

Social media accessibility: Opportunities and challenges for rural communities

Joshua Ebere Chukwuere^{1*} 

¹Department of Information Systems, North-West University, South Africa, joshchukwuere@gmail.com,

 <https://orcid.org/0000-0001-8366-4328>

*Corresponding author

Abstract: Social media breaks traditional barriers to human communication and access to information. It has become a global platform for the great and small (rich and poor) to source and share ideas and participate in a citizen-centered society. Social media offer opportunities, and some challenges hamper the accessibility of the platforms. The accessibility of social media platforms is no longer in doubt, but it has become an issue of concern for rural communities, especially those in developing countries. This paper looks into social media accessibility and the opportunities and challenges to define the next step in order to ensure social media accessibility. This paper applied the narrative literature review (NLR) principle to understand the topic and provide the way forward. This paper discovered the need for investment and acceleration of social media accessibility and availability in rural communities to improve empowerment and access to resources.

Keywords: Accessibility, Availability, Digital accessibility, Rural communities, Social media accessibility, Social media

Introduction

Social media has become a familiar ‘word’ in developing countries because of its ability to connect people. However, the accessibility, opportunities, and challenges are still in doubt with mixed reactions from the public. Many researchers have explored the opportunities and challenges of social media in different sectors of society, such as health, education, finance, and many more (Anderson, 2019; Raja, 2016; Brown & Hollier, 2015). The role of social media platforms and their accessibility in rural communities are still questionable. In setting the context of this paper, the paper outlines what social media accessibility and rural communities entail. The paper addresses social media accessibility, the opportunities, and challenges in rural communities by addressing these basic questions: **a)** Is social media available for rural communities? **b)** Is it accessible for rural communities? **c)** What are the opportunities for rural communities? **d)** What are the challenges for rural communities? and **e)** The way forward in making social media available and accessible for rural communities. These questions are begging for answers to address accessibilities in rural communities. Accessibility challenges and barriers are an issue of concern for rural communities, especially those with physical disabilities. According to Brown and Hollier (2015), Social media accessibility impacts people with disabilities into participating in the electronic society (e-society). The accessibility also impacts many people in rural communities. However, good social media accessibility can benefit everyone in the rural communities by bringing all social, economic, political, and educational activities to the people. Although the benefits of web and internet accessibility are known by many (Abuaddous, Jali & Basir, 2016), there are limited or known studies on the opportunities and challenges of social media accessibility in rural communities.

Conference Paper: This *International Conference on Emerging Technology and Interdisciplinary Sciences (ICETIS 2021)* conference paper is published by *JFP Publishers*. This paper is distributed under a Creative Common Attribution (CC BY-SA 4.0) International License.



Research method

This paper deployed secondary data (existing literature) in exploring the opportunities and challenges in social media accessibility in rural communities. There are different literature review methods: narrative, descriptive or mapping, scoping review, aggregative, meta-analysis, and many more. This paper used narrative literature review (NLR) to search various academic online databases to understand the opportunities and challenges in social media accessibility for rural community dwellers. According to King and He (2005), NLR guides the formation of the research topic under investigation. At the same time, Yang and Tate (2012) believed that NLR is a qualitative research methodology to investigate research through a review of past and existing academic research. To effectively apply NLR in a paper, the research topic was formulated – accessibility, opportunities, and challenges of social media – and ways to improve social media accessibility in rural communities were searched. Keywords such as social, accessibility, challenges, opportunities, and others were explored in relevant academic databases such as ResearchGate, Google Scholar, and many others. The suitable papers were collected and analyzed in addressing the questions mentioned above.

Related literature

Social media accessibility and availability in the rural communities

Social media can serve as a tool for inclusivity (Bitzer-Wales, 2014). According to Kulkarni (2018), accessibility has everything to do with the ability to access products, services, environment, or devices for all respective social standings and disabilities. The accessibility recognizes social, political, and economic challenges, aiming to break or eliminate them. Social media accessibility within the context of this paper is centered on access to social, digital technologies, products, and services through social media platforms. Digital accessibility provides the accessibility of social media platforms in rural communities. Digital accessibility provides digital technologies, products, devices, hardware, and services (Kulkarni, 2018). Digital technology accessibility focuses on removing all forms of the digital divide (barriers and obstacles) that drive the center point of social media accessibilities. Social media accessibility promotes a good ground for access to every person with or without disability to participate in society's inclusive social, political, economic, and educational activities. The accessibility and availability of social media contents promote inclusiveness and usage for everyone globally, which benefits everyone with and without disabilities in rural communities. Lack of social media (technology) accessibility and availability deepen the digital divide, whereby improving access and availability will strengthen the 'accessibility' and 'availability' in rural communities.

Digital technologies

Digital technologies promote social media accessibilities and availabilities for everyone in developed and developing countries. Digital technologies are electronic devices such as social media, the Internet, smartphones, telecommunications, and many others. These technologies are sources used to gather, process, interpret and store information (data) to bridge the digital divide to cause digital disruption. The digital divide can be eliminated through digital disruption, which improves decision-making. However, social media accessibilities keep asking if digital technologies are available.

The availability of digital technologies, in this case, social media accessibility, is determined by some factors, which are *infrastructure*, *hardware*, and *software*. Infrastructure in the rural communities is a determinant factor in building people's perception and attitude on social media contents and activities, which open doors for access to education, employment, health benefits, and many more. Infrastructure, such as the Internet and networks, provides the basis for types of equipment that assist in powering social media platforms and other technological components. However, the digital technology *infrastructure* should be improved in order to address the rural communities' critical needs and expectations. Improved infrastructure enhances the accessibility of social media platforms in rural communities.

Hardware is a physical component of digital technology. It houses digital technology and the device components that enable people to interact with social media platforms. The availability of hardware and the associated cost increases the accessibility of social media content. **Software** programs, such as applications, inform the hardware on what to do. Social media platforms have applications that run hardware and software. For example, Facebook, WhatsApp, and many more interact with Android or iOS to provide users with a user-interface experience to engage

with an application. Therefore, any software's perception and ease of use will improve social media accessibility in rural communities. These three factors (infrastructure, hardware, and software) are critical components in social media accessibility in rural communities. When talking about social media accessibility, digital availability comes to mind.

Digital accessibility (social media accessibility)

Current technologies and tools are becoming more accessible for everyone in rural communities (areas). According to Raja (2016), accessibility reduces technological divides (digital divides). Accessibility deals with inclusiveness for the wider population. One can always ask, is digital technology, in this case, social media, accessible for all? To answer the question, Figure 1 presents several factors or barriers such as awareness, culture, cost/affordability, education, availability, ease of use, perception, infrastructure, and policies that affect social media accessibility in rural communities.

Figure 1: Barriers to social media accessibility



Awareness: According to the Internet Society (2018), rural communities have no basic understanding of the application of technology and the benefits it can offer. There is a lack of awareness about the social media platforms' benefits and opportunities in rural communities, which affects their usage. Often, many believe that the platforms are made for young people (youths), difficult to use, distractive, and many more. However, Brown and Hollier (2015) suggest that awareness of online accessibility, including social media, increases accessibility.

Culture: Rural communities are dominated by their culture and traditions. Internet Society (2018) believes that culture could restrict people for different reasons in using technologies. The impact of culture can be a function of lack of training, innovation, digital transformation, education, awareness, infrastructure, and a few others in dealing with social media accessibilities.

Cost/affordable: Cost/affordability can aid the accessibility of social media platforms. According to the Internet Society (2018), developing countries have a challenge with low incomes. The cost of internet connectivity and data in developing countries is high, and many cannot afford it, especially those in rural communities. The income level in the rural communities can determine social media accessibility in the areas. The higher the income, the more likely access to social media platforms, even in rural communities.

Education: There are limited education and training opportunities in rural communities. However, education and training bring economic and social empowerment (Raja, 2016). Lack of education opportunities and facilities in rural

communities plays a critical role in people's social media accessibilities. According to the Internet Society (2018), a lack of appropriate educational infrastructure goes a long way in hindering people in adopting technology.

Availability: Isolated and rural areas may have limited internet access (Internet Society, 2018). The limited access to digital technology and Internet access and availability may determine social media accessibility in rural communities. The availability of the Internet and other infrastructures strengthens social media accessibility.

Ease of use: People in rural communities may find social media platform usage challenging. This can result from a lack of education, training, and perception, impacting the accessibility of social media platforms. Therefore, the ease of use of social media platforms increases accessibility.

Perception and attitude: Rural communities have limited education and training exposure, which defines the adoption of social media platforms. User perceptions and attitudes will affect social media accessibilities.

Infrastructure: There is always a lack of or limited basic infrastructure in rural communities. The lack of infrastructure such as the Internet and other technological equipment in the rural communities will affect social media accessibilities in the area.

Policy: The government is mandated to provide an appropriate policy framework to enable rural development and advancement. The level of developmental policies will foster infrastructural development to enable social media accessibility in rural communities in assisting the populace to be engaged in the digital society. Internet Society (2018) suggests that digital accessibility policy (law and regulations) prepares an environment to innovate technology.

The opportunities of social media accessibility in the rural communities

Social media accessibilities open equal access and opportunities for people in rural communities. The opportunities to be derived from social media accessibilities are many. Still, it begins with equal access and opportunities to education, healthcare, government, employment, healthcare services to the world, and many others. Rural communities lack many basic human and social needs, including technology. The COVID-19 pandemic has laid bare the level of the digital divide that exists in society. Through social media accessibility, rural communities have equal access to information, which improves personal and social well-being. They can access government services and information such as healthcare, education, politics, employment, training and capacity building, and many more in building a human-centric society.

Social media accessibility promotes equal opportunities to communicate, interact, share content, and participate actively and effectively in the digital society. People in the urban settlements (cities and towns) have better opportunities from social media accessibility to share and interact with the rest of the world. The same opportunity should be awarded to rural communities when social media accessibility challenges are addressed. Furthermore, the opportunities can be possible through increased awareness, formulating regulation and policy to bring change.

The challenges to social media accessibility in the rural communities

Institutional context limitations: These limitations encompass different stakeholders, but mandates are placed to accelerate positive accessibilities. According to Kulkarni (2018), access to technologies opens the door for information access for a person with a disability as mandated by the United Nations Convention in the Rights of Persons with Disabilities (UNCRPD). The UNCRPD discussion and documents stressed the need for access and availability of information for persons with disabilities and beyond. However, institutions such as government, private organisations, and others can promote social media and its content accessibilities through inclusivity. Conversely, these institutional actors may unintentionally stand as barriers to promoting the same accessibilities without good policy and willingness.

Technology context limitations: The technology itself is mandated to promote access to information beyond borders. The same technology itself can lead to challenges in carrying rural communities through wrong attitude and perception.

Lack of accessibility awareness: In rural communities, the awareness of social media platforms' opportunities and their accessibilities is limited. The limited accessibility of information brings a challenge in the adoption and access to social media platforms. Abuaddous *et al.* (2016) suggest that the accessibility of web content is challenged by lack of accessibility, especially for those in rural communities.

Limited and lack of resources: Tangible and intangible resources impact web or online accessibility (Abuaddous *et al.*, 2016). Basic resources such as tech centres, internet connection (internet coverage), trained experts, infrastructure, and others are always limited in rural communities. These resources will affect social media platforms' accessibility in rural communities. Lack of awareness and knowledge hinders technology accessibility (Raja, 2016).

Cost and affordability: The high cost of technology limits access and usage (Raja, 2016). Furthermore, the cost of data to access social media platforms hinders the usage and penetration into rural communities because of its economic challenges.

Lack of professionals to understand digital tools: Access to education, training, and educational resources is always limited in rural areas. Rural communities lack professionals and knowledgeable individuals who understand and can manage digital tools to access social media.

Security: Security plays a vital role in the adoption of any emerging technologies. Many are concerned about their personal information regarding online or Internet activities. Everything over the Internet is prone to security threats and attacks. Lack of awareness of social media security will hamper social media accessibility in rural communities. The security concerns involve privacy issues that affect human 'liberal democracies' because of the amount of data humans deposit on social media platforms (Anderson, 2019). The wrong perception of security will affect social media accessibility.

Culture and language: This can influence users' adoption and perception. Social media accessibility depends on users' belief that social media platforms will not interface with their culture and tradition. Rather, the technology deployed in the rural communities should support the indigenous culture and language of the people. Raja (2016) suggests that technology should support local languages.

Regulations: Lack of legal framework and policies affects technology adoption and perception. Regulations will foster courage and a positive perception of the users. The social media accessibility in rural communities depends on the available regulations and policies framework. According to Abuaddous *et al.* (2016), the availability of laws and policies addresses the issue of accessibility of technology. The accessibility includes social media platforms and other emerging technologies. The availability and accessibility of technology are addressed through legislation, laws, regulations, and policies (Raja, 2016).

Unavailable skills: There are limited or no skills to manage and maintain technology in rural communities due to a lack of technological investment and infrastructure. Social media accessibility in rural communities is a function of skilled personnel and individuals.

Availability: Lack of technological infrastructure in rural communities makes it difficult for social media accessibility. The accessibility of social media is the function of its availability in an area.

Return on investment: The use of technology keeps increasing, but the users want to understand the benefits and the impact on their lives and activities. Investors want to know whether the amount invested can be regained within a particular period. This concern impacts investment in the aforementioned resources and social media accessibility in rural communities.

Way forward in improving social media accessibility in the rural communities

Technology is evolving continually and touching humans in many ways. Addressing social media accessibility in rural communities involves the following:

Create awareness: Awareness drives adoption and implementation. According to Raja (2016), technical assistance, workshops, training, campaigns, and capacity-building are necessary to create awareness. These programmes are essential for addressing social media accessibility in rural communities and equipping rural dwellers with the required knowledge and skills to function digitally.

Investment and infrastructure building: The investment in the necessary infrastructure that can enable social media accessibility in rural communities comes in various forms. They can be investing and building emerging technology, smart technology infrastructures, and creating policy and legislative frameworks.

- ❖ **Emerging technologies:** These are technology tools and applications such as AI, blockchain, machine learning, social media, and others with disruptive features to change lives. Government, private sectors, and other stakeholders can invest and build great infrastructure in the rural communities to bring technology such as social media accessibility closer to the people. Emerging technologies and devices have the ability to improve access to information and empowerment for those in rural communities.
- ❖ **Smart technologies:** Today, the world is evolving technologically. This advancement comes in various ways, such as smart cities, smart townships, smart schools (education), smart healthcare, smart human, smart streets, smart roads, smart communities, smart homes, smart buildings, and so many. These smart technologies disrupt the status quo in addressing basic and complex human and social challenges. The ability of the government and other stakeholders to invest and build infrastructures that incorporate smart technologies will equip the society in handling common rural community challenges. Then, social media accessibility be addressed in rural communities.
- ❖ **Improve legislation and policy:** Countries can create a policy framework to facilitate technology accessibility at the local level (communities) (Raja, 2016). Improving the legislation and policy landscape to increase social media accessibility involves creating guidelines and codes of conduct to increase implementation. Create technical requirements and standards, define a language and quality of service regulations (Raja, 2016).

Digital equity and equality: Provide access to social media resources and technology accessibility. According to Miller (n.d.), access to digital tools and technologies may guarantee equity. However, it assists in eliminating different forms of digital divides that may exist in rural communities.

Eliminate the digital divide: Our societies and communities are digitally divided between those who have and those who can and cannot afford it. The digital divide can be defined as social and digital inequality between people accessing and using technological tools (Chisango & Marongwe, 2021; Ercikan, Asil & Grover, 2018). The digital divide hinders the accessibility of social media and other digital tools in communities. Going forward, this digital divide should be eliminated through investments, creating awareness, and other things. Chisango and Marongwe (2021) suggest that digital skills, knowledge, competencies, usage and material access, and many more, should be afforded to everyone towards eliminating the digital divide in societies and rural communities.

Conclusion

Social media accessibility is good for social and human development in rural communities. Empirically, research on social media accessibility is missing in the literature, especially in addressing rural communities' challenges. This paper has uncovered different opportunities that rural communities can derive from social media accessibility in their area. This paper also discovered the challenges that can prevent the opportunities from being realised. Furthermore, the study provided ways to manage and address social media accessibility in rural communities. Social media accessibilities should be explored more to understand the level of facilities in rural communities that aid the adoption and usage of social media platforms.

ORCID

Joshua Ebere Chukwuere  <https://orcid.org/0000-0001-8366-4328>

References

1. Abuaddous, H. Y., Jali, M. Z., & Basir, N. (2016). Web accessibility challenges. *International Journal of Advanced Computer Science and Applications (IJACSA)*.
2. Anderson, T. (2019). Challenges and Opportunities for use of Social Media in Higher Education. *Journal of Learning for Development*, 6(1), 6-19.
3. Bitzer-Wales, V. (2014). Social Media: Accessibility Issues and Solutions. Retrieved from <https://digital.gov/2014/06/30/social-media-accessibility-issues-and-solutions/>
4. Brown, J., & Hollier, S. (2015). The challenges of Web accessibility: The technical and social aspects of a truly universal Web.
5. Chisango, G., & Marongwe, N. (2021). The digital divide at three disadvantaged secondary schools in Gauteng, South Africa. *Journal of Education (University of KwaZulu-Natal)*, (82), 149-165.
6. Ercikan, K., Asil, M., & Grover, R. (2018). Digital divide: A critical context for digitally based assessments. *education policy analysis archives*, 26, 51.
7. Internet Society (2018). Digital Accessibility Guidelines – Building an Accessible Internet. Retrieved from <https://www.internetsociety.org/resources/doc/2018/digital-accessibility-guidelines-building-an-accessible-internet/>
8. King, W. R., & He, J. (2005). Understanding the role and methods of meta-analysis in IS research. *Communications of the Association for Information Systems*, 16(1), 32.
9. Kulkarni, M. (2019). Digital accessibility: Challenges and opportunities. *IIMB Management Review*, 31(1), 91-98.
10. Miller, J. (n.d.). 5 ways to make technology more accessible to more students. Retrieved from <https://www.teachthought.com/technology/5-ways-make-technology-accessible-students/>
11. Raja, D. S. (2016). Bridging the disability divide through digital technologies. *Background paper for the World Development report*.
12. Yang, H., & Tate, M. (2012). A descriptive literature review and classification of cloud computing research. *Communications of the Association for Information Systems*, 31(1), 2. pp?

