The Influence of ICT Competencies on Job Performance in Nigerian University Libraries

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Abstract - The study looked at the impact of ICT skills on librarians’ job performance in university libraries in Nigeria’s southeast. A descriptive research design was used for the study. The population of the study included 235 librarians from university libraries in southeast Nigeria. For the study, the total enumeration sampling technique was used. A structured questionnaire was used to collect data from respondents. The findings revealed that librarians in South-East Nigeria are above average in terms of ICT competence in university libraries. They also use ICT to post new problems, carry out current awareness tasks, and perform user education tasks. It was also stated that ICT has improved the services provided by librarians while decreasing creative activities in university libraries. Poor funding, insufficient ICT training, insufficient professional manpower to conduct in-house ICT training, LIS curriculum not properly structured in line with current ICT realities, insufficient ICT implementation and planning, and other issues have hampered librarians’ acquisition of ICT skills in university libraries. The study recommended among others that adequate funding be allocated for the training and retraining of librarians in the use of ICT, that training on network-based services, database management/searching, QR Code services, and web design be organized for librarians to boost their competencies, and that the use of ICT for task execution be adequately incorporated into the curriculum of library and information science to expose young professionals to the prospects of the use of ICT. 

Keywords: ICT Competence, Task Performance, Librarians, University Libraries, South-South, Nigeria

I. INTRODUCTION

The performance of university librarians has remained a hot topic among academics and scholars in the literature. Task performance is defined as in-role-mandated behavior, and it is manifested in specific work results and deliverables, as well as their quantity and quality (Nini, 2019). University libraries must have qualified librarians carrying out tasks based on the library’s goals and objectives in order to fulfill their duty of supporting the teaching, learning, research, and recreational needs of their parent institution. Strong communication, interpersonal interaction skills, soft skills, and assertiveness are recognized as skills that improve librarians’ job performance (Batrool and Ameen, 2010). One ability that has a strong correlation with librarian work performance in university libraries is information communication technology (ICT). The term “Information and Communication Technology” (ICT) refers to the technologies used to store, communicate, and disseminate data. Any medium capable of storing information (Flash drives, QR Codes, CD-ROMS, Optical Disks, Cloud Storage, and so on), as well as technology capable of communicating/disseminating information (radio, television, social media, blogs, and other online newspaper platforms), are included (IGI Global, 2020).

However, information and communication technology (ICT) has had an impact on almost every aspect of life, with professionals exploring new ways to use ICT tools to complete tasks more quickly, and librarianship is no exception. The use of information communication technology in university libraries is increasing because technological tools can perform many tasks faster than manual systems (Ubogu, 2019). However, Bhoi (2017) and Ubogu (2012) highlighted tasks that can be performed using ICT in libraries, such as checking publishers’ catalogs, ordering, price comparison, tracking ordered materials, and creating a list of received materials. Furthermore, Adeleke and Olorunsola (2010) asserted that the advent of ICT has made it feasible for remote libraries to access databases of large libraries in developed countries in order to adapt/adapt their bibliographic data for the processing of their materials, which has greatly transformed the landscape of cataloging and classification in university libraries worldwide.

Library Automation Software can be used to perform routines for readers such as user registration, charging and discharging, and keeping track of overdue charges and defaulters. Closed Circuit Television (CCTV) can be deployed for library security while QR Code placed indoors can be used for encoding/decoding information about various departments of the library, it can also be used to provide information contained in library materials for users to be able to easily ascertain materials useful in line with their information needs. ICT can help librarians in university libraries fulfill their core duty of fulfilling the information requirements of their communities by enhancing their work. However, librarians in university libraries must be proficient in the use of ICT to maximize their use of ICT in their every day (Job & Abulmalik, 2017).

By enhancing their work, ICT can assist librarians in university libraries in fulfilling their core duty of meeting the information needs of their communities. However, in order to maximize their use of ICT in their daily routines,
librarians in university libraries must be proficient in the use of ICT (Ubogu, 2022a). Competencies, according to Fuentes (2007), are a set of knowledge, skills, attitudes, and values required to perform professional tasks with ease or to be productive in a given role. ICT competencies are a set of knowledge, abilities, attitudes, and values required to use ICT to carry out university library duties in accordance with the library’s goals (Nwabueze and Ibeh, 2016).

II. OBJECTIVES OF THE STUDY

The study will be guided by the following objectives

1. To ascertain the ICT competencies of librarians in university libraries in South-South, Nigeria.
2. To know the jobs performed by librarians using ICT in university libraries.
3. To determine the influence of ICT competencies on the job performance of librarians in university libraries.
4. To ascertain the problems in the acquisition of ICT skills by librarians in university libraries

III. RESEARCH QUESTIONS

1. What are the ICT competencies of librarians in university libraries in South-South, Nigeria?
2. What jobs are performed by librarians using ICT in university libraries?
3. What is the effect of ICT competencies on the job performance of librarians in university libraries?
4. What are the problems in the acquisition of ICT skills by librarians in university libraries?

IV. LITERATURE REVIEW

The objectives of the study were followed when conducting the literature review. Librarians’ ICT skills are tested in university libraries. The ICT competency of university librarians is an important research topic in library and information science. Ajeemsha and Margam (2012) and Ayoku and Okafor (2015), on the other hand, presented a list of ICT skills for librarians that included fundamental computer skills, system troubleshooting, and maintenance skills, among other things. Database management and searching skills, virtual reference services, e-mail, word processing, web design, internet skills, and library automation are all required.

According to Ansari (2017)’s findings, librarians in Pakistani universities were not proficient in all areas of ICT abilities. The majority of those polled had a basic understanding of how to use information and communication technology. Itsekor and Ikechukwu (2014) investigated ICT competencies as a 21st-century talent for librarianship. The study of Bansode and Viswe (2015) in the Marathwada region revealed that the majority of librarians are ICT literate and have sufficient basic ICT abilities to perform library responsibilities.

According to the findings of the Madu and Asubogu (2018) study, 77 percent of those polled believe they are ICT competent. The 23% who disagree are most likely from libraries that are out of touch with technology. According to Nwabueze and Ibeh (2016), the participants have a high level of ICT literacy. Due to a lack of ICT skills, librarians in Anambra State, Nigeria, were found to be under-equipped to carry out a variety of activities in their libraries. Nini (2019) and Ubogu (2020) discovered that librarians have a diverse set of basic ICT skills. According to the study, they also appear to be more focused on network-based and digital services.

A. In University Libraries, Librarians Use ICT to Perform Their Duties

Many studies have been conducted on the jobs that librarians in university libraries may be able to do with the help of ICT. Librarians can use information communication technologies to send and receive emails, hold online video conferencing meetings, and provide quick and easy access to library resources via the online public access catalog, according to Adebayo, Ahmed, and Adeniran (2018). (OPAC). According to Unegbu (2013), the introduction of online cataloging has led to many libraries discouraging their cataloguers from practicing original cataloging because it is thought to be time-consuming and requires intelligent and articulate people with adequate competence, knowledge, and experience. According to the findings of the study, library jobs such as classification, cataloging, indexing, database building, and database indexing were discovered in the study of Ubogu (2019).

Krubu and Osawaru (2010) investigated the impact of information and communication technology (ICT) in Nigerian university libraries. According to the findings, the most commonly used ICT for information storage and retrieval was CD-ROMs, online databases, the World Wide Web, and the Internet.

According to Khademizadeh (2012) and Fidelis (2018), libraries used ICT to improve new library services. The most frequently performed activity (72.5 percent) was found to be virtual desk services, followed by the provision of electronic resources and databases (confirmed by 70 percent of respondents), and conversation with a librarian (indicated by 65 percent of respondents). Significant percentages were also noted for literature searches (52.5 percent), QR code access to resources (50 percent), asking a librarian (27.5 percent), and institutional repository access (27.5 percent) (22.5 percent).

B. Effect of ICT Skills on the Job Performance of Librarians in University Libraries

ICT has had a significant impact on various aspects of the library and information science professions. According to Krubu and Osawaru (2010), information and communication technology (ICT) has influenced all aspects
of academic library activities, particularly library collection development methods, library building, and consortia, and has improved librarians’ task performance. According to Job and Abdulmalik (2017), ICT proficiency improves library staff task performance 39. (54.2 percent).

Only 11 (15.3 percent) of those polled stated that their ICT skills had no impact on their job performance. Similarly, Oguche (2017) discovered that ICT had an impact on their performance in the following tasks: digitization, library user registration, publications; ordering of information resources; generation of user statistics, storage of information resources; accessioning of information resources, and marketing of library and information products and services. According to data from the study’s interview session, while respondents acknowledged that ICT competencies had improved their task performance, the volume of tasks assigned to them had also increased. In their study on the impact of ICT on information transmission, Madu and Azubogu (2018) discovered that ICT has influenced numerous elements of university library duties, including reference services, current awareness, bibliographic search, cataloging, and categorization, and lending services.

C. Problems in the Acquisition of ICT Skills by Librarians in University Libraries

Many issues have been found in the literature that affects librarians’ learning of ICT skills in university libraries. In a study conducted by Ayoku and Okafor (2015) it was discovered that there was a lack of adequate technological infrastructure to support the incorporation of ICTs into the curriculum of Nigerian LIS schools, poor planning and implementation of ICT projects in Nigerian university libraries, and a lack of adequate technological infrastructures to support the integration of ICTs in the curriculum of Nigeria (Ubogu, 2022b).

The lack of a policy for ongoing evaluation or assessment of librarians’ ICT abilities, as well as librarians’ lack of enthusiasm for it, is one of the challenges affecting the respondents’ understudy’s development of ICT skills. Tight work schedules, insufficient training, a lack of awareness, a lack of expertise with ICT, and a lack of effort from professional groups, according to Bansode and Viswe (2015), were all identified as factors in the study’s conclusions (Ezejiofor 2018).

Power outages and poorly maintained training programs According to Baro and Eze (2015), issues influencing respondents’ learning of ICT skills in the survey included a lack of training, intermittent power supply, poor internet access, and insufficient equipment (computers), and a lack of time.

V. METHODOLOGY

The descriptive research design was used for the investigation. The population of the study includes all librarians in university libraries in South-East Nigeria. The study included 151 librarians in total. The complete enumeration sampling technique was used for the investigation because the sample size of the respondents was manageable. To collect data for the study’s research instrument, a structured questionnaire was used. Two senior colleagues validated the instrument to ensure its validity. The researcher spent three months collecting data using the questionnaire with the help of two research assistants. 151 questionnaires were distributed to respondents, and 149 were completed and found to be usable for the study. The data were analyzed using the mean via tables for easier display of the results.

A. Data Analysis

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>ICT Competencies of Librarians</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Good usage of Computer</td>
<td>135</td>
<td>10</td>
<td>4</td>
<td>-</td>
<td>3.88</td>
</tr>
<tr>
<td>2</td>
<td>Internet Services</td>
<td>127</td>
<td>2</td>
<td>18</td>
<td>2</td>
<td>3.70</td>
</tr>
<tr>
<td>3</td>
<td>Cybernetic reference services</td>
<td>10</td>
<td>34</td>
<td>97</td>
<td>8</td>
<td>2.31</td>
</tr>
<tr>
<td>4</td>
<td>Microsoft Office Correspondences (Word, Excel)</td>
<td>118</td>
<td>25</td>
<td>2</td>
<td>3</td>
<td>3.72</td>
</tr>
<tr>
<td>5</td>
<td>Web Design</td>
<td>17</td>
<td>4</td>
<td>112</td>
<td>16</td>
<td>2.14</td>
</tr>
<tr>
<td></td>
<td>Aggregate Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.15</td>
</tr>
</tbody>
</table>

A total of 235 copies of the questionnaire were distributed, with 224 (95%) of them returned. Because the stand and the acceptable response rate for most studies is 60%, a response rate of 95% is deemed adequate for the study (Dulle, Minish-Majanja & Cloete, 2010).

B. Research Question 1: What is the ICT Competencies of Librarians in University Libraries?
Table II contained information on the ICT competencies of librarians in university libraries. The study found that respondents have basic computer skills, with a cutoff point of 2.50 and a grand mean score of 3.15. Item 1 had the highest mean score (Good usage of Computer). Followed by Microsoft Office Correspondences with a mean score of 3.72 (though it was above the cutoff point) (Word, Excel, Corel Draw, etc.). According to the study, respondents have adequate knowledge of ICT because they are ICT compliant.

C. Research Question 2: What Library Services are Performed by Librarians using ICT in University Libraries?

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Task Performed Using ICT</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Up-to-date Awareness</td>
<td>89</td>
<td>15</td>
<td>25</td>
<td>20</td>
<td>3.16</td>
</tr>
<tr>
<td>2</td>
<td>Procurement Associated Tasks</td>
<td>118</td>
<td>7</td>
<td>5</td>
<td>19</td>
<td>3.50</td>
</tr>
<tr>
<td>3</td>
<td>Customer Registration</td>
<td>127</td>
<td>5</td>
<td>15</td>
<td>2</td>
<td>3.72</td>
</tr>
<tr>
<td>4</td>
<td>Selective Dissemination of Information</td>
<td>137</td>
<td>12</td>
<td>-</td>
<td>-</td>
<td>3.92</td>
</tr>
<tr>
<td>5</td>
<td>Virtual Reference services</td>
<td>128</td>
<td>13</td>
<td>1</td>
<td>7</td>
<td>3.76</td>
</tr>
<tr>
<td></td>
<td>Aggregate Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.61</td>
</tr>
</tbody>
</table>

Table III shows the services provided by librarians in university libraries who use ICT. The study concluded that responded services using ICT had a mean cutoff point of 2.50 and a grand mean of 3.61. The distribution’s highest mean score was for “Selective Dissemination of Information (3.92),” while the lowest was for “Up-to-date Awareness (3.16). Again, all ten identified variables had mean scores that were higher than the cutoff point.

D. Research Question 3: What is the Effect of ICT Skills on the Job Performance of Librarians in University Libraries?

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Effect of ICT Competencies on Tasks Performance of Librarians</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Enhanced Cataloguing and Classification Tasks</td>
<td>128</td>
<td>2</td>
<td>13</td>
<td>6</td>
<td>3.69</td>
</tr>
<tr>
<td>2</td>
<td>Increased Acquisition-related Tasks</td>
<td>75</td>
<td>32</td>
<td>33</td>
<td>10</td>
<td>3.17</td>
</tr>
<tr>
<td>3</td>
<td>Improved the Incorporation of Library Resources for swift access</td>
<td>112</td>
<td>26</td>
<td>11</td>
<td>-</td>
<td>3.68</td>
</tr>
<tr>
<td>4</td>
<td>Improved Storage and Retrieval of Information</td>
<td>115</td>
<td>17</td>
<td>14</td>
<td>3</td>
<td>3.64</td>
</tr>
<tr>
<td></td>
<td>Aggregate Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.55</td>
</tr>
</tbody>
</table>

Table IV shows that respondents agreed that ICT skills affect the job performance of librarians in university libraries, with a cutoff point of 2.50 and a grand mean score of 3.55. The highest mean score was 3.69 for “Enhanced Cataloguing and Classification Services,” while the lowest mean score (but above the cutoff point) was 3.17 for “Increased Acquisition-related Tasks.” The study concluded that ICT has a significant impact on librarians’ jobs.

E. Research Question 4: What are the Problems Associated with the Acquisition of ICT Skills by Librarians in University Libraries?

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Problems in the Acquisition of ICT Skills by Librarians</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Inadequate Training on ICT</td>
<td>128</td>
<td>3</td>
<td>12</td>
<td>6</td>
<td>3.60</td>
</tr>
<tr>
<td>2</td>
<td>Inadequate technological infrastructures to support the integration of ICT</td>
<td>99</td>
<td>16</td>
<td>31</td>
<td>2</td>
<td>3.41</td>
</tr>
<tr>
<td>3</td>
<td>Tight working schedules</td>
<td>23</td>
<td>99</td>
<td>17</td>
<td>10</td>
<td>2.91</td>
</tr>
<tr>
<td>4</td>
<td>Insufficient Conferences from Professional Associations on ICT</td>
<td>127</td>
<td>14</td>
<td>3</td>
<td>5</td>
<td>3.77</td>
</tr>
<tr>
<td>5</td>
<td>Insufficient professional manpower to conduct in house training on ICT</td>
<td>3</td>
<td>115</td>
<td>25</td>
<td>6</td>
<td>2.77</td>
</tr>
<tr>
<td>6</td>
<td>Non-sustenance of training programs</td>
<td>133</td>
<td>12</td>
<td>-</td>
<td>4</td>
<td>3.84</td>
</tr>
<tr>
<td></td>
<td>Aggregate Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.39</td>
</tr>
</tbody>
</table>
Table V discusses issues related to librarians’ acquisition of ICT skills in university libraries. With a cutoff point of 2.50 and a grand mean score of 3.38. The distribution’s highest mean score was for “non-sustenance of training programs (3.84).” Again, all ten identified variables had mean scores that were higher than the cutoff point. All ten items are viewed as problems by the respondents, but the main issue is the non-sustenance of training programs.

VI. DISCUSSION

On librarians’ ICT abilities. According to the findings of the study, librarians in South-East Nigeria are proficient in the use of information and communication technologies in university libraries. They also have a positive attitude toward ICT. This study supports the findings of Nwabueze and Ibeh (2016) and Nini (2019), who discovered that the librarians studied were ICT literate and possess sufficient basic ICT skills to perform library tasks. Furthermore, the librarians were pleased that they possessed ICT skills, as opposed to their colleagues who did not. This also gives them the confidence to perform well in whatever job they are assigned in the university library.

In terms of the services provided by librarians using ICT in university libraries, the study found that the majority of respondents provide selective dissemination of information services using ICT. This finding contradicts the findings of Adebayo, Ahmed, and Adeniran (2018) and Ubogu (2022b) who claim that librarians can use information communication technologies to send and receive emails, host online conferences via video conferencing, and provide quick and easy access to library resources via the online public access catalog (OPAC). The findings also contradict those of Krubu and Osawaru (2010), who discovered that ICT has greatly facilitated information storage and retrieval tasks in university libraries through the use of CD-ROM, online databases, the World Wide Web, and the Internet.

The study found that ICT has a significant impact on the job performance of librarians in university libraries because it improves cataloging and classification services. The findings support the findings of Job and Abdul malik (2017) and Oguche (2017), which revealed that ICT competency had a positive influence on the task performances of library staff, as indicated by the majority of respondents. This finding indicates that ICT has positively influenced librarians’ task performance, which will translate to increased productivity.

Regarding the issue of librarians acquiring ICT skills in university libraries, findings revealed that the non-sustenance of training programs is the major issue in librarians acquiring ICT skills in university libraries. According to Ezejiofor (2018) and Ubogu (2021), the problems affecting librarians’ acquisition of ICT skills are inadequate funding, insufficient professional manpower to conduct training, insufficient ICT facilities, a lack of enabling environment to practice knowledge in training, poor internet connectivity, irregular power supply, and non-sustenance of the training program. This finding is consistent with the findings of Baro and Eze (2015), who discovered that lack of training, irregular power supply, poor internet connectivity, insufficient facilities (computers), and a lack of time were the factors influencing the acquisition of ICT skills by the librarians in the study.

VII. RECOMMENDATIONS

The following recommendations were made in line with the results of the study.

1. Appropriate funds should be made available for librarian training and retraining in ICT use.
2. Librarians should be trained in network-based services, database management/search, QR Code services, and site design in order to improve their ability to use ICT tools in their job.
3. To help young professionals at the start of their careers, the use of ICT for task execution should be effectively incorporated into library and information science curricula.
4. Professional associations/bodies such as the Nigerian Library Association and the Librarian Registration Council of Nigeria should hold regular conferences on the use of ICT in university libraries.
5. Training programs should be repeated on a regular basis to keep librarians up to date on the latest technological advances that can assist them with their many responsibilities.

VIII. CONCLUSION

The introduction and widespread use of ICT has had an overwhelmingly positive impact on university libraries, allowing jobs to be completed in the shortest amount of time possible. Despite the benefits of incorporating ICT into library work, its impact may be limited if librarians lack the skills required to use it to improve services and resources. Nonetheless, ICT technologies can handle the majority of university library functions, such as virtual reference services, information storage and retrieval, and information searching. ICT has had a significant impact on university library services because it has reduced the time required for service delivery, allowing more time for library routines to be completed in order to meet the needs of customers. As a result, in order for librarians to benefit from the potential of using ICT to complete their numerous tasks, they must first acquire the necessary skills. Librarians must increase their competence in the use of ICT tools for the execution of their work through a variety of techniques in order to remain productive in their university libraries.

REFERENCES


