Influence of Information and Communication Technologies (ICTS) on Academic Library Services in University of Ilorin, Nigeria

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Abstract

The paper examines the influence of Information and Communication Technologies (ICTs) on academic library services in the University of Ilorin, Nigeria. The study has adopted a descriptive survey design. The total population of library staff is 32 and the total enumeration technique was adopted due to the small but manageable size of the population. The findings of the study have revealed that ICTs devices are available, upgraded, and maintained thereby enabling the efficiency of not just the library but the librarian as well in the rendering of their services. Also, the study has revealed that inadequate funds, erratic power supply, inadequate skilled manpower, insufficient ICTs training, inadequate Internet facilities, irregular maintenance, and unfavorable government policy are some of the challenges, the study concludes that ICT skills possessed by library staff have brought numerous opportunities for libraries to enable them to fulfill their mission. Among the recommendations given is that a standby generator/ inverter should be provided as an alternative to power supply.

Keywords: Academic library, ICTs Skills, Library services, University of Ilorin.

Introduction

The proliferation of information is the key factor in any organization with the aim of development. The information itself and the way it is accessed have undergone changes owing to the development in Information Communication Technologies. Information Communication Technology, usually abbreviated as ICT is often used as an extended synonym for Information Communication Technology. According to Abubakar (2010), ICT could be defined as a broad-based term that

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encompasses the gathering (acquisition), organization (packaging), storage and retrieval (dissemination) of information that can be used in textual or numerical (books, documents), pictorial and vocal forms(audio-visual) or a combination of all the above(multi-media), using a combination of computers and telecommunications telephony distance learning. The rapid development and advancement of the ICTs have led to profound and progressive changes in all spheres of human endeavour. This is because it has evolved rapidly within the last part of the 20th Century particularly since the 1960s and 1970s, and has therefore resulted in tremendous changes in the library collections and information dissemination. The emergence of the Internet as the largest repository of information has modified the role of library and information professionals from intermediary to facilitator, new tools for dissemination of information. Also, the shift from physical to virtual services environment, and extinction of some conventional information services thereby giving way for an epoch of web-based information. Rana (2009) opines that ICT holds the key to the success of modernizing information services.

ICT has enormous benefits to the library, especially academic libraries. It led to a radical transformation in the functioning and management of modern libraries, especially academic libraries. It has profoundly changed library operations; the technology-driven environment has enveloped the academic library system. It has taken it to unprecedented heights in the acquisition of information materials, management, and communication as it is considered as the most instrumental factor for the endowment of library services. According to Mahant et al. (2012), ICT has brought about reconstruction to academic libraries and information services, user's services, predictable library information systems (LIS) such as online public access catalogue (OPAC), reference services, audio-visual services, and customer relations.

Fabunmi (2009) described a 21st Century library as a well-selected collection of units of documentary resources spread everywhere, accessible always, where individuals and groups such as authors, publishers, vendors, and readers are linked through hyperlink technology, across the global electronic network. Also, to relate in different ways, documents that are fast and easily obtainable and available in their full version in view of satisfying multiple cultural exigencies. Thus it is worthy of note that libraries are no longer what they used to be in the past, so also library services have revolutionized as well as the roles of librarians all over the world in every sector with the invention of ICT. Dafiaghor (2012) reported that the use of ICT in Nigerian academic libraries has been profoundly affecting all aspects of information acquisition, storage, and transfer of information. The effectiveness of a library as an instrument of education is determined by the success with which the

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library is able to provide information and satisfy users' needs. Library performs various roles towards users' satisfactions.

According to Raganathan and Babu (2012), the academic library performs a variety of functions: helping the students, providing textbooks, reference books and periodicals, and other information services, including e-resources. Its magnificent development has dramatically changed the mode of library operations and information services. For library users to enjoy services in the library, there must be availability of ICTs. Furthermore, Abubakar (2010) in a study on the availability and the use of the ICT in six Nigerian university libraries; notably to identified the availability of computers, internet, CD-ROMS, e-mail, microfilm, microfiche, videotapes, and slide projectors as resources available and they use the resources notably for education and training.

Despite, the availability of ICTs in Nigerian university libraries, the desired impact on library operations like collection management and other library services can only be felt when they are well used. Also, the benefit derived in library services like collection management will be minimal, and it will not justify the resources used to make the ICTs available (Ikegwuiro, 2017). Therefore, this study examines the influence of the ICTs on academic library services.

Statement of the Problem

The influence of Information Communication Technologies the (ICTs) on library services cannot be overemphasized. The aim of ICTs application in academic libraries is to enhance acquisitions, organisations, storing, and information dissemination. However, in spite of the enormous benefits that abound in the ICT application on academic libraries activities, the librarians still experience difficulties and obstacles in the application of the various ICT tools to the services provided by the academic library to its users. As supported by Otuza, Badmus, and Simisaye (2013) that ICTs are not being effectively utilized in providing services to library patrons and this may be attributed to some factors, one of which is the inadequacy of the skills of personnel in the ICT applications. Similarly, Ubogu (2019) reports that the librarians' performance in using the ICTs skills is very low. Thus, it is necessary to investigate the ICT skills level of library personnel to determine whether they have acquired the requisite ICT skills and how the acquired skills have influenced the provision of library services. Therefore, this study examines the influence of the ICT on academic libraries in the University of Ilorin Library.

Research Questions

The following research questions were formulated based on the specific objectives of the study:

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1. What are the levels of automation in the library?
2. What are the ICT resources available to the library staff in the library?
3. What is the influence of ICTs on academic library services in University of Ilorin?
4. What are the challenges encountered by the library staff in the use of the ICTs in the library?

Literature review

In the study carried out by Adeleke and Olorunsola (2010) on the use of online tools and techniques for cataloguing and classification in Nigerian libraries a case of Redeemers University, The findings reveal a high level of awareness among librarians in Nigeria. The study further reveals the use of the ICT tools, which has advantages over manual methods. Adeleke and Olorunsola (2010) affirm that libraries must have proactive response to the ICT.

In the survey conducted by Cent (2009), the findings show that the University Community in Kenya was ready to use the ICT for learning, teaching, and research. Also, the study established that the institutions allocated low operational budgets to the ICT and they did not invest adequately in campus networks. Equally important, they also lacked strategies for building the capacity of faculty to use the ICT effectively so to support their teaching and research activities.

Moreover, Oyegbami (2009) reiterates that the ICT is an instrument of social economic renaissance and if properly used, it could excellently stem national and international calamity therefore assisting in the growth and the development of libraries in our higher institutions in Africa. Furthermore, Amutabi (2009) examines Information Communication Technologies in Kenya. The study points out that with the dwindling financial donor support situation, it is unlikely that things will improve much better. Kamba (2011) restates that libraries which became fully automated in the 1990s but could not afford to migrate, and they also find their current software very limited. So, unless one could afford to migrate onto new and updated systems, the early start could be a great disadvantage. Additionally, Kamba (2011) reports that the ICT is not well spread and utilized in African institutions of higher learning, mainly because of poor communication network, limited access to the ICT hardware and software for example. Similarly, Etebu (2010) investigated the availability and application of the ICT facilities a case of Niger Delta Universities. The findings reveal that although there is an awareness of the ICT in the libraries, the available facilities are very poor. Walmiki and Ramakrishnegowda (2009) determine the status of the ICT infrastructure in six selected university libraries. The study reveals that most of the libraries lack sufficient hardware and software facilities and the Internet with required bandwidth. Also, Ifijeh (2013)

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reports that the ICT skills have positive influence on reference service delivery in the selected libraries through fast access to sources of information needed by users, easier way of directing users to sources of information, quick and easier means of communication with users and the provision of accurate information to users.

Similarly, Ojedokun and Okafor (2015) investigated ICT skills and skills acquisition and competencies of librarians in selected academic libraries in Nigeria. The study reveals that many of the respondents do have knowledge and skills of e-mail use and word processing tasks but they lack knowledge of search skills and directories other than Google and Yahoo respectively.

Itsekor and Ugwunna (2014) stressed that ICT has transformed the face of librarianship as the role of library and information science professionals shift from custodian of books to information professionals, with the responsibility of creating, processing, storing, manipulating and disseminating information electronically. In addition, Nagarajan (2012) reiterates that LIS professionals need to be trained with the latest ICT skills to keep them up to date in order to enhance their performance in providing improved and dynamic information service to users. Oyoywe-Tinuoye, Omeluzor and Patrick(2021) reveals that the majority of the respondents in the university library acquire ICT skills through self-sponsorship.

Methodology

The study adopted descriptive survey research design. The population of the study consists of the professionals and paraprofessionals who work in the University of Ilorin main library with total number of 32 (14 professional and 18 para-professonals).Total enumeration was adopted because of the small population which the researcher can manage and stratified sampling technique applied. The questionnaire was used as data collection instrument. The data to be collected was coded as input into computer, using the Statistical Package for Social Science (IBM-SPSS) version 20.0.

Data Analysis
Table 1: Frequency Distribution of Respondents

Sex	Frequency	Percent	Valid Percent	Cumulative Percent
Male	20	55.6	55.6	55.6
Female	12	44.4	44.4	100.0
Total	32	100.0	100.0	

Source: Field Data, 2020.

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Table 1 shows that 20(55.6%) of the respondents are male and 16 (44.4%) of the respondents are female. It can be deduced that more males participated in the study than females.

Table 2: Age, Professional level and Qualification of library staff(n=32)

Demographic characters	Items	Frequency	Percentage
Age	31-40	14	43.8
	41-50	14	43.8
	51-60	4	12.4
	Total	32	100
Professional Level	Professional	14	43.8
	Paraprofessional	18	56.3
	Total	32	100
Educational Qualification	SSCE	4	12.5
	NCE/OND/Diploma	14	43.8
	BSC/HND	4	12.5
	MLIS	10	31.3
	Total	32	100

Source: (Field Data, 2020)

Table 2 shows that members of staff of the age bracket 31-40 who participated in the study are 14 (43.8%) while members of staff of the age bracket 41-50 who participated in the study also constitute 14 (43.8%). So also members of staff from the age bracket of 51-60 constitute 4 (12.4%). The age bracket of 31-40 and 41-50 are more than that of age bracket of 51-60. This shows that the staffs are capable and experienced enough to attain efficiency and effectiveness in the execution of library services. Also, the number of professional staff is 10 (31.2%) and Para- professional staff is 22 (68.8%) as the highest, which implies that there are more para-professional staff than professional staff in the University of Ilorin Library. This is also reflected in their educational qualification, where the combination of SSCE (4) 12.5%, NCE/OND/Diploma (14) 43.8% amounts to the Para-professionals of (18) 56.3%.

Table 3: ICT devices Available in the Library(n=32)

Items	Non-available	% Available
Computer system	0	32 (100%)
Internet facilities	2	30 (93.8%)
Telephone	8	24 (75%)

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Photocopiers	2	30(93.8%)
Printers and Scanners	0	32 (100%)
Microform and Microfiche	14	18(56.3%)
Audio visuals	0	32(100%)
Projector	6	26(81.3%)

Source: (Field Data, 2020)

Table 3 indicates that all of the ICT devices above are available in the library as for every item listed, over 50% of the staff have agreed to the availability of the item. 100% of the staff have agreed to the availability of computer system, printers and scanners as wells as Audio visuals. In addition, the finding shows that 30(93.8%) of the staff have agreed that internet facilities as well as photocopiers are available. Also, 26(81.3%) of the staff have agreed that projectors are available as well, while 18 (56.3%) of the staff have agreed that Microform and Microfiche are available in the library.

Table 4: Level of ICT skills possessed by librarians (n=32)
KEY: VG- Very Good, G- Good, F- Fair, V.P- Very Poor, P- Poor

ICT Skills(Tasks)	VG	G	F	VP	P
Ability to use ICT devices such as computers, printers, scanners, projectors, etc.	18 (56.3%)	12 (37.5)	0 (0%)	2 (6.3%)	0 (0%)
Ability to us Library software such as Koha, Slim, Newgenlib etc.	10 (31.3%)	10 (31.3%)	12 (37.5%)	0 (0%)	0 (0%)
Information searching skills and use of Boolean logic	8 (25.0%)	16 (50)	6 (18.8%)	2 (6.3%)	0 (0%)
Ability to develop institutional repository	8 (25%)	6 (18.8%)	16 (50%)	2 (6.3%)	0 (0%)
Ability to design and manage web pages	6 (18.8%)	10 (31.3%)	8 (25%)	8 (25%)	0 (0%)
Ability troubleshoot and repair ICT devices such as printers, scanners, projectors etc.	2 (16.3%)	6 (18.8%)	6 (18.8%)	16 (50%)	2 (6.25%)

Source: (Field Data, 2020)

Table 4 shows that majority 30(93.8%) of the respondents are able to make use of ICT devices such as computers, printers, scanners, and projectors, while 2(6.3%) of the staff are very poor at handling the ICT devices. Also, 20(62.5%) are able to use library automation software such as Koha, Slim, Newgenlib to a large extent with 24 (75%) possessing skills to search for information and make use of

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Boolean logic. 2 (6.3%) of the staff does not have the skills to develop institutional repository, as well as to troubleshoot and repair the ICT devices with 16 (50%) that is not able to design and manage web pages.

Table 5: Usage of the ICT in the Library(n=32)
Key: SA-Strongly agreed; A-Agreed; D-Disagreed; SD-Strongly Disagreed

Items	SA	A	D	SD
I use ICT for Acquisition	14 (43.8%)	16 (50%)	2 (6.3%)	0 (0%)
I use ICT for Cataloguing and Classification	30 (93.8%)	2 (6.3%)	0 (0%)	0 (0%)
I use ICT for Circulation control	12 (37.5%)	18 (56.3%)	2 (6.3%)	0 (0%)
I use ICT for Serial administration	12 (37.5%)	20 (62.5%)	0 (0%)	0 (0%)
I use ICT for inter library loan	8 (25%)	22 (68.8%)	2 (6.3%)	0 (0%)
I use ICT for Online database	14 (43.8%)	18 (56.3%)	0 (0%)	0 (0%)
I use ICT for internet facility	22 (68.8%)	10 (31.3%)	0 (0%)	0 (0%)
I use ICT for Data processing	8 (25%)	20 (62.5%)	4 (12.5%)	0 (0%)

Source: (Field Data, 2020). Note:SA+A=AGREE; SD+D=DISAGREE

Table 5 shows that 30 (93.8%) of the library staff of University of Ilorin Library have agreed that they use the ICT for acquisition while 2 (6.5%) have disagreed. Similarly, 32 (100%) of the library staff have agreed to the use of ICT for the cataloguing and classification of the library users, 30 (93.8%) of the staff have agreed to the use of the ICT for circulation control, which include the registration of students, as well as the charging and discharging of books. Also, 32 (100%) of the staff have agreed to the use of the ICT for Serial Administration, 30 (93.8%) have agreed to the use of ICT for Interlibrary loan, 100% have agreed to the application of ICT for Online database and Internet facility and finally 28 (87.5%) of the staff have agreed to the use of the ICT for data processing.

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Table 6: Influence of ICT on library services (n=32)
Key: SA-Strongly agreed; A-Agreed; D-Disagreed; SD-Strongly Disagreed

Items	SA	A	D	SD
ICT makes service easier and faster	22 (68.8%)	10 (31.3%)	0 (0%)	0 (0%)
ICT brings about poor library services	0 (0%)	0 (0%)	16 (50%)	16 (50%)
ICT reduces direct interaction between library and users	10 (31.3%)	18 (56.3%)	4 (12.5%)	0 (0%)
ICT endangers the work of the librarian	0 (0%)	0 (0%)	14 (43.8%)	18 (56.3%)
ICT reduces the work of the librarian	14 (43.8%)	16 (50%)	2 (6.3%)	0 (0%)
ICT provides access to a wide range of library materials	16 (50%)	16 (50%)	0 (0%)	0 (0%)

Source: (Field Data, 2020). **(SA+A=AGREE, SD+D=DISAGREE)**

Table 6 shows the result of the influence of the ICT on academic library services. The result indicates that the ICT has a positive effect on library services with the library staff agreeing more with the positive points and disagreeing with the negative points. 32 (100%) of the staff agree that the ICT makes services easier and faster with 100% disagreeing that the ICT brings about poor library services and that it endangers the job of the librarian. 28 (87.5%) of the staff supports that the ICT reduces direct interaction between the library and its users, 30 (93.8%) of the staff agree that the ICT reduces the work of the librarian while 30(100%) agree that the ICT provides access to a wider range of library materials.

Table 7: Challenges facing ICT in UNILORIN library(n=32)

Items	Yes	No
Inadequate funds	28 (87.5%)	4 (12.5%)
Erratic power supply	32 (100%)	0 (0%)
Inadequate skilled manpower	24 (75%)	8 (25%)
Lack of proper ICT training	24 (75%)	8 (25%)
Lack of maintenance	24 (75%)	8 (25%)
Poor attitude of librarians towards ICT	22 (68.8%)	10 (31.3%)
Unfavourable government system	24 (75%)	8 (25%)
Lack of bandwidth and internet services	30 (93.8%)	2 (6.3%)

Source: (Field Data, 2020).

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Table 7 shows that 32 (100%) of the library staff support this. Other constraints include lack of bandwidth and internet services with 30 (93.8%), inadequate funds with 28 (87.5%). Also inadequate skilled manpower, lack of proper ICT training, lack if maintenance, Unfavourable government service all with 25 (75%) respectively and poor attitudes of the librarians towards the ICT with 22 (68.8%).

Discussion

The study reveals that the ICTs devices are available, upgraded and maintained, thereby enabling the efficiency of not just the library but the librarian, as well in the rendering of services. The findings supported by Kadiri and Adetoro (2012) that the ICTs do not only encourage creation and the sharing of Information but also accounts for automation of library system in which machines (computers) are now used to perform those activities that are hitherto performed manually in the traditional library setting.

The findings reveal that the library staffs have a high level of ICT skills in basic computer operation, use of library automation software and the Internet use while they have low level of other ICT skills in web page design and management and the ICT devices maintenance and troubleshooting. The findings corroborate with those of Umeji, Efe, and Lucky (2013) and Kabiru (2014) that library personnel are highly skilled in the ICT devices, including library automation and information retrieving skills but they have very low skills in web page creation, database creation and the development of institutional repositories.

The findings of this study reveal that the ICT devices are available in academic libraries to the library staff, though not all of the library staff possess the skills to make use of these ICT resources. This aligns with the findings of Solarin (2013) who reports that Covenant University Library has very good ICT resources and internet usage available to both staff and users alike. The study reveals that inadequate funds, erratic power supply, inadequate skilled manpower, lack of proper ICT training, lack of internet and bandwidth facilities, lack of maintenance and unfavourable government policy are the prime challenges. The finding corroborates Krubu and Osawuru study (2011) who report that inadequate training and retraining of staff by management, inadequate funding, epileptic power supply and lack of search skills are the major factors, militating against the effective use of the ICT in Nigerian University libraries.

Conclusion

The study has examined the influence of the ICT on academic library services. The findings demonstrate that academic libraries are making serious efforts

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to meet the information needs of its users, by making the ICT's available and applying them to library services and operations. Moreover, advances in the ICT and skills possessed by library staff have brought numerous opportunities for libraries to enable them to fulfil their mission of providing their users with relevant, timely, and up-to-date information.

Recommendations

Based on the findings of this study, the following recommendations are suggested:

1. The issue of power supply. A standby generator/ inverter should be made available as an alternative to the power supply.
2. The Management should organise more training at regular intervals to keep the library staff abreast of development in the ICT.
3. The library should organise seminars and workshops to showcase the ICT applications in library services

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