

# The use of ict in managing library resources



## THE USE OF ICT IN MANAGING LIBRARY RESOURCES By EKUDAYO

OLUWAYEMISI Introduction 1. Background of the study ICT (information and communications technology - or technologies) is an umbrella term that includes any communication device or application, encompassing: radio, television, cellular phones, computer and network hardware and software, satellite systems and so on, as well as the various services and applications associated with them, such as videoconferencing and distance learning. ICTs are often spoken of in a particular context, such as ICTs in education, health care, or libraries. The term is somewhat more common outside of the United States. ICT covers all forms of computer and communication equipment and software used to create, design, store, transmit, interpret and manipulate information in its various formats. Personal computers, laptops, tablets, mobile phones, transport systems, televisions, and network technologies are just some examples of the diverse array of ICT tools. Studies in ICT include many disciplines, such as mathematics, information systems, physics and design. The skills acquired in an ICT degree can be applied to everything from satellites to iPhone applications, from CT scanners to computer games. While many people think of Information Technology when they think of ICT, Multimedia Design, Computer Systems Engineering and Software Engineering also lead to careers in ICT. According to the European Commission, the importance of ICTs lies less in the technology itself than in its ability to create greater access to information and communication in underserved populations. Many countries around the world have established organizations for the promotion of ICTs, because it is feared that unless less technologically advanced areas have a chance to catch up, the increasing technological advances in developed nations will only serve to exacerbate

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the already-existing economic gap between technological "have" and "have not" areas. Internationally, the United Nations actively promotes ICTs for Development (ICT4D) as a means of bridging the Digital divide UNESCO (2000) defines ICT as the techniques used in information handling and processing. ICT has changed library and information services globally. Digital media has revolutionized information source and advances in ICT has dramatically changed information provision. The process of collection management has become very challenging and complex. As observed by Friend (2000: 55), basic collection management activities include analysis of user needs, inter-and intra-library communication, policy development, budgeting and allocation of resources, contract negotiations, macro-evaluations of collection, micro-evaluation for selection, relegation, preservation or withdrawal of stock, and system evaluation. The information and communication technology revolution is sweeping through the world and the gale has even caught up with developing countries like Nigeria and Ghana. Information and communication technologies have introduced new methods of managing resources and conducting research and have been brought into education facilities for online learning, teaching and research collaboration. While some university communities in some countries enjoy free or inexpensive Internet access, students and faculty/staff in Nigeria must pay for time spent accessing the Internet, whether at a cyber café or in the library (although the library offers a discount). To improve ICT services in the library, therefore, researchers need to show how students and faculty/staff are using the Internet in the academic environment. University administrations at many Nigerian universities see information and communication technologies as necessary in the process of learning and

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teaching. Information and communication technologies have given rise to new modes of organizing the educational environment in schools and new concepts in the teaching process as well as the remodeling of the roles played by the participants in the educational process. Developing countries, including Nigeria, are being encouraged to invest in ICT. Thoiune (2003), cited by Ogbomo and Ogbomo (2008), indicates that many initiatives have been taken at the international level to support Africa 's efforts to develop communication infrastructure, and these efforts are designed to enable African countries to find faster ways to achieve sustainable development.

The concept of library and its resources A library is a collection of sources, resources, and services, and the structure in which it is housed; it is organized for use and maintained by a public body, an institution, or a private individual. In the more traditional sense, a library is a collection of books. It can mean the collection itself, the building or room that houses such a collection, or both. The term " library" has itself acquired a secondary meaning: " a collection of useful material for common use." It can also be used by publishers in naming series of related books, e. g. The Library of Anglo-Catholic Theology. Libraries most often provide a place of silence for studying. Thus, modern libraries are increasingly being redefined as places to get unrestricted access to information in many formats and from many sources. They are extending services beyond the physical walls of a building, by providing material accessible by electronic means, and by providing the assistance of librarians in navigating and analyzing tremendous amounts of information with a variety of digital tools. Libraries: a changing concept

Libraries, worldwide, since the last two decades, have undergone significant metamorphosis — from a purely traditional modelled manual service delivery

system to a more dynamic technologically driven system. In Nigeria, this change has become more manifest only in the new millennium. Like a cyclone, the technology-driven environment has enveloped the library and is taking it to unprecedented heights in knowledge acquisition, management, and communication. Even, the vocabulary of librarianship is changing: ‘dissemination’ is being replaced by ‘communication’, ‘repository’ by ‘database’, ‘Literature’ by ‘knowledge’, ‘search’ by ‘navigation’, etc. This reflects current approach to packaging and the tools used for managing knowledge. Knowledge itself has become more ubiquitous than was ever imagined twenty years ago. However, in an apparent symbiotic relationship, whereas the new communication technology is giving shape to librarianship and libraries, the new librarianship is also shaping the architecture and design of information and telecommunications technology (ICT). Thus, providing us with a challenge to constantly review and adjust our skills, technologies, services, and methods of outreach to clients. Public and institutional collections and services may be intended for use by people who choose not to – or cannot afford to – purchase an extensive collection themselves, who need material no individual can reasonably be expected to have, or who require professional assistance with their research. In addition to providing materials, libraries also provide the services of librarians who are experts at finding and organizing information and at interpreting information needs. Libraries had, up till now, always served as a tangible structure where books, journals, magazines, and all types of documents are kept and retrieved for study. Both the librarian and client must be physically present in the library in order to exchange information. Librarians were custodians of knowledge. They were experts in the retrieval of knowledge.

No library client could make any meaningful search of library resources without approaching the librarian. This could be the 'Reference' Librarian, the 'Circulations Services' Librarian, the 'Documents' Librarian, or the 'Subject' Librarian. But, all that has changed with the application of the dynamic ICT. The physical walls of libraries are collapsing like the collapsed Berlin Wall. The 'custodian' status of the librarian has also melted, giving way to a liberalized access to information without borders. However, contrary to fears of librarians in the early stages of the introduction of ICT, the librarian continues to be relevant and needed.

### ICT - based Library Resources

The libraries especially in the developed countries use various types of electronic equipment and communication technologies to ensure the smoothness of library activities. The following are the ICT resources: Computer systems, computer connected to internet, CDROM, Audio cassettes, video cassette, photocopier, printer, scanner, and so on.

### ICT-based Library Activities

Libraries use ICT activities such as data processing, communication, circulation, cataloguing, bibliography, serials control, electronic publishing, automating indexing / Abstracting, electronic document delivery, text digitization, intelligent gateways and creation of an in-house database. According to Singh (2004: 127), this set of activities will continue to evolve with new ICT products and services. Gone is the era in which housing a large collection that spans linear miles was a matter of great pride for a library. At that time, libraries were able to meet most user requirements with the resources they owned. Today, physical location is less important as long as the information is accessible.

### ICT-based Library Services

Most of the private university libraries provide computerized service to users, while most of the public university libraries are not yet able to do so. Some

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special libraries provide ICT-based services, while the other is not as advanced. The following are different services provided by libraries: CDROM searching, Online searching, photocopying, online information service, news clipping, scanning service, database searching service and so on. ICT- based Library Software For creating and maintaining a database, the libraries use different types of software. Some of the libraries use locally-developed software, but most use CDS/ISIS software for indexing journals. ICT- library Resources and Use in Nigerian Institutions Oduwole, et al. (2003), sought to know the electronic resources provided by Nigerian libraries. When asked what electronic resources they provide, Nigerian university libraries identified Online Public Access Catalog, CD-Rom databases, electronic mail (e-mail) and Internet browsing. Ojedokun and Owolabi (2003) reported that e-mail is the most used Internet resource by staff and students and also the use of e — library. E-Library refers to all the library resources that are available online through computers and databases. These are different than the open internet, as they have restricted access. Most school Libraries is either given special access, or pays money so that students and faculty can access the articles, databases, books, services, and resources through E-Library for free. You need your ID and password to access many of the online library resources. If you are signing in from off campus, you will need to use your ID and password to sign into our proxy server. The ICT section in the library is able to undertake day- to-day technical and managerial and minor maintenance thus provide technical trouble-shooting. The section also plays important liaison function with the institutional computing centre. The library has its own server and battery converters. Thus the library's collection can still be accessed even when there is no electricity. Availability of Computers

Access to and availability of computers in the school community potentially has influence on the use of electronic resources. The research has revealed high levels of access to computers connected to the Internet among both academic staff and students. It is worth observing that although the availability of computers within the institution is fairly good, the numbers of computers available for users in most institutions are not adequate.

Management of Library Resources The library uses ICT in several ways: 1. Management of Library Administration 2. Processing of library materials 3. Developing online resources 4. Accessing online resources 5. Developing offline resources 6. Accessing offline resources 7. Providing service to clients

These services require appropriate software as well as equipment. In the recent past, an increasing number of libraries in Nigeria have bought off the shelf software for cataloguing, circulation, and, even complete management of the library. Many of these software were developed outside the country but purchased from country representatives of the vendors. This is more a case of technology deployment than development. The problem with this approach is that skills in the maintenance of such software are not really developed. However, the training usually given to library staff to operate the software is a measure of skills development, even though the creative instinct is not essentially stimulated. In accessing online resources skills of browsing and navigation are developed. Browsing is a general survey of sites/resources that are online — usually Internet or Intranet resources.

Navigation is a more systematic assessment of online resources. Skills developed during these processes include the use of Universal Resources Locators (URLs) as well as Portals creation. Portals are most useful sites that have been aggregated into a folder or another site developed, such that

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easy access to the resources is enabled. In the process of developing both online and offline resources, librarians learn to create and manage personal and subject web sites. This is a skill that is continuously required from librarians in the digital age. In the process of developing this skill, exposure to the different software and applications for developing web sites are acquired: such as dream weaver, html, FrontPage, java, and visual basic. The application of ICT has resulted in the globalization of knowledge resources. Libraries in less developed countries may not have ICT available to them. In the midst of a global information revolution, many libraries still use methods that date back to a much earlier era. The extent of ICT application in South-South Nigeria is still largely unknown. Libraries need a global access policy for information. According to Singh (2004: 127), policy is formulated with an organization's mission statement and strategic plan in mind. Collection management policy should be linked very closely to the general and specific programs of the organization and be informed by the information needs of users. Nwalo (2000: 34) asserts that many libraries in developing countries are gradually converting from manual to computerized routines. The benefits of ICT in a library system are self evident and overwhelming. Okolo (2002: 43) observes that the library needs ICT in order to give efficient services to its users. Not only is the speed of its operation high, the volume of its output is correspondingly large. When ICT is used the library, there is economy of labour and operating cost. The accelerated adoption and use of ICT means that bibliographic databases, full-text documents, and digital library collections are always available to users (Chisenga, 2004). David (1998: 18) notes that, " the use of electronic services helps with an ever expanding base of knowledge and a steadily eroding base of resources." Olorunsola <https://assignbuster.com/the-use-of-ict-in-managing-library-resources/>

(1997) asserts that, " the use of information technologies ... has had a far-reaching effect ... [in] ... that provision of information can be made more effective and efficient with the use of electronic information resources." Scott (1995: 197) states that knowing how to find information and having good research skills, especially online searching skills, are particularly critical for university and special libraries that cultivate autonomous learners. Odufuwa (2006: 100) observes that advances in ICT have progressively reduced the cost of managing information, making individuals and organizations more efficient. Such advances have also led to innovations. According to Ugboma (1998), public libraries cover a broad area, including education, social, political, economic, and cultural matters. Consequently, public libraries hold books and non-book materials, in various disciplines and various languages. Hawkins (2002) notes that nations have placed greater emphasis on developing human capital. Governments are focusing on strategies to increase access and improve the quality of education and information resources. Thus, it is a foregone conclusion that ICTs are significant in the management of library resources. Hence, with this conclusion came the realization that there was need for greater infusion of ICT knowledge, and management skills into Library Information Science (LIS) course content, as well as thorough diffusion of ICT competencies into the LIS students. Sutton (2001) observes that the changes brought into the LIS profession by ICTs can be divided into two major categories, namely, the natural evolutionary changes, on the one hand, and transformatory changes, on the other. As natural evolution, the library and information science profession has harnessed ICTs to perform old tasks better through the automation of housekeeping tasks such as reference work, bibliographic services,

cataloguing, serials, circulation and acquisition, which are performed more efficiently in an ICT environment. Transformatory changes, on the other hand, include the emergence of new functions arising out of an expanded, demand-driven information society, wider and/or interdisciplinary jurisdiction and closer focus on user needs (Sutton, 2001). These transformative trends represent systematic changes that substantially alter the boundaries of the profession. For example, Fourie and Bothma (2006) observe the increased use of the World Wide Web in private, social, business lives of many people and hence note that it is a vital component of the enabling structure for school, university, career and other use for information and communication. This one platform exhibits the fact that those involved in information services need to be sufficiently prepared to handle both the users of information and the attendant technologies. Thus, knowledge of networking, communication and retrieval technologies is very crucial in the management of library resources and as distinctions continue to blur between telephones, television and computers (Curry, 2000), information professionals, have to be able to navigate information networks competently so as to provide relevant services and materials for their users. Consequently, there is need for them to consolidate ICT concepts, management skills and proficiency into core competencies, and library professionals need to provide adequate content and practice that will enable library workers to adapt and use ICTs effectively in managing these resources. The application of ICT has resulted in the globalization of knowledge resources. Libraries in less developed countries may not have ICT available to them. In the midst of a global information revolution, many libraries still use methods that date back to a much earlier era. The extent of ICT application in South-South Nigeria is still

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largely unknown. Libraries need a global access policy for information.

According to Singh (2004: 127), policy is formulated with an organization's mission statement and strategic plan in mind. Collection management policy should be linked very closely to the general and specific programs of the organization and be informed by the information needs of users. The role of ICT in the school library ICT provision in the school library should be part of a coherent and consistent whole-school policy. ICT provision through the library benefits the school in several ways: Access to information - ICT widens the range of material available in the school library and makes access to it much easier. - The library is able to offer access to ICT resources before and after school as well as during the school day - If the school library catalogue (OPAC) can be accessed via the Internet or school's intranet, information is available at the point of need - The library should provide a range of ICT information sources including CD ROM, the Internet and high quality licensed databases offering up-to-date, authoritative information Support for the development of research skills - The library's involvement in research skills training using ICT should be part of a whole-school programme and fully integrated into the curriculum - Many of the research skills developed by students for use with print-based texts apply to electronic sources - Students who struggle to interact with traditional text-based material sometimes find it easier to access and use ICT sources Support for literacy The school library will use ICT to enhance its support for literacy and the promotion of reading for pleasure. - The library can offer online access to relevant websites devoted to reading, authors or books - The school librarian can co-ordinate students' material for inclusion on the school's intranet or the school's web pages - Reports from the automated library management <https://assignbuster.com/the-use-of-ict-in-managing-library-resources/>

system can offer useful insights into students' reading habits Support for the preparation and presentation of work - Access in the school library to basic computing applications such as word processing, data handling, spreadsheets, multimedia presentation and authoring tools offers new scope for staff and pupils to prepare and present information - E-mail enables students to communicate and exchange ideas

### The role of the School Librarian in the management of Library Resources

To ensure consistent practice throughout the school, the librarian should be aware of how ICT is used to support all areas of the curriculum. He or she should also work closely with teaching staff and other educators to identify learning needs. School librarians are information specialists and should be, at the very least, competent users of ICT. Many are, in fact, proficient users of ICT and offer teachers and students support in a number of ways. The school librarian supports teachers and students in several ways:

- Evaluating the quality and suitability of sources

The enormous quantity of information available can make identifying relevant material a daunting and potentially time-wasting task. The school librarian, when assessing sources to ensure that they meet the curriculum needs of teachers and students, applies traditional evaluation criteria extended to cover new aspects of electronic resources. Because of the ephemeral nature of some of these materials, this will be constantly reviewed and updated.

Disseminating information on useful resources

To ensure that the school community is aware of the full range of potentially useful sources the school librarian will:

- Add Internet sites to Bookmarks or Favourites. These may be included on the automated library management system for view through OPAC
- Provide annotations on websites/software
- Provide reliable guides to relevant material

Providing guidance and support

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with research skills The school librarian will provide advice and guidance on all aspects of research skills. The use of ICT in the research process places an additional emphasis on the skills required for planning, searching and evaluating information. Planning a research task is even more important when using online information than it is when working with traditional sources. It is easy for students to waste time by adopting a serendipitous approach or being lured into digressions. The provision of an Internet planning form can help students in planning and formulating queries. It is helpful to know which search engines are best for a research task. The school librarian will have a good knowledge of the range of search facilities available together with their strengths and weaknesses and may provide guides to appropriate search engines. The school librarian will also offer guidance on effective search strategies. The school librarian will bookmark sites or links to sites via the automated library management system.

Evaluation of sources to assess relevance and the selection and rejection of information are also critical. The provision of guidance on how to evaluate a website can provide students with a set of useful criteria to apply. Advising on copyright issues For example, when material can be downloaded from the Internet and how to obtain permission to use downloaded material. Offering support for reading The school librarian may co-ordinate the production of students' reviews on the school's intranet. The school librarian may provide opportunities for:

- Contacting authors through their own or publishers' websites
- Joining an Internet activity related to books and reading e. g. book raps, review sites, e-mail and video conferencing as part of the Carnegie Shadowing scheme
- The computerized library management system can provide reports for teaching staff on, for example, profiles of students'

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reading and lists of the most popular books, etc. Producing high-quality presentations and publications Presentation software enables the school librarian to produce high quality, interactive presentations to the school community. The use of ICT tools enables the school librarian to produce high quality promotional material for staff, students, parents, governors, etc. The quality of shelf guiding, posters, booklists, guides etc. can be improved by the use of word processing. Producing web pages The library could form a significant part of the whole school website. By placing the school library catalogue on the website, access to information is extended beyond the physical confines of the library. Effective library management The use of an automated library management system not only saves time on routine operational tasks but can also produce library usage statistics to support strategic planning. ICT Services In Nigerian School Libraries The information and communication technology facilities in Nigerian libraries are those that assist in providing efficient and current information services for their use. In Nigeria, some of the resources that are harnessed for scholarly work include the use of various computer operating systems such as Microsoft Windows, software packages specially designed for library operations such as library management software , software for indexing journals and newspapers, graphical library automation systems and data management applications. Internet technologies software used include file protocol software, use net news groups, discussion groups, web directories, search engines, and e-mail services. These can be harnessed by academics for good scholarly work. These technology oriented services have shifted most university libraries from traditional library Libraries these days provide reading resources as well as online information. MOST universities world wide has added technology-

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oriented services such as these to traditional library services. Libraries these days not only provide reading resources but also online information that is always available on the World Wide Web (WWW). Current information is very important for the development of mankind.