ICT Revolution in Librarianship in Africa: The State of the Art University of Calabar Library

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Abstract

Purpose: This study investigated Information and communication Technologies (ICTs) revolution on Librarianship has impacted much on the development of libraries in Africa and Nigeria in particular. This revolution is characterized with the free flow of Information made possible, with the adoption, application and utilization of modern ICTs in information management, acquisition, processing, storage, retrieval and dissemination particularly in academic libraries where University of Calabar library belongs. However, over the years, many factors had been highlighted as militating effects. Thus, this study addressed one of such (human resource development) as a measure to showcase the state of the art in University of Calabar library.

Methodology: Two sets of respondents were used for this study - the trainers and the trainees. Interview method was used to elicit responses from the trainers who were only three (3) in numbers while for the trainees, a four-point Likert scale questionnaire was used for data collection among 134 respondents.

Findings: From the trainers revealed that University of Calabar library has made a very meaningful effort to improve its operating systems with the introduction of E-mails, CD-ROM and its server with internet connectivity, setting the pace for proper digitization of all its activities. From the trainees, there is a present kit-up on the low ICT skilled Librarians and their support staff which is a healthy development as suitably qualified personnel are required for the application of ICT in Librarianship for the overall support and national development. The study concludes with recommendations that the major obstacle of funding should be effectively addressed to cater for continuous training exercises, which would advance into more technical areas such as programming, web development, networking and network security. Finally, the Nigerian library schools should revise their curricula to incorporate the emergence of ICT revolution in the provision of library services.

Originality: This paper offers valuable information on the state of the art of ICTs in Librarianship as it concerns University of Calabar Library.

Classification: Research paper.

Keyword: Academic Libraries, Africa, Cross Rivers State, ICT Revolution, Nigeria, University of Calabar

Introduction and Background

ICT revolution on Librarianship denote the time or instance of complete change in conditions or ways of doing things especially in method of Government when caused by the overthrow of one system by force.1 will draw us back to the words of Shakespeare's Julius Caesar: "There is a tide in the affairs of men which, taken at the floods leads unto fortune; omitted all the voyage of their life is bound in shallows and miseries" On such a sea are we now afloat... What this means explains the fact that Africa even though it was omitted from the Agricultural revolution, was only bypassed by the train of industrial revolution. This was as a result of historical accident and Africa remained in the periphery of the economic systems of the world.

A new train of economic and technological development, a faster and powerful one is underway and countries in the West had long boarded the train. As the train is passing the African station, there is the clarion call for Africans to join but its distasting that many are undecided or ill-equipped to do so. In order not to continue as outcasts of the world's economic system, Africa has very little choice but to join in this pivot of development for the very survival of the Africa continent depends on it and we can

infer that whatever is now happening in ICT is a grandchild of Librarianship. Backing this statement is the words of Norman Stevens who said that the role of the librarians as gatekeepers to the world of information has continued to erode and wonders if Librarianship is in danger of losing that function entirely, after being at the forefront of the information industry.

In describing library developments in Africa, we must draw a distinctive line between the ancient and modern times. The oldest books in the world were said to be found in tightly sealed jars in the tombs of Egypt. At the time of its conquest by Julius Caesar in 47 BC, the famous library in Alexandria contained approximately 700,000 scrolls. Accounts of other great empires such as those of Ghana, Senegal and Mali which flourished as early as the 4 century AD have survived in Arabic texts. In Muslim Africa, mosques played an important role as centres of learning in as much as they housed extensive collections of secular and religious books-library activities.

In assessing the change that have taken place in the information industry as regards Librarianship, it is worth noting that libraries are among the oldest social institutions in the attempts to pass to generations, information needed for their decision making. All through the ages, the ability to transcribe information using a medium far more permanent than sound had always added a whole new dimension to the process of human communication, the dimension of time. Information, once recorded, can be remembered often thus, for centuries, libraries have served as the "social memory" of our civilization.

Libraries still serve as was first possible to link authors with readers but beyond this, almost everything has changed. This change, which is really not very surprising in that this started when information was recorded on clay tablets and still proceeded to other medium. Encyclopedia Americana held that a greater blurring of boundaries has occurred but however, as the nature of recorded information has been transformed by computer technology and one of the greatest transformation of this technology as far as recorded of information is concerned; is a return to impermanence.

In some ways, this is but a continuance of a **historical trend;** in which each technological advance has resulted in less permanent

documents. However, incredible advances in record or document generation by computer have moved society to a situation in which increasing, its documents are so transient that it is becoming impossible to describe them as actual physical entities and this profound change affects the ways in which libraries acquire information and make it available for use.

Objective of the Study

The benefits of ICT adoption, application and utilization in libraries for information processing, storage, retrieval and dissemination are indisputable and University of Calabar is no exception especially if it must produce for the labour market such qualified graduates that can stand the test of time. Thus, the use of ICT to performing tasks can be a *sin qua non* in the right context. In line with global transformation, this study thus seeks to investigate, the extent of adoption of ICT, the state of the art in university of Calabar library for the practice of modern and optimum librarianship success. Specifically, this study will investigate and provide answers to the

- extent of adoption of ICT in University of Calabar Library.
- availability of operating systems,
- computerizable tasks, with the level of adoption.
- perceived problems and strategies put in place to curb such excesses.

Methodology

The research adopted the base line survey to give most readily available data to work with especially as the project of ICT revolution progresses. Two set of respondents were used for this study and treated accordingly.

In Part One, the researchers employed the use of face to face structured interview for data collection from the trainees who were just three (3).

Questions to elicit response ranged from:

- the extent of computerization
- availability of operation systems or library software
- computerizable tasks with the level of adoption
- perceived problems and solution strategies.

Part two, attended to trainees (library staff on ICT literacy acquisition). 134 copies of a four-point Likert scale questionnaire with 10 items

were used to elicit responses ranging from personal data to:

- usefulness of computers for quality and effective service delivery
- ease of acquisition of computer skills
- availability of facilities and support staff and, overall prediction for future
- computer use by staff

Data collected was analyzed using simple percentages.

Review of Literature

The major objectives of ICT revolution is to bring to bear the potential benefits of ICT for developing and least developed countries in Africa in relation to the production and dissemination of and access to, knowledge and information. Fadhli and Jackson (2006) are of the opinion that the new ICTs are not only enhancing the potential range of publications that libraries could provide for their users but also, the speed with which requests can be met through resource sharing and the attention that the concept has attracted particularly in terms of interlibrary lending and document delivery, culminating in the introduction of some software (Ariel software in Gulf states) which facilitate electronic document delivery through the internet. In line with most library activities, resource sharing has been influenced by recent technological developments. The international Federation of Library Associations and institutions (IFLA) has always encouraged libraries and information centres to collaborate and a speaker at an IFLA workshop on library cooperation highlighted:

The enormous potential for international cooperation in the exchange and utilization of information that today's technology offers and tomorrow's technology promises, present a unique opportunity to library and information professionals. The growing demand for bibliographic exchange, multicultural internet resources, research unhampered by geographical or linguistic limitation and cross-cultural networking, both in the sense of online technology and offline partnership is a challenge to libraries which should be welcomed and which must be addressed (Hiraldo 2003).

However, not all libraries in Africa had keyed into this as Ashoor (1989) lamented that unfortunately, one important aspect which can enhance the accessibility of information for fulfilling information needs of all academic and

research community has been totally neglected in Gulf states and he pointed to the pooling and sharing of resources of various institutions for the overall better access. One major difficulty in discussing the application of computing technology in developing countries is that such countries as a group have many different races which differ widely in both the extent to which they have introduced computer and networking technology and the extent to which the necessary infrastructure exists for exploiting the technology.

The role of a nation is very important because the result of lack of ICT access by governments affects the entire country. Government and people around the world have started appreciating the ability of ICTs to stimulate rapid development in all sectors of the economy and ICTs are a ready tool for all strata of society - as much for the president of any nation in government as for the housewife in her daily chores, the teacher in class or artisan in his trade. Yet, for several impediments, African countries like Nigeria have not fully realized those benefits.

The criteria for successful performance in information provision are constantly being raised not only as a result of continual innovations but also, by changes in approaches to teaching, learning and the relentless increase in research and publication as ICT is an important enabler in the globalization of society (Palvia and Palvia 1996). More so, there must be an ICT policy development as the key determinant of legislation and regulation to set out the vision for ICT and link to national development goals which appearance has brought massive changes in every human domain by providing the opportunity to transmit, access and share data^ information and complex multimedia; whether locally or internationally, for countries that have developed such policy,

Ondari-Okemwa (2002), explained that there is hardly a reasonable telephone network in Africa apart from perhaps South Africa and there are no policies to strengthen the acquisition and effectual efforts of ICT by various governments. For instance, in trying to fill gaps in the infrastructure of the country and enhance some of the areas that are critical, the Nigerian government earmarked in 1999, the sum of NSO billion for Petroleum Trust Fund to use for the rehabilitation of roads, water schemes, manufacturing of essential drugs etc and

significantly, setting up of appropriate infrastructures for participating in the information super highway was not considered essential by the nation's policy makers. Also, an estimate of 64kbps to provide internet lease circuit was made and instead of government to release funds or energies the private sector hi this regards, every detail was silent showing that the internet is not considered an essential infrastructure for Nigerian development.

Thus, Borishade (2002) stated that adoption of ICTs in Nigeria is to enhance access of academic libraries where University of Calabar belongs, serving higher education in the country to global library and information services and action plans for higher education reformation the world over, have as one of the first step, the improvement of library facilities (Okebukola 2002). It is therefore, desirable and imperative to give urgent attention to the follow-up strategies of effective adoption for equitable access of qualitative information services without delay.

Literature abound for research studies conducted to investigate the state of ICT in Africa, Nigeria in particular (Alemna, etal 2002; Omonowa, 2001, Emkhamenor, 1990; Aguolu and Aguolo (2002; Oketunji et al 2002; Ani et al 2005 etc. Generally, Grace, Kenny & Qiang (2004) report on the role of ICTs in broad based development particularly in the development of education in developing countries. The report concluded with a discussion on the broader agenda needed to ensure maximum investments of ICT to improve the quality of teaching and learning in our educational institutions. And one meaningful way to achieve this goal is in the investment and adoption of ICTs in academic libraries. This formed the basis of the study conducted by Oketunji et al (2002) to determine the state and future of ICTs in library and information services in Nigeria. The findings of the study show that academic and international organizations libraries have an edge in the availability and application of computers to the usual routine library processes and access to the internet. Also revealed is a high level of ICT awareness among libraries in the country and a bright future for libraries in Nigeria, as most organizations are willing to computerize then-libraries, pending on funds availability.

Alemna et al (2000) explored ICT availability in the University of Ghana and Zambia and reported that ICT introduction followed different timing and patterns. Omoniwa (2001) traced the attempt to computerize Kashin Ibrahim library at Ahmadu Bellow University from! 972-2001 and discussed the problem and prospects that militated against computerization efforts. Ehikhamenor (1990) examined efforts taken by Nigerian University Libraries toward automation and the facilities available and the study revealed lack of manpower, funds and computing facilities and a destructive power supply as the bane of computerization of academic libraries. Aguolu and Aguolo (2002) has explored the progress of library computerization in Nigeria, using the libraries of one of the states (Borno) as a case study, only one polytechnic library (The Ramat polytechnic library) was among the surveyed libraries. Findings showed that, all operations of the libraries were manual at Ramat polytechnic library. According to the authors, the findings of the state of ICTs in Borno state provided a sufficient insight into the problems of application of computer and telecommunication technologies in different libraries in the country. The current study is a follow up study and attempt to investigate the state of the art in University of Calabar library to showcase ICT achievements so far.

Result and Discussion

Regarding ICT revolution in librarianship, the state of the art in University of Calabar Library is presented in table 1, as analyses of result from trainers.

Items Queried	Responses
Extent of computerization as in ICT based library services	E-mails, CD-ROM, server producing internet coverage, virtua library-making for the onset of digitization of public catalogue.
Availability of operating systems	Windows xp, windows 7 and windows vista
Computerization of library tasks(in broad divisions)	Acquisition, organization/processing, circulation, serial control and administration
Perceived problems and strategies to curb lapses	Lack of trained staff leading to lack of awareness, poor power supply and management negative attitude.

The result presented above show the study library that was operating only manually has taken a good step and meaningful effort towards ICT adoption. Its preparedness is with better operating systems currently in vogue and a possibility for computerizing task in all sectors for quality service provision. This finding is in support of Hayden (1998) who enumerated different reasons for computerization in libraries to increase efficiency, among others.

Table 2a shows the personal data of trainees as a solution strategy of perceived problems.

Division	No. of Staff Per Division	Sex		Highest Qualification	Computer Literacy Levels		
		M	F		High	Low	Moderate
Administration	4	2	3	1 MLS	-	4	-
Abstract/Indexes	10	5	5	1MLS 1BLS, 3 other degrees	-	9	1
Africana	12	8	4	lPh.D 6BLS 2 MLS	-	12	-
Humanities	12	2	1	1MLS	-	11	1
Law	10	3	7		-	10	-
Medical library	11	5	6	IPhJD 4BLS 2 MLS	-	8	3
Processing Division	20	9	11	2 MLS	-	19	1
Reference/Bibliography	11	4	7	1 Ph.D, 4 BLS	-	9	2
Resource Dev. Division	8	6	2	4BLS		3	5
Science & Technology	14	4	10		-	12	2
Social Sciences	22	9	13	lPh.D 10 BLS		13	9
Total	**134**	**56**	**78**			**110**	**24**
Percentage	**88.74%**	**41.79%**	**58.21%**			**82.0%**	**17.16%**

From this table, 134 staff member of University of Calabar library registered for computer literacy training representing 88.74% of the total population of 151 staff members. Out of these, 56 (41.79) were males and 75 (58.21%) were females. 110(82.09&) had low computer literacy level meaning that, they have heard of computers but never touched nor worked with any computer before. 24(17.16%) indicated that they had seen and touched computers at a very minimal level revealing also that, on their own, they could not boot their computers properly nor do they know how to function in a formal way.

To test the learner, a few questions were also highlighted and they are analyzed in Table 2b

Table 11: Showing the Learners Responds to Training

S/N	Statement	Response			
		SA	A	D	SD
1.	ICT makes librarian lazy on their jobs	-	4 2.98%	9671.64%	34 25.4%
2.	ICT discourages work with initiative	2 1.5%		120 89.6%	12 8,96%
3.	There is ease of acquisition of ICT skills	-	130 97%	-	4 2.98%
4.	Workers without ICT literacy are handicapped in his library information, age.	15 11.2%	102 76.12%	17 12.67%	-
5.	There is usefulness of computer skills for quality and effective service delivery.	129 96.27%	5 3.73%	-	-
6.	With ICT, there is resource sharing to cater for information materials that the library cannot acquire	67 50%	46 34.3%	11 8.21%	10 7.46%
7.	There is availability of facilities and support staff.	19 14.18%	8966.42%	26 19.4%	-
8.	With ICT there is benefit of internet connectivity	7 0 52%	64 47.8%	-	-
9.	ICT encourages sustainability of information since material on CD-ROM and other facilities cannot be mutilated	125 93.9%	5 3.73%	42.98%	-
10.	I predict smooth, efficient and satisfying usage for the future of University of Calabar Library	4 2.98%	130 97%	-	-

From Table 2b, it is observed in statement one, that 96(71.64%) of the respondents disagreed and 34 (25.4) strongly disagreed that ICT makes librarian lazy on their jobs. Statement 2, revealed that out of 134 respondents, 120(89.6%) disagreed that ICT discourages work with initiative. Statement 3 analysis show that 130 (94%) agreed that there is ease of ICT skill acquisition while in statements 4, 102 (76.12%) agreed that workers without ICT literacy are handicapped in this library information age.

For statement 5,129 respondents strongly agreed that there is usefulness of computer skills for quality and effective service delivery. Statement 6 revealed that 67(50%) strongly agreed while 46 (34.3%) agreed that ICT produces opportunity for resource sharing of materials which an individual library cannot acquire. Also, Statement 7 showed 89(66.42%) of respondents agreed that there's availability of facilities and support staff but 26 (19.4%) disagreed and seven (7) among those disagreeing added as extra information that more ICT support staff should be recruited into the library. Statement 8 revealed 70 (52.24%) respondents strongly agreed and 64 (47.8%) agreed to the benefit of internet connectively. For statement 9, 125 respondents (93.9%) strongly agreed that ICT encourages sustainability of materials and finally, 130 (97%) of respondent of statement 10, agreed and are optimistic that the future usage of ICT will be to users' satisfaction in line with Ehikhamenor (1990) which revealed that the existing problems of ICT computerization in libraries will be overcome or circumvented in future.

Conclusion

This is an ardent call on Africa as a whole, not to look at or perceive ICT as a luxury for it is so vital that its inter and extra access to information has become an agent of change hence the free flow of information within and between countries, libraries and other organizations is critical to competitive advantage.

Human resource development in ICT ranks among the first five challenges of computerization that why Abdul-Hadi (1999) revealed that the main barrier to the efficient operation of ICT in any information centre and realizing all the potential benefits from the new technologies, is the lack of understanding of the importance of using ICT and a lack of familiarity with the skills in ICT application. Again the World Bank (2002) noted that the

storage of ICT skills slows the process of development or exacerbates the lag that client countries are experiencing.

However, it is encouraging from the result that the level of preparedness in University of Calabar library is high and staff presently on ICT training are maximizing efforts to be ICT complaint for a better service delivery but the best is hoped for, when the major obstacle which is inadequate funding is effectively tackled and addressed by the Federal/ state governments as stakeholders of Education. Also, Library managements in our Universities should intensify efforts to source for extra funds from corporate organizations,, companies, international agencies as well as individuals and alumni as record prove that one University Library has already obtained funding from individual/ alumni to fund ICT project (Ani, Esin & Edem 2005). This funding will help to plan and execute workshops and training programme to improve the level of awareness, literacy and skill acquisition in ICT among library staff to the extent that in the nearest future, there would be among the librarians, web developers, programmers and systems analyst to cope with the challenges of globalization and continuity in the profession.

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