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**USE OF LIBRARY, STUDY SKILL AND ICT (GES 112.2)**

**TOPIC: Information Communication Technology (ICT) in**

**Library and Information Services**

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**Introduction**

Information is power. Information Communication Technology (ICT) involves hardware and software that enable society to create, collect, consolidate and communicate information in multimedia formats and for various purposes. It is the combination of science and technology and practice of transmitting information. Specifically, ICT means communication of information through technology, in which information is transmitted through electronic gadgets and signals. In this process, the information or message such as spoken words, text, photographs, sense and sounds is first converted into signals and then transmitted through electronic links. The processing of ICT involves sending, receiving and processing information in electronic form.

When computer and communications technologies are combined, the result is Information Technology or "InfoTech". Information Technology (IT) is a term used to describe any technology that helps to produce, manipulate, solve, communicate, and/or disseminate information. Information Technology merges with high-speed communications links carrying data, sound and video. Typical examples are personal computers, telephones, televisions, appliances, and various handheld devices. The two important parts of Information Technology are *computers* and *communications.* The role of communication technology in Information Technology necessitates the use of the term *Information and Communication Technology* (ICT), which is preferred to Information Technology (IT).

So, the term, ICT, describes the use of computer-based technology and the Internet to make information and communication available to the wide range of users. *ICTs permeate the library environment thereby enabling users to locate, store and disseminate information.* ICT tools such as CD-ROM, e-mail are used in libraries to disseminate information. In addition, digitization of information resources which involves converting print resources to electronic information is also carried out. Presently, majority of libraries are facilitating with OPAC (online public access catalog), E-journal, E-books, Repositories, Digital Library, etc.

**ICT-BASED SERVICES** **PROVIDED IN LIBRARIES**

The advent of ICT is indeed a boost to the library services as it now assists many librarians to use their ICT potentials to reach out to library users. According to Chisenga (2004), some of the ***ICT-based services*** ***provided by libraries*** are:

1. **Provision of web access to OPAC:** OPAC is the computer form of library catalogue, to access materials in the library. Libraries are providing access to web-based Online Public Access Catalogue (OPAC) interfaces. The OPAC makes it easier for users to access and use information resources.
2. **Electronic Document Delivery:** Libraries implement ICT-based interlibrary lending system, through the use of electronic networks for documents delivery. In essence, the Document Delivery Service (DDS) enables a library to use copies of research papers or other research documents from other libraries. These documents could be journal articles or other documents in digital format. They are mainly in *portable document format* (PDF) and they delivered to library users’ desktops.
3. **Online Instruction/User Education**: Libraries can also use internet or CD ROM to educate users. There is implementation of online based bibliographic or library user programmes such as online tutorials on searching online resources and virtual tours of library collections.
4. **Online Readers Advisory Services**: Libraries now implement web-based versions of reader’s advisory services to include informing users about new acquisitions, provide reviews and recommendations and so on in using the web.
5. **Networked Information Resources**: Libraries now provide users with access to networked information such as database, electronic scholarly journals and other publications from various publishers.

Other library services as highlighted by Idowu (2011) include:

1. **Reprographic Technology:** These are widely used in libraries globally. Reprographic machines are provided in libraries to ease photocopying of documents on demand.
2. **Library Retrieval System:** This involves the use of compact disc read only memory (CD-ROM), a technological mechanism for acquisition of specialized CD-ROM databases in various discipline such as law, sciences, medicine technology, agriculture, humanities and so on.
3. **Indexing and Abstracting Services**: It is a service that is carried out to provide summaries of documents and also to assign descriptors for referencing documents.
4. **Institutional Repositories:** It is an online archive for collection, preservation and dissemination of digital copies of the intellectual output of academic or research of institution,this could be journal articles as well as digital versions of theses and dissertations. This service is mostly provided in academic or research libraries.
5. **Document Scanning Services:** Scanner is important equipment in modernization of library. It is useful for scanning text, image and content page of books and providing great help for establishing digital and virtual library.

**BENEFITS OF ICT IN LIBRARIES**

On professional duties, computers are used to automate different manual functions in the library. Acquisition, circulation, cataloguing of library materials and serials management are now automated in libraries using available software in the market. This have generated many benefits in libraries:

1. ICTs enable libraries to locate, store, retrieve and disseminate information. ICT tools such as CD-ROM, e-mail are used in libraries for dissemination of information. In addition,
2. ICT is used to digitize information resources which involves converting print resources to electronic form.
3. Provision of speedy and easy access to information and library resources.
4. Provision of remote and regular access to users.
5. Provision of access to unlimited information from different sources.
6. ICT enhances easier, faster, cheaper and more effective library operations.
7. ICT helps to manage information overload as information retrieval is made easier in computerized systems.
8. ICT has provided new media, new modes of storing and communicating information.
9. Computerization helps the library to save space and reduce paper.

***Some other benefits are:***

* Easy to collect different library resources
* Collaboration & creation of Library network
* Avoids time-consuming effort done by the librarian
* Increases the range of services offered
* Less time consuming
* Efficiency can be increased
* Easy & speedy access to information
* Improves the quality of library service
* Increase in the knowledge & experience
* Integration within the organization
* Improvement in the status of libraries
* Improvement in the communication facilities
* More up to date information
* The flexibility of Information to the users
* Workload reduce of library staff
* Combining data from different sources

**Disadvantages of ICT in Libraries**

The few disadvantages of ICT in libraries are:

* Lack of trained Library and Information Science professionals to handle IT devices;
* Establishment cost;
* Lack of infrastructure and above all;
* Rapid growth and development of IT devices and their implementation in the automated environment.

**ICT Resources in Libraries for Sustainable Development**

ICT as aggregate of computers, telecommunication gadgets, multi-dimensional resources and other related technologies are applied and utilized in the total process of information management and dissemination. The various components of ICT have provided a facelift for the support of varying professional services. Nwabueze and Ozioko, (2011); Umana (2018) identified the following primary ICT resources as imperative in actualizing Nigeria’s sustainable development goal. Likewise, the same ICT resources are paramount to effective delivery of library services. **The ICT resources that can be found in the libraries are**:

1. **Computers:** These are essential management tools which can be used to handle different operations more efficiently. Computers can be used for various activities such as information generation, processing, storage, analyzing and information dissemination for sustainable development. The use of computers in the library is noted with great assets such as speedy information transmission, cost effectiveness and optimal utilization of available resources. Other computer accessories include CDs, Flash drive and so on. The computers are used to perform various library operations and routine such as ordering/acquisition, circulation e.t.c.
2. **The Internet:** This ICT resources is a means to speedy flow of information. It is a network of computers, communicating with others, often via telephone line. The internet provides a worldwide platform for information sharing among individuals, institutions and organizations. The use of internet enables the provision of current and useful information to enhance productivity and good governance.
3. **Electronic Mail (E-mail)**: This is the most widely used resource of the internet. It is used for sending and receiving of messages otherwise known as mails. The messages are communicated through electronic device. E-mail enables faster and cheaper organizational communication.
4. **World Wide Web (WWW):** This is also an internet-based resource. Websites help individuals, organizations or institutions find products or information and transacts business. Relevant information is made available to members of the public through the websites of many organizations or institutions. Being on the web, places any nation or organization on the right cause of speedy and sustainable development in line with emergence of changes in technology, economic and political area.
5. **Video Conferencing:** This enables people at different locations to hold conferences by data communication network. It is convenient and less expensive for conducting a conference between two or more participants situated at different remote location, e.g Zoom, Google Meet, Skype, etc.
6. **Printing Technology:** A printer is a device that converts computer output into printed images. There are different kinds of printers used in library. They include Laser printer, Inkjet Dot-matrix printer and so on.
7. **Online Public Access Catalogue (OPAC):** It is the computer form of library catalogue to access information materials in the library. It is an online database of materials held by a library or group of libraries. It is a computerized library catalogue made available to the public. Most OPACs are accessible over the internet to users all over the world.

**Role of Librarian in ICT Environment**

In the changed scenario under the influence of ICT the duties of the librarian have been changed. The librarian works as information broker, navigator, and market negotiator and information technology expert. For example, the services the librarian will offer in the future shall compel them to new methods of classifying and cataloging internet resources search engine, which specialize the certain subject areas only and interlink each bit of information which has relevance to anything else in the universe of knowledge. Now librarian should possess the following skill in the changed scenario since the librarian is going to be a highly skilled professional, whose total commitment is to be as a processor and disseminator of information to the user. There is a need to acquire soft skills that helps the librarian to deal effectively with their clientele; some of the soft skills are enumerated below in brief.

1. *Communication Skills:* The librarian should be able to achieve both verbal and written communication skills.
2. *Adaptation Skills*: Librarian should be ready to adopt new techniques and technologies on current trends.
3. *Management skills*: Besides the traditional management skills, the librarian must achieve the special management skill as per the ICT.
4. *Marketing skills:* The librarian must be able to promote his products and services hence, marketing skills which is essential for marketing of library services.
5. *Update of Knowledge*: Librarian should update their knowledge to provide better services to the users.

**Conclusion:** Information communication technology is not only a technology; it manages with the library objectives with the adoption of ICT. ICT has greatly affected the information environment. Librarians must have the knowledge, skills and tools in handling digital information and that will be the key success factor in enabling the library to perform its role as an information support system for society.