



# Information and Communications Technology (ICT) Use in Libraries: A Plus or Minus to Academic Libraries in Nigeria?

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## Abstract

The study surveyed Information and Communications Technology (ICT) use in libraries: a plus or minus to academic libraries in Nigeria? The specific objectives of the article were to analyze the present state of academic libraries in Nigeria, briefly articulate the concept of ICT, level of ICT presence in Nigerian academic libraries, aspects/areas where ICTs are applied in academic libraries, benefits and the minuses concept of ICT and finally, the way forward. The study adopted the literature review method by randomly reviewing related articles on the topic and making a generalization based on available literature. In the end, the study revealed that ICT has positive and negative effects on Nigerian academic libraries, ICTs are introduced for various routines in academic libraries, some librarians in academic libraries engage in activities against the ethics of libraries with regards to ICT, despite questionable ways of using ICT by some librarians, ICT remains a repositioning force in academic libraries in Nigeria amongst others.

**Keywords:** Academic library; Libraries; Libraries in Nigeria; Information; Information and communications technology.

## 1. Introduction

Libraries are seen as very important centers where sources of information and other similar resources are made available and accessible to a given group of users. Users can be special, public, students etc. In a more detailed note, libraries help patrons to easily retrieve information materials for personal development and all kinds of academic pursuits. For citizens to be healthy, sound, get new ideas and able to access jobs, they must ensure that libraries around them are constantly and properly utilized. This is because the library is an indispensable cornerstone without which the society will be rendered inadequate and incomplete. On his part, Holiso (2011) avers that libraries represent a repository/depository of knowledge with timely and accurate information to a group of users who could be students, lecturers and researchers. Materials in a library are organized in a way that accessibility is guaranteed, different materials are usually stocked in the library in a more accessible way. This view is in line with Fayose (2002), who opines that library can be defined as the part of a system where there is an organized collection of books, periodicals, newspapers, films, filmstrips, videotapes, and recordings of all types, sizes, computers, study-kits, realia and other information bearing materials that are housed for use by users. Libraries are much more than places where we read, libraries are also set up to house electronic resources which by extension lead to intellectually transformed societies.

There are five major types of libraries namely, national, public, academic, school, special and virtual libraries. The focus of this study will be on academic libraries which are seen as libraries which serve polytechnics, colleges of education and universities. Oyegunle (2013), observes that academic library is a library that is attached to academic institution above the secondary level, serving the teaching and research needs of students and staff. According to Oyegunle, these libraries serve two complementary purposes: to assist in the area of research of the university, polytechnic, colleges of education, faculty and students and secondly to complement teaching. No serious academic business can be carried out in any Ivory tower if adequate attention is not given to its library. To this end, Aguolu and Aguolu (2002), argues that the academic library is the heart of the learning institution. This is because; the academic institution's health and intellectual vitality depend largely upon the state of health and excellence of its library which is also its lifeblood.

The academic library will literally hit the rock if introduction of innovations and new trends are not encouraged. Today's libraries can no longer function fully with functional information and communication technology gadgets, they must therefore voraciously key into the 21<sup>st</sup> century standard of libraries where ICTs are encouraged. Okon (2005), states that there is an astronomical development in the area of information technology and the introduction of networked information services have prompted a comprehensive adjustment of the library and information science (LIS) profession for good. Okon opines that what is now prevalent is the change from the conventional ways of rendering services to an e-environment where emphasis is on ICTs. Be that as it may, traditional or conventional ways of rendering services must not be discarded entirely. This point is corroborated by Kumar (2009), who further buttresses the notion that academic libraries are changing automatically by adopting new means of technology from

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activities of print to e-platform where a variety of manual methods are replaced by computerized systems which provides opportunity for online accessibility.

From the foregoing, it seems ICTs have come to stay in our libraries irrespective of type or size but one is tempted to think twice as stakeholders foresee some temptations introduced by the arrival of information and communication technologies (ICTs).

### **1.1. Statement of Problem**

Available works in this field of study indicate that academic libraries are important sources of information to both students, researchers and lecturers but quickly observe that majority of academic libraries today do not take full advantage of the ICT trend but rather use ICTs for other trivial assignments which in most cases conflict with the ideals of the library and by extension that of the parent institution. The focus of this paper therefore, is to look at information and communication technologies use in academic libraries to determine whether it is a plus or minus. In the end, there will be a part of this work that will be set aside as 'the way forward'.

## **2. Methodology**

This paper is a literature-based conceptual article that brings together a wide range of literature to demystify the concept of academic library, ICT in academic libraries and what these facilities are actually used for in the library environment: weather good or bad.

### **2.1. Present State of Academic Libraries in Nigeria**

Academic libraries otherwise known as the nerve centre or the hub around which scholarship revolves (Iwu and Yusuf, 2010) is said to be the heart of tertiary educational system. Without sound and adequate provision of library and information services, the core objectives of tertiary institution: teaching, learning and research may not be realized. Although academic libraries are set up to provide adequate and up to date information to users, Nigerian libraries are said to be plagued by certain factors such as inadequate funding, poor infrastructural facilities and poor skills (Eze and Uzoigwe, 2013).

Developing countries are always at the receiving end when we discuss issues of education and library developments. In Nepal for instance Siwakoti (2008) found that no government department was created to control, monitor and evaluate the activities of academic libraries. In his findings, there was lack of awareness programmes, budgetary constraints, inadequate space, inadequate library materials, lack of trained and skilled manpower, lack of appropriate government policies and lack of information literacy.

Away from the availability of infrastructure and budgetary allocation to academic libraries, Adomi and Anie (2006) in their research on computer literacy skills of professionals in Nigerian university libraries concluded that there is a problem, that most of the professionals do not possess high level of computer skill and their use of computer and technology is still maturing. They therefore recommended in-house computer training for librarians. Academic libraries are indispensable and valuable if higher education institutions must succeed; this is the reason why librarians in academic libraries in Nigeria try as much as possible to ensure that their facilities are functional and accessible by tertiary institution students. It is a professional duty for librarians to literally make things work for patrons once all library infrastructures are on hand. Walton (2009), cited in Association of College and Research Libraries (ACRL) clustered some of the challenges rocking academic libraries to be

- Inability to create and manage physical and virtual spaces and services as environment for discovery (ACRL)
- Lack of recognition of the value of libraries and librarians by leaders in higher education and campus decision-making (ACRL)
- Inability to keep up with information technology, including practice, theory and policy (ACRL).

In summary, academic libraries in Nigeria presently encounter the following in the area of ICT introductions;

- Lack of infrastructure
- Lack of long term planning
- Lack of networks
- Inadequate skill manpower
- Inadequate financial aid
- Lack of shared initiatives, etc

### **2.2. The Concept of Information and Communication Technologies**

Information and communication technologies have come to stay as they assist staff in all sectors to do their job; it is by extension indispensable in reducing world poverty as it provides developing nations with an unprecedented opportunity to find solutions to pressing needs and issues. In the same vein, Rodriguez in Hernandez (2017), postulated that the era of progress where a society furthers its progress through capital and labour has come to an end. He further noted that a competitive society has emerged that relies on the acquisition, transmission and application of information, which could be hindered if ICTs are absent in a given sector.

In today's life, schools are seen as the major sectors where ICTs are given much priority, and the library is a main subsector of the school; be it tertiary or primary. In a similar standpoint (Param, 2012) claims that schools and libraries are venues where ICTs have led the greatest penetration, which in turn have had an effect on the role of teachers and librarians. Information and communications technology (ICT) is simply used to mean all technologies that are deliberately put in place to acquire, analyze, store and disseminate information. The advent of ICTs have

made the handling and manipulation of information very easy and interesting. ICT is literally a child of information technology (IT) which helps to disseminate/communicate information generated. [Idhalama \(2014\)](#) cited [Olaojo \(2010\)](#) by submitting that ICT encapsulates any medium to record information and technology for broadcasting information, it is by extension an umbrella term that capture technologies for the generation and communication of information. Even in the developing countries today, ICTs have become very popular and accepted by all irrespective of colour, age, geographical location and type of work/job. Some of the examples of ICTs are computers, internet, mobile phone systems, broadcast radio, Television systems, others are world wide web (www), e-mails, CD-Rom, library softwares, fax machines, projectors, scanners, printers, digital camera, etc.

### **2.3. Level of ICT Presence in Nigerian Academic Libraries**

The role of ICTs in academic libraries cannot be undermined, in fact ICTs have become very necessary in everything we do in our lives today, hence [Krubu and Osawaru \(2011\)](#) submit that ICT has impacted on every sphere of academic library activity especially in the form of the library collection development strategies, library building and consortia. According to them, ICT presents an opportunity to provide value-added information services and access to a wide variety of digital based information services.

From available literature, it is on record that developing countries in general have a challenge of access to ICT resources and services in their libraries, other researchers believe that in this current dispensation, unavailability of ICT is a problem of the past. For instance world population statistics of September 2009 presented by [Ezeani \(2010\)](#) reveal Africa's figure of internet usage at about 67 million persons. This is on the low side as our sister continents like Asia, Europe and North America stand taller at about 738, 418 and 253 million respectively. It is therefore worthy to note here that the need for academic library staff to fully embrace ICT facilities is paramount. From other standpoints, it is obvious that ICT facilities are commendably on ground, this simply attests to the fact that developing countries like Nigeria are aware of ICTs and apply these facilities to a reasonable extent. This was supported by [Iwu and Yusuf \(2010\)](#) who stated that 61.18% of students of Covenant University use OPAC to locate materials in their library. In order to confirm the availability and use of ICT facilities in Nigerian academic libraries, [Krubu and Osawaru \(2011\)](#) listed ICT facilities such as search engines, internet, CD ROMs, online databases and World Wide Web in John Harris and Benson Idahosa University libraries. These they reported are available and actively in use. [Nweze \(2010\)](#), was not left out as he reported that 78% of staff and 85% of students at Obafemi Awolowo University use ICT facilities and especially the internet for research in their library. In conclusion of this part, it can be said that Nigerian academic libraries no longer battle with the problem of 'lack of ICT' but should advocated for more ICT gadgets and use/patronage.

### **2.4. Application of ICT to Library Processes in Nigerian University Libraries**

Information Technologies (IT) and information and communication technologies (ICT) are applied in the library to always ensure that the work of librarians is done more effectively, accurately, timely and more precisely. The ICT is known to be relevant in all operations in a typical library. In a more detailed explanation, ICT introduction in the library is quite synonymous with the concept of automation. Hence, [Ogunsola \(2004\)](#) explained library automation as the use of computers and associated technology to do exactly what was hitherto done by humans in the library. He stated further that automation helps in the acquisition, organization, storage and dissemination of information in libraries. ICT helps in a number of ways in an academic library eg acquisition, cataloguing, circulation, serials and user services. [Wordpress.com \(2013\)](#), hinted that ICT has contributed to the library in the following specific ways;

#### **a. Library Management Software**

Academic libraries are known for utilizing software packages for the management of varied library routines and processes. Most of these softwares are integrated and have modules for different activities like cataloguing, serials control, acquisition processes etc. Examples of some of the softwares are: CDS/ISIS, GLAS, X.lib and SLAM (Strategic library automation management).

#### **b. OPAC**

This refers to online public access catalogue and is the computerized version of the library catalogue as database of all library holdings.

**c. Office Operations:** The day to day running of the library is facilitated through the help of ICT e.g. word processing, accounting, database management and communicating through email.

**d. Networking:** ICT here is directed in the areas such as online database, e-journals, e-books, e-government publications, digitally networked systems. Access is said to be allowed online remotely through the internet or intranet.

**e. Electronic document delivery:** This implies that libraries no longer rely on postal services to send documents to users or carry out inter-library lending. This is not only efficient but also saves time.

**f. Online user education tutorials:** With the introduction of ICTs in libraries, academic libraries should think of using the internet or CD ROMs to educate their users or carry out information literacy programs. Others are:

**g. E-reference services** e.g. selective dissemination of information (SDI) and current awareness services (CAS)

**h. Library cooperation and resource sharing**

**o. Institutional repositories**

**j. Online searching**

**k. Library websites**

**l. Social media networks**

## **2.5. The Place of ICTs in Academic Libraries (Plus Concept)**

Information and communication technology has severally been commended with numerous advantages/benefits to the library. Some of the benefits are: saves time of library users, helps to save space and also reduces paper work on the part of librarians, ICT makes work more efficient, easier and faster.

There is no doubting the fact that ICT is a major factor in the actualization of globalization. [Omekwu and Echezona \(2008\)](#), noted the following points as benefits of ICTs to academic libraries.

- Libraries are now situated in cyberspace
- Users of the library now access information beyond their state, country and continent
- Time of opening and closing is now an issue left behind
- The advent of ICTs makes it possible for different library users to access a particular document at the same time (ubiquitous)

Still talking about the benefits of ICT [Akanni \(2008\)](#), highlighted the following as benefits:

- Ready access to information
- Conserving library space
- Digitization of local content
- Added value to the status of Nigerian academic libraries
- Advancement of tertiary education

## **2.6. Nigerian Academic Libraries and the Minus Concept of ICT**

Technology today is running mankind; some librarians have become so lazy and fully dependent upon computers, CD Rom, projectors, televisions, and all other ICT luxuries. Librarians have forgotten their natural roots by getting so much engrossed with ICTs; its killing jobs and making people robots themselves.

In getting so much obsessed with ICT facilities, most librarians have long missed the track by literally misusing the beautiful concert. This [Studymode.com \(2018\)](#), supported by stating that librarians' behavior hasn't changed for the better over the past years of ICT existence, rather librarians have now become unnecessarily much busier by engaging in activities that take their attention away from users. The source also claimed that academic librarians are now involved in more mundane activities and associating with mundane objects (being so worldly instead of being academic and dedicated to primary assignments).

Television on its own is another technology that has also compromised our attention span and our interactions with other library staff in our academic libraries. This has a way of hindering tacit knowledge management in the library.

On his part [Greenfield \(2010\)](#), avers that social networks like facebook, bebo, whatsapp, twitter and general ease of access to information online have changed the way librarians function. Libraries and librarians are seen as major sources of reliable and dependable information, but that is changing as some librarians are now fond of dishing/dispensing non-reliable information from fake sources. Social media like facebook has also created an environment where some unserious librarians indulge in amorous relationship with the opposite sex, these librarians do during work hour, and these unhealthy attitudes are not only unethical but also unprofessional.

Still on the minus concept connecting the use of ICT by academic library staff [Ahaneku \(2017\)](#), the Vice Chancellor of Nnamdi Azikiwe University, Awka claimed that over 40 percent of the university staff watch pornographic videos and other illicit films during work hours. Ahaneku says he was able to monitor the development in offices on campus from his own network. It must therefore be stated clearly that the reasons for the introduction of ICT are far much loftier than watching illicit videos in the library.

Gaming is another aspect of ICT that has taken over many libraries by storm over the years, though it has been observed that video games make people happier and also bring people together, its emergence has also brought much distractions to modern day libraries. Libraries are centers for serious academic business and should be handled as such.

## **3. The Way Forward**

Despite the minuses highlighted above which contend with the ideology/rationale behind the introduction of ICT to libraries, the place of ICTs in repositioning the 21<sup>st</sup> century academic libraries cannot be misplaced. To this end, the following must be taken seriously.

- a. Academic libraries handle different types of information, this calls for more commitment on the part of libraries and librarians.
- b. Information may not be properly managed without ICT facilities.
- c. Introduction of ICT into academic libraries should be encouraged and sustained
- d. Academic library staff are to see themselves as image makers saddled with more educational responsibilities
- e. Head librarians should be more proactive by monitoring the activities of staff.
- f. Academic library staff should make appropriate and judicious use of ICT facilities

### **3.1. Summary**

- a. Information and communication technology ICT has positive and negative effects in academic libraries
- b. Academic libraries in Nigeria still suffer from inadequate ICTs, inadequate staff, lack of qualified staff, inadequate fund, lack of ICT literacy skill on the part of staff
- c. To a reasonable extent, academic libraries in Nigeria have access to ICTs



- d. ICTs are introduced for various routines in academic libraries
- e. Some librarians in academic libraries engage in activities that are against the ideals of the advocates of ICTs in libraries
- f. Despite the questionable use of ICT by some librarians, ICT remains a welcome trend in academic libraries in Nigeria

## 4. Conclusion

After a thorough review of literature relating to ICT positive and negative effects in academic libraries, it is germane to note that ICT is no doubt a plus to not only the tertiary institution but also stand as a major boost to academic libraries. One may be right therefore to submit that in repositioning the academic library in the 21<sup>st</sup> century, libraries should aggressively subscribe to full introduction of IT (ICT) in our libraries. On the other hand, academic librarians are to be mindful of what they use ICT gadgets for in a bid to discharging their professional duties. This will ensure that information is dispensed to prospective users ethically, legally and lawfully.

## References

- Adomi, E. E. and Anie, S. O. (2006). An assessment of computer literacy skills of professionals in Nigerian University Libraries. *Library Hitech News*, 23(2): 10-14.
- Aguolu, C. C. and Aguolu, I. E. (2002). Libraries and information management in Nigeria. Available: [www.semanticscholar.org/](http://www.semanticscholar.org/)
- Ahaneku, J. (2017). Unizik staff watch porn during work hours – Daily Post. Published November 30 2017. Available: [www.dailypost.ng/2017/11/30/unizik\\_staff\\_watch\\_porn\\_work\\_hours\\_vice\\_chancellor/](http://www.dailypost.ng/2017/11/30/unizik_staff_watch_porn_work_hours_vice_chancellor/)
- Akanni, S. B., 2008. "Globalization: Challenges and opportunities for Nigerian libraries." In *Compendium of papers presented at the 46th Annual National Conference and AGM of the NLA, Kaduna, 1-6 June 2008*. pp. 1-12.
- Eze, J. U. and Uzoigwe, C. U. (2013). The place of academic libraries in Nigerian university education: contributing to the education for all initiative. *International Journal of Library and Information Science*, 5(10): 434-98.
- Ezeani, C. N. (2010). Network literacy skills of academic libraries for effective service delivery: The case of university of Nigeria library system in scholarly communication and information: monitoring, mastery and modernization. *Library Philosophy and Practice (e-Journal)*, 6(3): 185-91.
- Fayose, F. O. E. (2002). *School library*. Centers for External Studies, University of Ibadan: Ibadan. 30-36.
- Greenfield, S. (2010). Computers in Schools could do more harm than good. Available: [www.telegraph.co.uk/education/7220021/](http://www.telegraph.co.uk/education/7220021/)
- Hernandez, R. M. (2017). Impact of ICT on education: Challenges and perspectives. *Review Articles*, 5(1): 325-47. Available: <http://dxidv.org/10.20511/pyr2017.v5nl.149>
- Holiso, Y. (2011). Factors affecting information and communication technologies (ICTs) use by academic librarians in southwestern Nigeria. *Library Philosophy and Practice (E-Journal)*: Available: [https://www.researchgate.net/publication/268327624\\_Factors\\_Affecting\\_Information\\_and\\_Communication\\_Technologies\\_ICTs\\_Use\\_by\\_Academic\\_Librarians\\_in\\_Southwestern\\_Nigeria](https://www.researchgate.net/publication/268327624_Factors_Affecting_Information_and_Communication_Technologies_ICTs_Use_by_Academic_Librarians_in_Southwestern_Nigeria)
- Idhalama, O. U. (2014). Adoption and use of ICT by lecturers in Delta State University. *Communicate. Journal of Library and Information Science*, 16(1): 2-18.
- Iwu, J. and Yusuf, F. (2010). Use of Academic Library: A case study of covenant university. Available: [www.whiterclouds/ic/c/clies/e/zoyi.pdf](http://www.whiterclouds/ic/c/clies/e/zoyi.pdf)
- Krubu, D. E. and Osawaru, K. E. (2011). Impact of information and communication technology (ICT) in Nigeria university libraries. *Librarian Philosophy and Practice (E-Journal)*: Available: [https://www.researchgate.net/publication/267207651\\_The\\_Impact\\_of\\_Information\\_and\\_Communication\\_Technology\\_ICT\\_in\\_Nigerian\\_University\\_Libraries](https://www.researchgate.net/publication/267207651_The_Impact_of_Information_and_Communication_Technology_ICT_in_Nigerian_University_Libraries)
- Kumar, M. (2009). *Academic libraries in electronic environment: paradigm shift: A paper presented at the international conference on academic libraries (ICAL)*. Hosted at the University of Delhi, India. 105.
- Nweze, C. (2010). *The use of ICT in Nigeria university: A case study of Obafemi Awolowo University*. Ile-Ife. [www.webrage.vidaho.edu/-mbolin/nwezeh.htm](http://www.webrage.vidaho.edu/-mbolin/nwezeh.htm)
- Ogunsola, L. A. (2004). Nigerian university libraries and the challenges of globalization: The way. *Electronic Journal of Academic and Special Librarianship*, 2(5): 2-3.
- Okon, H. O. (2005). Effective Communication and Smooth administration of academic libraries in the 21st century: A new paradigm in Nigerian. *Library Philosophy and Practice*, 8(1): 24-32.
- Omekwu, C. O. and Echezona, R. I., 2008. "Emerging challenges and opportunities for Nigerian libraries in global information system in compendium of papers presented." In *The 46th annual national conference and agm of the nla, kaduna 1-6 june 2008*. pp. 62-76.
- Oyegunle, J. (2013). Academic libraries in Nigeria. Available: [www.jdafo220.blogspot.com/2013/03/academiclibraries\\_in\\_nigeria.html?m=1](http://www.jdafo220.blogspot.com/2013/03/academiclibraries_in_nigeria.html?m=1)
- Param, C. (2012). Modern day ICT facilities. Available: [www.imedpub.com](http://www.imedpub.com)
- Siwakoti, S. (2008). Status of school library development in Nepal Sri Lanka. *Journal of Librarianship and Information Management*, 1(1): 2-19. Available: <http://www.cab.ac/k/academic/institute.hills/reports/nepal.pdf>
- Studymode.com (2018). ICT has done more harm than good: essay and research papers. Available: [www.studymode.com/subjects/ict\\_has\\_done\\_more\\_harm\\_than\\_good\\_page.html](http://www.studymode.com/subjects/ict_has_done_more_harm_than_good_page.html)
- Walton, R. (2009). Challenges (and opportunities) of academic libraries. *Texas Library Journal*, 2(6): 10-25.

Wordpress.com (2013). Use of information and communication technology (ict) in the library. Available:  
<https://fotalib.wordpress.com>