ASSESSMENT OF CATALOGUING AND CLASSIFICATION PRACTICES OF THE NATIONAL LIBRARY OF NIGERIA IN THE DIGITAL AGE: A BIBLIOGRAPHIC CONTROL PERSPECTIVE

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ABSTRACT

The study assessed cataloguing and classification practices of the National Library of Nigeria in the digital age from bibliographic control perspective. The study was guided by two objectives. The design of the study was descriptive survey design, while sampling technique adopted was purposive sampling of four professional departments. Method of data analysis for research questions involved using a combination of descriptive and inferential statistics, mean and standard deviation. The findings revealed that though cataloguing and classification of information resources are highly practiced with the use of standard tools, the digital age has not impacted on her cataloguing practices, as the practices are not ICT-driven in this digital age. Cataloguing and classification practices are not automated, e-tools are not effectively used in cataloguing and classification, and even resource description and access (RDA) has not been implemented in the apex library of the nation. Recommendations were made, and the study concluded that it is imperative for the National Library of Nigeria to be ICT-driven in her cataloguing and classification practices in this digital age, so as to engender effective bibliographic control and effectively contribute to the world knowledge through universal bibliographic control and universal availability of publications.

Keywords: Assessment, cataloguing, classification, practices, National Library of Nigeria, bibliographic control, digital age.

Cite this Article: Juliana O. Akidi and Charles O. Omekwu, Assessment of Cataloguing and Classification Practices of the National Library of Nigeria in the Digital Age: A Bibliographic Control Perspective, *International Journal of Library & Information Science*, 8(1), 2019, pp. 20-34.

<http://iaeme.com/Home/issue/IJLIS?Volume=8&Issue=1>

1. INTRODUCTION

National libraries in their bibliographic control efforts are responsible for acquiring information resources published in their countries of domain, processing them through cataloguing and classification and making them available to their citizens and also users outside the country, thereby enhancing effective bibliographic control nationally and globally. Akidi (2017) opined that bibliographic control practices involve collection of legal deposit, cataloguing and classification of information resources and maintenance of cataloguing standards, among others. Information resources acquired through legal deposit in National Bibliographic Agencies are catalogued and classified to enhance easy identification, accessibility, and utilization. Aina (2004) maintained that information resources should be organised so as to make them accessible to users who have diversity of interests. IFLA (2014) *Best Practices for National Bibliographic Agencies* and *The IFLA Professional Statement on Universal Bibliographic Control* in Holley (2014) maintained that a National Bibliographic Agency (NBA) has the responsibility of providing authoritative bibliographic data for publications of its own nation; documentation of authorised access points; authoritative citations for works related to the nation; and equally making the data available to other national bibliographic agencies (NBAs), libraries, and other communities through appropriate and timely services thereby increasing open access to the bibliographic data. Thus, NBAs adopt national and international standards and principles for cataloguing and classification, among others.

Assessment of cataloguing and classification practices of the National Library of Nigeria in the digital age is critical so as to determine the extent and effectiveness of cataloguing and classification practices of the apex library. Hufford (2013) and Verzoa in Igwe (2014) asserted that assessment in Library and Information Science is a management tool, applied to determine how effectively and efficiently the library is serving the needs of its users, and also to determine the limitations so as to recommend ways of improvement on such service. Through assessment, the strengths, weaknesses, opportunities and threats to the National Library of Nigeria's cataloguing and classification practices will be determined; and decisions on repositioning strategies taken, so as to ensure effective cataloguing and classification of information resources and invariably ensure effective bibliographic control and access to information resources.

Ensuring that the digital age impacts cataloguing and classification practices through computerization/ automation of cataloguing and classification practices has become a necessity for national bibliographic agencies, especially the National Library of Nigeria. In addition, librarians, particularly those in bibliographic agencies that do not flow with the tide and reposition themselves by upgrading their skills and competences through professional development may find it difficult to meet up with the challenges of the digital era. Cataloguers are life-long learners, and as cataloguing tools are regularly updated so are cataloguers required to update their skills and knowledge and keep abreast of the innovations in all spheres of their practices, especially in cataloguing and classification, so as to ensure that information resources are promptly processed and made available for use nationally and globally.

The digital age also calls for the cataloguing community especially national libraries as bibliographic agencies, to implement the new set of rules known as Resource Description and Access (RDA), that replaces the Anglo American Cataloguing Rules 2nd ed., (AACR2); which Cerbo 11 (2011) averred is designed to improve flexibility in rules for dealing with the changing landscape in describing resources and enhancing their accessibility. All these efforts are geared toward effective cataloguing and classification practices, which ultimately enhances effective national bibliographic control, universal bibliographic control and universal availability of publications. It is unfortunate that some bibliographic agencies, particularly those in developing countries like Nigeria are still grappling with allowing the digital age to have positive effect on their bibliographic control efforts, especially cataloguing and classification practices.

Digital age according to IGI Global (Idea Group Inc.) (2014), is the present development epoch in which economic, social and political activities or processes are driven by ICTs. This implies that cataloguing and classification practices in this era should be ICT driven.

Cataloguing and classification practices are gateways to information resources access and utilization as they are means of organizing library resources in order to ensure that access and retrieval of such information resources are made easy. Where there is failure of any national bibliographic agency to catalogue and classify the information resources acquired, achieving effective bibliographic control of the intellectual output of that nation will be impossible, as there will be chaos, and the nation equally stands the danger of not documenting the intellectual output, providing access to the resources, impeding use, and equally losing the information resources entirely.

Consequently, assessment of the cataloguing and classification practices of the National Library of Nigeria in the digital age is necessary in order to evaluate her capacity to achieve effective bibliographic control of information resources, identify the strengths, weaknesses, opportunities and threats of the National Library cataloguing and classification practices in the digital age. This is borne out of the recognition that digital age and its resultant prevalent application of information and communication technologies to services and functions is expected to improve the cataloguing and classification practices of the apex library. Thus, the study centres on investigating the effectiveness of the National Library of Nigeria cataloguing and classification practices in the digital age in order to ascertain her capacity to achieve effective and comprehensive bibliographic control thereby ensuring accessibility and utilization of information resources nationally and globally, and realizing the two core objectives of universal bibliographic control and universal availability of publications. Researches in the area of assessment of cataloguing and classification practices in the digital age appear to be rare in Nigeria. Thus, the gap identified formed the critical motivation that calls for the study, with the hope of providing empirical evidence, buttressing the strength and weaknesses and thereby proffer strategies for improvement.

Objectives of the study

The main purpose of the study is to assess the cataloguing and classification practices of the National Library of Nigeria in the digital age. Specifically, the objectives of the study comprise to:

1. Ascertain the effectiveness of the NLN in cataloguing and classification of information resources in the digital age;
2. To find out the challenges of cataloguing practices of the National Library of Nigeria in the digital age.

2. REVIEW OF RELATED LITERATURE

Cataloguing can be defined as the physical description of a book, pointing out its important bibliographic details such as author, title, sub-title, parallel title, edition, editor, publisher, and place of publication, date of publication, series, subject and collation. (Nwalo, 2012: 13). Ekere and Mole (2014) opined that cataloguing encompasses full bibliographic description of information resources acquired by the library, adhering to the established rules of the practices; determination of subject contents of the information resource; and generally, determination of the actual position of each new addition in the library's scheme of book arrangement. Cataloguing is also defined "as the process of creating entries for a catalogue' In libraries, cataloguing usually includes bibliographic description, subject analysis, assignment of classification notation, and all the activities involved in physically preparing the item for the

shelf, which are tasks usually performed under the supervision of a librarian trained as a cataloguer" (Reitz, 2004:122 & Pandey, 2015:49). Classification on the other hand "is a process whose purpose is to: specify the location of every bibliographic item on the library's shelves; and display the subject relationships among various bibliographic items in a library's collection" (Chowdhury & Chowdhury, 2007).

Cataloguing and classification are therefore means of organizing library resources in order to ensure that access and retrieval of such information resources are made easy for library users. Thus, Omekwu (2008) refers to cataloguing and classification as the central nervous system of librarianship, noting that they are not ends in themselves but are essentially the bedrock for providing information to users. Though cataloguing and classification aim at ensuring timely and adequate access to, retrieval and utilization of information resources, classification is an intellectual activity. Dhiman and Rani (2005) maintained that cataloguing and classification are two interrelated practices performed in the library to aid users of the library in finding and selecting appropriate information resources needed for study and research. There are two complementary bibliographic control practices performed by cataloguers in the library to facilitate easy access and location of library resources by users. Whereas cataloguing is the physical description of library resources, classification involves taking decision on the subject or subject analysis, determination of the subject(s) and assignment of suitable class number or call mark to the resources so as to enable the information resource to be arranged according to class numbers on the shelves of the library. This is to avoid chaos in the library.

Cataloguing and classification require librarians who are intelligent, skilful, resourceful, dedicated, innovative, have initiative, and keen interest in the performance of their routine tasks. Adeyemi in Sonaike (2009) opined that cataloguing activity is unique; and its process demands some rare qualities like diligence and meticulousness; and noted that cataloguing is:

a skilful art, subject to specific rules and guidelines, which the practitioner acquires through period of professional training; a skill whose finesse and speed of application takes time and experience to develop; a skill which requires an eye for a minute detail, and indeed a skill which teaches patience (p.26).

Nwosu (2014) reported that the development of three principles, requiring 'ability, aptitude and attitude', that guide cataloguers in acquiring competencies and skills, and essentially engaging in continuing education will position cataloguers to cope with the challenges inherent in cataloguing practices. The author also emphasized that in cataloguing, professional knowledge is very important, which includes theoretical background as well as technical skills for cataloguing, and that knowledge of cataloguing tools is also imperative. Cataloguers do not only require having knowledge of these tools and how to use them, but must also keep abreast of the latest changes and updates. This is because cataloguing tools and rules change regularly to reflect or accommodate changes or new developments. Omekwu in Nwosu (2014) asserted that cataloguers will be in a position to define the future, design new functions and delineate the pathway of the information forest. Thus, to collectively carry out cataloguing and classification practices, cataloguers need continuous update of their knowledge and skills in order to cope with the changing requirements of their jobs, and also prevent "trying to do today's job with yesterday's tools - with yesterday's concepts" (McLuhan, 2014). Esse (2013) study equally revealed that cataloguing is not just building a catalogue, but about providing users with timely access to information relevant to their needs, which requires among others that cataloguers should invest consistently in self-development and skills acquisition that is required for them to keep pace with innovations brought about by technological developments, and be relevant in the 21st century information environment. This is in line with Yusuf (2015) study, which maintained that the practice of cataloguing and classification has witnessed radical transformations over the years as a result of the introduction of ICT, and these changes involve

use of 'computers, internet, CD-ROMs, online databases, electronic files, metadata structures, library software packages, online public access catalogue (OPAC) as well as creation of hyperlinks'(p....). This is corroborated by Eyitayo (2009) who reported that the impact of information and communication technology on cataloguing practice is such that it has become greatly germane for librarians and information professionals to move their catalogue from manual to automated systems for obvious advantages associated with such paradigm shift. The author expressed that the Internet has provided the platform for presenting OPACs to the world beyond the walls of libraries, with authoritative records and irrelevant ones being commonly found on the Web. This makes it imperative for ICT driven librarians and information professionals to assist the users "to sieve through the muddy groove and identify the relevant and all-inclusive information for their varied needs" (Eyitayo, 2009: 52).

As Reitz (2004) stated that cataloguing is a process of creating entries for a catalogue, cataloguing practices therefore come out with a unit card known as "catalogue card" for each of the library information resource. At this digital age, cataloguing practices result in creation of machine readable catalogue cards and online public access catalogue (OPAC) for libraries and other user communities. Sonaike (2001) opined that a library catalogue is a record of the information resources indicated on a card, book or machine-readable format. The key to information retrieval in the library, and the preparation of this retrieval tool also referred to as bibliographic tool, requires a sound knowledge of the internationally recognised cataloguing codes for standardization and completeness in order to comply with universal bibliographic control. While cataloguing is the process which libraries produce records that enable them to provide bibliographic control, the catalogue is therefore the principal end-product of the process. Catalogues are the tools by which libraries identify and manage information resources and thus adjudged a bibliographic control tool.

Catalogue information can be made available to the users in the form of books, cards, microfilms or microfiches or through computer networks. In the digital age, catalogues are presented as electronic databases mounted on computers, called online public access catalogues (OPACs) or public access catalogues (PACs). However, cards are still used by libraries that have not computerized their operations; or used as a back-up for those that have computerized. Nwalo (2012) maintained that it is important to note that catalogue overtime continued to respond to time and changes resulting in its metamorphosis from the oldest book catalogue to card catalogue to microform catalogue and also to computerized catalogue, presently known as Online Public Access Catalogue (OPAC). Online Public Access Catalogue (OPAC), according to Chowdhury...etal (2009) and Aina in Ekere and Mole (2014) is the most modern and efficient form of a catalogue, which enables users to interact with the collections of one or more libraries; enables users to search the library catalogue and access very specific entries of a library; allows bibliographic records in a library collection to be stored in a computer memory disk, and also enables the library catalogue to be accessed from various points, remote places and at the same time too, while its use is made possible via a computer with large memory and Internet access.

Cossham (2013) study among other findings revealed that library catalogues presently compete with search engines, online booksellers, digital libraries and archives. The study also noted that the user tasks in functional requirements for bibliographic records need to be re-evaluated in the light of research into information seeking behaviour in the online environment; and equally identified the need to ask whether the model determines the functions of bibliographic records such that, in future users' needs would be met, and whether the user tasks are sufficiently accurate and comprehensive for the kinds of online information seeking behaviour the users have developed.

Ekere and Mole (2014) while discussing economy of cataloguing, enunciated four ways of reducing cataloguing costs in libraries, which involve adopting centralized cataloguing, cooperative cataloguing, simplified cataloguing and selective cataloguing. The last two are also referred to as limited cataloguing. Unegbu (2013) opined that cataloguers are contending with original cataloguing, cooperative and centralized cataloguing, with its varied manifestations like online cataloguing, copy cataloguing, quality cataloguing, outsourcing, online public access catalogue (OPAC), among others. For cataloguing and classification practices to be carried out, international standard tools are required.

Sung (2013) enunciated basic cataloguing and classification tools to include: Anglo-American Cataloguing Rules, 2nd edition (AACR2) and/or Resource Description & Access (RDA); MARC 21 Formats for Bibliographic Data; Web Dewey and/or printed Dewey Decimal Classification (DDC); Library of Congress Classification (LCC); Library of Congress Subject Headings (LCSH); Library of Congress Subject Cataloguing Manual (LCSCM); OCLC Bibliographic Formats and Standards, among others (Sung: pp.1-2). According to Nampeya (1998) study, some of the useful cataloguing tools available in the Internet include the Cataloguer's toolbox, Library of Congress Websites, and Subject Cataloguer's electronic toolkit. In the National Library of Nigeria, in addition to the conventional standard tools, Home-made Classification Scheme for government documents and Elizabeth Moy's Classification Scheme for law books are equally used for processing resources to be published in the NBN. These are done to make information resources easily accessible and retrievable to serve the clientele better and faster, and bring about effective bibliographic control.

Furthermore, Chorun, Oyeniyi and Tibree (2016) reported the need for provision of international standard cataloguing tools for digital environments to ensure retrieval and maximum utilization of digital resources, and outlined some online cataloguing tools like Dublin Core, MARC21, Text encoding initiative (TEI) and electronic archive initiative (EAI). The findings also x-rayed how standard generalized mark-up language (SGML) can be adopted as a language of metadata for text encoding initiative and also compared MARC 21 with TEI, and concluded that they are most suitable for digital resources. The author also added that Sears List of Subject Headings and Library of Congress List of Subject Headings could provide alternative access points for catalogued resources. Eze (2012) study revealed that cataloguing and classification practices have witnessed reasonable changes in the era of ICT and online cataloguing is a major change that ICT has brought to cataloguing. However, the study revealed poor status of automation and use of ICT for library routine and services; inadequate funding; inadequate number of cataloguing staff; inadequate ICT skills and training opportunity. In the same vein, Ocheje (2014) study revealed that conventional cataloguing is more practiced than online cataloguing, which is seen as a new development. Furthermore, the study revealed that librarians are highly skilled in the conventional cataloguing owing to daily practical involvement in the art. The study however revealed the constraints as poor network connectivity; lack of skills in ICT; inadequate power supply; lack of training in the use of ICT facilities; lack of competent chief cataloguers and negative management approach. Igbaal (2011) study on challenges of bibliographic control in Africa revealed slow pace in embracing ICT; lack of suitable automation software; failure to adopt automation software within geographical area; and inadequate funding of ICT projects.

Thus, assessment of cataloguing and classification practices in the digital age is imperative as Calhoun in Cerbo 11 (2011) noted that "Today, a large and growing number of students and scholars routinely bypass library catalogue in favour of other discovery tools, and that the library catalogue represents a shrinking proportion of the universe of scholarly information' (p.1)". Consequently, Gorman in Cerbo 11(2011) study emphasized that the digital age as a great opportunity for cataloguers, with the library of the future having an integrated catalogue

into all facets of its programs and practices. The digital age equally requires that the cataloguing community implement the new set of rules for cataloguing called Resource Description and Access (RDA), which is gradually replacing the Anglo American Cataloguing Rules 2nd ed., (AACR2); and which Cerbo 11 (2011) averred is designed to improve flexibility in rules for dealing with the changing landscape of resources, their description and access.

Thus, with the ever increasing use of electronic resources, Cerbo 11 (2011) study revealed that cataloguers are given the opportunity of providing the user with accurate and usable records to ensure that the resources that are sought are actually found, as it is no longer just books and serials, but e-books, e-journals, websites and repositories, which have speedily increased the quantity of resources and the methods used in acquiring them. Users are no longer restricted to a card catalogue or even the resources of one particular library, as the entire web and its paraphernalia are available at the press of a button or the click of the mouse. Atinmo, (2013) equally observed how technological changes have affected traditional library cataloguing that constitute new directions in practice and user services, as she x-rayed the future of cataloguing in a world of information explosion of online content outside libraries. The study therefore, revealed the strategies that will equally re-equip library catalogue and integrate it with other discovery tools and also ensure that cataloguing and cataloguers in Nigeria contribute to the current global information communication revolution. These four strategies include: 'rethinking the catalogue; creating an interactive space; improving access through embedding library interface in external systems; retraining and retooling cataloguers for the networked environment' (Atinmo, 2013: 82-83). The cataloguer in the digital age must be a multi-skilled professional, with cutting edge competencies in order to remain relevant and give an added value to cataloguing practices and services.

Cataloguing and classification of information resources in the digital age is fundamentally required to enhance effective bibliographic control and bring about universal access to information resources. Nwalo (2013) stated that universal access to information is an evolution that is geared towards meeting user needs; and the new mode of universal access has been propelled by rapid developments in information and communication technologies (ICTs). The author opined that all through the history of knowledge and libraries, the cataloguer has always confronted the challenge of controlling the flow of information and knowledge, and also that the greatest challenge of the digital age cataloguers is to organize web resources to enhance both recall and precision and to reassert their authority over the control of information at all times. The cataloguers in the National Bibliographic Agencies, and particularly the National Library of Nigeria should be part of this effort. In the same vein, Atinmo (2009) reported that the explosive growth of the Internet in the recent years, coupled with the interconnection of the world through the use of the Internet and the Web have changed the basic roles, paradigms and cultures of the libraries and librarians, especially the cataloguers. This development therefore calls for inclusion of Web resources in the library collections and also requires the organisation of such resources. The author asserted that cataloguing the Web enhances optimum use as its real potential can only be realized by organising the resources in some meaningful manner, and which can only be performed better by the cataloguers.

Hsei-Yee in Atinmo (2009) reported that cataloguers have the expertise required for cataloguing the Web and that as they have applied these principles in the cataloguing of resources in various formats, they should be able to apply these same principles to the cataloguing of Web resources. This is sequel to the reality that according to Atinmo that the Web is changing user's information seeking behaviour, turning user's attention away from the libraries; and the World Wide Web has become the people's encyclopaedia of choice; while Google and other Web search engines give people good start, by enabling them to be in their homes and offices and download full-text just with a click of a button. All these inherent

advantages of technological innovations, make it a necessity for cataloguing and classification practices of libraries, especially bibliographic control agencies to be ICT driven in this digital age.

3. RESEARCH METHODOLOGY

The design of the study was descriptive survey design. Area of study was the National Library of Nigeria Headquarters in the Federal Capital Territory, Abuja. Population of the study comprised 736 staff of the National Library of Nigeria. Sample size was 178 respondents, which comprised three categories of staff namely, professionals, para-professionals, and non-professionals/ support staff. The study adopted two sampling technique, which involved purposive sampling of four professional departments, and complete census of all the respondents, which comprised 76 librarians (professionals); 11 library officers (para-professionals, and 91 library assistants and other support staff (non-professionals). Instrument for data collection was a structured questionnaire, which was validated by three experts in Library and Information Science. Method of data collection involved the researcher personally distributing the questionnaire with the aid of two research assistants. One hundred and seventy-eight (178) copies of questionnaire were distributed and 162 returned, giving 91% response. Method of data analysis for research questions involved using a combination of descriptive and inferential statistics, mean and standard deviation. The mean scores were ranked. Real limit of numbers was used in decision taking. 1.00-1.49 denotes Not At All; 1.50-2.49 denotes Low Extent; 2.50-3.49 denotes High Extent; and 3.50-4.00 denotes Very High Extent.

4. PRESENTATION OF RESULTS

Table 1: Statistical Distribution of Questionnaire

Category of Staff	Questionnaire Distributed	Questionnaire Returned	Percentage Response
Professionals	76	76	42.7%
Para-professionals	11	08	4.5%
Support Staff/ Non-professionals	91	78	43.8%
Total	178	162	91%

Table 1 shows the statistical distribution of the questionnaire used for the study. It presents that out of the one hundred and seventy-eight (178) copies of questionnaire distributed, seventy-six (76) copies 42.7% were given to professionals; eight (8) copies 4.5% were given to para-professionals; while seventy-eight (78) copies 43.8% were given to non-professionals / support staff of the National Library of Nigeria, Abuja Headquarters.

Research Question 1: How effective is the National Library of Nigeria (NLN) in cataloguing and classification of information resources in the country in the digital age?

Table 2: Mean Responses of Respondents on the Effectiveness of NLN in cataloguing and classification of information resources in the digital age N= 162)

S/No	Item Statements	Mean	Std. Dev.	Rank	Decision
1.	Uses the Library of Congress subject headings	3.54	.54	1 st	VHE
2	Uses Library of Congress classification schedules (LCCS)	3.51	.58	2 nd	VHE
3.	Use of Dewey Decimal classification Scheme	3.45	.71	3 rd	HE

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4	Use of Sears list of subject headings	3.44	.79	4 th	HE
5.	National library of Nigeria develops uniform standards for cataloguing and classification using different standard texts in bibliographic description	3.20	.67	5 th	HE
6	Use of Anglo-American Cataloguing Rules, 2nd edition (AACR2)	3.16	1.07	6 th	HE
7.	Use of Elizabeth Moy's classification scheme for classification of law information resources	3.05	1.05	7 th	HE
8	Uses the international standard bibliographic description (ISBDs) for cataloguing.	2.97	.73	8 th	HE
9.	Establishes, complies and maintains authority files for national authors and subjects used in the NBN	2.95	.99	9 th	HE
10	Use of Home-made scheme for classification of government documents/information resources	2.56	.98	10 th	HE
11	Has automated her cataloguing and classification practices	2.24	.80	11 th	LE
12	Use of Web-Dewey and e-LC	2.22	1.31	12 th	LE
13	Uses Metadata formats/schemas/standards	2.13	1.15	13 th	LE
14	Uses e-tools in cataloguing and classification in the digital age	2.06	.90	14 th	LE
15.	Uses MARC 21 Formats for bibliographic data	2.04	.90	14 th	LE
16	Uses OCLC Bibliographic Formats and standards	1.86	.79	16 th	LE
17	Is an active partner in the programme for cooperative cataloguing	1.61	.75	17 th	LE
18	Use of Resource Description and Access (RDA) for cataloguing	1.43	.78	18 th	NA
Cluster Mean		2.63	.55		HE

VHE = Very High Extent , HE = High Extent, LA = Low Extent, NA= Not At All.

Table 2 shows the mean ratings of the respondents on the effectiveness of the NLN in cataloguing and classification of information resources in the digital age. Using the principle of real limit of numbers, the results of the data analysis revealed that uses the Library of Congress subject headings 3.54 (.54), and uses Library of Congress classification schedules (LCCS) 3.51 (.58), are effective to a very high extent. Items 3-10, uses Dewey Decimal Classification Scheme 3.45 (.71), Use of Sears list of subject heading 3.44 (.79), National Library of Nigeria develops uniform standards for cataloguing and classification using different standard texts in bibliographic description 3.20 (.67), use of Anglo-American Cataloguing Rules, 2nd edition (AACR2) 3.16 (1.07), use of Elizabeth Moys classification scheme for classification of law information resources 3.05 (1.05), uses the international standard bibliographic description (ISBDs) for cataloguing 2.97 (.73), establishes, complies and maintains authority files for national authors and subjects used in the NBN 2.97 (99), use of Home-made scheme for classification of government documents/information resources 2.56 (.98) are rated high extent in effectiveness, with mean ratings of 3.44 to 2.56.

Furthermore, items 11-17, 'has automated her cataloguing and classification practices' 2.24 (.80), 'use of Web-Dewey' 2.22 (1.31), 'uses Metadata formats/schemas/standards' 2.13 (1.15), 'uses e-tools in classification of information resources in the digital age', 2.06 (.90) 'uses MARC 21 Formats for bibliographic data' 2.04 (.90), 'uses OCLC bibliographic formats and standards' 1.86 (.79), 'is an active partner in the programme for cooperative cataloguing' 1.61 (.75), are rated low extent in effectiveness, while item 18, use of Resource Description and Access (RDA)

for cataloguing of information resources, 1.43 (.78) is rated not at all. The overall mean shows that “uses the Library of Congress Subject Headings” (Mean = 3.54) is ranked highest, while “use of Resource Description and Access (RDA) for cataloguing of information resources (Mean = 1.43) is ranked lowest as regards effectiveness of NLN in cataloguing and classification of information resources in the digital age. Data presented in Table 2 show that the cluster mean is 2.63, which indicates that majority of the respondents agreed to a high extent on the theme of the cluster.

The findings revealed that the National Library of Nigeria is effective to a high extent in all the traditional cataloguing and classification practices. The high effectiveness recorded could be attributed to the institution being the bibliographic agency of the nation, which statutorily accords it the responsibility of providing authoritative bibliographic records of national publication output and equally maintaining cataloguing standards in the country. However, the National Library of Nigeria is effective on a low extent in the use of ICT-driven tools. The National Library’s effectiveness in the areas that relate to ICT was recorded low because the agency is not yet fully ICT-driven in her cataloguing and classification practices. The Agency has not yet automated cataloguing and classification functions and has not equally applied ICT to her cataloguing and classification practices. Furthermore, the findings revealed that the National Library of Nigeria has not adopted the use of Resource Description and Access (RDA) for cataloguing information resources. The finding is however, in contrast with the *National Bibliography of Nigeria 2011 edition* (2013), which stated that the National Library of Nigeria has incorporated e-cataloguing; subscribes to Web- Dewey 22 and e-Library of Congress classification scheme; made all necessary online arrangements to enhance online cataloguing, and also has the necessary infrastructure for sustenance of e-cataloguing. The practice must have been initiated but not sustained as presently, the cataloguers are still manually carrying out their cataloguing and classification activities.

This findings bring to the limelight that the digital age does not have much impact on the National Library of Nigeria cataloguing and classification practices, as most of the cataloguing and classification activities are not ICT-driven but manually inclined. Acquisition of e-tools for cataloguing and classification of resources, adoption of the new tool for cataloguing called Resource Description and Access (RDA), and automating cataloguing and classification practices, among others are important measures that will enhance effective cataloguing and classification practices, engender effective bibliographic control in the digital age and make the bibliographic agency remain relevant in this digital age and effectively contribute to the IFLA programme on Universal Bibliographic Control and Universal Availability of Publications, which is usually initiated at the national level. The findings have far reaching implication, which is in line with Zaid (2009) who stated that the changing environment for cataloguers who have embraced the new technology is that newly acquired resources are not held up in the cataloguing section or for unjustifiable length of time, which is apparently counterproductive to the goals of the library. This is also in line with the studies of Eyitayo (2009) and Eze (2012) that buttressed more on the impact of ICT on cataloguing practices. Furthermore, the National Library of Nigeria not yet adopting and implementing the use of Resource Description and Access (RDA), portends that the apex library and bibliographic control agency is not adequately playing her leadership role in library services, as stated in the enabling Act.

Furthermore, as the study revealed that the National Library of Nigeria is not an active partner of the Program for Cooperative Cataloguing (PCC), which is an avenue for Nigeria being the giant of Africa to assist in presenting most of the problems encountered in the classification of most Africana resources, which Nigeriana is part of. Becoming an active partner of PCC is an avenue to come up with subject headings and classification numbers for the items that are not covered by Library of Congress Subject Headings and Library of Congress

Classification Scheme owing to its literary warrant status. If National Library of Nigeria as the bibliographic control agency of the country becomes an active partner of such a program, challenges of cataloguing and classification of our local resources will be ameliorated as the apex library will liaise with other libraries in the country and come up with a standard that will be communicated to the Library of Congress, the coordinator of program for cooperative cataloguing and such additions and amendments could be reflected.

The essential role of cataloguing and classification practices in bibliographic control is in line with the *IFLA Professional Statement on Universal Bibliographic Control* in Holley (2014) that maintained that a national bibliographic agency has the responsibility of providing authoritative bibliographic data for publications of its own nation, documentation of authorized access points, and making the data available to other national bibliographic agencies, libraries and other communities through appropriate and timely services thereby increasing open access to the bibliographic data. This role can only be effectively carried out if cataloguing and classification practices are ICT driven.

Research Question 2: What are the challenges of cataloguing and classification practices in the digital age?

Table 3: Mean Responses of Respondents on the Challenges of cataloguing and classification practices in the digital age?

S/No	Item Statement	Mean	Std. Dev.	Rank	Decision
1	Lack of bibliographic control of electronic resources	3.15	1.08	1st	HE
2	Inadequate funding of the NLN	3.07	.94	2 nd	HE
3	Inability to provide adequate tools and technologies required for bibliographic control practices in the digital age	3.02	.89	3rd	HE
4	Inability to adequately incorporate ICT into cataloguing and classification practices	2.94	1.02	4 th	HE
5	Lack of automation of cataloguing and classification practices	2.91	1.02	5 th	HE
6	Lack of adequate bandwidth	2.81	.93	6th	HE
7	Lack of Internet connectivity	2.80	.96	7 th	HE
8	Not being an active partner of the programme for cooperative cataloguing	2.56	1.02	8 th	HE
9	Lack of implementation of Resource Description and Access (RDA) for cataloguing	2.55	.93	9 th	HE
10	Inadequacy of cataloguers that are digitally-savvy	2.51	.95	10 th	HE
	Cluster Mean	2.83	.54		HE

VHE = Very High Extent, HA= High Extent, LA = Low Extent, NA= Not At All.

Table 3 shows the mean ratings of the respondents on the challenges of cataloguing and classification practices of the National library of Nigeria in the digital age. Using the principle of real limit of numbers, the results of the data analysis reveal that items 1- 10, Lack of bibliographic control of electronic resources 3.15 (1.08), inadequate funding of the NLN 3.07 (.94), Inability to provide adequate tools and technologies required for bibliographic control practices 3.02 (.89), Inability to adequately incorporate information and communication technology (ICT) into cataloguing and classification practices 2.94 (1.02), Lack of automation

of cataloguing and classification practices 2.91 (1.02), Lack of adequate bandwidth 2.81 (.93), Lack of Internet connectivity 2.80 (.96). Others include not being an active partner in the programme for cooperative cataloguing (PCC) 2.56 (1.02); lack of implementation of Resource Description and Access (RDA) for cataloguing 2.55 (.93); and Inadequacy of cataloguers that are digitally savvy 2.51 (.95) are rated high extent as the challenges of cataloguing and classification practices. Data presented in Table 3 show that the cluster mean is 2.83, indicating high extent.

The findings revealed that all the listed items are challenges of cataloguing and classification practices in the digital age. Furthermore, some of the items in Table 2 that were recorded low extent in cataloguing and classification effectiveness, with mean ratings ranging from 2.24 to 1.43, portray that those items are also challenges to actualization of effective cataloguing practices. Majority of the findings are in conformity with Okafor (2013) whose study revealed that most of the resources allocated for ICT application are available but not functional; and that the extent of ICT application is in the National Library of Nigeria is low.

5. CONCLUSION

In view of the findings, the cataloguing and classification practices in the National Library of Nigeria is highly effective in the use of traditional international standard tools. However, the study revealed that the digital age has not impacted on the National Library of Nigeria cataloguing and classification practices as the practices are not ICT driven in this digital age. This results in delay in cataloguing and classification, which culminate in having backlog of information resources to be catalogued and published in the National Bibliography of Nigeria, which affects effective bibliographic control. The study has therefore provided an empirical evidence supporting the need for the apex library to be ICT driven in her cataloguing and classification practices, automation of cataloguing and classification practices, adopt the use of e-tools; subscribe to e-tools and sustain it; and also spearhead the implementation of Resource Description and Access (RDA) in Nigeria. This will bring about effective cataloguing and classification practices and equally enhance her bibliographic control efforts, as it will equally engender timely production of national bibliography of Nigeria, among others.

RECOMMENDATIONS

1. The National Library of Nigeria should ensure that digital age has positive impact on her cataloguing and classification practices.
2. It is therefore recommended that the Bibliographic Agency should automate her cataloguing and classification practices, and adopt the use of e-tools; subscribe to e-tools for cataloguing and classification and sustain it.
3. As a bibliographic control agency, the National Library should lead other libraries in Nigeria in the adoption and implementation of RDA for cataloguing and classification practices.
4. It is equally recommended that the National Library of Nigeria should become an active member of Program for Cooperative Cataloguing (PCC), so as to contribute to the pool of global cataloguing activities. The Bibliographic Agency's participation in the program will help to ensure that the subject areas on Africa that are not properly covered in Library of Congress Classification Lists of subject Headings and Schedules are adequately captured through the bibliographic agency's recommendations of pertinent additions.
5. The National Library of Nigeria should endeavour to be ICT driven in her cataloguing and classification practices in order to keep pace with the innovations

brought about by technological developments; and ensure that the cataloguers remain relevant in this digital age so as to provide cutting age services that are in line with the global best practices.

6. It is also imperative for cataloguers in the National Library of Nigeria to be trained and retrained in order to gain competencies to remain relevant, provide added value to cataloguing and classification practices and effectively control the flow of information and knowledge in this digital age.

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