

Global Voices, Local Impact: Redefining Development Communication in The Age of Algorithmic Media and Diaspora Influence

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ABSTRACT

A mix of algorithmic media and effects from worldwide diasporas is deeply transforming development communication. Through rising digital connectivity, groups from the global South who are settled in other countries have important roles in transforming transnational narratives, countering dominant information sources and making sure the voices of minorities are heard through digital channels. The discussion focuses on the role of diasporic groups from Africa, Asia and Latin America as creators of alternative ideas within algorithmically controlled public spaces. This work studies how various actors use social media and peer-to-peer tools, supported by postcolonial theory, participatory communication approaches and critical algorithm studies, to tell civic stories, unite people and introduce challenges to how normal development is carried out.

Comparative case studies are used in this study to analyze selected digital campaigns and advocacy, both of which use non-centralized learning and avoid algorithms. Looking at the research, it seems that platform rules tend to favor dominant belief systems, but diasporic involvement backed by inclusive and participatory media can reorganize the way things are seen and affect others. The interventions fall under new forms of digital civic diplomacy, showing how diasporas can link issues locally with those globally.

The author advocates for development communication to include algorithmic justice, data sovereignty and intercultural literacy as major frameworks. The research suggests that future government policies recognize how digitally connected diasporas can build fair and inclusive future media. Taking this approach leads not only to greater justice in research but also strengthens the framework used for development communication as we enter the algorithmic age.

Keywords: Global Voices, Local Impact, communication.

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INTRODUCTION

Over the last decades, the field of development communication has seen significant change. Previously, health communication was built on an idea where information mostly moved from the North to the South, intending to support development through sharing knowledge and increasing awareness. Starting from a modernization perspective, the early models included top-down approaches, so information was delivered by institutions and authorities to inactive people in the global South (Risam, 2018). Even so, new technologies, international events and societal trends have combined to make it difficult for traditional communication models to continue working effectively. The changes involve algorithmic media becoming more common and digital diasporas playing a bigger role in how development stories are presented, passed along and understood.

In the mid-2020s, algorithmic media driven by artificial intelligence and machine learning hold a major position in development communication. They help organize the sharing of data on social media, search engines and digital content platforms, now serving as the gatekeepers for public discussion (Bucher, 2012). Algorithms are built to engage users more and help popular viewpoints to be seen more, usually reducing how often different or unfamiliar opinions get noticed (Caplan & Boyd, 2016). Rather than being impartial, these algorithms often reflect and keep alive the biases found in corporate and institutional thinking and fail to value detailed local narratives and minorities (Chonka, 2023). This means that powerful digital companies often direct what people hear and read across the world, often without caring for developing nations and small communities.

Also, diasporic communities are now playing a much bigger role in international debates on development. Because

of global connectivity and technology, members of diasporas can now participate in the political, cultural and economic issues of both their current and ancestral homes (Godin & Doná, 2016). Through doing citizen journalism, using social media and telling their stories together, members of digital diasporas now fight for different ways to report on their homelands, emphasizing how great they are. In effect, they control the flow of communication between people inside and outside their communities and occupy unique roles in international discussions (Ekwo, 2011).

Nevertheless, having algorithmic systems meet diaspora situation creates both benefits and obstacles. Even though digital platforms are meant to make everyone's opinions count, they may also lead to algorithmic discrimination, divide the public and turn the voices of because they are marginalized into profit-making opportunities. So, development communication must change to handle the challenges and chances that new media provide and especially to enrich local initiatives and engage communities from the global South (Ponzanesi, 2020).

This paper looks closely at the way algorithmic media and online diasporic communities influence development communication. The argument is that this convergence is changing power structures, ways of knowledge and the means by which development is discussed worldwide. Since the local and global blend more than ever, it is crucial that development communication today be participatory, inclusive and thoughtful about who we are in the modern worldwide community.

Historical Background of Development Communication

The field of development communication which seeks to achieve changes in society through effective communication, has advanced both in its theoretical ideas and practice. In the early years, development focused on a sequence of here to there steps, but today techniques follow people's ideas and use technology. This chapter follows the development communication field and traces it throughout four important stages: modernization, postcolonial criticism, globalization paired with technology and the rise of algorithms.

Early Views of Modernization and Leadership from Above

It was in the mid-20th century, during the decolonization and Cold War-era when development assistance began, that development communication appeared. According to modernization theory, early models pictured growth as a smooth journey from the traditional to the modern, based on the ideas of Western industrialization, democracy and individualism. Media was thought to be important in spreading the need for productivity, education and taking part in society.

In 1964, Wilbur Schramm argued that media could link developments from expert organizations with the less-

developed sections of society. Using this model, people in charge of development projects in the Global North were responsible for creating knowledge that was then passed to communities in the South.

Though it shaped policy and institutional policies, the model was often criticized for having ethnocentric and paternalistic ideas. It usually avoided the local cultural reality and became a tool for soft power, helping to maintain uneven global arrangements (Couldry et al., 2018).

Participatory Communication and Postcolonial Reorientations

In the 1970s, people started asking more questions about modernization theory because post-colonial writings revealed its colonial past. Such authors as Frantz Fanon and Edward Said made it clear that the conversation about development often follows the colonial mindset, where the West is always the "civilizer" and the South is seen as always separate. These ideas led experts to change their methods and promote involvement by local groups.

According to participatory communication, emphasizing local agency, dialogue and horizontal information was key. The country's education system was modernized in part by Freire's *Pedagogy of the Oppressed* (1970) which encouraged communities to take part in their own development. They did not just accept what the society offered but helped to create it.

As a result, indigenous and local communities across the South began their own radio, mail news and online campaigns, showing their own traditions and ways of life (Gajjala, 2019). As a result, the approach switched from communicating about development to actually developing communities.

Globalization, Technological Expansion, and Diaspora Engagement

The 1990s saw stronger globalization thanks to the more widespread use of neoliberal economic rules and information and communication technologies (ICTs). With satellite TV, the internet and mobile phones, people could now access information more and discuss development in places apart from the main centers.

At this time, people could be more involved, yet not everyone could use these technologies due to inequality. With Western companies running the main platforms, the way content spread worried people about epistemic injustice and dependence on technology (Ponzanesi, 2020).

At the same time, groups of displaced people began influencing development communication across borders. Because of digital connectivity, they were able to know about distant problems, help at home and introduce new traditions. Using Facebook, WhatsApp and YouTube, people were able to advocate and transfer their ideas globally, breaking the long-standing North-South division (Retis & Tsagarousianou, 2019).

Algorithmic Media and the Decentralization of Development Narratives

Today, algorithms have greatly changed how development stories are made, transmitted and used by the public. Using user data, Twitter, TikTok and Instagram change which messages appear for different users which can greatly influence how society talks.

Because of this, Couldry and Mejias (2019) describe it as “data colonialism,” in which user content from the Global South supports corporations and politicians in the West. As a consequence, the strengths claimed for participatory media are reduced when machines favor viral trends and silence those with less influence (Bolsover & Howard, 2019).

Even so, using algorithms in media has allowed for different ways to resist. #BlackLivesMatter and #EndSARS demonstrate that digital means can boost efforts by people, create worldwide unity and help spread other opinions than those promoted by major news outlets (Kianpour et al., 2024). On the internet, diasporic influencers and activists now attempt to reverse standard images of poverty, migration and conflict using trends, real-time videos and independent journalism (Tran, 2017; Godin & Doná, 2016).

Therefore, development communication must be rebuilt and reformed after its original establishment. We need a model now that responds to algorithms and diasporic communities by putting local communities in charge while closely examining the structures behind digital communication.

In sum, the historical evolution of development communication illustrates a dynamic interplay between theoretical paradigms, technological change, and geopolitical context. From its early roots in modernization theory to participatory and algorithmic approaches, the field has moved toward increasingly decentralized, multivocal practices. As digital diasporas and algorithmic logics continue to influence communicative power, future

trajectories of development communication must prioritize equity, epistemic justice, and critical engagement with the infrastructures that shape global dialogue (Treré, 2018).

Algorithmic Media and Development Narratives

How development stories are written, shared and debated has been greatly altered by changes to communication infrastructure in the last twenty years. In 2025, Facebook, X (formerly Twitter), Instagram, YouTube and TikTok help determine how people discuss development in public platforms. Platforms like these depend on intelligent designs to determine which content is visible, leading to the particular way that development issues are discussed and who is recognized in public debates (Bucher, 2012; Caplan & Boyd, 2016).

Understanding Algorithmic Media and Its Power Structures

They do more than just send information; algorithmic media carry embedded political and economic principles in their structure. Developed to improve interaction and profits such systems prefer content that triggers emotion or surprise over thoughtful, considered talks on topics which leads to a warped version of development communication (Bolsover & Howard, 2019). As a result, algorithmic infrastructures have replaced development agencies, media organizations and state broadcasters in guiding what information is available to the public.

Tufekci (2015) describes algorithmic systems as “discreet boxes” that use algorithms, interested in making money, to decide rankings, instead of human judgement. Its result is often the exclusion of other perspectives, making way for only those narratives that support the business or influence agendas of the biggest players in digital markets (Chonka, 2023). In turn such platforms restrict or encourage our roles

Comparative Table 1: Contrasting Development Paradigms in Development Communication

<i>Dimension</i>	<i>Modernization Paradigm</i>	<i>Participatory Paradigm</i>	<i>Algorithmic Paradigm</i>
Agent of Change	External experts (often Western institutions)	Local communities and grassroots actors	Algorithms, platforms, and transnational data systems
Directionality	Top-down communication	Horizontal, dialogic communication	Platform-driven, opaque and data-centric
Technology Role	Mass media (radio, print, television)	Community media, ICTs for development	AI, algorithms, digital platforms (e.g., Facebook, Twitter, YouTube)
Power Structure	Centralized control, Western hegemony	Decentralized, empowering local voices	Algorithmic governance, surveillance capitalism, digital colonialism
Knowledge Production	Western-centric, universalist	Contextual, rooted in local knowledge	Curated by data patterns, platform logics, and digital infrastructures
Audience Role	Passive recipients	Active participants, co-creators	Datafied users; visibility dependent on platform dynamics
Ethical Concerns	Cultural imperialism, ethnocentrism	Inclusivity, empowerment	Bias in algorithms, marginalization, lack of transparency



Table 1: Key Characteristics of Algorithmic Media vs. Traditional Development Communication Channels (2025)

Criteria	Algorithmic Media	Traditional Development Media
Content Curation	Algorithm-driven (based on user behavior and engagement)	Editorially curated (guided by experts and policy goals)
Audience Targeting	Micro-targeting through personalized data algorithms	General demographic or national-level targeting
Visibility Logic	Determined by popularity, virality, and engagement metrics	Prioritized by institutional agendas and development relevance
Voice Representation	Influencers, diasporas, grassroots digital activists	NGOs, government actors, multilateral institutions
Accountability Mechanisms	Platform governance, commercial policies, user reports	Professional ethics, journalism standards, institutional checks
Speed of Dissemination	Instant, borderless, and user-amplified	Slower, mediated through bureaucratic and editorial processes

in online discussions which changes the existing order in the world's news flow.

Algorithmic Bias and the Politics of (In)Visibility

Systems powered by algorithms are built with biases that result in many cases of injustice for those living in the Global South. Things that are not attractive to a platform are commonly removed from view by the algorithms in use (Bucher, 2012). Consequently, it turns into a lack of representation in which attention is a resource few can secure (Gajjala, 2019).

A person who posts from London about problems in Sudan may build a large audience, whereas a person covering the events as a local journalist in the language used by the communities may reach fewer users (Sobré-Denton, 2016; Ponzanese, 2020). In this way, Graham, Hjorth and Lehdonvirta (2017) point out that being connected alone is not enough to become part of an online community.

Because of this, NGOs are encouraged to make their messages short, appealing and follow the engagement standards set by different platforms. The process reduces the scope and understanding found in development stories which only work well with thoughtful and relevant storytelling (Risam, 2018). Consequently, the way algorithms are designed can damage the credibility of information in development communication..

Development Narratives in the Age of Algorithms

This new media age makes algorithmic platforms major settings for discussing and debating development stories. Ways of handling topics like digital inclusion, early pandemic recovery, gender inequality and climate justice now depend on content produced by active online users (Tréré, 2018). It has a strong impact on how global development discussions are carried out and what results from them.

Consider, for instance, what is happening in India's gig economy. Many of the common digital stories focus on how anyone can start their own business and be independent.

But there are less public alternatives that talk about unfair work, digital systems that drive down pay and unstable jobs (Graham et al., 2017). Preventing variety in the project's image allows urban planning to reflect neoliberal views without revealing ongoing social inequalities.

In several African and South Asian regions, leading digital influencers and expats help shape the way the public understands development. Still, much of what they share is used as a tool for selling image, often selectively highlighting given experiences while hiding others (Adhikary et al., 2018). Because of this, we should consider who uses algorithmic platforms, as well as the ideology behind supposed empowering messages.

Case Snapshot: Algorithmic Interference in Nigeria's Development Communication

A 2024 investigative study by The Civic Tech Lab Nigeria revealed significant algorithmic interference in public discourse during the lead-up to national elections. Algorithms on Facebook and YouTube were strategically manipulated to prioritize misleading narratives about international aid programs and governmental achievements while suppressing critical fact-checking content produced by independent media outlets (Kperogi, 2020). This not only distorted public understanding but also weakened the deliberative foundations of civic engagement.

Such cases illustrate the paradox of algorithmic media in development communication: while these platforms enable decentralized storytelling and broaden access to global audiences, they also entrench structural inequities by privileging visibility based on virality rather than veracity. Addressing this paradox requires more than technical reform; it necessitates a normative rethinking of algorithmic governance grounded in communicative justice principles. Without critical engagement with the algorithmic logics that determine who speaks and who is heard, development communication risks becoming a site of digital colonialism masked as participatory inclusion.

Digital Diasporas as Transnational Communicators

With more people linked around the globe by technology, groups living outside their homelands have become important players in cross-cultural and cross-national communication. Using digital technologies is what digital diaspora means for migrant groups, allowing them to maintain contact across countries, combine cultures and discuss sociopolitical topics of interest to their homelands (Alonso & Oiarzabal, 2010; Retis & Tsagarousianou, 2019). They no longer remain marginal parts of global communication systems; instead, they spread challenges to the standard development ideas.

Diaspora Media as a Developmental Actor

Thanks to the rise of diaspora media on platforms managed by the community, journalism, activism and civic education are now inseparable from diasporic work on development. This change is shown by Sahara Reporters, set up by journalist Omoyele Sowore while he was living abroad. On these platforms, Nigerians can access news and information, bypassing censorship and the political critique shared shapes the way people vote in elections.

According to Ekwo (2011), diaspora media helps people in diasporas take part in democratic affairs by making use of advanced technology. They started out distributing news and have gone on to mobilize people for political issues, fundraise, back campaigns aimed at change and shape how society discusses governance. It shows that these individuals affect domestic discussions about development even without being part of official international bodies.

Affective Politics and Diasporic Expression

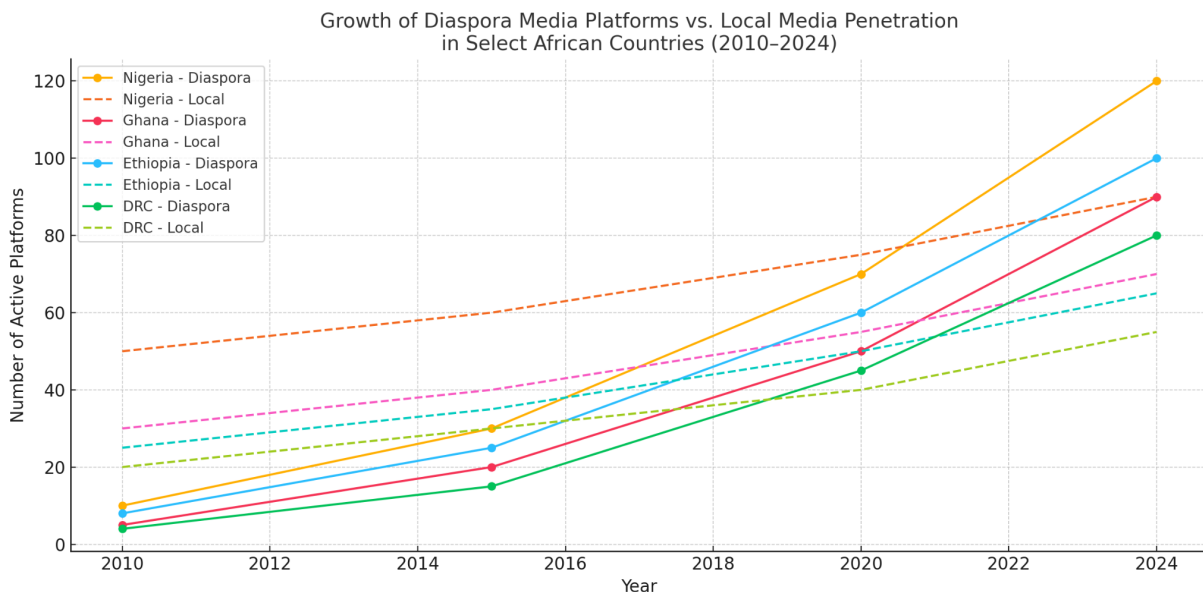
Other than factual information, these groups form what Ponzanese says are affective economies, showing that memories, emotions and trauma encourage their politics. With stories about displacement, nostalgia and belonging, these networks help unite people and build their group identity online. These emotional expressions are essential in development communication as they make big issues easier to understand.

Godin and Doná investigate how Congolese youth in other countries use social media to both fight against common stereotypes about Africa and regain control over their own stories. Using clips, memes and online talks, these actors try to create a different kind of modern life based on strength and fairness. Using these ways of feeling, diasporic communities can shape criticisms of culture and help bring about change.

Counter-Narratives to Mainstream Development Discourse

Historically, most media and sponsor-backed organizations in development communication have viewed the Global South through a lens of crisis or helplessness (Risam, 2018). Yet, digital diaspora media relays stories from the community that highlight its own actions, creative solutions and opinions about aid from others. Development is guided more effectively when such narratives are included in discussions.

In her research on Vietnam diaspora in Canada, Tran (2017) shows that diasporic actors mix ideas about global justice with their ideas of what is good and progress-driven locally. They reflect the part of diasporas in bridging home



Graph 1: shows the growth of diaspora media platforms versus local media penetration in Nigeria, Ghana, Ethiopia, and the DRC from 2010 to 2024.



and host cultures to create images of progress that question both assimilation and neocolonial influence.

Significantly, people use Twitter, TikTok and Instagram to share alternative messages. Contagious internet content, popular hashtags and computerized amplification help people from abroad get noticed and direct what others hear about them around the world, often outdoing the impact of official channels. The change in how information moves among people in diasporas reveals how digital involvement can be participatory and decentralized.

Diasporic Mediation in Humanitarian and Crisis Communication

When people are at risk from humanitarian disasters, natural events or systems of political repression, digital diasporas play key roles in informing the world and gathering assistance. Thanks to WhatsApp, Telegram and Signal, people can react to international events more quickly and in more places (Gajjala, 2019). They allow us to quickly sort out financial help, assistance in emergency situations and campaigns led by diaspora communities.

In his paper, Gaskins (2019) introduces techno-vernacular creativity to show how people from the Global South, through diasporas, share and use digital tools for their communities. They demonstrate how informal associations often take responsibility in past regions where state or global authorities may be absent. Humanitarian communication made stronger by diasporas supports both communities in any country.

All in all, digital diasporas are changing the boundaries of development communication by bringing closer people and ideas throughout the globe. By engaging affectively, using technology and resisting stories about development, these groups fight against traditional views and take charge of developmental discussion. Growing algorithmic networks mean that diasporas' role in sharing news and opinions with each other will expand, requiring processes that welcome all, encourage involvement and oppose colonialism in global development policy.

Intersection of Algorithmic Media and Diaspora Influence

Diaspora and algorithmic influence are growing in influence over the way development communication is shaped today. Digital globalization has allowed datafied platforms to mix with shared cultural traditions, so that basic differences between regional and worldwide resistance movements are now blurred. Now, with this new communication mix, development narratives are being written, spread and understood differently and diasporic actors play major roles as connectors. Using algorithmic tools to distribute knowledge, individuals in a diaspora help create and redistributed development discourses that question traditional power structures and help rebalance the flow of knowledge.

Networked Power and Digital Diplomacy

Diaspora communities long situated at the interstices of identity, cultural memory, and geopolitical negotiation have evolved into formidable agents of digital diplomacy through algorithmic platforms. Unlike traditional public diplomacy, which is typically state-centric and formalized, digital diaspora diplomacy is characterized by its decentralization, authenticity, and affective resonance (Manor, 2019; Falola, 2023). Through platforms such as Twitter, TikTok, and YouTube, diasporic actors engage in what Charles (2024) terms "vernacular diplomacy": the use of everyday digital practices to project soft power and shape global public opinion on domestic development issues.

One illustrative case is the #EndSARS movement, during which the Nigerian diaspora mobilized Twitter, Instagram, and Clubhouse to amplify narratives of police brutality and state repression. These interventions not only influenced foreign policy discourse but also generated material outcomes, such as international sanctions and increased humanitarian support (Kperogi, 2020). Unlike the state-run media apparatus, which often operated under censorship or bias, diasporic digital actors provided real-time, user-generated documentation that proved more compelling to global audiences.

This fluid exercise of networked power illustrates how diaspora communities, through algorithmic infrastructures, can act as digital diplomats engaging in transnational agenda-setting, mobilizing international solidarity, and influencing development outcomes beyond borders.

Cross-Platform Interactions During a Development Crisis

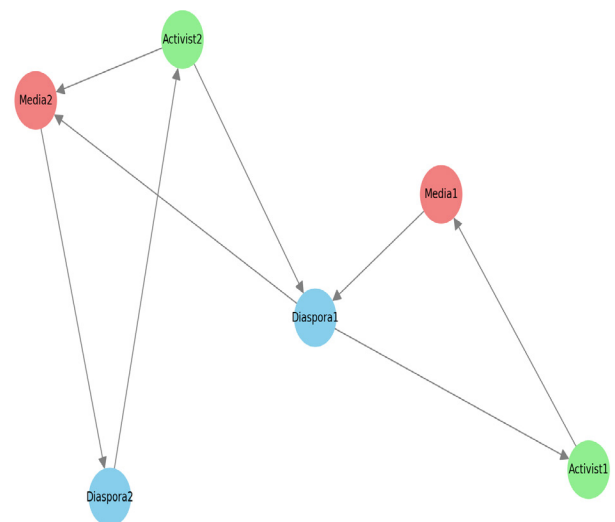


Figure 1: a network visualization graph showing cross-platform interactions between diaspora influencers, domestic activists, and international news media during a development-related crisis.

Reconfiguring Knowledge Production

People have rightly accused the algorithms behind platforms for promoting epistemic injustice by reinforcing echo chambers and biasing the voices of minorities (Bucher, 2012; Caplan & Boyd, 2016). Still, the same platforms have allowed diasporic people to reconsider how traditional systems of knowing are organized. Northern institutions and elite development agencies have long ruled over development communication, but now diasporic scholars, journalists and creators are changing it and taking on roles as distributed epistemic nodes (following Risam, 2018).

Now, publishers on Substack, Medium and YouTube can easily avoid the gatekeepers in academia and institutions. In his 2021 thesis, Tuzcu points out that postcolonial intellectuals rely on these media to defend their authority, developing ways to resist the traditional stereotypes from Europe. As a result, technical processes can spread these narratives more when they agree with global topics. In several cases, reports by diasporic activists working on climate issues in Bangladesh or India have made headlines globally whenever they echoed key conversations among international climate advocates (Godin & Doná, 2016).

The shift in understanding who or what provides truth now points to a new communication pattern in which diasporic groups add to knowledge that uses different voices, feelings and is based on online technology.

Amplifying Subaltern and Peripheral Voices

Apart from knowledge creation, diasporas are algorithmic amplifiers of subaltern voices. By way of participatory media practices and transnational storytelling, diaspora actors enable peripheral communities to bypass domestic censorship and global invisibility. Ponzanesi (2020) refers to these sorts of practices as “mediated solidarity” the utilization of digital platforms in the formation of transcontinental networks of care, resistance, and developmental co-design.

A more spectacular example is the Afro-Brazilian, West African, and Caribbean diasporas, which have organized on Instagram Lives, WhatsApp groups, and TikTok campaigns to fight environmental racism and promote indigenous rights to land. Such transnational alliances have enabled cultural exchange and actual coordination on localized development interventions, such as community-led water harvesting in semi-arid regions (Gaskins, 2019).

At the same time, diasporas are also at the forefront of digital rights activism, spearheading civic literacy movements on issues of algorithmic bias, digital surveillance, and disinformation. As Mihailidis (2018) and Treré (2018) observe, these are central to empowering marginalized communities for the digital competencies required for participatory development in an era of algorithms.

Thus, the intersection of diaspora power and algorithmic media opens up a rich terrain for reimagining development communication not just as a one-way process, but as a networked, participatory conversation between dispersed yet networked publics.

Risks of Algorithmic Distortion and Elitist Representation

Despite their emancipatory potential, algorithmic platforms also present structural risks that disproportionately affect marginalized diaspora members. Chief among these is the systemic privileging of elite diasporic voices typically those with Western institutional affiliations, digital fluency, or media capital (Tran, 2017; Kianpour et al., 2024). These actors often dominate algorithmically amplified discourse, thereby eclipsing grassroots perspectives and perpetuating intra-diasporic hierarchies.

Moreover, platform algorithms are engineered to prioritize virality, emotional intensity, and visual spectacle metrics that frequently dilute complex development issues into oversimplified, sensationalized content. Couldry et al. (2018) warn against the reduction of development discourse into “datafied storytelling,” wherein algorithmic logics commodify suffering and frame development through individualized, decontextualized narratives. Bolsover and Howard (2019) further argue that such content often aligns with Western humanitarian tropes, ultimately reinforcing neocolonial imaginaries.

These distortions underscore the urgent need for algorithmic accountability and digital equity. If left unchecked, the convergence of diaspora influence and algorithmic media may inadvertently replicate the same exclusions and asymmetries that traditional development paradigms sought to overcome.

CHALLENGES AND CRITIQUES

As the transformative potential of algorithmic media and diaspora influence in development communication gains traction, several critical challenges and tensions continue to undermine the inclusivity, equity, and long-term impact of these digital shifts. These critiques reveal structural asymmetries, ideological contradictions, and governance vacuums that must be addressed for a more ethically grounded and contextually relevant communicative ecosystem.

Digital Colonialism and Platform Capitalism

While digital platforms enable transnational engagement, they are embedded within structures of digital colonialism in which corporations based in the Global North dominate the technological infrastructure, data governance, and monetization strategies of user-generated content (Couldry & Mejias, 2018). This asymmetry reproduces a neocolonial logic of extraction and control, as local and diasporic actors are subject to opaque algorithmic governance systems that determine visibility, value, and participation.

This phenomenon, often conceptualized as platform capitalism, concentrates algorithmic power among a few multinational entities such as Meta, Alphabet, and X (formerly Twitter), thereby privatizing the digital public sphere. These corporations deploy monetization logics



that prioritize virality and profit over civic participation and developmental relevance (Caplan & Boyd, 2016; Siddiqui, 2023). Consequently, development communication is refracted through commercial imperatives, risking the instrumentalization of participatory discourse to serve neoliberal agendas under the guise of inclusion.

Algorithmic Invisibility and Epistemic Erasure

A major epistemological concern in the current digital order is the algorithmic invisibility of marginalized narratives. Algorithmic ranking systems typically reward engagement metrics aligned with mainstream, often Western-centric, cultural codes while sidelining content that deviates from prevailing geopolitical or commercial interests (Bucher, 2012; Chonka, 2023). In development contexts, this renders indigenous knowledge systems, hyper-local experiences, and alternative development paradigms algorithmically insignificant.

This marginalization amounts to epistemic erasure, where the knowledge produced by historically subaltern communities is rendered illegible or expendable in the digital economy (Risam, 2018). Compounding this is the politicized nature of content moderation, which disproportionately targets voices from conflict zones or postcolonial states under ambiguous content flagging criteria (Bolsover & Howard, 2019). The result is a structurally embedded digital hierarchy, reinforcing the global division of communicative labor and privileging dominant epistemes.

Diaspora Representation and the Problem of Elitism

Although diasporic actors are increasingly celebrated as bridges for knowledge exchange and policy innovation, their internal heterogeneity is frequently ignored. Elite diasporans—often highly educated, media-savvy, and financially mobile dominate digital discourse, marginalizing informal migrants, refugees, and working-class voices within the broader diasporic imaginary (Tran, 2017).

This internal imbalance fosters a representational elitism that risks reproducing asymmetries within diaspora–homeland relations. Influential diasporic figures may inadvertently propagate saviorist narratives or nostalgia-infused imaginaries disconnected from lived local realities (Ponzanesi, 2020). Such dynamics risk tokenism, where diaspora involvement is celebrated symbolically without interrogating the socio-political exclusions that condition their influence.

Misinformation and the Erosion of Public Trust

The democratization of content production in diaspora-led spaces also creates vulnerabilities to misinformation, particularly during periods of heightened socio-political volatility such as elections, conflicts, or pandemics. Studies have shown how diasporic social media actors have contributed intentionally or otherwise to the spread of

conspiracy theories and ethnonationalist propaganda, undermining the credibility of development communication (Kperogi, 2020; Ekwo, 2011).

The amplification of sensationalist content via algorithmic mechanisms, combined with weak media literacy infrastructures in both host and origin countries, exacerbates this issue (Mihailidis, 2018). Furthermore, digital activism from the diaspora can catalyze offline tensions, incite harassment, or deepen polarization in already fragile contexts (Manor, 2019). The absence of cross-border accountability frameworks leaves a regulatory vacuum that enables such digital disruptions.

Structural Dependence and Sustainability Issues

The digital engagements of diasporic and grassroots communities often lack institutional permanence, being contingent upon external funding cycles, temporary initiatives, or fluctuating platform policies. This project-based logic undermines sustainability, rendering development communication vulnerable to digital abandonment once funding dries up or donor priorities shift (Tuzcu, 2021; Retis & Tsagarousianou, 2019).

Compounding this fragility are abrupt changes in platform governance such as updates in community guidelines, algorithmic recalibrations, or the withdrawal of monetization options which can instantly destabilize entire digital ecosystems, silencing community-driven initiatives with minimal recourse (Gajjala, 2019; Klinger, Kreiss, & Mutsavairo, 2023). Without stable infrastructural support, these platforms risk becoming ephemeral rather than embedded components of long-term development strategy.

Ethical Gaps and Participatory Paradoxes

Despite rhetoric around empowerment, many digital development initiatives fail to adequately address ethical concerns around consent, data extraction, and representational justice. Participation is often narrowly defined in terms of platform usage rather than genuine co-creation or shared governance, leading to what critic's term "participatory deception" a simulation of inclusion without material redistribution of power (Cooke & Kothari, 2001; Milan & Treré, 2019).

Diasporic engagements, particularly when mediated through proprietary platforms, may inadvertently reproduce these participatory paradoxes. For instance, community data may be harvested for analytics without informed consent, or local users may be invited into digital forums without mechanisms for feedback or agenda-setting power. These ethical gaps call for a radical rethinking of what constitutes meaningful participation in algorithmically mediated development landscapes.

Policy and Practical Implications

As algorithmic systems continue to mediate communication

across borders, especially among dispersed populations, the convergence of digital media infrastructures and diaspora engagement demands a paradigmatic shift in development communication. The mid-2020s context necessitates strategic interventions that account not only for digital connectivity but also for algorithmic hierarchies, diaspora agency, and transnational flows of influence. This section outlines structured, evidence-based policy and practical recommendations to navigate this evolving landscape.

Advancing Algorithmic Justice in Development Media

The proliferation of algorithmically curated content across platforms such as Meta (Facebook), TikTok, and X (formerly Twitter) prioritizes virality and engagement metrics over epistemic plurality and representational equity (Bucher, 2012; Bolsover & Howard, 2019). In development contexts, this results in the amplification of dominant narratives, often shaped by Western-centric data logics, at the expense of local communicative ecologies.

Policy interventions must thus foreground algorithmic justice. Governments and multilateral institutions should mandate algorithmic audits, platform transparency, and enforceable accountability measures, especially in regions deemed development-sensitive (Caplan & Boyd, 2016; Siddiqui, 2023). Furthermore, companies operating in the Global South should be required to establish local algorithmic fairness teams tasked with adapting content moderation and training data to reflect regional linguistic, cultural, and political specificities (Chonka, 2023).

Public-private partnerships can play a pivotal role in facilitating decentralized, open-source platforms that bypass proprietary algorithmic filters and amplify grassroots voices (Calzada, 2024). These alternative infrastructures would reinforce narrative sovereignty and challenge epistemic monopolies in development discourse.

Strengthening Diaspora-Home Country Media Ecosystems

Diasporas increasingly shape public discourse around development, especially during electoral transitions, social uprisings, and humanitarian crises (Kperogi, 2020; Falola, 2023). Yet, their influence remains fragmented due to minimal coordination with domestic media ecosystems. To bridge this gap, states and NGOs must promote media diplomacy strategies that institutionalize collaborative frameworks between diaspora journalists and local grassroots communicators (Manor, 2019; Charles, 2024).

Proposals such as transnational public service media hubs can serve as intercultural spaces for co-producing context-sensitive narratives that transcend the binaries of “home” and “abroad” (Alonso & Oiarzabal, 2010; Ekwo, 2011). These hubs should be complemented with sustained civic media literacy

programs, aimed at diaspora influencers and communicators. Core training modules should include algorithmic ethics, misinformation detection, and culturally embedded fact-checking practices (Mihailidis, 2018; Tréré, 2018).

Such efforts would not only bolster democratic discourse but also mitigate the risks of diasporic misinformation and epistemic dislocation.

Promoting Ethical AI and the Integration of Indigenous Knowledge

The deployment of AI in development communication particularly through natural language processing and predictive targeting tools raises pressing concerns about epistemic justice and ontological erasure. Predominantly Western-trained algorithms often misrepresent or omit Indigenous knowledge systems, exacerbating historical marginalization (Risam, 2018; Tuzcu, 2021).

To redress this, development communication policies must mandate ethical AI practices that recognize and integrate subaltern epistemologies. This includes collaboration with ethnographers, Indigenous digital anthropologists, and local knowledge custodians during dataset formation and model training (Gaskins, 2019; Gajjala, 2019).

Digital sovereignty laws should also be enacted to protect communities from exploitative data extraction and to ensure that narrative ownership remains with the populations represented in training corpora (Couldry et al., 2018; Calzada, 2024). Such laws would form a foundational pillar in efforts to decolonize AI in development communication.

Institutional Reform and Realignment of Funding Structures

Despite the global shift toward participatory and decentralized communication, donor agencies and international development organizations continue to favor legacy, top-down media models (Retis & Tsagarousianou, 2019). This funding inertia hampers innovation and restricts the agency of local communicators.

A structural realignment is essential. Funding must be redirected toward diaspora-led media incubators, transnational civic-tech hubs, and hybrid storytelling labs that enable cross-border narrative co-creation (Sobré-Denton, 2016). These hybrid formations have demonstrated unique agility in responding to crises where formal media systems are either absent or politically compromised.

Moreover, institutions such as UNDP and UNESCO should convene stakeholders to develop Ethical Media Compacts binding, transnational agreements that codify standards for algorithmic transparency, narrative justice, and diaspora inclusion. These compacts could serve as normative anchors for cross-border cooperation in development media.

To further clarify how the proposed algorithmic framing builds upon and addresses the limitations of earlier paradigms, a comparative overview is presented below:



Table 2: Comparative Models in Development Communication Paradigms

<i>Paradigm</i>	<i>Key Characteristics</i>	<i>Limitations Addressed by Algorithmic Framing</i>
Modernization	Top-down messaging, tech-centric	Ignores local agency and cultural context
Participatory	Community-led, dialogic, locally grounded	Lacks scalability and cross-border engagement
Algorithmic (Proposed)	Data-aware, transnational, ethically governed	Mitigates digital colonialism and diasporic exclusion

CONCLUSION

How algorithmic media and diasporic agency relate is helping reshape development communication in many important and ongoing ways. Nowadays, digital tools enable worldwide sharing of information, identity and power, so that diasporic actors and computer-based platforms play a leading role in shaping what happens in development. Previously led mainly by states, multilateral agencies and NGOs, development discourse is now a shared responsibility among diasporic intellectuals, digital activists and cultural intermediaries who can easily move between offline and online spaces (Ponzanesi, 2020; Kperogi, 2020; Gajjala, 2019).

As platforms powered by algorithms look to give everyone a chance, they also continue to highlight existing differences by using hard-to-see data, systematic surveillance and by dominating the market (Bucher, 2012; Caplan & Boyd, 2016; Couldry et al., 2018). Because of the rise of computational propaganda, automated content management and machine-based moderation, multiple perspectives in discussions could become limited and subaltern accounts could be neglected, mainly in postcolonial countries and digital underprivileged regions (Bolsover & Howard, 2019; Chonka, 2023).

Even so, the influence of digital diasporas is clearly changing the way development messages are sent and received, through meaningful and real-time political and emotional involvement (Ekwo, 2011; Falola, 2023). These days, their work isn't limited to criticism; they help plan developments and join local and international ties between activists. By being narrative activists, having memory-based politics and gaining algorithmic visibility, diasporic communities make an impact on the world's various media areas, questioning standard knowledge hierarchies and transforming most popular stories about progress and development (Godin & Doná, 2016; Sobré-Denton, 2016).

Even so, this ongoing process shows varying and uncertain feelings. Since diasporic leaders are often seen more than others, their achievements can hide unfairness inside their communities and also lead to challenges in deciding who is authorized to stand for the diaspora. Additionally, engaging with major digital platforms creates problems in areas such as data privacy, how algorithms work and the chance that cultures will blend or might even be lost (Tuzcu, 2021; Siddiqui, 2023).

Because of these complexities, we should now work to redefine development communication in the algorithmic era by promising algorithmic justice, more decentralized

approaches to knowledge and ensuring that further voices from the Global South are magnified. For this to happen, all these groups—policy planners, scientists, academics and communication experts—should join forces to ensure digital equity, cultural acceptance and everyone's involvement in managing development systems (Calzada, 2024; Mihailidis, 2018).

The future of development communication relies equally on using new technologies and being ethical, humble and focused on diaspora culture. Appreciating digital diasporas as main agents of story decolonization and dialogue among countries can replace the old one-way aid system with a new process that helps everyone improve together. As a result, development is reshaped to be a conversation, a trans local effort and a jointly-built process guided by the lives, dreams and imaginations of marginalized and diasporic people around the world.

REFERENCES

- [1] Ponzanesi, S. (2020). Digital diasporas: Postcoloniality, media and affect. *Interventions*, 22(8), 977-993.
- [2] Ekwo, U. (2011, September). Diaspora media and citizen engagement in the digital age: Analyzing the impact of transnational journalism on democratization. In *Diaspora Strategies [Conference]: Encouragement, Evolution, and Engagement*, in The Clinton Institute of American Studies, University College, Belfield, Dublin, Ireland (pp. 9-11).
- [3] Kperogi, F. A. (2020). *Nigeria's digital diaspora: Citizen media, democracy, and participation* (Vol. 87). University of Rochester Press.
- [4] Gaskins, N. (2019). Techno-vernacular creativity and innovation across the African diaspora and global south. *Captivating technology: Race, carceral technoscience, and liberatory imagination in everyday life*, 252-274.
- [5] Arefin, S., & Simcox, M. (2024). AI-Driven Solutions for Safeguarding Healthcare Data: Innovations in Cybersecurity. *International Business Research*, 17(6), 1-74.
- [6] Godin, M., & Doná, G. (2016). "Refugee voices," new social media and politics of representation: young Congolese in the diaspora and beyond. *Refuge*, 32, 60.
- [7] Kianpour, M., Triandafyllidou, A., Allen, T., Mazroui, S., & Shams, M. (2024). Understanding Cultural and Identity Narratives in the Age of Advanced Digital Technologies.
- [8] Tran, T. (2017). *Digital diasporic cultures and everyday media: The Vietnamese diaspora in Vancouver, Canada*. The University of Wisconsin-Madison.
- [9] Gujarathi, P., Reddy, M., Tayade, N., & Chakraborty, S. (2022, September). A Study of Extracting Causal Relationships from Text. In *Proceedings of SAI Intelligent Systems Conference* (pp.

- 807-828). Cham: Springer International Publishing.
- [10] Lee, D., Gujarathi, P., & Wood, J. N. (2021). Controlled-rearing studies of newborn chicks and deep neural networks. *arXiv preprint arXiv:2112.06106*.
- [11] Alonso, A., & Oiarzabal, P. (Eds.). (2010). *Diasporas in the new media age: Identity, politics, and community*. University of Nevada Press.
- [12] Retis, J., & Tsagarousianou, R. (Eds.). (2019). *The handbook of diasporas, media, and culture*. John Wiley & Sons.
- [13] Gajjala, R. (2019). *Digital diasporas: Labor and affect in gendered Indian digital publics*. Rowman & Littlefield.
- [14] Falola, T. (2023). *Citizenship and the Diaspora in the Digital Age: Farooq Kperogi and the Virtual Community*. Rowman & Littlefield.
- [15] Calzada, I. (2024). *Beyond the Local-Global Nexus: Towards P2P Decentralized AI-Driven Diasporic e-Citizenship for Data Cooperatives*. Available at SSRN.
- [16] Gujarathi, P. D., Reddy, S. K. R. G., Karri, V. M. B., Bhimireddy, A. R., Rajapuri, A. S., Reddy, M., ... & Chakraborty, S. (2022, June). Note: Using causality to mine Sjögren's Syndrome related factors from medical literature. In *Proceedings of the 5th ACM SIGCAS/SIGCHI Conference on Computing and Sustainable Societies* (pp. 674-681).
- [17] Risam, R. (2018). *New digital worlds: Postcolonial digital humanities in theory, praxis, and pedagogy*. Northwestern University Press.
- [18] Siddiqui, H. (2023). *Towards Developing a Global Policy Framework to Regulate Big Tech's Impact on Democracy: A Global South Perspective* (Master's thesis, UiT Norges arktiske universitet).
- [19] Sirangi, Arjun. (2018). Retail Fraud Detection via Log Analysis and Stream Processing. *Computer Fraud & Security Bulletin*. 2018. 21-32. 10.52710/cfs.678.
- [20] Cherukupalle, Naga Subrahmanyam. (2018). Declarative IPAM and DNS Lifecycle Automation in Hybrid Environments Using Infoblox NIOS and Terraform. *Journal of Electrical Systems*. 2023. 592-606. 10.5281/zenodo.15723361.
- [21] Jakkaraju, Venkata Thej Deep. (2019). Autonomous Security Agents for Real-Time IAM Policy Hardening in Multi-Cloud DevOps Pipelines. *Computer Fraud & Security*. 2019. 1-9.
- [22] Cherukupalle, Naga Subrahmanyam. (2019). Regulatory-Aware Terraform Modules for Multi-Cloud Infrastructure Provisioning Across VMware and AWS. *Computer Fraud & Security*. 2019. 20-31.
- [23] Sirangi, Arjun. (2019). Customer Lifetime Value Modelling with Gradient Boosting. *Journal of Information Systems Engineering & Management*. 4. 1-15. 10.52783/jisem.v4i1.6.
- [24] Jakkaraju, Venkata Thej Deep. (2020). Adversarial-Aware Kubernetes Admission Controllers for Real-Time Threat Suppression. *International Journal of Intelligent Systems and Applications in Engineering*. 8. 143-151.
- [25] Cherukupalle, Naga Subrahmanyam. (2020). Policy-Based SAN Zoning Automation using Terraform and Ansible for Cisco MDS and Brocade Fabrics. *International Journal of Intelligent Systems and Applications in Engineering*. 8. 346-357.
- [26] Sirangi, Arjun. (2020). Federated Learning for Cross-Brand Identity Resolution. *Computer Fraud & Security Bulletin*. 2021. 20-31. 10.52710/cfs.679.
- [27] Sirangi, Arjun. (2021). AI-Driven Risk Scoring Engine for Financial Compliance in Multi-Cloud Environments. *Journal of Electrical Systems*. 17. 138-150. 10.52783/jes.8887.
- [28] Cherukupalle, Naga Subrahmanyam. (2021). Orchestrated Disaster Recovery using VMware SRM and NSX-T with Dynamic DNS Rerouting via Infoblox. *International Journal on Recent and Innovation Trends in Computing and Communication*. 9. 26-35.
- [29] Akinagbe, Olayiwola. (2021). Quantum-Resistant Federated Learning Protocol with Secure Aggregation for Cross-Border Fraud Detection. *International Journal of Computer Applications Technology and Research*. 10. 364-370. 10.7753/IJCATR1012.1010.
- [30] Jakkaraju, A. (2022). International Journal of Communication Networks and Information Security. *International Journal of Communication Networks and Information Security* (June 30, 2022).
- [31] Sirangi, Arjun. (2022). Cross-Modal AI for Toxicity Detection in Product Reviews. *Journal of Information Systems Engineering & Management*. 7. 1-11. 10.52783/jisem.v7i1.5.
- [32] Jakkaraju, Venkata Thej Deep. (2022). Homomorphic Encryption-Driven CI/CD Pipelines for Zero-Trust Builds. *International Journal of Communication Networks and Information Security*. 14. 1129-1139.
- [33] Cherukupalle, Naga Subrahmanyam. (2022). Cross-Site SDDC Connectivity Using VXLAN and Cisco Unified Fabric for VCF-Based Infrastructure. *Journal of Information Systems Engineering & Management*. 7. 1-12. 10.52783/jisem.v7i4.7.
- [34] Sirangi, Arjun. (2022). Ethical Guardrails for Real-Time Generative Targeting Guardrails. *Journal of Electrical Systems*. 18. 162-172. 10.52783/jes.8819.
- [35] Cherukupalle, Naga Subrahmanyam. (2022). VMware Cloud Foundation as a Catalyst for AI-Driven Datacentre Modernization: Optimizing Hybrid Workload by Orchestration with Edge Computing Integration. *International Journal of Computer Network and Information Security*. 14. 1140-1153.
- [36] Jakkaraju, Adithya. (2023). Quantum-Inspired Neural Architecture Search (Q-NAS). *Journal of Electrical Systems*. 19. 467-481.
- [37] Sirangi, Arjun. (2023). Synthetic Data for Counterfactual Targeting in Regulated Industries. *Computer Fraud & Security*. 2023. 21-34.
- [38] Jakkaraju, Venkata Thej Deep. (2023). AI-Driven "Immunological" Drift Detection in Serverless Workflows. *Journal of Electrical Systems*. 19. 42-54. 10.52783/jes.8779.
- [39] Cherukupalle, Naga Subrahmanyam. (2023). Federated Reinforcement Learning for Multi-Cloud Compliance. *Journal of Electrical Systems*. 2023. 592-606.
- [40] Jakkaraju, Venkata Thej Deep. (2023). Predictive Threat Modeling Using Reinforcement Learning Agents for API Gateway Exploit Detection. *Journal of Information Systems Engineering & Management*. 2023. 1-10.
- [41] Jakkaraju, Adithya. (2024). Cost-Aware Infrastructure Automation Using Predictive Analytics for Multi-Cloud Environments. *Revista de Fisioterapia*. 53. 281-296. 10.48047/hb5tea21.
- [42] Sirangi, Arjun. (2024). Generative AI for Predictive Customer Churn Immunization. *Computer Fraud & Security*. 2024. 297-307.
- [43] Adithya Jakkaraju. (2024). Self-Healing Neural Networks Against Adversarial Attacks. *International Journal of Intelligent Systems and Applications in Engineering*, 12(23s), 2537-2549.
- [44] Cherukupalle, Naga Subrahmanyam. (2024). AI-Optimized VMware Horizon VDI: Predictive Resource Scaling for GPU-Intensive Workloads in Hybrid Cloud Environments. *International Journal of Intelligent Systems and Applications in Engineering*. 12. 2062 – 2072.



- [45] Sirangi, Arjun. (2024). International Journal of INTELLIGENT SYSTEMS AND APPLICATIONS IN ENGINEERING Edge-AI for Zero-Latency Customer Micro-Segmentation. *International Journal of Intelligent Systems and Applications in Engineering*. 12. 888-899.
- [46] Kolawole, Ayinoluwa & Rahmon, Shukurat & Akinagbe, Olayiwola. (2024). Designing secure data pipelines for medical billing fraud detection using homomorphic encryption and federated learning. *International Journal of Science and Research Archive*. 10.1210-1222. 10.30574/ijrsra.2023.10.2.0866.
- [47] Jakkaraju, Venkata Thej Deep. (2024). Post-Quantum Cryptography Integration in CI/CD Pipelines: Future-Proofing Software Supply Chains. *Computer Fraud & Security*. 2024. 457-467.
- [48] Cherukupalle, Naga Subrahmanyam. (2024). Quantum-Secure Policy Automation for Multi-Cloud Governance. *Computer Fraud & Security*. 2024. 445-456.
- [49] Arefin, S., & Kipkoeh, G. (2024). Using AI and Precision Nutrition to Support Brain Health during Aging. *Advances in Aging Research*, 13(5), 85-106.
- [50] Akinagbe, Olayiwola. (2024). Human-AI Collaboration: Enhancing Productivity and Decision-Making. *International Journal of Education, Management, and Technology*. 2. 387-417. 10.58578/ijemt.v2i3.4209.
- [51] Jakkaraju, Venkata Thej Deep. (2024). Neurosymbolic AI for Context-Aware Cloud Security Policy Generation. *Communications on Applied Nonlinear Analysis*. 31. 739-753. 10.52783/cana.v3i1.5375.
- [52] Arefin, S., & Simcox, M. (2024). AI-Driven Solutions for Safeguarding Healthcare Data: Innovations in Cybersecurity. *International Business Research*, 17(6), 1-74.
- [53] Cherukupalle, Naga Subrahmanyam. (2024). GenAI-Driven Digital Twin Models for Real-Time Simulation of Edge Retail Infrastructure. *Journal of Electrical Systems*. 20. 5054-5058.
- [54] Akinagbe, Olayiwola. (2024). The Future of Artificial Intelligence: Trends and Predictions. *Mikailsys Journal of Advanced Engineering International*. 1. 249-261. 10.58578/mjaei.v1i3.4125.
- [55] Jakkaraju, Adithya. (2025). Ethical Synthetic Data Generation via Fairness-Aware Generative Models. *Journal of Information Systems Engineering & Management*. 10. 741-752. 10.52783/jisem.v10i24s.3988.
- [56] Akinagbe, Olayiwola & Taiwo, Abdulahi. (2025). A Comparative Study of AI-Powered Virtual Assistants in Banking: Features, Benefits, and Challenges. *ALSYSTECH Journal of Education Technology*. 3. 190-204. 10.58578/alsystech.v3i2.5191.
- [57] Karamchand, G. ZERO TRUST SECURITY ARCHITECTURE: A PARADIGM SHIFT IN CYBERSECURITY FOR THE DIGITAL AGE. *Journal ID*, 2145, 6523.
- [58] Sirangi, Arjun. (2025). LLMs in Personalized Education: Adaptive Learning Models. *Journal of Information Systems Engineering and Management*. 10. 706-715. 10.52783/jisem.v10i47s.9333.
- [59] Karamchand, G. (2025). Quantum Machine Learning for Threat Detection in High-Security Networks. *SAMRIDDHI: A Journal of Physical Sciences, Engineering and Technology*, 17(02), 14-25.
- [60] Akinagbe, Olayiwola & Taiwo, Abdulahi. (2025). The Impact of Machine Learning on Fraud Detection in Digital Payment. *Asian Journal of Science, Technology, Engineering, and Art*. 3. 191-209. 10.58578/ajstee.v3i2.4900.
- [61] Jakkaraju, Venkata Thej Deep. (2025). Holographic Data Provenance for Immutable Cloud Recovery Leveraging Holography and Blockchain for Tamper-Proof Forensic Trails. *Journal of Information Systems Engineering and Management*. 10. 1324-1333. 10.52783/jisem.v10i45s.9161.
- [62] Akinagbe, Olayiwola & Taiwo, Abdulahi & Arinze, Betsy. (2025). The Impact of Artificial Intelligence on Risk Management in Banking and Finance. *Mikailsys Journal of Advanced Engineering International*. 2. 118-128. 10.58578/mjaei.v2i2.5195.
- [63] Lima, S. A., & Rahman, M. M. (2024). Effective Strategies for Implementing D&I Programs. *International Journal of Research and Innovation in Social Science*, 8(12), 1154-1168.
- [64] Karamchand, G. (2025). Sustainable Cybersecurity: Green AI Models for Securing Data Center Infrastructure. *International Journal of Humanities and Information Technology*, 7(02), 06-16.
- [65] Paul, Isaac. (2025). Religion and Education in Africa: Harmony, Tension, and Transformation. *International Journal of Advanced Research in Education and Technology*. Volume 12. 11. 10.15680/IJARETY.2025.1203086.
- [66] Lima, S. A., Rahman, M. M., Bhuiyan, M. I. H., & Rahman, Z. (2025). The Role of HRM in Shaping Inclusive Cultures: Navigating Cross-Cultural D&I Challenges in US Organizations. *Journal of Business and Management Studies*, 7(1), 263-272.
- [67] Karamchand, G. (2025). AI-Optimized Network Function Virtualization Security in Cloud Infrastructure. *International Journal of Humanities and Information Technology*, 7(03), 01-12.
- [68] Arefin, S., & Al Alwany, H. M. A. (2025). Child Nutrition and Mental Health: Parental Guidelines for Balanced Development. *Emerging Medicine and Public Health*, 1-8.
- [69] Akinagbe, Olayiwola & Taiwo, Abdulahi & Arinze, Betsy. (2025). Developing an AI-Driven Predictive Model for Stock Market Forecasting in the Banking Sector. *Mikailsys Journal of Mathematics and Statistics*. 3. 200-213. 10.58578/mjms.v3i2.5197.
- [70] Konduru, Rahul & Cher-Ladine, Karthick & Dalal, Aryendra & Kaushik, Keshav & Soni, Mukesh & Cherukupalle, Naga Subrahmanyam. (2025). Sustainable IoT Applications: Energy-Efficient Strategies and Green Computing Paradigms.
- [71] Lima, S. A. From Transactional to Transformational: HR as A Strategic Business Partner.
- [72] Arefin, S., Al Alwany, H. M. A., & Global Health Institute Research Team. (2025). Skin-Care Obsessed Kids: The Hidden Risks and Healthy Alternatives Every Parent Should Know. *Clinical Medicine And Health Research Journal*, 5(1), 1082-1086.
- [73] Karamchand, G. (2025). Detecting the Abuse of Generative AI in Cybersecurity Contexts: Challenges, Frameworks, and Solutions. *Journal of Data Analysis and Critical Management*, 1(03), 1-12.
- [74] Zhang, Q., Yan, L., Tao, Y., Huang, R., & Yang, Y. (2024, March). On-Chip Write & Verify and Endurance Enhancer Circuits towards Multi-level RRAM Array. In 2024 8th IEEE Electron Devices Technology & Manufacturing Conference (EDTM) (pp. 1-3). IEEE.
- [75] Yue, W., Jing, Z., Yan, B., Tao, Y., Zhang, T., Huang, R., & Yang, Y. (2024, March). Multifunctional RRAM Chip with Configurability for Sparsity-Aware in-Memory ISNG Machine. In 2024 Conference of Science and Technology for Integrated Circuits (CSTIC) (pp. 1-3). IEEE.
- [76] Zhu, Y., Cai, L., Yu, L., Fan, A., Yan, L., Jing, Z., ... & Yang, Y. (2024, November). MeMCISA: Memristor-Enabled Memory-Centric Instruction-Set Architecture for Database Workloads. In 2024 57th IEEE/ACM International Symposium on Microarchitecture (MICRO) (pp. 1678-1692). IEEE.
- [77] Yan, L., Li, Y., Li, X., Pan, Z., Wang, Z., Wang, X., ... & Yang, Y. (2024,

- December). Neural Manifold Learning Based on 40 nm Dual-Mode PCM Compute-in-Memory Chip with Hardware Adaptive Drift Compensation. In 2024 IEEE International Electron Devices Meeting (IEDM) (pp. 1-4). IEEE.
- [78] Lu, Y., Yang, Z., Tao, Y., Cai, L., Zhang, T., Yan, L., ... & Yang, Y. (2025). Energy-Efficient Online Training with In Situ Parallel Computing on Electrochemical Memory Arrays. *Advanced Intelligent Systems*, 2401068.
- [79] Shi, D., Zhu, Y., Fan, A., Tao, Y., Yang, Y., & Yan, B. (2025). Non-Binary LDPC Arithmetic Error Correction For Processing-in-Memory. arXiv preprint arXiv:2502.11487.
- [80] Fu, Y., Fan, A., Yue, W., Zhao, H., Shi, D., Wu, Q., ... & Yan, B. (2025, March). PROCA: Programmable Probabilistic Processing Unit Architecture with Accept/Reject Prediction & Multicore Pipelining for Causal Inference. In 2025 IEEE International Symposium on High Performance Computer Architecture (HPCA) (pp. 761-774). IEEE.
- [81] Tao, Y., & Wu, Q. (2022). An Automated FPGA-based Framework for Rapid Prototyping of Nonbinary LDPC Codes. arXiv preprint arXiv:2202.07295.
- [82] Fan, A., Fu, Y., Tao, Y., Jin, Z., Han, H., Liu, H., ... & Huang, R. (2023). Hadamard product-based in-memory computing design for floating point neural network training. *Neuromorphic Computing and Engineering*, 3(1), 014009.
- [83] Tang, W., Cho, S. G., Hoang, T. T., Botimer, J., Zhu, W. Q., Chang, C. C., ... & Zhang, Z. (2023, June). Arvon: A Heterogeneous SiP Integrating a 14nm FPGA and Two 22nm 1.8 TFLOPS/WDSPs with 1.7 Tbps/mm² AIB 2.0 Interface to Provide Versatile Workload Acceleration. In 2023 IEEE Symposium on VLSI Technology and Circuits (VLSI Technology and Circuits) (pp. 1-2). IEEE.
- [84] Yu, L., Tao, Y., Zhang, T., Wang, Z., Wang, X., Pan, Z., ... & Yang, Y. (2023). Fast and reconfigurable sort-in-memory system enabled by memristors. arXiv preprint arXiv:2309.10350.
- [85] Arefin, S., Al Alwany, H. M. A., & Global Health Institute Research Team. (2025). Revolutionizing Pediatric Emergency Medicine with Artificial Intelligence: Innovations, Case Studies, and Future Directions. *Journal of Current Science and Research Review*, 3(01), 11-14.
- [86] Graham, M., Hjorth, I., & Lehdonvirta, V. (2017). Digital labour and development: impacts of global digital labour platforms and the gig economy on worker livelihoods. *Transfer: European review of labour and research*, 23(2), 135-162.
- [87] Bjola, C., Cassidy, J., & Manor, I. (2019). Public diplomacy in the digital age. *The Hague Journal of Diplomacy*, 14(1-2), 83-101.

