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Mrs Ilo, Promise I.

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ABUJA INFOLIB is a bi-annual journal of the Nigerian Library Association (NLA), Abuja Chapter. It receives and publishes articles in library science, information science and related fields in the information industry and beyond. Such articles should preferably be research oriented, and practical experience that will have knowledge added to the practice of librarianship and information science.

The articles should be original and not previously published elsewhere, and should not be more than fifteen (15) pages including graphs, tables and bibliographies.

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Book Reviews: Books may be accepted for review subject to the above conditions and must be based on current materials that has no succeeding editions. Such books must in addition, be analytical enough. Note however that reviews are published subject to prior invitation by the Editor-in-chief. Books submitted for possible review may not be returned to the author.

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Articles that have fulfilled the above conditions may be published only at the discretion of the editorial board.

Editor-in-chief

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CATALOGUING AND CLASSIFICATION IN AN ICT AGE: MATTERS ARISING

By

Ilo, Promise

Technical Services Librarian

Covenant University, Canaan Land, Ota

promisingme@yahoo.com Tel: 08056739608

Abstract

The paper discusses the current trends in cataloguing and classification of library materials in the information and communication technology era. There is outstanding evidence that ICT has improved cataloguing activities, but has at the same time given rise to some issues of concern to the library, librarian and the users. These identified issues include threat to the position of the cataloguer, requisite skills, infrastructure, training, software etc. Suggestions given on how to derive maximum benefits include capacity building through self-development, review of curriculum, constant power supply and regular user bibliographic instructions.

Keyword: Cataloguing, Classification Information Technology

Introduction

Libraries are charged with the responsibility of collecting, processing and preserving information materials. Such materials must be arranged in an orderly manner, so that users can retrieve them without necessarily wasting much energy and time. To ensure efficient retrieval, the resources must be catalogued and classified. Cataloguing and classification of library materials play a key role towards ensuring appropriate organization, according to their subject areas.

A library having a million volumes that are not organized for easy retrieval will be judged as having nothing. Nwalo (2003) observes that a building filled with books is not necessarily a library unless those books have been organized for access and made available for use. Joni (1995) avers that when a library has invested so much money to purchase books and other research materials, cataloguing is a small price to pay to be able to find them when they are needed. According to him, a librarian at

the social law library in Boston said that it could take up to two hours to find a title in the uncatalogued section of their collection. Nwalo (2005) points out that since the great king Asurbanipal's library in Nineveh was found to be with primitive form of catalogues, cataloguing has been the cornerstone of librarianship. It will therefore not be an overstatement if cataloguing and classification are called the hallmark of librarianship.

Organization of materials started from man's inception. In our homes, we organize materials according to their different purposes. Our cooking utensils are organized in the kitchen, clothes in the wardrobe, chairs in the parlour etc. Traders arrange wares in their shops according to their types following any pattern so that they can easily retrieve them whenever they want to dispose them. All over the world, men organize objects found within their environment with the aim of making them available whenever there is need. The emphasis is that information resources of various shapes and sizes acquired in libraries must be organized so that retrieval can be done easily.

When resources are acquired in the library, they are arranged in specific patterns so that users can access them with ease. There was no formal way of arranging library materials in the past. Ola (2001) posits that before the advent of standard methods of organizing materials, individuals assembled their collections according to colour, size, language and form. The method lacked efficiency and result, because books with similar subject contents were scattered in different locations. As a result of this, a standard method of organizing the ever-increasing library materials needed to be put in place. This therefore gave rise to the description of physical contents and assignment of subject headings to these resources. The description resulted in the term cataloguing while the assignment of subject headings, which is done according to the subject treatment of the books, is called classification.

Cataloguing as noted by Nwalo (2003) describes a book and points out its subject contents, which ultimately places the books in a subject class. He says that classification involves assigning a class number to a book that corresponds with its subject contents, following a chosen classification scheme. Cataloguing shows vividly the bibliographic details of materials in such a way that a user can easily identify them with ease, even when there is no help coming from a staff. Ola (2001) citing Chopra (1990) maintains that cataloguing is the process of compiling a catalogue or constructing entries for insertion into a catalogue. He opines that this process entails the preparation and maintenance of catalogue, which includes

classification, assigning subject headings and subject indexing. Classification is the act of using a specific classification scheme to assign a specific heading, which corresponds to the subject treatment of a book, so it can be identified in the library.

Ola (2001) quoting Wynar (1985) identified four basic precepts for classifying materials which include classifying materials according to subject and the form in which they are represented, where they will be most useful, placing them in the most specific subject division instead of the general topic and then placing the items in the predominant subject if they cover two or three subjects. All in all, the purpose of classification is to bring subjects that treat the same topics together so that in the process of arrangement, such books will be on the same shelves and users will be able to locate them with minimal effort.

Cataloguing and Classification in a Manual Setting

Before the advent of computerized cataloguing, the manual system has been in existence. It therefore becomes imperative to stand on the practice of manual cataloguing as a premise for building an understanding of the use of ICT in cataloguing and classification.

At inception, cataloguing and classification were not tedious tasks. This is perhaps because there was no explosion in information. Then, books were as discussed earlier, organized using length, colour, size and shape. This was not difficult because there were just few resources.

Ajibero (2006) observes that church and monastery libraries, which were devoid of secular books, characterized the middle ages. The monks authored and organized their books in such a way that retrieval was easy. Isa (2003) states that early monastic libraries were expected to have bibles, service books, lives of saints and some classic works. These were arranged in a way such that retrieval was easy. Bibles and bible related materials were simply separated from books on humanity.

Ajibero (2006) maintains that emergence of Guttenberg's printing press in 1400 resulted in the printing of books, which made it difficult for materials to be organized using shapes, sizes and colours. The publication of Charles 'Cutter's Rules' in 1800 and the Anglo American Cataloguing Rule2 (AACR2) in 1978 also played significant roles in facilitating cataloguing and classification of materials. The schemes devised

for use in this regard include: Bliss Bibliographic Classification (BBC), Dewey Decimal Classification (DDC), Library of Congress Classification (LC), and Universal Decimal Classification (UDC). Though the schemes were used to process books manually, they helped to link users with the right resources.

In the traditional library setting, new books are first sent to acquisitions section where they are stamped. The number of copies received is also entered in the accession register with their accession numbers. They are then shifted to the cataloguing and classification section for further processing.

The first step is to describe the bibliographic details of the books on the cataloguing slips. Before doing original cataloguing on any book, the cataloguing slips are crosschecked with the already existing author/title and subject cards. The purpose is to find out if any of the books already exists in the library. Any title found in the catalogue does not undergo original cataloguing; rather, the call number is copied from the already existing author/title cards. The titles not found in the catalogue are then catalogued and classified originally.

Manual classification demands a lot of time, personnel, and energy to carry out such tasks as bibliographic description of materials, crosschecking of catalogue cards, updating of the shelf list and filing and interfiling of cards. Madu (2004) avers that manual cataloguing is tedious because hand, paper, pencil, ruler and eraser are used in descriptive cataloguing.

It is characterized by delays. We are in an age of information explosion, which results in the multiplicity of information resources. This multiplicity according to Ola (2001) is as a result of astronomical growth of information. There is need for urgency in the processing of the ever-increasing materials. Manual cataloguing is not positive in this regard, rather delays are encountered and backlogs are seen at different stages before the books get to the shelves. Formson (1999) notes that before the advent of technology in the University of Botswana, about six months

passed between the time books pass through the hand of the cataloguing co-ordinator and when they finally get to the shelves.

There is low rate of efficiency. Mistakes are made at different stages, ranging from the copying of bibliographic details of books on the cards. The library assistants sometimes make mistakes especially in the punctuations. Cards can be misfiled during filing and interfiling. Cards are sometimes duplicated for books that are already in the library, perhaps as a result of the inability of the assistants to check the catalogues correctly. On the side of the typists, mistakes occur during typing, especially when there are arrears of work to be done.

Manual cataloguing and classification involves a lot of brainwork and labour before maximal output is realized. Formson (1999) maintains that cataloguing process is cumbersome and labour intensive.

Updating of records is tasking. Catalogue cards are produced on daily basis, yet there is no provision for filing them without disrupting the existing ones. The process of interfiling is time-consuming. Apart from that, correction of errors on already filed cards involves pulling out the cards from the trays, erasing and interfiling them. Users spend a lot of time trying to search out relevant titles from hundreds of cards filed in the cabinet. Catalogue cabinets also consume space.

Resource sharing in classification helps to improve on quality and quantity of work. Manual cataloguing does not give room for sharing in cataloguing. The cards produced are filed in the cabinets, which are confined to a particular library. It is not possible for other libraries to see the stock of that same library so as to share in copy cataloguing, even when the need is there.

When compared with electronic cataloguing, manual cataloguing and classification can be called a Herculean task.

Cataloguing and Classification in an ICT Age

The emergence of Information and Communication Technology (ICT) has brought a

turn-around to cataloguing and classification. Oketunji (2006) traces the origin of computerization in cataloguing to the 1960s when the Library of Congress introduced computers to its operations.

Madu (2004) posits that it is the problems associated with manual cataloguing that ICT has come to eliminate. Arua (2005) opines that the simplest form of library technology is mechanization, which he defines as the application of machinery to routine library activities. ICT has indeed brought a revolution in all operations carried out in technical services department of the library.

Advent in technology has removed the sluggishness accompanying manual cataloguing and classification. In electronic cataloguing, there is no delay because bibliographic details are not copied manually. Library software have provisions for bibliographic entries of books. The library staff makes the entries directly into the computer, saving the time and energy that would have been used for copying on the worksheets, erasing, re-copying and typing on the catalogue cards. Multiple copies of titles, which are sometimes scattered because of error in classification, are brought together through the OPAC. Mosuro (2000) avers that computers have offered assistance in the processing aspects of traditional library operations:

There is increase in the volume of materials classified within a given time. Libraries that are connected to the internet automatically have access to the materials classified in other libraries if such materials have been uploaded too. They have opportunity to access other libraries in any part of the world since ICT has made the world flat. Mosuro (2000) argues that ICT has turned the world into a "global village" and everyone to an electronic neighbour. Through the internet, it is easy for classifiers to gain access to the Library of Congress and copy the call numbers of the materials they have classified. This makes it possible for hundreds of books to be classified in a day as against the backlogs, which characterize manual classification. Formson (1999) observes over a 100% increase in the number of books classified at the University of Botswana all as a result of technology.

The stress associated with the job is removed through technology. While classification is in progress, staff can interact through phone, effect corrections in their systems without necessarily getting up from their seats. This is very easy when the systems are networked. In fact, the stress of carrying the classification tools from one cataloguer to another is removed.

Extra and new copies of the same materials procured by the library do not require re-cataloguing; the bibliographic details are merely replicated by simply clicking a mouse on the computer icon meant for this purpose.

Matters Arising

Even though ICT has turned the world to a global village and everyone to an electronic neighbor, there are still speculations on the fate of the libraries, librarians and the users alike in the midst of this technological advancement. A lot of issues however call for concern.

Position of the Cataloguer

The pride of place, which the cataloguer occupies in a traditional library parlance, seems to be at stake. The cataloguers' skills have become sit-down-and-acquire by library assistants and technologists who are gradually imbibing the skills of cataloguing. Nwalo (2005) argues that the enviable position of the cataloguer appears to have come under threat from IT applications in libraries even as many librarians express fear that it will surely make nonsense of their profession. Library assistants can catalogue and classify online. They can also study the software used by their library and use it to catalogue effectively. Formson (1999) quoting Rider (1996) points out that outside vendors are engaged to provide library services at reduced prices. All these have come into being because of technology. Online Public Access Catalogue has come to replace author/title catalogues; copying of bibliographic details is facilitated through the computer. All these expose the paraprofessionals and non-professionals to cataloguing and classification.

Software

Softwares are instructions, which are programmed for computers to achieve their tasks. The success or failure of any library that has accepted ICT in cataloguing depends to a large extent on the selection of software. Some libraries have been frustrated because of errors in selection. Oketunji (2006) states that many librarians face difficulty in finding and using the appropriate software for their library functions. Technology has also prompted the availability of different softwares in the market and the problem of the one to select has become a challenge to many librarians. If a librarian wants to select software, he is supposed to find out if it is web-based, the compatibility of the software with the server in a situation where the library will use a local area network. User friendliness is another consideration. Above all, there should be considerations concerning the willingness of the software vendor to render assistance in the use of the software whenever the need arises. There must be proof that the vendor is a reputable one and that continuity of the software is guaranteed.

Skills

The ability to access the wealth of information, which ICT has to offer, depends to a large extent on the skills acquired by the cataloguer. Without proper ICT skills, the cataloguer will surely not be able to harness the vast information existing in the internet and other online databases and therefore stands the risk of losing his job to non-professionals. Librarians who understand the matters of the moment are giving it what it takes to acquire the skills needed to harness information through computers, online database, CD ROMs, E-mail, internet, etc. Ikpaahindi (2006) quoting Oladapo (2005) maintains that for better performance in an increasingly digital or (ICT) environment, cataloguers need to be proactive in information management through self development in new skills, knowledge background, enthusiasm, willingness and with the right attitudes and expectations. The situation calls for training of cataloguing and classification librarians on how to work with the

new technologies. Those who have acquired the skills should be retrained so as to embrace current trends that emerge on daily basis.

User Training

Many users are not confident and skillful in the use of computerized library systems. They show negative attitudes towards automation and manifest obvious frustrations in their bid to use the modern library. Arua (2005) stresses on the need to educate library users since automated system is often poorly used when located in a society that is not computer literate. It behooves the librarian to ensure that these users are constantly exposed to the use of Online Public Access Catalogue, information sources, basic internet search skills, CD-ROM database searching as well as navigating effectively with the various commercial online databases.

Infrastructure

Alegbeleye (2006) quoting Baker (1991) regards information technology as a tool comprising of computer, micro-electronics and telecommunication equipment used to produce, obtain and send information. ICT thrives on relevant infrastructure, libraries must have facilities like computers, internet access, constant power supply, telecommunication appliances such as, telephone, E-mail facilities. Some libraries have fully embraced ICT with the required equipment, while others are yet to. The facilities can be used effectively if there is sufficient supply of electricity. Most libraries are however constrained by constant power outage. This stops them from performing optimally, especially where such libraries do not have standby generators. Mohammed (1999) observes that properties are being destroyed daily because of unexpected power cut, power upsurge, and low power supply. Power outage destroys ICT equipment and affects retrieval of information.

Computers are vital in automated cataloguing and form the bedrock for internet connectivity and networking. The Internet gathers information from all over the globe. Alegbeleye (2006) maintains that the Internet is an electronic network that permits access to thousands of thousands of computer networks. Its features are

electronic mail, remote login and file transfer. It is the world's largest intellectual resource. Internet connectivity is very important if cataloguing with ICT must be effective. It gives the cataloguer the opportunity to access libraries in other parts of the world. In developing countries, many libraries though with some other ICT infrastructures, are not connected to the internet. This limits the ability of the cataloguer to access materials that have been catalogued and classified in other libraries of the world.

Resource Sharing

No library can boast of having all the materials needed to satisfy the needs of the different categories of users, or suffice it to say skills to get all its work done. The present state of libraries has made them to enter into co-operation or sharing so as to exchange their materials, their networks and the works to be done. Ikpaahindi (2006) observes that with the advent of technology, resource sharing is no longer limited to books but has incorporated various activities in library services such as indexing, abstracting, bibliographic access and cataloguing. Resource sharing in an ICT age can only be possible if the libraries intending to share are using the same library software and are networked. Where the software is not compatible, their chances of sharing their cataloguing functions are ruled out. However, this is the situation with many Nigerian libraries.

Changing role of the cataloguer

The emergence of ICT has also brought changes in the role of the cataloguer. The cataloguer has more advanced role to play. This stems from the fact that the library assistants who have been exposed to the rudiments of cataloguing can now be engaged in the cataloguers' original work which includes copying of bibliographic description of books, doing bibliographic search, classifying through the internet. To this effect, the professional cataloguer is freed to engage in more intellectual assignment so as to ensure that users enjoy the vast information brought about by ICT. The cataloguer can now engage in strategic administrative planning and carrying out of research. Apart from these ones, he could devote his time to other

specialized aspects of librarianship like acquisition of materials, indexing, abstracting of journals. Observations, according to Mosuro (2000) shown that the new technology has the impact of sharing intellectual tasks with machines and since these machines can relieve humans of boring tasks, human beings can devote their attention to the more intellectually demanding tasks.

Preponderance of Libraries still manual

Librarians in ICT libraries are quickly losing grip of manual operations. Such librarians are cut up in fears that if there should be loss of job in a particular ICT library where they are working, it will be difficult to fit into a traditional library setting again. In such a case, the librarians should either try to keep abreast with manual trends or are forced to look for jobs in ICT libraries, irrespective of where such libraries may be. This seemingly contradiction impacts negatively on the development of ICT skills among libraries in a developing nation.

Quality control and standardization

Iwuji (2005) defines standards as guidelines or expectations that are formally established to guide the practice and conduct of an interest group. Standards form a yardstick with which professional standards are assessed.

Thomas (1996) avers that the quality of cataloguing is an issue that has engendered much discussion over decades of bibliographic control. There is need for standard, accurate and timely bibliographic records. The AACR2 gave stipulations on the standards for cataloguing and classifying all library materials in all formats. The advent of ICT has however given rise to different softwares with different templates, which are used in libraries, thereby making for inconsistencies in cataloguing practice. Some of these softwares have variations from others. Some are mere duplication of others with little or no variations. Closely related to the issue of software is the inability of some library assistants to maintain standard while classifying materials in ICT based libraries. Library assistants have been turned to 'copy assistants' who just copy what has been classified in other libraries, without

considerations on the need to effect changes for necessary adaptation. There is every need for experienced cataloguers to supervise materials catalogued by library assistants, so as to effect necessary corrections. This will play a great role towards standardization and quality control.

Outsourcing

ICT encourages outsourcing of library materials. To this effect, a library that is not ICT compliant can outsource its materials to an ICT library for the purpose of classification. Such materials are often classified online whereby some money is paid to the classifying library. It therefore helps one library in getting job done quickly while another gets some money for the services rendered. During the retrospective conversion in Kenneth Dike Library, University of Ibadan, Nigeria, Igbeka (2005) observed the conviction of the library management that the reconversion program would move faster if consultants knowledgeable in it were invited from outside to help out

Recommendations

In library literature all over the globe, the efficiency and benefits derived from ICT in library management in general and cataloguing and classification in particular is extolled. In the midst of these benefits, writers still observe that many libraries, librarians and library users lack the skills, finance, training and infrastructure to utilize the benefits accruing from ICT. As a way forward therefore:

Cataloguers should be provoked towards self-development in computer skills, especially current trends relating to cataloguing practices. They should build solid knowledge base on ICT-related skills so as to be conversant with best practices. Computer and information technologists, librarians and information specialists who have good knowledge of ICT should participate in the training of librarians and library users. The cataloguer should be ready to spread his tentacles and learn other areas where computer can be used in the library apart from cataloguing and classification. Librarians should organize bibliographic training sections for users to enhance the use of computer to access materials, use of OPAC, online databases, internet etc.

There should be a review of the curriculum of students offering Library and Information Science in higher institutions. This should be in line with the modern trends in ICT. Courses involving practical lessons in ICT should be included in their programmes. There should be quality control measures to standardize softwares used in libraries. This will ensure compatibility with international standards and provide solid platform for meaningful library collaboration as well as compilation of National Union Catalogue, which is a necessary for effective national bibliographic control.

Constant supply of electricity should be given priority. Libraries should acquire standby generators since power supply is the major driving force behind ICT operations.

Conclusion

Despite the factors that pose challenges to cataloguing and classification in this ICT age, everything points to the improvements recorded so far. Therefore, the librarian, library management and users alike must stand up to the challenges by giving ICT what it takes so as to be in control. Carter (2000) quoting Lincoln (1862) avers that the dogmas of the quiet past are inadequate to the stormy present. The occasion is piled high with difficulty, and we must rise with the occasion. As our case is new, so we must think anew and act anew.

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