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Capacity Building for Sustainable Digital Information Services in 21st Century Administration of Academic Libraries in Nigeria

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Abstract

The paper is on capacity building for sustainable digital information services in 21st century administration of academic libraries in Nigeria. Capacity building is termed as the building or the development of organization's facilities, equipment, provisions, features, amenities, infrastructures and resources (human and physical) to foster growth and expansion. As such, capacity building needs to be introduced in the library which includes the professional building of human resources (professional library staff and other para-professional workers) and material resources. To achieve this goal, education and trainings on administration are given to the library staff for effective, efficient output and productivity. It can therefore be concluded that capacity building in academic libraries is very essential and crucial especially when considering the imperativeness of the services rendered by librarians for the general satisfaction of the intellectual quests of patron. The services must be rendered with ethics, principles and standard in order to maximize the output of the libraries. It can therefore be recommended that library staff should be trained and re-trained on administration for the benefit of delivering a well-rounded service in the library. Also, resources should also be provided for the both junior and senior library staff in academic libraries to sustain the network of policy fulfillment in the organization.

Keywords: Capacity Building, Digital Information Services, 21st Century Administration, Academic Libraries, Nigeria

Introduction

Capacity building is a term used to refer to the building or the development of organization's facilities, equipment, provisions, features, amenities, infrastructures and resources (human and physical) to foster growth and expansion. In library of the 21st century, information resources are both in print and non print. Printed and Non printed materials are physical and electronic stocks carefully selected and acquired to satisfy users' information needs.

It is no secret that academic library administration and management are feeling the pinch in the global economic meltdown. Hard decisions are being made about collections, space, and services. Yet academic administrators are not declaring libraries an anachronism. On the contrary, administrators see libraries as vibrant centers of learning. One intriguing attitude found among administrators was that they feel library directors should be more forceful advocates for their libraries, ready to provide evidence for funding that can be carried forward to the highest levels of the administration. Perhaps the final lesson one can take from hearing from administrators is that administrators look to librarians not just to make the case for libraries but to ride the wave of change. Libraries and librarians must step into new roles and take up different challenges, reimagining the ways they can be essential consultants in all the ways that students and faculty learn, discover, and share their work (Barbara, 2010).

With the explosion of information and the popularity of the internet, librarians have faced new challenges to look for new ways to meet the users' demands and expectations. The need to bring information to various users has encouraged the creation of many innovative services through linking new technology with traditional library information services (Chunli and Jinmin 2011). As such, capacity building needs to be introduced in the library which includes the professional building of human resources (professional library staff and other para-professional

workers) and material resources. To achieve this goal, education and trainings are given to the library staff for effective, efficient output and productivity. Thus, librarians and other supportive staff are equipped to render a profitable service to users who often find that most of the information they search for through the internet overlap or are irrelevant to what they want. They don't know how to choose the right one in the information sea, thus, it is the training of the librarians that give help to integrate the culture of library use into their system (Chunli and Jinmin 2011). It can be therefore discovered that capacity building can sustain digital information services rendered by librarians in libraries especially academic libraries.

Academic libraries have various kinds of policies as regard the use of their digital resources. The use of digital resources varies according to the level of the availability of the equipment, literacy skill (trainings) and competences, awareness and accessibility. But generally most university libraries operate according to the same pattern. Some libraries charge users on the use of internet others make it free. In the era of accessing Online Public Access Catalogue (OPAC) it is generally free in all academics libraries because it serves as the access to the library stocks or holdings. In order to solve the problem of digital information services, a new technology of push is put to use in library. Its aim is to transform service mode of 'users-look for-information' into' information-look for- users through the operations of the librarians'. Through this operation, information will be delivered to users timely. Users may get the new information issued from the website without visiting library every time (Chunli and Jinmin 2011).

Academic Libraries

Academic libraries are repository institution where information stocks are properly and systematically selected, acquired, organized, synthesized and disseminated. In academic libraries, users have diverse requests with the aim of being satisfied. Users come to the library to read, consult reference sources, ask for directory, loan materials and so on. No librarian can satisfy all these needs without being adequately trained and certified. Capacity building helps to update the library staff to be able to meet the users need adequately. No capacity building, no service! It can therefore be deduced that staff in the library need to be trained and re-trained for the purpose of supporting to realize the institution's objectives- teaching, learning and research.

Devi & Singh, (2004) in Nwabueze and Urhiewhu (2015) opined that the major function of libraries, irrespective of type, is to provide the right materials (resources in all formats) to meet the information needs of users. A university library aims at serving students and researchers at all levels, hence, librarians must be ready to acquire and make available necessary databases for teaching and research for the university communities. Rosenberg (2005) in Nwabueze and Urhiewhu (2015) noted that these services are made available frequently over the Internet so that users can access electronic materials remotely. This refers to e-services which most libraries are trying to embrace in the digital environment. Rosenberg further stated that as libraries embrace the digital environment, their most crucial role is not that of providing e-resources, but of establishing services that facilitate access to available information.

Administration: Overview

The administration of an organization, whether it is a business, a non-profit organization, or a government body includes the activities of setting the strategy of an organization and coordinating the efforts of its employees (or of volunteers) to accomplish its objectives through the application of available resources, such as financial, natural, technological, and human

resources. “Running a business” and “Changing a business” positively are two concepts that are used in management to differentiate between the continued delivery of goods or services and adapting of goods or services to meet the changing needs of customers. The term management may also refer to those people who manage an organization as managers

Larger organizations generally have three hierarchical levels of managers in a pyramid structure:

- Senior managers, such as members of a board of directors and a chief executive officer (CEO) or a president of an organization. They set the strategic goals of the organization and make decisions on how the overall organization will operate. Senior managers are generally executive-level professionals and provide direction to middle management, who directly or indirectly report to them.
- Middle managers: Examples of these would include branch managers, regional managers, department managers, and section managers, who provide direction to front-line managers. Middle managers communicate the strategic goals of senior management to the front-line managers.
- Lower managers, such as supervisors and front-line team leaders, oversee the work of regular employees (or volunteers, in some voluntary organizations) and provide direction on their work.

In smaller organizations, a manager may have a much wider scope and may perform several roles or even all of the roles commonly observed in a large organization (Wikipedia, 2021).

Digital Information Services

Academic libraries provide a number of services in digital form. Students, researchers and faculties always appreciate these services as they assist them in studies and research. The

increasing commitment for building-up network-enabled digitized collections in academic libraries has brought about the installation of fiber optics-based Campus –LAN connected to Mbps VSNL Radio Link enabling faster access to the Internet for the entire academic community. The availability of high-speed Internet connection has led to launching of a number of sponsored and non-sponsored project for building network –enabled digitized collections within the framework of virtual library and information services in academic libraries. The Library has adopted a multi-pronged strategy to embark upon the digital world (Bhattacharya, Siddiquee, Jha and Khan, n.d).

Users ICT skills are gotten from librarians' impartation of skill which determine to a considerable extent the rate at which the digital services are being explored. The use of these facilities such as computers, CD-ROM, internet, slides, digital multimedia, video / VCD machine etc involve various methods which include systematized feedback system, computer based operation / network, video conferencing and audio conferencing internet / worldwide websites and computers assisted instruction. However, students, staff and the librarians will not perform well if there is no official training (capacity building). The library professionals, as intermediaries, have to be trained, to cope with the knowledge explosion which is a result of information technology (IT) and high expectation of users (Edem, 2007).

Digital information services therefore can be described as the totality of e-services rendered to users. It involves the use of electronic mail to communicate users on the available library services and resources. It is amongst the most complex and advanced form of information services. It comes with unique challenges and opportunities because of many diverse equipment involving collaborative support, rapid access, highly interactive interfaces, digital document imaging, distributed database management, hypertext, information retrieval, enforcement of

intellectual property rights, integration of multimedia information services, management of multilingual collection, information mining, electronic reference service, electronic document delivery and selective dissemination of information. As such deployment of digital information services require integration of several information technologies (Bhattacharya, Siddiquee, Jha and Khan, n.d)

Administration of Digital Information Service (DIS) provides the following functions in academic libraries:

(i) Provide access to a very large information collection(s);

(ii) Support multi-media content;

(iii) Network accessible;

(iv) Provide user – friendly interface;

(v) Unique referencing of digital objects;

(vi) Enable 'links' representations to local/external objects (hypertext);

(vii) Support advised search and retrieval;

(viii) Information available for a very long time;

(ix) Also supports traditional library mission of collection development, organization, access and preservation of information;

(x) Support editing, publishing, annotation and integration of information;

(Bhattacharya, Siddiquee, Jha and Khan, n.d)

Promoting Capacity Building for Sustainable Digital Information Services

The organisation, preserving, collecting, maintaining and circulation of digital resources of knowledge involves managing and recruiting the staff members, managing fund and overall

functions of the library. For instance, from the career backgrounds of those who use virtual information desk, it is concluded that the students, teachers (professors) and researchers account for the majority, which means that the main target group of the virtual reference service users are those with teaching and researching needs, while less of industrial or entertaining needs use these services.

According to Enikanselu and Oyende (2009) in Efosa-Isibor (2018), capacity building can be promoted to sustain digital information services when the degree of both human and non-human resources of an organisation is strategically positioned. It is also the degree of complexity in a library whereby librarians, library officers, library assistants, porters, support staff, information resources and non-information resources are well placed in order to facilitate effective service delivery.

Challenges to Administration of Digital Information Services in Academic Library

The traditional hierarchical administrative structure in academic libraries is in internal conflict with its own culture and is ineffective in dealing with a rapidly changing environment. This structure must become a more balanced type, a proposal for which is made here, based upon the literature in organizational behavior and leadership (Honea 1997).

Ashiq, Rehman and Batool (n.d) opined that the purpose of this study was to explore the perceptions of academic library leaders of Pakistan about library leadership. Qualitative research design was used with phenomenology approach as the present study aims to investigate what library leaders commonly perceive to be challenges, fundamental difficulties and needed skills to be successful. Data were collected through in-depth interviews from 15 senior academic library leaders. Major challenges found were identity crises followed by communication issues,

financial constraints and administrative issues. The most challenging aspects of being an academic library leader were identified as trying to create awareness, lack of self-development culture and technological issues. The required leadership skills were communication, vision, social interaction, team building, organisational understanding and knowledge sharing. The findings of the study are helpful for current, young and future chief librarians to understand the challenges they may face and to develop the leadership skills needed to cope with these challenges. The study will also be helpful to academic institutions during their recruitment processes; professional associations for training purposes; and library schools for arranging and offering leadership courses.

(Ly 2014) expressed that community colleges are an overlooked segment of higher education and there is a wide gap in the library and information science literature on community college library administrative models, leadership, and librarianship practice. The importance of capacity building and need for continuous professional development for library and information science professionals in academic libraries is paramount. The changing dynamics in higher education, information and communication technologies and the shift in the learning landscape has led to more demands for skills and competencies of library and information professionals. The need for training is more urgent than before. If academic libraries are to remain relevant in the 21st Century, they need to constantly adapt and have administration of professional staff who are able to cope with such rapidly changing environments enabling them to deliver resources and services efficiently and effectively. There is therefore the need of the importance of capacitating staff in academic libraries (Tsekea, 2021).

Training was found to be the core element towards attaining capacity building. Other approaches found to enhance capacity building were mentoring, coaching and exchanges

(Mosala, 2000). However, there are challenges to digital information services in academic libraries. According to Bhattacharya, Siddiquee, Jha and Khan, (n.d) the challenges of Digital Information Services in the library are:

Protecting the intellectual property rights

A major administrative challenge is in complying with copyright and intellectual property rights issues. The library authorities, have to discuss seriously with publishers on this aspect in order to evolve some mechanism profitable to both users, publishers as well as authors. Users may be charged for each access, downloading from servers and/or each kind of digital library collection. This would provide revenue for publishers, authors and libraries; (ii) security aspect- security aspect is the most pressing challenge of digital information service. Piracy of database, viral invasion, parallel satellite networking stress are some of the issues of digital libraries that are confronted as a way of routine.(iii) Lack of Expertise- Not too many vendor/experts are available in the country and abroad as well. Overseas vendors charge too much and are also reluctant to import techniques/technology; (iv) Technophobe – In general, some people do, however, fear any upcoming technology. Individuals may have several reasons for not using the new technology.

Right Management and Access Control in Digital Library:

A true digital library not only requires an organized collection of online digitized contents, it also requires that the contents be accessed and distributed as widely as possible to legitimate users around the globe. Distribution does not mean just onsite access, it also means allowing access to authenticated members of the subscribing organization regardless of their physical location. Server- side software are now available that allows a server to be configured to distribute

information with or without right management. Most vendors of online digital contents supports password authentication to their products. Many others like ScienceDirect, IEEE, Link Information Services, AIP support IP address authentication as well as password support. However, a few have (i.e., Proquest Direct) adopted technologies that allow secure access to vendor's server from legitimate patrons who are not on an institutional LAN.

Bandwidth problem:

Digital libraries are multimedia products incorporating structured text, sound, graphics, pictures, photographs, video clips, etc. which require intensive use of bandwidth. The developing countries, as such have restrictions of bandwidth available to them. Moreover, the "last mile problem" that every user has in every country is much more intense in developing countries like Nigeria. Moreover, increased use of network for transferring data by more people would increase the load on network traffic. This is further compounded by the size transferred if it include full-text multimedia document. While simple text takes up only a small amount of space, pictures and graphics take up more, video and sound files are really space-hungry demanding much more space transmission time. Successful implementation of digital library would, therefore, require concerted movement to raise National Information Infrastructure (NII) in different countries for increased bandwidth, speed and accessibility to provide necessary inputs for growth and development of digital library. These high-speed transmission rates and increased bandwidth would accommodate image-rich, multimedia-based digital library of future. The combination of digital technology and national infrastructure would provide instant access to stored information that something was unthinkable just a few years ago.

Interoperability in Digital Information Services

Interoperability is a critical problem in the network environment with increase in number of diverse computer systems, software applications, information resources and users. It is particularly more important in a digital library implementation given the fact that digital conversion activities are distributed amongst libraries that held traditional print –based resources and the digitized information is to be made accessible universally. Collaboration amongst participants is, therefore necessary in order to adopt a framework for achieving suitable level of information sharing.

Preservation problems

Digital technologies present a preservation solution for the documents in the libraries with increased access to digitized documents over the electronic networks. However,digital technology as well as all other associated Internet and web technologies are in a continuous flux of change. New Standards and protocols are being defined on a regular basis for file formats, compression techniques, hardware components, network interfaces, storage media and devices etc. The digital librarian should be aware of constant threat of "techno-obsolescence" and transitory standards. Magnetic and optical discs as a physical media are reengineered to store more and more data. We are already witnessing phasing out of one of the most popular and wisely used optical storage media, i.e., CD ROMs. There is a constant threat to backward compatibility for the products that were used in the past. Digital images will have to be constantly migrated and be converted to new formats computing devices, storage media and software to ensure that valuable digital objects are not left behind in obsolete system which will eventually break down rendering data in accessible. The initial conversion of printed–text into

digital objects is not only expensive; it would also necessitate diversion of manpower and resources into constant re-invention of wheels in terms of migration of digital resources.

Conclusion and Recommendations

It can be concluded that capacity building in academic libraries is very essential and crucial especially when considering the imperativeness of the services rendered by librarian for the general satisfaction of the intellectual quests of patron. The services must be administered and rendered with ethics, principles and standard in order to maximize the output of the libraries.

It can therefore be recommended that library staff should be trained and re-trained for the benefit of delivering a well-rounded service in the library. Also, resources should also be provided for the both junior and senior library staff in academic libraries to sustain the network of policy in the organization.

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