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BIBLIOGRAPHIC CONTROL PRACTICES IN THE DIGITAL AGE: CONCEPTUAL MODEL AND THEORETICAL FRAMEWORK PERSPECTIVE

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Abstract

The study examined bibliographic control practices in the digital age from conceptual and theoretical framework perspectives. It illustrated selected conceptual model and theoretical framework that could be applied in the study of bibliographic control practices. The study related these theories and models to bibliographic control practices, with a focus on national bibliographic control agency. An author designed conceptual model was applied in order to bring out the tripartite roles of bibliographic control, which involve national bibliographic control, universal bibliographic control and universal availability of publications. In addition, the practices and their relationships were illustrated. Technology Acceptance model (TAM) propounded by Davis, 1989, and modified by the researcher was also applied to draw attention to the need for bibliographic agencies to embrace information and communication technology (ICT) in their practices; and also for users to accept and use technology in accessing and utilizing information resources/sources. The five laws of Ranganathan were also deemed an important theory to illustrate issues on availability, accessibility and utilization of information resources, which are the basic principles of bibliographic control practices. The study concluded that the conceptual model developed for the study enunciated the practices and brought out the relationship among the variables; while the five laws of Ranganathan and technology acceptance (TAC) model, brought to the limelight the need for bibliographic control agencies and users of information products and services of such agencies and other libraries to acquire and apply basic ICT skills and knowledge, so as to perceive the usefulness and ease of use of modern technology in this digital age for effective bibliographic control practices.

Keywords: Bibliographic control, practices, digital age, conceptual, theoretical framework.

Introduction

Bibliographic control according to Reitz (2004) and Pandey (2015) can be defined as a term that ‘encompasses all the activities involved in creating, organising, managing, and maintaining the file of bibliographic records representing the items held in a library or archival collection or the sources listed in an index or database to facilitate access to the information contained in them’. Dictionary.com (2019) also defined bibliographic control as the identification, description, analysis and classification of information resources in order to effectively organize, preserve, retrieve and use them when needed. Bibliographic control is IFLA/UNESCO programme which starts with national bibliographic control; leads to universal bibliographic control and culminates in universal availability of publications. It ensures that

users are able to get information needed whenever and wherever needed despite distance or location. Thus, for bibliographic control to be successful and comprehensive, countries are involved. Each country collects information resources published within the country, by citizens of the country or about the country and also publishes its own national bibliography, which is an embodiment of the country's intellectual output that represents scholarly and intellectual output/heritage of the citizenry.

National bibliographic control can therefore be defined as the systematic listing and management of a country's publication output or intellectual heritage, and making it publicly available when needed by citizens of that country, libraries and other users globally. It is geared towards preservation of intellectual heritage of a particular country for future generation. It entails identification, collection, description, and systematic listing in such a manner that the citizens will be aware of the availability of the information resources and where the resources can be found or located. National bibliographic control has two distinct facets, which according to Anderson in Adimorah (1995) and Lasisi (2013) include: being concerned with the physical objects, books, and other information resources, which make up the national collection; and also being concerned with the records of those publications that cumulate to make up the national bibliography. Snyman (2000) as cited in Akidi (2017) revealed that national bibliographic control provides a system that enhances the possibility of identification and localising of information resources within the country's borders; in addition to the identification, recovery, collection and preservation of the physical items which originate in the country, the creation of bibliographic records that describe and identify the publications is very significant; and the publication on its own is valueless to the information community without the records indicating their existence and providing access to their content. Thus, looking at national bibliographic control from the context of universal bibliographic control, it is imperative that the national bibliographic control agency in addition to the collection of information resources published in her country, should be responsible for the creation of authoritative bibliographic records for every new resource published in accordance with internationally accepted standards. When all countries adopt bibliographic control on the national level, a measure of universal bibliographic control would be possibly realized.

Nwosu (2013) defined universal bibliographic control as a long term programme adopted by the UNESCO and International Federation of Library Associations and Institutions (IFLA) as a major policy objective to develop a world-wide system for the control and exchange of

bibliographic information in order to make bibliographic information on publications issued in all countries universally and promptly available. The author maintained that universal bibliographic control was hitherto attempted without success, hence, since Second World War, UNESCO has been emphasizing that universal bibliography is possible only in terms of national units, necessitated the compilation of national bibliographies all over the world. Anderson in Nwosu (2006) averred that the basic principle of universal bibliographic control (UBC) is that every country has a contribution to make to a worldwide system, that each country should be responsible for making the bibliographic records of its own publications in accordance with internationally accepted standards, and that these records will then be made available and accessible for use worldwide.

In the same vein, Anderson in Nwosu (2013), Ejedafiru and Akporhonor (2011) and Lasisi and Oyelude (2013) maintained that the aim of universal bibliographic control is to establish an international network that consists of component national parts, covering publishing and library activities; a world-wide network of national bibliographies to secure a fundamental standardized registration of, and through that a possibility of retrieval of information resources published globally. Thus, effective national bibliographic control ultimately contributes to universal bibliographic control. In the same vein, Holley (2014) averred that IFLA adopted a strategy for the actualization of universal bibliographic control, which involved that the national library in each country should be responsible for acquiring and cataloguing in standardized form all the publications produced in that country; and also to publish a national bibliography in print or microform, which in the present digital age should include electronic/digital format. Thus, one can state that UBC is IFLA/UNESCO programme for the development of a world-wide system for the control and exchange of bibliographic records; and that national and international agencies are contributors to the actualization of global bibliographic network.

In corroboration, IFLA Professional Statement on Universal Bibliographic Control (2012) affirmed that the philosophy on universal bibliographic control was that 'each national bibliographic agency would be responsible for cataloguing the works published in its own country and establish the names of its authors, and that data would be shared and re-used around the world' (p.1). The author averred that in the 1990's there was recognition that having data in a language and script users can understand is extremely important, thus, respecting the cultural diversity of users globally should be addressed too; and it was also recognized that Web technologies offer new possibilities of sharing data globally and beyond the library domain, but

equally demonstrate a need for authoritative and trusted data. This made the concept of UBC remain valid and worth IFLA's continued support and promotion, as the effort culminates in universal availability of publications to users.

Universal availability of publications according to Hussain (1984) is a concept propounded by Line to denote the widest possible availability of published information resources to intending users. The concept stipulates that published information resources should be made available to everyone who wants it more or less where he wants it. Its objective is to ensure widest possible availability of published information resources to intending users wherever and whenever they need it, which forms an essential element in social, economic, educational and personal development of people and nations. UAP programme aims to improve availability of information resources at all levels, from national to international and at all stages from the publication of new information resources to retention of last copies, both by positive action and by the removal of barriers. The ultimate goal of universal availability of publications is to ensure that individuals throughout the world are able to obtain for personal use any publication, wherever or whenever published, either in original or copy. Thus, UAP aims "at ensuring that improved access to information on documents through universal bibliographic control is matched by improved access to the documents themselves". Furthermore, Hussain maintained that UAP and UBC are complementary to each other, such that while the former locates a particular publication, the latter provides means of its availability.

In line with the requirements of universal bibliographic control, Lasisi and Oyelude (2013) opined that the bibliographic control agency of Nigeria, which is the National Library of Nigeria was established as the administrative machinery to take up the role and functions of a national bibliographic agency and charged with the responsibility of publishing all bibliographic records emanating from the country, with the shortest possible delay in a national bibliography and regularly too. Bothmann (2014) asserted that universal bibliographic control is dependent upon a mutual understanding of how librarians define a resource. In the digital age, emerging technologies have changed expectations and assumptions about the constancy of formats; challenged the definitions of formats and descriptive cataloguing rules; and driving such responses as the International Standard Bibliographic Description (ISBD) Area Zero and Resource Description and Access (RDA). The convergence of emerging technologies and universal bibliographic control raise the issue of the ability of the present bibliographic control practices to accurately and universally describe information content delivered in an emerging

technology. This is because universal bibliographic control is a worthy and essential goal for the description of resources in any environment, notably for a Linked Data environment.

Bibliographic control practices bring about effective bibliographic control. Information explosion experienced in the digital age has brought proliferation of publications created by diverse authors such that users are faced with problems of how to identify and locate recorded knowledge as contained in books (printed and electronic), serials, databases, and other media that currently flood the book industry and the web. Bibliographic control practices enhance the possibility of identifying and accessing these numerous resources. Bibliographic control practices can therefore be defined as involving all the activities carried out by the bibliographic agency to ensure adequate and comprehensive acquisition, organisation, management, preservation of information resources, dissemination, and also creating means of availability, accessibility and utilization of such information resources. Bibliographic control practices facilitate easy availability, accessibility and utilization of information resources. Effective bibliographic control practices according to Akidi (2017) enhance resource sharing and networking among bibliographic agencies, and ensure universal availability of information resources to the general public and global community.

Bibliographic control practices of bibliographic agencies according to Akidi (2017) involve collection of legal deposit, cataloguing and classification of information resources and maintenance of cataloguing standards, compilation and production of national bibliography, indexing and abstracting services. Others include production of bibliographic tools, establishment and maintenance of authority files, compilation and maintenance of national union catalogue of monographs and serials, and maintenance of publishing standards. The National Library as a bibliographic agency is responsible for bibliographic control practices in Nigeria. The Agency therefore ensures availability and adoption of the enumerate practices among others, so as to remain relevant in bibliographic control network.

This is in corroboration with Omolayole (2003), who reported that the National Library of Nigeria is charged with the responsibility of bibliographic control thereby being responsible for the development of the national bibliography of Nigeria and national bibliographic services either in a national bibliographical centre or elsewhere. The author averred that National Library of Nigeria is statutorily responsible for maintenance of national leadership in professional practice and standardization for all libraries in Nigeria, clearly manifested in bibliographic control practices among others. In the same vein, Lasisi and Oyelude (2013) opined that the

National Library of Nigeria as the National Bibliographic Agency of the country plays a vital role in the bibliographic control of the country's intellectual output, and therefore established many infrastructures to enhance effective national bibliographic control practices.

Bibliographic control practices in this digital age ensures availability, accessibility and effective utilization of information resources, which requires librarians, especially in bibliographic agencies to constantly review the way they work, re-invent themselves and retool so as to remain relevant and adopt gold standard bibliographic control practices. Moreso, the five laws/principles of librarianship as enunciated by Ranganathan (1959), "books are for use; every reader his book, every book its reader; save the time of the reader; and the library is a growing organism"; bring to the fore the need for effective bibliographic control practices.

Conceptual models and theoretical frameworks / models are applied in studies to provide illumination and bring about better understanding of the concepts, variables and their relationships. Thus, the theoretical significance of this study is anchored on the Ranganathan's (1931) five laws of Library Science, Technology Acceptance Model propounded by Davis (1989), while the conceptual model will be a researcher made construct on the variables of bibliographic control. The theoretical framework and model applied, and the conceptual model (schema) created and adopted for the study on bibliographic control practices by the researcher portray the need for availability and adoption of effective bibliographic control practices at the national bibliographic agencies, with focus on the National Library of Nigeria, in order to ensure adequate provision of the right resources to the right persons at the right time irrespective of the distance or location.

Conceptual model

Conceptual models according to Ukachi (2013) are designed to stimulate efforts that represent certain aspects of the real world; and equally identify, clarify variables, and possible linkages amongst them so as to promote understanding. The author emphasized that understanding models can therefore contribute to unveiling the truth and accuracy of the real system. In assessing the bibliographic control practices of the National Library of Nigeria in the digital age, a conceptual model developed by Akidi (2017) and applied to describe the kind of relationships that exist among variables. It equally explains how the research was carried out, by projecting the relationship and interaction among the independent variables of the study. See fig. 1.

Conceptual model for bibliographic control practices in the digital age

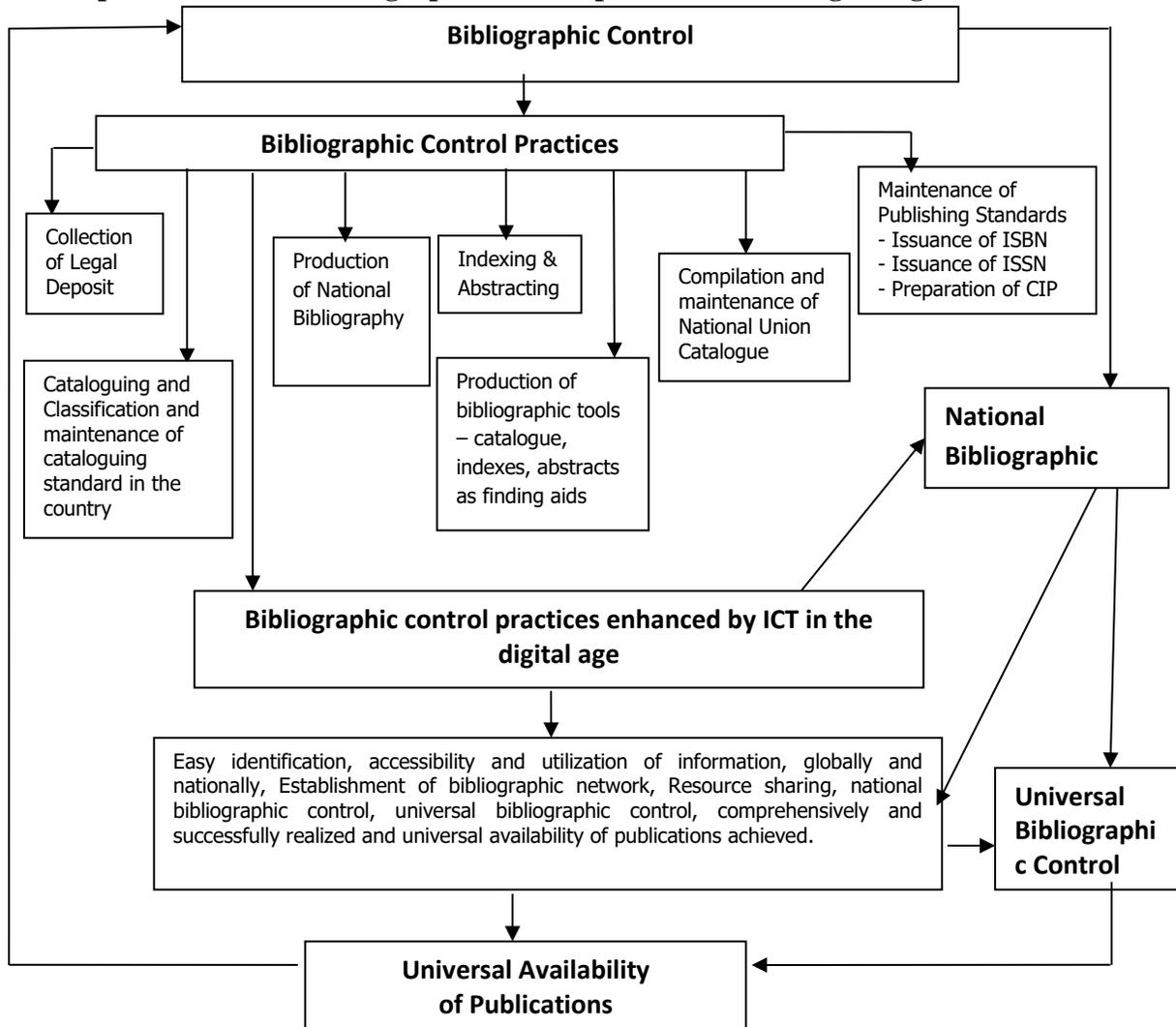


Fig1: Conceptual model for Bibliographic Control Practices of the National Library of Nigeria in the digital age (Source: Akidi, 2017)

The above figure shows that bibliographic control is a fundamental variable, which could only be realized when some practices are incorporated. When some practices are brought into place, there will be bibliographic control practices, which could also be enhanced by the application of ICT to such practices in this digital age. When bibliographic control practices are enhanced by ICT in this digital age, there is the tendency that the following among others will be achieved: easy identification, accessibility and utilization of information / information resources, nationally and globally; establishment of bibliographic network; resource sharing; national bibliographic control; universal bibliographic control comprehensively and successfully realized; and universal availability of publications achieved. From the above figure, it is noted that

bibliographic control practices have the following variables: Collection of Legal deposit; cataloguing and classification of the collected resources, and maintenance of cataloguing standards; compilation and production of national bibliography; indexing and abstracting; production of bibliographic tools; and compilation and maintenance of national union catalogue of monographs and serials, for wider access and resource sharing; maintenance of publishing standards (issuance of ISBN/ISSN, and processing of cataloguing-in-publication (CIP) data for publishers and authors in order to ensure that all published resources meet international standards. The model establishes the relationship among the dependent variables such as bibliographic control, which stipulates that individual countries like Nigeria should engage in national bibliographic control, which when successful in all nations, results in universal bibliographic control and universal availability of publications.

The model depicts the two cardinal objectives of bibliographic control, which Nwosu (2013) averred are universal bibliographic control and universal availability of publications, which of course starts with national bibliographic control by the national bibliographic agencies. This means that bibliographic control starts with national bibliographic control, which is bibliographic control at national level, and which stipulates that national bibliographic agencies collect, process, publish and make available and accessible their national intellectual output. When this is done at the national units successfully, universal bibliographic control will be achieved and ultimately, universal availability of publications will be realized in which people can access information resources whenever and whenever needed disregarding the distance. Universal availability of publication presupposes that information resources are universally available, as there will be resource sharing and networking, especially in this digital age that experiences information explosion.

Thus, bibliographic control practices in the digital age presuppose that the national units will adopt the use of ICT in their practices. When these practices are enhanced by ICT, it becomes more effective and engenders effective and maximum identification, access and utilization of information resources nationally and globally; resource sharing and networking, and also national bibliographic control, universal bibliographic control comprehensively and successfully realized and universal availability of publications achieved.

Theoretical Framework

Theoretical framework entails application of relevant theories and / or models to the study so as to bring about clearer understanding. In this regard, Akidi (2017) adopted

Ranganathan's five laws of library science, and Technology Acceptance Model, to throw more light on bibliographic control practices of National Library of Nigeria in the digital age.

Five Laws of Library Science by S. Ranganathan (1931)

Five laws of Library Science by Ranganathan was published in 1931, a classic work that described the essential nature of library and information science practices. The five laws provide the guidance and rationale needed when critically reviewing acquisition of information resources, cataloguing and classification practices; assessing libraries and how to improve the library practices and services, among others. These laws are fundamental and applicable to any problem in library and information science professional practices, especially bibliographic control practices. The five laws are: books are for use; every reader his or her book; every book its reader; save the time of the reader; a library is a growing organism.

The first law, which states that 'books are for use' implies the need for processing and organising the library resources for maximum use through the provision of physical facilities, one of which is cataloguing and classification of the information resources and the provision of the library catalogue that serves as a bibliographic tool that throws the entire collection of the library open to users; enhances easy accessibility and utilization of such resources, among others. This law came to the limelight in this digital age as the library is a service institution, with the purpose of continuously enhancing the ability of the user to make the most effective use of the resources and services of the library.

The second law, which stipulates 'every reader his or her book' has very serious and vital implication for the library and bibliographic control practices, with the fundamental issue that every reader must be carried along in acquisition of information resources; and emphasised that all efforts should be made to ensure that each reader gets his/her information resource or is satisfied with his information needs. Thus, book selection and acquisition should be carried out judiciously and equitably so as to adequately meet the demands of different categories of users. The implication for national bibliographic agencies is that legal deposit collection should be comprehensive as to cover all national publication output, while production of NBN should also be comprehensive in coverage, and timely. Thus, the National Library of Nigeria as a national bibliographic agency should not rely solely on legal deposits for the production of National Bibliography of Nigeria (NBN), but rather endeavour to purchase from the publishers as a sort of encouragement and better collection building. This is on the premise that national bibliography of any country is the mirror that showcases the country's publication characteristics and through

which peoples could become aware of what information resources are published and possibly available for use. This law equally has implications for the cataloguer who provides means of identifying and accessing information resources; production of bibliographies, catalogue cards, indexes and abstracts, among others. It has implications on bibliographic control practices in the digital age as the librarian must ensure that the user is satisfied with his needs through information search in remote places, which national union catalogue, consortium, inter-library loan and resource sharing enhance, and which ultimately enhances national bibliographic control, universal bibliographic control and universal availability of publications.

The third law, 'every book, its user' addresses the pivotal and fundamental issue of access. If a book is acquired, processed and the access is denied, either by lack of awareness of the existence, or its acquisition kept secret, or hidden from users through wrong shelving, or any other impediment, the spirit of bibliographic control practices is defeated. Thus, the desire of the third law is that every book in the library must find/locate its user, which implies that there should be maximum use of the book by its user. The success of this law could be achieved through making efforts to ensure availability, accessibility and utilization of information resources, which could be harnessed through collection of legal deposit, cataloguing and classification, production of catalogue, whether in print (catalogue cards) or electronic (OPAC), production of national bibliography, indexing and abstracting among others. Thus, the librarian can ensure that every book has its reader by creating awareness on the existence of resources and adopting more measures that will aggressively enable connecting information resources with their users.

The implication of this law on bibliographic control practices in the digital age is that, the library must adopt the state-of-the-art structured, well-thought-out indexing, abstracting and classification system and tools; and also production of national bibliographies for easy identification and accessibility, so as to enhance the opportunity of information resources ending up in the hands of those that need them. It is also imperative to ensure that librarians maintain appropriate arrangement of these information resources on open stack and maintenance of proactive shelving and shelf-reading on daily basis as wrong shelving of books can make it inaccessible and possibly lost to the right user.

The fourth law 'save the time of the reader' places great premium on time and stipulates that a library catalogue should not only be simple in its design and construction but also save the time of the reader. Thus, every approach whether through author, title and subject, among

others, should be provided to enhance access. The law also revolves around the user, and implies that the user should be seen as a busy person whose time must not be wasted. The success of this law hinges on cataloguing and classification and shelf arrangement, which must have degree of mutual relationship of subjects, and also on indexing and abstracting services that provide finding aids and surrogates. It equally hinges on Cataloguing -In- Publication programme that enables the book get to the shelf fast. Provision of library guides, application of information and communication technology to bibliographic control practices; availability of Internet and networking facility, and adequate bandwidth; the library resources being acquired must be processed in such a manner as to enhance quick access and retrieval; and the library providing finding aids such as catalogues; indexes; abstracts; bibliographies like national bibliographies; and national union catalogue, among others, so as to facilitate speedy access to information resources.

The fifth law states that “library is a growing organism” and stipulates that the library is a social institution that keeps on growing like an organism. The growth is usually in terms of information resources, users, staff and infrastructure. The implication of this law is that no limit should be put on the size of library collection and that library building must be planned in view of the present and future needs; choice of classification scheme, physical form of a catalogue and staff strength must take into cognisance the inevitable growth of the library. The emergence of the information and communication technologies has brought about far-reaching changes evident both in the physical forms of library catalogue and their internal structure. In addition, library networks have also provided access to resources of other libraries. Thus, as change is inevitable, National Library should always remain alive to changes so as to remain relevant in the digital age, while the librarians should re-invent themselves so as to take over libraries of the future.

Technology Acceptance Model by Davis (1989)

The Technology Acceptance Model (TAM) was developed by Davis in 1989. The model provided an explanation on the determinants of technology acceptance, which is generally capable of explaining user’s behaviour. It explained the attitudinal, social, and control factors that affect information technology (IT) adoption and usage in organisations and practices. Davis stated that usage of an information system is determined by users’ intention to use the system, which in turn is determined by users’ beliefs about the system. For the purpose of this study, users refer to bibliographic control agency staff applying technology to bibliographic control

practices in the digital age and also users of the products and services of such bibliographic control agency and other libraries using technology to identify, access and utilize information resources.

Two kinds of significant beliefs are involved in Technology Acceptance Model, which are: perceived usefulness and perceived ease of use of the system. Perceived usefulness is defined as the extent to which a person believes that using the system will enhance his or her job performance (bibliographic control practices in the digital age), while perceived ease of use is defined as the extent to which a user believes that using the system will be free of effort. This is subject to acquisition of some basic knowledge and skills by the staff adopting technology for his practice and the user applying it to identify, access and utilize information resources. Perceived usefulness could be seen as having direct effect on adoption intention, while perceived ease of use, which could come as an effect of the users' computer self-efficacy or attitude towards the use of the system, and both have a direct and an indirect effect on intention.

This model also expounded that usefulness and perceived ease of use will have a significant impact on a user's attitude towards the use of the system. A staff of any bibliographic control agency that could not see the impact of the digital age on bibliographic control practices or views the adoption of technology as a very difficult task will manifest a negative behavioural attitude towards the use of information and communication technology in the following bibliographic control practices: collecting legal deposit, cataloguing and classification of the information resources, production of catalogue cards including Online Public Access Catalogue; online national union catalogue; indexing and abstracting practices and production of indexes and abstracts as finding aids; and production of national bibliographies, among others.

For the users of national bibliographic control agency library products and services, technology acceptance manifests in their identification, access and utilization of information resources for their various needs which could be information, research and other academic activities. Similarly, national bibliographic control agency staff or users who have low computer self-efficacy will also not perceive the use of the resources easy since its use entails manipulating the computer. The implication is that staff and users' attitude towards the collection, processing, management of information resources and their easy identification, access and utilization; and also their computer self-efficacy which respectively, reflect the perception and beliefs on one's capability will enhance performances in bibliographic control practices and access and utilization

of resources in the digital age. The schema below which was modified by Akidi (2017) further illustrates the model.

Technology Acceptance Model by Davis (1989)

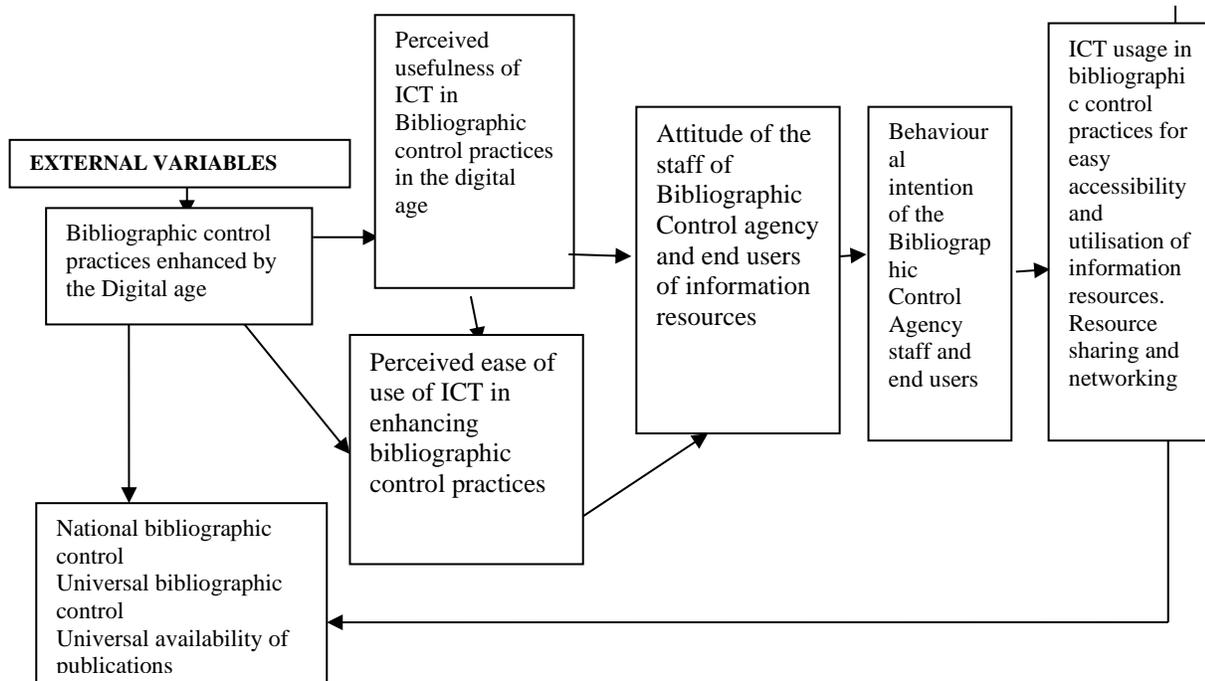


Fig. 2: Technology Acceptance Model by Davis, 1989 (modified by Akidi, 2017).

Conclusion

Attainment of effective bibliographic control practices by national bibliographic agencies like the National Library of Nigeria, among others accomplish the five laws of Library Science as information resources will actually be for use; every user will access and use his or her information resource(s), every information resource would be identified, accessed and utilized by its user; the time of the user would be saved as information resources would be readily available, easily accessible and used; while the library will continually grow like an organism in terms of comprehensive collection of legal deposit and acquisition of other resources, and the staff would continually update their knowledge and skills so as to remain relevant in this digital age.

The five laws and technology acceptance (TAM) model, which was also adopted for the study brought to the limelight the need for the national bibliographic control agencies like the National Library of Nigeria (NLN) and users of information products and services of the agency to acquire basic ICT skills and knowledge so as to perceive the usefulness and ease of use of

modern technology in this digital age for effective bibliographic control practices, while users will easily identify, access and utilize available information resources.

References

- Adimorah, E. N. O. (1995). Enhancing national bibliographic control using modern information technology. Paper presented at a National Workshop on Bibliographic Control and International Standards on Book Publishing, held at Zodiac Hotel Ltd, Enugu. 9th – 12 Oct.
- Akidi, J. O. (2017). Assessment of bibliographic control practices of the National Library of Nigeria in the digital age. An unpublished Ph.D Thesis, Department of Library and Information Science, University Of Nigeria, Nsukka, Enugu State, Nigeria.
- Bothmann, R. L. (2014) Hitting a moving target: cataloguing in the age of emerging technologies. Available: <http://creativecommons.org/licenses/by/3.0/>
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly* 13 (3): 319–340, [doi:10.2307/249008](https://doi.org/10.2307/249008)
- Ejedafiru, E. F. and Akporhonor, B. A. (2011). The Problems and prospects of bibliographic control in Nigeria. *Knowledge Review*, vol. 22(2), April.
<http://www.globalacademicgroup.com/journals/knowledgereview/The-problems-and-prospects-of-bibliographic-control-in-Nigeria.pdf>
- Dictionary.com (2019). Bibliographic control. Available at: <https://www.dictionary.com/browse/>
- Holley, R. P. (2014) Self-publishing: a new challenge for universal bibliographic control. Retrieved from : <http://creativecommons.org/licenses/by/3.0/>
- IFLA (2012). *Professional statement on universal bibliographic control*. Available from: <http://www.ifla.org/publications/ifla-professional-statement-on-ubc>
- Hussain, S. (1984). Universal availability of publications: problems and prospects. *Annals of Library Science and Documentation*, 31 (1-2), 38-43.
- IGI Global (Idea Group Inc.) (2017). What is digital age? Available at: <https://www.igi-global.com/dictionary/digital-age/7562>
- Lasisi, J. & Oyelude, A.A. (2013) National bibliographic control and national bibliography of Nigeria: current trends and issues. Paper presented at the seminar/workshop on *Legal deposit and bibliographic control in Nigeria*. Organised by the National Library of Nigeria, held at the Oyo state branch of the National Library of Nigeria, Plot 774, Iyaganku GRA, opposite Court of Appeal, Ibadan, 11th -12th Dec. 12p.
- Nwosu, C. B. (2006) National union catalogue: the way forward. In *Current trends in information and communication technology application to technical services*. Proceedings

of selected seminar papers of the cataloguing, classification and indexing section of the Nigeria Library Association, 2003-2004. 77-85.

Nwosu, C. B. (2013). Legal deposit obligations and their benefits to the Nigeria book industry. A Paper presented at the Legal Deposit Seminar/Workshop, Held at the National Library Branch, Ibadan, from 11th – 12th Dec.

Omolayole, O. O. (2003). 40 years of national library service to the nation In S. O. Olanlokun (Ed.) *40 Years of Library and Information Service to the Nation: a Compendium of Papers Presented at the National Conference & AGM*, June, 16-21, Topo- Badagry, Lagos State. Lagos: Nigerian Library Association.

Pandey, R. (2015) *Dictionary of library & information science*, 7th ed. New Delhi: O. P. Gupta for Ramesh Publishing House

Nwosu, C. B. (2013). Legal deposit obligations and their benefits to the Nigeria book industry. A Paper presented at the Legal Deposit Seminar/Workshop, Held at the National Library Branch, Ibadan, from 11th – 12th Dec.

Ranganathan, S.R. (1931). *The five laws of library science*. Madras: Madras Library Association.

Ukachi, N. B. (2013). Accessibility and students variables as correlates of the use of electronic information resources in University libraries in South-West, Nigeria. An Unpublished Ph.D Thesis, Department of Library and Information Science, University of Nigeria, Nsukka, Enugu State, Nigeria.