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Innovation In Academic Libraries In The 21st Century: **A Nigerian Perspective**

Comfort Baliyat Basahuwa

e-mail: basahuwacomfort @yahoo.co.uk

Department of Information Resources Management College of Postgraduate Studies, Babcock University, Ilisan-Remo, Ogun State

Abstract

The academic health, intellectual vitality and effectiveness of any university depend largely upon the state of health and excellence of its library which is its lifeblood. As such, this paper shall attempt to address areas of importance for innovation of academic libraries in the 21st century in a Nigerian perspective. Also identified are the challenges hindering their progress and ways are highlighted. Innovation drivers are also identified and recommended as strategies can propel Nigerian academic libraries into being a respective player in the information age.

Keywords: Academic Libraries, 21st Century, Innovation, Nigeria

1.1 Introduction

Innovation is an important concept in today's academic libraries especially in the light of libraries' ongoing evolution from acquiring books, journals and serials in print to providing access electronically, thus moving towards virtual library and changing the scope of the library. Few organizations can remain static in this information age which is characterized by rapid change in social, economic and political influences, but academic libraries must change in order to create a range of services. This is unthinkable in the 20th century, but mandatory in the 21st century, if they are to provide relevant and adequate information to their user community with the value added service needed. The academic library serves two complementary purposes; which are to support the school's curriculum and the teaching, learning and research of the university faculty and studies. Therefore, their role in the institution cannot be overemphasized, as such there is the need for academic libraries in Nigeria to move with the current trend in the society to enable it maintain its status by adapting the innovation drivers strategies to introduce new ideas, methods process of doing new things in the library so as to measure up with their contemporaries in the developed countries and meet the needs of their user environment.

1.2 Purpose of the Study

The main aim of this paper is to look into the place of academic libraries in the 21st century, focusing on the Nigerian perspective, its present state, factors militating against their progress and strategies to propel library services to measure up to the needs of its users' community in the 21st century. And to contribute to other studies made on innovation in Nigerian academic libraries.

2.1 Literature Review

2.2 Conceptualizing the 21st Century

The 21st century is an era of information explosion output and information sources. It is the millennium of information. This era is known as the beginning of knowledge age. As a result of the information age development it has come up with new patterns of work and new business practices. While new kinds of work with new and different skills are required. This century has changed the meaning of knowledge, it is no longer what is stored in the minds of experts or represented in books and classified in disciplines. Knowledge is now viewed as being like a form of energy, as a system of networks and flows or something that does make things happens. In the knowledge age, change not stability is a given preference. Knowledge age workers need to be able to locate, access and presents new information quickly. They need to communicate this to others. They need to be adaptable, creative and innovative and be able to understand things as a system or big picture level. In the 21st century academic library the emergence of information and communication technology (ICT) has redefined the library's role.

Print materials are no longer sufficient to store information. CD-ROMs, databases, electronic documents delivery, automated cataloguing, circulation systems and Online Public Access Catalogues (OPAC) have become the order of the day. This century has also witnessed a dramatic change in users' information seeking pattern.

2.3 Conceptualizing Academic Libraries

Academic libraries according to Akpohonor (2005) "are libraries attached to tertiary institutions such as universities, polytechnics and colleges of education, colleges of agriculture, colleges of technology and also research institutes". "Academic

library", as put by Yusuf and Iwu (2010), "is the nerve centre or the hub around which scholarship revolves. It is an indispensable instrument for intellectual development, being a slave house of information to which user (students as well as lectures) may turn to for accessing information". The library has a unique position as a potential educational force in the university community of staff and students of different levels especially in this era of information communication technology which can facilitate the libraries capability to reach out to direct users as well as remote access users.

2.3 Definitional Concept of Innovation

The term innovation has been variously defined. The Oxford Advanced Learners Dictionary of Current English (2014) defines innovation as "Introducing new things". Merriam Webster's Advanced Learner's English Dictionary, (2015) defines innovation as "a new idea, device, or method or the act or process of introducing new ideas, devices or method". Based on these definitions, it is obvious that innovation is something new and is in everyday language used in this broad meaning.

2.4 Types of Innovation

Types of innovation are briefly described as follows:

- i. Product/service innovation introducing new goods or services that are new or services that are substantially improved. This could include improvement in functional use, convenience or technical capabilities.
- ii. Process innovation the implementation of new or significantly improved production or delivery methods.
- *Business method innovation* changing the way business is done.

- iv. Organizational innovation creating or business structures, practices and models
- v. Marketing innovation developing alternative marketing techniques to deliver improvements in price, position, packaging, products designs or promotion.
- vi. Supply chain innovation improving the way that materials are sourced from supplies or improving methods of products delivery to customers.
- vii. Financial innovation bring together basic concepts. This might include

credit, risk sharing, ownership or liquidity to produce new financial service, products or ways of managing business operations.

The common link between each of these is an improvement in efficiency, productivity, quality and/or competitive positioning of the organization.

2.5 Innovation Drivers

There are four main factors that create the need for innovation such as, Technological advances, changing customers and needs, intensified competition and changing business environment.

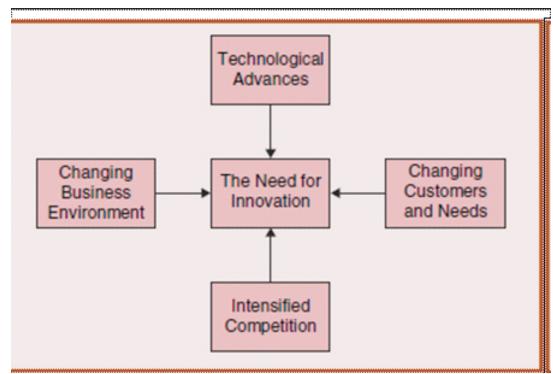


Figure 1.1 Drivers of the Need for Innovation (modified from Sheth and Ram 1987)

i. Technological advances

New educational models are being implemented which adopt changing models of teaching and learning. Students are offered more freedom in choosing the time, location and manner of their learning. Digital technologies, and especially the World Wide

Web (WWW), has made it possible for students to access library and information resources at anytime of the day or night from their homes, work-places and community libraries (providing adequate communications and computing infrastructure available). Students can pursue courses from the Web in

formal or informal discussion/tutorial groups, contact their lecturers, seek information, etc. Through these developments, academic libraries are at the cusp of a great revolutionary fault line as we move to truly open learning. These signs are that shift will change parent organization and academic libraries even more profoundly than the dramatic changes we have seen in the global banking industry, which many people can access their funds 24 hours a day, almost anywhere in the world. At the same time users have access to information in ways that were restricted to professionals until recently, for the library users the library is no longer "the only place" to find information. Internet enabled the retrieved of information that was reserved for "Librarians" for a long time.

ii. Changing customers and needs

This is changing characteristics and requirement of customers. To satisfy a user needs, new forms of users' instruction on support are necessary. As a result of change of tasks in academic libraries, the list of users demand has to change also in order to meet user needs. Classic tasks like, collection building, cataloguing and indexing change and get another interpretation. Libraries are changing somewhere on the continuum from the "paper library" to the "virtual library" in order to fulfill the new mission of academic libraries successfully. It is necessary that emphasis is given on (new) functions and skills like, defining users' needs, development of new products and services, users' help, information analysis (quality control) and marketing of information products. Instructive and communicative skills and other ways of domain knowledge are important factors in this development. It is important that new development in ICT skills are adapted and integrated in the relevant levels of the library. Academic libraries are in a process of continuous and rapid development, as such, this asks for an

ongoing professionalization of the staff. Therefore the need and demand for additional learning is great.

iii. Intensified competition

Open and competitive market, both within and between nations foster innovation and efficiency and provide opportunities for all to improve their living condition, for instance, users involvement in innovation in new services and product development will intensify competition in academic libraries. Alam, and Perry, (2002) have developed a stage model of new service development. This frame work takes into account the care elements of users' involvement in new service development lighting objectives/purposes of They find involvement of involvement. customers in ideas generation and idea screening as the most important input to service innovation. Nambisan, (2002) has likewise identified a number of stages of new product development and has looked at the roles of customers in new product development. He has come up with three roles; customers as a resource, customers as co-creator and customers as users.

iv. Changing business environment

Traditionally, the core roles of academic library staff lay in acquiring, processing, and lending library materials and in responding to user generated information queries. Today, combination of outsourcing and self-help mechanism have replaced these previously "core" roles. Academic libraries are typically involved in three interrelated fields, teaching, research, and community service. The role of librarians in academic libraries must be integrated into all these activities, in order to ensure their continual relevance in the 21st century. The academic library must turn from ownership mechanism to access mechanism and from re-active to pro-active involvement in the academic processes of its university community. The concept of flexible delivery

has captured much attention in many countries. Academic librarians can no longer afford to sit in the institution library building, waiting for clients to seek them out. The librarian's skill must now be taken to the client. The place for an academic librarian in the future will be outside the library building, activity will involve the academic community. Most librarians have adopted the concept of 'liaison librarians' professional staff whose primary responsibility is to work with the staff of a particular faculty or academic department in order to ensure that the information needs of academic units are met by the library services offered.

2.6 Importance of innovation to academic libraries

Experience has shown that innovation in the academic library environment is essential for effective library services delivery in the institutions of higher learning. Some of the advantages of innovation are identified as follows:

- 1. It fosters ideal for products and services in the library.
- 2. It gives librarians a sense of job satisfaction e.g. in reference services that the interaction with users is no longer centred on face to face or one-on-one; rather the librarian is involved in the search until the user is satisfied.
- 3. It encourages team walk and allows academic libraries to find competitive advantages in the information business market.
- 4. Academic libraries who see and act upon the opportunities and possibilities for change through innovation in the current information business environment will survive; they will successfully compete and even flourish the face of emerging adverse information business market.
- 5. Libraries will use innovation as a strategic systematic and technological

level for developing agile innovative cultures, accountable information business management processes and global information industry systems. For innovation to succeed in an academic library, it must be embraced by the top management and supported at all level of operations.

Although students are important part of the set up of academic institutions being the major users of academic library facilities; the staff (particularly the academic staff) also make maximum use of the library. Agboola and Bamigboye, (2011) maintained that the, quality and strength of any educational program depends on the library; not the library as a magnificent building but the use of its resources. Ajibero (1995) saw academic library "as the heart of the university using the human and material resources at its disposal to support teaching, learning and research objectives of the institution". Professional librarians that work in the academic libraries especially in this information age have always engaged themselves on the collection, organization and dissemination of information resources to support research and learning. These resources are in both print and electronic formats. That is why librarians in the university libraries are fully recognized as academic staff. Academic libraries are at the forefront of providing information services to the different categories of users like students, lecturers, and researchers in order to support their teaching, learning and research needs.

Academic libraries are playing their supportive roles to tertiary institutions, by providing information resources and services especially in this information age. These enable the libraries to meet up with the needs of their teaming patrons. Such resources range from print to non-print and electronic materials. This aligns with what Yusuf and Iwu (2010) asserted that "different users of

academic libraries utilize different materials provided by these libraries. Such materials include reference materials, textbooks, journals, newspapers, past projects, electronics journals, e-books, etc". organizations can remain static in the postmodern society, which is an environment characterized by rapid change in social, economic, and political influence. Nartell (2000) eloquently implored libraries to create a range of services unthinkable in the 20th century but mandatory in the 21st century, if we are to private society with the value added services it will need from its professionals. In his article about the 21st century library, Atkinson (2001) states that, "the new library must be mainly a social gathering place, somewhat noisy with plenty of coffee". This quote suggests that some rather profound changes will likely occur in academic libraries.

As stated by Clayton (1997) "innovation is no longer an option but a necessity". The nature of environment in which we find academic libraries pose unique and significant challenges with regard to identifying the need for major change, providing motivation for that need, and taking the required action to institutionalize the change. Bass (1985) summarized the condition in the modern academic libraries as one embedded in a state bureaucracy, complicated by union contacts, faculty norms, and tradition. The academic library inherits many of these characteristics from its parent institution, most libraries have significant external control, both administratively, and financially, which can limit innovations. Budd (1998) noted that each academic library is part of a larger organization and, ultimately authority rests outside of the library which hinders the library from functioning appropriately.

Beyond the boundaries of the institutions, the rapid changes in information and communication technologies are change

drivers in the library. Institutions such as academic libraries do not have the benefit of quantitative measures such as profit and loss statement to provide very visual evidence for the need to change and a reliable mechanism for measuring outcomes. The students and faculty (users) comprise a very diverse group and do not typically voice dissatisfaction when they receive mediocre or low quality service. Competitive threats from the external environments may also not be recognized as requiring a response and the need for major change. One can therefore ask: why a university librarian might incur risk by instituting major changes when incremental changes appear sufficient for the institution to survive and strive? However, as Nadler and Tushman (1990) have indicated, a continued focus on incremental innovation in the face of environmental turbulence is a recipe for future.

3.1 The 21st Century Librarians and their Innovative Roles in Academic Library Services

As the traditional custodian of information, librarians in the 21st century need to be aware of the significant changes and as such employ their technological know-how and intellectual master pies in order to retain the leading role of the academic libraries in supporting teaching, learning and research. This means that the 21st century librarian will have to be armed with competent skills that will enhance the provision of effective library services to meet users' changing information needs. Omekwu (2003) mentions that librarians need the basic knowledge of computers and their capabilities, competency with search engines; Internet facilities; email; Internet navigator tools, web browsers and web file formats, database software, and Internet development/management knowledge.

The human resources management is an important aspect of any organization

including the academic library. The success or failure of the academic library depends to a large extent on the human capacity. The 21st century librarian is changing with the changing environment which is a consequent of ICT. Larue (2012) asserts that the library's most powerful assets "are its professional staff". According to him, librarians have the power to change lives and build communities. For this task to be accomplished, they have to leave their desks, leave their buildings and show the community what a powerful tool they are. Tanawade (2011) observed that "it is time to publicize ourselves, our professionalism, and the skills we have to offer from the above definitions of the new role of the 21st century librarian", he/she no longer sits behinds the reference desk answering mere reference questions but rather an active marketer who sells the library's products and services to his/her users or community at every opportunity.

3.2 User Incentives in the Academic Libraries

The 21st Century Librarian can use the following strategies in library services to attract users in the library:

i. Library Advocacy

In the current dispensation, users no longer seek information in the library; instead libraries go out to render information services to users. To achieve this, the librarian has to look out for opportunities to connect and interact with his varied users. He/she therefore employs his interpersonal skills, strategies to connect with administrators, faculty and students. During meetings, he can brief faculty on current publication and their terms of accessibility. By this, he/she acts as a strong advocate for the library which is an important organ of tertiary institutions.

ii. Use of social media

The library is in the business of connecting

people with information. Web 2.0 technologies have brought new role for library professionals. Web 2.0 tools such as Facebook, Twitter, Blogs, Online groups, (which are also known as social media) have made it possible for people to actually connect to one another through the internet. Khan and Bhatti (2012) put it thus, "social media provides more opportunity to reach your community, target specific audience, and give them a chance to interact with the library". By using social media, libraries can engage their users on issues of interest and enable them make inputs especially as it affects library services. This can improve the library's image.

iii. Mobile Phones

Mobile devices like cell phones have improved communication and enhanced the way information is being created, delivered and accessed. The 21st century librarian can provide effective library services through mobile telephones like the GSM (Global System for Mobile Communication). In support of teaching and research, the use of SMS (Short Message Services) can be employed to answer reference, queries, and alert users on new arrivals and upcoming events in the university calendar, e.g., public holidays, university matriculation, lecture free week, etc. This could be flashed through a facility called broadcast II where one text messages is sent to all the library contacts listed in the address book on the mobile phone at once, (Iwhiwhu, Ruteyan and Egbuwubare, 2010).

iv. Information Packaging

Packaging of information in various formats has become the norm in the digital era. This has created new opportunities for the library to provide value added services in the academic environment. Users of the 21st century library are at home with electronic sources of information which permit multiple

use of a material by different uses at the same time. Librarians can exploit these advantages by developing and preserving a research output of institution through digitalization of projects, theses and dissertations. The librarian can collaborate with the university ICT centre for an institutional repository to be created to host these projects on the university's website. While their visibility is guaranteed on the website, their access and retrieval remains the sole responsibility of the library.

v. Reference Services

Reference services are the assistance given to a user in search of information in a library. It is one of the core activities of librarianship; therefore it should not be neglected. Ibegbulam (2000) observes that references services no longer centre on one-on-one service delivered face-to-face in the library. The quality of good reference services depends on the competency and skill of the reference librarian. The 21st century librarian employs his/her in-depth knowledge and search strategy to meet user information needs. He/she does not point to a row of shelves rather he involves himself in the search process. He/she is not satisfied until the users are satisfied. This improves the knowledge of the librarian as well as the library's image.

vi. Partnership

Librarians in the 21st century can partner with academic unit to teach their students information literacy skills so that they can become effective users of information. Information literacy skills are the set of skills needed to find, retrieve, analyze and use information. It equips students with the critical skills necessary to become independent long-life learners. It includes the technological skills needed to use the modern library as a gateway to information. It is the responsibility of libraries to inform and

empower users to become resourceful. When users acquire the right knowledge, they are empowered to become useful citizens. The academic library can create an activity centre for users to acquire extra skills through partnership with relevant units of the university. Such skills includes: sewing, baking, hair dressing, decorations, poultry or fish farming, this has an advantage of adding value to the library.

4.1 Academic Libraries: A Nigerians Perspective

The Yaba College of Technology library was established in 1947 as the first academic library in the country. The history of academic library development in Nigeria dates back to pre-independence time when Henry Carr's collection form the nucleus of the University College Ibadan, which was established in 1948 with the first university library in Nigeria. As pointed out by Aina, (2011), since independence in 1960, there has been an unrelenting upsurge in the establishment of educational institutions at all levels, especially university education. Successive Nigerian governments have continued to invest strongly in education. It must be realized that academic libraries, being integral parts of educational institutions, generally emerged simultaneously with their parent institutions. Hence, there are as many academic libraries as there are many universities, colleges of technology, agriculture and as well as many colleges of education.

Considering the crucial role of academic libraries in tertiary institutions, it is necessary to provide information services to their respective communities which comprise of students, lecturers, and researchers in order to support their teaching, learning and research needs. Nigerian academic libraries are at a crossroad. This is because they are operating in an era of dwindling finances where resources (financial and materials) are

not forth coming. The information age which is characterized by ICTs implores academic libraries to move with the current trends in the society in order to meet the information needs of its users. Nigerian academic libraries derive the greater part of their funds from the government (both federal and state). Okiy (2005) notes that of all the different types of libraries in Nigeria only university libraries have a clearly defined policy of funding because they are allowed 10% of the recurrent annual budget of their parent institution. Onuoha, Onuoha, and Amposah (2013) share the same view that "the national university commission of Nigeria requires statutorily that a minimum of 10% of each university's recurrent expenditure should go to the library budget.

However, it is regrettable that such monies are not forthcoming as most university administrators tend to flout that decision. Okiy (2005) and Yetunde (2008) opined that "the situation in the private university also tends to portray a gloomy picture as the story seems to be the same". Yetunde (2008) observed that "in most private universities in Nigeria, the founders and board of trustees usually determine the share of university library's budgets which in most instances are not adequate". This situation affects the efficiency and effectiveness of the library's functions. However, despite the discouraging situation in terms of funding, recent efforts made in the area of Internet and ICTs in Nigerian academic libraries has been reported in the literature. For instance, Ani et al (2005) observed that academic libraries have made series of attempts to adopt the technologies for improved services. Although despite the efforts, very little success has been recorded. A lot still needs to be done. Providing current awareness services (CAS) to an ICT driven target academic community requires dynamics, innovative, timely, and adequate communication technologies.

4.2 Services Provided by Nigerian Academic Libraries

Nigerian academic libraries perform myriad functions, among which are:

- The use of RSS services to inform their users of library news and developments in a way that resembles the 'new device' that many libraries still have, often in collaboration with RSS services which changes the library schedule, new acquisition, library renovations, exhibition etc.
- Assisting staff and students of the institution in acquisition of general information materials relevant to their curriculum and search interest of the users.
- Provision of online information database for their users so that they can access information on various information platforms. The use of database is very relevant e.g. AGORA, EBSCOHOST, HINARI, JSTOR, TEEAL etc.
- User education: education of library users on the importance and benefits that can be derived from using the library is another service rendered by academic libraries.

However, most academic libraries in Nigeria are severely constrained by a number of factors that include erratic Internet services, lack of hardware and software, and in most instances the non-availability of the said ICT tools in most academic libraries. Besides, there are difficulties in the importation of books and journals from abroad due to the high rise in foreign exchange. This has deferred many academic libraries from acquiring current and relevant titles that will support the academic programmes of their parent institutions. Thus, the efforts of most academic libraries in providing modern information services are

thwarted by the existence of the aforementioned problems whose genesis is that of inadequate funding. Also ICT literary among academic librarians in most libraries is still at the peripheral level. Nok (2006) observed that "many staff of university libraries are not computer literate as such they find it difficult to cope with the requirements of the electronic age". However, the recent establishment of digital libraries in three (3) universities in Nigeria, i.e. Ahmadu Bello University, Zaria (A.B.U), University of Lagos; and the University of Nigeria Nsukka (UNN) by the MTN Nigeria can be considered as a stepping stone towards provisions of viable and vibrant academic libraries services that are desirable in the 21st Century Nigeria.

Conclusion

The academic library is very essential to the existence of tertiary institutions in Nigeria, its provisions of information resources and services connote it as the heart of any educational system. Without sound and adequate provisions of library resources and services the core objectives of the institution which is teaching, learning and research may not be realized.

In this information age, which is characterized by ICT, services of academic libraries in the 21st Century have dramatically changed, posing a challenge for the libraries to adopt the innovative drivers or strategies in their libraries in order to maintain their status and enable them measure up with their contemporaries elsewhere. academic libraries in Nigeria are faced with certain factors militating against their progress such as inadequate funding, poor infrastructural facilities, lack of ICT skills, etc., which posed problems to the advancement of these libraries. The ability of these libraries and their parent organizations to provide certain strategies to cope with these major factors will facilitate the provision of the desired and relevant information resources and services needed by the user environment.

Recommendations

There is no doubt that no academic institution can achieve its educational goals without sound information services to their respective communities that will match the requirement of the 21st century. The following are therefore recommended:

- 1. Academic libraries should explore more alternative sources of funding as over reliance on the government on monies that are not forth coming may not provide the deserved solutions to their numerous challenges.
- 2. New initiatives are required in the form of consultancy services, marketing of information products as well as other income generating services.
- 3. There is the need for the committee of university librarians and their counterparts in polytechnics and colleges to sensitize their respective institutions, administration on the central role of academic libraries in teaching, learning and research activities in academic Communities.
- 4. More emphasis should be placed on the provision of online access and services such as OPAC, e-journals, e-books and networked information services.
- 5. Improvement on ICT facilities such as the Internet, intranet, hardware and software as well as bandwidth.
- 6. There is the need for our professional leaders, e.g., The Nigerian Library Association (NLA), Librarians' Registration Council of Nigeria (LRCN) and Nigeria Association of Information Science Educator (NALISE) to be proactive in the 21st century.
- 7. Improvement on ICT training for

- $International\ Journal\ of\ Applied\ Technologies\ in\ Library\ and\ Information\ Management\ 3\ (1)\ 3\text{-}18\ -\ 30$
 - academic librarians.
- 8. Government and parents institutions of academic libraries must realize the central role of academic libraries to national development which requires provisions of more funds for academic library development in the country.

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