EFFECT OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) ON COLLECTION DEVELOPMENT PROCESSES IN LIBRARIANSHIP

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Abstract
This paper examined the indispensability of Information and Communication Technology (ICT) applications as the major pivot and driven force upon which collection development processes can be enhanced in librarianship. Relevant literature which were germane to the study were searched. Information and Communication Technology (ICT) has no doubt changed the processes of librarianship globally. Advantages of automated collection development processes were highlighted. The study recommended that management of libraries should educate and train their staff on the use of Information and Communication Technology (ICT) and it relevance to collection development processes which can be done through attending seminars, workshops and conferences or even organising in-house ICT training for the staff. Libraries should also adopt the use of ICT applications in their operations such as collection development processes in order to meet up with the current global trends.

Keyword: Collection, Communication, Development, Information, Librarianship, Pivot, Processes, Technology.

Introduction

The application of information and communication technology (ICT) in the field of librarianship as revolutionized the entire processes of collection development from manual system to automated system. The transition had reflected greatly in Libraries and Information Centers. This

started in late 1980s and then got momentum in 1990s in developed countries. The developing countries are also slowly moving to the automated system. Automated Libraries had emerged as a leading edge technological solution to the persistent problems of enhancing access and expanding the dissemination of information. Subsequently, the rapid move to a automated environment had changed the taste and preferences of users. Non-availability of documents in print form, opportunities of accessing documents sitting at home forced the libraries to shift gradually from print to electronic medium.

Collection development is backbone to any library and information center, whether it is academic, public, or special library. Collection development is a systematic building of information resources in a library or information centre. Collection development in libraries is tilting towards electronic documents/information sources using network facilities. The trend of printed materials is decreasing and need for accessing electronic information resources is increasing slowly day by day and the concept of collection development which implies building, growing, dealing with selection and acquisition of library materials is changing towards collection management (Khademizadeh, 2012).

In the first decade of 21st century, the digital library environment is a perfect blend of internal resources (i.e. institutional resources) and external resources like those, which are having access rights from the publishers through subscription. In digital library environment, some resources are "born digital" and others are needed to be digitized through the process of conversion of printed materials using modern technology. The organization of digital materials is done using metadata like Dublin Core to provide seamless access to the users.

Methodology

This study adopted a theoretical approach utilising data gathered through the content analysis of secondary data such as journals, textbooks and Internet resources. The paper also presents evidence from literature of other related studies on collection development in the 21st century librarianship.

Conceptual Elucidation of Key Terms

The key terms that would be elucidated here include collection development processes, automated system, electronic acquisition system, online database and CD-ROM database.

The collection development processes include:

Selection: - This is a process of selecting relevant books and materials to be used in the library. The acquisition librarian handles the selection process. The selection tools are now online i.e. vendors list, publishers catalogue, reviews, bibliographies, online search of commercial free accessible websites of publishers such as Amazon.com, Google books.com, Global Books.com etc., to determine the current price of a particular material or book in question. Computers and internet now ease the selection process by enabling the librarian to select materials or books library intend to buy, right from his/her office. This routine does not involve any paper handling work.

Criteria for Selection of Library Materials include:

- Relevance to the curriculum and usefulness to the academic audience
- Timeliness and lasting value of content and format
- Reputation of the author, issuing body, and/or publisher
- Presentation and usability (style, clarity, intuitiveness, and organization)
- Aesthetic considerations: (1) literary, artistic, or social value; (2) appeal to the imagination, senses, or intellect
- Special features: (1) accuracy, usable index; (2) bibliography; (3) footnotes; (4) pictorial representations
- Physical and technical quality: (1) paper, typography, and binding; (2) stability; (3) compatibility with other library systems
- Suitability of content to format
- Strength of present holdings on the same or similar subject
- Frequency of document delivery requests for material on the same or similar subject
- Price/relative cost of material in relation to the budget and other available or needed material
- Inclusion in subject specific and standard library reviewing sources
- Holdings of other libraries in appropriate resource-sharing networks
- Where materials have a geographical focus, materials relating to Fort Wayne, Allen County, northeastern Indiana and the Midwest are preferred.
- Current publications have priority over retrospective buying

Order Placement: - This is a stated intention, either spoken or written, to engage a vendor or publisher to supply some specific library materials for the library. Order may be placed through e-mail, Fax, phone calls, the SLU Libraries' web site, campus mail, marked-up publishers' catalogs, Choice cards, etc.

Types of order

- Firm orders - Orders that are determined by name specifically. For example, a specific book, textbook, or journal that the library wants.

- Standing orders – Open orders for all titles that fit a particular category or subject. For example, these are usually developed for serials and the library knows that it will want anything published in that particular series. A benefit to this style of ordering is that it is automatic--the acquisitions department does not have to order the next in series.

- Approval plans – Similar to standing orders except they cover quite a few topic areas, are sent from the vendor, and the library is only charged for the specific titles that they accept into their collection. Under these circumstances the library is free to return anything it does not wish to add to its collections. A benefit to this

style of ordering is that the acquisitions department can sometimes make better decisions with the materials in hand versus an order form.

- Blanket orders – Largely a combination of both a firm order and an approval plan. Blanket orders are the library making a commitment to purchase all of something. For example, a library makes a contract with a certain publisher or vendor and will purchase everything that this publisher or vendor has available in regards to a topic. A benefit to this style of ordering is an automatic acquisition of materials for a particular field, which can be especially beneficial to specialized or academic libraries.

- Subscriptions – Generally utilized for journals, newspapers, or other serials that a library will acquire. Like standing and blanket orders, a library only has to develop a contract once with a vendor or publisher and the items are automatically delivered when printed. Subscription can also be done for e-resources to be available in the library database. Often, subscriptions are for a specific length of time and must be renewed at the end of the contract.

- Leases – Contracts that allow access to particular resources for a period of time. Leases are most commonly utilized with electronic resources such as databases, journals, and web-based materials. The library is paying for access to the material versus paying for ownership of the material.

- Gifts – In some cases libraries may allow gifts that people give to the library. It is the job of the acquisitions department to determine whether or not the gift will be kept and incorporated into the library's collection. This method is typically used by large academic institutions, and the persons giving the gifts are mostly alumni of that institution. A library's collection development policy usually states whether the library accepts gifts.

- Exchanges – Exchanges can be broken into two subcategories: exchange of unwanted duplicate/gift materials AND the exchange of new materials between libraries. Again, the institutions that usually have a process for this type of acquiring are larger academic or research libraries. This is also a process of consortia.

When placing an order, bibliographic information such as - author, title, publisher, date, cost, distributor (if different from the publisher), are needed to be included.

Delivery: - This is the carrying of library materials that have been bought down to the library premises in question.

Payment: - Having delivered the library materials**.** Payment can now be done through electronic fund transfer.

Processing: - Before items can be shelved and then circulated from the library, they need to be prepared. Library materials go through processing so that they can be located, used, and returned to the library from which they originated. Each item in the library must go through processing. Processing can either be done in-house (i.e. in the library) or purchased through a vendor. Processing can be a tedious, time consuming, and labour intensive procedure. In an effort to save time and money, many large libraries have centralized technical services or entered into cooperative agreements with other libraries. In large libraries or systems, the centralized processing unit can handle acquisitions, cataloguing, and preparation of materials for different libraries. All sizes and types of libraries have turned to outside vendors and have contracted processing services. Most book jobbers (i.e. companies that sell large volumes of books to libraries such as Baker and Taylor, Midwest, or Coutts) offer processing services. As well, there are now a number of companies that offer complete cataloguing and processing services (e.g. ISM).

In libraries with automated circulation systems, barcodes provide a unique accession number for an item. Remember that there are two types of barcode – Codabar and Code 39. In both barcodes there are unique information in the bar code for a particular item. In the Codabar, the eight digits following the first five, represented the item. In the Code 39 barcode, the last seven digits are unique to a particular item.

Barcode labels are either "smart" or "dumb". Smart barcodes are specific to an item. Each item in the collection is assigned a unique barcode number by the automated system, usually during the cataloguing or acquisitions process. During barcode label production, the computer program associates the appropriate call number and copy number with each barcode. When the barcode labels are printed, the call number and title of each item is include on the barcode label. The barcodes are usually printed in call number order for ease of application during processing.

Dumb barcode labels can be used on any item. The barcode number is not associated with a particular item prior to affixing it to the item. During processing, staff must electronically link the barcode number to the item record (catalogue record). The barcode label is then affixed to the item. Usually a dumb barcode label will have an eye-readable number printed below the barcode. The library may also choose to have the library name printed above the barcode as a means of identification. Smart or dumb barcode labels are put on materials in the following locations:

- Inside the front or back cover – this protects the barcode label from being damaged but adds a step at the circulation desk because the book has to be opened.
- On the front or back cover – this makes it easier to circulate the item because the book does not have to be opened but the label may be subject to damage from patron use.
- On both – this gives you more options but increases your processing costs.

Whatever location is chosen; it should be consistently used so that circulation staff do not have to look for the barcode when they are checking items out. Barcode labels are applied at different times during processing including:

- When they are received
- During cataloguing
- When the call number is being added

Libraries can either purchase barcode labels or create labels in-house using a laser printer. Purchased labels are usually photocomposed, a computer controlled graphic process which forms original images within photosensitive paper. Photocomposed labels are very durable and will handle the abrasion of repeated scanning very well. Laser printer produced labels are less durable because the barcode is printed only on the surface. Repeated scannings, dirt, abrasion and grease will damage the label and so it should be protected with a clear plastic label protector.

Storage: - Storage is a mechanism that enables a computer to retain data, either temporarily or permanently. Storage is a process through which digital data is saved within a data storage device by means of computing technology for future use. Library materials can either be digitizing or store on a storage device such as CDs, DVDs, Cloud object storage, Virtual tape devices, Hard disk, Magnetic tape, Flash memory (USB memory sticks) etc.

Retrieval:- Retrieval of information is the act of obtaining information resources relevant to an information need from a collection of information resources. The use of online bibliographies, catalogue, classification etc. now help the users to get the needed information with ease.

Electronic Acquisition System

Electronic acquisition system is a system of using electronic gadgets such as computer to acquire library materials the library intends to acquired. Electronic resources are those materials that require computer access through personal computer or mobile devises. These include: e-Books, e-journals, e-Reference Books/database, e-audio/visual resources, e-images, numerical and statistical databases, indexing and abstracting databases, etc. (IFLA 2012).

Online database

The most effective means of providing access and acquiring electronic books/journals in libraries is through subscription to online databases which can be accessed and acquired through the internet. Online databases are collection of electronic information sources such as e-journals, e-books etc. provided by publishers or vendors from various fields and disciplines (Afolabi, 2007). Some of these databases are provided free of charge to libraries in developing countries by their publishers or vendors. Some of these include NARI, http://www.healthinternetwork.org/scipub.php. AGORA: http://www.aginnternetwork.org/en/. Other require subscription fee such as emeral d database, http;//www.emeraldinsight.com and Blackwelsynergy: http://www.blackwell-synergy.com among others. Access to these databases provides researchers with thousands of scholarly articles in their field of specialization or research (Fatoki, 2004). For librarians The most effective way to provide access to electronic books/journals in libraries is through subscription to online databases which can be accessed through the internet. Online databases are a collection of electronic information sources (e-journals/e-books) by publishers to utilise the

growing range of electronic resources they must acquire and practice the skills necessary to exploit them (Okello-Obura 2010).

CD-ROM database

CD-ROM databases allow users to access relevant databases without robust Internet connectivity in libraries. It is therefore cost effective than online databases as information could be accessed off-line without paying for telecommunications fee (Afolabi, 2007). Besides, CD-ROM databases are of immense value over print if the system is networked, as patrons at their terminals could access information without coming to the library. The information revolution brought forth by advances in information and communication technology has enabled universities and colleges around the world to take advantage of these developments. New modes of teaching, learning and accessing information have emerged as a result of internet and World Wide Web (Darkwa et. al., 2007). CD-ROM databases are important tools for identifying the bibliographic details of potentially useful documents and ensure easy access to large volumes of literature for research.

Advantages of Automated Acquisition System Over Manual System

The advantages of automated acquisition system include:

- It helps to maintain up-to-date information/record of all activities involved in collection development;
- It affords cost effective monitoring capability to library management;
- It helps to reduce labour and paper-intensive work involved in manual process
- It helps to have effective and efficient control over ordering, claiming and cancellation functions;
- It provides more accurate, timely and complete records of orders, order status, fiscal data, vendors/suppliers directory and financial information;
- It helps to provide necessary management information reports, whenever they are required;
- It enables accommodation of increased workload;
- It enables the staff to have ability for generation of new services;
- It facilitates cooperation in terms of resources sharing among libraries.

These new trends would go a long way in providing good stead in the quest for quality and productivity of library and information sources (collection) and services. Whatever the form the collection development takes, still it requires policies that would govern the acquisition of both electronic resources and traditional forms of documents. Hence, there is a need for redefining a collection development policy on the following identified key issues.

Conclusion/Recommendation

The concept of collection development or acquisition management in the 21st century has been evolving to that of automated collection control or collection management. This concept involves the model of a process for selecting bibliographic materials to meet the needs, goal, objectives and priorities of a library. The use of ICT in collection development processes will no doubt bridge time and space, minimizes efforts and improve quality. Therefore, libraries should work

towards automating their system for quick and easy acquisition of library materials and to meet up with current global trends.

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