

Awareness and Utilisation of ICT Tools for Community Development in Oyo State, Nigeria

¹Ganiyu Oluwaseyi Quadri; ²U. C. Osu

¹Kenneth Dike Library, University of Ibadan; ²Department of Adult Education, Faculty of Education, University of Ibadan, Ibadan, Nigeria

Abstract

The study aimed at investigating the awareness and utilisation of ICT tools for promoting community development in Oyo state, Nigeria. The study employed descriptive survey design and multi-stage as well as purposive sampling techniques. The questionnaire with reasonable reliability coefficient was used to obtain information from the respondents. Descriptive statistical tools comprised simple percentages, mean and standard deviation were used to analyse the obtained data. The Technology Acceptance Model (TAM) was the framework adopted in the study. The empirical finding revealed that there was an awareness of ICT tools among the community development officer and that majority of community development officer are familiar and use ICT tools especially WhatsApp, Facebook, X, Telegram among others for disseminating information. The findings also revealed that more than half 66.7% of the respondents agreed that they are familiar and use digital technology for community development. In addition, the study found that there were challenges associated with utilisation of ICT among the community development officer which ranges from lack of electricity, poor accessibility, inadequate telecommunication infrastructure to insufficient financial resources for technology integration. The study concluded that there is high awareness level of ICT tools usage among community development officer in Oyo State, but, the utilisation level is low.

Keywords: Awareness, ICT tool, Utilisation, Community Development, Nigeria.

Introduction

Digital technologies are powerful tools that drive societal transformation by empowering, enlightening, and enriching people. They foster continuous, lifelong learning, promote innovation, and build core competencies and competitive intelligence globally, thereby contributing to sustainable development. Fajimi (2020) explains that digital technologies have revolutionized community development practices and transformed communities with the advent of the internet and low-cost information and communication technology. This underscores the need to retool community development practices in Nigeria, as technology plays a crucial role in every facet of the economy and work. In today's world, technology is useful in every facet of the economy and work. Information in this age comes in multiple formats such that they help to understand or interpret certain information (Robinson, 2020). Digital technologies are increasingly prevalent in developing world and as such are being used in variety of ways to promote developmental efforts. Community development involves residents coming together to identify and address their needs, pooling resources to improve their community (Issa, 2001; Osu, 2019). ICT tools can significantly enhance this process by facilitating communication and resource coordination. Although ICT has enormous potential to enhance community well-being, there are relatively few examples of sustained community networks built around ICT, particularly in

developing countries like Nigeria. This study addresses the gap by exploring the awareness and utilisation of ICT tools in Oyo State Nigeria.

Technology has been increasingly available for up to two decades (Abiona & Osu, 2020). Early work in the field has had mixed success (O'Neal 2001), and whilst the lack of external funding for equipment can be a barrier to success, provision in itself is no guarantee of successful adoption in community (Harris 2001; Byrne and Wood-Harper 2000). Community development has recently seen a shift in approach worldwide, hence, it is expected of the people living in the various communities that they will pool their resources together and channel them toward the communities' overall growth.

Community development is a process that requires expertise, and one component of its methodology is the belief that communities cannot be assisted unless they themselves agree to the process, which is referred to as community mobilisation. In other words, communities cannot be helped unless they are mobilized. This is a process in which community action, either internally or externally promoted, is planned, carried out, and assessed by the community's individuals, groups, and organizations on a participatory and consistent basis to improve health, hygiene, and education level as well as better overall living conditions in the community. Julius Nyerere (2019). According to Kim Braun and Ukaegbu (2020), community development projects are evaluated based on the degree to which they are anticipated to contribute to an improvement in the quality of life for a specific population. Participation from members of the community is required at every stage of the implementation of activities geared toward community development. People in the community have had both explicit and implicit goals for community development throughout the course of history, with the overarching goal being to achieve, through concerted effort, a better life for themselves and future generation (Egenti, 2020).

Information and communication Technology (ICT) becomes a catalyst for social transformation in any successful community development. The function of digital technology in community development is to offer people aside the wider ecosystem power and a voice (Quadri, 2012). Information Communication Technology (ICT) and supporting technologies have a substantial impact on the socioeconomic development in various regions of the world (Sein, Thapa, Hatakka & Saeb, 2018; Alasa & Quadri, 2022). In today's world, ICT plays a vital role in improving people's lives. Even though technology has transformed every aspect of our lives, significant gaps remain. The importance of technology in promoting growth is demonstrated by straightforward solutions like informing the citizenry via the Internet-connected gadgets. The accomplishment of these ideas will be increased when they are replicated with residents' active participation. It enhances quality of life when combined with developmental therapy. Hence, charitable organisations, government agencies and civic organizations must integrate technology into their developmental efforts.

Oloruntoyin and Adeyanju (2013) reported that over the past decade, new applications of ICT enhance service delivery, information dissemination as well as public access in Nigeria's development. This was also supported by Quadri and Quadri (2015) who reported that application ICT into services especially in the library will improve routine of professional librarian. ICT comprises a diverse set of technological tools (Blurton, 2004). Although stronger economic growth is

strongly tied to higher internet penetration, it has the potential to boost our economic status in the global economy (Ren, Conglin Huang, Ying Liu, & Jingjing Ren, 2017). Disruptive innovation technologies are crucial for addressing community needs in sectors such as healthcare and education. Therefore, it is critical to create technologies that solve community challenges in an acceptable way. By incorporating regular feedbacks from these technologies, disruptive ones can be designed for maximum acceptance. It is crucial that stakeholders in any educational system identify the need to incorporate technology into their practices.

Opportunities offered by technology that are both affordable and scalable may be swiftly expanded up across the country. India might be converted into a knowledge sanctuary by introducing new concepts that give people academic and active learning experiences. It is also possible for community development experts or agents to assist with the day-to-day activities of a community by using digital technology. Collaboration is the key to repurposing existing technology and utilizing it more effectively. The term ICT encompasses a wide range of communication devices, including radio, television, cell phones, computers, networks, satellite systems and so on, as well as all the services and applications related to them, such as video-conferencing, Zoom, and webinars (Abiona & Osu, 2016). ICT technologies are used by skilled professionals like community development officers. Community development is a multifaceted process that is defined as a practice-based profession and academic subject concerned with the organisation, education, and empowerment of individuals in their communities (International Association for Community Development, n.d.). In other words, community development is the process through which individuals aim to improve a given issue in their communities (Gallardo, 2016).

Ugochukwu (2010) suggests that community development is a restructuring mechanism with economic and social goals that is set to provide rural people with what they need and encourage them to participate in development. This includes a variety of multi-sectoral initiatives, such as improving agriculture, promoting industries, developing infrastructure and social services, and establishing a decentralised framework to involve the people. One of the most fascinating advancements of the twenty-first century is the acceptance and use of digital technology tools for community development practice delivery. Literature shows the belief that the new technologies have the potentials to promote community development practices (Fu, 2013). It is against this background; this study examines digital technologies in community development practice prospects and challenges in Ibadan.

Statement of the problem

The advent of ICT tools has transformed the landscape of community development globally. However, many communities in Oyo State, Nigeria, remain unaware of the potential benefits of ICT tools, hindering their ability to leverage these tools for sustainable development. Furthermore, even when awareness exists, use of ICT tools remains a significant challenge. Limited infrastructure, high costs, and inadequate digital literacy skills restrict the ability of community members to effectively utilize ICT tools. This exacerbates the digital divide, leaving communities in Oyo State lagging behind in terms of development. The ineffective utilisation of ICT tools for community development in Oyo State, Nigeria, necessitates an investigation into the factors influencing awareness and utilization. By exploring these factors, researchers can identify

strategies to enhance the adoption and effective use of ICT tools, ultimately driving sustainable development, improving quality of life, and bridging the digital divide in Oyo State, Nigeria.

Objective of the study

The main objective of the study is to investigate awareness and utilisation of ICT tools for community development in Oyo State, Nigeria while the specific objectives are to:

- i. find out the level of awareness on ICT usage for community development in Oyo State, Nigeria;
- ii. find out accessibility of ICT tool for community development in Oyo State, Nigeria;
- iii. identify the problems affecting the use of ICT for community development in Oyo State, Nigeria.

Research questions

The following research question were answered in the study:

- i. What is the level of awareness of community developments officers to the use ICT in promoting community development in in Oyo State, Nigeria?
- ii. What is the level of ICT tools used in the practice of community development by community development officers in in Oyo State, Nigeria?
- iii. What are the problems associated with the use of ICT for community development practices in in Oyo State, Nigeria?

Theoretical Framework

The present study is anchored with Technology Acceptance Model (TAM) founded by Davis, Bagozzi and Warshaw (1989). The theory is mainly useful in describing, predicting as well as explaining individual behaviour toward technology use. The TAM was mainly developed to understand the factors affecting technology acceptance and use in an institution/organisation (Ramayah 2006). Many researchers have used TAM to explain acceptance/intention of individuals to use diversity of technologies. TAM affirms that individual behavioural intention can determine technology use. The TAM posits that perceived ease of use and perceived usefulness as constructs influences individual's attitude towards behavioural intention to use information technology. The TAM theory is related to the present study by explaining community development officer intension to easily used technological tools effectively to promote or develop community. The theory is commonly used in technological environment. Hence, making it a suitable framework for the present study.

Research Methodology

The research design for the study is survey design. According to Nworgu (2006), survey design is employed in a study to collect data based on the opinions of the representative sample of the population or sometimes from the entire population. Hence, the descriptive survey design was adopted for this study as opinions of the subjects would be sought. The population for the present study comprised all one hundred (100) community development officers in Oyo State, Nigeria. There are thirty-three (33) local government in Oyo State from which six were randomly selected for this study viz: Ibadan North, Akinyele, Ibadan South East, Ibadan South West, Orelope and Itesiwaju local government. Also, the accidental sampling technique was used in selecting community development officer in the

selected local government area in Oyo government area Oyo State. Accidental sampling technique means that the researchers administered the instruments to only the community development officers that are able to reach in the process of data collection.

The study made use of questionnaire to gather information from the respondent. The questionnaire tagged “ Awareness and Utilisation of ICT Tools for Community Development (AAUITCD) in Oyo State, Nigeria”. The questionnaire comprises 3 sections ‘ A, B and C. Section ‘ A ’ contained information on the awareness of ICT tools for community development, section ‘ B ’ contained information on the level of ICT tools utilisation for community development and Section ‘ C ’: contained information on challenges to the use of ICT in community development. The instrument undergone content and face validity. The reliability of instrument was established with the aid of Cronbach Alpha which yielded 0.70 reliability coefficients. Copies of questionnaire were administered personally with the help of three trained research assistant. The administration of the questionnaires took about four weeks. The demographic variables and research questions were analysed, using frequency counts and simple percentage, mean and standard deviation.

Presentation and Interpretation of Results

The results are presented using the research questions.

Research question 1: What is the level of awareness of community developments officers to the use ICT in promoting community development in Oyo State?

Table 1: Level of ICT tools awareness and used by community development officers in Oyo State, Nigeria

S/N	ICT Tools	SA	A	D	SD
1	WhatsApp is a device for sharing information	42 63.6%	21 31.8%	34 35.1%	0 0.0%
2	With the use of projector/slides, community development practice would be promoted	34 35.1%	4 54.5%	23 34.8%	4 6.1%
3	Video is used to facilitate learning in community development practice	30 45.5%	9 13.6%	5%	20 30.3%
4	Facebook has a wider coverage in community development practice	38 57.6%	0 0.0%	13 19.7%	15 22.7%
5	Telegram is very simple to operate and disseminate information in community development practice	40 60.6%	10 15.2%	12 18.2%	35 36.0%
6	X is a type of ICT tool for community development information	41 62.1%	35 36.0%	3 4.5%	22 33.4%
7	Video conferencing/teleconferencing can be used for teaching in community development	48 72.7%	0 0.0%	2 3.0%	16 24.3%
8	Interactive whiteboard can be used in teaching	38 57.6%	0 0.0%	3 4.5%	25 37.9%
Weighted Mean		3.52			

Note: Agree and Strongly Agree are aggregated to be Agree, while Strongly

Disagree and Disagree are Disagree.

Table 1 indicated that 63(95.4%) agreed that WhatsApp is a platform for sharing information whereas 34(35.1%) disagreed. Other ICT tools used by the respondents for sharing information and promoting community development officers in Oyo State are project/slides, Facebook, Telegram, X, video/audio conferencing and interactive whiteboard. It is obvious that the analysis above reflected that the community development officers are aware of ICT tools and also used the tools to promote and develop community in Oyo State, Nigeria. The results further revealed a high level of awareness of ICT tools for community development by community development officers in Oyo State, Nigeria since the weighted mean of 3.52 is greater than the criterion mean of 2.50 set as benchmark for high level of awareness of ICTs tools.

Research question 2: What is the level of ICT tools utilisation for community development by community development officers in Oyo State, Nigeria?

Table 2: Level of ICT tools utilisation for community development by community development officers in Oyo State, Nigeria

S / N	ICT Tools Use	SA	A	D	SD
1	I am familiar with digital technology being used for community development	44 66.7%	0 0.0%	8 12.1%	14 21.2%
2.	I use technology routinely without much consciousness	38 57.6%	1 1.5%	20 33.3%	7 10.6%
3.	I use technology such as WhatsApp, Facebook on regular basis for community development practice	38 57.6%	0 0.0%	3 4.5%	25 37.9%
4.	I aspire to acquire more knowledge about the use of technology for teaching community development	1 1.5%	19 28.8%	28 42.4%	18 27.3%
6.	I do not know how to use ICT for teaching in community development.	0 0.0%	38 57.6%	12 18.2%	16 24.2%
6.	I am capable of using ICT tools for community development practice	0 0.0%	18 27.2%	24 36.4%	24 36.4%
7.	I rarely go on Facebook to seek knowledge	0 0.0%	24 36.4%	27 40.9%	15 22.7%
7.	I stay online for about 6 hours per day	1 1.5%	29 44.0%	2 3.0%	34 51.5%
9.	I can access Facebook easily with my android phone	0 0.0%	36 54.5%	4 6.1%	26 39.4%
Weighted mean 3.58					

Note: Agree and Strongly Agree are aggregated to be Agree, while Strongly Disagree and Disagree are Disagree.

Table 2 narrates ICT tool utilisation for community development. more than half 44(66.7%) of the respondents agreed that they are familiar and use digital technology for community development, 39(59.1%) agreed that technology is used for routine without much consciousness. While 38(57.6%) attested that they do not know how to use ICT for teaching in community development. However, large proportion 48(72.8%) of the respondents disagreed on not capable of using ICT tools for community development practices, closely followed 42(63.6%) by those who disagree that they rarely use Facebook. It is evidence in table 2 that the community development officers are actually aware of the ICT tools and the utilisation by community development officer was actually high going by the weighted mean of 3.58 which is actually greater than the criterion mean of 2.50 set as benchmark for high level of ICT tools utilisation.

Research question three: Are there problems associated with the use of ICT utilisation for community development practices in Oyo State?

Table 3: Challenges associated with the use of ICT utilisation for community development practices in Oyo State

S/N	Challenges	S A	A	D	SD
1	Lack of information on new technologies	2 3.0%	28 42.4%	18 27.3%	18 27.3%
2	Inadequate telecommunication s infrastructure	35 53.0%	2 3.0%	21 31.9%	8 12.1%
3	Inadequate access to electricity or frequent power shortages	44 66.6%	1 1.5%	10 15.2%	11 16.7%
4	Insufficient financial resources for technology integration	46 69.7%	0 0.0%	3 4.5%	17 25.8%
5	Poor technical and physical infrastructure for teaching	44 66.7%	0 0.0%	2 3.0%	20 30.3%
6	Problem of accessibility	48 72.0%	4 6.0%	2 .0%	16 24.2%

Weighted Mean 3.41

Note: Agree and Strongly Agree are aggregated to be Agree, while Strongly Disagree and Disagree are Disagree.

Table 3 presented challenges encountered in ICT usage for community development by community development officer in Oyo State, Nigeria. Large number of the respondents 52(78.0%) affirmed that they were faced with the problem of accessibility, followed by insufficient financial resources for technology integration with 46(69.7%). Other challenges were poor technical

infrastructure for teaching, inadequate access to electricity and so on. While 36(54.6%) disagreed that they were face with lack of information on new technology. This implies that it is clear from the above analysis that there are myriads of challenges hindering ICT tools use for promoting community development in Oyo State. The implication to be drawn from the result is that, inadequate telecommunications infrastructure, inadequate access to electricity or frequent power shortages, insufficient financial resources for technology integration, poor technical and physical infrastructure for teaching and problem of accessibility are major barriers to ICT tools usage for community development in Oyo State, Nigeria.

Discussion of findings

The findings from research question one on awareness of ICT tools among the community development officer revealed that 63(95.4%) agreed that WhatsApp is a platform for sharing information whereas 34(35.1%) disagreed. Other ICT tools used by the respondents for sharing information and promoting community development officers in Oyo State are project/slides, Facebook, Telegram, X, video/audio conferencing and interactive whiteboard. This result is in agreement with Osu (2021) who reported that community development officers are mainly aware of various ICTs like WhatsApp, Facebook, projector/slides and video forums. In addition, Selwyn (2009) affirms that respondents in the United Kingdom are ware of ICTs tools such Facebook, X, Google+ and meet for community development.

Findings from research question two sought ICT tools utilisation for community development and found that more than half 44(66.7%) of the respondents agreed that they are familiar and use digital technology for community development, 39(59.1%) agreed that technology is used for routine without much consciousness. While 38(57.6%) attested that they do not know how to use ICT for teaching in community development. However, large proportion 48(72.8%) of the respondents disagreed on not capable of using ICT tools for community development practices, closely followed 42(63.6%) by those who disagree that they rarely use Facebook. This finding is in tandem with that by Degryse (2016); Ogedengbe and Quadri (2020) who reported that ICT tools are capable of improving services delivery in every sphere of human endeavour as well as fostering communication within the community. Bashir et al. (2011) further submitted that bridging digital divide between rural and urban areas depend heavily on increasing ICT awareness and use in rural areas.

The third research question sought the challenges to the use of ICT tools by community development officers and found that problems such as lack of electricity, network problem, inadequate telecommunications infrastructure, poor technical and physical infrastructure for teaching, poor accessibility were some of the identified challenges. This is in agreement with the finding by O'Neal (2001); Osu (2019) who reveals that lack of equipment, funding, poor ICT infrastructure, technical know-how and so on were the listed hiccups hampering ICT tools usage among community development officers. Similarly, Bala et al. (2002) affirmed that digital technology in communities is hampered by a number of problems ranging from expensive technology infrastructure, internet connectivity, inadequate technological skills, erratic power supply to poor technical know-how.

Conclusion and Recommendations

The study concluded that there is awareness of ICT tools among community development officer in Oyo State but the usage was low. Majority of community developmental officers agreed that ICT devices like WhatsApp, Facebook are used in sharing vital information and promoting the community. The part of the problem associated with use of ICT devices are lack of electricity, poor network, poor technical and physical infrastructure for teaching. Based on the findings of this study, the following recommendations are raised.

1. There is the need for community development experts to adopt and adapt relevant technologies in community development practices.
2. Government should introduce a workable ICT policy and liaise with other stakeholders in community development to ensure a visible improvement in community development practices.
3. There is need for alternative electricity supply like solar inverter for community development officer to have access to ICT use.
4. There is need for network provider to increase the bandwidth so as to improve on quality of internet connectivity or network.
5. There is need to sensitized community development officers to use more of ICT device in their daily work for this will improve quality of their work through training and re-training programme.

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