AWARENESS AND PERCEPTION OF DIGITISATION BY SCHOOL LIBRARY MEDIA SPECIALISTS

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Abstract
Digitization is a tool for managing library resources in the 21st century, however, school libraries are yet to embrace it in Nigeria. This paper assessed awareness and perception of digitisation by School Library Media Specialists (SLMSs) in secondary schools in Ibadan Metropolis, Oyo State, Nigeria. The concept of digitization, its process, benefits and challenges were concisely explained. One hundred and sixty-five copies of questionnaire were administered on randomly selected School library media specialists from fifteen secondary schools each from eleven local government areas of Ibadan Metropolis, vis: Akinyele local government area, Egbeda local government, Ibadan North, Ibadan North East, Ibadan North West, Ibadan South East, Ibadan South West, Ido, Lagelu, Oluyole and Ona Ara. The study established that few School Library Media Centres in government-owned secondary schools were manned by qualified SLMSs. In addition, many SLMSs were not aware of digitization concept, its purposes, processes and activities. The findings also revealed the perceived benefits and barriers to digitization in Nigeria. The study concluded that digitization is a necessary tool to manage school library resources in the 21st Century and made some recommendations.

Key words: *Digitisation, School libraries, School library media centres, School librarians, School library media specialists, Ibadan, Nigeria*

Introduction

Ranganathan's fourth law of librarianship enjoins that users' time must not be wasted and in the attempt to do that easy accessibility of library collection by users is germane to librarianship. It is the quest to make library collections easily accessible to users, and the emergence of technological innovations especially the Internet that resulted in digitization of library collections. Library collection is simply all the information resources available in a library at a given time which includes still images, printed text, handwritten text, photographs, newspapers, maps, audio and video. Library applies technological innovations to its services and products in order to satisfy its users' information needs. Digitisation is one of the processes that library and information profession has employed to serve her clienteles.

Digitisation is the conversion of physical object into digital object or conversion of hard copies into soft copies. It also signifies the various activities through which physical (analogue) information content, such as books, artefacts, records and other cultural material are turned into a digital form, described and made accessible through digital channels. To define digitization by the activities involved, Federal Agencies Digitisation Guidelines Initiative (FADGI) (2009) states that digitization is a complete process that broadly includes: selection, assessment, prioritization, project management and tracking, preparation of originals for digitization,

metadata collection and creation, digitizing, quality management, data collection and management, submission of digital resources to delivery systems and into a repository environment, and assessment and evaluation of the digitisation efforts.

Digitisation of library collections increases accessibility and visibility of the collections. It also enhances preservation of fragile and rare library collections and solves the problem of theft (Jagboro, Omotayo and Aboyade, 2012). In realization of these benefits, libraries globally especially academic and research libraries have embraced it (Morgan and Proffitt, 2017). Digitization is already permeating academic libraries in Nigeria, however, other libraries especially school libraries are yet to embrace it.

School Library Media Centre (SLMC) or otherwise known as school library in the traditional setting, is established to support and ensure the realization of the curriculum of both basic and post-basic education. SLMC provides and systematically organises its collection, both print and non-print information resources, in such a way to facilitate easy accessibility by the users. SLMC are manned by trained School Library Media Specialist (SLMS) or School librarians or teacher librarians in order to achieve its mission of supporting primary and post primary education curriculum. SLMS plays a dualist role; educationist and librarian. Opeke (2001) refers to school librarian as education generalist and media specialist. As a media specialist, school librarian makes suitable media and resources available, advise teachers on the available materials that are appropriate for the teaching in accordance with the curriculum. On the other hand, School librarian as an educationist, has teaching role which includes reading promotion and information literacy education (Dike, 2004). However, previous studies revealed that many school libraries in public secondary schools in Nigeria are manned by teachers without any formal librarianship training and student volunteers (Aramide and Elaturoti, 2013).

There are few studies on digitisation of library collections in Nigeria (Bello, 2013; Jagboro, et al 2012). However, none of these studies focused on the awareness and perception of School Library Media Specialist. As a result, this study investigated the extent of awareness and perception of digitisation of school library media collections in secondary schools by school library media specialists in Ibadan Metropolitan area. Prior to serious advocacy for digitisation of SLMC collection, it is vital to assess awareness and perception of SLMS. Awareness of any technological innovation precedes its use, hence for SLMS to advocate for digitisation of SLMC collections, they must be aware of the concept. Perception is formed based on the awareness of any innovation, product or service. It is therefore, pertinent to assess the awareness and perception of digitisation among SLMSs in Nigeria.

Objectives of the study

The main thrust of this study is to investigate awareness and perception of digitisation of school library media collections by school library media specialists. To achieve this, the specific objectives are to:

1. establish the extent of awareness of digitization by SLMSs;
2. examine the perceived reasons for digitization of school library media centers' collections by SLMSs;
3. ascertain the perceived barriers to digitisation of school library media collections by SLMSs.

Research questions

The following research questions were answered in the study

1. What is the extent of awareness of digitisation of library collection by SLMSs
2. What are the perceived benefits of digitisation of school library media collections by SLMSs
3. What are the perceived barriers to digitisation of school library media collections by SLMSs

Literature Review

School Library Media Centre (SLMC)

International Federation of Library Associations and Institutions (IFLA) School Library Guidelines (2015) defined school library as "a school's physical and digital learning space where reading, inquiry, research, thinking, imagination, and creativity are central to students' information-to-knowledge journey and to their personal, social and cultural growth. The physical and digital place is known by several terms (e.g., school media centre, centre for documentation and information, library resource centre, library learning commons) but school library is the term most commonly used and applied to the facility and functions"). This paper, therefore, refers to school library as school library media centre (SLMC). SLMC is established to support and make it possible to achieve the basic and post-basic education curriculum. (Aramide and Elaturoti, 2013). SLMC achieves her mission by providing, organizing and making her collections accessible to pupils, students and teachers of primary and secondary schools.

SLMC collections are varied and it includes print materials, non-print materials, audio-tape recordings, video tape recordings, motion pictures, transparency, photographic slides, filmstrips, opaque and charts (Elaturoti and Aramide, 2012). It also promotes reading by providing carefully selected books and other materials to meet the needs of the children and teaches them how to use the library. According to Bello (2013), school libraries introduce children to the world of imaginative literature, teach them to learn from array of information sources and media in the libraries by using problem-solving learning approaches.

In the traditional structure, SLMC users (pupils, students and teachers) have always been accessing library collections in the library's physical space but in this age of technological innovations especially with the Internet, SLMC collections are accessed both in the physical library and remotely. In this epoch of open access and online discovery, remote access to library collections is indispensable, coupled with

the fact that pupils and students of primary and secondary schools today are digital born. One of the ways to make SLMC collection accessible remotely is digitization.

Digitisation process and activities

Digitisation has been a global phenomenon for library resources management for some time but it is a relatively new trend in Nigerian libraries especially in School libraries. The digitisation process is multifaceted, it denotes all the steps involved in the process of making hard objects digital and accessible online.

Fabunmi, Paris and Fabunmi, (2006) defined digitisation as:

> *a process in which materials are converted from the hard copies to electronic copies. It does not always mean scanning, it also involves simple data conversion from catalog cards or paper to digital form, video and audio migration to digital form, and so on (Fabunmi, Paris and Fabunmi, 2006:28).*

Pandley and Mistra (2014) enumerated the digitisation process in developing countries to include policy formulation, policy approval, planning and budgeting, acquisition of technology or equipment, adoption of procedure, copyrights clearance, selection criteria, verification and metadata creation.

According to Federal Agencies Digitization Guidelines Initiative (FADGI) (2009), digitisation processes are categorised into four main phases: project planning, pre-digitisation, digital conversion and post-digitization work. The planning stage of digitisation is very crucial. The activities include setting up of project team, selection of appropriate standards and guidelines, writing of the proposal, timeline and budget preparation.

At the planning stage, the project team is set up comprising many professionals because digitization process involves varied tasks, hence, the services of many professionals are needed. Professionals which include Librarians, Computer Scientists, Computer Engineers, Library Technologists and Library Assistants are required. The equipment needed for digitization include server and storage devices such as computer system, rack and online uninterrupted power supply (UPS), digitization equipment such as, scanners, digital camera, digital copier and network connectivity devices, CD or DVD writer; printer; and of course the materials to be digitized (MinerV AeC Project, 2008; Jagboro et al, 2012). The digitisation budget includes the following costs: equipment, software, supplies, training, personnel, pilot study expenses, administrative expenses, services such as metadata creation, digitization (Scanning and editing), lesson plans or other services and miscellaneous (MINERVA Technical Guidelines, 2008; Gregorio and Schweibenz, 2009).

The second stage is the pre-digitisation stage and activities such as, selection of materials, preparation of selected materials for digitisation, copyright clearance, creation of metadata and provision of delivery mechanism are carried out (FADGI, 2009).

Selection of materials

The selection criteria for digitisation should be discussed prior to the selection and should be fully documented. Selection criteria for digitization should follow the standard library selection criteria which include: purpose, user demand and interest, value of content, physical condition of the materials, copyright status, cost of digitisation and sources of funding among others (FADGI, 2009; Ooghe and Moreels, 2009). The purpose of digitization must be ascertained, that is, being able to explain what the library wants to do and why is it desirable to digitise the information resource? In addition, answers must be provided to these questions:

i. What will users be able to do with the resources that they cannot do with the print version?
ii. What is the significance of the information resources to be digitized?

The value, or significance of the collection or information resources (current audience or potential audience, cultural and historical significance, uniqueness and rarity of the collection, popularity of collections, collection in high demand, material at risk because of its physical condition) must be ascertained (The University of Southern Mississippi Libraries Digital Program, 2009; Ooghe and Moreels, 2009).

The UNESCO, IFLA and ICA Guidelines for Digitisation Project (2002) advised that digitization projects should be user driven, that is high demand for access, preservation driven, that is, high demand on fragile objects (physical condition of the materials), and opportunity driven, that is, availability of fund to digitise the materials. In line with this, Jagboro et al (2012) enumerated that choice of materials to be digitized must be based on the priority of the library, secondly it must follow common accepted criteria which include, materials must be of high demand by users, it should be unique materials, rare and aging materials in high demand, useful but out of publication, of immediate and of curricular importance.

Copyright clearance

It is important to know the copyrights status of the materials to be digitised. Thus, another crucial factor to consider in selecting information resource to be digitised is the copyright status of the information resource. Pandey and Mistra (2014) referred to it as legal aspect of digitization. Copyrights means an author's right to an original work of literature, music and art is legally protected. Copyright gives the owner an exclusive right of disposition over his or her work, in other words, the right to authorise copying and public distribution or performance of any kind. The time span for copyright depends on when the work was created and it varies from country to country. Transfer of copyright must be made in written form and signed by the owner of the copyright (UNESCO, IFLA and ICA, 2002). The copyright status should be checked to know if the resource is in public domain, or 'fair use' or there is need to get permission from the copyright holders. However, getting permission from the copyright holder is difficult and time consuming exercise. Where it is impossible to identify the copyright holder of any information resources, it is recommended that accessing such digital collection is reliant upon

acknowledgement of a copyright disclaimer in order to safeguard institutions from possible litigation (UNESCO, IFLA and ICA, 2002; JISC, 2009). Verification Once selection of materials has been done there is need to ascertain whether the digital copies of such materials are already available in order not to duplicate efforts and not to waste resources (Pandey and Mistra, 2014).

Metadata creation

After the selection of the library collection to be digitized the next activity is metadata creation. It is the bibliographic features of the information resources. "The term 'metadata' commonly refers to any data that aids in the identification, description and location of networked electronic resources (Jean, Agnew and Brown, 1999). Metadata is structured data about data – information that facilitates the management and use of other information (Lagoze and Payette, 2000). The creation of metadata records for the digital material is .a specialized task (Lopatin, 2006). This work may also involve cataloging the analogue material or searching for information to enhance the metadata record where it is absent from the analogue version.

There are basically three main types of metadata; descriptive, administrative and structural metadata. These includes descriptive metadata describes a resource for purposes such as discovery and identification and includes elements such as title, abstract, author, and keywords structural metadata which indicates how compound objects are put together, for example, how pages are ordered to form chapters and administrative metadata provides information to manage a resource, for instance when and how it was created, file type and other technical information: -Rights management metadata, which deals with intellectual property rights, and Preservation metadata, which contains information needed to archive and preserve a resource. Some common general metadata schemas are Dublin Core, MARC and Metadata object description schema (MODS) (Lagoze and Payette,2000; Lopatin, 2006).

Preparation of the library collection

Before digitising, the materials must be sorted according to the type (e.g. glass plates), colour (black and white, colour), and size (e.g. 6x6, 6x7, 9x13). In order to digitise effectively the quality and physical condition of the materials must be checked. Decision about the quality of the materials by dividing them into groups, if possible must be taken. Creation of folders for storing the digitised objects and preparation of lists for documentation, e.g. Excel sheets for recording the file names (FADGI, 2009).

Digitisation Stage

The third stage involves scanning, optical character recognition, naming, proofreading and formatting and production of the final version.

a. ***Scanning***

The information materials to be scanned must be cleaned and dust off, and ensure that all the pages are present and in the right order. If the information material is in poor condition, a fresh copy should be found. To scan a material, place it face down on the scanner platen or put the pages into the sheet feeder. Then, in the software, choose a setting, resolution and colour and scan each page of the document at the settings you have chosen. The digitization work flow is in Figure 1. Resolution is determined by the number of pixels used to present the image, expressed in dots per inch (dpi) or pixels per inch (ppi). The physical size is important when setting the resolution. You can reduce the size of a document by reducing the resolution. The key issue is to determine the point at which sufficient resolution has been used to capture all significant details in the source document It is important to add here that some of the library collections would not be scanned but rather be captured with digital camera such collection like still image. Compression is another way of ensuring image quality, it is a means of reducing the file size for processing, storage and transmission of digital images. Usually, "loss less" is used for master files while "lossy" is used for access files(UNESCO, IFLA and ICA, 2002; MinerVa eC, 2008, Manzuch, 2011).

b. Naming of the file after creation

Naming the files should be done immediately after the creation. The files should be named according to a clear set of rules. These rules should be detailed enough to cover all the necessary information aspects, rigid enough to ensure an unambiguous identification, but not so complex that they cannot be understood and implemented properly. These rules serve for identification and should include: Name of institution, Name of collection, Inventory number, Image details, Type of file (master, submaster, etc.) and File format. The file name makes the file unique. Example : file naming convention: institution_collection_identification_detailinformation_type.file (MINERVA eC Project, 2008).

c. Proofreading

At this level corrections to the text and layout are done in two ways:

I. Comparing the scanned text on the screen with the hardcopy and entering the corrections directly into the computer. The word processor's spellchecker will help in spelling errors quickly.

ii. Printing out the scanned text and comparing it with the original copy. Mark any corrections on the printout, and then enter them, into the computer. This is a slower method, but may be the best option if there are no enough computers for each proofreader(MINERVaE, 2008).

d. Reformatting

There may be the need for reformatting after Optical Character Recognition (OCR) software have been used on a document, for instance there may be the need to insert columns, headers and footers. There may be the need to change the typeface, heading styles and so on, to make the document more attractive and readable.

Otherwise, you may be able to adjust the settings of your OCR program to preserve the layout of the page (Han, 2010).

e. Final Version

After the corrections have been done on the final version, the next thing to do is to create the metadata. As cataloguing is to library collection, so is metadata to digital collection. As for a book you must make sure that the bibliographical features such as book title, the author or the editor, the publisher and the publication date are all included. As for chapter in a book, the title, the author of that chapter and the original page numbers in the printed version of the book should be included. All other information resources should also have metadata (Jagboro et al, 2012).

Digitization workflow

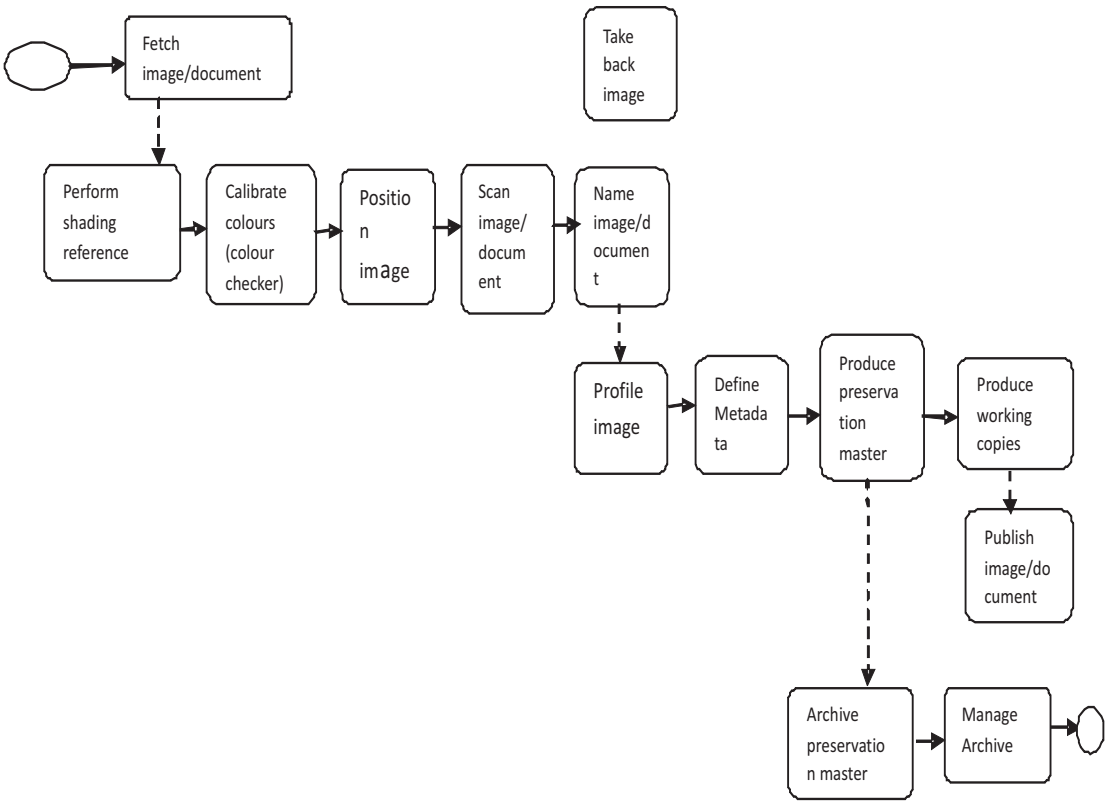

Fig.1: Digitization work flow adapted from BPMN Notation S. Gregorio IML, 2009

Post-digitisation Stage

At this stage derivatives copies of the digitised documents are made, that is, copies for storage or preservation and access. Having produced the needed copies the access copy will be made accessible to the public via the world wide web (www). Two approaches of delivery are available, through basic web pages which is simple to do but difficult to maintain and there is no searching and dynamic browsing options. The second approach is through the use of Digital library delivery software. This approach has powerful functionality for searching, browsing and

managing content but it requires high level of technical skill and it can be expensive. Some of the digital library delivery software are DSpace, Fedora, Eprint and Greenstone (MINERVA eC Project, 2009).

Benefits of digitisation of school library media collection

Digitisation is of immense benefits to school library in this dispensation. Bello (2013) submitted that digitisation of school libraries allows users to copy information resources to the user's desired destinations, allows performance of other tasks such as e-publishing and e-books, allows link up of information resources with cheaper access, library cooperation is enhanced with electronic information resources (EIR). It also reduces cost in terms of space, personal and redundancy of collection. Similarly, Jagboro et al (2012) highlighted the benefits of digitisation of library collection which includes wider access, remote access, preserving aging materials and solution to theft among others.

Barriers to digitisation

According to Manzuch (2011) digitisation is an instance of complex task and poses both opportunities and challenges. There are both generic and specific context challenges. Digitisation has numerous benefits, however, there are many barriers to its implementation globally and in developing countries particularly. Han (2010) affirmed that non-availability of electricity, non-availability of quality scanners, problem of storage unit and non-availability of major computer companies as challenges faced Pandey and Mistra (2012) opined that several barriers are militating against realization of digitisation of library materials. They submitted the following: funding, constant changing of software and hardware, technophobia, inadequate technology infrastructure, technological obsolescence and copyrights issues. In the Nigeria context, Akintunde and Anjo (2014) observed some peculiar challenges of digitisation of library collection such as, lack of adequate fund, lack of skilled library personnel and lack of adequate power.

Methodology

This study employed descriptive survey research design to investigate the school library media specialists' awareness and perception of digitisation of school library media collections. A total of 165 copies of questionnaire were administered to School Library Media Specialists from 15 randomly selected secondary schools (state government-owned and privately owned) schools each from the 11 Local Government Areas (Akinyele, Egbeda, Ibadan North, Ibadan North East, Ibadan North West, Ibadan South East, Ibadan South West, Ido, Lagelu, Oluyole and Ona Ara) in Ibadan Metropolis. Only 105 were returned with useful responses which is 63.6% response rate. The descriptive method of analysis such as frequency, percentage, means and standard deviation were used for the analysis.

Data Analysis and Discussion of findings

Table 1: Response rates from selected local governments

Local Government		Frequency	Percentage
Valid	Akinyele	9	8.6
	Egbeda	9	8.6
	Ibadan North	12	11.4
	Ibadan North-East	9	8.6
	Ibadan North West	8	7.6
	Ibadan South East	10	9.5
	Ibadan South West	10	9.5
	Ido	10	9.5
	Lagelu	10	9.5
	Oluyole	10	9.5
	Ona Ara	8	7.6
	Total	**105**	**100.0**

Table 1 reveals the respondent distribution by local government area. The total number of copies of questionnaires administered were 165 and 105 (63.3%) copies were returned and found usable. The largest number of questionnaire 12 (11.4%) was from Ibadan North local government while Ibadan North-West and Ona Ara local government areas had the lowest 8 (7.6%).

Table 2: Demographic information of the respondents

Variable	Privately owned Schools N=46	State government owned Schools N=59
Gender		
Male	15 (32.6%)	18 (30.5%)
Female	31 (67.4%)	41 (69.5%)
Educational qualification		
Teacher/School librarian with DLS	2 (4.3%)	5 (8.4%)
Teacher/School librarian with NCE/HND	8 (17.3%)	13 (22.0%)
Teacher/School librarian with First degree in librarianship (BLIS)	25 (54.3%)	5 (8.4%)
Library teacher with non librarianship bachelor degree	7 (15.2%)	29 (49.1%)
Teacher/School librarian with Master degree in Library and Information studies	2 (4.3%)	-

The data in Table 2 indicated that out of 105 respondents 46 (43.8%) were from private secondary schools while 59 (56.1%) were from public secondary schools. There were 33 (31.4%) males and 72 (68.5%) females. The highest number of school library media centres in public secondary schools 29 (49.1%) were manned by library teachers with non librarianship bachelor degree while the highest group 25 (54.3%) from private secondary schools were teacher/school librarians with first degree. The implication of this finding is that many school library media centres in public secondary schools in Ibadan are manned by unqualified library personnel while many privately owned SLMCs have qualified library personnel. Many of these teachers were English or Physics teachers and they were saddled with the responsibility of overseeing the library because their offices are located in the school libraries thus, they became teacher/librarians. This finding corroborated that of Aramide and Elaturoti (2013) that revealed that many privately owned SLMCs were manned by qualified library personnel whereas only few federal and state governments owned SLMCs were manned by qualified library personnel.

Research question 1: What is the extent of awareness of digitization among the School Librarians in Ibadan metropolis?

The answer to research question 1 is presented in Table 3.

Table 3: Respondents opinion on extent of awareness of digitization of school library collections

Variables	Aware	Not Aware	Mean		SD
Awareness of the concept of digitization	25 (23.8%)	80 (76.19%)	2.35		.561
I am aware of the reasons for digitization of the school library collection	18 (17.4%)	87 (82.8%)	2.13		.451
I am aware of the process of digitization	10 (9.5%)	95 (90.4%)	1.23		.621
I am aware of the legal issues of digitization	8 (7.6%)	97 (92.3%)	1.05		.321
Average weighted mean			1.69		

Table 3 presents data on the extent of awareness of digitisation among the school librarians in the selected secondary schools in Ibadan Metropolis. The data revealed the average weighted mean of 1.69. It also shows that 25 (23.8%) of school librarians are aware of the concept of digitization (Mean = 2.35), while 8 (7.6%) of school librarians are aware of legal issues of digitisation (Mean =1.05). Although the mean of awareness of the concept of digitisation is greater than weighted mean yet there is low awareness of digitisation. The implication of this is that majority of school librarians in Nigeria are not yet aware of digitization. This study is in line with the findings of Yilmaz, Kulcu, Unal and Cakmak (2013) that revealed low level of

awareness of digitization among librarians, archivists and museum specialists in Turkey. They discovered that librarians in Turkey were not familiar with digitisation.

Research question 2: What are the perceived benefits of digitisation of school library media collections by the school library media specialists?

The answer to question 2 is presented in Table 4.

Table 4: Perceived benefits of digitisation of school library media collections

Digitising school library collection will:	SD	D	N	A	SA	Mean	SD
increase accessibility of the collection	-	-	-	34 (32.4%)	71 (67.6%)	4.68	.470
Preserve fragile materials	-	-	3 (1.9%)	38 (36.2%)	64 (61.0%)	4.58	.551
Remove the problem of distance as users do not have to come to the SLMC before they can access and use information materials.	-	-	-	47 (44.8%)	58 (55.2%)	4.55	.580
Provide better access to resources that would otherwise be unknown	-	-	2 (1.9%)	43 (41.0%)	60 (57.1%)	4.55	.532
Allow integration of related materials on multiple hosts	-	2 (1.9%)	-	44 (41.9%)	59 (56.2%)	4.52	.606
Exhibit library collection on the web	-	1 (1.0%)	2 (1.9%)	46 (43.8%)	56 (53.3%)	4.50	.690
Reduce redundancy of collections	-	3 (2.9%)	2 (1.9%)	44 (41.9%)	56 (53.3%)	4.46	.680
Allow several students to access the same material at the same time	-	2 (1.9%)	2 (1.9%)	51 (48.6%)	50 (47.6%)	4.42	.632
Add value to resources by providing content to documents or visual material	-	-	9 (8.6%)	50 (47.6%)	46 (43.8%)	4.35	.685
Enhance information sharing	-	2 (1.9%)	8 (7.6%)	56 (53.3%)	39 (37.1%)	4.26	.681
Allow online reference requests	-	7 (6.7%)	7 (6.7%)	45 (42.9%)	46 (43.8%)	4.24	.849
Average Weighted mean						3.77	

Data in Table 5 shows the perceived benefits of digitidation of school library media collections. There were thirteen suggested benefits of digitidation and the respondents accepted all. The average weighted mean was 3.77. The first three major benefits are that : digitisation increases accessibility of the library collection (Mean = 4.68 and SD .470); digitisation preserves fragile materials (Mean = 4.58 and

SD .551); and digitization removes problem of distance as users do not have to come to the SLMC before they can access and use information materials (Mean = 4.55 and SD .532). The last three perceived benefits are: digitisation adds value to resources by providing content to documents for visual materials (Mean = 4.35 and SD .685); digitisation enhances information sharing (Mean = 4.26 and SD .681) and digitisation allows online reference requests (Mean = 4.24 and SD .849). This finding is consistent with Jagboro et al (2012) that reiterated that digitisation allows library collections to be made available electronically, enhances wider access, permits users to access right in the offices or classes without going to the physical library and preserves aging materials. Similarly, this study supports Bello (2013) study that submitted that digitisation of school libraries allows: users to copy information resources to the user's desired destinations, performance of other tasks such as e-publishing and e-books, link up of information resources with cheaper access, library cooperation is enhanced with electronic information resources (EIR). It also reduces cost in terms of space, personal and redundancy of collection.

Research question 3: What are the perceived barriers to digitisation of school library media collections in Nigeria?

Table 5 : Perceived barriers to digitisation of school library collections in Nigeria

Statements	SD	D	N	A	SA	Mean	SD
Lack of adequate ICT facilities in schools	-	-	2 (1.9%)	22 (21.0%)	81 (77.1%)	4.75	.476
Frequent electricity interruption	-	-	-	28 (26.7%)	77 (73.3%)	4.73	.444
High cost of digitisation	-	1 (1.0%)	1 (1.0%)	36 (34.3%)	67 (63.8%)	4.61	.563
High cost of ICT facilities	-	2 (1.9%)	3 (2.9%)	39 (37.1%)	61 (58.1%)	4.51	.682
Non integration of digitization into the school curriculum	1 (1.0%)	4 (3.8%)	7 (6.7%)	36 (34.3%)	57 (54.6%)	4.37	.846
Limited access to Internet	1 (1.0%)	2 (1.9%)	2 (1.9%)	56 (53.3%)	44 (41.9%)	4.32	.703
Poor perception of ICTs among teachers and administrators	-	6 (5.7%)	8 (7.6%)	39 (37.1%)	52 (49.5%)	4.30	.845
Lack of skilled manpower	2 (1.9%)	2 (1.9%)	1 (1.0%)	63 (60.0%)	37 (35.2%)	4.25	.744

The results in Table 5 reveals the perceived barriers to digitisation of school library media collections in Nigeria. Respondents were asked to rate their level of agreement with eight suggested challenges of digitisation in Nigeria. The data shows that the respondents accepted all the eight suggested challenges. The first major challenges were: lack of adequate ICT infrastructure in secondary schools (Mean = 4.75 and SD .476); frequent electricity interruption (Mean = 4.73 and SD .444) and high cost of digitisation (Mean = 4.61 and SD .563). The last three challenges were: limited access to Internet (Mean = 4.32 and SD .703); poor

perception of ICTs among teachers and administrators (Mean 4.30 and SD .845) and lack of skilled manpower (Mean = 4.25 and SD .744). This is in agreement with Jagboro et al (2012) study that established that lack of fund, infrastructure, electricity and training were challenges to implementation of digitisation in libraries. In addition, this study is in agreement with Morgan and Proffitt (2017) study, that assessed the state of digitisation in the United State Public and State libraries and submitted that perceived major barriers to digitisation were inadequate funding, inadequate technology/equipment, lack of experience by the librarians and right management issues among others. Similarly, this study concurred with the study of Pandey and Mistra (2014) that found that inadequate funding, inadequate technical expertise and inadequate technology infrastructure were some of the barriers to digitisation.

Conclusion

This study discussed the concept, activities and processes of digitization of library collection. Also, the study affirmed that many government-owned SMLCs were manned by untrained library personnel. Furthermore, this study established that few SLMSs were aware of the concept and reasons for digitization of SLM collections. It also revealed the perceived benefits of digitization and perceived barriers to digitization in the Nigeria context. Finally, the study made some recommendations based on the identified barriers to digitization. In conclusion, digitization of school library media collections is a necessity in order to be relevant in the 21st Century information environment.

Recommendations

Based on the findings of this study, the following recommendations were made:

1. In order to solve funding problem, there should be fund raising campaigns for digitization and old students association of each secondary school could lead in this regards.
2. The government should as a matter of urgency, provide enabling infrastructure for use of information communication technology in the secondary schools
3. Professional associations such as Nigerian School Library Association should be in the fore front of organising workshops and trainnings for School Library Media Specialists from time to time to keep them abreast of issues and trends regarding their chosen profession.
4. School library media specialists should avail themselves of on-the-job trainnings on relevant technologies that can enhance their productivity.
5. The government should include digitisation and the use of ICTs in the curriculum.

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