MPRI-JAEE | INTERNATIONAL JOURNAL OF ASSESSMENT & EVALUATION IN EDU.
VOL. 1 NO. 1 JUN-2022

COMPARATIVE STUDY OF MARC21 ADDITIONAL FEATURE OVER AACR2, ISBD, FRBR AND RDA: ANALYTICAL STUDY

KEFAS GILBERT
Federal Polytechnic Bali, Library Department, Taraba State.

Abstract

This paper study (4) catalogue standard to access their capability and recommending the future substitute of MARC21 format. This paper tries to find out the existing scenarios in cataloguing policy, their boundaries leading to movement and try for the achievable prospect of MARC21.

KEYWORDS:
Catalogue, AACR2, ISBD, MARC21, FRBR, RDA, XML, HTML, Doublin Core

Introduction

This could be importance control design for undervalue the authority of librarians whose main functions are determined on selecting, acquiring, organising and dissemination of information resources both print and non-print in a good way to the users. Notwithstanding the important of internet in given surprising information sources, the librarians still have a significant role to perform for creation of access to information and services.

"Technology and automation have cause librarians to become more diverse in their role" Williams (2009). MARC plays a tremendous role in the cataloguing world since its advent in the 1960 by Avram.

Despite the agitation by Tennant that: "MARC most die"

The techniques play a significant role in the cataloguing world the format still stands as the major technological tool for finding library materials. Therefore, the concept of AACR2 will never be a banned fruit in the life circle of cataloguing, the concept upon which all the other formats are built on.

EDITOR-IN-CHIEF
Prof. A.I. Mteiye [MALAWI]

The history of AACR can be traces since 1841 as a structure the rules for British Museum's library catalogue. Initial the American library cataloguing policy was available in the year 1876. The year 1902 -1949, (UK) United Kingdom and the (USA) United States of America has developed different kinds of policy. To reason and believe in just beginning in developing common regulations come in around 1961 by means of formulation of philosophy of cataloguing and supported by the professional bodies called national cataloguing organizations from (UK) and International Federation of Library Associations (IFLA) and also from North America in collaboration to create this(AACR2) Anglo-American Cataloguing Rules by the year 1967. But there are some variations which were not prepared to accept by that time, moreover, first version of it AACR was make in public or in print different from north America and UK and type. There is a number of force to eradicate those outstanding distinctions sustained the growth or development of an additional universal content benchmark/standards, the (ISBD) International Standard Bibliographic Description, the professional body called IFLA in the year 1969. These shows that the results of second version of (AACR2) were in print 1978 on one version types. The acknowledgments of worldwide viewpoints on cataloguing principles have therefore been an important power of AACR2.

The Anglo-American cataloguing rules (AACR2) have kept on increase through these years 1978, not all the least to provide somewhere to continue the latest forms of materials resource up-and-coming from the electronic and universal Web. About 20 years of massive growth or development, a worldwide conference of professional in the field of librarianship was hold in Canada, in the year 1997 and look at philosophy plus prospect and growth of AACR2.

The year 1998 professional bodies of librarianship (IFLA) produce Functional Requirements for Bibliographic Records, as an entity-relationship (with model that gives a principled foundation for the clustering of mechanism and stress bibliographic relationship and also centre of which is a set of customer tasks that arrangement and justify the whole exercise) type proposed to sustain the methods of information recovery plus materials finding facility to customer/users. However, the IFLA plays key role in having and keeping on extra newly with a sequence of meetings held in many areas international from 2004 - 2007 with the aimed of modernized and considering the philosophy of cataloguing certified in Paris of 1961.

The environment inside which cataloguing obtain situation have passed important transformation since its publication of AACR2, in the year 1978 Metadata be

necessary to explain a longer variety of information transporter by means of a greater complexity and difficulty of content varieties starting, for instance, collections of electronic resources to so many learning post or correspondence. The internet will permit a greater/superior multiplicity of workers to add to substance of metadata, the writers providing the heading or title, synopsis and theme and study through manager formative recognize and right of entry circumstances to metadata librarian putting some right of entry areas and make sure excellence one. The problem which related with modifying is therefore with learning environment are explain in the toolkit constructed by the Managing digital assets in tertiary learning scheme. The electronic-obtained metadata is almost growing importance. Policy and regulations have to be well clear, unmistakable, reliable, and full and prepared sufficient to be practical successfully athwart a variety of talents and capability. Bibliographic content must be prepared sufficient to live articulated in a current scientific storage space and message arrangement for use by customer services. At that time there was an explosion of an arrangement designed intended for this (RDA) resource description and access of current periods, there are variety and test of (MARC) Machine-Readable Cataloguing, was in collaboration by Dublin Core (DC), and Bib frame and numerous others concentrating on bibliographic control and there was a (IEEE-LOM) Institution of Electrical and Electronics Engineers Learning Object Metadata. The MARC means machine readable catalogue is a machine through which information can be store through computer system and analysis the bibliographic source of a library and many other libraries in a whole world. This has to do with professional librarian who knows how to use system, which means in a virtual library or system. In the year 1960s a notable librarian called Avriam since the beginning of MARC 21 version. The major significant thought about MARC21 is of tagging of materials with (3) digits, the tag is with the conformity of language ISO 2709 regulations. The MARC21 have been a very important with recent growth in technology particularly professional librarians who appealing to change from traditional form of old library system to the present electronic system. According Brain E.S and Anne M.M (2005.P51)

> *"Integrated library system typically does not reveal their underlying programming to the competitors but libraries are to use that software to build their own local data bases of catalogue records using standardized and widely disseminated schemas, such as the MARC format."*

The MARC can be describing as legendary professional librarian Dewey who use his brain to divide the whole human endeavour or knowledge into 10 main classes and he further subdivided to each classes to make sure that is accept to all kinds of the same concept of bibliographic data which given in a tags and the symbols can direct information resources which give the cataloguer the opportunity to locate into the content designations.

These are common fields that are normally used by customer in MARC fields,

0XX- Control information number
1XX- Main entry
2XX-Titles, edition, imprint
3XX-Physical description
4XX-Series Statement
5XX-Notes
6XX-Subject access field
7XX-Name, etc. added entries or series, linking.
8XX-Series added entries, holdings and locations.
9XX-Reserve and local implementation

This is common table used in MARC fields see practical below in Appendix

010	Library of Congress Control Number
020	International Standard Book Number
100	personal name main entry (author)
245	title information (which includes the title, other title information, and the statement of responsibility)
250	Edition
260	publication information
300	physical description (often referred to as the "collation" when describing books)
490	series statement
520	annotation or summary note
650	topical subject heading
700	personal name added entry (joint author, editor, or illustrator)

MARC does not work perfect on its own is guided by rules but work in collaboration with AACR2 and other regulations it depends on two main categories. (1) Is $record content and (2) the second is $content designation. This

record content means the data that would normally develop the record, while performing the function to provide the regulations of metadata record. The second content designation also means the construction of metadata facts while using the fields and subfields with other important sign so that MARC can perform the functions well.

According to Aswal (2005)" He said due to the exploitation of information technology, the proliferation of computer system in libraries and rapidly growth of centralized cooperative bibliographic services and resources sharing it is apparent that a standard system is needed". This standard Aswal is meaning to AACR2 and MARC21 for indexing and creation of ways through which users can retrieve information resources.

The truth is creation of accurate of entry points to provide in catalogues performs marvellous functions on the MARC records this is successful searching. In MARC21format there some problems in it for long time, the problems are concerning concept which needs to be solved. While not only MARC21 have this problems DDC also grow with its hierarchical (relations component) in its organizing human knowledge likewise MARC required such hierarchical connection. In MARC fields there some missing records which want for language mark-up, for instance field 500 is missing look at the table above, and its sign code and numbering system is very difficult to read and understand by persons that strange with its and difficult syntax.

To develop a standard rule for the two or both ample for at offer desires and supply sufficient to give most recent prospects, then librarians should start the (RBD) the meaning of requirements for bibliographic description and find a programming principle which will provides authority and suppleness. The information about MARC21 can be used to encode bibliographic items which refer to metadata that can communicate benchmark not content paradigm. The element of data that content contain in MARC21 records normally explain by benchmark which is not included in the formats. For instance, ISBD, LCSH, and many cataloguing regulations, which are used by various agencies that can be, develop well sound records. In MARC librarian's places normal content within each fields are actually rules which will explain benchmark outer surface of MARC. In MARC as I mentioned earlier it have problems such as on how to store electronic information which connects with machine readable data for instance when it comes to cataloguing policy on how to plan and explain materials items.

The RDA and FRBR this were at the beginning was planned with purpose of modifying AACR2 title/heading to AACR3 when the professional meet with the steering committee to modify AACR2 Second version they came with the idea to change it to AACR3 which they discovered changing the name they come up with two strong motive. (1) They want to know and ensure that the recent directions will be for all individuals not simply for Anglos and Americans. (2) the RDA stand more on AACR2 and springy of many may needs the name to exist and modify, but the name did not change to AACR3, it only gives room for RDA the meaning is resources description and access this were release in 2010. At the end of the year 2010, national library of medicine, national agricultural library and library of congress, and many agencies and libraries in the English speaking countries in the world they try find out RDA, it penalty was released in the following year.

The functional requirements for bibliographic records it codes is more knowledgeable and which can be measured more to be computer system and can flexible and good for utilize in a higher circumstance. While to appreciate stability in bibliographic rule have power over, Charles C His objectives was modifying by notable librarian lubetzky at conference of professional cataloguer in Paris, it tries to describe four (4) laws of library its objectives and functions using functional requirement for bibliographic record which explain mission for customer.

"Identify; that the resource found corresponds to the resources sought.
Find; resources that match the search criteria.
Select; the resources that appropriate for the user's needs
Obtain; the actual need".

According to Gordon (2007)" The most immediate and obvious impact that RDA will have on library management system is improved integration of metadata". The RDA which will be share through electronic form that give straight accurate to use to person's policy, stipulations of vocabulary and many other materials to arrange progress of across more than and within its part. The library management system trader is reserved knowledgeable of the RDA with its objective, they are able to construct content their cataloguing job course, and go through the improvement pattern, link elusive help management by using the helpfulness of the item. This RDA depend largely on worldwide agree benchmark, so practically its types, and it estimate which developed with the professional bodies of librarianship such as IFLA, ICP, AACR, and others who provides single standpoint of this RDA who depend on order which will be exposed.

The ERM is involve wisely easy to authentically as DB that is an object to an OPAC is an additional way meant for attractive a gander of the sequence though, this doesn't happen as substance of path constant of the departed ring meant for either AACR2 or MARC21 will be a descendant of AACR2, this have been organize on functional bibliographic records rules as a phrase which all individuals cataloguer of construction, and changing of the record of the functional bibliographic records regulations which is improbable to contain rapid contact resting on catalogue. This FRBR is mainly possible may move to modify the pattern of information in their structure which is linked collectively to give by the recent material association type of customer which will contain the ability to end new means of index in brightness of the genuineness to enhanced move towards for linking materials all perhaps keep on essentially which will be equal.

The mark-language XML which is a situation of policy for programming materials in an arrangement for both machines readable and individual readable, Wikipedia refers XML as an arrangement of standards for encoding libraries in an organization which are machine. "There has been a wide spread interest in the potentials of XML on the part of library community, regarding raising awareness and expectations" (Tennant 2002).

The MARCXML which is a toolkit that give customer to exchange from MARC file arrangement which contained the complete features position of adaptation to match arrangement which is obtainable through MARCXML design; this can alter with wide thought to allow the exploit the use MARC data to be added which hold schemas and type page.

Presently, MARCXML planning and its objective of the record is to readable this function is presently creature denote to particular software which can revolve it depends on type of page or sheet, a type of sheet as a model converse attainment for web page inventor, enlarge their ability to improve the attendance of sheet.

HTML also provides writer or author to architecture their materials and get merit of features of media which the materials provided. For instance, television screens. In doing this the media have added quality to writer or author give customer manager opportunity to weight and relate approach sheet selective.

AACR2 stand/based ON ISBD the word catalogue is defined as a list of all materials available in a group of libraries. It records and describes all the materials available in a particular or group of libraries. Wikipedia view it; as a register of every single bibliographic material found in some libraries around the world. Catalogue are guided by cataloguing rules most common and earlier is AACR. According Charles

A C (1904 P1). *"The catalogue purpose is to enable a person to find a book [or other item] of which; the author, the title or the subject is known. To show what the library [or information centre] has; by a given author, on a given subject in a given kind of literature and to assist in the choice of book [or other items] as to its edition (bibliographically) and also to its character (literary or topical)"*

The citation of Charles A C, proves his objectives relevant to existing age of information science. The objective of a card catalogue to online shows, the ability of bibliographical description is still important to users by means of information concerning library materials.

The bibliographical materials usually as means of identifying 'item' are a sign which create bibliographical description. This may be book or any meaningful materials resource for example; visuals and audios materials. The AACR2 have rules on how to catalogue any library materials sources obtained by any libraries strongly division to (12) rules inside of (12) rules is more subdivided inside entities to make sure all data of information manage;

0- **General rules**
1- **Title and statement of responsibility area.**
2- **Edition Area.**
3- **Special area for serials, maps and other cartographic materials and music.**
4- **Publication distribution area.**
5- **Physical description area**
6- **Series area.**
7- **Note area.**
8- **Standard number.**
9- **Supplementary items.**
10- **Resources made up of more than one type of material.**
11- **Facsimiles, photocopies, and other reproduction.**

AACR2 rules lay more emphasis on International Standard of Bibliographic Description (ISBD) the records of any mechanism which needs to make and be identifiable with a large variety of information sources is officially responsible to demonstrate awake in library build up, there is no of demand mechanism of description, is decide by agreement of emphasis for representation. ISBD border the principle of precise, ISBDs is regarded best for classifications of materials resources. This forms a basis for prospect change of current ISBD symbols. As well

as usual to universally advisory committee in who is responsible for making the indexing and code available for use, ISBD the basis for principle on representation of library resources, during the use of exacting ISBD.

DUBLIN CORE was design because of his openness in supporting organization in modernization in metadata plan and finest work through the uses of bibliographic control in libraries, Dublin core performance which contained activities on engineering, mock-up conference and jointly effort in DC environment and job of collections in the world, the meeting and dialogue the major purpose of conference is to promote the institutions to agree with it and general public recognise it in the field of bibliographic principle and finest of exercise. It's sustained some figure or numbers with its 15 fundamental principles (title, subject, sources, type, relation, creator, rights, coverage, publisher, date, identifier, format, description, contributor, language) recognized and casual link of associations of principles of metadata society.

BIBFRAME was a proposal to change bibliographic portrayal principles to connections information mock-up, to instruct and construct bibliographic information additional helpful together inside and external of library society.

FINDING/DISCOVERY

It was discovered that Dublin core may be good substitute/replacement for MARC21 because it's simple functions and capacity.

CONCLUSION

In conclusion, looking at the four cataloguing standards each one has its peculiar problems or either depends on one another, but Dublin core by (15) fundamentals principles and its simplicity and acceptance through the field may be better use as a replacement/substitute for MARC21. Because it gives full bibliographical descriptions of any materials in an exceptionally huge quantity of information resources, that is why I recommend it for any practicing librarians and libraries/organizations should use it, in expression of bibliographic control meant for the final customers this include off an arrangement for metadata component which may be utilize, at the lower stage any person who want to search online operation can do it because of its simplicity. This have been bent with the brightness of the genuineness syntaxes have been clear meant for Dublin core by means of materials descriptions structure. The large variety of field contained all

bibliographic information about a materials and inside the variety of the bibliographic carriers in an electronically resources.

REFERENCES

Aswal R.S. (2005) ''AACR2R with MARRC21''*: cataloguing practice for the 21st century.* Ess Ess publishers.

Bowman J. H. (2003) '*Essential of cataloguing*'' Facet Publishers

Downing Mildred Harlow and Downing David. (1992) ''*Introduction to cataloguing and classification.'' McFarland and* company, Inc. pp.2, 14, 16

Gordon, Dunsire. (2007) 'RDA and library systems''. Available at *http://www.emrald insight.com/* (accessed April 8th 2017)

Gorman Michael. (2004) '*The concise AACR2 Facet''*. publisher. American library Association. p.7

https://en.wikipedia.org/funtional reguirements for bibliographic records (Accessed April 8th 2017)

https://en.wikipedia.org/wiki/bibframe.(Accessed April 8th 2017).

https://www.ifla.org/files/assets/cataloguing/isbd-cons-2007-en.dpf.(accessed 9th April 2017)

https://dublincore.org.(accessed 10th April 2017)

Tennant, Roy. (2002) "*MARC must die*." LIBRARY JOURNAL-NEW YORK- 127.17. pp26-27

Jo William. (2009) 'MARC data, the OPAC, and the library professionals'' available at *http;//www.emraldinsight.com/* (accessed 10th April 2017)

Mitchell, A M. and Surrat, B E. (2005) ''Cataloguing and organising digital resources*''. an how-do-it manual for librarians* Neal-Schumann publishers pp.34, 35

Wikipedia 'Marc21 format'' available at *https://en.wikipedia.org/wiki/MARC_standards* (assessed April 8th 2017).