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Role of ICT in Disseminating Development Communication in Nigeria

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Abstract
The rapid expansion of information and communication technologies (ICTs) has significantly influenced the spread of development communication in Nigeria. Guided by media development theory, this study explores the role of ICTs in driving development initiatives across various sectors of Nigeria's economy. Using a conceptual framework, it examines how the Internet, mobile phones, and social media have improved the reach and engagement of development messages. Despite these benefits, challenges such as inadequate infrastructure, low digital literacy, and a persistent rural-urban divide remain barriers to widespread ICT adoption. To address these issues, the study recommends implementing training programmes to enhance digital skills among community leaders and development stakeholders. Additionally, establishing ICT centres in rural areas is suggested as a strategy to build capacity, support development initiatives, and amplify the voices and needs of rural populations.

Keywords: ICTs, Development, Communication, DevCom, Rural Areas

Introduction

Development communication (DEVCOM) plays a pivotal role in addressing the socio-economic challenges of developing nations, particularly in Nigeria. Over the years, communication scholars have emphasised the need to restructure Nigeria's communication systems to meet the developmental needs of its people (Opubor, 2016; Okunna, 2002, 2020; Nwuneli, 1985). However, these efforts often contend with a communication landscape

described as skewed towards Western paradigms, rather than reflecting Afrocentric perspectives (Udeze & Uche, 2017; Uche, 2022; Uche & Obiajulu, 2022; Adelabu et al., 2024).

Okenwa (2002), as cited in Elobisi and Asodike (2022), highlights the growing call among African communication scholars for deliberate policies to integrate indigenous communication practices with Western approaches. This integration seeks to balance global influences with local traditions. Similarly, Okunna (2020), also cited in Elobisi and Asodike (2022), advocates for a multi-channel, multimedia strategy as the most effective way to convey development messages. By leveraging mass media, traditional channels, interpersonal communication, group media, personal interactions, and increasingly, social media, development messages can better reach and engage target audiences. These perspectives underscore the critical role of information and communication technologies (ICTs) in enhancing the diffusion of development communication in Nigeria and across Africa.

Development communication can be broadly defined as the strategic use of communication tools and processes to promote socio-economic development. It involves deploying methods and strategies to facilitate the exchange of ideas and information that drive socio-political change, economic growth, and individual empowerment. As noted by Ono et al. (2020), DEVCOM serves both transformative and socialising roles through various approaches, including behaviour change communication, social marketing, information dissemination, education, social mobilisation, media advocacy, community participation, and communication for social change. This communication may take various forms, such as interpersonal interactions (e.g., word of mouth), mass communication (e.g., print and broadcast media), or promotional materials (e.g., flyers, posters, and brochures).

ICT tools have revolutionised information dissemination and reception, significantly influencing Nigeria's developmental process. They have become indispensable tools for real-time reporting on developmental issues and fostering interactive dialogues between governments and citizens, as well as between journalists and their audiences. The immediacy and accessibility provided by ICT platforms have transformed how development information is disseminated and consumed in the digital age. This study, therefore, aims to assess the impact of ICTs on the diffusion of development communication in Nigeria, highlighting areas of transformation and the challenges that persist. Throughout this work, "DEVCOM" and "development communication" are used interchangeably.

Statement of the Problem

Nigeria, a nation endowed with abundant natural resources, cultural diversity, and a vast pool of human capital, has faced persistent challenges in leveraging development communication effectively. Traditional media such as radio, television, newspapers, and magazines have historically played significant roles in promoting development. However, they have been hampered by limited accessibility, unreliable power supply, restricted reach, and inadequate technical expertise. The emergence of ICTs offers a potential solution, introducing new possibilities for enhanced information dissemination, community engagement, and real-time feedback.

While several communication scholars, including Nwuneli (1985), Opubor (1985), Okigbo (2002), Nwosu (1990), and Okunna (1995, 2002), have contributed significantly to the field of development communication, emphasising the importance of participatory communication in Nigeria and Africa, challenges persist. ICT tools such as mobile phones, social media platforms, and internet services provided by companies like MTN, Globacom, and Airtel have

fostered a more inclusive and participatory communication landscape. Despite these advancements, significant obstacles remain, including infrastructural deficiencies, digital illiteracy, and unequal access between urban and rural areas.

This study seeks to address critical questions: What challenges continue to hinder development communication through ICTs in Nigeria? How can these challenges be effectively mitigated to enhance development outcomes? By exploring these issues, the study aims to offer valuable insights into the transformative role of ICTs in Nigeria's development communication efforts.

Methodology

This study adopts a conceptual approach, drawing on secondary data from diverse sources, including academic journals, textbooks, and credible online resources. These materials provide insights into key themes such as development communication, the transformative impact of ICTs, and effective strategies for leveraging ICTs in contemporary Nigeria. By synthesising information from these sources, the study offers a comprehensive understanding of the interplay between ICTs and development communication, highlighting both advancements and challenges in Nigeria.

Theoretical Framework

This paper is anchored in the Development Media Theory, propounded by McQuail (1987). The theory was established to address gaps left by the four classical theories of the press, advocating for media support in fostering democratic governance and driving social, political, and economic transformation within societies. Baran and Davies (2012) assert that Development Media Theory emphasises cooperation and support from the media, rather than unrestrained criticism of government efforts. The MacBride Commission Report (1980) provided significant reinforcement to this perspective, highlighting communication as a vital resource for development. Key tenets of the Development Media Theory include the promotion of social change, information dissemination, technological innovation, cultural preservation, and capacity building. The theory envisions the media as a catalyst for empowering citizens and communities, enabling their active participation in development processes. Media outlets achieve this through engaging in educational programmes that motivate individuals to advocate for their rights, pursue economic opportunities, and engage in democratic practices (Okigbo, 2016; Okunna, 2002).

The principles of Development Media Theory, as outlined by McQuail (1987), include:

1. The mass media should align with and promote national development policies.
2. Media content should prioritise information flow from nations with similar socio-cultural and economic contexts, while being subject to censorship aligned with community development needs.
3. Media practitioners must balance their freedoms with their responsibilities to support societal development.

According to the MacBride Commission Report (1980, as cited in Adelabu et al., 2024), communication is a core development resource—a tool for enhancing political participation, shaping policy, and defining national priorities. Development Media Theory underscores the need for the media to champion positive societal change, empower communities, and promote socio-economic and political development.

In the Nigerian context, ICT has become a crucial driver in implementing the principles of this theory, especially in rural areas. Technological innovations such as mobile phones, social media, and community radio enable the dissemination of development communication, fostering awareness, interaction, and mobilisation among rural populations. For example, ICT platforms can facilitate participatory governance, improve access to economic opportunities, and encourage community involvement in local development projects (Opubor, 2016; Okigbo, 2016). Through ICT, the media supports cultural preservation and identity in a diverse society like Nigeria. National networks such as the Nigerian Television Authority (NTA) and the Federal Radio Corporation of Nigeria (FRCN) regularly broadcast programmes in various local languages, showcasing arts, traditions, and cultural heritage. This inclusivity fosters national cohesion and ensures that even minority voices are amplified (Amatokwu, 2016; Moemeka, 2000).

The integration of ICT into development communication is particularly significant in rural areas, where traditional media channels are often inaccessible. ICT platforms provide innovative ways to engage rural communities, enabling socio-economic development through access to information, participatory governance, and interactive communication. By leveraging these tools, Nigeria can bridge the urban-rural divide, promoting self-sufficiency and socio-cultural growth in line with the principles of Development Media Theory (Nwafor & Ogbonna, 2022). The theory, therefore, advocates a collaborative and supportive role for the media in aligning with government initiatives to build a robust economy, ensure cultural preservation, and drive socio-political development through ICT-driven dissemination strategies. By fostering the integration of ICT in rural communication frameworks, Development Media Theory offers a pathway to sustainable progress in Nigeria's rural communities.

Review of Concepts

Development Communication

Development communication has various definitions from authors and development communication professionals. In terms of nomenclature, development communication can be restated as communication for development, communication for social change, development support communication, or strategic communication (Amatokwu, 2016; Okigbo, 2016; Opubor, 2016; Okunna, 2022). Development communication is the application of communication principles and strategies in the developing world. It applies wherever there are people whose lives can be improved qualitatively (Okigbo, 2016).

Okunna (2022), cited in Uche and Obiajulu (2022), describes development communication as the use of all forms of communication in the development process. This implies that the media or channels of communication would include the mass media as well as interpersonal, traditional, group, and community media. Development communication is a process that is carried out for the people, with the people, and by the people (Ani, Odogwu & Chukwuemeka, 2016). This view is corroborated by Ono, Chiagha, and Okunna (2020), who assert that people are at the centre of any development. It is people who conceive, initiate, and carry out any development agenda, and they are the beneficiaries of such agendas too. Development is from people, through people, and for the total well-being of people.

Development communication involves the use of dialogue to elicit the participation of communities benefiting from the development that concerns them (Ono et al., 2020). Dang (2017) noted two basic roles of development communication: transformation and socialisation. Development communication achieves this by bringing about social change in a way that inspires people to aim for a higher quality of life while maintaining the established values of

society through its socialising role. In this way, development communication, in performing its socialising role, aims to build a conducive atmosphere for the proposed change while keeping the social fabric of society intact (Dang, 2017).

Development communication helps to engage stakeholders and policymakers to establish conducive environments, assess risks and opportunities, and promote information exchange to achieve positive social change for sustainable development. It plays a very significant role in explaining the development process to ordinary people in such a way that it finds acceptance (Ono et al., 2020).

Development communication can also be viewed from the perspective of sustainable development. Ani et al. (2016) posit that sustainable development is akin to the concept of development communication when it is described as development that is carried out for the people, with the people, and by the people. This aligns with the World Commission on Environment and Development, which states that for any development to be sustainable, it must meet the needs of the present without compromising the ability of future generations to meet their own needs (Hilty & Hercheui, 2010, cited in Uche et al., 2022).

Information and Communications Technology (ICT)

Information and Communication Technology (ICT) covers a broad spectrum of technologies that have transformed journalism and other sectors through innovative means of communication and data handling. These technologies include the internet, mobile devices, social media platforms, and digital broadcasting tools, all of which have reshaped how news is gathered, produced, and disseminated (McQuail, 2013, cited in Obiora & Uche, 2024). ICT involves the integration of computing and telecommunication systems and tools designed to facilitate the creation, processing, transmission, and storage of information. It encompasses the infrastructure and technologies that enable modern communication, such as the internet, wireless networks, computers, mobile phones, video conferencing tools, and various media applications and services (McCarthy et al., 2023). These technologies empower users to access, retrieve, store, transmit, and manipulate data in digital form, fostering global connectivity between individuals and between people and machines.

One of the core objectives of ICT is to improve the efficiency and effectiveness with which information is created, shared, and managed. Though ICT is a broad and evolving concept, often involving the convergence of media and communication technologies, it remains difficult to define universally due to the continuous innovation in tools and systems (Onyia, 2021). However, the term generally refers to all hardware, software, networking components, and applications that enable interaction and collaboration in the digital realm.

The components of ICT are diverse and constantly evolving. While some elements, like computers and telephones, have been foundational for decades, newer innovations such as smartphones, digital televisions, cloud computing, and artificial intelligence reflect the rapid advancement of technology. ICT systems include not only physical devices (hardware) but also software, middleware, data networks, cloud services, communication protocols, and security frameworks (Uche, 2024). ICT, in essence, is not merely a collection of tools; it represents the strategic application of these technologies to enhance communication and streamline information management processes (Obiora & Uche, 2024).

Discussion

ICTs and Development Communication

Information and communication technologies have brought about a transformation in development communication by introducing innovative tools for information packaging and dissemination, including community participation in the development process. Studies indicate that ICTs such as the Internet, social media, and mobile phones have enhanced the speed and accessibility of information dissemination, thereby positively impacting development communication (devcom) in Nigeria (Emenike & Elekwachi, 2021; Okocha & Edafewotu, 2022; Okoye & Umeifekwem, 2023). There are specific areas where ICTs have impacted in various ways, such as agriculture, health, and educational development. In the field of health, there are applications such as telemedicine, mobile health, and e-health. These have expanded healthcare services, improving access and speed. Health services have been extended and improved in certain rural areas through telemedicine. In education, ICTs have led to the concept of eLearning, online studies, and distance and remote learning programmes. These have increased access to education, thereby raising the literacy rate in Nigeria. In agriculture, ICTs have led to the expansion of extension services to rural communities. Crucial information on improved farming methods, better seedlings and crops, weather forecasts, and other related issues has been disseminated to farmers through ICT tools. There are online platforms and mobile applications for farmers to access information in real-time (Okocha & Edafewotu, 2022; Okoye & Umeifekwem, 2023).

The Importance of ICTs in Development Communication

Development communication (devcom) is the strategic use of communication technology tools and techniques to ensure the social, political, and economic development of a people. Traditionally, this entails the use of mass media such as radio, television, newspapers, and magazines. However, the advent of ICTs — namely, the Internet, mobile phones, and social media networks — has expanded the channels through which development messages are disseminated. This has resulted in far-reaching, immediate, and more interactive communication. Information and communication technologies play vital roles in any modern society. Facilities such as computers, the internet, digital broadcast systems, and satellite transmission are among the ICTs that have revolutionised media communication in Nigerian society (Okorie, 2008). The traditional media, as specified above, could not and cannot satisfy the needs of the modern individual; hence, the deployment of the conventional media. Nonetheless, conventional media is gradually being overtaken by new media, which includes social media products born of innovations occasioned by ICT deployment. Soola (1998), cited in Uche et al. (2022), highlights the importance of ICTs, as they provide near-limitless possibilities for increasing quantity, enhancing quality and speed, and disseminating needed information in a complex but increasingly interdependent world of business. Adaja (2005), cited in Uche et al. (2022), agrees, asserting that ICTs have positively impacted individuals, groups, organisations, governments, and societies. Information and communication technologies have precipitated a revolution in the communication sector, emphasising improved methods, efficiency, and the prompt and instantaneous transmission of information (Okorie, 2008).

In a study by Dunu et al. (2016) on rethinking capacity building for the achievement of sustainable development goals in Nigeria, the authors argue that the attainment of the MDG goals was hampered largely due to inadequate capacity building in areas such as data gathering and statistics, lack of a community-based monitoring system, and ineffective orientation of local communities to embrace development projects as "community efforts," among other challenges. They concluded by recommending adequate documentation to ensure ease in

tracking progress. A related study by Ani et al. (2016) on rethinking sustainable development in an era of scarcity reports that the challenge lies in accurate, reliable, credible, and believable statistics. This underscores the significance of ICT, which enhances proper tracking and documentation of developmental goals, attainment, challenges, and solutions.

Challenges Confronting ICT Adoption in Nigeria

Despite the various benefits inherent in the use of ICTs, adopting them for development communication has been hindered by various challenges such as inadequate infrastructure, limited access to advanced technologies, and the digital divide between urban and rural areas (Sanusi & Azeez, 2024; Ibrahim, 2013). Furthermore, issues such as misinformation, fake news, and ethical practice present significant obstacles (Okon, 2014). Credibility questions often arise with the use of Photoshop and artificial intelligence, which can showcase non-existent development strides due to the misuse of ICT tools. Adeyemi (2018) notes that while ICTs hold high potential to enhance development communication in Nigeria, infrastructural barriers remain significant. While ICT tools have been deployed in the diffusion of devcom, Nigerian journalists have often lacked the necessary skills and resources to fully exploit sophisticated ICTs (Okoro & Ugwuanyi, 2019). There is also inadequate ICT infrastructure, unreliable internet, and inconsistent power supply that daily confront the country (Obiora & Uche, 2024; Sanusi & Opaleke, 2024). Issues concerning infrastructure and connectivity have often impacted the reach of ICT services. Other researchers, including Emenike and Elekwachi (2021), Okocha and Edafewotu (2022), and Okoye and Umeifekwem (2023), have also highlighted the challenge of unstable power supply, poor internet connectivity, limited broadband, and poor digital literacy as factors that have hindered ICT deployment in devcom.

The Way Forward for Enhanced ICT Deployment for Development Communication

The following steps can serve as a way forward towards enhancing the role of ICTs in accelerating the diffusion of development communication in Nigeria, thereby helping the country attain its national development goals:

1. **Strengthening ICT Infrastructure:** The current administration should invest heavily in ICT infrastructure and expand it to rural areas in Nigeria to bridge the digital literacy gap. The infrastructure should include broadband and mobile network coverage to penetrate the hinterlands, which are hitherto uncovered by mobile telephony, to enhance access to development communication (Ekwueme & Okoro, 2018).
2. **Digital Skill-Up:** There should be a deliberate programme aimed at building the capacity of citizens, especially those in rural areas. Rolling out a national digital skill-up programme will help equip Nigerian citizens with skills that will enhance the effective use of ICT tools for development communication (Oyediran et al., 2020).
3. **Content Localisation and Customisation:** In order to ensure the maximisation of ICT impact, development communication messages should reflect Nigeria's diverse language groups. By customising content, devcom messages will become more relatable and accessible to the entire population (Ajibade & Ojo, 2019).
4. **Collaboration and Partnership:** The Federal Government should cooperate and collaborate with ICT companies, non-governmental organisations (NGOs), and community-based organisations (CBOs) to facilitate the development and deployment of ICT solutions for development communication in the country (Ndukwe, 2020).
5. **Leveraging Mobile and Social Media Platforms:** Social media networking platforms have become widespread across the globe, including in Nigeria. Thus, the government and its agencies, including development partners, should increase their use of social

media and mobile platforms to promote agriculture, healthcare, and socio-economic initiatives that cascade development to the populace (Uzor, 2021).

6. **Public-Private Partnership (PPP):** Corporate bodies and individuals within Nigeria should embrace cooperation, participation, open dialogue, and knowledge and information sharing. Corroborating this point, Okon (2015) asserts that sustainable development communication in Nigeria entails dialogue, participation, cooperation, and the sharing of knowledge and information.
7. **Respect for Press Freedom**: We are already living in an information age occasioned by ICT innovation, and as such, there should be no covert or overt gagging of individuals or corporate bodies, especially the press, to ensure proper and effective information dissemination. This will enhance the ease of doing business and open up the landscape for development (Uche et al., 2022).

Conclusion

The advent of ICTs has significantly impacted development communication in Nigeria. As noted in this study, ICT has been indispensable in enabling real-time coverage of developmental issues and fostering interactive dialogue between the government and the governed, as well as between journalists and their audiences. It allows for the immediate dissemination of information across various platforms, promoting greater accessibility and engagement in the digital age. Nonetheless, challenges remain, not just limited to socio-economic barriers and infrastructural deficits but also religious and cultural factors. By bridging the literacy gaps and leveraging more ICT tools, social media, and mobile platforms, it is hoped that the diffusion of development communication in Nigeria will be enhanced.

Recommendations

The following recommendations are hereby made to enhance ICT use in development communication in Nigeria:

1. Workshops and training programmes should be organised to improve skills and digital literacy among local community leaders and development stakeholders.
2. More digital tools should be leveraged to monitor and evaluate the diffusion of development communication across diverse regions of Nigeria to identify areas for improvement.
3. Communities should be empowered to use ICTs for development.
4. Digital hubs and ICT centres should be established in rural communities to build capacity and promote the dissemination of development efforts and the needs of the rural populace.

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