, platformization, and public-sphere scholarship. The analysis distinguishes technical capacity, regulatory authority, and public communicative power. Kenyan procurement documentation establishes formal maintenance procedures but does not establish vendor exclusivity or effective supplier substitutability. Indonesian documents establish regulatory conditions and announced corporate restructuring, while demonstrating why jurisdictional compliance, ownership concentration, and public accountability require separate assessment. Neither case provides sufficient evidence to determine affected publics' influence over final decisions. Sustainability commitments and electronic-waste assessments further demonstrate that environmental responsibilities belong within communication governance, although project-level impacts remain unmeasured. The framework advances an account of inequality as a relationship among capacities, governing arrangements, participation, and material obligations. The framework contributes a method for distinguishing expanded communication capacity and institutional bargaining authority from demonstrated public influence and environmental accountability. The findings generate context-dependent propositions rather than a general verdict on Chinese or Western technological influence.

Keywords: global communication ecology; Global South; platform governance; communicative power; digital infrastructure;

INTRODUCTION: FROM COMMUNICATION ORDER TO COMMUNICATION ECOLOGY

Introduction

Global communication inequalities extend beyond uneven access to information. They are embedded in the infrastructures, platforms, regulatory arrangements, and environmental conditions through which communication becomes possible, governed, and contested. These arrangements shape who can communicate, whose perspectives become visible, and who can influence the terms of participation. Understanding inequality therefore requires attention not only to the availability of communication resources, but also to the authority exercised over them and the opportunities available to affected publics to challenge their organization.

Political-economy approaches establish that communication is inseparable from the distribution of capital, resources, and institutional power (Castells, 2009; Schiller, 1999). Platformization scholarship further explains how technical infrastructures, commercial relationships, and governance arrangements jointly organize cultural production and participation (Nieborg & Poell, 2018; van Dijck et al., 2018). These perspectives challenge the assumption that expanding digital services necessarily redistributes control over their operating conditions. The analytical problem addressed here is more specific: how can expanded technical capacity, institutional regulatory action, and affected publics' influence be distinguished within particular communication-governance processes?

China's involvement in digital infrastructure and platform development provides an important setting for examining this problem. Technological partnerships can introduce equipment, expertise, services, and comm.-

ercial opportunities, but their consequences depend on procurement conditions, technical interfaces, ownership arrangements, domestic institutions, and accountability. Supplier nationality alone cannot establish dependency, access to operational data, or political control. Equally, the availability of alternative providers does not necessarily eliminate existing inequalities. Such conclusions require evidence about the mechanisms through which communication systems are financed, maintained, regulated, and used.

A Global South perspective must also distinguish national institutions from the diverse publics within their jurisdictions. Governments, firms, traders, teachers, creators, consumers, and communities may have different priorities and unequal capacities to influence decisions. A government may strengthen its bargaining position without broadening public participation. Individuals may acquire connectivity or commercial visibility without gaining influence over the rules governing those opportunities. This article consequently distinguishes technical capacity, regulatory authority, and communicative power rather than treating them as interchangeable forms of empowerment.

Habermas's theory of communicative action provides a normative basis for examining whether institutional decisions remain open to public justification, questioning, and revision (Habermas, 1981/1984, 1981/1987). His account of democratic legitimacy further directs attention to the relationship between public communication and administrative decision-making (Habermas, 1996). Fraser's (1990) critique qualifies any assumption that formal openness establishes equal participation: differences in resources, recognition, and representation shape whose claims can enter public discussion and receive consideration. Together, these perspectives distinguish promised public benefit, opportunities to participate, and demonstrated influence over decisions. Procurement and commercial regulation are not themselves public spheres, but their relationships with public communication can be examined through these distinctions.

An ecological perspective connects these questions across four dimensions: technological infrastructure, socio-cultural practices, regulatory arrangements, and environmental conditions. Building on the relational orientation of deep mediatization (Hepp, 2020), the framework examines how decisions in one dimension affect possibilities in others. Maintenance requirements may shape supplier participation and service continuity; platform rules may reorganize commercial practices; and equipment-lifecycle obligations may distribute environmental responsibilities. The framework does not presume that these relationships form a stable equilibrium. Accountability and contestability, rather than stability alone, provide the evaluative criteria.

The analysis examines selected governance arrangements in Kenya and Indonesia. The Kenyan case concerns NOFBI maintenance procurement and school-connectivity partnerships, foregrounding technical continuity, supplier participation, and access provision. The Indonesian case concerns the regulation and restructuring of TikTok Shop, foregrounding commercial permissions, corporate organization, and institutional implementation. The units of comparison are these arrangements, not the countries' communication systems as a whole. Their contrast allows common questions about capacity, authority, participation, and responsibility to be examined across different institutional settings.

The comparison is exploratory and documentary. It does not assume that infrastructure provision necessarily produces dependency or that platform regulation necessarily establishes autonomy. Nor can it isolate project type from differences in institutions, markets, chronology, or source availability. Institutional documents are examined for what they establish about formal arrangements, stated objectives, and reported actions, while conclusions about implementation and public influence remain bounded by the available evidence.Three research questions guide the investigation:

Q1. How do the selected infrastructure and platform-governance arrangements allocate communication capacities and decision-making authority?

Q2. What opportunities for affected-public participation and influence are documented?

Q3. How are environmental responsibilities specified, and what implementation questions remain unresolved?

The paper contributes an ecological–Habermasian framework for examining relationships among communication capacity, regulatory authority, public influence, and material responsibility. Its purpose is to identify how gains in connectivity or institutional bargaining capacity may coexist with constraints in other dimensions, while distinguishing institutional commitments from procedures and demonstrated outcomes. This approach shifts attention from a binary assessment of Chinese and Western influence toward the conditions under which Global South institutions and publics can shape, scrutinize, and contest the communication environments in which they participate.

LITERATURE REVIEW

Political Economy and Platformization

Political economy provides the foundational insight that communication resources cannot be understood apart from capital, institutional power, and the broader organization of social life. Castells (2009) situates communication within networked relations of power, while Schiller (1999) links digital networks to the restructuring of global capitalism. Although these traditions differ in emphasis, both challenge access-centred accounts of digital inequality by showing that the ability to connect does not necessarily coincide with the ability to shape the conditions of connection. For the present study, however, ownership concentration is only a starting point. What remains analytically decisive is the mechanism through which an actor's institutional or commercial position becomes practical control over infrastructure, data, markets, or participation.

Platform scholarship develops this insight by examining how public values are negotiated within commercially organized digital environments. Van Dijck, Poell, and de Waal (2018) argue that platforms increasingly mediate markets, labour, civic life, and democratic processes, thereby raising questions about who is responsible for securing values such as fairness, accessibility, accountability, and democratic control. Nieborg and Poell (2018) similarly show that platformization reorganizes cultural production through the interaction of infrastructures, markets, and governance arrangements. Their work therefore already connects technical conditions to commercial dependency and adaptive practices; it would be inaccurate to suggest that platformization research overlooks the relationship between infrastructure and culture. The unresolved issue for this comparison is instead how comparable forms of conditional participation operate across two different sites: the maintenance and governance of national fibre infrastructure in Kenya, and the regulation of a transnational commerce platform in Indonesia.

A mechanism-oriented approach is therefore required. It asks whether substitution, exit, or contestation is technically possible, contractually permitted, financially practicable, and institutionally supported. These conditions do not necessarily align. A formally open procurement process may coexist with technical requirements that effectively restrict eligible suppliers; conversely, a platform's legal restructuring may alter its corporate form while leaving its market power and data practices largely intact. Political economy identifies the stakes involved in such arrangements, but documentary analysis must establish how those stakes become consequential in specific institutional settings.

These approaches establish why ownership and governance matter; the comparison examines how their effects become observable through procurement conditions, technical substitution, commercial restructuring, and institutional review.

Data Colonialism and Contextual Specificity

Data colonialism functions here as a sensitizing perspective rather than a directly tested account of extraction. Couldry and Mejias (2019a, 2019b) offer a broader account of how digital environments transform social life into a resource for accumulation. Their concept of data colonialism describes the appropriation of everyday activity through data relations, whereby work, education, consumption, mobility, and social interaction are progressively converted into data streams available for extraction and commodification. This perspective usefully moves beyond a narrow focus on privacy violations. It suggests that greater digital participation does not automatically produce greater autonomy, because the very activities through which people become visible online may also become objects of commercial capture and behavioural influence.

At the same time, data colonialism should not operate as a substitute for empirical demonstration in a particular

case. The presence of foreign-supplied equipment does not, by itself, prove that a supplier can access operational data. Likewise, the collection of commercial data on a platform does not establish that all sellers, consumers, or workers experience dispossession in the same way. The relevant questions are more specific: Who holds access rights? For what purposes may data be processed? What contractual permissions govern reuse or transfer? What oversight mechanisms exist? And what consequences follow for different categories of participants? Within the ecological framework developed here, extraction is treated as a mechanism to be investigated rather than a condition inferred automatically from the presence of foreign technology or corporate scale.

Public Spheres, Difference, and Influence

Public-sphere theory provides a normative basis for examining whether communication enables affected people to question governing arrangements and influence institutional decisions. Habermas's distinguishes communicative coordination oriented toward mutual understanding from coordination primarily mediated by money and administrative authority (Habermas, 1984, 1987). His later democratic theory connects public communication to legitimate institutional decision-making, arguing that communicative power should be capable of informing and constraining administrative power (Habermas, 1996). This distinction does not imply that commercial objectives or regulatory enforcement are inherently illegitimate. Rather, it directs attention to whether those arrangements remain open to public justification, scrutiny, and revision.

However, formal opportunities to speak do not necessarily establish equal participation. Fraser (1990) challenges the assumption that participants can set aside social inequalities when entering public discussion. Differences in resources, status, and recognition affect whose concerns are heard and which forms of expression are considered legitimate. Her concept of subaltern counterpublics identifies alternative arenas in which subordinated groups formulate interpretations of their needs and challenge dominant accounts. This perspective qualifies any equation of consensus with inclusion: visible disagreement may reveal previously excluded interests rather than a failure of communication.

These debates are particularly relevant to a Global South analysis that distinguishes state authority from the interests of diverse publics. Governments may describe infrastructure expansion or platform regulation as serving national development, yet affected groups can experience those interventions differently. Teachers, students, traders, online sellers, creators, consumers, and communities should therefore be treated as potentially differentiated constituencies rather than a unified public. Regulatory sovereignty may create opportunities for accountability, but its exercise does not itself demonstrate that those constituencies influenced the decisions made in their name.

Kraidy's (2005) account of hybridity adds a further caution against interpreting cultural interaction as passive reception. Local actors may adapt transnational technologies, commercial formats, and communicative practices in creative ways, even while remaining embedded in unequal systems of distribution and authority. However, neither cultural creativity nor public visibility should be conflated with communicative power. A stronger concept of influence requires evidence that claims affect agendas, justifications, decisions, or the distribution of resources. Distinguishing expression from institutional influence is therefore central to assessing communication inequality in both cases.

The ecological–Habermasian framework consequently distinguishes three evidentiary levels: institutional commitments to public benefit, procedures through which affected groups can contribute, and documented responses showing that their contributions received consequential consideration. Procurement and commercial regulation are not themselves public spheres; they are institutional processes whose relationships with public communication require investigation. In Kenya, this distinction separates supplier access and consultation claims from evidence of community influence. In Indonesia, it separates the stated protection of small enterprises from evidence that differently positioned participants shaped platform-governance decisions. The analytical task is therefore to examine how opportunities for expression become—or fail to become—opportunities to contest the conditions of participation.

Ecology as Integration Rather Than Replacement

Hepp's (2020) concept of deep mediatization provides a useful starting point for examining interconnected media environments rather than isolated technologies or channels. Deep mediatization emphasizes that digital media and their underlying infrastructures become intricately related to institutions, organizations, communities, and everyday life, producing mutually dependent transformations across society. The ecological approach developed in this paper extends that relational orientation by incorporating material sustainability as an explicit analytical dimension. It does not claim that every relationship among infrastructure, platforms, publics, and environmental conditions is new, nor does it assume that these elements naturally form a stable equilibrium. Its value lies in tracing connections that sector-specific accounts may otherwise fragment.

Ecological language nevertheless carries risks. Terms such as "balance," "health," and "resilience" can obscure conflict if they imply that a stable system is necessarily just. A communication environment may appear stable precisely because certain actors lack the capacity to contest it; resilience may likewise preserve unequal authority rather than transform it. References to ecological balance must therefore be tied to explicit normative criteria. In this study, those criteria are accountability, contestability, meaningful participation, and environmental responsibility. Disagreement is not treated as evidence of ecological failure. On the contrary, visible disagreement may indicate that excluded interests have acquired sufficient capacity to challenge prevailing arrangements.

The synthesis developed here assigns distinct but complementary roles to established approaches. Political economy identifies the distribution of resources and institutional power; platformization specifies the conditions of participation within digitally mediated markets; data colonialism interrogates processes of appropriation; public-sphere theory evaluates justification, recognition, and influence; and ecological analysis examines relationships across material, institutional, communicative, and environmental dimensions.

The contribution of this paper is not the claim that earlier scholarship uniformly neglected infrastructure, agency, or power. Rather, it is the operational integration of these perspectives into a framework capable of comparing how communication capacities, decision-making authority, and environmental obligations are configured in specific national and platform contexts.

The analytical gap addressed here concerns the relationship among technical capacity, regulatory authority, public influence, and material responsibility within contrasting communication-governance processes.

CONCEPTUAL FRAMEWORK

Four Dimensions of Communication Ecology

This study conceptualizes communication environments through four interrelated dimensions: technological infrastructure, socio-cultural dynamics, regulatory arrangements, and environmental conditions. These dimensions are not treated as separate stages in a causal chain. Rather, they constitute overlapping features of the same communication ecology, whose effects become visible through concrete institutional practices, commercial relationships, and everyday forms of participation.

Technological infrastructure refers to the material and technical systems through which communication becomes possible. It includes networks, equipment, processing systems, protocols, and interoperability requirements. Its analysis extends beyond ownership and distribution to include maintenance arrangements, possibilities for substitution, and operational continuity. In the Kenyan case, for example, the durability, repairability, and replaceability of fibre-optic infrastructure are not merely technical matters; they shape which institutions retain capacity to provide and govern communication services over time.

Socio-cultural dynamics concern the production, circulation, and interpretation of meaning. This dimension encompasses educational use, commercial communication, language practices, and collective claims. It recognizes that infrastructure and platforms are not simply neutral delivery systems. They become meaningful through the practices of teachers, students, traders, creators, consumers, and communities who use, adapt, contest, or depend on them.

Regulatory arrangements allocate rights, authority, obligations, and economic benefits. They include laws, procurement documents, licensing conditions, platform terms of service, and oversight procedures. Regulation is understood here not only as formal state action, but also as the broader set of rules through which public and private institutions govern participation in communication markets and infrastructures.

Environmental conditions include the material consequences of communication systems: operational energy use, equipment lifetimes, repair, refurbishment, and end-of-life management. This dimension prevents the analysis from treating digital communication as immaterial. Decisions about equipment replacement, network expansion, platform operations, and device disposal carry environmental costs and responsibilities that must be examined alongside questions of access, commerce, and governance.

These dimensions frequently intersect. A maintenance requirement may simultaneously concern technical capability, supplier eligibility, public expenditure, and long-term service continuity. A platform transaction rule may affect creators' commercial practices, consumer protection, data governance, and regulatory jurisdiction. An equipment-replacement decision may connect network reliability with procurement authority and electronic-waste obligations. Artificial intelligence, mobile networks, and emerging technical standards are therefore not treated as external disruptions to this framework. They belong within the same institutional arrangements that determine who may participate, under what conditions, and with what consequences.

The framework is **immersive** because communication environments are encountered through ordinary institutional and social activity rather than abstract systems. It is integrative because it connects the material and symbolic conditions of that activity. At the same time, these are analytical commitments rather than claims that all actors inhabit a single coherent environment. Different groups occupy unequal positions within the same arrangements, and their experiences of connectivity, regulation, commercial opportunity, or environmental burden may diverge substantially.

Capacity, Authority, and Communicative Power

The framework distinguishes four analytically separate evaluative categories: technical capacity, regulatory authority, communicative power, and environmental accountability. The ecological dimensions identify what is being examined; the evaluative categories identify the consequences and governing qualities being assessed.

Technical capacity refers to the ability to connect, communicate, process information, or provide services. It may be held by a state, firm, school, platform, or community, but its distribution does not itself determine who controls the conditions under which it is used.

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Regulatory authority refers to the institutional competence to establish, implement, and enforce conditions of participation. It includes the power to issue licences, set procurement requirements, regulate platform conduct, impose data obligations, or determine environmental standards.

Communicative power refers to the capacity of affected publics to influence the justification, content, or implementation of decisions. It is not equivalent to access, visibility, or expression. It requires evidence that public claims, objections, or proposals have affected institutional agendas, decisions, or justifications.

Environmental accountability concerns the allocation, disclosure, and enforcement of material responsibilities. It asks whether the actors benefiting from digital infrastructure and platform activity also bear, disclose, or are held responsible for the environmental costs associated with those systems.

Figure 1 presents these outcomes as evaluative questions applied across the four ecological dimensions. They are not scores that can be inferred directly from technology adoption, foreign investment, platform expansion, or regulatory reform. A country may expand connectivity while concentrating procurement authority; a platform may increase commercial participation while limiting sellers' capacity to contest rule changes; a

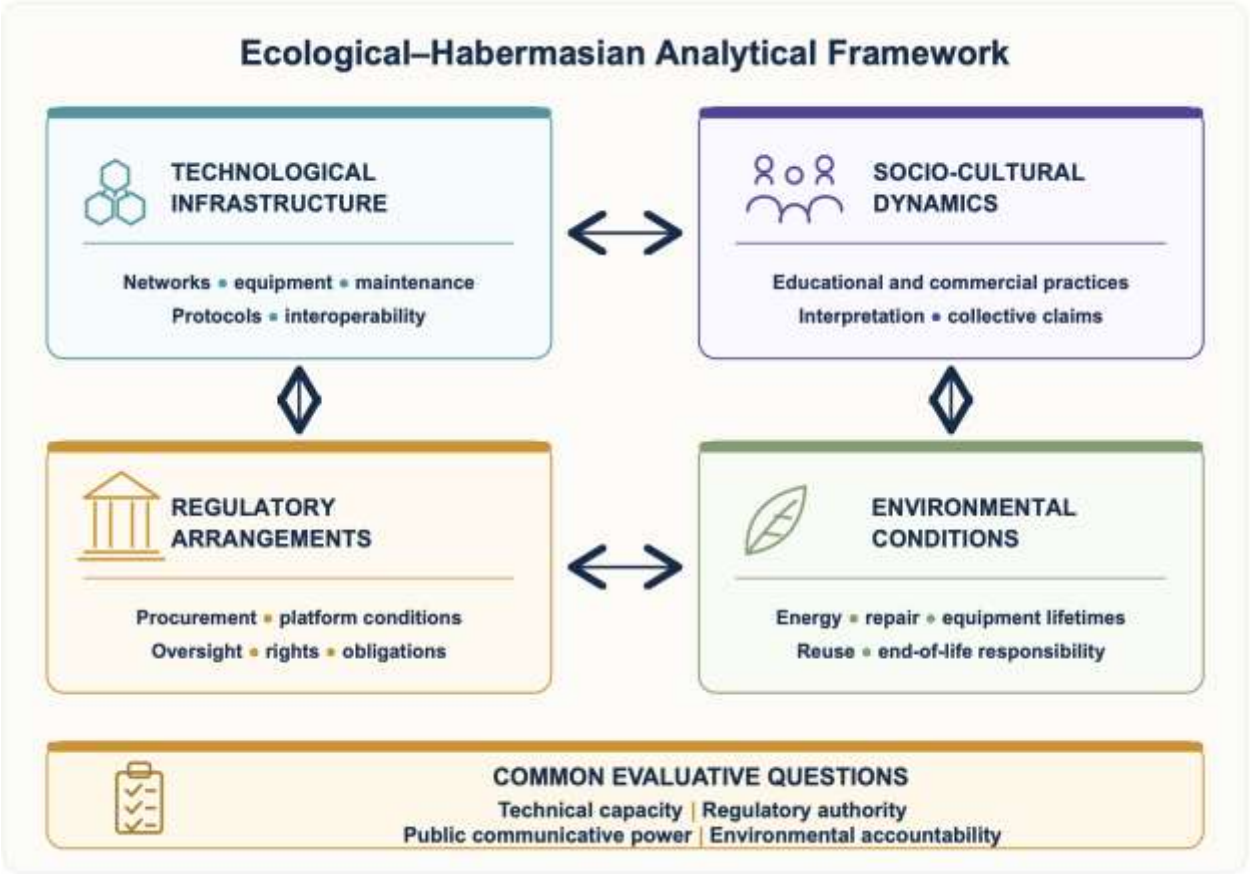
regulatory intervention may improve consumer protection while leaving environmental responsibilities unclear.

Information flows are therefore examined through service pathways, procurement arrangements, data-processing conditions, and distribution mechanisms rather than assumed geopolitical routing. Power relations are examined through access conditions, procurement practices, licensing, ownership, contractual permissions, and review procedures. Geopolitical configurations enter the analysis where states and firms negotiate cross-border relationships, but the available documents do not justify reducing national decisions to a simple competition between China and Western powers. Domestic constituencies, institutional mandates, commercial interests, and local political pressures remain analytically consequential.

The Habermasian dimension of the framework establishes a graduated set of evidentiary thresholds. A rhetorical commitment to inclusion constitutes evidence of an institutional claim, but not of participation. Consultation records may establish that affected groups were given an opportunity to contribute. Evidence that submissions altered a decision, however, supports the stronger inference that communicative power was exercised. These distinctions prevent public-benefit language from being treated as equivalent to democratic influence.

Similarly, a security or efficiency objective does not automatically demonstrate lifeworld colonization in Habermas's sense. Such an interpretation requires evidence that administrative or economic mechanisms have displaced meaningful opportunities for communicative coordination. Mixed arrangements remain possible. A commercially oriented initiative may incorporate meaningful consultation, while an inclusion-oriented initiative may provide limited opportunities for affected groups to challenge its terms. The framework therefore evaluates not only the stated purpose of an arrangement, but also the procedures, evidence, and outcomes through which that purpose is realized.

Figure 1:- Ecological–Habermasian Analytical Framework



Note. Bidirectional arrows indicate conceptual relationships, not measured effects, causal coefficients, or quantities. The lower panel identifies questions applied across the four dimensions.

METHODS

Research Design and Comparative Rationale

This study employs an exploratory, structured documentary comparison to examine how selected digital-governance arrangements organize communication capacity, institutional authority, public participation, and environmental responsibility. The units of comparison are specific governance arrangements—not Kenya and Indonesia as complete national communication systems. The design supports contextual interpretation and the development of analytical propositions rather than statistical generalization or causal inference.

The cases were selected purposively to examine contrasting sites of intervention. The Kenyan case concerns NOFBI maintenance procurement and school-connectivity partnerships, foregrounding infrastructure continuity, supplier participation, and service provision. The Indonesian case concerns the regulation and restructuring of TikTok Shop, foregrounding commercial permissions, corporate organization, and regulatory implementation. Both involve relationships between Global South institutions and influential technology providers, but they differ in sector, institutional mandate, timescale, and stakeholder composition.

A common set of questions structures the comparison: What communication capacities are provided, and to whom? Which actors establish their operating conditions? What opportunities exist to question those conditions? What evidence connects public contributions to institutional responses? How are environmental responsibilities specified? Applying these questions across the cases permits comparison without assuming that infrastructure provision necessarily produces dependency or that platform regulation necessarily establishes autonomy.

The observation periods are differentiated. The Kenyan evidence centers on a 2022 maintenance tender and the ICT Authority's 2024–2027 strategic plan, supplemented by an undated corporate account of school connectivity. The Indonesian evidence concerns a September 2023 regulatory explanation, a December 2023 corporate partnership announcement, and an April 2024 implementation report. Environmental assessments provide separately identified global and national context. The analysis does not assume that the arrangements described remained unchanged through November 2026.

Document Search and Selection

Targeted document retrieval and verification were conducted on October 30 and November 1, 2026. The repositories consulted were Kenya's ICT Authority website and document server, Huawei's TECH4ALL website, Indonesia's Ministry of Trade news repository, GoTo's corporate press archive, the International Telecommunication Union's publication and country-resource pages, and the International Energy Agency's report repository. Scholarly publications were consulted for theoretical interpretation but were kept separate from the institutional evidence set.

Searches combined geographical and institutional identifiers with issue-specific terms. Kenyan searches included NOFBI, maintenance, Huawei, school connectivity, strategic plan, green ICT, and electronic waste. Indonesian searches included TikTok Shop, Regulation 31/2023, Tokopedia, trade, and electronic waste. Additional searches addressed data-center electricity consumption and environmental responsibilities associated with digital infrastructure. The search was purposive and iterative, directed toward the research questions and the verification of specific claims; it was not an exhaustive systematic search.

Selection proceeded in two stages. Initial screening assessed institutional provenance, title, subject matter, and relevance. Subsequent examination assessed the substantive content available for interpretation. Documents were included when they had identifiable institutional authorship, accessible substantive content, and a direct connection to maintenance, connectivity, platform regulation, corporate restructuring, or relevant environmental assessment. General commentary, duplicate material, inaccessible substantive texts, and documents not used in the analysis were excluded from the retained evidence register.

The final register contains nine institutional documents: three concerning Kenya, three concerning Indonesian commercial governance, two providing global environmental context, and one providing Indonesian

environmental context. By source type, the register includes three government procurement, strategy, or press-release documents; two corporate accounts; one government-hosted media report; and three intergovernmental assessments or profiles. Table 1 identifies their dates, locations, and evidentiary functions. Foundational scholarship is not included in these totals.

No pooled identification or exclusion counts are reported because the targeted search did not generate an exhaustive record-level screening database. The register enumerates the documents used in the analysis rather than every result encountered. A linked English-language regulatory text that could not be retrieved was not treated as directly examined legislation; interpretation instead relies on the Ministry's attributed explanation. Undated webpages retain an undated citation and retrieval date.

Unit of Analysis and Analytical Procedures

The primary interpretive unit is a meaning-bearing passage: a sentence or connected group of sentences expressing a coherent claim, procedure, commitment, or description. Document-level context—including authorship, publication type, institutional purpose, and intended audience—guides interpretation. Findings are limited to the content actually examined; selected-passage analysis does not justify conclusions about omissions throughout an entire document.

Analysis proceeds through three connected stages. First, passages are interpreted through the four ecological dimensions: technological infrastructure, socio-cultural dynamics, regulatory arrangements, and environmental conditions. These dimensions identify what is being examined. A passage may address several dimensions, such as a maintenance provision linking technical continuity with procurement eligibility and environmental obligations.

Second, Habermasian categories assess the governing qualities described. Attention is given to public justification, inclusion, contestability, strategic objectives, economic coordination, and administrative authority. Communicative power is reserved for evidence connecting public claims to institutional responses or decisions. Lifeworld colonization is treated as a higher-level interpretation requiring convergent evidence of communicative opportunities being displaced, not as a label assigned through isolated references to security, efficiency, or profit.

Third, within-case interpretations are compared through the common questions concerning capacity, authority, participation, and responsibility. Tables 2 and 3 define the categories, while Table 4 connects representative passages to supported inferences and unresolved questions. The comparison distinguishes documented arrangements from plausible mechanisms and identifies the additional evidence needed to evaluate implementation.

Ambiguity and Evidentiary Thresholds

Four rules guide ambiguous interpretations. First, classification follows the mechanism described rather than favorable or unfavorable vocabulary. References to cooperation or inclusion do not automatically establish communicative legitimacy; references to commercial objectives or enforcement do not automatically establish domination.

Second, institutional claims, formal procedures, and demonstrated outcomes are distinguished. A public-benefit statement establishes a stated objective. A consultation record may establish an opportunity to contribute. Evidence that contributions affected a justification, decision, or implementation process supports the stronger inference of public influence.

Third, overlapping orientations are retained. A commercially motivated initiative may incorporate accessible review, while an inclusion-oriented initiative may leave important decisions insulated from challenge. Such passages are not forced into mutually exclusive normative categories.

Fourth, insufficient evidence is recorded as unresolved. Silence concerning consultation, supplier substitution, or environmental safeguards is reported as an absence of documentation in the examined material, not proof that the relevant practice did not exist.

For example, the NOFBI tender's invitation to eligible suppliers is interpreted under regulatory arrangements and contestability. It establishes a formal supplier-access procedure but does not establish effective competition, the eventual award, or affected-public participation. Similarly, an Indonesian statement invoking the protection of small enterprises establishes a regulatory justification; it does not independently demonstrate that those enterprises shaped the resulting arrangement.

Numerical Information and Environmental Evidence

The analysis does not report coding frequencies, intercoder reliability coefficients, or percentages of discourse. Numerical information is limited to attributed contextual estimates and announced commitments. Table 5 identifies the source, unit, reference period, geographical scope, and interpretive limits of each figure.

Global energy and electronic-waste estimates are used to establish material context, not to calculate the impacts of the selected projects or platforms. National electronic-waste figures are likewise not attributed to TikTok Shop. Corporate investment commitments are distinguished from verified disbursement and measured public benefit. Environmental policy provisions establish formal recognition of responsibilities but do not independently demonstrate implementation or performance.

Trustworthiness and Source Criticism

Trustworthiness rests on transparent attribution, explicit interpretive rules, and conclusions proportionate to the evidence. The source register and evidence tables allow readers to inspect the relationship between documentary content and interpretation. They do not establish exact replicability, given interpretive judgment and the potential alteration of online material.

Different source types perform different evidentiary roles. Government documents establish formal requirements, institutional positions, and reported actions. Corporate publications establish announced activities and commitments. A media report hosted on a government website remains an attributed report rather than becoming a direct administrative record. Comparing these materials permits assessment of their relationships, but agreement among institutional statements is not treated as independent verification.

Apparent inconsistencies in dates, labels, or numerical descriptions are not silently corrected. Where they affect interpretation, they are identified, and the analysis relies only on clearly attributable information. The study does not claim independent coding, peer debriefing, participant validation, or technical auditing.

Study Limitations

Language and access constrain the inquiry. Kenyan documents are in English, while Indonesian material is interpreted through cautious English paraphrase. Comprehensive multilingual coverage and back-translation are not claimed. The evidence set does not include confidential contracts, maintenance-award records, stakeholder interviews, internal platform data, or measured project-level environmental impacts.

These limitations restrict conclusions about effective supplier substitution, public experience, regulatory outcomes, and environmental performance. Differences between the cases also prevent project type from being isolated from institutional and market conditions. The findings therefore identify bounded arrangements and plausible mechanisms for further investigation rather than representing national communication systems or the Global South as a whole.

Table 1:- Institutional Evidence Register and Case Distribution

ID / case	Source and date	Category / locator	Evidentiary role
K1 / Kenya	ICT Authority, May 31, 2022	Government procurement; invitation p. 4; eligibility p. 9	NOFBI 2 maintenance rules; not an award or performance record.
K2 / Kenya	ICT Authority, 2024	Government strategy; preface; strategic objectives; environmental planning	Institutional priorities, consultation claim, sustainability commitments.
K3 / Kenya	Huawei, n.d.; accessed Nov. 1, 2026	Corporate project account; DigiSchool technical-role paragraphs	Attributed activities and partnership; not independent outcome evaluation.
I1 / Indonesia	Ministry of Trade, Sept. 27, 2023	Government press release; opening paragraphs	Stated regulatory purpose and effective date; not independently retrieved full regulation.
I2 / Indonesia	GoTo, Dec. 11, 2023	Corporate press release; agreement paragraphs	Announced combination, controlling stake, investment commitment.
I3 / Indonesia	Ministry of Trade, Apr. 6, 2024	Hosted media report; official quotations	Attributed integration and monitoring account; not technical audit.
E1 / cross-case context	IEA, 2025	Intergovernmental assessment; executive summary	Global electricity estimate; no case attribution.
E2 / cross-case context	ITU, Mar. 20, 2024	Intergovernmental assessment summary; opening findings	Global e-waste generation and documented recycling.
E3 / Indonesia context	ITU, n.d.; accessed Nov. 1, 2026	Intergovernmental country profile; Country Status	National e-waste estimate and policy-development context.

Note. Nine retained institutional documents: Kenya, 3; Indonesia commercial-governance case, 3; cross-case environmental context, 2; Indonesia environmental context, 1. By source category: government procurement/strategy/press release, 3; corporate accounts, 2; government-hosted media report, 1; intergovernmental assessments/profile, 3. Theoretical literature is excluded from these totals.

Table 2:- Ecological Interpretive Categories

Category	Definition and inclusion	Boundary / ambiguity rule
Technological infrastructure	Material and technical means of connectivity, processing, storage, maintenance, and interoperability.	Algorithms belong here when technical operation is discussed; authority over algorithms also concerns rules.
Socio-cultural dynamics	Production and interpretation of meaning; educational and commercial practices; language and collective claims.	The label does not mean computer software. Claimed benefits are not measured user experience.
Regulatory arrangements	Allocation of rights, obligations, authority, market access, and accountability.	Standards are included when establishment or enforcement is at issue. Formal requirements are not implementation.
Environmental conditions	Energy, equipment lifetimes, repair, reuse, material resources, and end-of-life obligations.	Metaphorical ecosystem health is excluded. Global context is not project impact.

Note. Categories are nonexclusive interpretive guides. No frequency distribution or independent reliability coefficient is claimed.

Table 3:- Habermasian Categories and Evidentiary Thresholds

Category	Operational meaning	Decision rule
Communicative orientation	Reasons offered for mutual understanding and openness to challenge.	Record whether this is rhetoric, an accessible procedure, or a demonstrated response.
Inclusion and discursive equality	Opportunity for affected groups to contribute and receive consideration.	Beneficiary language alone is insufficient; identify participants and access conditions.
Contestability	Ability to challenge evidence, arrangements, and decisions.	Require an identifiable clarification, appeal, disclosure, or review mechanism; distinguish supplier from public access.
Strategic orientation	Communication directed toward securing a specified institutional or commercial outcome.	Do not infer manipulation from persuasion alone; examine purpose and context.
Economic coordination	Organization through prices, investments, market access, and commercial incentives.	Can coexist with public justification; does not automatically establish colonization.
Administrative coordination	Organization through procurement, rules, enforcement, and institutional competence.	Security or sovereignty vocabulary alone does not prove communicative exclusion.
Communicative power	Traceable influence of public claims on an agenda, justification, or decision.	Requires evidence connecting contribution and response; consultation alone is insufficient.
Possible lifeworld colonization	Displacement of relevant communicative coordination by economic or administrative mechanisms.	Interpretive conclusion requiring convergent evidence, not a keyword code.
Mixed / unresolved	Coexisting orientations or insufficient evidence.	Retain ambiguity; do not force exclusive classification or infer absence from silence.

Note. Categories are nonexclusive interpretive guides. No frequency distribution or independent reliability coefficient is claimed.

ANALYSIS & FINDINGS

Communication Capacity, Authority, and Participation

Kenya: Maintenance Governance and Conditional Participation

The ICT Authority's tender, issued on May 31, 2022, concerns the maintenance of NOFBI 2. Its invitation describes an open-tendering process and states that procurement is open to eligible, qualified, and interested tenderers (ICT Authority, 2022, p. 4). This establishes a formal procurement procedure. Importantly, it does not support an inference that the document itself assigns an exclusive maintenance role to a named supplier. Nor does it reveal the eventual award outcome or the number of firms capable of meeting the stated conditions.

Other provisions show how technical and institutional requirements intersect. The tender addresses conflicts of interest, ownership disclosure, clarification procedures, and tender amendments. Public opening is specified for tenderers' representatives who choose to attend. Environmental eligibility provisions exclude goods and processes declared harmful by competent authorities (ICT Authority, 2022, pp. 4, 9). These are meaningful formal requirements. Yet their presence in the tender does not demonstrate enforcement, nor does it show that residents, teachers, or service users participated in deliberation about the network's broader governance.

The distinction between supplier participation and public participation matters here. Procedures that allow firms to seek clarification may improve contestability among prospective suppliers, but they do not necessarily

give affected communities influence over strategic decisions about connectivity, affordability, or service priorities. Conversely, the absence of those publics from the tender invitation is not proof that consultation did not occur elsewhere. The tender's institutional purpose limits what its silence can establish.

Vendor dependency, therefore, cannot be assessed from procurement language alone. It must be evaluated through technical and contractual conditions of substitution: licences, equipment documentation, replacement components, interoperability requirements, and the transfer of technical expertise. The tender establishes that maintenance is important. The reviewed passages, however, do not demonstrate an exclusive award, a maintenance monopoly, or comprehensive switching costs. The ecological interpretation is therefore a question about how continuity is governed, not a completed diagnosis of lock-in.

The ICT Authority's Strategic Plan 2024–2027 broadens this context. Its vision is a digitally empowered society, and its preface states that the plan's development involved public and private stakeholders. It acknowledges members of the public, national and county governments, industry, academia, and suppliers (ICT Authority, 2024, preface). This is documentary evidence of a claimed consultative process. It prevents an interpretation that participation was entirely absent, but it does not identify submissions, responses, forms of representation, or changes made in response to public input.

A complementary corporate account describes Huawei's role in DigiSchool connectivity. Huawei reports partnership with Kenya's Ministry of Education, the ICT Authority, and UNESCO. It identifies technical assessment, solution design, equipment provision, and project management as its activities. It also describes connections to NOFBI and cooperation with Kenya Power in using existing poles (Huawei, n.d.). These details make the relationship more specific than a generalized account of Chinese infrastructure expansion.

The corporate account points to an interaction mechanism: public institutions, a technology provider, an international organization, and an electricity utility combine resources to extend service access. It reports schools connected, not learning outcomes or users' influence over procurement. The account therefore supports a bounded conclusion about announced provision and organizational cooperation. Independent evidence would be needed to assess teaching improvements, equitable use, continuing affordability, or repair capacity.

Taken together, the documents show Kenyan institutions acting through procurement and planning rather than simply receiving an external system. At the same time, significant implementation questions remain unresolved. Formal tendering, an inclusive planning mission, and corporate partnership are distinct forms of evidence. None should be treated as a substitute for the others.

Indonesia: Regulatory Conditions and Corporate Restructuring

The Ministry of Trade's September 27, 2023 press release explains Regulation No. 31 of 2023 as a response to practices considered harmful to micro, small, and medium enterprises. It states that the regulation became effective on September 26, 2023 (Ministry of Trade of the Republic of Indonesia [MTRI], 2023). The explanation frames regulatory action through the language of a fair and healthy digital trading ecosystem. This is a policy justification, not direct evidence that all affected constituencies shared the Ministry's diagnosis.

The intervention is analytically significant because it concerns the regulation of commercial organization, not a general prohibition of TikTok's expressive functions. Its relevance lies in the state's attempt to establish conditions for participation in a platform-mediated market. Even so, the legal and operational effects of that intervention must be assessed through implementation evidence rather than inferred from the Ministry's vocabulary of fairness.

GoTo's December 11, 2023 announcement states that Tokopedia and TikTok Shop Indonesia would combine under PT Tokopedia, with TikTok taking a controlling stake. It also announces an investment commitment exceeding US$1.5 billion over time (GoTo, 2023). This is evidence of announced corporate restructuring and a prospective financial commitment. It is not proof that the full amount was disbursed, nor that its benefits reached the businesses the regulation was intended to protect.

The controlling-stake provision is theoretically consequential. A locally constituted commercial entity does not necessarily imply locally dispersed ownership or reduced foreign corporate influence. Regulatory restructuring can coexist with substantial continuity in corporate control. This complicates a simple narrative in which national intervention eliminates external platform power. It also shows why jurisdictional compliance, ownership, and public accountability require separate analysis.

An April 6, 2024 media report hosted by the Ministry quotes an official as stating that integration had been completed and that Shop Tokopedia managed payments, user data, and merchants. The official also indicated continuing monitoring (MTRI, 2024). Because the item reproduces media reporting rather than presenting a regulation or direct administrative decision, it is classified separately in the evidence register. It records an attributed implementation assessment; it is not an independent technical verification of all system functions.

The report contains an apparent internal chronology problem in a quoted company statement, referring to March 2023 while describing a 2024 integration process. That date is not used to establish completion timing. The analysis relies instead on the dated publication and the clearly attributed official account, rather than silently correcting the text. This treatment illustrates why institutional hosting does not remove the need for source criticism.

The evidence supports regulatory action and corporate response. It does not establish complete autonomy over algorithms, market relationships, or data processing. Nor does an objective of protecting small enterprises demonstrate that traders, online sellers, creators, consumers, and workers influenced the final arrangement. Stakeholder submissions and a traceable institutional response would be required to support that stronger conclusion.

Cross-Case Interpretation

The cases reveal different sites of negotiation. Kenya's documents concern the organization of ongoing technical services and the expansion of access. Indonesia's documents concern permissible commercial arrangements and a corporate restructuring response. Both show institutional activity. Neither, however, provides a complete account of affected publics' influence.

For this reason, the comparison does not classify Kenya as dependent and Indonesia as autonomous. It distinguishes the decisions for which evidence is available. Kenyan tender provisions indicate formal contestability among qualified suppliers; Indonesian documents indicate institutional pressure and announced corporate adjustment. Whether either process redistributed communicative power to affected publics remains unresolved.

These findings connect information flows to concrete interaction mechanisms. School connectivity combines network access, equipment, and institutional cooperation. Social-commerce restructuring connects visibility, transactions, corporate organization, and regulatory conditions. The documents do not measure cross-border traffic or establish that supplier nationality determines routing. Geopolitical interpretation therefore remains bounded by these institutional observations.

Table 4:- Documentary Evidence and Bounded Interpretations

Source / locator	Representative evidence	Supported interpretation / limit
K1, p. 4	"Tendering is open to all eligible, qualified and interested Tenderers."	Formal supplier access; not proof of effective competition or award outcome.
K1, p. 9, eligibility provisions	Goods and processes declared harmful by competent authorities are excluded. [Paraphrase]	Environmental condition in procurement; not measured compliance.
K2, preface	"The development of the plan was highly consultative" and involved public and private stakeholders.	Institutional consultation claim; influence and representation unverified.

K3, technical-role paragraphs	Huawei describes assessments, design, equipment provision, and project management. [Paraphrase]	Attributed division of work; not independent service or educational outcome evidence.
I1, opening paragraphs	Fairness and MSME protection justify the regulation, effective September 26, 2023. [Paraphrase]	Stated rationale and chronology; not stakeholder agreement.
I2, agreement paragraph	"TikTok will take a controlling stake."	Announced ownership relationship; local entity does not establish dispersed local control.
I3, official quotations	Integration completed; Ministry monitoring to continue. [Paraphrase]	Attributed implementation assessment; not independently audited operation.

Note. Quotation marks identify short verbatim English excerpts. Other entries are paraphrases. Indonesian material is paraphrased in English. Document identifiers correspond to Table 1; source citations appear in the text and reference list.

Environmental Sustainability and Material Inequality

Operational Energy and Equipment Lifecycles

The environmental dimension concerns how communication systems are powered, maintained, repaired, and retired. It is not simply an analogy for institutional balance. The International Energy Agency estimates that global data centres consumed approximately 415 terawatt-hours of electricity in 2024, or around 1.5% of global electricity consumption (IEA, 2025). This figure covers data centres generally. It does not measure either case, a particular platform, or Chinese overseas operations.

The Global E-waste Monitor findings summarized by the ITU identify 62 million tonnes of electronic waste generated worldwide in 2022, of which 22.3% was documented as formally collected and recycled. These figures concern electrical and electronic equipment broadly. They establish the scale of material-governance questions, not the footprint of communication devices alone. They cannot be allocated to the Kenyan projects or to TikTok Shop without additional methods and data.

Kenyan Sustainability Commitments

Kenya's ICT strategic plan includes sustainable digital transformation, environmental considerations, and attention to ICT-waste management (ICT Authority, 2024). Its terminology links digital access with durable institutional and technical capabilities, rather than treating sustainability solely as a matter of energy efficiency. The NOFBI tender likewise includes environmental eligibility requirements for goods and production processes (ICT Authority, 2022, p. 9). Environmental responsibility is therefore present in formal institutional documentation.

The important distinction, however, is between recognizing an obligation and demonstrating performance. Neither document provides a project-level energy inventory, lifecycle assessment, or independently verified disposal outcome for the selected infrastructure arrangement. Evidence of repairability, refurbishment arrangements, and supplier take-back obligations would strengthen evaluation. Their absence from the reviewed evidence does not establish their absence from every relevant contract.

Huawei's description of using existing electricity poles for school connectivity identifies a specific design choice (Huawei, n.d.). Reusing supporting structures could reduce construction requirements, but the document does not quantify avoided materials, emissions, costs, or ecological disturbance. The analysis therefore records the choice without converting it into an unsupported environmental saving. Infrastructure sustainability requires measurement as well as narrative.

Indonesia's Electronic-Waste Policy Context

The ITU's Indonesia country profile reports 1,886 million kilograms of electronic waste generated in 2022 and describes the development of an extended producer responsibility approach. The same profile discusses a circular-economy roadmap covering 2025–2045 and identifies the initial phase as concerned with regulation, monitoring, and institutional foundations. These are national contextual observations, not evidence of waste caused by a particular platform.

The page also contains an apparent reversal in its summary labels for total waste and per-capita waste. The analysis uses the explicitly stated national total in the narrative and does not reproduce the inconsistent summary labels. This source-level discrepancy reinforces the need to distinguish a usable contextual estimate from a complete national accounting system.

Extended producer responsibility asks how obligations for post-consumer equipment are distributed among producers and other actors. That question is related to platform governance through the material conditions enabling digital participation, but it is not part of the same regulatory intervention. National electronic-waste policy cannot be treated as an environmental component of the TikTok agreement without evidence connecting the two.

Environmental Justice and Participation

A Habermasian assessment asks whether affected groups can inspect and contest decisions about environmental costs. Relevant evidence would include accessible environmental assessments, consultation records, responses to objections, and enforceable obligations. A technically efficient project can remain poorly accountable. A participatory process can also produce weak environmental outcomes. Neither dimension substitutes for the other.

The material implication for Global South communication is therefore both distributive and procedural. Who pays for maintenance, obsolete devices, collection, and safe treatment? Who possesses information about energy and waste obligations? Who can challenge their allocation? These questions connect communication capabilities to material justice without attributing environmental harm to a supplier's nationality.

The evidence establishes recognition and policy development, not project-level performance. Environmental accountability remains an empirical research requirement rather than a demonstrated failure of all safeguards. Table 5 preserves the distinction between global estimates, national context, and corporate commitments.

Table 5:- Contextual Numerical Information: Units and Limits

Indicator	Reported value / period	Source and interpretation
Global data-center electricity	Approximately 415 TWh; about 1.5% of global electricity, 2024	IEA (2025). All data-center workloads; not Kenyan, Indonesian, or platform-specific consumption.
Global e-waste generated	62 million tonnes, 2022	ITU (2024). Electrical and electronic equipment broadly; not communications equipment alone.
Documented formal collection and recycling	22.3% of global e-waste, 2022	ITU (2024). Reported global share; not a local recycling rate.
Indonesia e-waste generated	1,886 million kilograms = 1.886 million tonnes, 2022	ITU (n.d.), narrative Country Status. Unit conversion divides million kilograms by 1,000; inconsistent summary labels are not used.
TikTok investment commitment	More than US$1.5 billion over time; announced Dec. 11, 2023	GoTo (2023). Prospective commitment, not verified disbursement or measured local benefit.

Note. Values are attributed estimates or announced commitments, not measurements generated by this study. Quantities have different spatial scopes and must not be summed or attributed to either case.

DISCUSSION

Cross-Dimensional Mechanisms

The ecological–Habermasian framework contributes by tracing how technical arrangements, institutional conditions, social participation, and material responsibilities relate to one another. Its novelty is not the observation that communication and power are connected; political economy and platformization scholarship have already established that point. The contribution lies elsewhere: in specifying when evidence about one dimension can, and cannot, support a conclusion about another.

Kenya illustrates the difference between formal supplier access and effective substitutability. The tender's openness matters, but establishing practical competition would require evidence of the award decision, bidder capability, contract terms, and technical alternatives. Indonesia illustrates a related distinction between regulatory restructuring and redistributed ownership. A compliance response may alter the legal form of a platform operation while leaving a controlling foreign corporate stake intact. These mechanisms offer more precision than treating every external relationship as dependency or every intervention as autonomy.

The framework also disciplines ecological metaphor. A network's continuity is not, by itself, evidence of justice. A platform's restructuring is not, by itself, evidence of public influence. A communication environment should be evaluated through its contestability and the accountability of its responsibilities, not through an assumed equilibrium. Ecological integration strengthens explanation only when the relationships among dimensions are traced in evidence, rather than merely represented in a diagram.

Separating Regulatory Authority From Communicative Power

A second contribution is the separation of institutional authority from affected publics' influence. Public-benefit language, accessible procedures, and demonstrated effects occupy different evidentiary levels. Kenya's strategic plan acknowledges stakeholders, but it does not show which contributions altered decisions. Indonesia's stated protection of small enterprises provides a justification for regulation, but not proof that every relevant constituency participated in shaping the final arrangement.

This distinction makes the Global South analytically plural. National authority may create opportunities for domestic scrutiny, but it cannot automatically represent the interests of all social groups. Communication inequalities can arise within a country's negotiation with external firms as well as between countries. The relevant question is therefore not only who negotiates with technology providers, but who can define a problem, contest its framing, and influence its institutional resolution.

Fraser's (1990) account of subaltern counterpublics clarifies why disagreement should not be read as ecological dysfunction. Marginalized groups may require separate arenas in which to challenge dominant definitions of security, development, or commercial fairness. Communicative health is not measured by the absence of conflict. It concerns whether disagreement receives a consequential response from institutions with the authority to act.

Habermasian Boundaries

The findings do not support a binary opposition between communicative rationality and all administrative action. Procurement standards, enforcement measures, and commercial commitments can support social coordination. The concern is whether their operation forecloses meaningful opportunities for public challenge. Demonstrating lifeworld colonization requires evidence that economic or administrative mechanisms have displaced relevant forms of communicative coordination, not simply a count of references to security, efficiency, or profit.

Conformity with a national rule is likewise not equivalent to democratic legitimacy. A state can require organizational change without creating an inclusive process. A company can announce local benefits without demonstrating equitable outcomes. The normative contribution of this study is therefore an evidentiary distinction among promises, participation, and influence—not a score that assigns legitimacy to particular countries or firms.

Material Accountability

The environmental dimension adds another relationship: participation in digital communication depends on equipment and services whose material obligations are unevenly allocated. Global energy and waste estimates establish scale; national documents identify policy responsibilities. Neither establishes the footprint of the specific cases examined here. This scalar distinction prevents contextual evidence from becoming unsupported causal attribution.

The framework integrates environmental questions without reducing them to deliberation. Energy use and waste treatment require technical assessment. Accountability requires accessible information, clear allocation of responsibility, and opportunities for review. Both tasks are necessary. Their relationship generates a research agenda: do infrastructure contracts and platform arrangements translate sustainability objectives into measurable, enforceable, and contestable obligations?

Propositions and Practical Implications

Four propositions follow from the analysis:

1. Expanded communication capacity can coexist with weakly documented public influence.

2. Regulatory intervention can alter commercial organization without dissolving corporate concentration.

3. Supplier dependency is best investigated through substitution conditions—technical, contractual, financial, and institutional—rather than inferred from supplier nationality.

4. Sustainability becomes accountable when responsibilities, performance, and opportunities for challenge can be connected.

These are not causal laws. They identify questions for broader comparison and for more detailed within-case investigation. Practical implications include publication of procurement awards, interoperability requirements, responses to stakeholder submissions, and lifecycle obligations for equipment and services. Their purpose is to make governing conditions inspectable, not to prescribe supplier exclusion or a single geopolitical alignment.

The comparison also cautions against equating multipolarity with equality. Additional partners may widen the range of available options, but options must be assessed through their terms, accessibility, and consequences. A more plural distribution of powerful firms does not necessarily improve opportunities for less powerful publics. Communication justice concerns the capacity to contest the conditions of participation, not simply the number of competing centres of power.

Limitations and Future Research

The evidence set is small, purposive, and institutionally concentrated. It supports interpretation of selected claims and procedures, not representative estimates of discourse or lived experience. Corporate sources describe announced activities, while government sources may foreground policy intentions and compliance. The hosted media report is treated as an attributed account rather than a direct administrative record. Independent evaluation remains necessary for outcome claims.

Case comparability is also limited. Kenya’s maintenance procurement and Indonesia’s platform restructuring involve different institutions, sectors, time horizons, and documentary purposes. They cannot be treated as equivalent measures of national autonomy. The analysis does not establish that project type explains observed

differences independently of political economy or legal context. Nor do the document dates justify assuming that conditions remained unchanged through November 2026.

Future research should prioritize evidence that can test the study's bounded interpretations. This includes maintenance awards and executed contracts, technical assessments of substitution, consultation submissions, administrative responses, and implementation evaluations. Interviews with teachers, traders, creators, and communities could clarify how affected groups understand their opportunities, though such evidence should complement rather than replace documentary verification. Multilingual research would also broaden access to claims that are less visible in English-language sources.

Environmental assessment would benefit from measured project energy use, equipment inventories, repair and replacement records, and waste-treatment outcomes. Network analysis could examine information routes, while process tracing could investigate whether stakeholder claims altered decisions. A larger comparative design could assess the propositions across different institutional contexts without treating the Global South as a homogeneous category.

CONCLUSION

Communication inequality emerges through relationships among technical capacity, governing authority, public influence, and material responsibility. The Kenyan documents establish formal maintenance procedures and partnership-based connectivity, but they do not demonstrate an exclusive maintenance monopoly or independently verified social outcomes. The Indonesian documents establish regulation and corporate restructuring, but they do not show complete autonomy over platform systems or demonstrable public co-authorship of decisions.

Environmental assessments and policies make clear that digital participation is materially situated. They support analysis of energy use, equipment lifecycles, and responsibility, while leaving project-specific impacts unresolved. This distinction between documented commitments and demonstrated outcomes is not a peripheral limitation. It is central to the ecological approach developed here.

The ecological–Habermasian framework offers an integrative account by specifying mechanisms, evidentiary thresholds, and differences among forms of empowerment. It treats Global South institutions and publics as differentiated actors negotiating unequal arrangements, rather than as passive recipients or unified sovereign voices. A more equitable communication order depends not only on expanding services or diversifying partners. It also requires making the conditions of communication accountable, contestable, and materially sustainable.

Data Availability

The institutional evidence set is identified in Table 1 and the reference list. The analysis uses publicly accessible documents and does not include participant-level data. No quantitative coding dataset is reported.

Ethical Considerations

The author declares that there are no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

REFERENCES

1. Castells, M. (2009). Communication power. Oxford University Press.
2. Couldry, N., & Mejias, U. A. (2019a). The costs of connection: How data is colonizing human life and appropriating it for capitalism. Stanford University Press.
3. Couldry, N., & Mejias, U. A. (2019b). Data colonialism: Rethinking big data's relation to the contemporary subject. Television & New Media, 20(4), 336–349. https://doi.org/10.1177/1527476418796632

4. Fraser, N. (1990). Rethinking the public sphere: A contribution to the critique of actually existing democracy. Social Text, (25/26), 56–80.
5. GoTo. (2023, December 11). GoTo and TikTok enter strategic e-commerce partnership to support Indonesian MSMEs [Press release]. https://www.gotocompany.com/en/news/press/goto-and-tiktok-enter-strategic-e-commerce-partnership-to-support-indonesian-msmes
6. Habermas, J. (1984). The theory of communicative action: Vol. 1. Reason and the rationalization of society (T. McCarthy, Trans.). Beacon Press. (Original work published 1981)
7. Habermas, J. (1987). The theory of communicative action: Vol. 2. Lifeworld and system: A critique of functionalist reason (T. McCarthy, Trans.). Beacon Press. (Original work published 1981)
8. Habermas, J. (1996). Between facts and norms: Contributions to a discourse theory of law and democracy (W. Rehg, Trans.). MIT Press.
9. Hepp, A. (2020). Deep mediatization. Routledge.
10. Huawei. (n.d.). DigiSchool Kenya: Transforming education with connectivity. Retrieved November 1, 2026, from https://www.huawei.com/en/tech4all/stories/digischool-kenya-transforming-education-connectivity
11. ICT Authority. (2022, May 31). Provision of maintenance service for the National Optic Fiber Backbone Infrastructure (NOFBI 2) [Tender document, ICTA/OT/28/2021–2022]. https://cms.icta.go.ke/sites/default/files/2022-06/ICTA.OT_.28.2021-2022%20Tender%20For%20%20Provision%20of%20Maintenance%20Services%20For%20NOFBI%202_0.pdf
12. ICT Authority. (2024). ICT Authority strategic plan 2024–2027: A digitally empowered society. https://cms.icta.go.ke/sites/default/files/2024-09/SP_2024_-2027_0912.pdf
13. International Energy Agency. (2025). Energy and AI. https://www.iea.org/reports/energy-and-ai
14. International Telecommunication Union. (n.d.). Indonesia [Electronic-waste country profile]. Retrieved November 1, 2026, from https://www.itu.int/en/ITU-D/Environment/Pages/Priority-Areas/E-waste/Country%20Pages/Indonesia.aspx
15. International Telecommunication Union. (2024, March 20). A record 62 million tonnes (Mt) of e-waste was produced in 2022 [Press release]. https://www.itu.int/en/mediacentre/Pages/PR-2024-03-20-e-waste-recycling.aspx
16. Kraidy, M. M. (2005). Hybridity, or the cultural logic of globalization. Temple University Press.
17. Ministry of Trade of the Republic of Indonesia. (2023, September 27). Terbitkan Permendag Nomor 31 Tahun 2023, Mendag Zulkifli Hasan: Pemerintah bangun ekosistem perdagangan digital adil dan sehat [Issuing Regulation No. 31 of 2023: Government builds a fair and healthy digital trade ecosystem] [Press release]. https://www.kemendag.go.id/berita/siaran-pers/terbitkan-permendag-nomor-31-tahun-2023-mendag-zulkifli-hasan-pemerintah-bangun-ekosistem-perdagangan-digital-adil-dan-sehat
18. Ministry of Trade of the Republic of Indonesia. (2024, April 6). Merger TikTok Shop dan Tokopedia tuntas, ini kata Kemendag [TikTok Shop–Tokopedia integration completed: Ministry of Trade comments] [Reproduced media report]. https://www.kemendag.go.id/index.php/berita/pojok-media/merger-tiktok-shop-dan-tokopedia-tuntas-ini-kata-kemendag
19. Nieborg, D. B., & Poell, T. (2018). The platformization of cultural production: Theorizing the contingent cultural commodity. New Media & Society, 20(11), 4275–4292. https://doi.org/10.1177/1461444818769694
20. Schiller, D. (1999). Digital capitalism: Networking the global market system. MIT Press.
21. van Dijck, J., Poell, T., & de Waal, M. (2018). The platform society: Public values in a connective world. Oxford University Press.