



## MANAGING SPACE AND SERVICES IN ACADEMIC AND RESEARCH LIBRARIES IN THE DIGITAL AGE: A CASE STUDY OF THREE DIFFERENT LIBRARIES IN NIGERIA

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### Abstract

*Digital age has created a paradigm shift in Academic and Research Library. It transformed the Library from being a traditional physical space to information service provider. The Paper studied three different academic and research libraries in Nigeria with the objectives of identifying the utilization of space in digital Age. The study used qualitative research methodology, the data collected was thematically analyzed and interpreted. The findings of the study that the Libraries and the information specialist in Nigeria are gradually moving from the traditional system of Library management to the expectation of the digital age. The Libraries provide spaces for meetings, relaxation, Internet and electronic information spaces, e-learning centers, quiet zones for reading and knowledge space among others. It was also recommended that Academic and Research Libraries in Nigeria should compete with those in the developed world in utilizing spaces and services to meet the challenges of digital Age and advancing teaching, learning and research to the user community.*

**Key word:** Managing Space, Services, Academic and Research Libraries, Digital Age

### Introduction

Information and knowledge are created as a result of human interaction and activities. Such interactions are accompanied by events that needs to be recorded, organized and preserved for dissemination whenever the need arise. Library therefore has the responsibility of preserving, organizing and disseminating such recorded knowledge. Library is a building with a collection of information resources professionally organized, processed and disseminate to users and potential users for the purpose of educating, informing or entertaining a variety of users and potential users for the development of the society at large (Kalu and Abigeal, 2021).

Thus Library serves as a custodian of information resources, it is also a social

institution responsible for preserving and disseminating information that may eventually lead to individual and societal development. This statement was supported by (Mwuese and Dianne, 2021) who posited that Library is a social institution responsible for preserving information resources for utilization by users. They also advanced that Library is also a social institution created to conserve, preserve knowledge and disseminate the knowledge for education and research purpose thus helps in transmitting knowledge from one generation to another. The knowledge and information Library contributes to the development of the society.

Academic and Research Libraries are indispensable tools for the intellectual development of the academic community. It also serves as a store- house of recorded knowledge and human experience thus charged with the responsibility of meeting the users needs whenever the need arise. A well-stocked Academic and Research Library serves as a place where students, faculty members, researchers and the academic community demand for information in the pursuit of their intellectual development (Adolphus, 2021). Taking into consideration the aims and objectives of the Academic and Research Library there is need for adequate space and places that will accommodate virtual infrastructure and print resources in the Library.

Library users tend to come to the Library not just to study but to also use it as a social space, where they can relax and relief tension of managing work and study. Library as a place need to be different from how it was a decade ago; recent Libraries, especially Academic and Research Libraries need to be versatile to provide different spaces and places such as socialcentres and entertainment venues to promote teaching and learning process. This was supported by Adolphus (2021) posited that Academic Libraries are social centres and entertainment venues with occasional film shows.

Similarly, a paradigm shift which affected the Library from being a reservoir of books and journals for scholars, students and researchers to a market place competing for clients by offering different kind of services necessitate the Librarians to become information service providers rather than information specialists. Thus creating more spaces that will help address the information needs of the user community in the current IT age is necessary.

### **Statement of the Problem:**

Academic and Research Library exist to serve as a facilitators of knowledge creation and a space where researchers can collaborate. Thus it is established to satisfy the teaching, learning and research needs of the academic community, a good designed library building with adequate space supports these activities. The new learning system in Academic and research library has reshaped the library services and space (Ugwanyi, Okwor and Ezeji, 2021). The knowledge of Library space will help library administrators introduce Librarians to the technicalities of planning and design of the Library building. This involves funding bureaucratic structure and even government legalities (Ugwanyi, Okwor and Ezeji, 2021). Librarians should acquire management skills and political power in order to sustain the Library as space and place in their respective institutions.

Library space and place is an area that is given less attention by the Librarian and Information Professionals in this part of the world (Africa), yet it is the universe of both

human and material resources enhancing the educational and research goals of any Academic Library. There is a Library paradigm shift from being a reservoir of printed resources for supporting academic activities to a place contending for users by providing different kind of information and services (Adolphus, 2021). Hence a good Academic and Research Library building is expected to provide flexible learning space and traditional reading rooms that encourages learning and research activities. It is against this development that the researchers embarked on the study to ascertain the situation in the libraries they served.

### **Research Questions:**

1. What is the dimension of Academic and Research Library space and services in the area under study?
2. Does the space of the Academic and Research Libraries understudy adequately meet the library requirement in terms of digital age?
3. Do the Academic and Research Libraries under study adequately utilize space in the digital age?
4. What are the challenges associated with the space and service provision in the Academic and Research Libraries under study?
5. What measures should be taken to address the challenges?

### **Review of Related Literature:**

#### **Academic and Research Library Space and Services:**

Academic and Research Library exist to serve as a facilitator of knowledge creation and a space where researchers can collaborate. Thus it is established to satisfy the teaching, learning and research needs of the academic community, a good designed library building with adequate space supports these activities. The new learning system in Academic and research library has reshaped the library services and space (Ugwanyi, Okwor and Ezeji, 2021). The knowledge of Library space will help library administrators introduce Librarians to the technicalities of planning and design of the Library building. This involves funding bureaucratic structure and even government legalities (Ugwanyi, Okwor and Ezeji, 2021). Librarians should acquire management skills and political power in order to sustain the Library as space and place in their respective institutions.

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In the present era there is a revolution in the information house which led to migration from print to electronic resources and to the Virtual Library. The reshaping of library service affects the library space and the library as a place (Ugwanyi, Okwor and

Ezeji, 2021). These changes necessitated a reform in the existing library space and place which led to the development of new library designs that will perfectly address the functions and services of the new Library (Mehtonen, 2021).

The present Academic and Research Library as information and knowledge enhancer provide suitable Library space and place that will surely deliver new functions and services that will effectively go in line with the trend (Ugwanyi, Okwor and Ezeji, 2021). Academic Librarians, Architect and Library administrators have to collaborate to ensure Library as space and place where convenient learning and research environment is provided. It is also necessary to understand how user community feels about Library space and how they act and interact within it with behavioral psychological knowledge. The Librarians and Information service providers should provide or rearrange space so that it works better for the people and people works better within it (Mehtonen, 2016).

Academic and Research Library should invest in the design appealing Library space and try to draw people by offering new kind of activities that support various forms of social interaction and learning process (Mehtonen, 2016). The introduction of information and communication technology has drastically affected the functions and services of Academic and Research Library, the availability of electronic information on the Internet and virtual world made the Librarians and other information professionals to have a rethink on how to make the Library relevant to the user community and fit in with the trend.

The Library space and service need to improve to meet the current needs of the students, teachers and the faculty members, so as to make the Library relevant hence the Library administrators has some basic things to consider.

**Purpose:** the Librarians and information service providers as well as the library management should consider the purpose; that is aims and objectives of creating or establishing the Library before designing the Library space. In the course of this, the Librarian should find out what users want. This can be carry out through attending University or institutions' meetings, users survey, observation, interview and focus group discussion (Adolphus, 2021).

**Functions:** the second point to consider while designing a Library space is the functions of the Library. The main functions of an Academic and Research Library is promotion of teaching, learning and research activities in the institution (University). The Librarian should therefore understand the functions and provide the space that will accommodate the respective users' needs. This can be achieved by prioritizing into what is essential and what is not. The Library should provide the essential space and service that will help the user community to satisfy their information needs (Adolphus, 2021).

**Services:** services of Academic and Research Library are generally related to mission, vision as well as the aims and objectives of the study. The Librarian and information service provider should have an idea of what the users want through a survey or visiting a Library with similar objectives. They should also consider institutions' and Library strategic plans, campus history, culture, demographics, Library need assessment and environmental scan (Casey and Kidwell, 2020).

The information and communication technology era is characterized with different activities and innovations which positively affect the Library itself, its functions and the services offered. This development has transformed the Library functions and services to

come with three (3) basic Library spaces and functions ie physical, social and digital space. This development was supported by (Mehtonen, 2016) who stated that Library in general has migrated from furniture and book depository to a place that work with different activities with selective furniture, technology and equipment that enable a positive outcome. The physical, social and digital space were perceived by (Mehtonen, 2016) as:

**Physical space:** is a neutral container for the acquisition, preservation, use and distribution of physical collections in the Library such as books, journals, dictionaries and encyclopedias.

**Social space:** is a place associated with the interaction between Library staff and users primarily connected to the practical use of the Library collections or use of the Library as an information system.

**Digital space:** the process of digitization advances. Libraries particularly Academic and Research increasingly provide access to various resources that no longer need to be stored locally. Digital space has become separated from the physical Library; the use of the digital collections and services is no longer connected to any particular location. Digital Library space has the potential of becoming autonomous by providing several essential information resources.

### **Academic and Research Library Space:**

The increasing use of electronic resources may distance library users from the Library. This development brought about the idea of expanding Library space to support different types of academic activities and attract users to physical use of the Library. The Academic and Research Library should seriously consider the issue of space allocation because the Library serve the entire educational community through planned programs with a structured learning space (Farmer, 2016). The idea of creating different types of space in the Academic and Research Library will help the Library not to lose its uses and potentials to the user community.

The Academic and Research Libraries need to be modern learning spaces that accommodate different learning activities such as marketing place, learning and knowledge space as well as social space. The spaces and the furniture in the Library should go with the current trend, thus the Library administrators should consider setting up a Library with the following spaces proposed by Adolphus (2021) and Casey and Kidwell (2020) for effective learning and research activities:

**Internet cafe:** this space should be located at the central area of the Library or reception to make the user community attracted to come inside the Library building to look at the resources available. The presence of the café may increase the Library usage. The space should also encourage conversation and solitary reading as well as relaxation. This area is also designed for browsing new information materials, popular materials and community based art and display. The area should be designed for users to find what they are looking for.

This place should be a space that is inviting, approachable, accommodating on all sides. It should also be full of information and professionals to find the information. The furniture in this area should include: attractive display on tables, located at the entry of the Library, new books, fresh picks and current themes. The furniture should equally include

anything that promotes the activities and programs of the Library such as lounge seating, laptops and a few books for consultation. The space should be spacious, well ventilated and have adequate lightening. Nongo and Terna, (2020) are of the opinion that Libraries should collaborate through consortia agreements in order to acquire and share relevant online resources that could compliment hard copies use and incorporate Inter-library loaning system as part of managing spaces in libraries.

**Knowledge space:** this should be a place where people sit and advance their knowledge either through group discussion, individual self-reading, group reading, formal or informal learning by individual or group. The space should be well furnished with computers, tables and chairs with adequate lightening and ventilation or air conditioners. The space can be situated outside or inside for group or individual learning, relaxation, reflection, community activity and inspiration.

**Seminar room:** this is a room specifically created for seminar, lectures, art exhibition and other campus activities. The room should be well ventilated, equipped with the appropriate furniture such conference tables, chairs, air conditions, computers connected with Internet etc. The room should also have adequate light.

**Social space:** this is a place where students can work together on a project for group assignment or presentations. It is also a place that is neither a home nor work place but where people in the community can relax and relieve tension, have fun, see people and be seen. This can also serve as a learning space because in the western world learning take place as part of a social process where people get together in groups. The space can also be a large program room designed for flexible programming such as community events, meetings, performances and any large gathering. The space is for all members of the community to gather together to promote interaction, exchange of ideas and connection. The furniture should be seating type of all ages and should be arrange in U-shape, modular sofas, lounge seating, coffee tables and floor lamp, stacking chairs and nesting tables should be available.

**Quite zone:** a place where a user can work in silence, where one can work with laptops. It can also be a place where one can read for learning, leisure and entertainment. It is primarily dedicated for adults to gather for reading and resting. The furniture should include a large round table that seat eight (8) to ten (10) people, sofas, lounge seats, coffee tables, laptops, laptops tables and lamps.

**Disabled persons space:** the disabled persons from the user community should be given a separate and convenient place for learning and research activities. The place should be located at the ground floor of the Library for convenience. The place should also accommodate different types of activities that promote learning and research in accordance with people with disability requirement.

**Outdoor Garden:** this space may serve as a story telling space. The space should be designed with the same care and intention as the indoors space of the Library. The furniture should specifically be selected to suit that place. Such furniture, like bistro table and chairs, picnic tables and outdoor lounge should be purchased for comfort and flexibility.

**Business Incubator:** this space is dedicated for business evolution; where business startup can flourish and carrier changes. The space should feature: group study space, innovative technology, staff support and collection access so that the users can advance their business

and career goals with tools to succeed. The furniture should include farm tables or long tables that will sit at least ten (10) people, sofas and seater with high back.

**Maker space:** based on the industrial revolution and creative theories, maker space is being gradually introduced into Academic and Research Libraries in Europe and other part of the world. Academic and Research Library maker space is the best place to discover new knowledge and interest, practice and interdisciplinary education. Maker space promotes changing modes of learning by providing opportunity to the user community to learn a hand on which is a characteristic that is frequently supposed to be acquired in tertiary and university education.

Hands on learning has a great educational benefits because it give help to the development of critical thinking and problem solving skills which are very important to human intellectual and economic development. It also give opportunity to the students to acquire different skills such as brainstorm, test solution, expose students to cutting edge technology that can lead to new entrepreneurial opportunities.

It is also a place that helped in transforming Library from an avenue of teaching culture to a place for learning culture which uses active learning techniques. This space can be media lab, tinker lab, art studio, or any brand of maker space equipped with latest tools to turn ideas into reality. It should promote content creation and experiential learning for the whole community. The furniture should contain tables and chairs, laptops etc. The space should also have adequate lightening and ventilation.

### **Methodology**

Qualitative research design was employed to collect the data for the study. Thematic analysis was used to analysis the data. Three Academic and Research Libraries were selected for the study; Federal College of Agricultural Produce Technology, Kano, Yusuf Maitama Sule University Library, Kano and University of Abuja Library, FCT, Abuja.

### **Findings and Discussion**

The Librarians of the three Academic and Research Libraries were interviewed to elicit information on the current Library space and service. The responses are presented on table

| SN | Themes                                                      | Responses                                                                                                                                                                                                                      |                                                                                                                                                                        |                                                                                                                                                                                                                     |
|----|-------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |                                                             | LB 1                                                                                                                                                                                                                           | LB 2                                                                                                                                                                   | LB 3                                                                                                                                                                                                                |
| 1. | Dimension of Library space and services                     | The current space in the Library is relatively enough for the services rendered in the Library. It has about one hundred (100) sitting capacity with different spaces to accommodate different services to the user community. | The dimension of Yusuf Maitama Sule library space is as follows:-Reading space--- 2567.2 m2<br>Shelving Space --- 198m2<br>Total ----- 2765.2m2                        | The Library has more than enough space to accommodate both physical and other relevant spaces that are required in the digital age. It is built on approximately 30 hectares of land. It has 3,000 sitting capacity |
| 2. | Involvement of Librarians in Library building               | The Librarians in my institution were not involved in Library design and building; only the administrators and the contractors.                                                                                                | No, librarians were involved my institutions' Library building and design; only the contractors and the sponsors are usually responsibly for the structure and design. | The Librarians are not in any way involved in the Library building and design in the Library under study.                                                                                                           |
| 3. | Requirement of Library space and service in the digital age | The space and services of the Library does not adequately meet the required space and service of the digital age                                                                                                               | The space and services of the Library does not adequately meet the demand of the digital age. The space is generally adequate to cater for the digital age.            | Despite the fact that the Library has more than enough spaces, the space is not being utilized by the Library, some of the spaces are given out to other departments                                                |
| 4. | Space utilization                                           | Apart from the conventional space and services, the Library provide space for digital Library meetings and discussion of vital and knowledgeable issues and quite zone to the user community                                   | The Library provide both conventional and digital service. It provide meeting space, relaxation space. Knowledge space and quite zone and physical space.              | Some of the space that need to be utilized by the Library to meet the challenge of the digital age is given out to some departments in the Uni versity.                                                             |

|    |                                                             |                                                                                                                                                                              |                                                                                                                                                                                        |                                                                                                                                                                                              |
|----|-------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5. | Challenges of Library space and services in the digital age | Lack of awareness knowledge of Library space and service in the digital age.<br>Lack of enough space to meet the requirement of the digital age.<br>Lack of adequate finance | There is the issue of proper space utilization to meet up with the demand of the digital age                                                                                           | As a result of the present of other departments in the Library building there is a lot of noise and disturbances in the environment. The Library space is not being utilized by the Library. |
| 6  | Measures to be taken to address the challenges              | Expansion of the current Library building.<br>Good budget to meet the demand of the space<br>Adequate training of the Library staff on Library design, space and services.   | It is a requirement for libraries to review the library structure and services of the Library to meet up with knowledge growth and departmentalization that goes with the digital age. | The Librarian and other Library administrators should try as much as possible to get their space back and utilize it accordingly.                                                            |

Table 1.1

**Note: LB 1= Library 1, LB 2= Library 2, LB= Library 3**

Table 1.1 revealed that the Libraries under study have enough space to accommodate the requirement of the digital age yet not all the services and spaces required by the digital age are available in the three respective Libraries. A lot of spaces and services are needed to meet with the requirement of the digital. Spaces and services such as meeting space, discussion space, digital and electronic Library space, as well as physical space were available in the three Libraries. Nevertheless spaces proposed by Adolphus (2021) and Kidwell (2020) such as social centre, maker space, disabled persons space, outdoor garden and business incubator are not available in any of the three Libraries.

There are a lot of challenges associated with the availability and use of the spaces in the Libraries under study. The LB 1, there is no enough space to be utilized, LB 2 the space was available but for one reason or the other not all the services required by the digital age were provided. The LB 3 has enough space to provide the service but the spaces were given out to other departments in the University. The Librarians from the three Libraries were not carried along in making decisions on the Library space and how it should be utilized, not even that they were not carried along in the decision on the building and design of the Library and this results to a very serious challenge in utilizing space and providing services in the Library.

## Conclusion:

Academic and Research Libraries were affected by digital revolution, to properly adopt to the changes created by the revolution, the information administrators, professionals and architect as well as the user community should collaborate to provide a Library building and spaces with new purpose that goes with the current trend. Academic and Research Library building should be designed and operate with the features of flexibility, multi-functionality and artistry hence the Library should support the user community in several new ways of teaching, learning and research in a digital environment. The provision of these distinct functions, the Library as a place can enhance the excitement and adventure of the user community.

## Recommendations:

The following recommendations were made:

1. Academic and Research Library should be multifunctional, it should be created in such a way that it serves the information needs of the user community.
2. The Library should be designed in such a way that it promotes different activities related to learning, teaching and research.
3. The Library building and space management should be taught in Library schools so as to train future Librarians on effective Library space and design.
4. The Academic and Research Library should have operational features that will go with the current trend on promoting learning, teaching and research activities.
5. The Library space should be designed to encourage relaxation, solitary learning and conversation.
6. The Library should also accommodate user community activities such as students' entrepreneurship exhibition etc.
7. The Library should also be a place where the user community relieve tension, have fun and be entertained.

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