About Cataloguing, Addressing Challenge: Cataloguing from Textual Sign Post in Winnebago Spectrum5 to Koha ILS MARC21 A Case Study

Mohd Ariff Shah Muhammad Dzazuli, Haslinda Husaini and Mazwani Ayu

Mazlan

Faculty of Information Management
Universiti Teknologi MARA
Selangor Branch
Malaysia

Email: haslinda3145@uitm.edu.my

Abstract. The challenges faced by the library in migrating the bibliographic record from the textual signpost definition to proper cataloguing MARC21 format using the open-source library management system, KOHA, are discussed in this case study. The experiences also emphasize the significance of exposing in educating non-library science library staff to enhanced library science information, particularly from a textual signpost catalogue in Winnebago Spectrum to a MARC21 bibliographic format in Koha Integrated Library System It is a member of the German Malaysian Institute (GMI) Library's experienced staff who has no expertise or background in library science. This case study presents the experience on imparting knowledge to the non-library science background staff who used to perform copy cataloging from textual sign post catalogue due to issues faced by the old software itself, to MARC21 bibliographic format containing numerical tags and fields.

Keyword: Cataloguing, KOHA ILS, Winnebago Sperctrum5, MARC21, Bibliographic

1   Introduction

Traditional cataloging records involved the use of card cataloging in cabinets to store the catalog cards. The individual catalog cards are prepared in writing of print for each material to store the important catalog information components such as call number, main entry heading, description and tracing. The four (4) components contain eight (8) areas of description for the library materials. The eight area of

descriptions are title and statement of responsibility, edition, type of publication, publisher and distributor, physical description, series, notes, standard numbers and term of availability status. Large numbers of library material collections make these traditional cataloging records faced several constrain in providing efficient retrieval time and physical storage challenges.

Koha is a free open-source integrated library system (OS ILS) software with history trails back since 1999 (Koha,2020). Ever since, the open-source system receives updates developed by various volunteers and companies worldwide. The Koha ILS is more than a cataloging input machine, as its name suggest, the system integrates several other modules to ensure the library's efficient operation such as the patron module, acquisition module, report module, serials module and circulation module (Breeding 2017).

2   Literature Review

Physical catalogue card is now replaced with ILS software which performs similar function to it i.e. retrieve bibliographic data in a digital manner. The "digital catalog card" now is also assigned with Machine Readable Cataloging (MARC) record for computer file storage. Thus, the combination of catalogue card and MARC demand for the usage of personal computers to store the content of the catalog card: four (4) essential components of bibliographic description and eight (8) elements of International Standard Bibliographic Description (ISBD).

The library still needs human for its daily operation. To be specific, the librarians is a qualified profession in this business. Human factors such as perception towards change or adaptation to a new technology is studied by Asim and Mairaj (2019). The study reveals that absent of soft skill and technical skill on information and communication technology to use Koha ILS is the major issue for librarians of Punjab at Pakistan. Librarians as key staff at the library due to the lack of ICT knowledge such as Linux operating system affect the organization skilled manpower. In a macro perspective of the organization which the library resides in, top management approval faces red tape and bureaucracy issues too. Koha ILS uses internet connection, thus the performance of this system depends on the speed of this utility speed. Integrated library system as it names suggest provide a breezy experience for the librarians to operate cataloging, circulation needs, library user data organization and readily available web based OPAC.

Asim and Mairaj (2019) did not discuss about transition of a library from old to a new integrated library system. As a start, Koha ILS need input form current library collections and of course in future new collection will add up the load. This process is called data migration of bibliographic information as described by Todd (2018). In this study, inexperience librarians or data migrator were able to perform data migration without the need to outsource the task to expensive ICT vendors. Components of bibliographic data were sort out, put outside the Millennium ILS ecosystem, and rearranged into MARC record suitable to Koha ILS. This four (4) stages in-house effort namely migration preparation, data export, data mapping and finally uploading to

Koha ILS was a success for Northern Marianas College Library by using Open Office Calc and MarcEdit.

Data migration of bibliographic information for cataloguing from one system to another is just a small portion from the overall capability of various automation system available for library as discussed by Todd (2018). Macro comparative study between OS ILS were done by Mani and Naresh (2017) between Koha and NewGenLib. Both software is an OS and free, compared to the expensive proprietary software suitable for libraries facing financial constrain. Both software could perform similar function but each with its own unique work process. Sharp differences are only found on the ability of Koha as a better OS software in areas such as advanced search, user tagging, review on Amazon and friendlier to users in terms of documentation facilities.

Apart from a comparative study of OS ILS between Koha and NewGenLib performed by Mani and Naresh (2017), it is also essential to point the differences with proprietary software such as Virtua. And Lybsis. The study by Margam and Vikas (2015) found relatively close score for functionalities offered in every module for each of the ILS with Virtua ranked 79.9%, Koha 72.9% and Lybsis 72.1%. Common drawback for ILS understudies is in the area to fully use the cloud capabilities offered in Web2.0/3.0.

Focus on the right person to perform cataloging task is given special attention by Aminat & Usman (2014). Cataloger performs online cataloging with a personal computer connected to a server to store all MARC record. Another strategy is to copy MARC record form other reliable library and save the data in the same computer the cataloger uses in the later method. The result was astonishing in terms of speed of accomplishing a cataloging task. A cataloguer now could catalog minimum of twenty books per day compared to only five books if it was done manually. However, none of this is possible if there is a power disruption or when the internet service provider is not available.

3 Conceptual Framework, Implementation & Practices and Challenges

Conceptual Framework, Implementation & Practices and Challenges

Library materials must be organized in such a way that they are easily track, store and retrieved when needed. This has raised the need to have a systematic software or also known as automation system to track and store all the important catalog information components such as call number, main entry heading, description and tracing. It is also essential for the automation system to have the ability to integrate with circulation service for users' convenience for lending and returning of library materials.

For retrieval, a systematic system for cataloging must be able to support the library staff and library clients to reach back for the collection. Cataloging entry in Koha ILS by using MARC21 is essential due to its connection with the web based online-public access catalogue (OPAC). There are two types of strategies in performing cataloging.

As mentioned earlier by Aminat and Usman (2014) a qualified cataloger could choose either to perform original cataloging with a personal computer with MARC record capability or simply take pre-MARC record from other libraries and insert in the similar personal computer.

In this case study, comparison between old system known as Winnebago Spectrum5 and Koha is highlighted in the transition of performing data migration portrayed in Figure 1 below. Bibliographic data migration from textual sign post to MARC21 format is done by the non-library science background staff (NLSBS). This is done to expose them to the MARC21 cataloguing framework under the guidance of a qualified librarian.
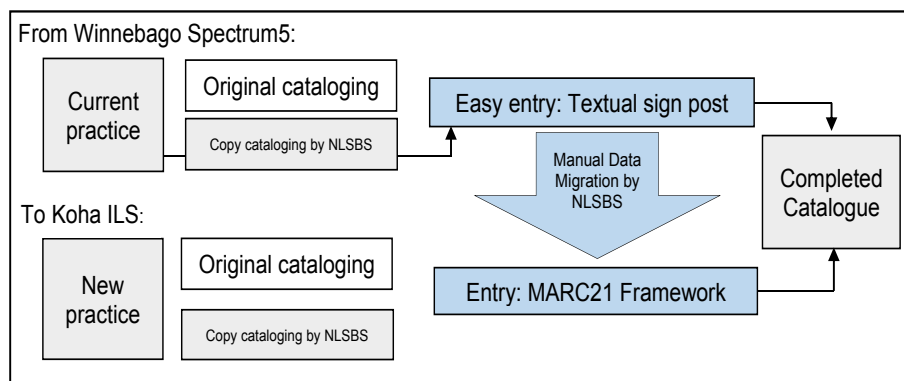

Fig. 1 Case study conceptual framework. The two software uses different approach in cataloging module for bibliographic entry.

Exposure and experience while performing cataloging task in MARC21 environment is expected in this conceptual framework to the library staff, especially to those who have no formal library science educational background.

Implementation and Practice

Library materials must be organized in such a way that they are easily track, store and retrieved when needed. This has raised the need to have a systematic software or also known as automation system to track and store all the important catalog information components such as call number, main entry heading, description and tracing. It is also essential for the automation system to have the ability to integrate with circulation service for users' convenience for lending and returning of library materials.
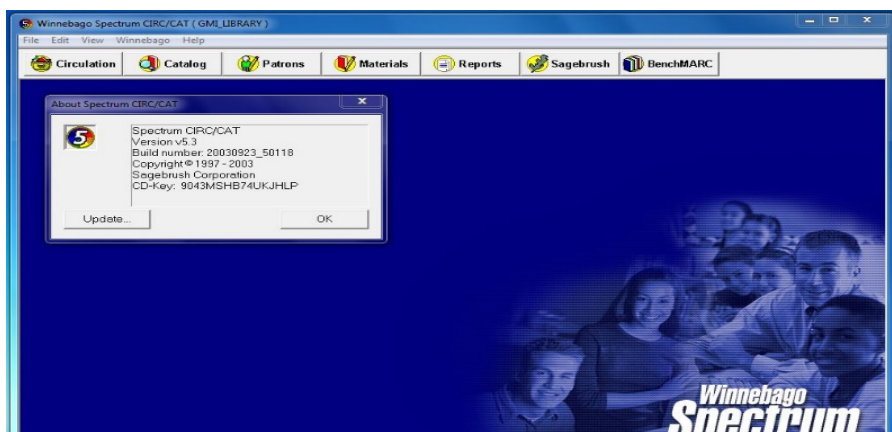
Hardware challenges as told by the ICT Unit are, the stand-alone server is not compatible to be integrated with the new models and spare parts are now not available anymore in case of breakdown.

In mid of 2020, the ICT Department suggested the use of Koha ILS for GMI Library. The library senior executive and librarian were given and ID and password to explore the system via http://elibrary.gmi.edu.my:8001/. The senior library executive creates anothet four ID for the support staff. The basic task for the preliminary execution is mentioned in Table 1.

4 KOHA Integrated Library System

Koha, also means "gift" in Maori, is commonly considered as the first full-featured open-source integrated library system (ILS). Horowhenua Library Trust in New Zealand was the first to use it in January 2000. It is being established by a growing community of libraries who are work together to attain their technological objectives. Koha is a web-based system that is designed to operate on a minimal proportion of hardware (Thami M, & Amzari, A., 2010). The projects are inspired by the fellow librarians' challenges over the years where administrative duties and obligations, such as those performed in a library, inevitably imply staff with specialized skills and experience to execute ongoing paperwork as well as perform actual library tasks, with cataloguing being particularly time-consuming and requiring the full force of expertise in that area. The ongoing problem is compounded by the uncertainty of the situation (Sazili, S & Mazwani, M. 2011). Thus, the integrated nature of Koha supply to the need of librarian where it has the potential to develop librarians' cataloguing expertise and skills (Nur Zakiah & Mazwani, M, 2017).

To further understand the implementation of Koha ILS, GMI Library had visited Perpustakaan Sultan Abdul Samad (PSAS) UPM for counterpart visit. The visit was participated by library senior executive, librarian and head of section of ICT for ICT related issues representation. The GMI Library were brief by qualified librarian from the PSAS UPM on their background of why they had decided to use Koha ILS, benefits of Koha ILS and consultancy services offered by PSAS UPM.

Table 1 Basic understanding in developing the use of Koha ILS at GMI Library. The Senior Executive and four (4) support staff have no qualification in library and information science.

BASIC RESPONSIBILITIES IN KOHA ILS SETUP			
GMI Library Unit			ICT Unit
Librarian	Senior Executive	Support Staff	
To administer and provide information science/ library science guidance to Library Senior Executive.	To conduct counterpart, visit with experienced user of Koha ILS. To administer, explore, set and test the function of the cataloging module. To ensure involvement of librarian, support staff and ICT Unit in the system development. To perform copy cataloging.	To copy catalogue existing collection into the cataloguing module based on agreement reached between senior executive and librarian.	To install and perform related maintenance of the system. To ensure hardware readiness for the system.

Practices

Communication between the two unit is expected in this counterpart visit due to different specialization, exposure and expertise in order to support the exploration of the Koha ILS which will later result to full implementation in GMI Library Cataloging in Koha ILS is done through the Cataloging module found at the main home page of the system (Figure 2). However, the starting point of the cataloging process starts at the Koha Administration page at the home page in order to set Item types and MARC biliographic framework (Figure 3).
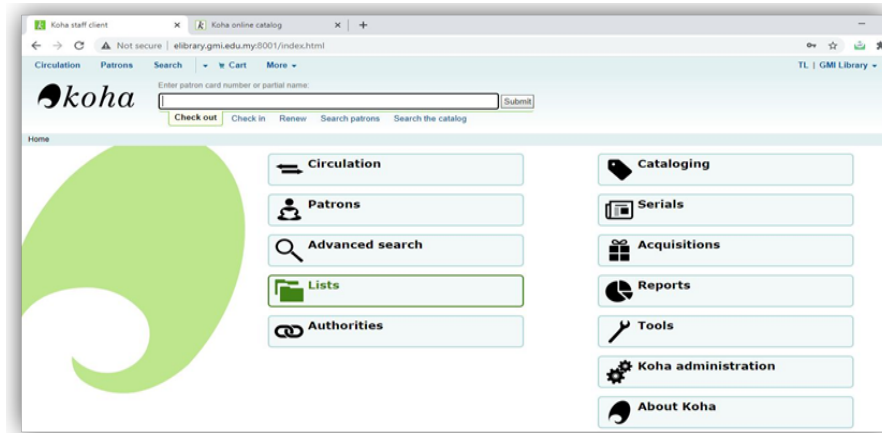
Fig. 3 The cataloging module, top right at the home page of the Koha ILS.

Before determining the MARC, it is essential for all library staff to understand the basics of cataloging involving matters such as:

(a)   Four components of descriptive cataloging namely class number, heading, description and tracing.
(b)   Eight areas in descriptive components which are the title & responsibility, edition, material, publication, physical description, series, note and ISBN/ISSN.

   A detailed description of the publication and highlighted that relevant to users, while giving a brief description of the publication and listed a few elements as in the cataloging guide below:

Table 2 Cataloging label tags according to MARC21 as embedded in koha ILS

Tag	Label	Description	Instructions
000	LEADER	Describes the record(i.e. surrogate) -- is it a record for a monograph? A serial?	Click in this field to fill it in. Then set "Bibliographic level" to 'a' for articles or 's' for serials. Otherwise, leave everything as is.
001	CONTROL NUMBER	Accession number.	Enter the accession number written inside the item here. For articles and items which do not have accession numbers, leave blank.
003	CONTROL NUMBER IDENTIFIER	Your MARC Organizational Code	Click in this field to fill it in (will auto fill if you have your MARCOrgCode preference set).

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Tag	Label	Description	Instructions
005	D & T LATEST TRANSACTION	Current date and time.	Click in this field to fill it in.
008	FIXED-LENGTH DATA ELEMENTS	Field containing computer-readable representations of a number of things.	Generally you will only use 's' (single) or 'm' (multiple) options for position 06- use the former when the item was published in a single year, the latter when it was published over the course of several. If there is a single date, only enter a date in the first date field (positions 07-10). Enter the three-digit country code in positions 15-17, being sure to add spaces if the country code is fewer than three characters long. If there is an index, note that fact in position 31. Enter the three-letter language code in positions 35-37.
010	LCCN	A number assigned by the Library of Congress to uniquely identify the work.	Check on the copyright page of the book (if it was published in the US) or the LC catalog for this number. If you can't find it, don't worry about it.
020	ISBN	Unique number used by publishers to identify books.	If this number isn't listed on the book, there probably isn't one.
022	ISSN	Unique number used by publishers to identify serials.	If this number isn't listed on the book, there probably isn't one.
033	DATE/TIME OF EVENT	Used for auction dates. Required for auction catalogs.	For auctions that took place on only one day, enter the date of the auction in the format YYYYMMDD in the subfield 'a' and a '0' in the first indicator. For auctions that took place over two consecutive days or any number of non-consecutive days, create a subfield 'a' for each day with the date in the format YYYYMMDD, and put a '1' in the first indicator. For auctions that took place over more than two consecutive days, create a subfield 'a' (in format YYYYMMDD) for the first day and a subfield 'a' (also in format YYYYMMDD) for the last day, and put a '2' in the first indicator.
040	CATALOGING SOURCE	Identifies which libraries created and modified the record.	For imported records, add a subfield 'd' with your OCLC code as the value. For new records, make sure that the subfield 'c' with your OCLC code as the value.
041	LANGUAGE CODE	Identifies all the languages used in an item, when two or	For significant portions of a text in a given language, there should be a subfield 'a' with that language code. If there are only summaries or

Tag	Label	Description	Instructions
		more languages are present.	abstracts in a specific language, create a subfield 'b' with that language code.
100	MAIN ENTRY--PERSONAL	Authorized form of the main author's name	See Authorized headings sheet and AACR2. The first indicator should generally be a '1', to indicate that the entry is surname first. If the name consists only of a forename, however, the first indicator should be '0'.
110	MAIN ENTRY--CORPORATE	Authorized form of the name of the main corporate author. Required for auction catalogs.	Auction catalogs should use a 110 field rather than a 100 field. See Authorized headings sheet and AACR2. Set the first indicator to '2'.
111	MAIN ENTRY--MEETING	Authorized form of the name of a meeting which acted as a main offer (e.g. conference proceedings)	See Authorized headings sheet and AACR2. Set the first indicator to '2'.
245	TITLE STATEMENT	Transcription of the title statement from the title page (or chief source of information)	Enter the title in subfield 'a', the subtitle in subfield 'b', and the statement of responsibility in subfield 'c'. If you are creating a record for a single volume or part of a multi-part item, you should put the part number in subfield 'n' and the part title in subfield 'p.' For auction catalogs, the date (in 'MM/DD/YYYY' format) should be listed in square brackets in subfield 'f'. See ISBD punctuation sheet. Set the first indicator to '0' if there is no author, otherwise set it to '1'. Set the second indicator to the number of non-filing characters (i.e. characters in an initial articles plus the space... for "The " set the second indicator to '4').
246	VARYING FORM OF TITLE	Alternate form of title for searching and filing purposes	If the patron might look for the work under a different title, enter it here. Do not include initial articles. The first indicator should be '3', unless the title is merely a variant spelling, in which case the first indicator should be '1'.
250	EDITION STATEMENT	Transcription of the edition statement from the title page (or chief source of information)	Transcribe the edition statement exactly as it appears on the title-page. You may abbreviate if the edition statement is very long.
260	PUBLICATION (IMPRINT)	Publication information.	Put the location of publication in subfield 'a', the publisher in subfield 'b', and the year (or probable year) in subfield 'c'. See ISBD

Tag	Label	Description	Instructions
			punctuation sheet.
300	PHYSICAL DESCRIPTION	Physical description	Enter the pagination statement in subfield 'a', a brief description of "special" contents such as illustrations or maps in subfield 'b' (see AACR2), and the size of the item in subfield 'c'. See ISBD punctuation sheet.
490	SERIES STATEMENT	Shows the series statement exactly as it appears on the item.	Transcribe the series statement into subfield 'a' with the volume number in subfield 'v'. See ISBD punctuation sheet. Set the first indicator to '1' if you are using an 830. As a general rule, you should do so.
500	GENERAL NOTE	Notes that don't fit anywhere else.	Enter notes as full sentences, with a separate 500 field for each distinct topic.
501	WITH NOTE	Notes whether the work is bound with the works described by other records.	Put description of relationship in subfield 'a'.
504	BIBLIOGRAPHY, ETC. NOTE	Indicates whether the work includes a bibliography.	If the work includes a bibliography and index, put the text "Includes bibliographical references (p. XXX-XXX) and index." in subfield 'a'. If the work does not include an index, remove that part of the sentence. If the references are scattered throughout the work and not gathered into a distinct sentence, remove the parenthetical statement.
505	FORMATTED CONTENTS	List of contents in a standard format. Unformatted contents can be listed in a 500 (General Note) field.	See ISBD punctuation sheet. Set the first indicator to '0'. If you are separately coding authors and titles, set the second indicator to '0'. Otherwise, leave the second indicator blank.
518	DATE/TIME OF EVENT NOTE	Used for auction dates.	For auction catalogs, enter the date of the auction in the format 'January 2, 1984' in the subfield 'a'
520	SUMMARY, ETC.	A brief summary or abstract of the book or article.	In general you do not need to write a summary. A summary might be called for, however, with items that cannot be easily reviewed by a patron, such as books with highly acidic paper or CD-ROMs.
546	LANGUAGE NOTE	Note describing the languages used in the work	Only needed for works in multiple languages. See ISBD punctuation sheet.

Tag	Label	Description	Instructions
561	PROVENANCE INFORMATION	Describes the previous ownership of the item.	Used only for rare books.
563	BINDING INFORMATION	Describes the binding of the item.	Used only for rare books.
590	LOCAL NOTE	Local notes. Required for auction catalogs.	Used for auction catalogs to indicate what types of coins are sold in the auction- Roman, Greek, etc.
600	SUBJECT ADDED-- PERSONAL	Authorized form of personal names for people discussed in the work	See Authorized headings sheet and AACR2. The first indicator should generally be a '1', to indicate that the entry is surname first. If the name consists only of a forename, however, the first indicator should be '0'. If you found the name in the LC authority file, set the second indicator to '0'. Otherwise set the second indicator to '4'.
610	SUBJECT ADDED-- CORPORATE	Authorized form of corporate names for organizations discussed in the work	See Authorized headings sheet and AACR2. Set the first indicator to '2'. If you found the name in the LC authority file, set the second indicator to '0'. Otherwise set the second indicator to '4'.
611	SUBJECT ADDED-- MEETING	Authorized form of meeting names for meetings discussed in the work	See Authorized headings sheet and AACR2. Set the first indicator to '2'. If you found the name in the LC authority file, set the second indicator to '0'. Otherwise set the second indicator to '4'.
630	SUBJECT ADDED-- UNIFORM TITLE	Authorized form of titles for other works discussed in the work	See Authorized headings sheet and AACR2. Set the first indicator to the number of non-filing characters (i.e. characters in an initial articles plus the space... for "The " set the first indicator to '4'). If you found the name in the LC authority file, set the second indicator to '0'. Otherwise set the second indicator to '4'.
650	SUBJECT ADDED--TOPICAL	Library of Congress Subject Heading terms describing the subject of the work	See Authorized headings sheet and AACR2. If you found the name in the LC authority file, set the second indicator to '0'. Otherwise set the second indicator to '4'.
651	SUBJECT ADDED-- GEOGRAPHICAL	Library of Congress Subject Heading geographical terms describing the subject of the work	See Authorized headings sheet and AACR2. If you found the name in the LC authority file, set the second indicator to '0'. Otherwise set the second indicator to '4'.
6	INDEX TERM--	Describes what	Generally used only for auction catalogs,

Tag	Label	Description	Instructions
55	GENRE/FORM	an item is as opposed to what the item is about.	which should have the genre heading "Auction catalogs." (make sure to find the authorized heading!) If you found the name in the LC authority file, set the second indicator to '0'. If you are using a term from a specific thesaurus, set the second indicator to '7' and put the code for the thesaurus in subfield '2'. Otherwise set the second indicator to '4'.
690	LOCAL SUBJECT ADDED--TOPICAL	Used for headings from any custom subject authority file.	If there is no appropriate LCSH term, you can use a 690 with subject headings you find on other items in the catalog.
691	LOCAL SUBJECT ADDED-- GEOGRAPHICAL	Used for headings from any custom subject authority file.	If there is no appropriate LCSH term, you can use a 691 with subject headings you find on other items in the catalog.
700	ADDED ENTRY-- PERSONAL	Used for second authors and other persons related to the production of the work.	See Authorized headings sheet and AACR2. The first indicator should generally be a '1', to indicate that the entry is surname first. If the name consists only of a forename, however, the first indicator should be '0'.
710	ADDED ENTRY-- CORPORATE	Used for corporate bodies related to the production of the work (e.g. publishers).	See Authorized headings sheet and AACR2. Set the first indicator to '2'.
711	ADDED ENTRY-- MEETING	Used for meetings related to the production of the work (e.g. symposia that contributed to the work).	See Authorized headings sheet and AACR2. Set the first indicator to '2'.
730	ADDED ENTRY-- UNIFORM TITLE	Used for uniform titles related to the production of the work (e.g. a work that inspired the present work)	See Authorized headings sheet and AACR2. Set the first indicator to the number of non-filing characters (i.e. characters in an initial articles plus the space... for "The " set the first indicator to '4').
773	HOST ITEM ENTRY	Describes the larger bibliographic unit that contains the work (e.g. book or journal containing	If the host publication is author main entry, enter the authorized form of the author's name in subfield 'a'. Put the title in subfield 't'. If the host publication is an independent work, put publication information in subfield 'd'. When

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Tag	Label	Description	Instructions
		the article being described in the current record)	available, ISSN and ISBN should always be used in, in subfields 'x' and 'z' respectively. Relationship information (e.g. volume number, page number, etc.) goes in subfield 'g'. Subfield 'q' contains an encoded representation of the location of the item: volume, issue, and section numbers are separated by colons, and the first page is entered following a '<' at the end of the subfield. See ISBD punctuation sheet. Set the first indicator to '0'. If you want the label "In:" to be generated, leave the second indicator blank. If you want something else displayed before the 773 text, set the second indicator to '8' and add a subfield 'i' with the label you want at the beginning of the field (e.g. "$iOffprint from:").
830	SERIES ENTRY-- UNIFORM TITLE	Authorized form of the series name transcribed in the 490 field. Often this will just be the same as the 490.	See Authorized headings sheet and AACR2. Set the second indicator to the number of non-filing characters (i.e. characters in an initial articles plus the space... for "The " set the second indicator to '4').
852	LOCATION/CALL NUMBER	Provides the section name for pre-barcode books, pamphlets, and some articles and serials.	Do not put anything in this field if you are cataloging a volume which gets only one record and a barcode. If the item does not get a barcode, or you are currently creating a record for an article in a volume, put the section in subfield 'a' (see ANS cataloging documentation), and the call number in subfield 'i'. Set the first indicator to '8'.
856	ELECTRONIC ACCESS	Links to material available online.	Put the URL of any electronic copies or summaries, etc. in subfield 'u' and a link title in subfield 'y'. Set the first indicator to '4'.
942	ADDED ENTRY ELEMENTS (KOHA)	Used for Koha-specific data.	Set the subfield 'c' to the appropriate item type.

This tagging listed in the guide as seen in Table 3, are customizable and implementation are fully rely on the preference of the library. This is essential due to its relation with MARC tag listed in Table 2. Briefing was done by library senior executive to all library staff with the present of librarian regarding Table 2.

Fig. 4 Basic setup at the Item types and MARC bibliographic framework is needed prior to cataloging.

In the Koha administration, MARC bibliographic framework at the Catalog section must be set. Adding a framework need the administrator or also known as super librarian to determine framework code and description of the framework.

Next is to set item types such as book, eBook or reference book at the basic parameters. Administrator could also set and icon image for each of the item types. Preparing the two (2) steps above will assist the library staff to perform cataloging in a desired framework. The librarian now needs to determine MARC tag and fields to be fill in for cataloging to take place. MARC is important to enable the computer to read the previously catalog card information in the form of numerical tags (Library of Congress, 2009). The list of MARC tag numbers selected by the librarian is shown in Table 2. The MARC tag numbers could be set to be hidden, but for educational and knowledge enrichment, the tag numbers are left visible along with the field description.

Table 3 MARC tag selected by librarian to commensurate fields. The most commonly used indicated by "*".

No.	MARC Tag in Koha ILS	Field in Koha ILS or known as Textual Sign Post for Winnebago Spectrum	Related Components
1.	020 a	ISBN*	descriptive area
2.	040 c	Cataloging Source - Transcribing agency : Spectrum	class no. component
3.	050 a	LOC Call Number	descriptive area
5.	100 a	Main Entry - Personal Name*	heading component
6.	245 a	Title Statement – Title*	descriptive area

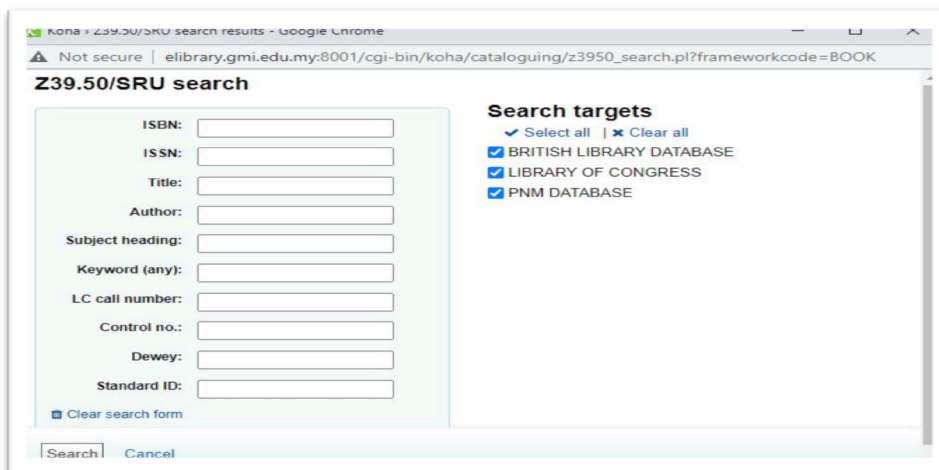|			
7.	245 b	Title Statement - Remainder of title	descriptive area
8.	245 c	Title Statement - Statement of responsibility	descriptive area
9.	250 a	Edition Statement*	descriptive area
10.	260 a	Place of publication*	descriptive area
11.	260 b	Name of publisher	descriptive area
12.	260 c	Date of publication	descriptive area
13.	300 a	Physical Description – Extent*	descriptive area
14.	365 b	Trade Price - Price Amount	descriptive area
15.	490 a	Series Statement - Series statement*	descriptive area
16.	500 a	General Note*	descriptive area
17.	504 a	Biography, etc. Note	descriptive area
18.	650 a	Subject Added Entry - Topical Term/ geographic name entry element*	tracing component
19.	700 a	Added Entry- Personal Name*	tracing component
20.	700 d	Added Entry- Dates associated with a name	tracing component
21.	700 e	Relator term	tracing component
22.	710 a	Added Entry- Corporate Name	tracing component
23.	710 b	Subordinate unit	tracing component
24.	710 e	Relator term	tracing component
25.	942 2	Added Entry Elements (KOHA) - source of classification	related to class no. component
26.	942 c	Added Entry Elements (KOHA) - KOHA item type	system requirement

Not all MARC tag fields will be filled. The field will be fill according to the presetup item types mentioned earlier. Each item type may or may not have information in all the listed field. In total, there are nine (9) sections containing various MARC tags and fields (Figure 5).

Fig. 5 MARC is subdivided into nine (9) sections.

Z39.50 SRU search function is also activated assist copy cataloging to fill the MARC bibliographic record. The search retrieval via URL (SRU) allows the sharing of catalog record from other libraries to be used by other libraries (Figure 6)

Fig. 6 British Library Database, Library of Congress and PNM Database is used as SRU search targets

Original cataloging will be done by the librarian. Staff will usually perform copy cataloging by referring to various establish web page such as WorldCat, MalCat, Library of Congress and PERPUN. Local university OPACs is also used for copy cataloging purposes. In this case study, non-library science background staff perform copy cataloging from the previous automation system, the Winnebago Spectrum5 too. The process end at the Add item page (Figure 7) after clicking save at the cataloging module. Here, barcode indicated as "p-Barcode" will be assign to the item for hand held barcode scanner detection in the Circulation module by using the existing material number of the book.

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Fig. 7 Add item page is the administration page for assigning barcodes

Other identification for the book could also be inserted such as permanent location, current location, shelving location, date acquired, cost replacement price, public note and so on. Adding an item at this page will simultaneously cause the catalog to be available at the OPAC page (Figure 8). MARC view could be seen on the MARC view tab (Figure 9). For books that have more than one copies with similar bibliographic records, they will be added as multiple copies to the same item. This is to ensure a title will remain as one title, but with several holdings. Editing of the keyed in MARC for rectification or inserting new additional field is allowed in Koha ILS.

Fig. 8 A book entry view in OPAC after cataloging is complete.

Fig. 9 An example of completed MARC view for a book in OPAC

Experiential Challenges

Qualification of Manpower in the library.

The library has only one qualified and formally trained librarian. The library manpower had experience transfers of staff for a second time within five years. This means that the library has new unexperienced staff. Cataloging frequency is low in this small library due to small number of requests to buy new books and budget constrained. Thus, exposure to perform copy cataloging is regarded as insufficient. For example, only 144 titles were bought to be new arrival book for 2020. Each staff have only the opportunity to copy catalogue about 28 books in average. To aggravate the challenge, all staff except the librarian has no library science background.

Different Copy Cataloging Approach from Winnebago Spectrum5 to Koha ILS

The old system entry (Figure 9) did not display the MARC tag yet provide textual sign post. For years, staff have been copied cataloging without knowing the role and function of the MARC. The Winnebago Spectrum5 might be design for a simpler and non-library background staff to perform cataloging. At the end of the completed copy cataloging task, the system did display MARC preview and catalog card image but it is always regarded as for librarian use and reference only (Figure 10). New method to perform cataloging task incited some resistance from the staff as well.

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Fig. 10 Easy entry function in Winnebago Spectrum5 did not use and
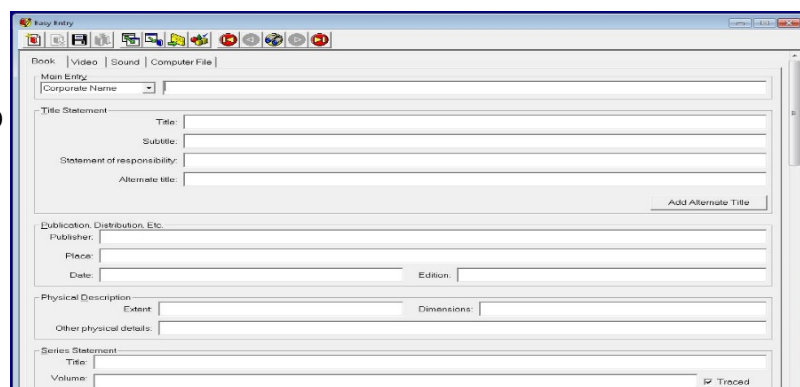
Work Load and Skill

The decision to perform initial data migration to export form Winnebago Spectrum5 to Koha ILS without ICT personnel or third party ICT consultant vendor is to familiarize the staff with Koha ILS. Librarian faces increased face to face consultation from the staff for books they copy catalogue when staff are in doubt even though MARC list has been given (Table 2) and explanation session has been conducted. The staff collect the book from their designated shelf, cross check it with the old system which sometimes have an existing error such as wrongly assigned material numbers to a particular book, creating confusion. These problematic books were sent to the librarian for rectification. With only one qualified librarian performing other task too such collection development, procurement and administrative task, the work stress has become more eminent. Although the qualified librarian is able to check and rectify catalogue data, problems related to ICT skill on programming language remain a challenge. For instance, the librarian is unable to perform several language commands to activate fine calculation and to set necessary command for e-mail notification on overdue items.
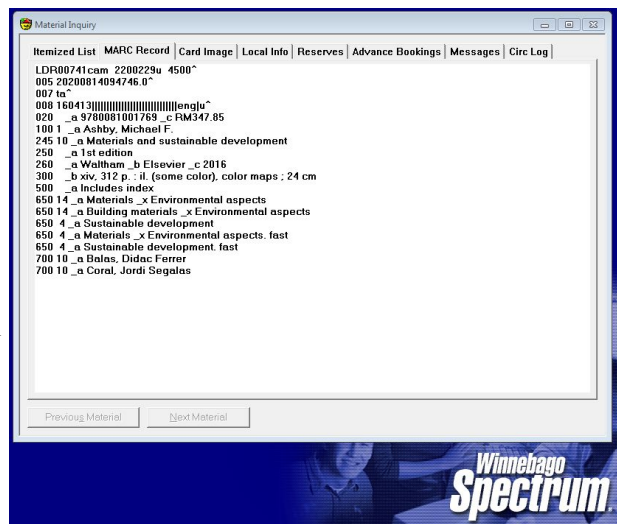
81

Fig. 11 MARC record after easy entry function in
Winnebago Spectrum mode has been filled has been

Inability to Attend Formal Training

Formal training form experience user and ICT vendors of Koha ILS is quite expensive. The current policy of the organization only permits HRDF claimable training to be attended. This has cause dilemma on whether to adopt for a change, or to remain backwards due to budget constraints. In this case study, a staff voluntary self-fund to attends a two-day course with charged fee of RM450.00 to attend Koha ILS training at Perpustakaan Sultan Abdul Samad, UPM.

5   Recommendation & Suggestion

Books form shelf must be checked first and rectification must be done in the old system before performing copy cataloging to Koha ILS. In previous years, stock checking is not as detailed into MARC record. Uzomba, et al (2015) have mentioned that inventory controls provided by an integrated library system uplift the management and collection orders. The typical stock checking focuses on whether the books are available or missing due to the main concern over total number of collections per se. The system was often riddled with expired system codes, typos, obsolete MARC subfields, and stub records, entailing a major data clean-up effort by the bibliographic control department (Walls, I. 2011). As such data cleaning is necessary to be performed before copy cataloging to Koha ILS were done.

Some MARC field has to be set to invisible to reduce confusion. Not all MARC from one to nine section is used. The library has the right to set own policy over the fields considered as compulsory, optional or to be permanently hide. This have been argued in Chauhan, K. (2018) stating that Koha users can change and configure it to fit their needs, ensuring that the library runs effortlessly. The setting is done through MARC bibliographic framework to edit unfamiliar field to suit the existing need, supported by Biswas, R. (2020) in recent study stating bibliographic, holdings, au-

thority, classification, and group information are among the five categories of data in the MARC 21 format. The format is primarily intended to provide guidelines for the sharing of bibliographic and related data between systems. The MARC bibliographic framework (called default framework) in Koha includes all the tags and subfields of MARC 21 which are scattered into various tabs (0 to 9) but all the tags and subfields of default framework are not obligatory for bibliographic record of books as it also provided the fields to accommodate the implementation of the latest Resource Description and Access (RDA .Through importing a new MARC framework with customized library preference in all the required tags and subfields for resources in the framework have made more productive and minimize error for cataloguer.

The non-librarian background staff should be brought to join future work visit too. In this case study, the work visit was only attended by the librarian, the library senior executive and ICT personnel. Work visit with non-librarian background staff will exposed them to their counterpart from other organization that has more experienced in using Koha ILS.As the nature of the Koha ILS are free for all, it welcomed the user with fully supported information that can be referred to and download via the Koha official site. The efforts of Koha Groups have been mentioned in grace and honor throughout the nation in term of selfless contributions and networks in the objective of providing as well as building the brighter future for a librarian without the strings of monetary and skills restrictions. These availabilities increase motivation, networking, as well as sharing knowledge among fellow librarians should be adapted in the working culture of a library staff.

Greater cooperation is needed between the Library Unit with ICT Unit to provide maintenance support in terms of command language, server backup and updates. Mazwani (2016) have mentioned that current ILSs are built around the traditional isometrical of printed collections, thus services designed around these collections, but the last ten to fifteen years have seen great changes in both library collections and services. Print and physical materials are no longer the dominant resources, as any library or organization has benefited from using this integrated architecture, which includes both library automation and a digital library environment, according to the statement by Mandal, S. et al (2017). Ownership of this initiative must be enhanced from both side for the betterment of the students, the client of GMI. The other option is creation of vacancy for a library management system librarian position, to directly report at the library unit.

With so much focus put on OPACs, it's important to note that they acted as the connection between the user and the library's selection. New browser-based OPACs are being built for mobile users in different libraries as a result of the emergence of mobile services. The development of mobile optimized OPACs caters to both regular desktop OPAC users and mobile OPAC users (Kataria, S. (2018). The mobile revolution has transformed the way libraries deliver services, making it much simpler and easier. While e-resources, such as digital books, electronic journals, and electronic reference material, have driven library users away from the library and into their homes and offices, the mobile interface, particularly access to the library catalogue via mobile interfaces, has driven library users back into the library.

Large libraries with experienced librarians shall reach out to help small libraries to keep up with latest technology when asked. Open-source integrated library systems are receiving necessary attention, but its adoption can be successful only with adequate technical, infrastructural and monetary support (Salma, M. S., 2020).It is also privileged to receive training and monetary incentives from cooperating partners (Bwalya, 2020) nonetheless it should be standard practice to include free consultations in the name of corporate service accountability, in comparison to operating a small library with limited resources using the business mode. Wangdi, et al (2020) suggested the organizations that have the greatest stake in the project and the human resources to maintain it take on and share responsibility for tracking progress and providing financial, if possible and manpower support. In light of these, a Memorandum of Understanding (MOU) could pave the way for future collaboration.

6   Conclusion

Technology changes are unavoidable in many industries, including educational institutions with libraries. The organization's decision to switch from the outdated and outmoded Winnebago Spectrum5 ILS to Koha ILS is a significant step forward in better serving library users. The prior system had limitations such as the inability to give web-based OPAC access outside of campus, the "hanged" problem, and delayed retrieval time. The COVID-19 pandemic had somehow pushed the agenda for the library to be more inclusive and accessible from outside the campus.

Non-library science personnel may now learn more about the field. New knowledge would have boosted their confidence and enhanced their library experience. Librarians should continue to enhance their abilities, and librarians from larger institutions with advancement prospects should help tiny libraries justify their continued existence and relevance.

This study illustrates how a small library with around twenty-two thousand collections and five to six staff members with non-library science backgrounds might aid in manually migrating one thousand bibliographic data via copy cataloguing concept in MARC bibliographic record environment. However, to prevent agitation and opposition in implementing the introduced changes, careful preparation and exposure must be carefully coordinated.

National development necessitates access to information, especially in fields such as agriculture, medicine, and technology, all of which can contribute to the development of stronger societies. In order to make informed decisions, impart quality education, and generate creativity and innovation, developing countries, in particular, need high-quality and current knowledge. Permission and cost constraints, on the other hand, restrict what knowledge seekers can access.

Libraries from all over the world collaborate to pool their intellectual, technological, and financial capital for the greater good of the society. Collaborative agreements enable libraries to more effectively share their own unique resources while still benefiting from their colleagues' experience and expertise.

The acquisition setup page is the most recent addition to Koha's features (Camden County Library System 2021) and it affects how the orders table in acquisitions is shown. All active orders data, as well as all related data, was fetched from the database prior to these updates (patrons and bibliographic data). Because all orders meeting the filtering criteria were loaded, even if only 20 rows were presented on the UI, this causes substantial delays. With this patch, the table is rendered utilizing the REST API's server-side pagination. This means that (1) just the data to be presented is retrieved (faster drawing) and (2) When a new filter is introduced, the page does not reload; instead, it simply refreshes.

Funding a library and a collection is just half the battle; a library professional is also required to add value to the collection and provide useful and creative services. Human capacity–library staff, teacher-librarians, and library leaders–must be matched by expenditure in facilities–collections, programs, resources, and devices. Great challenges lie ahead for Koha and the Koha community in remaining a relevant and open-source ILS in the face of forthcoming events and situations such as a pandemic and economic turmoil. There is hope with efforts that bring together all the bright minds to think as a team and stay relevant without having to constantly show our worth to superiors.

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