

## Tincity Journal of Library, Archival & Information Science (TJOLAIS) Volume 13 No. 1 (2024) eISSN 2992-3077 CHALLENGES OF ICT-BASED RESOURCES AND LIBRARY USER EDUCATION PROGRAMMES IN LIBRARIES

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#### Abstract

This study examines the obstacles hindering the effective implementation of ICT-based resources and user education initiatives in libraries. The research delves into the complexities arising from inadequate infrastructure, limited technical expertise, and financial constraints. Furthermore, it explores the impact of digital literacy disparities and evolving user needs on the success of these programs. By identifying these challenges, the study aims to provide insights for developing strategies to enhance ICT integration and user empowerment within library environments.

**Keywords**: ICT-based resources, library user education, challenges, digital literacy, infrastructure, technical expertise.

#### Introduction

Libraries can be found at elementary, secondary, and post-secondary educational establishments. The University, Polytechnic, and College of Education are examples of postsecondary institutions. They aim to serve their universities' educational goals, which include research, teaching, learning, and cultural development. For the correct transfer of information in education institutes, the libraries must design and acquire standard books, periodicals, audio-visual materials, and other desirable learning resources. Education colleges' libraries choose, look for, gather, arrange, care for, and preserve their collection of materials. The purpose of education colleges' libraries is to serve parent institutions' information requirements.

For this service to be actualized, the deployment of information and communication technology-based resources to library users is critical. ICT is a generic term that refers to technologies which are being used for collection, storing, editing and passing on information in various forms. Tinio (2017) defined ICT-Based as a diverse set of technological tools and resources such as computers, Internet, and broadcasting technologies (radio and television) that communicate, create, disseminate, store and manage information while **ICT-based** resources encompass any medium for recording information (magnetic disk, tape, optical disks (CD/DVD), flash and using communication through voice and sound or images, microphones, cameras, loudspeakers, telephone to cellular phones. It includes a wide variety of computing hardware (Desktop computers. laptops, servers, mainframes, network storage). Information and communication technology-based resources are electronic gadgets or appliances that process data (Ormes and Dempsey 2018).

The goal of these ICT-driven libraries is to attract frequent users, as the entire world is increasingly moving toward becoming ICT-



driven, including libraries. Due to the abundance of information available in this day and age, library users must be familiar with information using and communication technology-based resources when using libraries. This can be achieved through library user education programs offered by education colleges. Some benefits of using ICT-based materials for library user education programs education ICT improves user include: instruction, raises student program performance, and gives students access to quick information (Awana, 2016).

## Challenges of ICT-based Resources and Library User Education Programme

There are some challenges of Information and Communication-based resources, which are enumerated, despite the numerous benefits derived from the current wave of innovation, which has transformed the contours of information services in academic and other libraries worldwide. As ICT-based resources are used in library services, there are some issues associated with this growth. Frequently evolving technology, limited funds, unstable inadequate power supplies, technical expertise, conflict between academics and professionals, inadequate cooperation, networking and connections, and lastly, the absence of actual library services are a few of these challenges that are covered as follows:

Due to the rapid advancement of information and communication technology, libraries with limited funding may find it difficult to compete. According to Madu and Adeniran (2014), the situation has not improved despite regular advances in information the technology, accessories as some and equipment quickly become outdated. This suggests that individuals who are specialists in certain information and communication technologies will require ongoing training to stay current in their area and avoid becoming obsolete. The awareness and utilization of information and communication-based resources, in libraries are capital-intensive ventures, both in the acquisition, installation, maintenance training and sustainability. As a result of this, not all libraries have the funds to venture and sustain ICT. Omekwu (2015) pointed out that initial investment in system implementation, design study. and procurement of hardware and software could be very expensive. He added that even after full implementation of ICT, areas of further expenditure include system maintenance or replacement. Anckar and Walden (2016) identified a lack of financial resources as one of the most important barriers inhibiting libraries from fully capitalizing on ICT.

The bulk of our academic libraries have inadequate infrastructure when compared to industrial economies and several Asian and Latin American nations. This is another obstacle to the successful integration of ICT in libraries. According to Gbaje (2018), costly technologies like VSAT and radio are used to deploy bandwidth connection and their suppliers. The uploading and downloading of electronic materials are not supported due to the extremely irregular and poor connections. However, in a study on his experiences with ICT in underdeveloped nations, Steinmuller (2018) issued a warning, pointing out that its applicability to library operations is limited to environments with the necessary infrastructure. Again, ICT-based resources depend solely on electricity power supply, for functionality and effective performance. Omekwu (2004) added that the epileptic power supply causes serious damage to the computer hardware and the crashing of huge databases. This is one of the reasons why many information professionals are not enthusiastic about ICT-based library systems. It is pertinent to mention that, frequent power outages remain a challenge in the country and constitute a serious challenge to the ICTbased library system. This makes the cost of



running power-generating plants prohibitive, for libraries.

Information professionals in the nation now possess poor levels of ICT proficiency; the majority lack the knowledge and abilities necessary to operate computers and browse or surf the internet to access and retrieve implementation information. ICT is hampered, according to Ashcroff and Watts (2016), by a lack of ICT skills, a dearth of technologically savvy librarians in libraries, a lack of qualified personnel to set up and maintain networks and technology, and inadequate funding to hire new librarians or help current ones acquire these skills. The majority of conventional librarians lack ICT proficiency and may exhibit technology fear. The problem of phobia has caused much worry, particularly for conventional librarians who exhibit dread when using computers and Omekwu equipment. related (2015)corroborated this claim by revealing that librarians' conservative attitudes toward the adoption and application of ICT in library operations and services represent a risk to their careers.

The difficulty librarians confront is learning and implementing the ICT skills necessary to function effectively as Library and Professionals Information (LIPs). This coincides with Ifidon's (2017) announcement that that many head librarians and other employing agencies hold the strong view that library graduates are unable to perform ICTbased duties, confidently and satisfactorily without supervision and that despite their training, many college of education graduates are not able to fit in properly to the requirements and demands of ICT in library services. Similarly, there is a low level of adoption of ICT in colleges of education libraries (Okon, Esin and Eden, 2018).

There has always been friction in the interaction between the two elements that make up the librarianship domain: the academic the and professional. Notwithstanding the establishment of the Librarians Registration Council of Nigeria (LRCN), which is intended to serve as the regulatory body, the harmony that results from the operation of a body empowered by law has not yet materialized. Similar to other professional regulating organizations, the LRCN is authorized by law to accredit who Librarians meet the minimal requirements for professionalism, which likely includes archivists, information scientists, information managers, and others. Diso (2009) claims that, in contrast to other professional associations, the LRCN has not been able to determine what minimal requirements need to be the starting point for the certification of the LIS programs that generate these so-called "professionals." However, a large number have already obtained their certification, and a large number are pursuing their certification to work as "professionals."

Academic collaboration in the library is one of the crucial areas that Nigerian institutions are still finding hard to establish. Diso (2009) Even among federal universities, collaborative and linking arrangements on an individual and institutional (university, faculty, departmental) basis are quite uncommon. Federal, state, and private universities, as well as other Nigerian tertiary institutions (Colleges of Education, Polytechnics, and Monotechnics), virtually never have joint or linked programs. It is clear that when it comes to joint and linking programs, Nigerian universities prefer to go more toward foreign than African schools, particularly American, European, and Asian institutions. In Nigerian institutions, this ubiquitous state affects all departments, especially the library departments. Partially in reaction to this circumstance, the Nigerian



Universities Network (NUNET) initiative was launched under the National Universities Commission's (NUC) auspices. The project's objective was to encourage an open dialogue between Nigerian institutions and the NUC. The project had a lot of money invested in it and grandiose goals for growth, but before it collapsed, its email service was inconsistent and had little success.

However, the use of ICT has posed lots of challenges, especially to developing countries e.g. Nigeria. Challenges such as; the expensive nature of ICT, the lack of skilled manpower supply as well as socio-cultural beliefs of Africans affect the use of ICT (Madu and Adeniran, 2014). Unfortunately, it has been observed that Nigerian libraries have inadequate human and material resources, and computer laboratory facilities are inadequate, which makes students not acquire adequate IT skills, (Gwarzo, 2013 and Opara, 2013;). Also, financial support to most libraries is at its lowest ebb (Ifidon, 2011). Some libraries do not even have a budget, teaching, learning and ICT-based resources are acquired on an ad-hoc basis at the whims and caprices of parent institutions' chief executives. Naturally, the product from such an environment cannot be expected to perform optimally. In addition, efficient performance of library services requires professional expertise in both the field of library and ICT. It is of great concern that many libraries in Nigeria have continually employed nonlibrarians and in some cases non-graduates to perform the jobs of librarians. This reduces the quality and quantity of output, slows down and distorts the flow of service delivery and hinders continuing professional development in the library, as such personnel may have neither the interest nor required knowledge to pursue further education in library and information science.

The challenge of library user education programmes in Nigeria is the unavailability of real library services at all levels of education, especially at earlier stages (Nna-Etuk 2012). The lack of a solid base, according to him, is evident at various schools, where literature indicates the absence of libraries, reading materials and qualified librarians to provide library services. Similarly, in the case of India, Rashid (2017) highlights several challenges as responsible for the slow pace of user education. These include the state of the library profession, the educational system, and financial, social and political factors.

## **Theoretical Framework**

## **Technology Acceptance Model (TAM)**

The Technology Acceptance Model (TAM), states that when users are presented with a new technology, some factors influence their decision about how and when they will use it. This model was developed by Davis in 1989. TAM postulates that a person's intention to adopt a particular IT is guided and determined by two distinct beliefs – perceived ease of use (PEOU) and perceived usefulness (PU). Perceived ease of use is defined as the extent to which a potential IT user believes that the use of an IT system will be with less effort. Further, TAM believes that perceived usefulness has a direct and positive effect on a user's intent to adopt an IT, or perceived intention to use.

Perceived ease of use directly affects perceived usefulness and, therefore, perceived ease of use both indirectly and directly drives perceived intent to use. The Technology Acceptance Theory was specifically developed to identify the factors involved in the acceptance of the utilization of computers in general and ICTs by extension. The TAM seeks to examine a variety of information technology usage behaviours. It is built on the theoretical framework that the intent to produce behavior is dependent on two basic determinants; attitude towards behavior and subjective norms. Subjective norms refer to



the reasons for producing a certain behavior or not, and provide the link between the latter and an expected result. Whereas, attitude toward behaviour refers to the positive or negative value the individual associates, with the fact of producing the behaviour (Bertrand and Bouchard, 2019). A representation of the TAM model is shown in Figure 1.

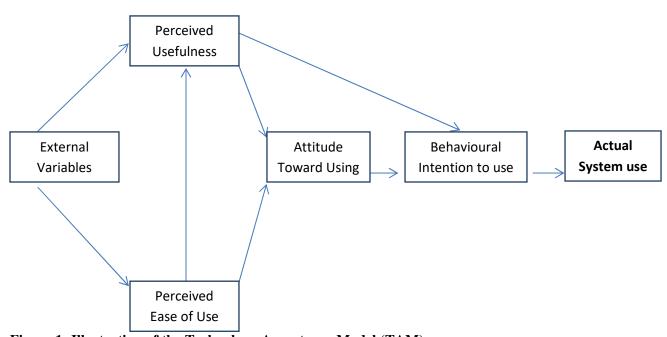


Figure 1: Illustration of the Technology Acceptance Model (TAM) Source: Davis (1989), Perceived usefulness, perceived ease of use and user acceptance of information technology.

When applied to the present study, the Technology Acceptance Model (TAM) has been empirically demonstrated to predict the adoption of information technology in several different studies, including digital library adoption. This study predicted that perceived ease of use and perceived usefulness together would have a positive effect on intent to use ICT-based resources for user education programmes, in South-South colleges of education libraries.

### Conclusion

The study has established the fact that the ICT facilities available were very limited in quantity, and needed for the eight core methods of creating awareness in the area of the study. Having established from the

perceptions of both the librarian and users that ICTs have the potential to aid librarians meet up with library user education programmes globally, it could be affirmed that the level of awareness of the importance and benefits derivable from the utilization of ICT-based resources in libraries is high in librarians. Hence, there would be easy acceptance of ICT use for user education programmes. Therefore, libraries need to take advantage of this positive perception, to fully infuse ICT utilization in colleges of education library user education programmes. Also, poor funding and lack of constant power supply were identified as challenges to the awareness of ICT-based resources for user education programmes in libraries. The strategies



proffered to tackle these challenges included increased funding and constant power supply.

## Recommendations

- 1. The education authorities should provide a constant power supply through independent power providers or gas generators in colleges of education. These will in no doubt aid the effective utilization of ICT for library user education programmes in libraries.
- 2. The library authorities should make ICTbased resources available for user education programmes in libraries. This would enable librarians and users to have quick access to ICT-based resources.
- 3. The libraries that have ICT-based resources should ensure proper maintenance of these ICT resources to enable the librarians and library users to always have access to functioning ICT-based resources in libraries.

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