# Influence of ICT Skills on Job Performance of Librarians in Selected University Libraries in South-West, Nigeria

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#### **Abstract**

Libraries have not been left out in the use of electronic technology to create, acquire, process, store, preserve, organize and disseminate information. This trend in ICT adoption in libraries has no doubt called for relevant ICT skill acquisition for librarians. Using survey method to collect information from a randomly selected librarians, and analyzing such information with the aid of frequency distribution, simple percentage and regression analysis, findings from the study revealed that ICT acquired by librarian significantly influenced their job performance, and that the use of ICT in libraries significantly influenced the performance of librarians. It is, therefore, recommended that librarians should be trained to acquire relevant ICT skills to improve their job performance.

**Keywords:** ICT Skills, Job Performance, Librarians, University Libraries, South-West, Nigeria

### Introduction

The traditional functions of university libraries have been transformed and made compatible with the electronic age often referred to as the information and communication technology (ICT) age. ICT is the use of computer and other forms of electronic technology to create, acquire process, store, preserve, organize and disseminate information. The library process and operations involving information acquisition, handling, storage, and dissemination are increasingly being influenced by advancements in computer and internet technologies (Iyanda, Okpele, Akintunde 2016). Basically, all the traditional functions of library activities have been transformed into ICT packages with accelerated improvement in the service delivery to users. Therefore, one can easily conclude that, it is very difficult to separate computer knowledge and librarians' job performance from each other. According to Bajpai & Madhusudhan (2019) the library environment has changed considerably in terms of collection, organization and services. ICT tools are now being used to manage libraries more efficiently and for better service delivery. In line with the ongoing reforms in the Nigerian Library system, the onus lies on library information professionals adopt effective management of library resources and operations through the use of appropriate technologies at different levels of education.

The advancement in ICT has significantly contributed to the operations in academic libraries, particularly on issues that have to do with library development strategies, library structure, and services. In this wise, technologies unlock opportunities to provide value-added information services and improve access to diverse resources for users to make choices. Thanuskodi, 2012. expressed that information and communication technologies presents opportunities to libraries for organization of

information for use, capacity building, management information system, digital libraries, resources sharing and document delivery. The adoption of diverse form of ICTs has systematically led to a shift in the organizational structure, change in work patterns, reclassification of positions in libraries, and demand of a new set of skills.

Skills, especially those related to ICT, has to do with the proficiency acquired basically as a result of training or experience gathered over time. Librarians are mandated to equip themselves with the necessary skills in order to perform creditably in their job activities. This would enable them satisfy their users as well as achieve the objectives of the library. Thus, skills or competencies required to access and utilise the appropriate technologies are usually acquired to provide adequate support services to different categories of users within the library systems (Omogbhe, Quadri and kutu 2020). In this context, skills refer to the ability of academic librarians to apply ICT knowledge which they have acquired such as skills in using Microsoft office and surfing Internet. Skills focus on the ability of individuals to apply and arrange their learning in a more creative and innovative way (2013), the Delta State Government developed a policy to support and enhance the university in ICT development in Delta State University Library, and even though the support is slow in coming, its benefits are already being felt in the development of administrative and teaching infrastructure. In addition, the university authority has put measure.

Agbamuche (2015) affirms that inadequate institutional support and lack of training in ICT skills could hinder the effective use of internet-based resources, especially within the library setting. The institutional and pedagogical supports made available by various institutions of higher learning could go a long way in determining the utilization of library resources in this technology-pervading library setting (Odunewu, Aluko-Arowdo 2018). The institutional factors have considerable effects on students' utilization of internet services and library resources. Dada and Eghworo (2020) in their study identified factors at the institutional level which could determine the extent of utilization of technology and technology-related devices in low-income countries. This is due to the fact that the developing countries of the world are grappling with inadequate infrastructural facilities, lack of institutional policy guiding the deployment of ICTs, lack of political will, implementation hindrances, and organizational bottlenecks. Other important factors are inappropriate technological supply, untrained of human resources, and economic bottlenecks. The main objectives of universities are to promote learning and improve human knowledge through research, while the university library is the focal point of academic and research activities. This implies that the acquisition of ICT skills could be associated with the way librarians discharge their duties at different levels. In essence, performance can simply mean the process through which employees in an organization improve in the discharge of their responsibilities to the clients, such the organizational goals are achieved. The implication is that when employees improve in their performance at various levels of organization, it will result to improved productivity. With this, the growth and development of the organization will be guaranteed. Job performance is, therefore, closely related to the realization of organizational goals and will lead to improved productivity. It is has to do with the way employee discharges his/her responsibilities within the organization, with a view to realizing the previously stated goals (June and Mahmood 2011).

However, the library as an organization that recruits manpower both the skilled and unskilled is propelled to provide services to the user of the library. It is the duty of the library managers to measure the job performance of their employees based on the efficiency and effective services they provided their clienteles.

The job performance effectiveness is the ability to achieve the goals according to predetermined criteria. In other words, the job performance is the ability to achieve the expected results of job performance and the job performance is the level of accomplishing duties, tasks responsibilities of the staff in any organization (including libraries) providing services that are qualitative and quantitative to potential users. (Ukanguwu and Okoro 2015). Apparently, there is a need to improve the job performance of librarians through acquisition of relevant ICT skills. The investment in the acquisition of ICT skills will strengthen the operations of library and lead to improved productivity of librarians in schools, especially at the higher level of education.

## **Literature Review**

The advent of the technology which is changing the world spheres has affected librarians' knowledge, psychic and services being provided. According to (Ayoku, and Okafor, 2015), the information professional has become affected by the fast-paced and dynamic information world which requires regular acquisition and update of skills. The rapid advancement in technology has systematically led to continuous transformation of library operations and processes. This transformation in the library system require new skill sets for librarians to effectively navigate the new terrain that is constantly being influenced by ICT devices and platforms. Librarians are increasingly required to acquire new skills and practices for 21st Century library operations (Emiri 2015). Okoye (2013) noted that the recent advancement in ICT is rapidly making considerable impact of different aspects of human endeavours.

Supporting the above view (Ekong and Ekong 2018) affirm that knowledge, skills and ICT competencies are increasingly becoming requisite skills for individuals making entrance into the competitive global economy. Technology is rapidly pervading all sectors including health, education, economy, and other critical areas of endeavour. The library sector is a critical component of the education sector. This makes it imperative for librarians to develop adequate skills and competencies to leverage the capabilities of ICT in providing adequate services to the users. In this 21st Century education system, the goals of setting up a library will be difficult to achieve without ICT. Technological platforms and devices provide unlock access to diverse library resources regardless of time and distance. Students can navigate internet-based platforms to search for information in different fields of study. This makes ICTs indispensable component of the library system. It is, therefore, important for librarians to add ICT skills to their skills-set with a view to function effectively in the modern library setting.

Different ICT tools and platforms are making significant impact on the operations of libraries and other sectors of the education system. Computer remains one of the critical components of the ICTs that is making impact on the teaching-learning process, including library setting. It is a sophisticated tool that is capable of accepting, storing, retrieving and processing different kinds of data for effective decision-making process (Okiki and Mabawonku 2013). It is a fact that before the advent of computer technology at the close of 20th century, computers were rear commodity in libraries. The basic functions of librarians were carried out manually. The computer is capable of quickly accomplishing a large volume of what can be manually. The computer has become a basic tool for generating and processing information.

Librarians have no other alternative than to employ and use computer that is part and parcel of information and communication technology in their work place with enormous advantages attached to it uses. Corroborating the above statement, Okoye (2013) contends that librarians require adequate competencies to effectively utilize computers and computer-related devices to manage library resources. It should be noted that the use of ICT in library system requires a shift in the roles of librarians. In order to function effectively in this 21st Century library setting, it is imperative for librarians to upskill their ICT competencies and ensure that services are rendered to the library users with utmost accuracy and appropriateness.

With the advent of ICT which requires that library workers constantly acquire new skills and constantly update themselves because of its dynamic nature, an additional capacity building might be required to properly position these library experts in the discharge of their responsibilities in the face of increasing globalization and information society. Information professionals must be flexible enough to adapt traditional skills to the requirements of technological advances (Chatama, 2014). Given the current situation whereby libraries are migrating from the traditional model of operation, libraries must definitely adopt new technological skills in order to move the new dispensation as far as library service provision is concerned.

Lawal and Lawal (2015) outline diverse ICT skills that should be acquired by librarians to make them function in the areas of software development, database management, publishing trade, and outsourcing opportunities. These specific areas require technical skills and institutional support such that librarians will be able to provide adequate information to the users. This may eventually lead to improvement in the performance of librarians within the library system at different levels of education.

Evidence abounds in the literature that the performance of librarians within the library system is increasingly dependent on their abilities to utilize ICT for service delivery. This implies that, to an extent, the productivity of the librarians could be a function of the ICT skills possessed to provide library services to the users. Adedoyin (2006) reported that librarians in this modern education system need to acquire relevant ICT skills for effective service delivery. Library users should not be restricted to the library environment before gaining access to the resources available for teaching, learning,

and research. Adequate ICT skills will position librarians to provide library services to the users notwithstanding the barriers of time and distance. Library users should be able to access information in the library from different parts of the world. Poelmans, Truyen, & Stockman (2012) report that a significant number of librarians have acquired ICT-related skills through information and capacity channels at the Isfahan University of Iran. The university, according to the authors, regularly organizes training in ICT-related skills to ensure that library staff are equipped with relevant skills to provide library services to different categories of users. Recent developments in information and communication technology industries have tremendously affected every facet of human endeavours including library professionals and library services in all ramifications. Susan and baby (2012) argue that changing information age library professionals have to gain extensive knowledge about developing technologies and improve their skills to manage those technologies. Computers, internet connectivity and electronic information have redefined the provision of library services of academic libraries and information centers all over the world. Academic librarians must acquire relevant skills of information and communication technology. Sankar & Chinnasamy, (2014) view that the rapid development in the education sector and library system in particular necessitates the need to acquire relevant ICT skills to effectively provide information to various categories of users in the society.

Librarians provide important services within the school systems to ensure that users have access to adequate information and resources to enhance the decision-making process. The increasing impact of technology on the education sector has necessitated the need to upskill the capabilities of these professionals in the utilization of ICT for service delivery. Librarians with adequate ICT skills are positioned to serve users and unlock access to valuable library resources. On the other hand, inadequate ICT skills could hinder effective discharge of duties among librarians at different levels of education (Sanni, 2015). This implies that librarians who are ICT-compliant will be able to function in the library system and meet the needs of students and researchers.

This necessitates the need for institutions of higher learning to invest in the use of ICT for effective service delivery. These investments, however, will only be meaningful if librarians are equipped with the requisite skills and competencies to utilize technology for library operations and services delivery. A great deal of efforts should be directed at capacity building for librarians to acquire ICT-related skills, such that different categories of library users are given the opportunity to access library resources anytime, anywhere.

### **Statement of Problem**

Information and Communication Technology is changing our environment at an ever increasing rate, which the ICT provides improved opportunities for accessing, retrieval and interpretation of information, realizing these opportunities requires adequate knowledge and skills that are not easily and are often more difficult to keep up to date. Literature has shown that inadequacies of the knowledge of practicing academic librarians have led to negative impact on the job performance and on the services provided. In spite of the importance of ICT skills of the librarians that would enable

librarians to provide effective and efficient services to users. Librarians are not forthcoming so less satisfactory services are being offered. It is against this background that this study intends to examine information and communication technology skills on job performance of librarians in Universities in South-West, Nigeria.

## **Research Questions**

The following research questions were answered in the study.

- 1. What Information and Communication Technology facilities will be available for use by Librarians in university libraries in Southwest, Nigeria?
- 2. What are the Information and Communication Technology skills possessed by librarians in universities in Southwest, Nigeria?
- 3. What are the job performances of librarians in universities in Southwest, Nigeria?

## **Research Hypothesis**

The following null hypothesis will be tested at 0.05 level of significance.

- 1. There is no significant relationship between ICT skills and job performance of librarians in universities in Southwest, Nigeria.
- 2. There is no significance relationship between use of ICT and job performance of librarians in universities in Southwest, Nigeria.

## **Presentation and Interpretation o Results**

This presents the results of the analysis in line with the research question formulated for the study in order to make valid conclusion based on the study

**Table 1: Distribution of Respondents By Sex** 

Sex	Frequency	%
Male	28	28.0
Female	72	72.0
Total	100	100.0

Table 1 indicates the distribution of respondents based on gender. From the result, it could be observed that 28(28.0%) of the respondents were male while 72(72.0%) were female. This implies that majority of the respondents who participated in the study were females.

**Table 2: Distribution of Respondents By Department** 

Department	Frequency	%
Circulation	11	11.0
Technical	21	21.0
Serial	5	5.0
Acquisition/Gift and Exchange	10	10.0

Reference	11	11.0
ICT/Multimedia	20	20.0
Readers	12	12.0
Others	10	10.0
Total	100	100.0

The table above presents the distribution of respondents by department. According to the result of the analysis, majority were from technical department as indicated by 21 & 20% respectively.

**Table 3: Distribution of Respondents by Status** 

Status	Frequency	%
Librarian 11	35	35.0
Librarian 1	22	22.0
Senior Librarian	7	7.0
Principal Librarian	34	34.0
DUL	2	2.0
Total	100	100.0

The table above presents the distribution of respondents by status. According to the result of the analysis, 35(35.0%) were librarian 11, 22(22.0%) were librarian I, 7(7.0%) were senior librarian and 34(34.0%) of the respondents were principal librarian while 2(2.0%) were DUL. This shows that majority of the respondents that constitute the sample size were between librarian II, principal librarian and librarian I respectively.

One: To find the Availability of information communication technology facilities available for use by librarian in university library in south west Nigeria.

Table 4: Availability of information communication technology facilities available for use by librarian

ICT Facilities	Available		Not Available	
	Freq	%	Freq	%
Computer	89	89.0	11	11.0
Scanner	89	89.0	11	11.0
Printer	100	100.0	-	-
Internet connectivity	89	89.0	11	11.0
Satellite Connectivity	100	100.0	-	-
Projector	67	67.0	33	33.0
Library software databases	78	78.0	22	22.0
Electronic Smart databases	44	44.0	56	56.0
Digital Camera	67	66.0	33	33.0
Laptop	66	66.0	34	34.0

The table above present the distribution on the availability of information communication technology facilities available for use by librarians in university library in south west Nigeria. The result indicated that computer, scanner, printer, internet, satellite connectivity, projector software for library, digital camera and laptop were available while electronic smart board were not. The table also indicates that 89% of the librarians use scanner, computer, and internet connectivity. All of them use printer 100% and satellite connectivity, 69% of them use projector and digital camera, 66% of them use laptop, while only about 44% use electronic smart database.

Table 4: ICT and Job performance of Librarians

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How ICT enhance job performance of Librarian	Yes (%)	No (%)
Provision of prompt service to users	66	34
Doing work scheduled on time	88	12
Meeting approved goals	88	12
Improved my punctuality at work	44	56
Improved diligence and commitment to work	66	34
Improved creativity on the job	88	12
Improved efficiency in service delivery adequate and timely document delivery	88	12
adequate and timely document delivery	66	34
Easy access to information resources	100	0
Influenced article writing/publication writing	89	11
Help in training other staff and library patrons	77	23
Easy circulation and reference delivery	33	67
Improved number of books catalog	33	67

The table indicates librarians' perception on the various ways through which ICT enhances their job performance. 89% of them indicated that ICT has influenced article/publication writing, 88% indicates that doing work schedule on time, meeting approved goals, improved creativity on the job, and improved efficiency in service delivery are some ways through which ICT has enhanced their job performance. 77% of the samples librarian indicate that ICT has helped in training their staff and library patrons, 44% indicate improved punctuality at work and improved number of books classified, while 33% of them indicate that ICT ease circulation and reference delivery as well as improve number of books catalog.

Influence of ICT skills on job performance of librarian Table 5: ICT skills as a determinant of job performance of librarian

R <sup>2</sup> =0.521 Adjusted R2=0.516 F-Statistic=106.841				
Parameter	Coefficient	Std Error	T-cal	Probability
Constant	23.370	3.054	7.653	0.000

ICT skill	0.663	0.063	10.327	0.000

In table 5, ICT skills as the only independent variable accounts for about 52.1% of the total variation in job performance of librarian (R2=0.521,p<0.05). This is significant thus; ICT skill has a significant positive influence on job performance of librarian. Therefore, there is a significant influence of ICT skill on job performance of librarian in southwest Nigeria. The constant almost has no direct meaning to job performance and makes no any form of job performance sense. Rather in part, it is a term that tends to account for any bias that is not captured by the terms in the regression model. In short, it makes the model to be free to some extent.

# Influence of use of ICT on job performance of librarian Table 6: use of ICT as a determinant of job performance of librarian

R2=0.500

Adjusted R2=0.495

F-Statistic= 98.071

Parameter	Coefficient	Std Error	T-cal	Probability
Constant	25.141	3.013	8.343	0.000
Use of ICT	0.623	0.063	9.903	0.000

In table 6 above, use of ICT as the only independent variable accounts for about 50.0% of the total variation in job performance of librarian (R2 = 0.500, p< 0.05). This is significant thus; use of ICT has a significant positive influence on job performance of librarian. Therefore, there is a significant influence of use of ICT on job performance of librarian in south west Nigeria.

### **Conclusion**

The adoption of ICT in libraries to improve service delivery had necessitated the need for librarians to be trained in order for them to be able to use ICT tools effectively. The data collected from randomly sampled librarians were analysed with the aid of descriptive and inferential statistics and the result of such analyses revealed that ICT skill acquire by librarians significantly influenced their job performance, and that use ICT in libraries librarians significantly influenced their the performance of librarians. The study therefore conclude that efficiency the delivery of services in the Nigerians libraries can be enhanced through the use of ICT tools in libraries and more importantly, through regular on-the-job training of librarians.

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