**Libraries As Facilitators of Digital**

**Inclusion for Sustainable Development**

**AGBATO Elizabeth Folasade (CLN)**

*College Library*

 *Virtual Section*

*Federal College Of Education(Special), Oyo*

*Email: elizabethfolasadeagbto@gmail.com*

**Abstract**

*Occupational stress is a pressing challenge undermining the health and performance of acad As stated in the UN transformation agenda, inclusive technology use and access are essential to sustainable development. Therefore, bridging the digital divide through digital inclusion has emerged as a crucial objective for educational establishments such as libraries. From a Nigerian perspective, this paper aims to investigate how libraries may support digital inclusion for sustainable development. The study found that libraries play a key role in promoting digital inclusion by serving as hubs for digital acceptance, literacy, and accessibility. This has a knock-on effect on digital equality sustainable development for everyone. Libraries in Nigeria, particularly those affiliated with academic institutions, are leading the charge in promoting digital inclusion as a means of attaining sustainable development.*

**Keywords:** Libraries, Digital acceptance, Digital accessibility, Digital inclusion, Digital literacy.

**Introduction**

Libraries are described as a growing organism by Dr. S.R. Ranganathan, the pioneer of Indian librarianship, in his fifth rule of library science. One must carefully plan in order to live and thrive in this rapidly evolving environment where new technical advancements are made on a daily basis. The task of developing sustainable plans to maintain library operations into the future is now at hand. Libraries are an essential tool for the advancement of society. Through channeling their user community, they can function as a quantum energy to start reforms and beneficial consequences for a sustainable environment, fulfill environmental obligations and provide resources following an evaluation of community needs. It is anticipated that the UN's framework for sustainable development will encourage member states' overall development, expansion, and advancement. Thus, through a variety of initiatives, projects, and structures, nations, organizations, institutions, and people are working to realize this agenda to improve our planet. Information and communication technologies, or ICTs, are thought to be a major factor in accomplishing this sustainable development. The development framework's aims can all be achieved more quickly with the use of these technologies (Tjoa & Tjoa, 2016; Jones et al., 2017). The aim of digital inclusion is thus made possible by the availability and accessibility of ICT infrastructures, services, and skills, which allow people to participate in the global economy and become citizens of the "global village" (The International Telecommunication Union, 2017). Digital equality is the state in which everyone has access to and has the ability to fully utilize ICTs for socioeconomic gains. Digital inclusion, which includes the activities necessary to ensure that everyone (individuals and communities) has access to and uses ICTs, is aimed at achieving this goal (National Digital Inclusion Alliance in Frank et al., 2021). Digital gaps persist across the social stratification and development taxonomies of nations, despite the social and economic benefits of digital inclusion to individuals and society (Bradshaw, 2011) and the spike in support for it (Sanders & Scanlon, 2021). Research has shown that the gap in digital inequality is still growing, particularly between high and low income groups (van Deursen & van Dijk, 2019); between urban and rural areas (Prieger, 2013); and between developed and developing nations (Ho & Tseng, 2006; Dijk, 2020). However, each nation has a different digital inclusion index, which gauges usability, cost, and accessibility. ICTs and global interconnection are acknowledged as having the power to advance humankind and close the current digital gap in the United Nations' 2030 Agenda for Sustainable Development (United Nations, 2015). This explains, in an inclusive way, why ICTs are prominent in the agenda, particularly in relation to goals 4b, 5b, and 9c. To close the digital divide, the United Nations Department of Economic and Social Affairs (2021) said that by 2030, all people must have inexpensive access to the Internet. Governments need to encourage universal access to ICT infrastructures, foster the development of digital skills and literacy, and raise awareness of the benefits of utilizing the internet. Libraries, as a significant player in the development agenda, ought to enhance their responsibilities in digital inclusion to facilitate the achievement of sustainable development.

**SDGs (Sustainable Development Goals) and Libraries**

The United Nations has established 17 Sustainable Development Goals, also known as Global Goals, to achieve the dual goals of promoting peace and harmony between people and the environment for the present and the future. Achieving the objectives is also aided by libraries, which serve as the main hub or node for the access and spread of knowledge. They will continue to achieve the objectives (beyond 2030) by given assistance to research and educational endeavors through access to credible and authentic materials. Libraries offer to empower people for the rest of their lives. A brief discussion of how libraries might support certain specific Sustainable Development goals is provided in the section below:

(1) SDG 4: Quality Education Libraries contribute to community literacy and lifelong learning as information centers. They thrive to provide seamless access to digital resources and educational programs in institutions/organizations.

(2) SDG 5: Gender Equality As a social institute, libraries can educate people by organizing events or programmes to address gender-biased issues and eliminate the prejudices.

(3) SDG 8: Decent Work and Economic Growth Libraries can promote economic growth by:

- informing people about local business opportunities and encouraging them for indigenous businesses to showcase the cultural heritages.

- guiding for career development, job search and entrepreneurship.

(4) SDG 10: Reduced Inequalities Libraries promote diversity and support social inclusivity by providing information access to one and all members of the community.

(5) SDG 11: Sustainable Cities and Communities Libraries ensure interactivity between diverse community groups and foster co-cultural, interdisciplinary learning.

(6) SDG 16: Peace, Justice and Strong Institutions Libraries act as a strong justice institution by making citizens aware of legal resources and human rights. They can host events to spread dialogue, resolve conflicts between community members.

(7) SDG 17: Partnerships for the Goals Libraries can effectively collaborate with local bodies, educational organizations, and business institutions to collectively attain sustainable development goals for fostering community enrichment. In a broader sense, actualization of these goals will furnish healthy growth of libraries for ages to come.

**Libraries As a Facilitator of Digital Inclusion for Sustainable Development**

**Libraries as Facilitators of Digital Acceptance in Nigeria**

An essential component of the adoption and use of technology is digital acceptance. Teo (2011) states that a user's desire to use technology for its intended purposes is a sign of technology adoption. It is now more crucial than ever to assess technology acceptability since technology is being adopted in an attempt to improve organizational performance (Park et al., 2022). In Nigeria, initiatives have been undertaken to encourage the adoption of digital technology in the small and medium-sized and financial sectors (Awoniyi, 2022; Okundaye, 2016). But among the most notable has been education, where libraries, by means of digital tools, resources, and training, are leading the charge in fostering digital acceptance, inclusion, and usage. This is consistent with the global practice, in which libraries play essential roles in enabling access to resources and technologies for development. Regardless of their kind, these libraries are set up to give their patrons the facilities and information resources they need to support their teaching, studying, and research endeavors. Aiyebelehin et al. (2018) emphasized that libraries are a natural setting for presenting citizens with new ideas and technologies because they are development partners. In order to fully satisfy the constantly evolving requirements of their patrons, libraries take the effort to integrate digital technology with their operations and services, as noted by Adeleke, Ojokuku, and Ojo (2022). Many libraries in Nigeria are working to encourage the use of digital resources by giving patrons access to them, conducting workshops and training sessions, partnering with IT businesses, and setting up digital spaces. Evidence from Nigerian libraries where access to digital tools and resources has aided in the acceptance of digital technology was documented by Gani and Magoi (2014).

Nigerian libraries have implemented a crucial tactic to encourage the adoption of digital technology: the development and distribution of access to networks and technologies that are typically out of reach or prohibitively expensive for the general public. Recent research (Sadiku et al. 2021, and Igbo et al. 2022), indicates that there are more libraries in Nigeria offering digital resources and services to promote digital acceptability. It should be highlighted that while the majority of the work to promote digital acceptance is taking place in the financial and educational sectors, these efforts have not been supported universally. It appears that citizens who do not participate in these areas are left out of this. Nigeria's digital penetration has been steadily declining as a result of the great majority's exclusion from the platforms meant to encourage digital access and acceptance (Helgi Analytics, 2022). Libraries should extend their responsibilities to cover people who are not directly under their purview. This could be accomplished more successfully by giving public libraries—which have several goals—greater authority to raise awareness of and improve access to digital technology (Aiyebelehin, et al., 2018). The majority of academic libraries' initiatives to promote digital acceptance won't have a national impact until this is accomplished.

**Libraries As Facilitators of Digital Literacy in Nigeria**

In this fast-paced, technologically-driven world, where everyone must universally acquire digital skills in order to live well and take an active part in society, digital literacy is a vital survival skill. A draft framework known as the National Information Technology Development Agency Framework (NITDA) was created by the Nigerian National Information Technology Development Agency in 2021 in response to this need. Its goal was to establish a curriculum for educating Nigerians from all backgrounds so they could actively participate in the fourth economic revolution, which will be centered entirely around digital technologies. The NITDA made it quite clear that:

*In order for Nigeria to improve its digital advantage and build sustainable prosperity, it must prepare for the challenges of a 21st century dynamic work environment. Building a digitally-skilled workforce will accelerate Nigeria’s economic growth and development (NITDA, 2021, p. 9)*

The goal of putting this framework into practice is to assist the government in realizing its audacious goal of raising the percentage of digital literacy from approximately 50% to 95% by 2030 (Adepetun, 2022). Positive evidence of digital capacity among Nigerian youth is currently available. In addition to direct government measures, other stakeholders' actions—particularly in the education sector—have begun to positively impact the younger generation.

According to Tyohemba (2023), Tertiary Education Trust Fund (TETFund), a government organization in Nigeria in charge of funding infrastructural and human capacity development, has made postsecondary institutions' commitment to developing digital literacy a top priority. As a result, the tertiary institutions' libraries have evolved into the hubs for various TETFU-supported projects. This is mostly because, despite a lack of resources, Nigerian libraries have made an effort to support and foster the development of digital skills. Adeleke, Ojokuku, and Ojo (2022) stated that industry-academia cooperation is essential for Nigeria to realize its goal of becoming a digital economy for security and prosperity. This emphasizes the roles that libraries must play in making sure that technology is not just available and accessible but also that people have the digital literacy and proficiency to use it for both individual and societal growth.

Adeleke, Ojokuku, and Ojo (2022) claimed that in order to solve societal problems and challenges, Nigerian tertiary institutions—and, consequently, its libraries—need to enhance their strategies for capacity development to keep up with the rapidly evolving digital innovations. The facilities and resources offered by electronic libraries have given the majority of digital natives that predominate on Nigerian tertiary institution campuses the chance to be touched by libraries and acquire valuable digital skills. The issue of low digital proficiency among library users persists despite Nigerian libraries' best attempts to offer digital materials and tools for improving digital literacy (Odu, & Omosigho, 2017). All kinds of libraries are now tasked with promoting digital literacy by offering learning resources that give users practical knowledge of computer literacy as well as media and information literacy. While considering this mandate, it is important to keep in mind that Nigerian libraries continue to face obstacles in the form of inadequate infrastructures, a lack of skilled labor, and weak policies regarding digital literacy that hinder the advancement of digital inclusion.

**Libraries as a Facilitator of Digital Accessibility in Nigeria**

Encouraging digital accessibility in Nigeria is essential to guaranteeing that the country fully engages in the global digital economy and to offer chances for swift development. According to the World Bank (2019), Nigeria "can fully unleash new economic opportunities, create jobs, and transform people's lives with improvements in digital connectivity, digital skills, digital financial services, and other core areas of digital development." Nearly 60% of Nigerians still do not have access to current digital tools, despite significant advancements in the country's digital tool and technology landscape (Ogune, 2021). Nigerian libraries have been in the forefront of advancing digital inclusion through digital accessibility in Nigeria. Since librarians started integrating ICTs for library service delivery in the 1970s, Nigerian university libraries have aggressively adopted platforms for delivering digital information resources and technologies to enhance digital accessibility (Gani & Magoi, 2014). Despite the various libraries' efforts, Rabiu, Ojukwu, and Oladele (2016) conducted a thorough analysis of the accessibility of digital resources and tools provided by Nigerian libraries and discovered that the availability of digital resources is rather low. In a related study, Tayo, Thompson, and Thompson (2016) found that very few people in the majority of Nigeria's rural and 63 suburban regions had any kind of internet access. A number of investments have been undertaken, mostly in the education subsector, in light of the low rate of digital access. To address this challenge, Igbo et al. (2022) report that the majority of university libraries in Nigeria now have websites, institutional repositories, Web-OPACs, online databases, and electronic resources. These various tools and resources have made digital accessibility easier.

**Conclusion**

For people and nations alike, the digital age has brought with it both new opportunities and difficulties. With the help of digital tools and services, people are overcoming environmental constraints and long-standing barriers to financial independence. Actually, the digital economy is taking over as the main economic sector, and the only countries benefiting from these opportunities are those that support digital inclusion. Participation is the key to reaping the benefits of the digital economy. Libraries, particularly those affiliated with academic institutions, are therefore in the forefront of promoting digital acceptability, digital literacy, and digital accessibility in order to facilitate digital inclusion. Due to inadequate financing, a shortage of people with digital literacy, and a lack of digital infrastructure to support digital inclusion, public libraries in Nigeria have not made significant progress in this area. Over the years, attempts have been made to promote digital inclusion despite the difficulties Nigerian libraries face.

**Recommendations**

1. Local communities should be served by public libraries by advocating for funds to enable digital access. Digital literacy should be incorporated into the orientation and education programs for users of academic libraries in their respective educational institutions.
2. In order to subsidize data tariffs, the Nigerian government should communicate with communication providers through the National Communications Commission (NCC).
3. In order to reduce the cost of purchasing digital infrastructures, the import charge imposed on them should be evaluated lower.
4. All types of libraries should create and put into practice a framework for digital inclusion that takes into account sustainable development and accommodates all of the components of digital inclusion.

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