INFORMATION AND COMMUNICATION TECHNOLOGY AND THE
20TH CENTURY LIBRARIES AND FUTURE LIBRARIANS IN NIGERIA

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ABSTRACT

The internet is democratizing information, empowering the masses and allowing end-
users access to a vast array of resources. It is also significantly altering the work of
information professionals. This chapter looked at some of the potential roles that librarians
could adopt in the age of the internet. It outlined the effect that networked information is
having on the library profession. It also identified the new roles that information
professionals could adopt so that traditional professional library skills continue to provide
a good foundation for the sector. It concluded with a look at how librarians should be
proactive, embrace ICT and not allow internet to snatch their profession and how they
should apply the traditional skill of librarianship to the new internet environment.

INTRODUCTION

Information and communication technology (ICT) is made up of three important
concepts, which must be understood individually. Information means many things
to many people, depending on the context. Scientifically, information are processed
data. Information can also be loosely defined as that which aid decision making.
Information through abstract could also be visualized as a commodity, which could
be bought or sold. According to De Watteville and Gilbert (2000), information is
any potentially useful fact, quantity or value that can be expressed uniquely with
exactness. Information is whatever is capable of causing a human mind to change its
opinion about the current state of the real world. Communication on the other hand
refers to the transfer or exchange of information from person to person or from one
place to another.

When action produces a reaction, positive or negative, communication has
taken place. Other writers in the field of communication studies have defined
communication as: …a process: a transfer of information, ideas, thoughts and
messages. It involves a sender, a receiver, a code and, a language that is understood
by both the sender and the receiver. James et al (2004) defined communication as a
process involving the passing of message through the use of symbols which all parties
in the communication encounter understand. It involves the exchange of ideas, facts,
opinion, attitudes and beliefs between people. It is not a one-way affair. There must
be a sender to transmit the message and receiver to make appropriate decisions on
how the rest of the exchange should continue. Technology according to Womboh (2008) refers to the use of scientific knowledge to invent tools that assist human beings in their efforts to overcome environmental hazards and impediments to comfort. In this regard, technology refers to those things like the computer, telephone, cell phone, GSM handsets, television, radio etc. Put together ICT has therefore been defined as the acquisition, analysis, manipulation, storage and distribution of information and the design and provision of equipment and software for tries purposes (De Watteville and Gilbert, 2000). This chapter looks at the traditional library versus the internet and how the notable and fast growing information technological changes can affect the working practices of librarians in the near future. This chapter also considers how these practices and skills can eventually be transferred into an organized networked environment.

TRADITIONAL WORKING PRACTICES AND SKILLS OF LIBRARIANS
The information that users require may be accessed differently but the skills information professionals need to manage this information can be adapted from established practices. There is no denying that this is a new global library environment and it is one in which librarians are still finding their way. However, the foundations of the profession and the skills, and roles associated with it will help to ensure librarians professional survival. The core skills traditionally associated with information professionals include information handling skills, training and facilitating skills, evaluation skills and concern for the customer are all still relevant. These skills cover cataloguing, classification, indexing, enquiry work and user education. All these functions are managed by librarians who will help to make the internet an easier place to navigate. Librarians in all sectors have built up roles and library services based on collections and users needs. According to Creth (2006), the values that are the foundation of the library profession should remain the same into the next century, ...values of service, quality, universal access and cooperation. It is the way in which these values are translated into operations and activities that will undergo substantial change.

INTERNET VERSUS TRADITIONAL LIBRARY
Traditional information research tools and sources found in libraries seem to have been recently supplemented by the information available on the internet. In most cases information seekers are doing the entire information access portion of their research on the internet. This raises a lot of question such as, Has the Internet taken over the function of a traditional library role of information dissemination? While internet access offers a number of advantages to information seekers it also offers a number of serious concerns to information providers (librarians). As the Internet is increasingly becoming the first place that students look for materials, the role of information professionals as intermediary is to introduce to information seekers the strength and weakness of the internet.
Advantages and Disadvantages of the Internet: The following are the advantages and disadvantages of sourcing for information from the Internet.

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<th>Advantages of Internet</th>
<th>Disadvantages of Internet</th>
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<td>1. Online resources can be accessed 24 hours a day, 7 days a week.</td>
<td>Reliability of information is not guaranteed.</td>
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<td>2. Websites can be constantly updated to provide breaking news and timely information.</td>
<td>Has no system that can catalogue and organizes all resources.</td>
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<td>3. Internet offers a complete multimedia experience with text, video, interactive features, hyper links and graphs all in one place.</td>
<td>Uncertainty about accuracy and truthfulness of the information found.</td>
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<td>4. The fraction of the world's total knowledge base represented on the internet is increasing each day. In some cases research papers appear via electronic publication before they appear in print. Some electronic journals do not even bother with printed versions.</td>
<td>Create opportunity for people to plagiarize and neglect copyright laws.</td>
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<td>5. It is cheaper and better to read in the electronic medium.</td>
<td>Electronic information will be difficult to access if there is no access to the internet.</td>
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<td>6. It is simpler to store or delete in the electronic version.</td>
<td>Reading over a long period on the internet affects the eye sight.</td>
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<td>7. The internet is a good supplement as it is in many aspects, convenient for the readers.</td>
<td>It might not be easy to fully concentrate while reading on electronic version.</td>
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<td>8. Once a piece of media is stored in digital format, it can last unchanged for an indefinite period of time.</td>
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<td>9. Researchers spend more time focusing on the topic of interest and less time running about and copying information for later use.</td>
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<td>10. A great deal of information is available from all over the world via the Internet.</td>
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The above advantages and disadvantages of the internet, therefore, call for the expertise of librarians to organize and sift these resources in such a way that information seekers will access them with ease.

THE ROLE OF LIBRARIES IN THE NEW NETWORKED INFORMATION ERA

Lancaster (2007) states that in order to justify its existence in the electronic world, the library must continue to perform one of the most important functions it now performs in the print-on-paper world. The universe of resources are organize in such a way that those most likely to be of value to the user community are made most accessible to this community, physically and intellectually. The vast amount of information available in a networked environment suggests that there is more than ever before a role for trained intermediaries with search skills, abilities to analyze and evaluate resources and match needs with sources. The traditional library skills should be reassessed and their value to information services in the electronic environment applied. For example, the skills of cataloguing and classification can be used to improve the end users experience of networked information retrieval. The creation of meaningful metadata files based on cataloging principles can help user find needles in the Internet haystack. The creation of catalogues including electronic resources can ensure access authenticity, reliability and validity of networked resources.
The increasing amount of information available to users and the ways in which they can be accessed have in theory made it easier for users to get the information they require. However, in practice there is now a danger that they can be overwhelmed by the amount of information they receive, making it difficult to locate the exact information they seek as well as overseeing issues of accuracy and authenticity. The role of librarians as both user-educator and intermediary is prevalent in this environment. The foundations of librarianship, which include skills such as cataloguing and user education, are relevant in an electronic age as they are in a print based and will continue to provide a solid base of skills.

In addition to the professional skills, the librarian of the future must be equipped with a wide range of personal and transferable skills in order to manage the changing environment in which he or she works. The importance of transferable skills over information technology skills should be understood. Management and interpersonal skills will make librarians more effective managers of networked resources and services. Hastings and Tennant (1996) are of the opinion that it is more important that digital librarians possess particular personal qualities (which are innate) rather than specific technical expertise (which cannot be learned).

The information professional must adapt to change and the new electronic information environment. He or she must learn about new technologies and be aware of their strengths and weaknesses. Librarians should not feel threatened by computers and technical developments but should move forward with new technologies and play a pivotal role within the organizations.

CONCLUSION AND RECOMMENDATIONS

This work has discussed the relevance of traditional library skills in the new era of networked information. It has shown that librarians in all sectors have an important role to play in shaping the internet through resource discovery and by familiarizing themselves with internet. They also have an essential role in teaching their user about critical information seeking on the internet and assessing the materials they find for quality. If librarians successfully transfer the foundations of the profession into this new medium they will continue to be seen as vital information intermediaries.

The information on the internet is so enormous and current that it will serve the seeker and make him/her not consult any other material. But the only snag in the internet information is that not all are edited and organized. If information seekers continue to retrieve information with ease from the internet, this means they can stay at home, cyber café or classroom to access information and carry out their research without using the library.

Librarians must not sit and watch the internet snatch their jobs from them. They should be proactive, computer literate, and ready to assist information seekers in suggesting and accessing sites for their information use. They should also organize the internet resources in such a way that they will be easily accessed by the information
To get all librarians and future librarians ICT compliant, all hands must be on deck. The government, librarians and institutions must all be involved in the following ways:

a. Librarians must be sent for regular ICT training, workshops, conferences and seminars. These trainings would afford librarians to become information professionals who would be dealing with information in electronic formats by creating web pages to promote their services to external patrons and choosing automated library management systems (Sharp, 2009).

b. Professional librarians must be seen to take up the ICT jobs in the library as against asking non-professional librarians to carry out the jobs (for example, inputting of data into the system at the cataloguing unit), because the more librarians work on the system the more they improve themselves, get acquainted with and carry out new innovations.

c. The library school should provide internet librarians from school by introducing into its curriculum compulsory courses on information technology. Skills in information organization are more necessary in this age of information explosion. An internet librarian or information professional would have a key role to play in this era. For example, librarians should be well equipped to take intranet projects through the various stages of design and maintenance as they understand their users and their organization's information needs and should have the range of skills to manage knowledge effectively. The role of the librarian is to help users find the information they require, provide them with the tools to assess and use the resources for their individual needs. Creth (2009) states that librarians achieve this by actively seeking out users in a variety of settings and by making full use of information and multimedia technology be offering instruction in a variety of formats (including web based instruction and online tutorials).

d. Another problem militating against the development of ICT in University libraries is the negative laissez-fair attitude of lecturers, students and even librarians. Majority of the library staff feel that the government or their employers should train them in ICT. This is very wrong perception and belief. Aina (2004), while admitting the high cost of ICT training says librarian must do something. “Given the fact that the cost of training is enormous and only few employers could afford to send staff on training on a regular basis, there should be the possibility of improving, one career from ones work place. Downtown centres and cybercafés now exist in the major towns and cities of Nigeria, with facilities for training in ICT”.

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REFERENCES


