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Globalisation of Library and Information Services: An Assessment of the Level of ICT Deployment in Academic Libraries in Oyo State, Nigeria

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Abstract

INTRODUCTION: Libraries in the global era have been challenged to take the advantage of technology tools to provide unhindered library and information services beyond borders.

OBJECTIVES: The main objective of the study is to assess the level of ICT applications in Oyo State Academic Libraries (OYSALs), Nigeria. Specific objectives are to: find out level of computerization of library systems and digitization of library resources, including the software adopted in OYSALs, find out availability of electronic information resources, services and facilities for accessing them and ascertain the respondents' capabilities to provide global library and information service delivery by the year 2025.

METHODOLOGY: Total enumeration technique was adopted involving a total of 12 academic libraries in the State. Questionnaire was used for data collection and was analyzed using SPSS. Descriptive statistics with percentages and frequency counts was used.

RESULTS: Of the 12 OYSALs surveyed, 11 libraries eventually participated in the study (91.67%). Levels of computerization varied: Fully computerized libraries were just 9.1%. 72.7% indicated computerization in progress and 27.3% was yet to commence. For digitization, only 4 (36.4%) had commenced the process. For software adopted, 1 (9.1%) chose VTLS, 36.4% adopted KOHA and 9.1% used Library Plus. Availability of electronic resources, 9 (81.8%) indicated having e-Books and Journals accessible via various databases and internet. The respondents' extrapolation for having the capacities to provide global library and information service delivery by the year 2025 was overwhelming (n = 9: 81.8%).

CONCLUSION: With the survey results, level of ICT use was impressive. However, it can be concluded that many of the libraries studied need to accelerate actions on computerization and digitization projects if actually determined to achieve global services by the year 2025.

Keywords

Library services without border, Computerization, Digitization, Library Software.

INTRODUCTION

Globalisation

The historical background surrounding the creation and conceptualization of globalisation is as diversely argumentative as it is enormously ambiguous (Akanni, 2008; Oladele, 2008; Scholte, 2008). Unfortunately, this paper is not set to examine globalisation at such level. The notion of globalization emerged in the second half of the 20th century. From the semantic point of view, “*globe*” as a noun etymologically came from the Latin “*globus*” and was coined in the 15th century (Robertson & White, 2003; Scholte, 2008, p.472). The adjective “*global*” entered the lexicon in the late 17th century but took its popularity in the 19th century (Scholte, 2008, p.472). “*Globalise*” as a verb emerged in the 1940s along with “*globalism*” (Zvarych, 2016, p 2). Globalisation as a process first appeared in the English Language in 1959 but captured into the dictionary two years after its appearance (Scholte, 2008; Schreiter, 2015; Singh, 2015). Attesting to the popularity of the terminology, Scholte (2007) argued that globalisation is now recognized in many languages like Arabic, Chinese, French, Russian, to mention just a few. The discussion of globalisation entered the academic community around 1980 through a professor of Sociology, Roland Robertson, from the University of Aberdeen who initiated a research on the concept titled “interpreting globality” (Robertson, 1983). This early pioneer described the concept “as the understanding of the world and the increased perception of the world as a whole” (Beck, Hutton, & Giddens, 2001). Following the pioneer’s effort, from 1990s, the talk about globalisation began to catch the fancy of others in academia (Scholte, 2008) and this continued till date.

Since the time globalisation came into existence, it has attracted many interpretations. The concept is a word of many dimensions, coined in many vocabularies. Akanni (2008) in his presentation on Globalisation: Challenges and Opportunities for Nigerian Libraries, alluded the concepts like globalisation of education, economic globalisation, globalisation of sporting events and globalisation of library and information services, which is the focus of this study. Conversely, Scholte (2008) cul-de-sac about the concept seems to eliminate the prospect of Akanni’s illustration and flawed the existing analysis of globalisation as the author identified the term as “redundant” with four main definitions: “globalisation as internationalization”, globalisation as liberalization” and “globalisation as westernization” (p.1473). Unfortunately, the arguments that necessitated Scholte’s submission was not accompanied with substantial insights that were part of the pre-existent vocabulary.

In a paper, “Globalisation: Definition, Processes and Concepts”, Cuterela (2012) described the term as one that involves spreading of ideas, practices and technologies. Similarly, Held (2004) defined globalisation in a simplistic sense as a rapid global interconnection. These definitions seem to establish the importance and value of globalisation as advocated for. These *debunked* Scholte (2008) counter argument that globalisation is a little more than internationalization and universalization and much more than westernization.

Further to the above, the definition emanated from Sociologists, Albrow and King (1990) as “all those processes by which the people of the world are incorporated into a single world society” aptly captured what the world is experiencing about globalisation and where it is heading to. Lending the words of Zeleza and Weare (2003), Oladele (2008) informed that “globalisation seems to be everywhere as rhetoric and reality and as process and project” (p.2). The author clarified that the prevalence of globalisation has been empowered by the advent and application of Information and Communication Technology (ICT).

In summary, the literature reviewed established that globalisation is tied to technology. The understanding here is that, the advances in technology precipitated the creation and growth of globalisation. Globalisation has become an international phenomenon attracting many terminologies and addressed in many languages across the globe (Scholte, 2007). It is also noted that the value and the potential of the concept contributed to its rapid popularity.

Library and Information Service Delivery in the Globalization Era

It is no longer a news that globalisation has its presence in virtually all aspect of human life (Zezeza & Weare, 2003). The kind of transformation that globalisation has injected into the library system worldwide is glaringly visible. Library and Information services can now be delivered speedily and anywhere unlike before. In the library field, globalisation has redefined library operations from the state of location bound or limitation to infinite possibilities (Oladele, 2008). It is indeed commendable and a thing of joy that globalisation has eradicated the age long incarceration of library users and information service delivery.

It is evident that globalisation will also eradicate the librarians' practice of *banking* (Freire, 1970) and eliminate what John Dewey termed *unfair privilege* and *unfair deprivation* (Dewey, 1923) in the course of making the required information available to the library users. "Banking practice" is a system where information provider/teacher withholds knowledge of information instead of passing it to the beneficiary (Freire, 1970). "Unfair privilege" describes the unique position of information or knowledge provider as opportunistic with the power to give out or not to while "Unfair deprivation" explains a situation where the beneficiary of information or knowledge user is precluded from accessing such information (Dewey, 1923). These practices have created gaps between the information provider and the user. Interestingly, globalisation is set to remove these barriers. Librarians can no longer dictate the time of access to information because users are in control. Time and place of access to information are now the decisions of the users and not librarians. Information resources are no longer under "lock and key" as it is used to be because librarians are not in the possession any more.

An anonymous quotation reported in a paper presented by Oladele (2008) at the International Federation of Library Associations and Institutions (IFLA) in Canada, on Globalization and African Libraries: The Challenges of Self Discovery in a Digital World aptly described a library in globalisation age:

"I am the library; I am neither wall nor shelves; Not even the books that stand in row; I am the wisdom of the universe captured and arranged for you; I am an open door; Enter" pp.2-3.

Looking at the potentials of ICT, it is clear that, the survival and advancement of globalisation is dependent on technology. The implication here is that, the advancement in ICT brought about the notion of globalisation and its acceleration too. This is indeed a credit to the ICT innovations. In library system, the application of ICT paves the way for unrestricted access to library and information resources and services. ICT is able to remove the barrier of geographical location, border issue and time to access library services – which is what globalisation is all about? This submission concurred with some findings in the literature (Okiy, 2010; Omekwu, 2008) who asserted that ICT revolution could be seen as a dominant and a driver to globalisation and which empowers library and information professionals to process, produce and disseminate information for global services.

Deployment of ICT in Nigerian Academic Libraries and Challenges

The history of library automation began in Nigeria in the mid 1990s with the opportunity of free provision of computers by the Nigerian National Universities Commission (NUC) (Imo & Igbo, 2011) and free CDS/ISIS software from the United Nations Educational, Scientific and Cultural Organisation (UNESCO) (Igbeka & Ola, 2010). Unfortunately, all these efforts occurred without achieving success (Adekanye, 2011; Ani, Esin, & Edem, 2005).

Many factors have been reported for these failures. Attitude of librarians towards ICT is one of them. The disposition of librarians towards the application of ICT in academic libraries was depressive (Igwe, 2013). In the efforts to document what might be the main causes of these unethical behaviours demonstrated by librarians, Adeyinka (2012) investigated the issue and found positive correlations with “fear” and “anxiety”. What caused fear and anxiety among some academic librarians in the country to warrant sabotaging the effort of ICT application? Common documented reasons for the librarians’ attitudes about fear and anxiety were “fear of change” in term of technology adoption and “anxiety” about possible job replacement with machines (Igwe, 2013; Imo & Igbo, 2011; Koneru, 2006; Krubu & Osawaru, 2010).

Another factor constituting a serious barrier to the dwindling states of ICT application in the Nigerian academic libraries is funding. It is unfortunate that the government in Nigeria has developed nonchalant attitudes towards educational funding (Igwe, 2013; Okiy, 2005; Yetunde, 2008). It is painful that the government disobeyed the UNESCO’s recommendation of compulsory and regular allocation of 26% minimum allocation to academic libraries (Igwe, 2013; Mordi, 2008).

Similarly, the tradition has been that libraries derive their funding from the parent institutions (Omotayo, 1997) but it is sad to note that the managements of these institutions have developed cold feet towards fulfilling the traditional request of making funding available to the libraries.

Discussion of the application of ICT in Oyo State Academic Libraries (OYSALs) in Nigeria cannot be complete in the absence of electricity. The problem of erratic power supply has immensely aggravated the existing challenges facing the academic libraries’ effort to utilize ICT for library services as reported in the previous studies (Ani, Atseye, & Esin, 2005; Zaid, 2004).

Oyo State

Oyo State is different from the city of Oyo (Oyo town). It is an inland State in the South Western Nigeria (SWN) with its capital at Ibadan. It was created in 1976 as one of the States that constituted the SWN and main indigenes are mainly the Oyos, Okeoguns, Ibadans, Ibarapas, with notable towns like Oyo, Ogbomosho, Iseyin, Kishi, Okeho, Saki, Eruwa, Iroko, Lanlate, Oje Owode, Sepeteri, Ilora, Awe, Ilero, Igbeti and Igbo ora (Oguntoyinbo, Areola, & Filani, 1983). Ibadan has been the center of Administration of the old Western Region, Nigeria since the days of British colonial rule (Utuk, 1975). The academic institutions in the State that were in existence as at the time of this study are as stated in Table 2.

Statement of the Problem

At various Library and Information Professional gatherings, there have been constant discussions about the transformation in Library and Information services delivery through the application of ICT. Consequence upon this, the International Federation of Libraries Associations (IFLA) charged libraries and librarians to redesign library systems in their domains and project the institutions in a way to alert the public to see libraries as partners in the national development. Also, there have been international campaigns calling libraries across the world to start preparing to align with the call of globalisation. In view of the transformation expected in the 21st century library services, this study was undertaken to investigate the level of application of ICT in the academic libraries in Oyo State, Nigeria.

Objectives of the Study

The main objectives of the study are to:

find out the levels of computerisation of library systems and digitisation of resources, including the names of the software adopted for the project by the Oyo State Academic Libraries (OYSALs)

find out the types of services provided, types of electronic information resources available and the availability of the required facilities for accessing them in these libraries

ascertain the respondents projections for the provision of global library and information service delivery by the year 2025

find out the challenges militating against the application of ICT in these libraries

LITERATURE REVIEW

Academic Libraries

This review of literature on academic libraries is based on three perspectives: 1.Traditional services (location bound). 2. Modern services (across borders). 3. Mandate (authority) given to the libraries. In view of this, review of literature under this heading will be based on the traditional functions/services, functions/services at the technology era and definitions of academic libraries in accordance with the mandate attached to their existence.

With advances in technology, coupled with the emergence of globalisation of library services, there has been a remarkable shift in library services from stand alone libraries to library and information networks, from printed publishers to digital resources and from ownership to access (J. Singh & Kaur, 2009). In the context of the 21st century contemporary library practice Campbell and Michael (2006) noted that academic libraries will be providing quality learning spaces, creative metadata, offering virtual reference services, teaching information literacy, choosing resources and managing resource licences, collecting as well as digitising archival materials and also maintain digital repositories. In a similar view, Lombardi (2000) informed that users of academic libraries at this digital age will be interested more in computer based content, digital find aids, digital repositories of articles, online access to newspapers. Corroborating

Lombardi's opinion, Bisbrouck, Desjardins, M  nil, Ponc  , and Rouyer-Gayette (2011) equated academic libraries with those established to provide library services to the users beyond their geographical boundaries.

From the perspective of their mandate to the parent institutions Academic Libraries (ALs) are domiciled in Higher Education Institutions like Universities, Colleges and Polytechnics (Abubakar, 2011). In the early days, Ajibero (1995) described university Libraries as the *heart* of the universities, adequately equipped with both human and information resources to support teaching, learning and research. Another author identified ALs as those established not only to support learning, teaching and research process alone in the universities but also to conserve knowledge and ideas (Anafulu, 1996). Paraphrasing the Nigerian National Policy on Education document (2004), Okudo (2013), defined academic libraries from the mandate and indispensable point of view, as *the heart of tertiary institution* charged with the responsibility of supporting the realisation of the institutional mission statements. In the same perspective, Abubakar (2011), Ogunsola (2005) informed that ALs existed specifically to support the educational goals of their parent institution. Preservation and access to knowledge and information are the specific mandate given to academic libraries in addition to supporting the mission of their parent institution (J. Singh & Kaur, 2009). In a closely related tone, Yusuf and Iwu-James (2010) echoed the submissions of the authors mentioned above, in this paragraph, defined ALs as the *nerves centers or the hub of the tertiary institutions*, around which scholarship is tied. In the same spirit, Okonedo, Amusa, Bakare, Bamigboye, and Alawiye (2014) also identified ALs as *indispensable companions to tertiary education*.

Application of ICT in Academic Libraries

Various definitions of Information and Communication Technology (ICT) abound in the literature. In the words of Gilbert, Boulter, and Elmer (2000) ICT is defined as:

“the acquisition , analysis, manipulation, storage and distribution of information, including the design and provision of equipment and software for these purposes” (p.5)

In the context of libraries, according to Chisenga (2006) ICT is seen as a multiple “set of technological tools and resources deployed to communicate, create, disseminate, store and manage information” (pp.1-2). A definition emanated from Osawele and Uzairue (2013) appears clearer and understandable to the non-professionals. It reads “ICT is the application of computers and technologies for acquisition, organisation, storage, retrieval, as well as dissemination of information” (p.11). The definition by Chisenga (2006) as stated above, mentioned “technological tools”, which appear ambiguous. The argument here is that, a lay man (who is not familiar with technology) can easily associate “computer” with technology. That understanding broadens the knowledge of interpreting the concept of ICT. Such clarity too lessens the chances of getting confused. Technology tools are many and in fairness to Chisenga, mentioning of all these in such a definition might be distorting. “Computer” is central. Besides, computer is significant to ICT.

The advent of ICT has brought substantial transformation in accelerating the ALs information service delivery as evident in computing technology, communication technology, including mass storage technology (Krubu & Osawaru, 2010; Okonedo et al., 2014). Aina (2000), Emojoorho and Nwalo (2009) also noted that the ICT adoption in academic libraries has necessitated the

globalisation of library and information service delivery. Application of ICT in ALs paves the way to sharing and collaboration with other libraries to offer appropriate and timely services to users (Bajwa, 2003). Adeyemi (2010) educated that globalisation with the aid of ICT enables ALs to create, organise, manipulate and access libraries from remote locations across the world within seconds. Similarly, Ani, Atseye, et al. (2005) informed that globalisation of library services is a necessity and a welcome development as a single library cannot be all self - sufficient in term of acquiring information resources. Okonedo et al. (2014) stated that ALs registered and paid for online databases like HINARI, AGORA, AORE, JSTOR, SCIRUS, SAGE, EBSCO, BLACKWELL and ELSEVIER to enjoy the benefits of ICT in order to serve their clients better and widely.

The global shift towards information society has created a big vacuum in the industries with the new responsibility of documenting knowledge digitally and provision of access. The reality now is that, since knowledge is indispensable to educational and socioeconomic development of any nation (Davies, Wiley-Schwartz, Pinkett, & Servon, 2003), people should be in the position to access information and knowledge in a format accessible wherever they are. A lot of knowledge is being generated across the globe and for such knowledge to be utilised for development processes, at the international level, it must be converted to a digital resource (Ondari-Okemwa, 2004).

The essence of automating academic library services is to have the ability to deliver effective and unrestricted library and information services to the academic community. In view of this need, the library managements are expected to do extensive investigations in selecting an automation software that will yield desired results for provision of effective library e-services (Chowdhury, Poulter, & McMenemy, 2006). Ramzan (2004) attributed the slow adoption of ICT in academic libraries to lack of budget, selection of appropriate software and problem of personnel.

The software found in academic libraries in the country varies. Al-Ansari (2011) reported the use of VIRTUA and SLAM in some academic libraries. A study conducted by Adekanye (2011) found users of GLAS, X-LIB AND ALICE. Nduka (2013)) reported higher users for TINLIB and less users for CDS/ISIS. Further to the above, Hudron Kari and Emmanuel Baro (2014) in a study, found a wider use of INNOPAC, JUJICA and ALEPH by a group of consortia. KOHA has also been found to be popular and widely used open source software in another study conducted in Nigeria (Hudron Kari & Emmanuel Baro, 2014; Ogbenege & Adetimirin, 2013).

METHODOLOGY

A descriptive survey method was carefully selected to enable the authors describe the level of ICT deployment in the Oyo State academic libraries: level of computerisation and digitisation of library materials, availability of electronic information resources.

A total enumeration technique was used. All the academic libraries in Oyo State, Nigeria as at the time that this study was conducted constituted the total population that took part in the study. The total academic libraries available in the state as at that time were 12 in numbers. These libraries were located at 7 different local governments (See Table 1 under Demographic Information about the Respondent) from the 33 local government areas available in Oyo State. The names of the participated libraries are also clearly stated in the same Table 1 referred to.

A structured questionnaire was administered to the heads of these libraries. For the purpose of clarification, the heads of libraries referred to here were “Librarians” by profession. A library head in this study was a librarian with a minimum academic qualification of a master degree in Library and Information Science. The nomenclature used for this position varied. Some were called “the university librarian” or “the Librarian” for those found in the university settings. Others were referred to as “College Librarian” and “Polytechnic Librarian” for those heading College of Education and Polytechnic institutions.

Of the 12 OYSALs surveyed, 11 eventually agreed to participate in the study (91.6%). Questionnaire was the instrument used to collect data from the respondents. The questionnaire was administered only to the heads of the libraries studied. It was divided into four sections: A, B, C and D. Section A contains information about biodata of the respondents. Parts of the items used were about the names of the respondents, local government area, academic qualifications of the heads of the libraries and age. Section B concentrated on questions about “Types of electronic/online services” available in these libraries with the facilities to use them. Section C focused on level of computerization and digitization. The question items under this heading include but not limited to information about full computerization, computerization in progress and questions about digitization project.

Based on the size of the academic libraries in the State, a total number of 12 copies of the questionnaire were distributed to all the libraries, which were in existence as at the time of this study, but 11 were returned and found useable. Data collected was analysed with SPSS. Descriptive statistics with percentage and frequency counts were used.

RESULTS AND DISCUSSIONS

Demographic Information about the Respondents

Table 1 represents the data on the educational qualifications of the respondents. The majority of the respondents 9 (81.8%) had master degrees in Library and Information Studies while only 2 (18.2%) were educated to the level of PhD in the same profession. For the distribution of the respondents according to their local government areas of location, 2 (18.2%) came from Atiba, while 4 (36.4%) were from Ibadan North. There was only 1 (9.1%) from Ibadan North East. 1(9.1%) from Oyo East, same figure (9.1%) came from Ogbomosho North. Others were: 1 (9.1%) from Ibarapa Central and 1(9.1%) from Oluyole. Table 2 gives details distributions.

The results of the years of establishments of the academic libraries studied to establish their age also varied. Those that were founded from 1948 to 1984 were statistically higher than those established from 1985 to date (54.5% /45.5%). Figure 1 shows the margins.

Discussion

The results about the academic qualifications of the respondents indicated that there was no any official or institutional pronouncement about PhD (as at when this study was conducted) as the compulsory academic qualification to head these libraries. The results obtained identified only 2 (18.2%) educated to the PhD level (see Table 1). Although, it was possible that some others among the respondents had enrolled for the programme or were even near the time of

completion as at the time that this study was conducted. Master Degree appeared to be the minimum entry academic qualification for a librarian to move through the ranks to the position of an academic library head in the most institutions in the state. The aspect of required entry academic qualifications for any professional librarian to head a Nigerian Academic Library is another research area to be explored. Such study will reveal the statistics of the libraries that have taken PhD as policies/laws for headship.

About the ownership of the OYSALs, five of them were owned by the Federal Government of Nigeria (FGN), four by the Oyo State government (OYSG) and the remaining two were established and managed by private individuals. According to the Nigerian constitution, this ownership indicated that, those owned by the FGN were established and funded by the body while same applies to others too. Looking at the structure of governance in the country, FGN is in charge of the nation's wealth and therefore expected to allocate more money into its academic institutions than the states. The question here is that, is the federal government fulfilling this constitutional obligation at a reasonable level? In hierarchy of a nation, FG takes the lead. In sharing of wealth, FG takes the lion share. The implication here is that, federal owned institutions are expected to be well funded than others. Unfortunately, what is being witnessed is obviously the opposite. The major challenges confronting academic libraries in the country were funding and electricity problems as reported in the literature (Ani, Atseye, et al., 2005; Igwe, 2013; Zaid, 2004). The challenges affected virtually all the institutions.

Table 1. Distribution of Respondents Qualifications

	Frequency	Valid Percentage	Cumulative Percentage
MLS/MLIS	9	81.8	81.8
PhD	2	18.2	100.0
Total	11	100.0	

Figure 1. Respondents Years of Establishment

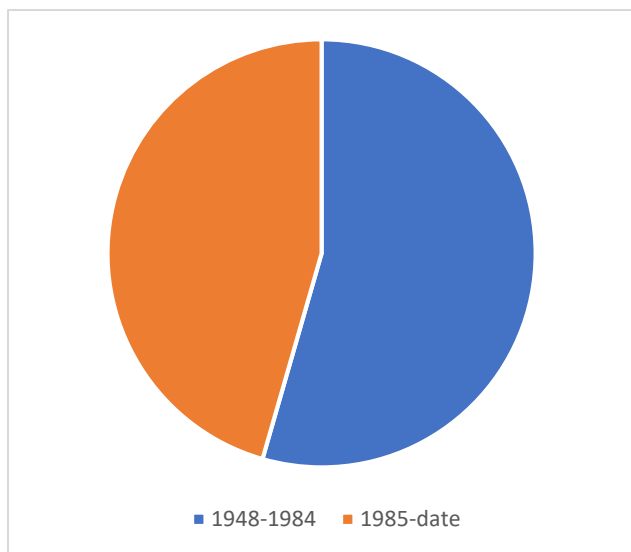


Table 2. Distribution of Respondents Academic Institutions, Locations & ownership

	Names of Libraries	Location	Local Government Area	Year of Establishments	Ownership
1	Kenneth Dike Library, University of Ibadan (UI)	Ibadan	Ibadan North	1948	Federal Government of Nigeria (FGN)
2	Federal College of Forestry Library	Ibadan	Ibadan North East	1954	FGN
3	Library, Archival & Information Studies Library, UI	Ibadan	Ibadan North	1965	FGN
4	The Polytechnic Ibadan Library	Ibadan	Ibadan North	1970	Oyo State Government (OYSG)
5	College of Medicine Medical Library, University of Ibadan	Ibadan	Ibadan North	1976	FGN
6	Adekunle Ogunmola Library, Emmanuel Alayande College of Education	Oyo town	Atiba	1984	OYSG
7	Ladoke Akintola University Library	Ogbomosho	Ogbomosho North	1991	OYSG
8	MT Kontagora Library, Federal School of Survey	Oyo town	Oyo East	1991	FGN
9	Lead City University Library	Ibadan	Oluyole	2005	PRIVATE
10	TY Danjuma Library, Ajayi Crowther University	Oyo town	Atiba	2005	PRIVATE
11	Oyo College of Agriculture	Igboora	Ibarapa Central	2006	OYSG

Objectives of the Study

Objective one: to find out the levels of computerisation of library systems and digitisation of resources, including the names of the adopted software.

Responding to the question on full computerisation of libraries, it is sad to note that only 1 (9.1%) had fully computerised the system, although, more than a half, 8 (72.7%) also indicated the project was in progress. While 2 (18.2%) were yet to start. Concerning digitisation of library resources, all the respondents (100%) answered “no” to the “full digitisation” question. However, 4 (36.4%) said the project was in progress while a larger number (7: 63.6%) confessed not doing anything yet towards digitisation. Figure 2 and 3 show the details.

About the software used for computerisation and digitisation projects, 4 (36.4%) chose KOHA, 1 (9.1%) used Virtual Technology in Library Solutions (VTLS). 2 (18.2%) adopted Library Plus. Unfortunately, 5 (45.5%) were in the process of selecting appropriate software.

Discussion

Computerisation and digitisation are core to the academic libraries’ use of ICT. Computerisation is simply defined as an automated services or mechanisation of activities (Bansode & Periera, 2008). Digitisation can be described as the conversion of analogue collections to digital format (Lopatin, 2006). The significance of digitising library materials at this technology age is to increase access to library holdings or provision of wider access (Astle & Muir, 2002). In the absence of these two, other tools to be deployed to provide unrestricted library and information service delivery cannot be applied. In reality, application and utilisation of ICT in academic libraries are tied to automated services and digital resources. Until these are achieved library services cannot be globalised. Global services, in this context, simply mean having the capability to provide library and information service delivery beyond the borders, beyond the geographical zones (where the libraries are located). It must also be noted that, globalisation cannot be implemented in a library system where ICT is not applied. Similarly, ICT cannot be fully utilised when library systems and resources are not automated and digitised. In other words, globalisation thrives with ICT in operation. Based on these facts, computerisation and digitisation are major requirements in the application of ICT in libraries. The interrelationship between ICT and globalisation has been investigated extensively in various ways in the literature (Igwe, 2013; Molawa, 2010; OGUNLANA & AMUSA, 2008; Okiy, 2010; Oladele, 2008; Scholte, 2008).

Considering the significance of computerisation and digitisation in the application of ICT in the library system, the results obtained for computerisation and digitisation were worrisome. Having only one respondent that had achieved full computerisation was below expectation. A larger number indicated project “in progress”. Five were yet to decide on the software to be used. Generalising these results, there was no clear indication for a timely achievement. The problem associated with interpreting the results lie with the predicament of time line that the respondents might bring the exercises to full completion. Ruminating about the challenge of interpreting the results obtained for computerisation, the responses for digitisation worsen the situation. None of the respondents had fully digitised the library materials. Those that indicated digitisation “in progress” were not many. By interpretation, “in progress” appears as a loose word prone to many interpretations. It connotes an activity that is still ongoing or moving. The difficulty in this situation is that, it is almost impossible to ascertain when an activity that is “still ongoing” will come to a conclusion.

Interpreting “in progress” in another way, it indicates that an exercise has commenced and continuing. Since there was no indication of stoppage, the results (in the absence of time frame) can still be interpreted to mean a project (computerisation and digitisation) that is achievable. Another motivating factor is the chosen software by the respondents. For instance, those that

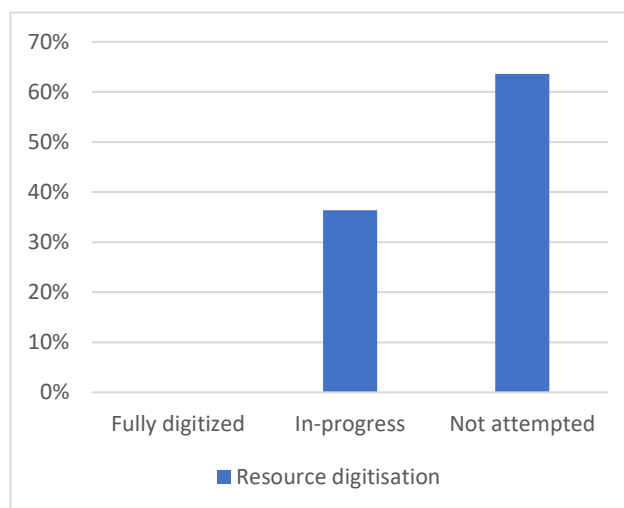
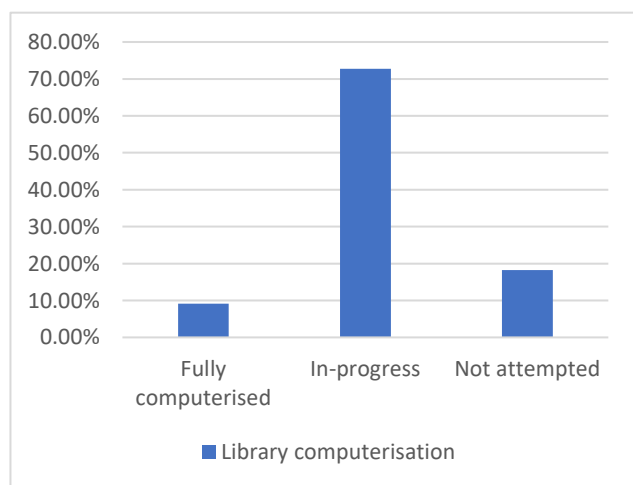
were enjoying collaboration with the chosen software were likely to pursue the projects to successful completion. For instance, those that used KOHA seemed to enjoy collaborations as many libraries in Nigeria were using this software. The same opportunity was available for VTLS users too. It was learnt that about six university libraries teamed up to purchase VTLS. The implication of this multi user software is that they have the opportunity to share problems and resolve same collectively.

Looking at these results generally, the implication is that OYSALs might not be able to provide effective e-library services to the academic communities in a few years to come. These libraries might not possibly be able to provide library and information service delivery beyond their borders in the next five years. The essence of ICT usage in the libraries according to Pareek and Gangrade (2016), is to bring library and information service delivery to the door step of the user. Besides, ICT applications are very crucial to the implementation of global library services as corroborated by Okiy (2010).

Generalising these results further, the low levels of computerisation and digitisation among the libraries studied might be connected with the general problems associated with the applications of ICT in Nigerian academic libraries. Some of these problems have been identified under the literature section of this study. One of these challenges is “fear and anxiety” of librarians. Fear of downsizing. Some were of the opinion that their services might not be needed again when ICT is fully deployed for library operations. This is in line with the finding of another researcher (Tella & Adu, 2009). In addition to the possible reason enumerated above, issues of ICT skills and the attitudes of the institutional managements have also been found as serious impediments delaying timely application of ICT in academic libraries (Igwe, 2013). These deplorable states of ICT utilisation in Nigerian academic libraries have been investigated extensively in virtually all the geo political zones across the country (Eke, 2011; Etebu, 2010; Igwe, 2010; Oladele, 2008).

Figure 2. Library Computerisation

Figure 3. Library Digitisation



Objective two: to find out the types of services provided, type of electronic information resource available and the availability of the required facilities for accessing them in these libraries

Responding to a question of “yes” or “no” to find out whether the respondents had access to electronic books and journals in their libraries, all respondents (100%) responded yes. Another close ended question was asked to investigate the specific electronic information databases available in these libraries. Interestingly, 9 (81.8%) of the respondents confirmed the availability of E-Granary, EBSCOHOST, JSTOR, Jaypee Digital, HINARI, AGORA, OARE with Directory of Open Access Journals (DOAJ) and partial Institutional Repository (IR). For the types of services provided, all the respondents (100%) indicated engaging in Selective Dissemination of Information (SDI), Literature Search (LS) and Reference Management Services.

On the issue of required facility to access these resources, all respondents (100%) claimed having Internet access in their libraries. Quantifying the Internet access points in these libraries, only 2 (18.2%) had the highest capacity that could accommodate more than fifty users at a time. This is followed by 1 (9.1%) with forty users, 2 (18.2%) with thirty users, 1 (9.1%) with twenty users and 5 (45.5%) with the capacity for ten users.

Discussion

Internet is the backbone of e-services for library operations. The availability of the Internet facility in these libraries can be interpreted to indicate a reasonable commitment towards achieving library and information service delivery beyond the border. Aside the Internet, the confirmation of those electronic resources as claimed by the respondents further clarified the target of the libraries. It was to make library and information services available to wider users wherever they might be. Although, the results obtained under the objective one indicated “computerisation and digitisation in progress” for the majority of the respondents but the availability of online databases and electronic resources indicated under this objective cannot be thrown away totally in evaluating the level of application of ICT in these libraries. These constitute parts of the requirements for the full utilisation of ICT in academic libraries to offer global services (Okonedo et al., 2014). The only challenge here will be limitation on access. The resources and services available in a library including the local contents cannot be accessible online until they are all digitised and the library is fully computerised. As Nok (2006) noted, computerisation of library

services enables the library to engage in integrated library system and network operations. The respondents' claims of the availability of e-books and journals accessible on those online databases (as mentioned under the results above) gave the impression that they planned to move to the next level of services.

The availability of partial Institutional Repository (IR) also indicated ongoing digitisation of resources. It showed that parts of the digitised materials had been uploaded to their repositories and possibly been test run. Also, SDI services, literature search and reference management services were all indications of the application of ICT in these libraries. These signified computer based library services and use of technology to a reasonable extent.

Interpreting the availability of computer based resources and services further, it suggested that the respondents had tasted the value of the use of ICT and would likely to pursue the full utilisation to a successful end. That is, the respondents were likely to carry the computerisation and digitisation projects to the end in spite of any hurdles since they already started. The results also described the level of preparation of the respondents towards the provision of global library services.

Objective three: To ascertain the respondents' projection for the provision of global Library and Information Service Delivery by the Year 2025

Respondents were asked if they would be able to provide full electronic library and information services beyond their geographical locations by the year 2025 and the results obtained indicated that 9 (81.8%) were very confident to achieve this, while 2 (18.2%) could not make such pronouncement.

Discussion

The overwhelming confession of certainty by the majority of the respondents about the provision of full electronic library and information service delivery by the year 2025 was suggestive of seriousness and commitment to success. With this confession, one can be tempted to believe in the success of the projects in spite of time assumption and possible hindrances. The pronouncement implied a high level of commitment and dedication. Plus or minus, it showed that by the year 2025 majority of the OYALs should be able to deliver library services beyond their jurisdictions.

The confession was also a product of determination. A determination to success usually push a determining person or organisation to accomplish a target, even in the face of any threats. This understanding indicate that there is a genuine reason to believe in the successful accomplishment of the respondents' target.

Objective four: to find out the challenges militating against the deployment of ICT in these Libraries

The respondents were asked if they were affected by the common challenges of Internet connectivity, Irregular Power Supply, Funding and Man Power. 8 (72.7%) agreed with these problems.

Discussion

Taken Internet connectivity as a challenge indicated possible slowness or connection failure. The question here is that, who should be blamed for this problem? Is it the Internet Service Provider (ISP) or consumers? Personal experience on the problem of Internet usage was that, most of the Internet consumers do not yield to the advices of ISP on the avoidance of bandwidth overload. The common practise is that, the bandwidth capacity is usually far less to the number of consumers, thus resulting to slowness and connectivity problems. Some institutions would subscribe to the Internet bandwidth meant for defined number of users but deviate from this by increasing access points, which in turn would not be enjoyable. In spite of this background, Internet connectivity problem might also be from the ISP or packet loss. Packet loss may occur as a result of errors in data transmission on wireless networks or which may be due to what is known as network congestion. Finding correlations to this, some studies (Igwe, 2013; Okonedo et al., 2014) established that Internet low bandwidth and other problems were reported as serious challenges to the application of ICT in academic libraries.

Electricity has been addressed as a major predicament in most parts of African countries. Electricity makes e-services possible. What differentiate developed world from Africa is regular and uninterrupted electricity supply. Literature of ICT applications in academic libraries in African continent identified electricity as a common inhibitor. Hardly any paper gave a report of challenges on information system research without mentioning electricity. This is pathetically horrible and unhealthy for the progress of information technology adoption in Africa. Some findings (Krubu & Osawaru, 2010; Okonedo et al., 2014) corroborated this problem where most of the respondents in their studies totally agreed with erratic power supply as a major hindrance in the application of ICT in academic libraries.

Funding too has always been an impediment to the deployment of ICT in Nigerian academic libraries. Government has not taken funding of education in the country as a priority and a project to be taken with utmost seriousness. In the developed world, any project attached to education receive heavier budget as education is seen as a means of economic development.

Generally, expertise has been a major issue to contend with when embarking on ICT application. African countries lack expert hands in the area of technology use. To buttress this point, Alabi (1984) reported that right calibre of personnel had been the major problem of computerisation and other technology use in the academic libraries. Attitudes of library and information professionals also do not help the matter. Many of them do not offer the required cooperation for the success of technology adoption.

CONCLUSION

Although, the confessional statement made by the respondents about having the capabilities to provide full electronic library and information service delivery by the year 2025 was undoubtedly inspiring. The availability of the required facilities too was equally impressive. The presence of Internet facility as an indispensable tool for ICT deployment cannot be thrown away either. However, the stages at which the respondents' computerisation of library services and digitisation exercises were made it difficult to say that the respondents' pronouncement of

offering full e-library system by the year 2025 would be a reality.

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