

Information and Communication Technology Application in Collection Development in Covenant University Library Ota Nigeria.

by
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Abstract

The library is the heart and life-line of any citadel of learning. The quality of teaching, learning and research is predicated on the robustness of the availability, accessibility and utilization of library and information resources. These information resources only get to the library through collection development. Therefore, the quality of the library depends on the quality of the collections. This study surveys the use of ICT in collection development in academic libraries. The Covenant University library, Ota, was used for the study. The study adopted the descriptive survey method. The questionnaire was used as instrument for data collection. The data collected was analyzed with the use of tables and simple percentages. From the analysis of the data collected, it was found that the use of ICTs help to save time in collection development, promotes quick delivery of information materials, enhances communication with publishers and book vendors. It was also found from the study that, poor power supply and inadequate infrastructure hinders the effective use of ICTs in collection development. It was recommended that academic libraries should provide adequate funding for ICTs and the supporting infrastructure, training for librarians was also suggested as well the use of online shops as sources of acquisition.

Introduction

A well built library with very social staff without information materials is as good as a new aeroplane without a functional engine. It is therefore obvious that the continuity of a library as an information system depends on the functionality of the collection development process of the library. Kavitha (2009) noted that Library collection has witnessed the ages of clay tablets to papyrus sheets, paper documents, and silicon chips, optical and magnetic disc and so on. In every age, libraries have used the latest technology to carry collection development. In the 21st century, ICT has become a force that has changed the way things were being done. Tella et al (2007) observed that ICTs are increasingly powerful tools for participating in global markets, promoting political accountability; improving the delivery of basic services; and enhancing local development opportunities. ICT has profound effects on the progress and development of human civilization. The advance in science and technology has made a tremendous improvement in the society and has changed almost all activities of present society. Information and communication technology (ICT) has become, within a very short time, one of the basic building blocks of modern society. Many countries now regard understanding ICT and mastering the basic skills and concepts of ICT as part of the core of education, alongside reading, writing and numeracy (UNESCO, 2002). It can be seen that no society plans for development without planning for ICT development.

Undoubtedly, it can be asserted that ICT has brought a wave of innovation to the way things are being done. This is irrespective of the sector or segment of the society. From the peasant to elite, urban to rural communities, schools to the farms, ICT has far

reaching influences. Also, it must be noted that, new technologies have a powerful influence on all aspects of our society, from commerce and business to health and entertainment. Obviously, the library is not an exception.

All the findings on the impact and use of ICT explain the inevitability of ICT in the acquisition and dissemination of information in the 21st century. It is important therefore, for libraries in the 21st century to adopt the technologies of the day. Another reason for the adoption of ICT in academic libraries is the increasing pressure on academic libraries to deliver information services to their clientele. In order to effectively meet up with the demand on the academic libraries, the collections must be in good shape. The traditional system of collection development are no longer sufficient in academic libraries, hence the need to integrate ICTs in collection development. In order to meet the needs of library users in a world governed by technology, academic libraries must adopt ICT in carrying out collection development.

Objectives of the study

The main objective of this research is to study the application of ICT in collection development with specific focus on the impacts and challenges of ICT use in academic libraries. The specific objectives are to:

1. Examine the various types of ICTs used in collection development in academic libraries
2. Identify the aspects collection development in academic libraries where ICTs are being used
3. Find out the impacts of ICT use on collection development in academic libraries
4. Identify the challenges of ICT use in collection development

Scope of the study

This study focuses on the application of ICT in collection development with regards to the impacts and challenges in Nigerian academic libraries. The professional and para-professional staff of the Covenant University library were used for the study. The ICTs studied include: computer, internet, printer, scanners, telephones etc.

Profile of Covenant University and Its Library

Covenant University is located in Ota, Ogun State, Nigeria. It was established in October, 2002. Presently, it has two colleges: College of Development Studies and College of Science and Technology. In addition to the traditional mission of Universities of teaching, research, and community service, Covenant University is also saddled with the mandate of raising new generation of leaders.

The Covenant University Library is popularly known as Centre for Learning Resources. It is fully automated and uses Millennium library software. The library has a collection of over 70, 000 volumes of books, 350 journal titles, and over 9 online databases which contain thousands of electronic journals and textbooks. It has a seating capacity of over 3,500.

Review of Literature

The library is the heart and life-line of any citadel of learning. The quality of teaching, learning and research is predicated on the robustness of the availability, accessibility and utilization of library and information resources. These information resources only get to the library through collection development. Therefore, the quality of the library depends on the quality of the collections. The objectives of the library determine the nature and range of collections the library will maintain. Ifidon and Ifidon (2007) observed that the objectives of the library serve as the major factors of determining the type of collections the library will acquire. These objectives are tailored to suit the present and future needs of the users of the library. The library as an agency responsible for the collection, organization and dissemination of information in various formats in the research institutes must ensure that the range of materials collected cover the information needs of the users. It is therefore instructive for libraries in the 21st century to stipulate objectives that reflect the reality of ICT in their collection development.

Law (1991) cited by Hunter and Day (2005), noted that collection development is a term that is used by the library community to refer to "the selection and acquisition of material for an expanding collection and decisions on the material to be included in that collection". Ifidon and Ifidon (2007) brought to the

fore, the basics of collection development in libraries. According to them, collection development is the systematic process of building a library's collection of information materials. Collection development is now viewed as being a part of the wider activity of collection management, which includes collection policy development, materials budget allocation, selection, collection analysis, collection use and user studies, training and organisation of collection development staff, preservation, and cooperative collection development (Hunter and Day (2005). It must be noted that scholarly use of information services has changed substantially in recent years. Research practices and teaching methods are shifting and evolving in ways that seem to vary by discipline. The availability of new network level services, such as digital content resources, a variety of new kinds of discovery tools, new services for information organization and use, and scholarly and pedagogical interaction and collaboration tools, have been the most important factors in motivating these changes (Guthrie and Housewright, 2011).

Traditional research practices relied on access to physical materials held in a library and locally implemented library-provided tools for discovery of these materials (e.g., books, journal articles, manuscripts). Today, there are numerous alternative avenues for information discovery, and libraries cannot afford to restrict its collections to the physical collections. This has led to a situation where libraries have to create access to information available online. The collection development of the library in the 21st century should therefore look beyond the acquisition of hard copies of books and journals to subscription to online databases such as HINARI, EBSCOHOST, DOAJ, OARE, JSTOR, AGORA, SCIEDIRECT, BIOONE etc. The emphasis in collection development should shifted from physical collections to access to variety of information sources. In this case a library may have few physical but with access to online databases; the library can still offer effective information services. According to Heidorn (2011) computers and telecommunications have revolutionized the methods for collecting, storing, analyzing, and disseminating information. It is therefore important that librarians in academic libraries look beyond the traditional systems of collection development. Odogua, Emerole and Egwin (2007) posited that with the application of ICT in collection development there will be less emphasis on expanding library space as emphasis will be on paperless or electronic information services.

Bearing in mind Raganathan's concept of every user his book, the library collections must reflect the current needs of the users. Alexander et al (2011) noted that changing patterns of faculty and student information needs prompt libraries to continually examine their library services. In view of this, as users needs are changing with the current realities of ICT, libraries all over the world have to revisit their collection development methods to reflect the integration of ICT in collection development in order to meet the ever rising current challenges of information provision. Whereas access in a print environment requires bringing the user and the book together physically in the same space at the same time, through the marvel of electronic access, the content may reside anywhere and the user needs only a reading device and telecommunication tool. This wider and flexible access provided by ICT has led to the increased demand for the application of ICT in collection development. Jones (2011) noted that a well planned ICT programme in collection development will result in a system that provides immediate patron-driven access to e-books. In addition, users will be able to find an e-book record in the library catalog as part of a standard search using their preferred search engine.

Jordan (2011) reported that in 2009, OCLC announced its strategy to build Web-scale services for libraries, the goal was to simultaneously lower the total cost of managing library collections while enhancing the library user's experience. Broadly, the benefits of this approach are: increased visibility and accessibility of collections for users, reduced duplication of effort from networked technical services and collection management, streamlined Work flows, and cooperative intelligence and improved service levels. It can be seen that with ICT in collection development the academic library would be able to create a wider access to information needed by researchers and students. Behera and Singh (2011) noted that ICT in collection development could result in many possibilities which include: (a) High compact storage; (b) Ease of reproduction, multiplication and manipulation and transmutation; (c) Contents can be very easily detached from its media Or container; (d) Ease of migration of contents from one medium to another; (e) Ease of transmission, communication and storage; (f) Hypertext and multimedia; (g) Seamless integration of print and electronic resources; (h) Sophisticated and multipronged searches through keywords, free text, Boolean operators, lass numbers and natural languages processing; (i) Wall-less libraries leading to the vision of multimedia global virtual library (MGVL) inaugurating an era of "Death

of distance"; and (j) Convergence of technology, which is getting more powerful each day.

With the use of ICT in collection development, academic libraries can now engage in effective cooperation and consortium building. Cryer and Grigg (2011) defined library consortia as associations that have been established to develop and implement resource sharing among participating members. Using ICT helps to make such cooperation very effective and this leads to a wider range of collections. Neal (2011) posited that cooperation is part of the professional DNA of libraries. According to Neal "from the conditions of knowledge scarcity over the centuries to the oppression of information and data over abundance in today's and tomorrow's library context, cooperation has been and will be a constant for service, success, and survival".

This much needed consortium building is only possible in a situation where ICT has been duly deployed.

The collection development process in academic libraries can only survive in the 21st century if the changes brought about by ICT are duly integrated. ICTs are not only used in the collection development process but used in managing the collections especially the online collections. It has been established that with an increasingly digital environment, abundance is replacing scarcity; digital ubiquity is replacing physical locality.

Though ICT has lots of advantages, it has been observed that constraints imposed by the physical, printed format are now being replaced by technological constraints such as software and hardware compatibility (Jones, 2011). The level to which ICT is put to use during collection development may largely depend on the librarians' expertise, perception and skills. Several researches have indentified various challenges to the effective use of ICT in library operations in Nigeria (Nwalo, 2000, Elisha, 2006, Ahiazu, 2006). Behera and Singh (2011) identified various challenges militating against the effective use of ICTs in collection development in academic libraries. These challenges include: lack of ICT skills, financial constraints, problem of coping with incessant upgrade etc. These challenges manifest at various degrees across different academic libraries. Despite all these challenges, ICT in collection development remains invaluable tool in competing favorably in the 21st century information management business.

Research Methods

Descriptive research design was used for this study. The study adopted a survey method in sampling and data collection. A survey is typically conducted to

determine the present status of a given phenomenon (Ifidon and Ifidon, 2007). Total enumeration technique was used to cover all the forty-five (45) professional and paraprofessional library staff at the Covenant university library, Ota, Nigeria.

The data collection instrument for this study is the questionnaire. The questionnaire was divided into five sections. Section A was designed to obtain demographic data of the respondents, Section B obtained data on the type of ICTs used in collection development, Section C obtained data on aspects of collection development where ICTs are currently being used, Section D obtained information on the impacts of ICTs in collection development while Section E obtained data on the challenges of ICT use in collection development. 45 copies of the questionnaire were administered to the respondents and 37 copies (82.2%) were retrieved and used for

analysis. The data collected was analyzed with the use of simple percentages and tables.

Data Analysis And Interpretation Of Results

The responses in Table 1 shows that spine labelling machine (78.6%), computers (76.7%) and printers (75.9%) are readily available for collection development at Covenant university library. The table also shows that the library possesses other ICTs such as internet facilities, telephone, scanners etc.

From table 2, it can be seen that the aspects of collection development where ICTs are mostly used include: ordering of books (78.3%), production of books-on-order (78.3%), checking publishers catalogues (75%), keeping acquisition records (65.2%) and online acquisition (62.5). Table 2 equally shows that ICTs are used in acquiring electronic journals, correspondence with suppliers and monitoring the progress of materials ordered.

TABLE 1: Percentages scores for ICT availability for collection development

S/No.	ICT	Readily available (%)	Available (%)	Not available (%)	Not readily available (%)
1.	Computers	76.7	23.3	0	0
2.	Internet Connectivity	69	31	0	0
3	Printers	75.9	24.1	0	3.4
4	Scanners	65.4	30.7	3.8	0
5	CD-ROM workstation	47.8	43.5	0	8.7
6	Telephone	50	43.3	3.3	3.3
7	Spine labelling machine	78.6	17.9	3.6	0

TABLE 2: Percentages scores for aspects of collection development where ICTs are used

S/N	Activity	Strongly agree (%)	Agree(%)	Disagree (%)	Strongly disagree (%)
1	Checking publishers catalogues	75	25	0	0
2	Bibliographic searching	50	50	0	0
3	Ordering	78.3	21.7	0	0
4	Productions of lists of books-on-order	78.3	21.7	0	0
5	Online acquisition	62.5	25	4.2	8.3
6	Electronic Journal subscription	56	36	8	0
7	Invoice clearing	53.3	40	6.6	0
8	Acquisition record keeping	65.2	30.4	4.3	0
9	Online payment	50	25	25	0
10	Correspondence with suppliers	54.2	45.8	0	0
11	Monitoring/tracking the progress of books on order	50	50	0	0

From Table 3, it can be seen that 71% of the respondents strongly agreed that ICT use in collection development results in acquisition of current materials, 72% of the respondents strongly agreed that ICT in collection development improves the quality of library services while 70.8% strongly agreed that ICT helps to eliminate delays in delivery of books. Also, 70% of the respondents strongly agreed that ICT saves time and another 70% believes that with the use of ICTs in collection development there will be quick delivery of information materials for rendering services to library users.

Table 4 shows that most of the respondents strongly disagreed with the items measuring challenges of ICT use in collection development. For example, 78.6% of the respondents strongly disagreed that they prefer manual system to ICT, 73.7% strongly disagreed that the poor funding of ICTs for collection development while 72% of the respondents strongly disagreed that there is a problem with access to ICT. However, table 4 shows that the problem of irregular power supply poses a great challenge to the use of ICT in collection development. 39.1% of the respondents agreed with this.

Table 3: Percentage scores for impacts of ICT in collection development

S/N	Variables	Strongly agree (%)	Agree(%)	Disagree (%)	Strongly disagree (%)
1	It saves time during collection development	70	30	0	0
2	Quick delivery of information materials	70	30	0	0
3	Better communication with vendors/publishers	69	31	0	0
4	Improves library services	72.4	27.6	0	0
5	Online subscription saves cost on transportation of hard copies	61.5	34.6	0	3.8
6	It eliminates delays in delivery	70.8	29.2	0	0
7	It improves my professional image	58.6	41.4	0	0
8	It helps me to develop new IT literacy skills	69	31	0	0
9	It results in acquisition of current information sources	71	25.8	3.2	0

Table 4: Percentages scores for challenges of ICT use in collection development

S/N	VARIABLES	Strongly disagree (%)	Disagree (%)	Agree (%)	Strongly agree (%)
1	I don't have adequate ICT skills to use the ICT	66.7	14.8	11.1	7.4
2	I prefer manual system of acquisition to the use of ICT	78.6	14.3	7.1	0
3	I don't have access to the ICT needed for collection development	72	16	8	4
4	I always encounter technical problems	56.5	21.7	13.0	8.7
5	There is problem of Internet connection	52.2	26.1	17.4	4.3
6	Some of the ICT are not available	60	28	8	4
7	There is problem of irregular power supply	43.5	13.0	39.1	4.3
8	There is problem of frequent computer breakdown	64	16	16	4
9	The funding of ICT for collection development is not adequate	73.7	26.3	0	5.3

Summary of Findings and Conclusion

From the study it was found that in Covenant university library:

1. ICTs are greatly available for collection development. Some of the ICTs readily available are computers, internet, printers, telephone, spine labelling machine etc. These ICTs are used for carrying out different aspects of collection development in the library.
2. ICTs are used in carrying out most collection development activities such as bibliographic checking, ordering, printing list of books on order, checking publishers catalogues, and correspondence with suppliers. Also ICTs were found to be used for acquiring e-materials, maintaining acquisition records and tracking of books on order.
3. The use of ICT in collection development has great impacts on the whole process. It was found that with ICT there is reduction in the time taken for acquisition, there is quick delivery of information materials, there is improvement in the quality of library services and it leads to acquisition of current materials.
4. Most of the challenges identified in literature such as poor funding, lack of skills, and problem of access were not found as challenges in Covenant University. This shows the level of seriousness the Covenant University library ascribed to the use of ICT in collection development. However, it was found that there is occasional problem with power supply which greatly affects the use of ICT in collection development.

The implication of the above findings is that if taken seriously, ICT in collection development can be the panacea for solving the problems bedevilling collection development in Nigerian academic libraries. According to Aiyebilehin (2008), these problems include: delay in delivery, foreign exchange problem, poor bibliographic control, transportation problems, attitude of suppliers etc. It can be seen from the findings of this study that, with the use of ICT in collection development, acquisition of library materials would no longer be a nightmare to librarians. Also, with the use of ICT in collection development it becomes easy for the librarians to build a high quality and quantity collection of standard information resources.

In conclusion, it must be noted that a beautiful library without a quality collection of information sources is nothing but a moribund and an ineffective information system, hence ICT in collection development in the 21st century academic library must be given utmost support by librarians. This is the only way librarians can retain a place of relevance in the challenging world of information services delivery.

Recommendations

It must be noted that for any academic library to survive the current demand for information in the 21st century it must aggressively integrate ICT into its operations. Collection development remains a crucial factor in determining the effectiveness of the library system because without information materials a library is not different from a town hall. With the increase in the production of information in sources other than the traditional book form, academic libraries must change the way they acquire information. It is therefore important for academics libraries to integrate ICT in collection development. The following recommendations have been suggested for consideration:

1. Academic libraries must have a proper plan for the acquisition and maintenance of ICT in the library
2. The funding of ICT in collection development in Nigerian academic libraries must be improved if the libraries are to participate effectively in the acquisition and dissemination of information sources in the 21st century
3. The librarians in Nigerian academic libraries should be given proper training in the use of ICT in collection development. It is not enough to acquire ICT in the library, proper training must be given to the librarians in charge of collection development in order to promote the use of ICTs
4. Nigerian academic libraries should maximize the use of online book stores such as amazon.com. Apart from the speed of acquisition and delivery, this helps to reduce the cost of materials acquired. It also result in the acquisition of up to date information materials
5. Nigerian academic libraries should provide supporting infrastructure for the use of ICT. For example, due to incessant power outages, it is important for the library management to make provision for a stand-by power generator.

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