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An assessment of Networking and Resource Sharing in Federal University Libraries in Nigeria

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Abstract

No library today can boast of having it all to satisfy all the vital needs and demands of her clientele without recourse to some forms of collaborative assistance or the other. This study so to speak is an assessment of networking and resource sharing in federal university libraries in Nigeria. The study was guided by four research objectives and questions respectively with a population sample of 86 librarians purposively derived from 43 federal university libraries. The major instrument used for data collection for the study was a 34-item modified Likert scale questionnaire while the data collected were analyzed using frequency and percentile and presented in tables and figures for clarity sake. The outcome of the study showed among other things that most federal university libraries in Nigeria were not participating in Wide Area Networking rather concentrate mostly in local area networking which implies that no federal university library in Nigeria can boast of being fully involved in global networking as to gaining from piles of information available in academic libraries of developed nations. The study further identified some of the factors militating against these services and operations. The study after due consideration of the findings recommended among other steps that all identified challenges as displayed in table 4 and figure 3 should be tackled head-on by all concerned and that the National University Commission (NUC)as universities' control and monitoring body should partner Tertiary Education Trust Fund (TETFUND) to sponsor and finance the establishment of Nigerian University Libraries consortium that will ensure effective networking and resource sharing among university libraries in Nigeria and those of developed nations.

Keywords: Networking, Resource sharing, University library, librarians, User, Information, Information and Communication technology

Introduction

A known library axiomatic is that no library in the world no matter how high placed is self-sufficient in information collection as to solely satisfy the information needs of her teeming users. This belief has led to the initiation of collaborations, inter-library cooperation and library networking in this era of globalization as a result of the emergence of Information and Communication Technology (ICT) and the associated astronomical growth in information which has given rise to information explosion thereby making it practically impossible for any library to have it all.

The discourse is that no library today can boast of having it all to satisfy all the vital needs and demands of her clientele without recourse to some forms of collaborative assistance or the other. This is non-arguably factual considering the global economic crunch in that no library can say to have sufficient budget to off-set the cost of acquisition, bibliographic processing and storage techniques of information resources which have failed to keep pace with the astronomical growth rate of information and attendant demand placed on libraries to satisfy their users. The most disturbing aspect of it all is when access and utilization of most of the resources are non-free-based thus run into millions of dollars. This situation noted Uzuegbu et al (2013) has forced most institutions, individuals and libraries of all sort to opt out of further negotiations and subscription to e-resources over the years in order to keep all the stock that will serve the need of their respective users without success.

The irony as posited by Geronimo and Aragon (2005) is that the need for access to support academic activities has shown libraries that this need will remain an illusion with only their own holdings due to several impending factors. It is against this backdrop that library cooperation largely focused on inter-library loan services came into existence but as information grows, the concept of resource sharing comes into existence. In resource sharing the resources of one library are lent to another library for a stipulated period of time. As we live in a dynamic world, methods of information sharing have drastically transformed as local and global are inextricably linked. The internet and other local/national networks have been adapted to transform the idea and method of library cooperation to that of library networking and resource sharing thereby increasing the application of electronic instruments to facilitate information exchange. Library networking noted Chatterjee (2012) is becoming more of library consortium than the mere

simple product exchange of old. The term consortium literary means fellowship which can also be translated as alliance, collaboration, partnership or cooperation. To this end, library consortium invariably means a group of two or more libraries that have agreed to cooperate with each other with a view to fulfilling certain related needs in the form of resource sharing. Zhang (1990) in Ekomanna (2012) explained that resource sharing through networking is a more structured type of cooperation in which definite regions or areas or definite organization are connected by electronic or other means with a view to promoting inter-library loaning of materials, in-service training and other sharing of resources. These other resources include equipment, facilities and exchanged of qualified and experienced staff as well as time and money.

Be that as it may, libraries are among the major beneficiaries of electronic information networks. They are taking advantage of modern ICTs to share information resources. They are establishing electronic information communication networks in which they pool their resources together for the benefit of their clients. For example, in South Africa among other countries, academic libraries have formed consortia in which they use electronic networks to share access to library systems, electronic document delivery and development of common online public access catalogues (OPACs).

1.2. Statement of the Problem

Higher education is seen as a tool for moulding one both in character and in learning therefore a sine-qua-non for measuring personal development and societal growth. Be that as it may, the library of any higher institution is placed in the forefront of realizing this purpose as the epicenter of information creation and dissemination. In the university, the library is the hub on which every academic activity revolves with the sole aim of providing information and services towards the realization of the tripartite functions - research, teaching/learning and extension services. Since no academic library can claim to be self-sufficient in meeting up with the needs of its clientele no matter how bulges the budget may be in this era of information explosion with most information resources in electronic format enunciated by the emergence of Information and Communication technology (ICT), networking and resource sharing also known as inter-library cooperation stand out as helping tool.

One established fact in recent time is that networking and resource sharing activities play significant roles among the global university libraries as they remain major sources of sharing ideas, researches, coordinating with other regional, national and international networks for exchange of information and documents for the use of libraries and users. The implication is that no university library that worth its onus will like to be left out in the scheme of reformation if she intends to remain relevant in a world that has become a global village as a result of ICT and partake, in global sharing of information. To this end, university libraries in Nigeria cannot work in isolation if they are to be part of the global university libraries.

But in recent time, it seems there is a missing link as most libraries in Nigeria cannot boast of being involved in any form of library networking and resource sharing activity. Indeed, it would be misleading to assume that the introduction of internet based library and information system provide perfect and trouble free information management. If we should tell ourselves the truth, lack of network in university libraries in Nigeria amounts to more irritations because almost all management task of national development depends on the availability of reliable information which only university libraries that are well linked to global networking can afford.

The assertion may be erroneous so it is in the light of correcting any erroneous assumption that this study has become imperative as to examining the state of networking and resource sharing in university libraries in Nigeria, identify challenges and make recommendations where necessary.

1.3. Research Objectives

The principle objective of this study is to assess the state of networking and resource sharing in Federal university libraries in Nigeria. Other objectives include:
,
a) To identify forms of network that are used in the university libraries
b) To ascertain types of networking and resource sharing activities carried in the libraries
c) To establish the benefits of networking and resources sharing in university libraries
d) To ascertain those factors militating against networking and resource sharing in federal university libraries in Nigeria.

Research Questions

This study was guided by the following research questions:

a) What forms of network are used in the university libraries?

b) Which type of networking and resource sharing activities are carried in the libraries?

c) What are the benefits of networking and resources sharing to the university libraries?

d) What factors are militating against networking and resource sharing in federal university libraries in Nigeria?

2. 0. Literature Review

2.1. Conceptual framework of Library networking

Networking simply put, involves the sharing of computers, peripheral hardware, software and switching all interconnected with communications channels used to establish a connection between network users. The end result is the shared use of information and resources. The intension of the network is to distribute information to the users requiring the network services. Computers and telecommunications may be the tools used for facilitating communication among them (Onwubiko, 2021). In other words, networking refers to the connection of devices to one another by means of communication network as well as a technical process for which methods for successful interaction are relatively straightforward or conversely, as on entirely non-technical process which involves higher-level inter-personal, social and organizational interaction.

In the context of information networks, networking refers to both informal and formal interactions between individuals and organisations whereas, information networks are formal groupings of individuals and/or organizations with the major objective of common exploitation, management and utilization of information resources and related facilities/resources such as human resources (expertise) and information communication technology resources (Chisenga 2001).

In the area of library networking, the terms library cooperation, library networking, library linkages, library collaboration, library consortia, document delivery are used interchangeably to describe formal and informal cooperation, partnership and resource sharing activities in library. A library networking is broadly described as a group of libraries coming together with some

agreement of understanding to help each other with a view to satisfying the information needs of their clientele. UNISIST II working document defines Information network as 'a set of interrelated information systems associated with communication facilities, which are cooperating through more or less formal agreements in order to implement information handling operations to offer better services to the users. The National Commission on Libraries and Information Science in its National Programme Document (1975) defines a library network as two or more libraries engaged in a common pattern of information exchange, through communications for some functional purpose. According to Ibezim (2011), library networking requires reaching out to distance numbers by developing new competencies for successful resource sharing, exploitation of comparative advantage and efficient service delivery. The networking therefore as information and resource sharing through computers and telecommunication links is meant to transmit information or exchange data from one library to another or from one information center to another. Unagha (2011), maintained that networking in academic library is a system of using computers, telephone or other communication devices that can communicate with one another with the aim of exchanging information and sharing resources.

Library networking reveals Onwubiko (2021) is in the form of certain services such as Local Area Network (LAN), Wide Area Network (WAN) and Regional Area Network (RAN) with a technology circuit and starting up a web server making it possible to exploit such advantages as the sharing of resources associated with computer such as data, software and hardware. As posits by Ikegbune (2003), typical LAN consists of two or more personal computer, printers and high capacity disk storage devices called file s server which enables each computer on the network to access a common set of files. In the words of Dahl (2006), library services and digital resources are delivered over the internet which depends on network operating system running on the web server computer. Library network is based on connected links of number of libraries for purpose of cooperation and sharing of resources for participating members. Library network server are socially configured to allow users access various areas of the library and run many applications that are crucial in service delivery of digital resources. Invariably, library application depends on national database for organization, storage, retrieval and dissemination of information.

2.1.1. Historical Angle of University Library Networking in Nigeria

The revolution of Information and Communication Technology (ICT) did have profound impact on the operation and services of Nigerian University Libraries. One of the significant impacts was the formation of the Nigerian University Libraries Consortium in 2004. The formation was borne out of AULNU objective of promoting library cooperation in the country as a whole and among university librarian (AULNU, 2016). As explained by Bozimo (2016), from 2002 to 2004, Nigeria had been a beneficiary of a very generous donation of a country-wide license of the EBSCO-HOST multi-disciplinary database from Mr. George Soros, an American philanthropist and founder/financier of the Open Society Initiation (OSI) the database held over 6,000 academic journals that can accessed either on-line or by CD/DVD to registered libraries. At this point, many Nigerian universities greatly enhanced their teaching, learning and research activities through the e-database. Sadly this gesture expired in December, 2004and this led to Nigerian University Libraries meeting to address their minds to the future subscription to EBSCO-Host database.

In line with the practices operated in the library and information profession, therefore, the Committee of University Librarians of Nigeria Universities (CULNU) at its meeting held at the University of Ilorin, Nigeria in May 2004 brainstormed and took the joint step of forming a consortium named 'The Nigerian University Libraries Consortium (NULIB Consults, Nigeria Limited). It embraced all university libraries in Nigeria.

The benefits of the consortium include among others:
  i.   Strong purchasing power,
  ii.   Better negotiating power to the purchase of electronic databases,
  iii. Cost effective exploitation of scholarly databases for teaching and research from the web,
  iv.   Joint grant meeting and lobbing,
  v.   Access to collective expertise and services,
  vi.   Ability to collaborate in the digitization of materials.

However the Consortium was faced with some challenges as the subscription to EBSCO-HOST database from 2002 to 2004, during each of the three period of OSI's funding was $30,000. At this cost, the entire Nigerian University system had access to over 6,000 academic journals and other information materials for 12 months. The consortium as a result of inflation and under the principle of collective bargaining contacted EBSCO-HOST and insisted on maintaining the

annual subscription of $30,000 instead of $35,000 caused by annual inflation growth rate of journal of about 15% - 18%. This subscription rate was retained till 2006. In the absence of laid down structures for collectively tasking university libraries for funding the subscription, CULNU approached the Educational Trust Fund (ETD) now Tertiary Education Trust Fund (TETFund) for that two years and it was after that that various university libraries took sole responsibility of funding their electronic databases subscription.

2.2. Theoretical and Empirical Framework

The essence of higher education globally is not one of rhetoric rather it is one that has been considered from time immemorial as a necessity and a means for individual and national development. Its purpose as noted by Mojubaolu (2015) includes the creation, progression, absorption and dissemination of knowledge. To achieve these noble roles, university libraries in Nigeria like their counterparts in other developing nations are expected to do the needful by embracing all needed means available just like their counterparts in developed countries to satisfy their users needs. These numerous challenges are generally understandable because no single academic library can single-handedly procure and manage its full materials requirements and by extension user satisfaction. University libraries so-to-speak are at the fore-front of providing information service to their respective communities which comprises students, lecturers and researchers in order to support their teaching, learning and research need. Scholars have underscored the critical role of university libraries in research and scholarship in the parent institutions as they are many times referred to as the heart or nerve centers of such institutions where all academic activities revolve (Abubakar, 2011)

Globally the history and development of cooperation and resource sharing in libraries could be traced to 1960 when the Center for Research Libraries was built in Chicago, U.S.A. to coordinate among 162 institutions to acquire, store and preserve less frequently used but very expensive research materials for the institutions' needs. In the 1970s with library budget remaining almost stagnant with high cost of library materials, in 1974 to be precise, the Columbia, Harvard and Yale Research Libraries and those of the New York Public Library founded the Research Library Group (RLG). This was borne out the belief that no library can be self-sufficient to satisfy the information needs of all its patrons materially and service wise (Martey, 2002).

In Canada, evidence shows that it has the information network for Ontario (INFO) with nearly 300 public libraries connected between South Ontario library service and Ontario library services, utilizing a choice of access by internet, standalone PC or CD-ROM. While in 1976, the University of Pittsburgh library system and the University of China exchanged digital full text journal articles over the internet (Edward, 1999). While Nigeria, the then University College, Ibadan Librarian now University of Ibadan, John Harris ignited the flame of library cooperation as a follow-up to a conference organized by International Federation of Library Associations (IFLA) in Grenoble, France in 1973, after which the National Library of Nigeria (NLN) was charged with the responsibility of of being the clearing house for all the existing libraries in the country. By October 1973, an inter-library lending unit was set up in the National Library of Nigeria. The problem of standardization arose because of the contributing libraries employed different rules for bibliographic description; hence the cards received were at variance with the existing cataloging rules (Nwosu, 2004).

From the fore-going developmental history the observation is that before the advent of modern information communication technologies, especially the Internet and the Web, organisations developed information resources that could only be used locally. Now 1CT, through electronic networks, has made it possible for sharing information resources across the globe. Libraries are among the major beneficiaries of electronic information networks. They are taking advantage of modern ICTs to share information resources. They are establishing electronic information communication networks in which they pool their resources together for the benefit of their clients. For example, in South Africa among other countries, academic libraries have formed consortia in which they use electronic networks to share access to library systems, electronic document delivery and development of common online public access catalogues (OPACs).

As declared by Bezimo (2016), even in the best of times, it is axiomatic that the library, no matter how well endowed can buy all the materials it needs for its clientele. With the serious under-funding of Nigerian Universities coupled with the spiraling cost of library materials, more than ever than before, the need has risen for university librarians to pool their resources together in order to maximize their procurement power so as to offer optimal services to their clientele at

minimal cost.   He noted that one development that has impacted so much on the services libraries provide to their clientele is the digital revolution as a lot of library materials especially journals and large reference materials, are now in digital format. One positive aspect of this development he added is that many users can access the same materials simultaneously thus greatly increasing a library's capacity to meet the needs of its clientele.

Libraries stated Wikipedia (2019),   operate as part of the technological infrastructure that supports the National Research and Education Network (NREN), acting as an electronic safety net for the American public to guarantee basic access to electronic information. Libraries are in capable to take on this role, as they already serve such a role in a print-based society. They not only provide electronic information and network connectivity but also provide training and education to the public on how to access and use network information. According McClure (1994), one of the most profound consequences of the NREN for librarians, library users, and the general education and research community is the "virtual library". Consortia of public libraries use the NREN to connect their online catalogs. This cooperation enables the "universal borrowing card" subsequently allowing library users to move between public libraries as just one.

Writing on aims and objectives of library networking Potdar and Joshi (1997) posit among other that; it improves resources utilization and service levels to users at the individual libraries by providing automation facilities in acquisition, serial control, cataloguing, circulation, user's services and funds accounting; enhances resource sharing by providing individual libraries access to composite databases like union catalogues, CAS and SDI, provides efficient and reliable means of resource sharing in areas such as inter library user services, document delivery services, manpower training, access to national and international databases, and communication link through publication and inter personal communication and procurement of micro documents, facilitates exchange of duplicate publication, establishes referral centers to monitor and to facilitate catalogue search and maintain a central online union catalogue of books, serials, non-book materials of all the participating libraries, implements computerized operation and electronic services in the libraries for fast communication of information, evolves standards and uniform guidelines in techniques, methods, procedures, hardware and software, services and

promote their adoption in actual practice by all libraries in order to facilitate pooling, sharing and exchanging resources and facilities towards optimization and coordinates with other regional, national and international networks for exchange of information and documents for the use of libraries and users.

On his part, Ekomunna (2012) did highlight the following as some of the objectives of library network: cooperative acquisition assignment of specialization in material acquisition; co-oriented subscription; exchange of duplicate holdings; cooperative cataloging, inter-library loan/reciprocal borrowing privileges, reference and/or referral services, translation-users' interest survey, bibliographic development; photocopying and reprographic services, joint research projects, workshops and meetings and directories and inventories. He also added that it gives member libraries support to set up institutional repositories, e-print archives, and e-theses collection. Resource sharing can also involve digitization of value rare collections in printed formats, creation of virtual library covering all e-resources in member libraries.

In his contribution on the necessity for library networking in this 21st century Onwubiko (2021) stated among other reasons that the era has witnessed an astronomical growth in information more than ever than before and is ever increasing hence it has become impossible for each and every library to procure every document that is published; rising prices of publications, which has affected collection development in libraries, budgets of the libraries are on the decline thereby making it very difficult for the individual library to provide all services from its own collection and the emergence of new subjects, readers require pin-pointed information that may be available in other libraries. Not underscoring the benefits of networking, ALA (2021) initiated The International Librarians Networking Program (ILNP) modeled after the International Librarians Network (ILN) Peer Program with the goal of assisting librarians from around the world to network and expands their skills in librarianship through a cooperative and collaborative program.

IFLA on her own part, has an Information Technology section which serves to promote and advance the application of information technology to library information services in all societies through activities like standards, training, research etc. It supports updating of databases and initiating information technology workshops. It has been promoting dissemination of standards,

open source software, MARC, digital preservation and metadata, promote data standards and protocols that will improve interoperability between systems and facilitate data exchange between library and other sectors of information creation.

Regardless of the accrued benefits associated with library networking in academic libraries, researches have also shown that networking and resource sharing activities in developing nations like Nigeria have been faced with a lot of challenges. As expressed by Igun (2010), some factors militating against library networking in developing nations like Nigeria are lack of fund, poor attitude of government and top government towards library. Mutula and Ojedokun (2008) assert that severe financial constraints, inadequate infrastructure, outdated or non-existence of hardware and network connectivity, inadequate staff training, poor facilities, harsh environmental condition. To Ogbonna and Anunobi (2013), acknowledged that librarians with software/hardware installation maintenance, networking and programming are barely known existence.

3.0. Methodology

The descriptive survey research method was adopted for the study. This is because of the numerous advantages attributed to it by statisticians and professionals such as Busha and Harter (1980), Aina and Ajiferuke (2002). They observed that survey method/design could be conveniently used in the study of large and small populations without sacrificing efficiency in addition to time and money and accuracy.

The targeted population of this study was all the librarians working in the 43 federal universities in Nigeria and through purposive sampling technique 2 librarians were selected from each of the university libraries giving a sampled population of 86 respondents. The 2 respondents selected were as a result of their positions in the various libraries – Circulation librarian and acquisitions librarians respectively. They were considered suitable for providing the desired data because of their strategic positions in the library.

The major instrument used in collecting data for this study was a 34-item modified Likert Scale structured questionnaire constructed by the researcher to examine the use, application, benefits

and factors militating against networking and resource sharing in federal university libraries in Nigeria. The questionnaires were electronically sent with adequate instructions to the librarians. While the data collected were presented in tables and figures and statistically analyzed using frequency and percentile in line with the research questions which were in tune with the objectives of the study.

4.0. Data Presentation and Analysis

Data collected were analyzed using frequency and percentile while for clarity seek, were presented in tables and figures with each complimenting one another. in line with research objectives and questions

Table 1: Forms of network being used in the library

Item	HU		U		NU		NHU	
	F	%	F	%	F	%	F	%
Wide Area Networking (WAN)	18	20.93	12	13.95	8	9.3	48	55.81
Local Area Networking (LAN)	69	80.23	17	19.76	*	*	*	*
Regional Area Networking (RAN)	12	13.95	8	9.3	34	39.53	32	37.20
Metropolitan Area Network (MAN)	*	*	*	*	70	81.39	16	18.6

*Key: HU=Highly in Used, U=In Use, NU=Not in Use, NHU=Not Highly in Use
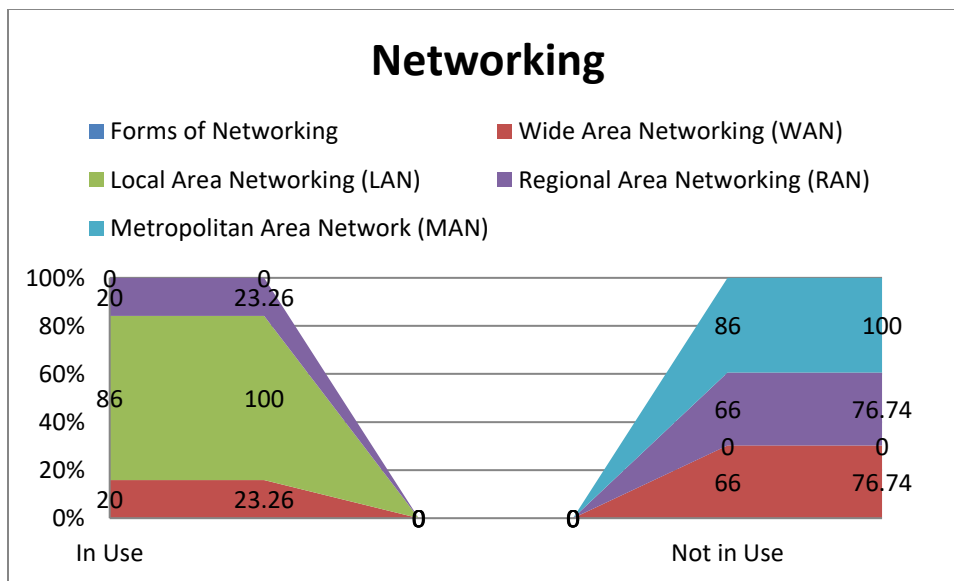
Available data as displayed in table 1 and figure 1 above showed that 69 (80.23%) and 19.76% or 17 respondent being 100% indicated highly use and use of Local Area networking in their libraries while 18 respondents representing affirm that it being used. On Regional networking, 0nly 20 of the 86 respondents representing 23.26% indicated highly use or use of the network in their libraries. On the other hand, the entire 86(100%) indicated the non-utilization of Metropolitan Area Networking. Majority of the university libraries-65.12% or 56 respondents as well as 66 respondents or 76.74% indicated non-utilization of WAN and RAN.

Table 2: Networking and resource sharing activities carried in the library

Item	SA		A		DA		SDA		Decision
	F	%	F	%	F	%	F	%	
Reference and Referral services	56	65.12	30	34.88	*	*	*	*	A
Databases subscription	74	86.05	12	13.95	*	*	*	*	A
Inter-library loan	14	16.28	10	11.62	36	41.86	26	30.23	NA
Cooperative cataloging	24	27.9	50	58.13	*	*	12	13.95	A
Co-oriented subscription	*	*	*	*	46	53.48	40	46.51	NA
Bibliographic development	34	39.53	22	25.58	18	20.93	12	13.95	A
Joint projects, workshops, conferences and workshop	80	93.02	6	6.98	*	*	*	*	A
Exchange of expertise	12	13.95	8	9.30			66	76.74	NA
Photocopying and duplication of materials	86	100	*	*	*	*	*	*	A
Catalogue search and maintain a central online union catalogue of books, serials, non-book materials.	46	53.48	16	18.60	*	*	30	34.88	A
Collaboration in the digitization of materials	*	*	*	*	52	60.47	34	39.53	NA

*Key: SA=Strongly Agree, A=Agree, DA=Disagree, SDA=Strongly Disagree
** A=Accepted, NA=Not Accepted

Figure 2; Networking and Resource Sharing activities in the libraries

The table 2 and figure 2 above housed the data collected in respect of networking and resource sharing activities carried in various federal university libraries in Nigeria. The data revealed that photocopying and duplication of materials are the most resource sharing activity carried out in the libraries with 100% response. It was closely followed by joint projects, workshops, conferences and workshop with 80 respondents or 93.02% strongly agree and another 6 (6.98%) indicating agree. Other networking and

resource sharing activities carried out include: Databases subscription-86.05% and 13.95 strongly agree and agree respectively; Reference and Referral services – 65.12% SA and 30 (34.88%) A

Table 3: Benefits of networking and resources sharing to the library

Item	SA		A		DA		SDA		Decision
	F	%	F	%	F	%	F	%	
They tend to rebrand									

	SA	%	A	%	DA	%	SDA	%	
librarianship and library practices	22	25.58	34	39.53	17	19.77	13	15.11	A
Networking promotes use of e-resources	32	37.20	37	43.02	11	12.8	6	6.97	A
supports to set up institutional repositories	18	20.93	43	50	19	22.09	6	6.97	A
Digitization of some library operations	45	52.32	41	47.67	*	*	*	*	A
Enhanced staff operational skills	37	43.02	21	24.41	15	17.44	13	15.11	A
Facilitates effective service delivery by the provision of resources to satisfy users' needs	63	73.26	23	26.74	*	*	*	*	A
It provides access to composite databases like union catalogues	71	82.56	15	17.44	*	*	*	*	A
It promotes inter-library loan/reciprocal borrowing privileges	77	89.53	9	10.47	*	*	*	*	A
It promotes reference and/or referral services	77	89.53	9	10.47	*	*	*	*	A
Facilitate the development of common online public access catalogues (OPACs).	63	73.26	7	8.14	4	4.65	12	13.95	A

*Key: SA=Strongly Agree, A=Agree, DA=Disagree, SDA=Strongly Disagree
** A=Accepted, NA=Not Accepted

The data in table 3 above projected the accepted benefits of networking and resource sharing in federal university libraries in Nigeria. The totality of strongly agree and agree scale did reveal that the 86 respondents which is 100% standing agreed that networking and resource sharing in the university brought about the digitization of some library operations; facilitated effective service delivery by the provision of resources to satisfy users' needs, provides access to composite databases like union catalogues, promotes inter-library loan/reciprocal borrowing privileges and promotes reference and/or referral services. Other benefits pinpointed include that that it facilitates the development of common online public access catalogues (OPACs) – 70 respondents or 81.40%, Networking promotes use of e-resources - 69 respondents or 80.23%, supports to set up institutional repositories – 61 respondents which stands for 70.93% and enhances staff operational skills – 58 or 67.44%

Table 4: Factors are militating against networking and resource sharing in the library

Item	SA		A		DA		SDA		Decision
	F	%	F	%	F	%	F	%	
Inadequate funding by the government	73	84.88	13	15.12	*	*	*	*	A
Epileptic power supply	61	70.94	8	9.3	7	8.13	10	11.63	A
Lack of technical know-how to develop internet knowledge	21	24.41	9	10.48	32	37.20	24	27.91	NA
Absence of IT strategies for the exchange of information	34	39.53	37	43.02	*	*	15	17.44	A
Poor maintenance in publish network	45	52.33	21	24.41	14	16.28	6	6.98	A
Poor internet connectivity/low bandwidth	54	62.80	32	37.20	*	*	*	*	A
Inadequate information and communication facilities	41	47.67	22	25.58	13	15.12	10	11.63	A
Political intervention	10	11.62	8	9.3	45	52.33	23	26.74	NA
Non-commitment of University Librarian	54	62.8	11	12.8	11	12.8	10	11.6	A

*Key: SA=Strongly Agree, A=Agree, DA=Disagree, SDA=Strongly Disagree

** A=Accepted, NA=Not Accepted
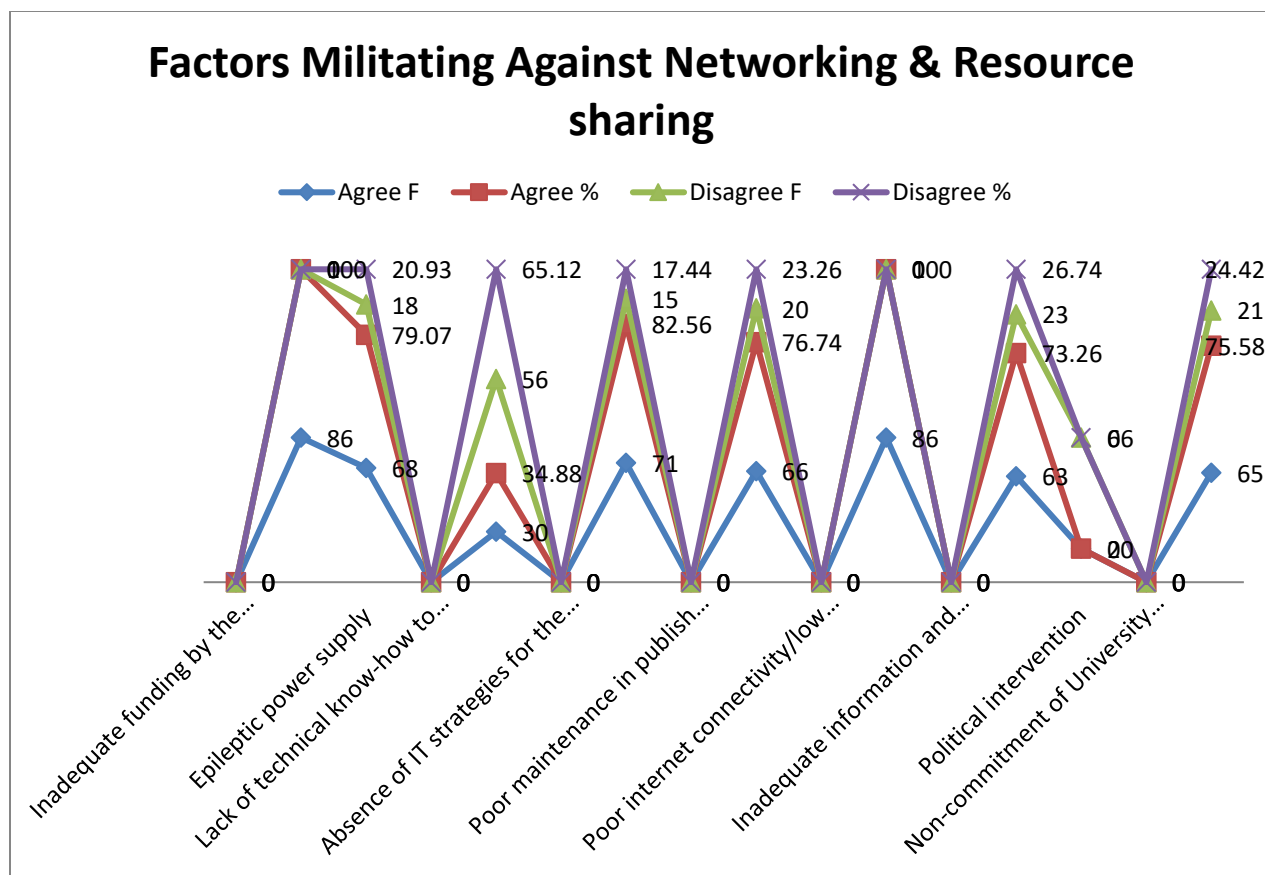
Figure 3: Factors militating against networking and Resource sharing in the university libraries

The aggregation of strongly agree and agree scale as displayed in table 4 and figure 3 above did indicate that the entire 86 respondents or 100% agreed that Inadequate funding by the government and Poor internet connectivity/low bandwidth are major factors militating against networking and resource sharing in federal university libraries in Nigeria. They were closely followed by absence of IT strategies for the exchange of information – 82.56% representing 71 respondents, Epileptic power supply – 68 respondents or 79.07%, Poor maintenance in publish network – 76.74% or 66 respondents, Non-commitment of University Librarians – 65 respondent representing 75.58% and Inadequate information and communication facilities – 63 respondents or 73.26%

On the other hand, the respondents did not agree that Lack of technical know-how to develop internet knowledge and Political intervention as both scored 65.12% representing 56 respondents and 76.74 or 66 respondents in the negative respectively

5.0. Discussion of Results

This study did discover that most federal university libraries in Nigeria were not participating in Wide Area Networking rather concentrate mostly in local area networking (LAN) (see table 1) In the case of other networks, only few of them were involved in Regional Area Networking while non participates in Metropolitan Area networking. The outcome of this study is indeed disheartening when compared with what is happening in university libraries in developed and other African countries like, the US, Canada, South Africa, Kenya but to mention a few. This result is contrary to the irked position of any library in this era as stated by Wikipedia (2021) that libraries in the US operate as part of the technological infrastructure that supports the National Research and Education Network (NREN), acting as an electronic safety net for the American public to guarantee basic access to electronic information adding that libraries are capable to take on this role, as they already serve such a role in a print-based society. They not only provide electronic information and network connectivity but also provide training and education to the public on how to access and use network information it noted.

The study further found that photocopying and duplication of materials are the most resource sharing activity carried out in the libraries alongside joint projects, workshops, conferences and workshop, databases subscription-Reference and Referral services. It is on record that none of the university libraries were involved in any global electronic networking as observed being practiced by university libraries of developed nations. All the same, the outcome of this study is in consonance with that of Ekomunna (2012) who did highlight that some of the objectives of library network include: cooperative acquisition assignment of specialization in material acquisition; co-oriented subscription; exchange of duplicate holdings; cooperative cataloging, inter-library loan/reciprocal borrowing privileges, reference and/or referral services, translation-users' interest survey, bibliographic development; photocopying and reprographic services, joint research projects, workshops and meetings and directories and inventories.

The study went on to ascertain benefits networking and resource sharing to the libraries. The totality of it all is that the respondents agreed that networking and resource sharing in the university library brought about the digitization of some library operations; facilitates effective service delivery by the provision of resources to satisfy users' needs, provides access to composite databases like union catalogues, promotes inter-library loan/reciprocal borrowing privileges and promotes reference and/or referral services. Other benefits pinpointed include that that it facilitates the development of common online public access catalogues (OPACs), Networking promotes use of e-resources supports to set up institutional repositories and enhances staff operational skills acquired through joint organized workshops, conferences and seminars.

This outcome affirms Potdar and Joshi (1997) assertion that among other things, networking improves resources utilization and service levels to users at the individual libraries by providing automation facilities in acquisition, serial control, cataloguing, circulation, user's services and funds accounting; enhances resource sharing by providing individual libraries access to composite databases like union catalogues, CAS and SDI, provides efficient and reliable means of resource sharing in areas such as inter library user services, document delivery services, manpower training, access to national and international databases

The study also identified of some factors militating against networking and resource sharing in federal university libraries in Nigeria. According to available data, the challenges may be said to hydra-headed. It was collectively agreed that inadequate funding by the government and Poor internet connectivity/low bandwidth are major factors militating against networking and resource sharing in federal university libraries in Nigeria (see table 4 and figure 3). Other identified challenges were, absence of IT strategies for the exchange of information Epileptic power supply Poor maintenance in publish network, Non-commitment of University Librarians and Inadequate information and communication facilities. This result is in agreement with that of Igun (2010), who stated that some of the factors militating against library networking in developing nations like Nigeria are lack of fund, poor attitude of government and top government towards library.as well as that of Mutula and Ojedokun (2008) who asserted that

severe financial constraints, inadequate infrastructure, outdated or non-existence of hardware and network connectivity, inadequate staff training, poor facilities and harsh environmental condition are militating factors. On the other hand, the discovering of this study debunked the claim that Lack of technical know-how to develop internet knowledge and Political intervention as projected by Ogbonna and Anunobi (2013) who acknowledged that librarians with software/hardware installation maintenance, networking and programming are barely known existence.

5.1. Conclusion and Recommendations

The outcome of this study did show that no federal university library in Nigeria can boast of being fully involved in global networking as to gaining from piles of information available in academic libraries of developed nations as has been highlighted overleaf. In fact, the university libraries may be said to be in the 20st century considering the fact that they are mainly involved in traditional resource sharing methods. All the same, the librarians are not be blamed as it was also discovered that the libraries were faced with many challenges militating against effective networking and resource sharing (see table 4 and figure 3).

Be that as it may, tt is no longer a matter of choice as the reality is before us that networking and resource sharing has become the mainstay of user satisfaction in this 21st century libraries. To this end, if university libraries realize that their survival depend solely on the support and patronage of satisfied students, the benefits of networking and resources sharing cannot be divorced from their joy and convenience which collaborative efforts or arrangements in modern information services provide. Come to think of it, the desire to share and transfer information in Africa is not new as there have are instance like the Cameroon Interuniversity Network – the determination of the Cameroonian authorities of higher education to provide universities with modern infrastructure; the Kenya Education Network (KENET) – an initiative to establish a high speed, reliable and sustainable IP network for interconnectivity among educational institution, the Malawi Academic and Research Network (MAREN) – established to provide bandwidth to major

academic sites and the Senegal UCAD information technology network which connects schools and faculties of the university in as much as Nigeria universities have had some failed projects, there is this clarion call for Federal University libraries if they are succeed in satisfying the information needs of their patrons and contribute meaningfully in teaching and research to join the league of global academic libraries and reap from the benefits of information networking driven by ICT. Going by the findings of this study, the following recommendations are penciled down.

- *In the first instance and on a general note, all identified challenged as displayed in table 4 and figure 3 should be tackled head-on by all concerned.*

- *The National University Commission (NUC)as university control and monitoring body should partner Tertiary Education Trust Fund (TETFUND) to sponsor and finance the establishment of Nigerian University Libraries consortium that will ensure effective networking and resource sharing among university libraries in Nigeria and those of developed nations.*

- *No organization can excel without adequate funding let alone the libraries that is the hub of academic activities. The implication is that there is need for government and other stakeholders in the management of university education in Nigeria to see the need to increase the annual budgetary allocation to university libraries with a view to increasing their efficiency, effectiveness and capacity development in line with the emerging technologies.*

- *Association of University Librarians of Nigeria (AULN) as a body should rise to the occasion and sought for financial assistance through soliciting*

for funds from developmental organizations, NGOs and public-private partnership arrangement.

➢ *It is an established fact that most university libraries in developing countries are battling with challenge of poor network in which case Federal University libraries in Nigeria are no exception. To this end, it is imperative that both government and university management ensure the provision of sufficient bandwidth above what is currently in use by the libraries with the support of internet service providers like MTN, GLO, Airtel, 9mobile and Nigerian Communication Commission (NCC)etc .*

➢ *In line with the trend, librarians should on regular basis attend conferences, workshops, seminars and other in-service training as to updating their skills in line with every emerging technology so as not to be found wanting in their field.*

➢ *The issue of moribund state of public power is no longer news. University management should go green and have the university libraries linked to solar power source. This can be installed as 'stand alone' exclusively for the library.*

➢ *University librarians should start talking with one voice based on the axiom 'united we stand and divided we beg' if the dream of effective library networking among the universities is to be realized to the fullest. The principle should be that of PUSH (Pressurize until something happens. This means that university librarians must see it as needful to mount desirable pressure on the powers that be anytime that they are demanding for any necessity like the library networking for the libraries. The final word is: ALUTA CONTINUA.*

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