Use of Information and Communication Technology (ICT) Facilities in Collection Development in University Libraries in South East, Nigeria

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Abstract: The study is an examination on the use of ICT facilities in collection development among collection practitioners of three federal university libraries in South East, Nigeria. Descriptive survey research design was used for the study. The population of the study comprises of all the personnel of the university libraries’ who participated in collection development practice. Purposive sampling technique was used to select the institutional libraries for the study. Data collected through questionnaire were descriptively analysed using mean and standard deviation. Results indicated that collection practitioners utilize some of the facilities to a high extent and that the facilities are benefiting the university libraries under study. The study also revealed a significance difference in the mean response of University of Nigeria Nsukka (UNN), Federal University of Technology Owerri (FUTO), and Michael Okpara University of Agriculture Umudike (MOUAU) collection development practitioners on the extent to which ICT facilities are used in federal university libraries in South East, Nigeria; the problems affecting the use of ICT facilities as well as significance difference in the mean response of UNN, FUTO and MOUAU collection development practitioners. The study concludes that university library management need to provide an enabling environment for ICT facilities; collection development practitioners must possess good knowledge in order to enjoy efficient benefits of ICT facilities; training programme on the use of these facilities should be organized from time to time.

Key Words: University Libraries, Collection Development, Information and Communication Technology (ICT).

I. INTRODUCTION

University libraries are academic libraries situated in universities to primarily help the students, staff and the whole community at large to accomplish their set goals of teaching, learning and research. They are intellectual powerhouses where pertinent information and all sorts of materials, including books and non-books materials, are collected, organized, preserved for easy retrieval and dissemination. Specifically, the university library aims to provide from within its own resources, the literature and information resources to support undergraduate and postgraduate studies and the research activities of the university. It is the central point of all academic activities in the University for students and staffs resort to it for academic nourishment. Based on this background, Ogunsola (2004) describes university libraries as the heart of the university, because it houses and maintains standard books, journals, audiovisual collections and services that are needed for all the teaching and learning processes of the university community. Emphasis is placed on the selection and acquisition of broad based research materials of multidisciplinary interest, including official publications, standards and statistics.

Collection development is a process of selection and acquisition of useful information materials. According to Okolo, Eserada, Ugboh&Ngbo (2019) collection development procedures includes: selection of materials, placing orders, receiving, checking, stamping, etc. It is understood to cover several activities related to the development of library collections (Johnson, 2014). According to Johnon (2014) such activities include selection of materials in all formats, the determination and coordination of selection policy, assessment of the needs of users and potential users, collection use studies, collection analysis, budget management, identification of collection needs, and planning for resource sharing. It is a process which varies from library to library depending on the objectives of the library, its size and number of staff charged with that responsibility. It is an activity that involves some processes that will precede the arrival of the information material. The library provides information sources that a patron wants, regardless of format or location and rendering of service.

The University library’s collection is said to be of quality when the collection of the library resources are current, relevant in meeting the various needs of library patrons. American Library Association (2018) observed that some issues have affected the ideology, operations and services of university libraries. These include forces of competition, advent of information in electronic form and the changes in users’ expectations. The global information revolution of the 20th century made manual systems of library operations mundane, clumsy and inefficient. According to Aiyebelehin (2011), the traditional system of collection development are no longer effective in academic libraries, hence the need to integrate ICT facilities in collection development.

Consequently, for the collection development practitioners of the university libraries to meet up with the demand on them, they have to appraise their collection development processes.
Information explosion being experienced all over the world, the demand for quick and relevant information by library users, present day technological advancements, and dwindling fund made available for collection development of university libraries hinders the efficient provision accurate, complete and timely information. Hence the need to overhaul the collection development processes of these university libraries, to effectively use ICT facilities in collection development to meet the ever growing information needs of the library clientele.

ICT has been defined as a term referring to the technology that has made positive impact in information generation, storage, retrieval and transmission or communication. Ezekwe (2019) defined ICT as “tools and as well as a means used for collection, capture, process, storage, transmission and dissemination of information”. It encompasses modern technologies such as communication satellites, radio, television, video tape recorders, compact discs, scanners, floppy diskettes, flash memory, personal computers and other related equipment so that output generated can reach the overall benefit of mankind and in good time.

Presently, information and communication technologies is use for collection development activity of the university libraries, different electronic and digital media, and computer aided electronic equipment, networks and internet has provided significant role in selection of titles, ordering, effecting payment, processing and engaging in collaborative scheme with other University libraries and information centres. ICT application in collection development activities in University libraries is commonly known as automated system. Tiamiyu (2000), enumerated merits of ICT in collection development to include: elimination of duplication in data entry operation, improvement in the control of operation, improvement in speed of operations or services; increased range and depth of service; reduction in staff costs; improved staff morale and prestige; and enhancing the capability to share bibliographic data and resources with other libraries.

II. STATEMENT OF THE PROBLEM

It is a common knowledge that in this era of information explosion, no library can satisfy its users’ needs with traditional manual processes. The manual process of collection development involves a lot of paper work and skilled labour which is tedious, time consuming and prone to error. This usually leads to unnecessary delay in the library’s quest to build a vibrant collection for its patrons. Some researchers and students whose information needs have not been provided in one time or the other resort to the use of alternative information sources like internet services and other ICT facilities are been provided by cyber cafes. This act threatens the strategic position that the university libraries occupy in the university system.

Thus, the entire philosophy of collection development needs to be changed to include hardware and software costs, collection development librarians have a large and more complex set of resources from which to select. The effective management of new technologies depends largely on the availability of skilled employees and the society’s level of competencies (Oyedokun, Oyewumi, Akanbi, & Laaro, 2018). Hence, use of ICT facilities is an important tool for collection development in the university libraries as it supports resource sharing among University libraries, increase effective and efficient service delivery, saves time, provide speedy and easy access to networked resources and web-based services to provide more up-to-date information to users. ICT facilities use in the collection development is meant to work towards the actualization of the university libraries’ aims and objectives. The extent of ICT use in various areas of university libraries with reference to university libraries in South-East, Nigeria seems to have been unexplored. Upon such an argument, it therefore requires for research to establish the actual levels of ICT facilities use in collection development practice of University libraries in South-East, Nigeria.

III. PURPOSE OF THE STUDY

The main objective of this research is to find out the extent of use of ICT in collection development in University libraries. Specifically, the study is designed to:

1. Identify the extent of use of ICT facilities in collection development practice in the university libraries in South East, Nigeria.
2. Examine the benefits of ICT use on collection development in university libraries in South East, Nigeria.
3. Identify the challenges of using ICT facilities in collection development in university libraries in South East, Nigeria.

IV. RESEARCH QUESTIONS

The following research questions guided the study:

1. What extent has the use of ICT facilities contributed to effective collection development in university libraries in South East, Nigeria?
2. What are the benefits of ICT facilities use in collection development in university libraries in South East, Nigeria?
3. What are the challenges of ICT facilities use in collection development of university libraries in South East, Nigeria?

V. SIGNIFICANCE OF THE STUDY

The findings of this study will be significanceto librarians other information scientists who are involve in collection development to find strategies that enhance use of ICT facilities for improving the condition of the library collection in the face of dwindling funding by their parent organizations through collaboration and provision of access to both offline and online electronic resources.
VI. LITERATURE REVIEW

The use of Information and Communication Technology (ICT) facilities can help reduce distance virtually or physically, thus providing scholars with easier access to and input into the world of international scholarship. The university library utilization of new tools and methods for providing and collecting a variety of information to university library clientele for diverse information needs has become common. Aina (2004) and Odufuwa (2006) averred that ICT facilities are used for teaching and research because they help lecturers to cope with information explosion, information handling and processing with greater speed and accuracy than the manual method.

Traditional system of collection development in university libraries are no longer effective, as a result of the following factors; information explosion, proliferation of available media for information storage, demand for quick and relevant information by library users, etc. It is necessary for university libraries in Nigeria and elsewhere to acquire current and relevant information resources necessary for sustaining the teaching, learning, and research activities that universities are known for.

Electronic resources have caused a change or review of the university libraries collections and management practices. IFLA (2012) described electronic resources as “those materials that require computer access, whether through a personal computer, mainframe, or handheld mobile devices”. The past two decades have witnessed a tremendous increase in the availability and use of electronic information resources across the globe as a result of inadequate funding. This had resulted in University libraries resorting to the use of Information and Communication Technology and collaboration scheme with other libraries and information centres as a way of ensuring that their collection remains relevant to the needs of its users. These sources include online databases, online public access catalogue (OPAC), e-conference, e-mail, discussion forums, full text data-bases, books, scholarly websites, pre-print and archives and bulletin boards amongst others. University libraries are now being categorized under the following operational level as either; traditional, hybrid, digital or electronic. The entire philosophy of collection development needs to be changed, as technology related factors have to be incorporated, budgeting has to be modified to include hardware and software costs, collection development librarian has a large and more complete set of resources from which to select (Golwal& Moltewa, 2012). Librarians participating in the collection development activity of the University libraries are faced with the challenge of creating information systems for the collection of information and new knowledge regardless of format.

VII. ANALYSIS

Research Question 1: To what extent has the use of ICT facilities contributed to effective collection development in university libraries in South-East Nigeria?

To answer this question, a list of items were presented to the respondents from the three university libraries and they were requested to indicate their level of agreement or disagreement based on a four scale of VGE= Very Great Extent; GE= Great Extent; LE= Low Extent; NA= Not Available; representing 4, 3, 2 and 1

<table>
<thead>
<tr>
<th>S/N</th>
<th>Items</th>
<th>UNN (N=34)</th>
<th>FUTO (N=20)</th>
<th>MOUAU (N=8)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>x</td>
<td>SD</td>
<td>Dec</td>
</tr>
<tr>
<td>1</td>
<td>It saves time during collection development</td>
<td>3.32</td>
<td>0.77</td>
<td>GE</td>
</tr>
<tr>
<td>2</td>
<td>Quick delivery of information materials</td>
<td>3.47</td>
<td>0.75</td>
<td>GE</td>
</tr>
<tr>
<td>3</td>
<td>Better communication with vendors/publishers</td>
<td>3.27</td>
<td>0.75</td>
<td>GE</td>
</tr>
<tr>
<td>4</td>
<td>Improves library services</td>
<td>3.38</td>
<td>0.89</td>
<td>GE</td>
</tr>
<tr>
<td>5</td>
<td>Online subscription saves cost on transportation of hard copies</td>
<td>3.41</td>
<td>0.66</td>
<td>GE</td>
</tr>
<tr>
<td>6</td>
<td>It eliminates delays in delivery</td>
<td>3.24</td>
<td>0.82</td>
<td>GE</td>
</tr>
<tr>
<td>7</td>
<td>It improves my professional image</td>
<td>3.41</td>
<td>0.66</td>
<td>GE</td>
</tr>
<tr>
<td>8</td>
<td>It helps me to develop new IT literacy skills</td>
<td>3.27</td>
<td>0.79</td>
<td>E</td>
</tr>
<tr>
<td>9</td>
<td>It results in acquisition of current information sources</td>
<td>3.41</td>
<td>0.66</td>
<td>GE</td>
</tr>
<tr>
<td>10</td>
<td>Facilitates the standardization of the collection development practice with the global needs and practices.</td>
<td>3.27</td>
<td>0.67</td>
<td>GE</td>
</tr>
<tr>
<td></td>
<td>Cluster mean</td>
<td>3.34</td>
<td>0.54</td>
<td></td>
</tr>
</tbody>
</table>

NOTE:  \( \bar{x} = \text{Mean}; SD = \text{Standard Deviation}; \text{DEC, Decision} \ \text{UNN=University of Nigeria Nsukka; FUTO=Federal University of Technology Owerri; MOUAU = Michael Okpara University of Agriculture Umudike} \)
The result in Table 1 shows that all the items listed from 1-10 with the mean scores of 2.50 and above which is acceptable; indicate the extent of use of ICT facilities by collection development practitioners in federal university in South East, Nigeria. Online subscription saves cost on transportation of hard copies with the mean score of 3.75, quick delivery of information materials with the mean score of 3.75 and result in acquisition of current information sources with the mean score of 3.60. Since the mean ratings in all the universities is above 2.50 set as a criterion for accepting items, it shows, therefore, that the respondents agreed that the use of ICT facilities contributed to effective collection development in university libraries. The cluster mean for UNN, FUTO and MOUAU are 3.34, 3.42 and 3.44 respectively. This showed that to a great extent, the use of ICT facilities contributed to effective collection development in university libraries in South-East Nigeria.

Research Question 2: What are the benefits of ICT facilities in collection development in university libraries in South-East Nigeria?

In answering this question, a list of benefits in the use of ICT facilities were presented to the respondents and they were requested to indicate their level of agreement or disagreement based on a four point scale of SA=Strongly Agree, A=Agree, D=Disagree and SD=Strongly Disagree representing 4,3,2 and 1.

<table>
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<th>S/ N</th>
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<tr>
<td></td>
<td></td>
<td>(\bar{x})</td>
<td>SD</td>
<td>Dec.</td>
</tr>
<tr>
<td>1</td>
<td>It serves as an additional platform for university library to provide useful, accurate and up to date information to its users.</td>
<td>3.68</td>
<td>0.48</td>
<td>SA</td>
</tr>
<tr>
<td>2</td>
<td>It provides the university library with a way out of the funding problem facing it and defects of the traditional system of collection development.</td>
<td>3.29</td>
<td>0.72</td>
<td>A</td>
</tr>
<tr>
<td>3</td>
<td>Provides diversified information access to the users of the university library.</td>
<td>3.35</td>
<td>0.65</td>
<td>A</td>
</tr>
<tr>
<td>4</td>
<td>Leads to user’s satisfaction.</td>
<td>3.44</td>
<td>0.50</td>
<td>A</td>
</tr>
<tr>
<td>5</td>
<td>Helps to keep the university library abreast of the latest development.</td>
<td>3.44</td>
<td>0.71</td>
<td>A</td>
</tr>
<tr>
<td>6</td>
<td>Helps the university library to maintain its pride of place in the university system.</td>
<td>3.38</td>
<td>0.60</td>
<td>A</td>
</tr>
<tr>
<td>7</td>
<td>Facilitates the standardization of the university library collection development practice with the global needs and practices.</td>
<td>3.29</td>
<td>0.63</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td><strong>Cluster mean</strong></td>
<td><strong>3.41</strong></td>
<td><strong>0.39</strong></td>
<td><strong>3.40</strong></td>
</tr>
</tbody>
</table>

**NOTE:** \(\bar{x}\) = Mean; SD = Standard Deviation; DEC. = Decision UNN=University of Nigeria Nsukka; FUTO=Federal University of Technology Owerri; MOUAU = Michael Okpara University of Agriculture Umudike

The result in Table 2 above shows that all the items listed 1-7 with the mean scores above 2.50 which is acceptable, are the benefits of using ICT facilities in collection development practice in university libraries in South-East Nigeria. The result shows that items 1 ‘serves as an additional platform for university library to provide useful’ with the mean score 3.77, ‘accurate and up to date information to its users’ with the mean score of 3.68 ranks the highest, followed by item 6 ‘helps university library to maintain its pride of place in the university system’ with the mean score of 3.60, item 5 helps to keep the university library abreast of the latest development with the mean score of 3.55 and item 2 ‘it provides the university library with a way out of the funding problem facing it and the defects of the traditional system of collection system. With the mean ratings of the respondents are above 2.50 set as a criterion for accepting items, it shows, therefore, that the respondents agreed that ICT facilities are beneficial to the collection development in the university libraries. The cluster mean of 3.41, 3.40 and 3.50 for UNN, FUTO and MOUAU respectively shows that ICT facilities are beneficial to the collection development in university libraries in South-East, Nigeria.

Research Question 3: what are the challenges of ICT facilities use in collection development of university libraries in South-East, Nigeria?

In answering this question, a list on challenges in the use of ICT facilities were presented to the respondents and they were requested to indicate their level of agreement or disagreement based on a four point scale of SA=Strongly Agree, A=Agree, D=Disagree and SD=Strongly Disagree representing 4,3,2 and 1.
The result in Table 3 shows that all the items listed from 1-12 with the mean score above 2.50 which is above acceptable, are hindrances to university libraries use of ICT facilities in collection development practice by practitioners in South East, Nigeria. The table shows that item 1 ‘frequent power failure and lack of alternative power supply’ with the mean score 3.87, item 11 ‘frequent change in technology’ with the mean score 3.50, item 12 ‘diversion of fund meant for university library’ with the mean score 3.55 item 5 ‘lack of conducive environment’ with the mean score 3.50 amongst others. The cluster mean of 3.23, 3.17 and 3.39 for UNN, FUTO and MOUAU, respectively, showed that the items in table 5 are the challenges of ICT facilities use in collection development of university libraries in South-East, Nigeria.

VIII. DISCUSSION OF FINDINGS

The findings on benefits of ICT facilities use in collection development in university libraries in South East, Nigeria revealed that there are numerous benefits derived from use of ICT facilities in collection development in university libraries in South East, Nigeria. For instance, the respondents indicated that it serves as an additional platform for university libraries to provide useful, accurate and current information to its users. And also helps in keeping the university libraries abreast of the latest development by using ICT facilities in collection development practice in university libraries in South East, Nigeria. Furthermore, the findings indicate that the use of ICT facilities by university libraries in South East Nigeria is helping it to maintain its pride of place in the university system. The findings of this study is in agreement to the observation of Obidike & Mole (2015) attesting that undergraduates in Nigeria find computer services very useful as it provides access to unimaginable resources and this goes a long way to help overcome the problem of scarcity or new books in the university libraries. Writing on the benefits of internet which is an ICT resource, Emuhohwo and Abdulhamid (2006), says it has the benefits of ease of use, low cost and multimedia capabilities which can be used to create interactive application and provide services and products. Also, Ezeani (2010) explained that over the last ten years we have witnessed the convergence of the human readable web with increased creativity. The author maintained that in recent times, there has been a web of several communicating applications and more pervasive, broadband connectivity.

The findings on challenges of using ICT facilities in collection development in university libraries shows that ICT facilities
usage in collection development is confronted with challenges such as complex nature of the ICT facilities, lack of conducive environment, lack of adequate knowledge, diversion of fund meant for university libraries, low bandwidth, poor communication network among others. The findings of this study on using ICT facilities in collection development in university libraries, Complex nature of the ICT facilities constitutes a major challenge on their usage as indicated by the respondents is in line with the findings of Oyedokun, Oywumi, Akanbi, & Laaro (2018) posited that the effective management of new technologies depends largely on the availability of skilled employees and the society’s level of competencies. Ashcroft and Watts (2004) noted that in recent years, there is shortage of technology literate staff in libraries, lack of skilled human resources to install and manage technology and networks for electronic resources. In the changing information age, library professionals have to gain extensive knowledge about developing technologies. However, the response from the oral interview conducted in UNN goes contrary to the findings as the interviewer informed the researcher that ICT skill is never a problem to their library.

IX. CONCLUSION AND RECOMMENDATIONS

This study examined the use of Information and Communication Technology facilities in Collection development in university libraries in southeast, Nigeria. The study adopted survey research design in sampling the opinions of librarians in three federal university libraries in South-East Nigeria namely; University of Nigeria Nsukka, Federal University of Technology Owerri and Michael Okpara University of Agriculture Umudike. From the data collected and analyzed, the study among others found out that ICT is a necessary tool in enhancing collection development programme, but is hampered with the complexity of ICT facilities.

Based on the findings made and conclusions drawn from the study, the following recommendations were made for implementation: Proper orientation on the benefit of ICT facilities use in collection development programme should be created for university library staff and users; for the university libraries under study to enjoy the efficient benefits of ICT facilities, they must possess good knowledge on the use of the facilities; good knowledge of the functionality of the ICT facilities by the collection development practitioners would enable them to know when a particular ICT facility is faulty.

REFERENCES

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