

## The Changing Budgetary Emphasis of University Libraries in the Online Technologies Era

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### Abstract

This paper surveys the changing pattern of budgetary emphasis in university libraries in the era of electronic services. Drawing from the contingency theory, the findings indicate that there has been, in the last few years, a fast shift in the contents of university libraries holdings. The paper affirms that emphasis has greatly shifted from hard-wares in the form of books to electronic holdings and carry with it remarkable budgetary implications. The data collection methods combined primary and secondary sources. The primary source is made up of qualitative study of two universities in Ghana and Nigeria. The secondary source includes literature reviews from publications by other experts. The paper supports the view that the use of online platforms has yielded to less spending for greater service quality to the library users. The paper recommends more strategic investments in library holdings through wider linkage with online library service providers in a manner that ensures increasing service quality to all categories of library users. The universities and library managements should ensure that the accompanying IT hard- and soft- wares are adequately provided for in the budget. The paper will help universities and library managements understand and respond appropriately to the changing needs of the environment.

**Key words:** budgetary emphasis; Online services; Strategic investments; Library managements; Service providers; Electronic holding

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### 1. INTRODUCTION

Budgeting and the budgetary processes are very crucial in universities funds management. It is the responsibility of every department head to ensure that during the budgeting process adequate attention is paid to the needs of their various domains. Since most organizations including universities plan their budgets annually in advance, this means that an overlook of the important budget items in one period could mean that such items would have to wait for another one long year. This informs the importance every departmental head attaches to the budgetary activity.

A budget is a statement of intention of the financial sources and applications for a given entity in a given period. Budgeting is a practical way of setting up plans and direction for an organized unit. How an entity maps available financial resources to commitments defines the strategy of implementation to achieve the goals of that establishment. This makes budgeting a crucial process in the effective administration of an organization, the library inclusive.

Every university library is in the continuous business of acquiring new publications to make current its holdings as well as discounting the outdated issues to give the library users higher value for money. Within the last decade, there has been a rapid move away from hard-wares, with e-library replacing the former large volumes in print. The input of this budget wise is enormous in relation to the university's total budget (Ma and Zhang 1999). It is now common place to see less and less book shelves in libraries while more computers are sprouting

the decks. This is a response the IT revolution has mandated on every modern library management which calls for a sustained budgetary commitment.

Two important questions are addressed in this paper: 1) how has the budgetary pattern of university libraries been affected by the new quest for e-library services? and, 2) what positive or negative consequences has greater emphasis on e-library holdings brought to the management and users of the university libraries?

The disappearing shelves and books are speedily being replaced with computers and servers that connect wider communities and a host of services of better quality and content than was the case a few years back. The two case study institutions: Babcock University in Nigeria and Valley View University in Ghana have to a reasonable extent embraced the IT revolution. Today, the two university libraries cater for wide categories of clients made possible by subscribing to a host of on-line service providers.

The National Universities Commission in Nigeria requires statutorily that a minimum of 10% of each university's recurrent expenditure should go to the library budget. This allocation was required to cover cost of holdings, personnel costs and other library overheads, but excludes capital infrastructure. Outside the first year of acquisition of the electronic platform, the institutions would be experiencing less and less commitments with electronic holdings renewal costs assuming a predictable fixed charge. However, taking the e-services to the level of maximum benefit of users who begin to look forward to one-stop shop delivery is one that could initially come with huge financial costs.

### 1.1 Objectives of the Study

This study is intended to determine the general level of change in the library budget pattern as a result of growing emphasis on electronic resources rather than hardware holdings. Therefore, the subordinate objectives of this study include:

- 1) To determine to what extent library budgetary pattern has changed in favor of electronic holdings.
- 2) To assess the impact of the shift on the skills requirement of the library staff
- 3) To ascertain the willingness of users to accept the changing phases of library budgetary pattern
- 4) To determine how the new budgetary pattern has encouraged linkage with other world libraries in the Diaspora.
- 5) To verify how much the changing budget pattern has affected the quality of service delivery of the libraries.

### 1.2 Scope of the Study

The study will be limited to qualitative review of the budgetary changes that the shift in emphasis from manual

processes to online services in form of e-library has brought about. Babcock University and Valley View University will be the case studies. However, the findings from these limited sources will be generalized for all other universities in Africa.

## 2. LITERATURE REVIEW/THEORITICAL FRAMEWORK

The literature focuses on four sub-headings as follows: budgeting and budgeting process; Traditional Roles of University (Academic) Libraries; E-library management challenge and the Contingency Theory.

### 2.1 Budgeting and Budgeting Process

In organizations, plans are driven through the instrumentality of budgets. A budget is a financial statement with a futuristic dimension – an expression of financial vision of things to accomplish in a given time frame. A “budget helps to aid the planning of actual operations by forcing managers to consider how the conditions might change and what steps should be taken now and by encouraging managers to consider problems before they arise” (<http://en.wikipedia.org/wiki/Budget>). The budgeting process encompasses the whole communication and action processes that lead to setting out a direction for the organization through thoughtful financial projections which may include how money is to be earned and how what is available may be applied to achieve set goals.

In large organizations, budgeting is a complex process that begins with an invitation for inputs from the finance office to the various stakeholders. The stakeholders prepare and defend their unit budgets in their subsections and forward the approved document to the finance office where the master budget is drawn up and presented to the overall controlling body for implementation. By definition, the budget is future dimensional as the documentation comes ahead of implementation for a fair period of time. Budgeting for the university library is not an isolated exercise; it comes along with the university's main budget process. The chief librarian receives the budget circular from the finance office early enough and submits agreed inputs along with all other unit heads.

Many libraries pass for both revenue and cost centres. Revenue centres earn income for the organization. Some cost centres earn no income but incur costs as an inevitable stage of rendering services to the various arms of the organization. University libraries qualify for both cost and revenue centres. The aim is to render quality services to as many users as possible and in the process earn some income and incur some costs. Such costs include personnel costs, stationery costs, subscriptions to internet and other service providers and other general overheads. It will, however, be an appropriate claim that

most university libraries perform woefully in the area of marketing their services which results in very poor revenue generation strength.

Suggesting commercialization of library services, Adeyoyin (2006) recommends raising funds for libraries through bequests, endowments, and trusts in addition to the other internally generated means. However, considering the low giving culture in Africa, one wonders how much success that would emanate from these suggested sources.

In Nigeria, the National Universities Commission's (NUC's) directive is that every university in the country should dedicate 10% of its total recurrent expenditure to the library outside of personnel costs. This has brought appropriate attention to this important arm of the university, making it emphatic that university budget officers mandatorily provide a fair sum for the running of the library. However, embracing IT at the instance of the directive of NUC ought not to be. As Drucker (1955) points out, finding the best solution should be predicated on passing four tests, namely: the risk, economy of effort, timing and limitation of resources. The implication of this is that embracing IT should not be such a mindless action that any library management should embark upon. Suffice to say then that budget provision alone needs not be the sole determinant of whether to embrace electronic environment or not. The issues of critical importance should include Drucker's four points test listed above. How has the arrival of the information technology age affected the kind of budgetary provisions made for the libraries at various universities in Africa? An important note flows from the argument of Dala, et al (2007) that the e-library age will change the image of the library, motivate staff and help management to achieve greater results by the efficient organization of the human and material resources. Engaging IT should be appropriately planned and carefully executed with eyes on the funding ability.

## **2.2 Traditional Roles of University (Academic) Libraries**

The university library easily passes as the heart of the university, the central organ that requires adequate financial support (University Grants Committee, 1976). The library has also been described as: "a designated building where information in prints and other formats are collected, organized, carefully prepared according to some specific or definite plan, and made accessible for reading and consultation by all ages and interest" (Dala, et al., 2010:54; Ode and Omokaro, 2007). University libraries serve the teaching and research needs of students and staff (Hoare (1997; Abubakar 2011). Before the electronic age, libraries provided materials in reserve as actual books or as photocopies of appropriate journal articles (Aina, 2011). The library contains books, journals, materials and a great deal of intellectual depositories that constitute

reference bank for researchers and students.

Libraries provide a bouquet range of services to users ranging from reading space, book loans, reference materials, to research convenient environment for students and professors. Eze, et al (2010) affirms that access to knowledge through libraries is essential for the functioning of a healthy and democratic society. Perhaps most succinct is Adebowale's (2010:125) commentary that "library provides a conducive atmosphere for self-education and self-development of individuals and public in general". It is said that "academic institutions are subscribing to electronic journal databases, providing research and scholarly writing software, and usually provide computer workstations or computer labs for students to access journals, library search databases and portals, institutional electronic resources, internet access, and course- or task-related software (i.e. word processing and spreadsheet software). They are increasingly acting as an electronic repository for institutional scholarly research and academic knowledge, such as the collection and curing of digital copies of students' theses and dissertations" (<http://en.wikipedia.org/wiki/library>. Retrieved 4/24/2012).

Experts assert that the libraries face challenges ranging from lack of appropriate priority, poor awareness, insufficient skilled staff, limited stock collection, poor location, inadequate basic equipment such as computers, printers and copiers. Often, the library budget is given a subsidiary place after other recurrent needs of the institution with the result that the allocation for provision of basic infrastructure is perennially short (Ogundipe, 2005; Aina, 2011; Oji, 2010).

Perhaps no challenge has impacted on the ability of libraries to do their jobs more than the issue of scarcity of adequate books for libraries locally, inadequate funding, shortage of foreign exchange, mutilation and stealing of library materials, poor integration of libraries services in planning, lack of library automation, poor maintenance culture and the lack of clear mission statement (Nwalo, 2000; Aina, 2011). It is on the hills of these mammoth challenges that the electronic revolution began, defining the certainty of greater challenges for all libraries which had to embrace the new age and change or diminish in relevance with time. This view point dovetails from Anunobi's, et al (2010) affirmation that "a university is adjudged high class when it can provide adequate information materials especially current serials". The authors' work concluded that many university libraries were not able to provide their communities adequate serials and lacked appropriate internet access for obtaining available online serials. Agboola (2000) agrees with the above and identifies the economic downturn in the last two decades as having had a negative effect on the quantitative and qualitative growth of the university libraries in terms of stock and services.

### 2.3 The E-library Management Challenge

About a decade ago the greatest challenge for library managements in Africa was getting the right volume of books and finding the qualified hands to run the organization. The IT revolution has added another critical, but welcome challenge to the pack: the e-resources challenge. Agboola (2000) avows that serious application of IT to library processes started in Nigerian university libraries in the early 1990s. Omekwu (2003) quotes the School of Information Studies at Syracuse University (2002) as having observed that “Technological advances have redefined the information environment in ways that pose technical, intellectual and ethical challenge to the library profession, including the nature of preservation and archiving, issues of information access, intellectual property and fair use. The library profession is evolving, redefining itself to meet the challenges of the changing environment.” Finding adequate financial resources to meet these new IT challenges is part of the emerging critical directions facing the modern university librarian.

The report of NetLibrary survey which reports that 93% of undergraduate students claimed finding information online makes more sense to them than going to the library. Another 75% claimed that they had no time to go to the library and preferred the convenience of the internet (<http://en.wikipedia.org/wiki/library>. Retrieved 4/24/2012). The big question in the minds of most library managers today is how to give the widest effective service to the broad range of users many of whom claim not to have time to visit the library in the traditional way. Situating Onuoha’s (2010:8) definition of service effectiveness as “the provision of current, timely, and accurate information resources in diverse formats, ease of access to library materials, provision of conducive study and research environment, provision of modern equipment to aid research, the competence and attitude of library staff in assisting users during service delivery, etc.”, the on-line service technology, despite the challenge of funds and technical manpower, readily fills this gap.

The e-library revolution is one that permits of using different networks at a fair price to create important access for users such that from a single local library; a user is able to obtain materials many kilometers away in other libraries of the world which are connected through the World Wide Web (WWW) in a seamless electronic environment (Omekwu, 2003). This may be likened to a household shopping trip to the supermarket where a single trip does it all. This revolution has immensely dwarfed the limitation of dearth of books on the shelves when all depended on physical access of books and materials in print in a physical environment. To put it differently Adebowale (2010:124) says, “The dawn of the electronic age has occasioned the call for the demise of the school librarian. ‘Why should we have school libraries when everything will be available on-line?’” While

Adebowale might sound extremist, Farmer (1995) and Simpson (1997) agree that the new age demands a change from the way libraries were organized and run to source and put information resources into the hands of the end users where they need it.

Orenstein (n.d.) affirms that the role of the academic librarian in the information age is to promote access to appropriate and accurate information to serve the needs of users. He concludes that the information age has made this mission a complex one, demanding new technical skills from the library staff.

A good example is the huge investment in e-resources at University of California library system with a reduced patronage of the traditional resources by 54% and the case of 1999 – 2000 where ARL libraries spent almost \$100 million on electronic resources (<http://en.wikipedia.org/wiki/library>. Retrieved 4/24/2012). These support the view of increasing shift from traditional to electronic holdings in academic and public libraries.

The IT environment of the library operates with a network of computers and a battery of technically sound, computer literate, library staff whose jobs focus more on providing guidance to the library users. There is literature evidence that the emerging e-libraries require less physical hands for co-ordination than the former manual system that depended on human hands to catalogue, shelve and retrieve the books from the shelves. The IT challenge comes with cost savings in two fronts: personnel costs and reduced cost per unit of services offered. Although the initial set up costs may be high, the advantage it offers in speed, quality of service and lower long-term per unit operating costs far outweighs the set up cost burden.

### 2.4 The Contingency Theory and Change Management

From great management thinkers like Drucker (1955) the field of management is credited with such critical knowledge that change is constant. In every field of endeavour new thoughts, novel ideas and directions are fast replacing the old. Every change seems to bring with it something of greater advantage to the beneficiaries and systems. The contingency theory made popular by some management giants like Frederick Taylor, Henry Fayol, etc. provide the framework to enable explanation for the ways of response of managers to situations in the course of managerial decision making. The crux of the theory is that managers respond with solutions that meet the circumstances of their managerial environment. This suggests that there is no single response to the issues; there are just set of answers to environmental developments as satisfactorily resolves the problems and situations at hand. Some of the answers may be spontaneous and that is the distinguishing mark of the situational manager. Eze, et al (2010) agree that such responses call for training and retraining of staff for the new required competences; adoption of new policies and programmes, and even the

acquisition of new equipment as the old is discarded.

The import of the contingency theory to the present topic connotes that library management would respond to its budgetary needs according to the impositions of the times in which the entities operate. Given that today's environments engage Information Technology for solutions to most of life's businesses, library managements would be too backward to budget and manage in the same ways they did many decades ago.

Organizations that favourably respond to their environmental demands are seen as progressive. Their counterparts which do not are considered backward and easily associated with uncompetitiveness. No wonder then most of today's libraries which have embraced online services are considered effective. But the reason some libraries are slow in adopting the new technologies despite the broadly identified benefits of improved and quality services to their clients may probably only be the result of the huge initial set up cost required to convert from manual to electronic services delivery system. The conclusion, therefore, is that the rate at which the library management could respond to the new developments in its system of operation would be contingent on the management's perception of the new demands in the community and the budgetary provisions available to meet them.

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### 3. METHODOLOGY

The data collection combines primary and secondary sources. The primary sources are in form of qualitative data through interviews of five librarians from each of Babcock University, Nigeria and Value View University in Ghana. The interviews were recorded in tapes and later transcribed. These were then analysed in sub-themes using objective inferences. The secondary sources include peer-reviewed literature from published articles by experts in the subject.

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### 4. FINDINGS

#### 4.1 Evidence of Shift in Budgetary Emphasis

There is a consensus of perception among the interviewees that there has been a large shift in emphasis on the budgetary provision engaged by university libraries in Africa. The traditional holdings in books and journals have given room for e-resources-based library services in most university libraries in Africa. There is a corresponding fast growing demand by library users for electronic resources than for the traditional library resources such as books and print journals. Interviewee X had this to say: "Investment in books and other printed materials surpasses that of IT. However, investment in IT has gone up. One good thing about IT is that certain equipment is bought and they would be used for years

before they are replaced." In another place, the budget had actually gone up over 20% because of the extension of IT services within the library. The consensus report is that the inclusion of on-line library services does not necessarily result in higher costs.

#### 4.2 Personnel Quality Revolution

The training of librarians is fast incorporating IT skills at the chore and more and more library managements are showing positive acceptance of the emerging e-environment. Both universities studied have evidence of long list of personnel who have been sent to compulsory skill acquisition. That way, interviewees admit that the quality of librarianship has become much better today than 10 years ago when all services were directly delivered in the traditional fashion.

#### 4.3 Content and Greater Service Diversity

The two universities in Ghana and Nigeria show proof that the introduction of electronic services has given room for not only greater service diversity, but also greater service content for a wider clients' base using a number of personnel. The introduction of online services has meant that many library users can obtain lots of data in one visit than when things happened in the traditional fashion. The level of library services transformation now encourages self-service with the librarians acting more as less needed guides to the various categories of library users.

#### 4.4 International Linkage and Expansion of Holdings

The e-environment of librarianship promotes international linkages which narrows the limitation of inadequate holdings as one library connected to a number of online services is able to increase the access available to users by the number of holdings in the networks to which the local library is connected. The librarians interviewed cited upwards of ten online journals to which their libraries were subscribed. This has drastically reduced the need for investment in prints. Also, access to journals published far away from the local communities has become a reality making it possible that less is spent every year to stock books in shelves.

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### 5. DISCUSSION OF FINDINGS

About a decade ago, libraries boasted about the number of volumes of book and journals in their holding as a proof of superiority over others. Today, that state of affairs has completely changed with attention now shifting to the number of e-resources that the library can offer. These e-holdings are in the forms of linkages with other libraries and on-line networks to which the local library is subscribed. The e-resources provide room for the local library to offer its users services that may be remote to the focal community.

As the shift from hard-wares grows, the incidental

product of that is the associated increasing emphasis in the retraining of librarians. Today, the syllabi of libraries emphasize IT knowledge above others. It is obvious today that any librarian without computer knowledge is no better than a farmer without farm implements. As the libraries move up to the e-holdings age, the very staff that would manage and monitor the offerings need to be equally upgraded to direct the new environment.

Today the offerings of the libraries have improved in content and diversity as more room is now available to serve clients from multi-service points. Distance is increasingly making less impact on the ability of users to reach resources many thousands of miles away from where the service is received.

The emerging new budget emphasis means that there is a growing global real-time inter-link among the libraries of the world. This has given immense advantage to the smaller libraries which are able, by a simple subscription and properly directed budgeting, to provide large network of access to their local clients. Very pronounced also is, by and large, the advantage of lower cost per unit of the fixed pass-on service charges per annum to meet the needs of a large variety of clients. This is a patriotic reason for every library management to take the use of adequate budgetary provision very seriously. Also important of mention for its budgetary impact is the declining need to staff each unit of the library as was hitherto the case, with personnel who would otherwise be remunerated financially in annual increasing proportions.

The shift in budgetary direction is also indirectly encouraging users to become IT literate. The new e-library age requires that users of the services are able to make use of the computers and surf the web with little guidance. While this lifts the quality of service delivery of the library higher, it as well challenges the users to improve their own knowledge of use of the infrastructure to be able to get the best from it. This is a case of mutual advantage for both the library and the users equally.

The fast growing development of e-environment of the libraries, more than ever before, encourages international linkages; this has greatly narrowed the limitation previously imposed by inadequate holdings in books and journals. As the libraries are fast connecting to many online hosts, this gives a tremendous boost to access of a great degree to users. A user who subscribes to one local library, which itself is connected to several other networks of libraries, is already in the reception of the services of those other remote networks where the physical presence of the user would not reach. No longer are the libraries holdings limited by the number of volumes stalked in the shelves. A user now has access to as many libraries as the focal library has links with. Suffice to say that the user who is subscribed to one library could connect to the internet anywhere and benefit from the on-line advantages just like those physically present within the library.

## 6. CONCLUSION AND RECOMMENDATION

The paper has looked at the changing emphasis on libraries budgets and how the pattern has emerged to support e-service delivery. The available literatures support the view that the existence of online services has made it possible for libraries to network over unlimited distances and by that wise, bring down the cost of service delivery by some great degree. The paper also concludes that the new budget direction has compelled improved quality of service delivery and self development for the users of the services of the libraries that have to acquire a degree of IT knowledge to benefit maximally from the offerings of the libraries.

The findings and conclusion of the literature reviews lead to the following recommendations:

- Library managements should make a conscious environmental scan to understand the online needs of the library users and strategically deploy budgets to meet those needs. Transmuting to e-environment should be intentionally planned for and executed.
- E-library environments demand special computer literacy skills to manage efficiently. Library managements should aim at putting the qualified manpower in place to drive this direction. This can be achieved through training and retraining of the existing staff. Perception of users will positively or negatively impact on the sustainability of the e-services, hence, ensuring that well trained hands are available to guide the users of the services is a critical challenge the library management must confront.
- The management should ensure that supporting infrastructures are in place to deliver the on-line services in a reliable and satisfactory manner. This includes provision of continuous electricity supply, installation of appropriate servers and acquisition of expansive internet bandwidth.
- Library managements should ensure that subscriptions to the internet services providers and other on-line networks are made promptly to guard against service disruptions. Disconnections take a while to re-establish. Proactive management will ensure that disruption of services due to disconnections for the reason of none payment of subscriptions do not arise.
- University library managements should develop service delivery manuals that will provide information on the various services available as guide to users. This will also encourage users to engage in a self-service way, and reduce the consultation hours that users demand from the library personnel.

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