

**USER NEEDS AND THE APPLICATION OF INFORMATION TECHNOLOGY
FACILITIES AS DETERMINANTS OF COLLECTION DEVELOPMENT
PRACTICES IN UNIVERSITY LIBRARIES IN NORTHERN NIGERIA**

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FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA, NIGERIA**

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**A THESIS SUBMITTED TO THE POSTGRADUATE SCHOOL, FEDERAL
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ABSTRACT

This research investigated user needs and the application of information technology facilities as determinants of collection development practices in university libraries in Northern Nigeria. Five research questions were provided to guide the study. Two null hypotheses were tested at 0.05 level of significance. The population for the study was eighteen thousand three hundred and sixty nine collection development librarians where thirty nine (39) eighteen thousand three hundred and twenty nine library users were library users in the nine university libraries studied. The sample size of the population was three hundred and seventy seven (377) according to Krejcie and Morgan (1970) sample size table. Questionnaire and observation checklist were the instruments used for data collection. Out of three hundred and seventy seven (377) copies of questionnaire administered, three hundred and thirty nine (339) copies representing 89.4% were used for the analysis. For the collection development librarians, thirty nine (39) copies of questionnaire were administered to them where nineteen (19) copies were returned. Descriptive statistical tools involving frequency counts and percentages, mean

and standard deviation were used to analyse the data in respect of the six research questions. Pearson product Moment Correlation (PPMC) was use to analyse the hypothesis. The findings of the study revealed among others that the main practice of collection development was through purchase and subscription. Similarly, insufficient computers with Internet facilities, poor Internet connectivity, lack of information technology skills, irregular power supply, download delay, difficulty in accessing some website, inadequate technology infrastructure, lack of technical assistance by library staff were seen as challenges to users' needs and information technology on collection development processes in the universities under study. The study further revealed that there is significant relationship between information technology use and collection development practice in the study areas. The study recommended that the management of university libraries in Northern Nigeria should encourage resources sharing among university libraries as it would save time in the selection and acquisition of information resources. The study recommended further that there should be provision of funding for the acquisition of information technology facilities as well as proper training on ICT for library staff members through seminars, conferences and workshops to keep them abreast of better ways of developing their collections. The study recommended that there should be provision of modern information technology facilities to facilitate the collection development activities of the libraries such as in selection, weeding, preservation and conservation of information resources.

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CHAPTER ONE

1.0 INTRODUCTION

1.1 Background of the Study

The main objective of the Library was to support teaching, learning, research and community development, preservation and maintenance of records including accounts of civilization, culture and knowledge of humanity created and transmitted over several epochs and generations. Libraries exist in different types which include: school, public, special, national, and academic. The emphasis of this study is on academic library, which centers in a university environment that provides information resources to support the teaching, learning and research activities of its users. The university library according to Ihedioha (2018) performs the following functions:

1. Provides information resources to undergraduates, postgraduate students and researchers
2. Provides information resources in support of the faculty
3. Provides information resources for self-development
4. Maintains Inter-Library co-operation with other libraries
5. Provides information resources for the host community where they are situated
6. Provides avenue for projects, thesis and dissertation works.

In order to achieve the above mentioned functions, the university library is divided into various units/department each performing its function. The major units may include:

1. The Administrative services,
2. The Technical Services or bibliographic services,
3. The Readers' Services,
4. Digital/Electronic Services.

One of the units of technical service or bibliographic service is the collection development section which is concerned with the building of library information resources to meet the needs of the users. It is charged with the functions of identifying and acquiring books, journals and other information resources needed in the library. This is achieved through various acquisition or collection development practice like: purchase, gift, bequeaths, and exchange. Libraries that enjoy depository status (like Public and National Libraries) exploit the legal deposit provision to develop their collections. According to Kaur and Rupesh (2017), large university libraries with appreciable volume of collection development activities, the collection development section could be further sub-divided into the following units.

- ❖ **Searching Unit:** This unit processes documents and makes available the necessary information for book ordering. The unit also crosschecks and ensures that books and other materials earmarked for ordering are not already in the library to avoid ordering duplicate copies with its attendant wastages. This unit also ensures that the bibliographic detail of the information resources placed on order are correct with particular reference to author, title, place and date of publication, publisher, pagination.
- ❖ **Acquisition Unit:** This unit orders for books and other information resources after establishing that all information pertaining to the material resources are correct. The unit ascertains donors, publishers, vendors, booksellers and other likely sources of library materials. The unit also ensures that the books and materials received are the exact ones ordered. Accessioning of materials also takes place in this unit.
- ❖ **Invoicing Unit:** This liaises with the-accounts section or other department that approve expenditure for the preparation and clearance of the invoices for payment.

It is pertinent to note that the activities in the collection development section can only be effective where there is a good collection development policy

Collection Development Policy is a written plan that entails having a balance collection regardless of the type or size of a library. It helps to identify the strength and weaknesses of the library's collection and must reflect the aims and objectives of the university library. In addition to the building of a library collection through the help of a written collection development policy guide the selection. Therefore, selection of library resources entails the picking of few out of many been recommended by the selection committee of the institution.

Once a collection development policy is available, selection of information resources becomes easy because the policy would have stated some guidelines as to the selection of materials (Aina, 2004). After selecting the appropriate materials/information resources for the library, acquisition of resources materials is done which involves adding information materials to the already existing library collection. This is done through collection development policies in variety of ways which include purchase, legal deposit, gift and exchanges, donations as well as through bequest. Through good written policies including the selection, acquisition and preservation of information resources, can support the activities of the university library in terms of teaching, learning and research in meeting users' needs.

A user in a library is a client and a patron who makes use of a library to satisfy his information/educational and recreational needs, with current, accurate, relevant and up-to-date information resources. To achieve and satisfy the information needs of a user, there is a need for a functional and suitable collection development that can meet the educational and recreational needs of the user.

Libraries are known to be the heart of any university that support the teaching, learning and research of the university which need to be well stocked with relevant information resources both printed and non-printed formats and also made accessible to the various groups of users like students, lecturers, researchers. To achieve this, the collection development of any university library needs to be supported with information technologies that enhance the building of their information resources.

Collection development in university libraries is moving towards electronic documents using information technologies. The use of printed materials is decreasing and need for accessing electronic information resources is increasing slowly day by day. In addition, the concept of collection development which implies building, growing, dealing with selection and acquisition of university libraries materials is changing toward collection management (Khademizadeh, 2012).

The application of information technology facilities in library routines has revolutionised the entire process of collection development practices from manual system to automated system. Automated libraries had become a leading edge in terms of technological solution to the long awaited problems of improving access and expanding the dissemination of information to users particularly in university libraries.

Subsequently, the rapid move to an automated environment had changed the task and preferences of users in various libraries. Lili (2009) argued that the non-availability and insufficiency of documents in printed form, including the opportunities of accessing documents at the comfort of a user's location forced the libraries to shift gradually from printed to electronic medium. The use of electronic media such as the Internet, software packages, mobile phones to mention a few provides opportunities for users to access information they may need or require which helps to bridge time, space, minimize effort

and cost in their search for information as well as maximize quality and efficiency of the information.

Utilisation of information technology in university libraries requires certain skills by both librarians as well as their users. In other words, the possession of information technology utilization skills is very essential to the effective utilization of the information technology facilities. The success of any university programme depends largely on the way these facilities are utilised as this affects the overall performance of the university. It is expected that information technology facilities should be available and properly utilised in terms of resources collection by librarians in the universities to inculcate in the students skills for individual survival and national development.

The availability and utilisation of information technology in the university libraries have become inevitable as it can be used to select and acquire current information resources used by students and faculty to improve the quality of teaching, learning and research. Information technology utilisation aims at increasing access to timely, accurate, relevant and current information from both immediate and remote databases and other sources, and this has become very necessary because of the current phenomenon of information explosion worldwide resulting from exponential rate at which information is been generated in the 21st century.

Universities all over the world are embracing the application of information technology facilities based services in terms of their information resources in an attempt to create favorable environment for students and faculty to engage in learning and research by gaining easier access to information. The universities in Nigeria, as the major supplier of high-level manpower for national development, must of necessity be very much involved in benefitting from current and relevant information technologies for the

achievement of academic excellence. Since university libraries exist to support the university; their development is therefore, always tied with the parent institution (university). Therefore, whatsoever is important to the university must be important to the library and planning activity needs to be tailored towards this (Cox, 2010).

In response to the university's need to improve its research output, the university library has adopted the use of information technology for collection development which has drastically transformed information service delivery in Nigerian university libraries (Reddy, 2015). The introduction of information technology in the university libraries have completely changed now as a result of new roles to fulfill the frequently changing needs of information in order to remain relevant in the 21st century. In libraries, information technologies have greatly simplified acquisition, organization, storage, retrieval, provision and use of information. Internet, CD-ROMS and other databases for example, have greatly improved access to a variety of current information resources. Information technologies have totally improved provision of library and information services by overcoming time, distance and other barriers. The application of information technology in the library has to a great extent enhanced accuracy and efficiency information handling and delivery, it has greatly improved the way information is being controlled and managed in libraries. Eyo and Ebye (2009) opined those libraries that operate with the application of information technology not only have the best of the information in the world, but they also stand a better chance of meeting up with the huge demand of information by the users. The availability of information technology facilitates will be encouraging the efforts by university libraries to provide academic information and use the technology to disseminate information through collection development of their resources.

On the other hand, collection development is the strength of any library and information centre, whether it is an academic, public or special library. Collection development is a systematic building of information resources in a library or information centre. Saka (2018) defined collection Development as the process of building library collection. In addition, collection development is seen as an aspect of library practice that is responsible for the selection and acquisition of information materials that assist librarians and information specialists to perform the basic functions to the used of information material effectively.

Collection development policies are written documents that the collection development committee uses as a guide for how the policies should be amended and how selection, acquisition of information, conservation and preservation as well as weeding of unwanted information resources is been carried out in the library

In the first decade of 21st century the digital library environment influenced by information technology is a perfect blend of internal resources (i.e. institutional resources) and external resources like those, which are having access right from the publishers through subscription. In digital university library environment, some resources are “born digital and other are needed to be digitalized through the process of conversion of printed materials using information technologies. The organization of digital materials is done using metadata like Dublin Core to provide seamless access to the users.

1.2 Statement of the Research Problem

For an effective teaching, learning, and research activities, university libraries must continue to attend to the interest of their users by providing adequate, relevant and up-to-date information resources within the shortest possible time for sustainable development. In other words, a good collection development practice ensures that the

right information resources be provided to the right users in the right format and at the right time. In fact, the sustainability of any library depends to a great extent on the vibrance or effectiveness of its collection development practice.

However preliminary investigation carried out by the researcher shows that all efforts made by university libraries to provide the necessary information resources needed by their patrons has not been encouraging.. This is as a result of the tedious processes involved in building library's collection which consume a lot of time, a wide range of distance in accessing the suppliers/vendors who have the required information resources needed as well as the effort put in place to achieve a well-stocked library with relevant information resources is very difficult.

Furthermore, it has been observed that the degree of information technology application for collection development practice in many university libraries in Nigeria is still very low when compared with advanced countries. These situations without any doubt will adversely affects service delivery especially in the area of collection development where many information resources are no longer published in printed format but electronically which requires a technological approach for their acquisition or subscription. It is against this backdrop that this study investigated user needs and the application of information technology facilities as determinants of collection development practices in university libraries in Northern Nigeria.

1.3 Aim and Objectives of the Study

The main aim of this study is to examine the user needs and the application of information Technology facilities as determinants of collection development practices in university libraries in Northern Nigeria.

The specific objectives of the study are to:

1. examine collection development practices in university libraries in Northern Nigeria;
2. examine the availability of information technology facilities for collection development processes in university libraries in Northern Nigeria;
3. determine the relevance of user needs on collection development practice in university libraries in Northern Nigeria;
4. determine the relevance of information technology use on collection development practice in university libraries in Northern Nigeria;
5. determine the factors affecting user needs and information technology use on collection development practices in university libraries Northern Nigeria.

1.4 **Research Question**

The following research questions guided the study:

1. What are the collection development practices in university libraries in Northern Nigeria?
2. What are the available information technology facilities for collection development practices in university libraries in Northern Nigeria?
3. What is the relationship between user needs and collection development practices in university libraries in Northern Nigeria?
4. What is the relationship between information technology and collection development practice in university libraries in Northern Nigeria?
5. What are the factors affecting user needs and information technology use on collection development practice in university libraries in Northern Nigeria?

1.5. Research Hypotheses

The following null hypotheses guided the present study and were tested at 0.05 level of significance:

1. There is no significant relationship between user needs and collection development practice in university libraries in Northern Nigeria.
2. There is no significant relationship between information technology use and collection development practice in university libraries in Northern Nigeria.

1.6 Significance of the Study

This study examined user needs and the application of information technology facilities as determinants of collection development practice in university libraries in Northern Nigeria. This study will benefit library management and user community.

The findings of the study will afford the university library managements the opportunity to know the actual user needs and the level of information technology use in relation to collection development practice for policy formulation and implementation.

The study is expected to encourage the university administrators in Nigeria, including collection development librarians to improve on community analysis (user needs) and use of information technology for sustainable collection development.

The study will also provide empirical evidence on the actual user needs in Nigeria university libraries in relation to information technology use for effective collection development practice.

1.7 Scope of the Study

The areas covered are some selected university libraries in Northern Nigeria which comprised Federal, State and private universities. The study was limited to nine universities. In each of the three geographical regions of North Central, North East and

North West, three (3) universities were selected consisting of both Federal, State, and private respectively.

1.8 Operational Definition of Terms

The following terms were defined operationally as used in the context of this study.

Collection Development practices: These are procedures and policies that guide the selection, acquisition and weeding out of unwanted information resources in the library for effective service delivery

Determinant: this is the degree of influence of one or two variables over the other. In other words, the extent of influence of independent variable over the dependent variable.

Information Technology: can be seen as modern equipment such as the Internet, computers, and telecommunication networks used in the selection, acquisition and preservation of information resources

Practices: These are systematic way of doing things or executing a task.

University Library: a library located in the university that provides information resources and services for the promotion of learning, teaching and research activities to students, faculty, and the host community.

Use: it involves the utilisation of information resources by students and faculty

User Needs: this is the informational, recreational and educational need of the university library users.

CHAPTER TWO

LITERATURE REVIEW

2.0

2.1 Conceptual Framework

2.1.1 Concept of Information Technologies

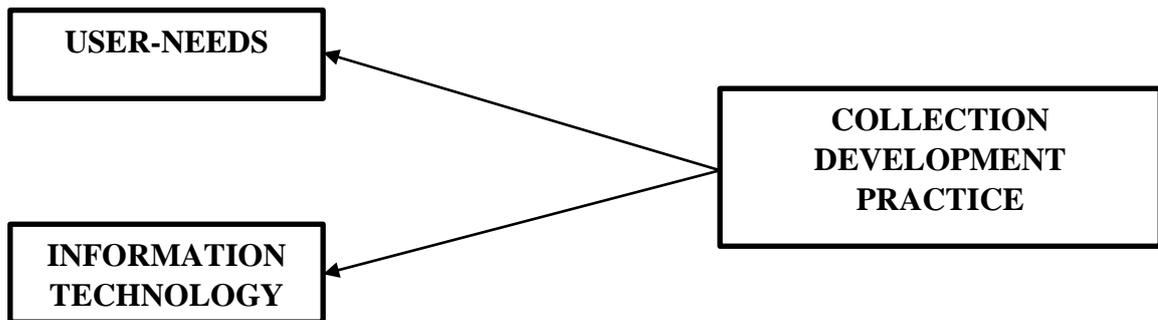


Figure 2.1: Conceptual model

The arrow in Figure 2.1 shows a natural flow among the various component parts of the model. The use of information technology such as the computer, Internet, software packages to mention but a few used in the university libraries in Northern Nigeria influences the collection development activities of the library. This entails that the processes involved in the selection, acquisition, of information resources has been simplified with the use of information technology. This has enabled the libraries to select and acquire relevant information resources that will meet the information needs of their user community.

The emergence of information technology has led to the increase and made possible for the accessibility of electronically made information resources such as electronic books and journals, various database, search engines and the internet. The information technology is very essential in providing information needs to users and the collection development of university libraries as it facilitates quick and fast access to information resources worldwide, irrespective of size, place and location these information resources

through the computer, Internet and other telecommunication networks. As a matter of fact, the university libraries cannot perform its statutory responsibility of providing information resources to the users effectively in this era of information explosion without the application of information technology. The availability and application of information technology in the university environment has become part and parcel of the entire system, to the students, faculty, collection development librarians (library) and the institution. The effective use of information technologies by the library users in search of their information needs and the collection development librarians who are part of the library management in selecting, acquiring, processing, storing and disseminating users information needs to a great extent is justifiable for the university libraries to acquire these information technologies. Information technology has affected the way education is delivered and user needs are made especially in the university libraries by collecting, processing, storing and making available a wide variety of electronic information sources for use by users, faculty and students in their respective institutions.

Gilbert (2015) revealed that information technology has affected the education sector by making it possible for users to access the full text digital contents of local distance libraries and databases using the computers and internet and that collection development librarians in the university libraries as well has access to this opportunity to build and increase their library collections.

By using modern information technologies, library users can access and retrieve their required information within a short time. The collection development librarians who are involved in building the entire library's information resources are also required to be thoroughly conversant with the mechanism and techniques of accessing, retrieving, processing and storing this desired information through information technology facilities in the library. Despite the perceived availability of information technology in

the university libraries and their benefits to user needs, their effective application for the collection development of the university libraries in Nigeria appears to be hampered by varying factors. Aliyu (2011) revealed that a lot of challenges have appeared to obstruct the efforts of information users to satisfy their information needs from new technology as a result of weak, slow and unstable collection development, as process of building library collections.

2.1.2 Concept of user needs

In the area of users need in accessing information using information technologies in the present era, university libraries are in the middle of a paradigm shift in sustaining or making it a reality. In the past, university libraries functioned primarily as information repositories, but now they are becoming a learning enterprise.

In this era university libraries are no longer limited to print resources, but have extended their efforts to electronic resources such as e-journals, e-books, library website pages and bibliographical databases using new technologies to meet the information needs of their users. These resources are consulted by numerous library users especially students and faculty for numerous reasons such as to prepare for examination, complete projects, up-date knowledge, for in-depth research work, updating lecture notes among others (Lawal-solarin, 2013). The use of ICT into the educational system has contributed in solving teaching and learning problems easily, rapidly and accurately.

Libraries and librarians/library staff are to make available adequate resources and services to library users. Hence, understanding users' information needs is essential to the management of libraries. Salaam and Fatokun (2010) submitted that libraries acquire materials primarily to make the materials available and accessible to users. Therefore, the utility of these materials can be determined by carrying out a survey on

users' needs and the success in meeting them. Popoola (2018) submits that the information resources and services available in institutional information systems must be capable of supporting research activities among students and faculty.

Ugah (2017) submits that if information sources are accessible, more users will make use of them. This entails that if information in whatever format be it in (print, non-print or electronic) are made accessible to library users, the users will make use of them in meeting their information needs. Moreover, the researcher added that library users tend to use information sources that are easily accessible. Franscotti, et al. (2017) established that the services of the library staff, introduction of better environment and availability of relevant collections will enable the student to use the library more. Once the aforementioned are made accessible, it will enable users make use of their university libraries thereby satisfying their needs interests.

2.2 Theoretical Framework

2.2.1 Ranganathan laws of theory

This theory was propounded by Ranganathan in 1967. Ranganathan theory was proposed to detailing the principles of operating a library system. Therefore, the theoretical framework for user needs and information technology use on collection development practice is based on Ranganathan's Five Laws of Library Science, namely:

1. Books are for use.
2. Every book its reader.
3. Every reader his (or her) book
4. Save the time of the reader.
5. The library is a growing organism

First Law: Books are for use

The First Law emphasises use and access – not materials for their own sake. Of course, Ranganathan believed in preservation and conservation but the focus in this Law is use. Ranganathan observed that books were often chained to prevent their removal and that the emphasis was on storage and preservation rather than use. He did not reject the notion that preservation and storage were important, but he asserted that the purpose of such activities was to promote the use of them that is, to satisfy the need of users in the library. On the other hand, it also means that books in libraries are not meant to be shut away from its users (Noruzi, 2004; Koehler, Wallace, Jitka, Wanda, and Joanna, 2000).

Second Law: Every reader his/her book

This law suggests that every member of the community should be able to obtain materials needed. Ranganathan felt that all individuals from all social environments were entitled to library service, and that the basis of library use was education, to which all were entitled. These entitlements were not without some important obligations for both libraries/librarians and library patrons. Librarians should have excellent first-hand knowledge of the people to be served. This is why they need to have knowledge of their user's needs and how they can provide their needs with quality information resources.

Third Law: Every book its reader

This principle is closely related to the second law, but it focuses on the item itself, suggesting that each item in a library has an individual or individuals who would find that item useful. Ranganathan argued that the library could devise many methods to ensure that each item finds its appropriate reader. The third law also means that a library's books have a place in the library even if a smaller demographic might choose to read it (Noruzi, 2004; Koehler, Wallace, Jitka, Wanda, and Joanna, 2000).

Fourth Law: Save the time of the reader

This law is recognition that part of the excellence of library service is its ability to meet the needs of the library user efficiently. To this end, Ranganathan recommended the use of appropriate business methods to improve library management. He observed that centralizing the library collection in one location provided distinct advantages. The fourth law of library science explained that all patrons should be able to easily locate the material they desire quickly and efficiently.

Fifth Law: The library is a growing organism

This law focused more on the need for internal change than on changes in the environment itself. Ranganathan argued that library organizations must accommodate growth in staff, the physical collection, and patron use. However, the above Laws have been applied to different aspects of library services in the institutions of higher learning such as: web resources are for use; every user has his or her web resource; every web resource its user; save the time of the user; and the web is a growing organism (Noruzi, 2004; Ogunrombi, 2005).

2.2.2 Collection development practice in university libraries in Nigeria

Collection development has become a very popular term in the university library world especially when a university library is working for a balanced collection that will serve library user needs. It includes everything that goes into acquiring resources, including selection, ordering, and payment. Collection development serves as a foundation upon which other library services are built. It is the systematic building of a library collection based on meaningful data rather than subjective choice. It is the process of assessing the strength and weaknesses of a collection and then creating a plan to correct the weakness and maintain the strength.

The process of collection development includes the selection of current as well as retrospective materials and the evaluation of the existing collection observed Kumbar and Hadagali in Igiamoh and Uro (2012).

According to Kaur and Guar (2017), Collection development is a practice of meeting the information needs of users in timely and economic manner using information resources locally as well as from other organizations. It includes a number of activities as:

- Set the objectives of collection development.
- Collecting data to determine the information needs
- Make a selection committee
- Make selection criteria for material
- acquiring the materials for the collection
- Periodic or continual evaluation of resources
- CREW (Continuous Review, Evaluation and Weeding)

According to the International Encyclopedia of Library Science, the term collection is a planned accumulation of selected artifacts. It is also used in museums as well as in libraries. In the latter, it includes not only books and other printed materials, but also all information materials that use information technologies in building such collection. The emergence /advent of information technologies have affected the role, services and the process of building university libraries in northern Nigeria, as well as satisfying the user needs. There is a clear paradigm shift from manual ways of carrying out information services powered by analog data to electronic ways of building, accessing and retrieving information resources powered by new technologies.

According to the International Federation of Library Association and Institutions (IFLA 2012), “collection development focuses on methodological and topical themes pertaining the acquisition of print and analogue library materials (by purchase, exchange, gift, legal deposit) and the licensing and purchase of electronic information resources” the practice of collection development consist of selection and de-selection of immediate and old resources that are relevant to the university libraries, planning of cogent procedures for continually increasing resources, input to preservation, decision-making, assessment of collections to ascertain how good they deliver their services. These processes are conducted under a guide known as collection development policy which set priorities support efforts and enhances decision making.

Libraries have always been valued for and measured by their collections. The process of collection development has undergone many changes in the past few decades. Through the ages, the library has been measured by and valued for its collections.

A collection development practice is that which permits the library to develop a collection of materials responding to the information needs and service requirements of the users. It has also been defined as “a process that allows for the identification of the strengths and weaknesses of the materials collection of a library in terms of the needs of the users and the resources of the community. It is a universal process in the library world in which the library professional assembles a variety of materials in order to satisfy the demands of the users. This dynamic and constant cycle brings together six elements: users“ study, policies, selection, acquisition, weeding and evaluation” as has been described before. (Evans, 2014).

Similarly, Sanchez (2015) defines collection development as a process which assumes that the information needs of the users that are satisfied in an economic fashion and

inside a reasonable period of time using resources as much internal as well as external to the organization.

2.2.3 Collection development policy in university libraries in Nigeria

Activities associated with building and managing a library's collection should be planned and organized. A written Collection Development Policy is perceived to be an important part of good collection management. A Collection Development Policy is a written statement of the policies intended to govern the activities of a library in regard to its collection. A collection development policy is a written statement about how the collection will be developed. The objectives of the Collection Development Policy should be to serve as:

- a planning document and working tool for selectors;
- a communication aid between the libraries and users;
- assuring consistent and balanced growth of the collection;
- assisting in determining and documenting budgetary needs; and
- facilitating interlibrary cooperation.

The primary function of a written Collection Development Policy is to provide guidance to staff when selecting and deselecting (printed and Dataset) resources for the local Collection. The document serves as a guideline for each element of collection development; it might cover the selection, acquisition, processing, housing, weeding, retention, preservation (archiving in case of Dataset) relegation and discarding of all types of library material in the relevant subject, with reference to specified levels of collection depth and breadth (IFLA, 2012:1).

A policy document provides a sound foundation for future planning; thereby assisting in determining priorities, especially when financial resources are limited. A policy is an

intellectual guide to selection rather than a practical method of selecting material; it is theoretical.

A collection development policy statement is a document that represents a plan of action and information which is used to guide the staffs thinking and decision making. Specially, the staff consults the collection development policy when considering which subject areas to augment and determine how much emphasis is to be given to each area. The policy should be such that it seems as a means of communication with library's service population and the people who fund it. (Evans, 2014)

2.2.4 Influence of user needs on collection development practice

The vital activities of libraries comprise collection development, reference services management, document delivery service, access to organized collections held by the library and assist users in information search and retrieval. Gradually, generation is changing with the time and the present generation's library users are too passionate with the use of information technology. It is well known that all the success depends upon the satisfaction of the library users. So, in the present scenario the quickest library service is more approachable through the world-wide web and internet. To provide information to the 'right users' at 'any time', from 'anywhere' in the 'right way' (Fischer, 2012) is possible using web based technological settings.

Tremendous development has been seen in the field of Library & Information Science due to the faster growth in technology. In past few decades, with the use of internet and technology, the library work has become very fast. To satisfy the needs of library users, speed and accuracy is the most two important dimension. Basically, information technology enhances the workflow of the library which helps reducing manual work, with this, it proliferates the library services. One of the most prominent advantages of

information technology is to provide information technology-based information services to meet the users' demands. Emerging information technologies have changed traditional libraries into knowledge centres and librarians function more like consulting information engineers or knowledge managers (Sampath, Kumar & Biradar, 2010).

Okafor (2011) as cited in (Gakobo, 1985:414) argue that, “the university library is part of the collection development pattern of user needs, in its own institution and cannot expect to choose freely what subjects it will wish to develop”. Fiscal adequacy of any university library is qualitatively measured in relation to users’ requirements. Common sense would dictate the standards that are applied arbitrarily and artificially would not win support from funds granting authorities; instead, budget justifying must rest upon a firm foundation directly related to the requirements of the library’s user needs. It is for this reason that for an objective allocation of university library’s financial resources, users’ preferences must take precedence.

Riahinia (2010) also acknowledges challenges faced by university libraries concerning limited budgets such that knowledge on how users utilize the available information resources is vital. In order to be cost effective, and to serve the users effectively, librarians need to be knowledgeable of the user’s preference and appreciate their favoured formats of information resources. The best method of getting information of the active collection in any given university library is through citation analysis. A number of researchers have used citation analysis to understand user needs information seeking behavior and determine their journal needs (philip and Oluwaranti, 2010;

Pather and Stilwell (2018) observed that usage patterns of information sources in the university libraries have changed considerably in favour of electronic resources. In efforts to satisfy users’ information needs and demands in the changing information

environment, electronic collection development policy has been developed by librarians to tackle the challenges posed by the new information seeking behaviour of users in the university libraries. The new paradigm is that users now require access to library resources electronically – such as full text electronic journals at their desks. With the emerging scenario, Adeyoyin (2016) proposed that university libraries must develop appropriate strategies to provide electronic resources towards efficiency in research process. Thus, books, journals and theses should be complemented with their electronic counterparts in the university libraries, and made accessible to users through networks in their offices and other terminals. Additionally, digital libraries should be developed.

According to Adeogun (2013), “libraries are challenged to provide access to relevant information by applying information technologies to facilitate quick, efficient access, integrate and repackage information for the end-user”. It is therefore apparent that, the innovations brought about by information technologies in librarianship and information profession are changing the nature of library collection development from print to electronic collections. In view of this, it is imperative for the university libraries to provide sufficient information technology infrastructural facilities to support accessibility and utilization of the acquired e-resources (Ramzan & Singh, 2010) to satisfy the changing information needs of users in the electronic information environment.

As the community changes, the library will need to reassess and adapt its collection to reflect new and differing areas of interest and concern. The Collection Development Policy will be periodically evaluated and revised as necessary to provide guidance for implementing changes in the collection. It is obvious that information resource development is necessary to identify the needs of the user rather than build abstract

collection. (University of Chicago library, 2013). The present era is called information era. Information has become the most important element for progress in society. To thrive, in this modern era, one needs a variety of information, no matter how well versed one is in a field of profession. It is to this effect that Kadil and Kumar (2013) stresses that a thorough understanding of users information needs and seeking behavior is fundamental to the provision of successful information services. Knowledge of the information needs of users is vital for developing library collection, upgrading facilities, and improving services to effectively meet the information needs of users.

According to Tahir and Mahmood (2018) for academic libraries to adequately address the changing information needs of its students, they need to know about the information searching, obtaining and use. They describe information behavior as those activities a person may engage in when identifying their own needs for information, searching for such information in any way and using or transferring that information. However, Nicholas and Herman (2019) are of the opinion that building collections which fails to satisfy the information needs of users would be a futile exercise. It is thus essential to ascertain such needs continuously and to anticipate future users' needs. For the purpose of developing information resources development policy, standard and guideline, it is necessary to study the primary users of the collection and to find out if there is information routinely sought on a particular topic by researchers and academics. Then it is necessary to ensure that these topics are adequately covered in the collection. From the literatures reviewed above, the changing information needs of patrons will have an effect on the policy because the quest for information is not static, the information needs of users changes especially in this modern era of technology which has resulted to information explosion. The information needs of patrons may tend to be shifting from

print to electronic resources and so libraries need to adjust their policies to meet the changing information needs of users.

2.2.5 Influence of information technologies use on collection development practice in university libraries in Nigeria

IFLA (2012) “asserted that electronic acquisition system (Information Technology) is a system of using electronic gadgets such as computer to acquire library materials the libraries intend to acquire.” Electronic resources are those materials that required computer access through personal computer or mobile devices. These include: e - books, e – journals, e – reference books/database, e – audio /visual resources, e – images, numerical and statistical databases, indexing and abstracting database.

According to Madu (2018) these electronic information resources listed above, because of their compatibility, durability and accessibility makes it possible for university libraries in Northern Nigeria to acquire, store and process all their required and acquired information resources with ease. That has affected and influences their collection development. That brought about the following advantage to the university libraries in Northern Nigeria.

- i. Bridge in time
- ii. Bridge in space
- iii. Minimization of effort
- iv. Minimization of cost
- v. Maximization of quality and efficiency

Sadiq (2011) stated the function of information technology as electronic devices that have collections development in the ordering and it can be viewed under three levels all of which can go simultaneously. These levels include:

- a) Computer processing of specific routine tasks such as selection, bibliographic searching and preparation of report.
- b) Computer monitoring of the flow of materials through the system, based primarily on the maintenance of an in process file.
- c) Computer assistance to management in scheduling work pinpointing problems areas and reporting on performance.

All the above listed functions enhance the accessibility, search ability, selection and acquisition of new information resources that the university library in Northern Nigeria intend to acquire.

Afolabi (2017) in related studies “opined that C – D ROM databases allow user to access relevant databases without robust internet connectivity in library. It is therefore cost effective than online data bases as information could be access offline without paying for telecommunication fee.” C -D ROM as one of the new technology has influenced collection development in the area of storage capacity because the CD ROM can store large amount of information resources and the access of such information resources is with ease and does not require the use of internet connectivity in library. These have minimized cost effective and also improve quality. CD ROM data bases are important tools for identifying the bibliographic details of potentially useful document and these has influence collection development by ensuring that library collections or holdings are built tirelessly and effortlessly. The CD ROM also ensures easy access to large volume of literature for research.

Alhassan and Macaulay (2015) affirm that:

The advent of information technology has accelerated the availability and usability of electronic Resources in university libraries because of high demand for relevant

information by faculty members, students and researchers. In order to meet such demands, library and librarians have to adjust their role and position in relation to these global developments. Thus university libraries now invest heavily in electronic resources.

The importance of information technology facilities on collection development practice cannot be over emphasized because the purpose of every university library is to select, acquire and disseminate relevant information resources to their patrons/users of which achieving these goals within the stipulated time frame always prove abortive. But with the application of information technology facilities, achieving these set objectives has always been made easy.

Emezie and Nwaohiri (2013) observed that: The traditional methods of information dissemination have given way to electronic means of communication while the development of new technology in library operations have improved and facilitated the dissemination of information and access to satisfy user needs. It has equally provided new roles in information provision, dissemination and transfer. The librarian no longer plays a passive role rather he assumes an active role. He is no longer a custodian of books but the gate way to a myriad of information sources. The traditional way of selecting, acquiring and disseminating information has change drastically with the advent of Information Technology use in the collection development of university libraries. University libraries are now changing dramatically by adopting new means of Technology in all activities of print to e-environment. This makes the selection of information resources easier as well as the acquisition of such information, as librarians can sit comfortably at any choice of their location and make selection of all the information resources they desire to make through the internet and communication networks as well as the acquisition of such information resources. The payment of such

information resources has also been influenced by Information Technology such as the automated Teller Machine (ATM), Internet banking and mobile banking. Collection development is the process of meeting the information needs of the people or users in a timely and economical manner using information resources locally held as well as from other organizations which could be in printed and non-printed formats using New Technology such as the computer. The benefit of using such Information Technology on collection development is both to the users and library staff. Okoroma (2010) stated some benefits to include: the provision of online access, ability to easily access more information via the online network, saves time and cost, and makes for more accurate completion of tasks or processes.

Similarly, Nwalo (2013) asserted that the use of information technology on collection development in university libraries in Africa will permit the acquisition and use of literature on Compact Disc Read-Only (CD-ROM) which has huge advantages both in terms of cost and durability. It collapses time, space as well as reduces the incidence of mutilation, defacing and theft of library materials.

Collectively, the use of information technology to automate our university libraries enhances various operations and services in the library such as selection, acquisition, serials, and cataloguing, circulation and information networks as well as library management.

Ihejirika and Ekere, (2016) opined that in the modern age of information explosion, no library can satisfy her client with the manual library process.” This they contend, is especially the case of university libraries where speed and versatility in making their bibliographic searches is required as such, information technological skills among librarians should be seen as a valuable prerequisite that would help to facilitate library computerization, efforts and functions in order to meet the demand of ever-growing user

information needs. In view of the above, the collection development librarians responsible for the selection, acquisition, order placement and payment of the acquired information resources need to have some basic information technological skills needed in a work as: using information technology for managing files, word processing, spreadsheet, database, Internet and e-mail. In the absence of such information technological skill, the purpose, function and the main objective of collection development may not be achieved easily and successfully and this could also affect the services rendered to clients and users of such libraries. For collection development is the process of meeting the information needs of the students, researchers, faculty members and the host community in a timely and economical manner using information resources locally and from other organization which could be in printed and non-printed formats using the information technology like the computer and communication Network to meet user's informational need.

However, in the light of the above assertion to build a qualitative and quantitative collection development of information resources in university libraries, the importance of the application of information technology facilities can never be overemphasized because they transformed the selection, acquisition, conservation and preservation, communication and liaison functions in libraries. The application information technology has transformed libraries from being location specific to being indifferent to the form and location of information by shifting library philosophy from ownership of locally stored information resources to provision of access to electronically stored information resources from different sources thereby reducing the functions of libraries from that of information provision to that of information intermediaries and database managers through which users frustration is drastically.

Ozioko (2011) and Ekere (2011) also opined that collection development also involves working on an already existing collection so as to determine the strength and weakness with a view of correcting and improving on the performance.” Adequate, easy and fast access to library information resources has affected the performance of any given library through the influence of information technology. Both printed and multi-media information resources can be accessed at a spot in different location in libraries that has been influence by information technology rather than at one location in libraries that are not influence by information technology. The storage and retrieval of library information resources (bibliographic, cataloguing, answer to users’ queries) at different locations is made easy, fast and efficient through the influence of information technology application. Moreover, due to the phenomenal speed of information technologies’ transmission, libraries speed of work (bibliographic checking, ordering and receipt, cataloguing and classification, and circulation) are done much very quickly than by manual methods thereby saving the time of users by creating fast access to information resources.

Jones (2017) emphasized the importance of digital collection development for users. In the present article this categorizes digital collections into four areas: materials to support students; learning and teaching materials to support researchers; special collections and „just in case“ materials.

Ameen, Kanwal (2016) in his article discussed all kinds of managerial and practical issues pertaining to collection development and its acquisitions. The paper has attempted to explore the relationship between the use of varying collection-related terminologies and ever-emerging forms of scholarly publishing in libraries. It was found that the related emerging terminology has been expanding rapidly because of the direct impact of the information technology developments.

Electronic resources have affected the functioning of university libraries and the information seeking habit of users (Tenopir, 2013). Resources at today's library are not only available in print but also in electronic format. CD-ROM technology has enabled libraries to provide instant, easy, and convenient access to a substantial amount of relatively current and retrospective information at a fixed or predictable cost. Due to the availability of CD-ROM databases, university libraries have reported an increase in the use of journal collections, interlibrary loans services, and microfiche collections.

The level of quality of a university is determined to a great extent by that of its library, that is, by the adequacy of its collections of books, journals, other research materials, and services.

University libraries are changing rapidly with the advent of technology. According to Shuling (2017), in recent years, electronic information has gradually become a major resource in every university library. The growth and diversity of electronic resources, especially e-journals, in the past few years has led many to predict the extinction of the printed journal (Okello-Obura and Magara, 2018). It has been suggested that a new paradigm is sweeping scholarship (Harper et al., 2006). Argue that technological advancements opened up new horizons for the creation, storage, access, distribution and presentation of information. In the global information technology dominated world, "place" is much less important (Ferguson, 2016). "The impact of moving from text-based to resource-based learning has involved heavier use of library materials and a demand for more and varied media sources" (Kinengyere, 2007). This makes the provision and use of Electronic Information Systems (EIS) in university libraries a critical issue for those working in information and library services (Armstrong *et al.*, 2011; Elam, 2017). In today's information age it would seem that university library users would not only be eager to take advantage of the convenience electronic resources

have to offer, but would be fully immersed in the information technologies (Elam, 2017).

Electronic information resources offer today's to users of information needs the opportunities compared to their predecessors.

2.2.6 Challenges of user needs and information technology use on collection development practice

These constraints in ranked order are absence of sufficient training programme; non-availability of desired electronic resources within the universities libraries. Further, low level of local contents in the electronic information resources; poor technological skills on the part of the library user of information needs and lack of time by the university library staff due to tight technical schedule, lack of publicity on the contents of the available electronic resources by the universities libraries. Also unorganized nature and proliferation of electronic resources on collection development Paucity of workstations to access electronic resources in the universities and, Irrelevance of contents of electronic resources to local user needs. Bhardwaj and Madhusudan (2013) identified the followings as constraints to use of electronic resources (ER): Lack of proper arrangement of legal information resources, poor description on legal information sources, lack of online help, poor website design, too many login requirements, lack of expertise in using the databases, lack of printing provision, and confusing search screens.

Studies by Dulle (2010) and Msonge (2013) observed that, library users in university libraries complained of poor access to current library resources and difficulties for subscription to online scholarly content. This affected negatively the teaching and learning process, research and consultation services.

There are challenges inhibiting the effective and efficient discharge of the statutory roles of the university libraries for teaching, learning and research.

These challenges arise from a number of factors peculiar to a developing country like Nigeria.

1. Financial constraint:

- Due to economic quagmire in which the country is thrown, university libraries face the challenges of financial constraint which causes the acquisition of inadequate books, journals and electronic information resources.

Acquisition of computer systems and accessories are also grossly affected by the nation's messy economic status. Okiy (2010) noted that of all the different types of libraries in Nigeria, only university libraries have a clearly defined policy of funding, because the National Universities

Commission (NUC) has a statutory provision that at least 10% of the recurrent annual budget of the parent institutions should be allocated to the library.

- However, it is regrettable that such monies are not forthcoming as most university administrations tend to flout and fail to comply with the provision (Fabunmi, 2014 ;Okiy, 2008). However, TETFUND places higher premium on the financial provision for University Libraries. But for TETFUND, university libraries could have become a doldrums. The problem of financial constraint has so many attendant effects and has resulted to problem of deteriorating facilities and problems in maintenance of core collections.

2. Inflation:

- There is a general increase in price of items. The implication of this is that the little amount that is disbursed to university libraries could only purchase few

items like book, journals, other information materials and equipment unlike in the past. Inflation has forced many university libraries to prune down their collections in the purchase of periodicals/ journals, electronic information resources and also reduction in the number of copies of books purchased in the libraries. However, the provision of databases which contains thousands of books and journals

3. Shortage of staff

Shortage of staff is also a challenge facing university libraries today. Echezona (2010) expressed that staffing difficulty has presented a challenge to university libraries especially the dearth of enough professional expertise required to increase the daily output of the library.

4. Information technology associated challenges:

University libraries also face the challenge associated with new technology use in facilitating teaching, learning and research of user needs in the university. Adeniji and & Ogunniyi (2011) reported from a study on the availability and use of new technology in a university library this factors militating against the use of information technology in the University library including high cost of internet connectivity, low bandwidth, lack of information technology skills and obsolete equipment.

Other challenges include lack of commitment by library managers, lack of funds, lack of expertise and IT infrastructure and lack of institutional support.

5. Epileptic power supply:

- Electricity supply in Nigeria is at its lowest ebb. This is a clog in the wheel of information technology facilities. Generators provided are not generating adequate power. Even then, the amount of funds still committed to the purchase

of fuel is alarming. When there is no power, most library routines are grounded. For the effective sustenance of the library's functions, provision of high powered generator and inverter becomes mandatory.

- The ranking of a university depends, to a large extent, on its library. It is the repository of information and knowledge (Aina, 2013). As a result of this, university libraries are often considered the most important resource centre of an academic institution (oyewusi *et al*, 2009). Despite the fact that a library is a major contributor to the success of any university system, it is being threatened by a number of factors as enumerated above. I do hope that the government and the university management of respective universities would wake up to its rescue and bring sanity to library institution so that its functions as catalyst to nation building would not be impaired.

2.3 Review of Related Empirical Studies

This aspect considers empirical studies relating to the study. Major highlights shall be on the design, methodology and the findings as well as the conclusion and recommendations. The survey of the empirical studies has shown that there is low level information technology usage for collection development in university libraries in Nigeria to satisfy user needs.

Sanchez (2005) presented a survey study based on collection development policies in digital environment and he mainly focused on user-oriented concept in development of digital collections in 16 centres of higher and technical education in Cuba. The results indicated that directors of university libraries and managers of collection development are aware of the process of collection development and they have accepted the development of the digital collections as an important source of digital Libraries using

new technology. The study relates to this present study as it focuses on the impacts of information technologies use on collection development process in university libraries. A study carried out by Ukanu (2008) on Utilization of information technology facilities in Nigeria university libraries. The study was a survey research. The population was the first, second, and third generation university libraries of Southern and Northern states of Nigeria. The findings revealed that Nigerian university libraries used new technology facilities for the collection development of the libraries and for the provision of library and information services, and that there is no significant difference between Southern and Northern university libraries in the application of information technology facilities with respect to location.

The researcher recommended the following approaches in order to ensure effective use of information technology facilities for collection development of the libraries: information technology on Installation and Monitoring Committee (IMC) should be set up in Nigeria university libraries to include staff and users. Some of the responsibilities or functions of the committee should be to inspect the installations, maintain and repair broken information technology facilities for effective utilization of collection development process. There should be appropriateness of the technology. That is, the information technology installed should be suitable to the local and socio-cultural context of the library environment and these facilities should be appropriate to the needs of the library's collection development process for user needs. The study relates to this present study as it focuses on the utilization of new technology facilities in collection development process of Nigeria university libraries for user needs.

A study conducted by Manda and Panda (2015) described different dimensions of collection development pattern through the survey on 17 engineering college libraries in West Bengal. They collected and analyzed the data received from these Engineering

College Libraries and enumerated their activities of resource sharing. At last they concluded that users are completely satisfied with the e-resources acquired through information technology consortium or networking by these university libraries. The study recommends that university libraries should endeavour to acquire e-resources for their collection development as users of the 21st century libraries are very much aware and satisfied with how to access and utilised e-resources for their informational need. This study is related to the present study because it finds out the influence of user need on collection development pattern.

A study conducted by Mimgba (2011) on utilization of information technology in user services of federal university libraries in South East Nigeria. It examined the availability, extent, user's perception, problems and strategies of addressing the challenges of information technology utilization. The findings revealed that a number of information technology facilities are at different level of availability in the federal university libraries under study. It also shows that new technology tools such as e-mails, subject gateways, e-journals, e-books are extensively used to provide reference services for user needs, in terms of bibliographic tools; the CD-ROMs and online databases are widely used. It further shows that users' perception is that information technology utilization is beneficial, as it aids in enhancing collection development process for user needs. Various problems ranging from inadequate infrastructure, lack of up-graded new technology skills level of users, inadequate qualified staff in libraries, software and hardware problems are shown to hinder information technology utilization. The study made the following recommendations: adequate infrastructure, funding, training of library staff on information technology use for collection development to meet user needs, provision of adequate electricity with back-up power plant, institutional

subscription, as solutions in addressing the problems of information technology utilization in federal university libraries in South East Nigeria.

The study relates to this present study because it is concern about the challenges of new technology utilization and solving user needs through the collection development process of the university libraries.

A study related to this work was carried out by Akporhonor and Akpojotor (2016) on the challenges confronting libraries and students of library and information science in the use of electronic resources in Southern-Nigeria.

The findings revealed that poor internet connectivity, irregular power supply, information overload, high cost of access to required information, downloading delay, and difficulty in accessing some websites are some of the problems militating against the use of electronic information resources for collection development process in southern Nigerian libraries and the students of library and information science usage. Based on these findings, the study recommended that power supply should be improved upon, internet providers should improve their network services, cost of accessing electronic information resources should be subsidize to a minimum level so as to make them affordable by service providers and the student at large.

The study relates to the current study because it aimed at identifying the challenges confronting user needs in the use of electronic resources which are also information technology resources.

A study carried out by Abubakar and Adetimiri (2015) on influence of computer Literacy on users' needs to the use of E-resources in Nigerian university libraries. The study investigated how computer literacy predisposes users of the university libraries to use e-resources. The study was survey research design. The findings revealed that the

users' computer literacy level was average and they use only few of the e-resources in their libraries and frequency of usage was low. The researcher recommended that the more users are exposed to computer literacy skills, the better the use of e-resources for their information needs. Computer literacy is necessary to influence use of e-resources by users, in search of their information needs and therefore, computer literacy programme should be introduced for new library users in search of their information needs and for the collection development of those libraries. The study is related to the present study because it sought to investigate the influence of new technology skills needed by users to utilize e-resources in the university libraries.

Radijeng (2017) who, in his study on Demand for Electronic Information at the University of Botswana, reported technical problem, lack of infrastructure, inadequate computer literacy, limited printers and printing opportunities, computer phobia, irrelevancy of contents to local needs, economic problems and, problems associated with electronic resources access. The study was survey research design. The findings revealed that the demand of electronic resources in the University of Botswana, reported some technical problems associated with the use of information technology by library users to meet their needs and the university management for selecting, acquiring, preserving and storing disseminating such e-resources. The researcher also discovers that the infrastructures necessary for the selection, acquisition, storage and dissemination of these e-resources to the users are not available in the university library. Irrelevancy of contents to local needs of users was among the findings reveal by the researcher. He discovers that most of the e-resources are not meeting users' needs due to lack of a well written collection development policy. Another problem discovered was that of financial constraints which slow and hinder the acquisition of relevant, accurate, and current e-resources for user needs. The researcher recommends that the

university library should have a current written collection development policy as a guide for selection and acquisition of the university library resources that capture the users of the university libraries in mind for solving their needs. This study is related to the present study because it sought to investigate the influence of user needs and information technology on collection development in the university libraries.

In a Studies by Dulle (2010) and Msonge (2013) observed that, library users in university libraries complained of poor access to current library resources and difficulties for subscription to online scholarly content. This affected negatively teaching and learning process, research and consultation services. On the other hand, poor selection and acquisition policies and procedures, low level of library stakeholders' participation in collection development, lack of comprehensive and written collection development policy in university libraries have also affected the collection development to most of the developing countries' university libraries. The study recommends that libraries should be well funded with financial resources to enable the accessibility of current library resources by users becomes faster and the difficulty encounter through the subscription of online scholarly content be made easily through a well-documented collection development policy that reflects the mission and vision of the parent institution. This study is also related to the present study because it sought to investigate the influence of user needs on collection development pattern.

2.4 Summary of Literature Review

The review of the literature was based mainly on documentary sources, many of which consist of journals articles, textbooks, conference proceedings, seminar/workshop papers, articles from the internet and other relevant publications.

The review focused on the conceptual framework: the concept of information technology on collection development process; Collection Development Process in University libraries; Collection Development Policy in University libraries; influence of User Needs on Collection Development Pattern; Influence of Information Technologies use on Collection Development Process in University libraries; Challenges of User Needs and information technology use on Collection Development Processes in University libraries and Solution to challenges of Collection Development in University libraries; and related empirical studies on challenges of information technology utilization on user needs and collection development in university libraries.

The literature clearly revealed that information technologies are more and more transforming the world of information: changing the way in which information is selected, acquired, processed, stored, preserved and made available by the university libraries, and how the information is being accessed, and retrieved by users of information for their user needs. Information technologies in an academic setting cannot be underestimated as it facilitates quick access to information for collection development and user needs worldwide, through the internet and other telecommunication network sources.

The review of the literature also shows how collection development as a process is being carried out in the university libraries, the policy of the collection development as a written document that guide the selection, acquisition of information resources to achieved a balance collection. The reviews examine the influence of user needs on collection development pattern, how their needs have affected collection development process.

The review further revealed the challenges of user needs and information technologies use on collection development in the university libraries to: lack of information

technological skills, insufficient provision of information technological facilities, erratic power supply, poor internet connectivity, delay in downloading information, difficulty in accessing some websites, cost and restricted access to electronic information resources and difficulty in finding relevant information.

Equally importance is the theories found to be related to this study (User Acceptance of New Technology Theories/Models, and Technology Acceptance Mode) these theories are considered suitable to the study as it serves as a basic upon which this work hinges on.

From the literature reviewed above, the researcher discovered that similar studies have been carried out on the user needs and information technology use as determinants of collection development pattern in university libraries. None of them examined in particular the user needs and information technology use as determinants of collection development pattern in university libraries in northern Nigeria, therefore, this study is aimed at this specific area in order to fill this gap.

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Research Design

The research method adopted for this study was survey research design method. This is because a survey research design method measures one or more characteristics of events, objects, and people at a given time. According to Oyedum *et al.* (2015), survey is used to assess a situation with a view to correcting inadequacies or effecting improvement and describing relationships among variables. Survey research method will also be necessary for this study because data will be collected and used to ascertain the user needs on collection development practice, determinants of information technology application on collection development practice and making information resources available to meet the informational needs of the users in the university libraries. Moreover, survey research method will allow the selection of samples from the large populations covered by this study to obtain empirical knowledge of a contemporary nature. This design is considered appropriate for this study because the study sought to investigate the actual user needs and information Technology use as determinants of collection development practice in university libraries in Northern Nigeria. The knowledge of the descriptive survey design will allow generalizations to be made about the characteristics, opinions, beliefs, attitudes of the entire population been studied.

3.2 Population of the Study

Table 3.1 List Universities in Northern Nigeria

S/N	UNIVERSITIES	OWNERSHIP	ZONE
1	Federal University, Wukari, Taraba State	Federal	North East
2	Abubakar Tafawa Balewa University, Bauchi	Federal	North East
3	Federal University Gashua, Yobe State	Federal	North East
4	Federal University, Kashere, Gombe State	Federal	North East
5	Modibbo Adama University of Technology, Yola	Federal	North East
6	University of Maiduguri, Borno State	Federal	North East
7	Nigerian Army University Biu, Borno State	Federal	North East
8	Adamawa State University Mubi	State	North East
9	Bauchi State University, Gadua	State	North East
10	Yobe State University, Damaturu	State	North East
11	Gombe State University, Gombe	State	North East
12	Taraba State University, Jalingo	State	North East
13	Borno State University, Maiduguri	State	North East
14	Gombe State University of Science and Technology	State	North East
15	American University of Nigeria, Yola	Private	North East
16	Kwararafa University Wukari	Private	North East
17	University of Abuja, Gwagwalada	Federal	North Central
18	University of Agriculture, Makurdi	Federal	North Central
19	University of Ilorin,	Federal	North Central

Ilorin

20	University of Jos, Jos	Federal	North Central
21	Federal University of Technology, Minna	Federal	North Central
22	Federal University, Lafia, Nasarawa State	Federal	North Central
23	Federal University, Lokoja, Kogi State	Federal	North Central
24	Benue State University, Makurdi	State	North Central
25	Ibrahim Badamasi Babangida University, Lapai	State	North Central
26	Nasarawa State University, Keffi	State	North Central
27	Kogi State University, Anyigba	State	North Central
28	Kwara State University, Ilorin	State	North Central
29	Plateau State University, Bokkos	State	North Central
20	African University of Science and Technology, Abuja	Private	North Central
31	Al-Hikmah University, Ilorin	Private	North Central
32	Baze University, Abuja	Private	North Central
33	Bingham University, New Karu, Nasarawa State	Private	North Central
34	Nile University of Nigeria, Abuja	Private	North Central
35	Salem University, Lokoja	Private	North Central
36	Veritas University, Abuja	Private	North Central
37	Ahmadu Bello University, Zaria	Federal	North West
38	Federal University, Birnin Kebi, Kebi State	Federal	North West
39	Federal University, Gusau, Zamfara State	Federal	North West

40	Bayero University Kano	Federal	North West
41	Federal University, Dutse, Jigawa State	Federal	North West
42	Federal University, Dutsin-Ma, Katsina State	Federal	North West
43	Nigeria Police Academy Wudil, Kano State	Federal	North West
44	Nigerian Defence Academy, Kaduna State	Federal	North West
45	Usman Danfodio University, Sokoto State	Federal	North West
46	Air force Institute of Technology, Kaduna	Federal	North West
47	Sule Lamido University, Kafin Hausa, Jigawa State	State	North West
48	Kaduna State University, Kaduna	State	North West
49	Kano University of Science and technology, Wudil	State	North West
50	Kebbi State University of Science and Technology, Aliero	State	North West
51	Umaru Musa Yar'Adua University, Katsina State	State	North West
52	Yusuf Maitama Sule University, Kano State	State	North West
53	Zamfara State University	State	North West
54	Al-Qalam University, Katsina State	Private	North West
55	Skyline University, Kano	Private	North West
56	Greenfield University, Kaduna	Private	North west

Source: www.nuc.edu.ng

The researcher divided the entire population of the university libraries in Northern Nigeria into three (3) clusters which are: North East, North West and North Central at all the category of the universities, the federal, state, and private universities. From each cluster, the researcher selected each category of university from each cluster using simple random techniques to have an adequate representation of the universities. For example, one Federal University from North Central represented the federal universities in the North Central; one State University from North Central represented all the States Universities in North Central and all the Private Universities in North Central

The target population of this study comprised 39 collection development librarians and 18, 329 library users giving a total population of 18,368 from the nine (9) selected Federal, State and Private owned university libraries in Northern Nigeria. The nine (9) selected Federal, State and Private universities include Federal University of Technology Minna, Nassarawa State University, Lafia, Abubakar Tafawa Balewa University Bauchi, Kebbi State University of Science and Technology, Aliero, Ahmadu Bello University Zaria, Gombe State University, Kwararafa University, Wukari, Skyline University Kano, and Bingham University, Keffi, Nasarawa State. According to Osuala (2005), population is a means of identifying characteristics which members of the universe have in common and which will identify each unit as belonging to a particular group. The populations for this study were library users, collection development Librarians and the librarians of the nine (9) selected university libraries in Northern Nigeria.

The reason for choosing the selected university libraries in Northern Nigeria is because they represent the three regions in the Northern Nigeria which are the North Central, North East, and North West respectively. Another reason for choosing collection

development librarians as the respondents for this study is that they are in a better position to provide information required in actualizing this research work.

The nine (9) selected Federal, State and Private university libraries that formed the population of this study are presented in Table 3.3.1 below.

Table: 3.2 Population of the Study

S/N	Universities	Collection Development Librarians	Registered Library Users
1	Federal University of Technology, Minna	5	3,143
2	Ahmadu Bello University, Zaria	10	5,484
3	Abubakar Tafawa Balewa University, Bauchi	6	1,952
4	Gombe State University	1	1,462
5			
6	Kebbi State University of Science and Technology, Aliero	3	274
7	Kwararafa University, Wukari Taraba State	4	1,456
8	Skyline University, Kano	5	1,580
9	Bingham University, Keffi	3	1,300
Total		39	18,329

The arrangement of the population is done by their ownership from federal, state and lastly by private ownership. The source of the information above is through the universities visited.

3.3. Sample and Sampling Technique

The sample size was 377. The researcher used Cluster sampling technique to have equal and fair representation of all the respondents from the various libraries in the universities of Northern Nigeria under study. It is used when the researcher cannot get information about the population as a whole. As such, the population will be divided

into clusters. The choice of using this sampling technique is that only the selected clusters were sampled. Simple random technique was employed to select the representative sample from the cluster. From the population of 18,329, a total of 377 library users were used as sample for the study using Krejcie and Morgan 1970 sample table for determining the sample size of a population.

Table 3.3: Sample Size of the Study

S/N	Universities	Collection Development Librarians	Registered Library Users
1.	Federal University of Technology, Minna	5	65
2.	Nasarawa State University, Lafia	2	35
3.	Abubakar Tafawa Balewa University, Bauchi	6	40
4.	Gombe State University	1	30
5.	Ahmadu Bello University, Zaria	10	112
6.	Kebbi State University of Science and Technology, Aliero	3	6
7.	Kwararafa University Wukari	4	30
8.	Skyline University, Kano	5	32
9.	Bingham University, Keffi	3	27
Total		39	377

3.4 Instruments for Data Collection

In order to collect relevant data relating to this study used two instruments which were the questionnaire and observation checklist.

The main research instrument that was used for this study was a self-designed closed ended structured questionnaire. Questionnaire is the most appropriate instrument that was used for the study because it is easy and cheap to administer and data could be collected within a short period of time (Ibrahim, 2013). Likewise, observation checklist was also used as a secondary data collection. A closed ended questionnaire titled ‘‘User Needs and Information Technology Use as Determinants of Collection Development Practice in University Libraries in Northern Nigeria’’ (UNITUDCDPUL) was used. The

questionnaire for the study contained seven (7) sections: Section 'A' was designed to collect demographic information of the respondents, Section 'B' collected information on the collection development practices, section 'C' was on the availability of information technology facilities for collection development, section 'D' was on level of user needs on collection development pattern, section 'E' was on influence of information technology on collection development process, section 'F' was on

The researcher made personal visits to the various universities under study to distribute questionnaires to the respondents in order to obtain the required data necessary for the study.

3.5 Validity of the Instrument

The questionnaire went through face and content validation judging each item on clarity and relevance. The questionnaire was validated by the researcher's supervisor and an expert in Statistics Department of Federal University of Technology, Minna. Leung (2015) described validation of the instrument as the procedure adapted in ensuring that the instrument used measures what they are designed to measure.

3.6 Reliability of the Instrument

The reliability of the instrument was tested by conducting a pilot testing to determine the reliability coefficient of the instrument. The pre-test was conducted using collection development librarians and library users in University of Abuja as respondents through a split half method. The result from the pre-test of the instrument was analysed using Cronbach Alpha Reliability Coefficient. The result of the reliability test was 0.78 approximately. According to Tavakol and Dennick (2011) if the average of Cronbach Alpha Reliability Coefficient of research question is less than 0.5, the instrument is unacceptable. This indicates that the instrument was reliable.

3.7 Procedure for Data Collection

A letter of introduction was collected from the Head, Department of Library and Information Technology, Federal University of Technology, Minna to the various Federal, State and Private universities under study to introduce the researcher. The questionnaire and observation checklist was administered and collected by the researcher with the help of one research assistant from each of the university to be studied. This is to ensure effective distribution and collection of questionnaires. The copies of the questionnaire were distributed to the respondents in their various units while the researcher used the observation checklist by himself to determine the availability of information technologies in the universities studied.

3.8 Method of Data Analysis

The statistical methods were used in analyzing the data collected. Descriptive statistics such as frequency counts, percentages, were used to measure demographic characteristics and research questions of the respondents. Pearson Product Moment Correlation (PPMC) was used to test all the null hypotheses at 0.05 level of significance.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.0

4.1. Response Rate

A total number of three hundred and seventy seven (377) copies of questionnaire were administered to the library users in nine universities in Northern Nigeria. Three hundred and thirty nine (339) copies of questionnaire were returned and used for the analysis representing 89% response rate. Similarly, thirty nine (39) copies questionnaire were administered to the collection development librarians in the nine universities in Northern Nigeria. Nineteen (19) copies of questionnaire were returned for analysis representing 49% response rate. Table shows the response rate based on the copies of questionnaire administered, returned and percentage(s) in each of the universities under study.

Table 4.2 Response Rate of Questionnaire with category of the Respondents

S/N	Name of University	No. of questionnaire administered to library users	No. of questionnaire returned from library users	Percentages (%)	No. of questionnaire administered to librarians	No. of returned questionnaire from librarians	Percentages (%)
1	Federal University of Technology, Minna	65	59	91	5	2	40%
2	Nasarawa State University, Keffi	35	30	86	2	2	100%
3	Abubakar Tafawa Balewa University, Bauchi	40	36	90	6	3	50%
4	Gombe State University	30	26	87	1	1	100%

5	y Ahmadu Bello Universit y, Zaria	112	101	90	10	5	50%
6	Kebbi State Universit y of Science and Technolo gy, Aliero	6	6	100	3	1	33%
7	Kwararaf a Universit y, Wukari	30	27	90	4	2	50%
8	Skyline Universit y, Kano	32	29	91	5	1	20%
9	Bingham Universit y, Karu	27	24	89	3	2	67%
	Total	377	339	89	39	19	49%

Table 4.2 reveals that 65 copies of questionnaire were administered to library users in Federal University of Technology, Minna, 59 copies representing [91%] were returned, 35 copies of questionnaire were administered to library users in Nasarawa State University, Keffi, 30 copies representing [86%] were returned, 40 copies of questionnaire were administered to library users in Abubakar Tafawa Balewa University, Bauchi, 36 copies representing [90%] were returned, 30 copies of questionnaire were administered to library users in Gombe State University, 26 copies representing [87%] were returned, 112 copies of questionnaire were administered to

library users in Ahmadu Bello University, Zaria, 101 copies representing [90%] were returned, 6 copies of questionnaire were administered to library users in Kebbi State University of Science and Technology, Aliero, 6 copies representing [100%] were returned, 30 copies of questionnaire were administered to library users in Kwararafa University, Wukari, 27 copies representing [90%] were returned, 32 copies of questionnaire were administered to library users in Skyline University Kano, 29 copies representing [91%] were returned and 27 copies of questionnaire were administered to library users in Bingham University, Karu, 24 copies representing [89%] were returned

Similarly, 5 copies of questionnaire were administered to the librarians in Federal University of Technology, Minna, 2 copies representing [40%] were returned, 2 copies of questionnaire were administered to librarians in Nasarawa State University, Keffi, 2 copies representing [100%] were returned, 6 copies of questionnaire were administered to librarians in Abubakar Tafawa Balewa University, Bauchi, 3 copies representing [50%] were returned, 1 copy of questionnaire was administered in Gombe State University, 1 copy representing [100%] was returned, 10 copies of questionnaire were administered to librarians in Ahmadu Bello University, Zaria, 5 copies representing [50%] were returned, 3 copies of questionnaire were administered to librarians in Kebbi State University of Science and Technology, Aliero, 1 copy representing [33%] was returned, 4 copies of questionnaire were administered to librarians in Kwararafa University, Wukari, 2 copies representing [50%] were returned, 5 copies of questionnaire were administered to librarians in Skyline University, Kano, 1 copy representing [20%] was returned and 3 copies of questionnaire were administered to librarians in Bingham University, Karu, 2 copies representing [67%] were returned.

4.2 Descriptive Analysis of Demographic Data

Table 4.3 shows the responses based on gender, designation, for librarians, Age group and highest academic qualification obtained.

Table 4.3

S/N	Gender (Librarians)	Frequency	Percentage(s)
1	Male	13	68%
2	Female	6	32%
Total		19	100%

S/N	Gender (Library users)	Frequency	Percentage(s)
1	Male	213	63%
2	Female	126	37%
Total		339	100%

S/N	Designation (Librarians)	Frequency	Percentage(s)
1	Library assistant	3	16%
2	Assistant librarian	4	20%
3	Librarian 11	3	16%
4	Librarian 1	1	5%
5	Senior librarian	3	16%
6	Principal librarian	2	11%
7	Deputy librarian	2	11%
8	University librarian	1	5%
Total		19	100%

These are the numbers of the university librarians that filled in the questioners from the university visited.

S/N	Year of working Experience in the library (Librarians)	Frequency	Percentage(s)
1	Below 5 year	7	37%
2	6-15 year	4	21%
3	16-25	5	26%
4	Above 25 year	3	16%
	Total	19	100%

S/N	Year of library usage(Library uses)	Frequency	Percentage(s)
1	1 year	21	6%
2	2 year	93	27%
3	3 year	66	19%
4	4 year	81	24%
5	5 year	47	14%
6	5 year and above	31	10%
	Total	339	100%

S/N	Highest Academic Qualifications (librarians)	Frequency	Percentage(s)
1	BLS	3	16%
2	BLS	6	32%
3	MLS/MLIS/MTECH	6	32%
4	Ph.D	4	20%
	Total	19	100%

Table 4.3 revealed that 213[63%] of the library users were male, while 126[37%] of the library users were female. On the other hand, 13[68%] of the librarians were male,

while 6[32%] of the librarians were female. This shows that most of the respondents were male for both the librarians and library users.

Furthermore, 3[16%] were library assistants, 4[20%] were assistant librarians, 3[16%] were librarians 11, 1[5%] was librarian 1, 3[16%] were senior librarians, 2[11%] were principal librarians, 2[11%] were deputy librarians and 1[5%] was a university librarian.

More so, 7[37%] of librarians were below 5 years of working experience, 4[21%] of librarians were between 6-15 years of working experience, 5[26%] of librarians were between 16-25 years of working experience, 3[16%] of librarians were above 25 years of working experience.

Similarly, 2[6%] of library users used the library for only one year, 93[27%] used the library for 2 years, 60[19%] used the library for 3 years, 81[24%] used the library for 4 years, 47[14%] used the library for 5 years and 31[10%] used the library for 5 years and above.

Also, 3[16%] of the librarians had Diploma in Library and Information Science (DLIS), 6[32%] of the librarians had Bachelor of Library and Information Science (BLIS), 6[32%] of the librarians had Masters of Library and Information Science (MLIS) and 4[20%] had ph.D.

4.3 Analysis of Research Questions

Research question 1: What are the processes of collection development practice in university libraries in Northern Nigeria?

Table 4.4 shows the responses of librarians on the collection development practiced in their various university libraries under study.

Table 4.4: Processes of Collection Development Practice in University Libraries in Northern Nigeria

S/ N		SA	A	D	SD	N	FX	\bar{x}	STD	Decision
		4	3	2	1	19				
1	Information materials are acquired through Purchase	7(36.8%)	9(47.4%)	2(10.5%)	1(5.3%)	19	60	3.16	0.66	Agreed
2	Information materials are acquired through Gift(Donation)	4(21.1%)	8(42.1%)	4(21.1%)	3(15.8)	19	51	2.68	0.18	Agreed
3	Information materials are acquired through Renting	2(10.5%)	3(15.8%)	10(52.6%)	4(21.1%)	19	41	2.16	0.34	Disagreed
4	Information materials are acquired through Exchange	5(26.3%)	2(10.5%)	9(47.4%)	3(15.8%)	19	47	2.47	0.03	Disagreed
5	Information materials are acquired through Legal deposit	6(31.6%)	3(15.8%)	8(42.1%)	2(10.5%)	19	51	2.68	0.18	Agreed
6	Information materials are acquired through Bequeaths	4(21.1%)	7(36.8%)	4(21.1%)	4(21.1%)	19	49	2.58	0.08	Agreed
7	Information materials are acquired	6(31.6%)	3(15.8%)	8(42.1%)	2(10.5%)	19	51	2.68	0.18	Agreed

	through									
	Subscription									
	to databases									
8	Information	3(15.8%)	2(10.5%)	10(52.6	4(21.1%)	19	42	2.21	0.29	disagreed
	materials are			%)						
	acquired									
	through Open									
	sources									

Key: Strongly Agreed (SA), Agreed (A), Disagreed (D), Strongly Disagreed (SD).

Table 4.4 reveals that eight items were listed for librarians to indicate the processes of collection development practiced in their various university libraries. Five items produced high mean scores which were above the bench mark of 2.5. These items include item 1: purchase (\bar{x} =3.16; SD=0.06), item 2: gift (donation) (\bar{x} =2.68; SD=0.18), item 5: legal deposit (\bar{x} =2.68; SD=0.18), Bequeaths (\bar{x} =2.58; SD=0.08), and item 7: Subscription to databases (\bar{x} =2.68; SD=0.18). On the hand, three items produced low mean scores which were below the bench mark of 2.5. These items include item 3: renting (\bar{x} =2.16, SD=0.34), item 4: exchange (\bar{x} =2.47, SD=0.03) and item 8: open Sources (\bar{x} =2.21, SD=0.29).

Research question 2: What is the availability of information technology facilities for collection development processes in university libraries in Northern Nigeria?

Table 4.5: this table shows the types of information technology facilities for collection development processes in university libraries in Northern Nigeria?

Table 4.5: availability of information technology facilities for collection

OBSERVATION CHECK LIST

Key: Available – A Not Available – NA

S/ N	Facilities	FUTM X		NSU		ATBU		GSU		ABU		KSUSTA		KUW		SUK		BU	
		A	NA	A	NA	A	NA	A	NA	A	NA	A	NA	A	NA	A	NA	A	NA
1	Desktop Computer	√		√		√		√	-	√	-	√	-	√	-	√		√	
2	Laptops and ipads Computers	√		√			-	√		√	-	√	-	√	-	√		√	
3	Printers		-		-	√			-		-		-		-		-		-
4	Plotters	√			-		-		-		-		-		-		-		-
5	Photocopying Machine	√		√		√		√		√		√	-	A	-	√	-	√	
6	Scanners		-	√			-	√		√		√	-	A	-	√	-	√	
-7	Digital Cameras		-	√			-	√		√		√	-	A	-		-	√	
8	Projector	√		√		√	-	√		√			-		-		-		-
9	Computer Output Micro Film (COM)		-		-	√		√		√			-	√	-		-		-
10	Telephone		-	√		√		√		√			-		-	√		√	
11	Local Area Network (LAN)	√		√			-		-	√		√	-	√		√		√	
12	Wide Area Network (WAN)	√		√		√		√		√		√	-	√		√		√	
13	Internet Network/Facilities	√		√		√		√		√		√	-	√		√			-
14	Facsimile		-		-	√		√		√			-	√			√		-
15	Video Conferencing/Teleconferencing Facilities	√		√		√		√		√		√		√		√		√	
16	Television	√		√		√				√		√		√		√		√	
17	Radio	√		√		√		√		√		√		√		√		√	
18	Email Facilities	√		√		√		√		√		√		√		√		√	
19	World Wide Web (www)	√		√		√		√		√		√		√		√		√	
20	Operating System Software (Windows, Unix, Linux)	√		√		√		√		√		√		√		√		√	
21	Application Software (Word Processor, Spreadsheet, Presentation< Graphics Application)	√		√		√			-	√		√		√		√		√	
22	Web Browser (Internet Explorer, Mizilla Fire Fox, Opera)	√		√		√		√		√		√		√		√		√	
23	Bibliographic Online Database	√		√		√		√		√		√		√		√		√	
24	Full Text Online Database	√		√		√		√		√		√		√		√		√	
Total																			

development practice in university librariesKey: Available (√), Not Available (-)

FUTMX=Federal University of Technology, Minna, NSU= Nasarawa State University, Lafia, ATBU= Abubakar Tafawa Balewa University, Bauchi, GSU= Gombe State University, ABU= Ahmed Bello University, Zaria, KSUTA= Kebbi State University of Science and Technology, Aliero, KUW= Kwararafa University Wukari, SUK= Skyline University Kano, BU= Bingham University, Keffi.

The results obtained from the observation checklist shows the ICT facilities that are available and those that are not available in the university libraries in Northern Nigeria.

The checklist revealed that there is availability of desktop computers, laptops and ipads, plotters, photocopying machine, projector, LAN, WAN, Internet network/facilities, WWW, operating system software, application software, web browser, bibliographic online database and full text online database, while ICT facilities such as printers, scanners, computer output, micro film, telephone and facsimile where not available in the universities under study. This is in line with (Sampath Kumar & Biradar, 2010), asserted that modern technologies have carried momentous changes in different aspects of library management. From housekeeping operation to users management, have been largely achieved through the applications of internet and library software.

Research question 3: What is the influence of user needs on collection development practice?

Table 4.6 the response of librarians on the influence of use needs on practice of collection development in the universities under study.

Table 4.6 Influence of User Needs on Collection Development Practice

S/N	Statements	VH	H	L	VL	N	FX	\bar{x}	STD	Decision
		4	3	2	1	19				
1	The needs of users in the library is mostly influenced through books, Journals	9(47.4%)	7(36.8%)	2(10.5%)	1(5.3%)	19	62	3.26	0.76	High
2	The need of users in the library is mostly influenced through computers ,CD ROM, Floppy Disc	8(42.1%)	9(47.4%)	1(5.3%)	1(5.3%)	19	62	3.26	0.76	High

Key: Very High (VH), High (H), Low (L), Very Low (VL).

Table 4.6 reveals that two items were listed for librarians to response on the influence of user needs on collection development. All the items produced high mean scores above

the bench mark of 2.5 which include item 1: the needs of users in the library is mostly influenced through printed information resources ($\bar{x}=3.26$, $SD=0.76$) and item 2: the need of users in the library is mostly influenced through Non-printed information resources ($\bar{x}=3.26$, $SD=76$).

Research question 4: To what extent has information technology influence collection development practice in university libraries in Northern Nigeria?

Table 4.7 shows the responses of librarians on the extent information technology influence the practice of collection development in the university libraries studied.

Table 4.7: Extent of Information Technology Influence Collection Development Practice in University Libraries in Northern Nigeria (Librarians)

S/N	Statements	VGE	GE	LE	VLE	N	FX	\bar{x}	STD	Decision
		4	3	2	1	19				
1	Quick access to information resources	7(36.8%)	8(42.1%)	2(10.5%)	2(10.5%)	19	58	3.05	0.55	High
2	Breaking barriers of distance to communication	6(31.6%)	9(47.4%)	3(15.8%)	1(5.3%)	19	58	3.05	0.55	High
3	Provision of unrestricted access to information resources	9(47.4%)	6(31.6%)	2(10.5%)	2(10.5%)	19	60	3.16	0.66	High
4	Facilitate communication to various vendors	6(31.6%)	7(36.8%)	3(15.8%)	3(15.8%)	19	54	2.84	0.34	High
5	Resources sharing among university libraries in different location	5(26.3%)	8(42.1%)	4(21.1%)	2(10.5%)	19	54	2.84	0.34	High

6	Saves time in selection, acquisition of information resources	7(36.8%)	9(47.4%)	1(5.3%)	2(10.5%)	19	68	3.57	1.07	High
7	Access to aggregators	5(26.3%)	6(31.6%)	4(21.1%)	4(21.1%)	19	50	2.63	0.13	High
8	Conduct complex analysis and large data set	3(15.8%)	3(15.8%)	9(47.4%)	4(21.1%)	19	43	2.26	0.24	Low
9	Communication links	2(10.5%)	5(26.3%)	8(42.1%)	4(21.1%)	19	43	2.26	0.24	Low

Key: Very Great Extent (VGE), Great Extent (GE), Low Extent (LE), Very Low Extent (VLE)

Table 4.7a shows that nine items were listed for librarians to indicate the extent new technologies influence collection development processes in the university libraries. Seven items produces high mean scores which were above the bench mark of 2.5. These items includes item 1: quick access to information resources ($\bar{x}=3.05$; $SD=0.55$), item 2: breaking barriers of distance to communication ($\bar{x}=3.05$; $SD=0.55$), item 3: provision of unrestricted access to information resources ($\bar{x}=3.16$; $SD=0.66$), item 4: facilitate communication to various vendors ($\bar{x}=2.84$; $SD=0.34$), item 5: resources sharing among university libraries in different location ($\bar{x}=2.84$; $SD=0.34$), item 6: saves time in selection, acquisition of information resources ($\bar{x}=3.57$; $SD=1.07$) and item 7: access to aggregators ($\bar{x}=2.63$; $SD=0.13$). On the other hand, two items produced low mean scores below the bench mark of 2.5. These items includes item 8: conduct complex analysis and large data set ($\bar{x}=2.26$; $SD=0.24$) and item 9: communication links ($\bar{x}=2.26$; $SD=0.24$).

Research question 5: What are the challenges to user needs and new technology use on collection development processes in university libraries in Northern Nigeria?

Table 4.8a shows the responses of librarians on the challenges to user needs and information technology use on collection development processes in the university libraries under study.

Table 4.8a: Challenges to User Needs and Information Technology Use on Collection Development Practice in University Libraries in Northern Nigeria (Librarians)

S/ N	Statements	SA	A	D	SD	N	FX	\bar{x}	STD	Decision
		4	3	2	1	19				
1	Insufficient computers with Internet facilities	7(36.8%)	8(42.1%)	2(10.5%)	2(10.5%)	19	58	3.05	0.55	Agreed
2	Absence or poor Internet connectivity	6(31.6%)	9(47.4%)	3(15.8%)	1(5.3%)	19	58	3.05	0.55	Agreed
3	Lack of new technology skills	9(47.4%)	6(36.1%)	2(10.5%)	2(10.5%)	19	60	3.16	0.66	Agreed
4	Inadequate new technology infrastructure	6(31.6%)	7(36.8%)	3(15.8%)	3(15.8%)	19	54	2.84	0.34	Agreed
5	Irregular power supply	5(26.3%)	8(42.1%)	4(21.1%)	2(10.5%)	19	54	2.84	2.34	Agreed
6	Download delay	7(36.8%)	9(47.4%)	1(5.3%)	2(10.5%)	19	68	3.57	1.07	Agreed
7	Difficulty in accessing some website	5(26.3%)	6(31.6%)	4(21.1%)	4(21.1%)	19	50	2.63	0.13	Agreed
8	Difficulty in finding relevant information	3(10.8%)	3(10.8%)	9(47.4%)	4(21.1%)	19	43	2.26	0.24	Disagreed
9	Lack of implementation of new technology policy	2(10.5%)	5(26.3%)	8(42.1%)	4(21.1%)	19	43	2.26	0.24	Disagreed
10	Slow speed of personal computers due to virus	4(21.1%)	2(10.5%)	9(47.4%)	4(21.1%)	19	44	2.31	0.19	Disagreed
11	Unavailability/disappearance of some website	5(26.3%)	4(21.1%)	5(26.3%)	5(26.3%)	19	47	2.47	0.03	Disagreed
12	High cost of subscription	4(21.1%)	5(26.3%)	6(31.6%)	4(21.1%)	19	47	2.47	0.03	Disagreed
13	Lack of technical assistance by library staff	6(36.1%)	4(21.1%)	5(26.3%)	4(21.1%)	19	50	2.63	0.13	Agreed

14	Cost of acquiring new technology facilities	7(36.8%)	6(36.1%)	4(21.1%)	2(10.5%)	19	56	2.94	044	Agreed
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Key: Strongly Agreed (SA), Agreed (A), Disagreed (D), Strongly Disagreed (SD).

Table 4.8a shows that fourteen items were listed for librarians to indicate the challenges of user needs and new technology use on collection development. Nine items produced high mean scores which were above the bench mark of 2.5. These items include item 1: insufficient computers with Internet facilities ($\bar{x}=3.05$; $SD=0.55$), item 2: absence or poor internet connectivity ($\bar{x}=3.05$; $SD=0.55$), item 3: lack of new technology skills ($\bar{x}=3.16$; $SD=0.66$), item 4: inadequate new technology infrastructure ($\bar{x}=2.84$; $SD=0.34$), item 5: irregular power supply ($\bar{x}=2.84$; $SD=2.34$), item 6: download delay ($\bar{x}=3.57$; $SD=1.07$), item 7: difficulty in accessing some website ($\bar{x}=2.63$; $SD=0.13$), item 8: difficulty in finding relevant information ($\bar{x}=2.62$; $SD=0.13$) and item 14: cost of acquiring new technology facilities ($\bar{x}=2.94$; $SD=0.44$).

On the other hand, six items produced low mean scores below the bench mark of 2.5. These items include item 8: difficulty in finding relevant information ($\bar{x}=2.26$; $SD=0.24$), item 9: lack of implementation of new technology policy ($\bar{x}=2.26$; $SD=0.44$), item 10: slow speed of personal computers due to virus ($\bar{x}=2.31$; $SD=0.19$), item 11: unavailability/disappearance of some website ($\bar{x}=2.47$; $SD=0.03$), item 12: high cost of subscription ($\bar{x}=2.47$; $SD=0.03$). The items with high mean scores indicate that they are really challenged to user needs and new technology use on collection development in the university libraries under study.

Research question 6: What are the practical solutions to the challenges of collection development practice?

Table 4.9 shows the responses of librarians in the university libraries under study on the solution to the challenges encountered on collection development practice.

Table 4.9a: Practical Solution to the Challenges of Collection Development practice (Librarians)

S/N	Statements	SA 4	A 3	D 2	SD 1	N 19	FX	\bar{x}	STD	Decision
1	Government and the university management should pay serious attention to funding of universities	8(42.1%)	5(26.3%)	4(21.1%)	2(10.5%)	19	57	3.00	0.50	High
2	The expected 10% of university statutory allocation should be disbursed to the library in addition to TETFUND's grants	7(38.8%)	6(31.6%)	4(21.1%)	2(10.5%)	19	56	2.94	0.44	High
3	Staff development is also very essential because the professional determines the quality of services rendered	5(26.3%)	4(21.1%)	6(31.6%)	4(21.1%)	19	48	2.53	0.08	High
4	Proper ICT seminars/workshop in the university	4(21.1%)	5(26.3%)	5(26.3%)	5(26.3%)	19	46	2.42	0.08	Low
5	Provision of sufficient new technology facilities	6(36.6%)	4(21.1%)	5(26.3%)	4(21.1%)	19	50	2.53	0.13	High
6	Government and university management should support on provision of stable power supply	9(47.4%)	5(26.3%)	4(21.1%)	2(10.5%)	19	60	3.15	0.65	High
7	Provision of adequate and effective internet services provider	4(21.1%)	2(10.5%)	9(47.4%)	4(21.1%)	19	40	2.10	0.40	Low
8	The nation information technology policy to be fully implemented	5(26.3%)	4(21.1%)	5(26.3%)	5(26.3%)	19	47	2.47	0.03	Low

9	Reduction of telecommunication/computer importation tariff	4(21.1%)	5(26.3%)	6(31.6%)	4(21.1)	19	47	2.47	0.03	Low
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Key: Strongly Agreed (SA), Agreed (A), Disagreed (D), Strongly Disagreed (SD).

Table 4.9 shows that nine items were listed for librarians to respond on the solutions to the challenges of collection development. Five items produced high mean scores above the bench mark of 2.5. These item includes item 1: government and the university management should pay serious attention to funding of universities (\bar{x} =3.00; SD=0.50), item 2: the expected 10% of university statutory allocation should be disbursed to the library in addition to TETFUND's grants (\bar{x} =2.94; SD=0.44), item 3: staff development is also very essential because the professional determines the quality of services rendered (\bar{x} =2.53; SD=0.03), item 5: provision of sufficient new technology facilities (\bar{x} =2.63; SD=0.13), item 6: government and university management should support on provision of stable power supply (\bar{x} =3.15; SD=0.65). On the other hand, four items produced low mean scores below the bench mark of 2.5. These includes item 4: proper ICT seminars/workshop in the university (\bar{x} =2.42; SD=0.08), item 7: provision of adequate and effective internet services provider (\bar{x} =2.10; SD=0.40), item 8: the nation information technology policy to be fully implemented (\bar{x} =2.47; SD=0.03) and item 9: reduction of telecommunication/computer importation tariff (\bar{x} =2.47; SD=0.03).

4.4 Testing of Hypotheses

H₀₁: There is no significant relationship between user needs and Collection Development Pattern in university libraries in Northern Nigeria.

Table 4.10 below shows the relationship between user needs and collection development pattern in the universities under study.

Table 4.10: Pearson Product Moment Correlation (PPMC) showing whether there is significant relationship between user needs and collection development pattern in university libraries in Northern Nigeria.

		User Needs	Collection Development Practice
User Needs	Pearson Correlation	1	.869**
	Sig. (2-tailed)		.000
	N	19	19
Collection Development Practice	Pearson Correlation	.869**	1
	Sig. (2-tailed)	.000	
	N	19	19

** . Correlation is significant at the 0.01 level (2-tailed).

Table 4.9 above shows whether there is significant relationship between user needs and collection development practice in university libraries in Northern Nigeria. Considering the responses from 19 librarians, the Pearson correlation, $r=0.869$ shows that there is strong positive relationship between user need and collection development practice and Since sig-value (0.000) < 0.05 , we reject the null hypothesis and conclude that there is significant relationship between user needs and collection development practice in university libraries in Northern Nigeria.

H₀₂: There is no significant relationship between information technology use and collection development practice in university libraries in Northern Nigeria.

Table 4.11 below shows the relationship between information technology use and collection development pattern in university libraries in Northern Nigeria.

Table 4.11: Pearson Product Moment Correlation (PPMC) showing whether there is no significant relationship between information technology use and collection development practice in university libraries in Northern Nigeria.

		Information Technology Use	Collection Development Practice
Information Technology Use	Pearson Correlation	1	.706**
	Sig. (2-tailed)		.001
	N	19	19
Collection Development Practice	Pearson Correlation	.706**	1
	Sig. (2-tailed)	.001	
	N	19	19
**. Correlation is significant at the 0.01 level (2-tailed).			

Table 4.10 above shows whether there is significant relationship between information technology use and collection development practice in university libraries in Northern Nigeria. Considering the responses from 19 librarians, the Pearson correlation, $r=0.706$. shows that there is strong positive relationship between information technology use and collection development practice in university libraries in Northern Nigeria. Since sig-value ($0.001 < 0.05$), we reject the null hypothesis and conclude that there is significant relationship between information technology use and collection development practice in university libraries in Northern Nigeria.

4.5 Summary of Major Findings

The following are summary of major findings:

1. The process of collection development practiced by librarians in the university libraries under study is through purchase and subscription to database.

2. The study revealed that ICT facilities available were desktop computers, laptops and ipads, plotters, photocopying machine, projector, LAN, WAN, Internet network/facilities to mention but a few.
3. The librarians indicate that the influence of user needs were mainly through printed and non-printed information resources.
4. The extent to which information technologies influence collection development processes according to librarians is high.
5. The respondents indicated that insufficient computers with Internet facilities, poor Internet connectivity, lack of information technology skills, irregular power supply, download delay, difficulty in accessing some website, inadequate technology infrastructure, lack of technical assistance by library staff are seen as challenges to users' needs and information technology on collection development processes in the universities under study.
6. The solution offered by the respondents indicated that government and university management should pay serious attention on funding of universities and government and universities management should support on the provision of stable power supply were rated very high.
7. There is significant relationship between user needs and collection development pattern in university libraries in Northern Nigeria
8. There is significant relationship between information technology use and collection development pattern in the study areas.

4.6 Discussions of the Findings

4.6.1 Research Question 1: What are the processes of collection development practice in university libraries in Northern Nigeria?

The study revealed that the processes of collection development by librarians in the universities studied were mainly through purchase, gift (donation), legal deposit, bequeath, and subscription to databases (Table 4.4), while collection development processes on renting, exchange and open sources were not well practiced. According to the International Federation of Library Association and Institutions (IFLA 2012), collection development focuses on methodological and topical themes pertaining to the acquisition of print and analogue library materials (by purchase, exchange, gift, legal deposit) and the licensing and purchase of electronic information resources”

4.6.3 Research Question 2: What is the availability of information technology for collection development practice in university libraries in Northern Nigeria?

The study revealed that there is availability of desktop computers, laptops and ipads, plotters, photocopying machine, projector, LAN, WAN, Internet network/facilities, WWW, operating system software, application software, web browser, bibliographic online database and full text online database. This is in line with IFLA (2012) that electronic resources are those materials that required computer access through personal computer or mobile devices. On the other hand, ICT facilities such as printers, scanners, computer output, micro film, telephone and facsimile were not available in the universities under study. This implies that ICT facilities are used in the collection development processes of the university libraries under study.

4.6.4 Research Question 3: What is the influence of user needs on collection development practice in university libraries in Northern Nigeria?

The study revealed that librarians in the study areas indicated that library users' needs on collection development practice were mainly through printed information resources and non-printed information resources. Libraries and librarians/library staff are to make available adequate resources and services to library users. Hence, understanding users' information needs is essential to the management of libraries. Salaam and Fatokun (2010) submitted that libraries acquire materials primarily to make the materials available and accessible to users. Therefore, the utility of these materials can be determined by carrying out a survey on users' needs and the success in meeting them.

4.6.5 Research Question 4: What is the influence of information technology facilities on collection development practice in university libraries in Northern Nigeria?

The findings of the study revealed that the quick access to information, breaking barriers of distance to communication, provision of unrestricted access to information resources and saves time selection and acquisition of information resources were rate very high on how information technologies influence collection development processes. Dulle (2010) and Msonge (2013) observed that, library users in university libraries complained of poor access to current library resources and difficulties for subscription to online scholarly content. This affected negatively teaching and learning processes, research and consultation services.

4.6.6 Research question 5: What are the challenges in meeting user needs and information technologies use on collection development processes in university libraries in Northern Nigeria?

The study revealed that the respondents agreed with factors such as insufficient computers with Internet facilities, poor Internet connectivity, lack of information technology skills, inadequate new technology infrastructure, irregular power supply, download delay and difficulty in accessing some website as challenges to user needs and new technology use on collection development as presented in Table 4.8a. Bhardwaj and Madhusudan (2013) identified the followings as constraints to use of electronic resources (ER) which include: lack of proper arrangement of legal information resources, poor description on legal information sources, lack of online help, poor website design, too many login requirements, lack of expertise in using the databases, lack of printing provision, and confusing search screens. Similarly, Akporhonor and Akpojotor (2016) revealed in their findings that poor Internet connectivity, irregular power supply, information overload, high cost of access to required information, downloading delay, and difficulty in accessing some websites are some of the problems militating against the use of electronic information resources for collection development process in Southern Nigerian libraries and the students of library and information science.

4.6.7 Research question 6: What are the practicable solutions to challenges of collection development in university libraries?

The findings of the study revealed that there should be provision of funding, staff development, ICT seminars and workshops, provision of stable power supply, and provision of information technology facilities as solutions to the challenges of collection development in the university under study. This is in line with Radijeng (2017) who, in

his study on Demand for Electronic Information at the University of Botswana, reported technical problem, lack of infrastructure, inadequate computer literacy, limited printers and printing opportunities, computer phobia, irrelevancy of contents to local needs, economic problems and, problems associated with electronic resources access. The researcher recommends that the university library should have a current written collection development policy as a guide for selection and acquisition of the university library resources that capture the users of the university libraries in mind for solving their needs.

4.6.8 Findings on the Tested Hypotheses

H₀₁: There is no significant relationship between user needs and collection development practice in university libraries in Northern Nigeria.

The test of null hypothesis one revealed that there is significant relationship between user needs and collection development practice in university libraries in Northern Nigeria. This implies that increase in the collection development processes such as selection and acquisition of relevant information resources will lead to increase in users information needs.

H₀₂: There is no significant relationship between information technology use and collection development practice in university libraries in Northern Nigeria.

The test of null hypothesis one revealed that there is significant relationship between information technology use and collection development pattern in university libraries in Northern Nigeria. This implies that increase in the use of modern information technology facilities will facilitate the collection development activities of the libraries such as in selection, acquisition, weeding, preservation and conservation of information resources.

CHAPTER FIVE

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

From the finding of this study, it could be concluded that the user needs and information technology use as determinants of collection development practice has resulted in challenges to the library in terms of use of technology for acquisition and selection of information resources. This makes it difficult or slows down the pace at which information resources were accessed and used by the users in meeting their information needs. Based on this, there is need for necessary measures to be taken on the use of information technology facilities to ensure timely selection, acquisition and use of relevant information resources by the library users. It is important that the library staff should be trained and re-trained on the use of information technology to improve on the collection development processes of the university libraries under study. It is equally important that the expected 10% of university statutory allocation should be disbursed to the library in addition to TETFUND's grants to enable acquisition of information resources to meet the over growing information needs of library users. Once these problems are adequately taken care of in the studied universities, it is expected that there will be tremendous improvement on collection development processes in the universities under study.

5.2 Recommendations

The following recommendations are made based on the findings of the study:

1. The management of the university libraries in Northern Nigeria should subscribe to online databases such as HINARI AGORA, Science direct, EBSCOHOST,

Proquest to mention but a few which contain current researches relevant to meet the information needs of their users

2. There should be provision of both printed and non-printed information resources relevant to meet the information needs of users
3. There should be provision of funding for the acquisition of information technology facilities as well as proper training on ICT for library staff members through seminars, conferences and workshops to keep them abreast of better ways of developing their collections
4. The management of university libraries in Northern Nigeria should encourage resources sharing among university libraries. This will save time in the selection and acquisition of information resources.
5. More efforts needs to be put in place by the management of university libraries in Northern Nigeria on the purchase of information resources than relying on gifts, exchanges and bequeaths.
6. The management of university libraries in Northern Nigeria should provide modern information technology facilities to facilitate the collection development activities of the libraries such as in selection, weeding, preservation and conservation of information resources.

5.3 Contribution to Knowledge

1. The study is beneficial to library users and librarians in general because it provides data on user needs and information technology use as determinants of collection development pattern in university libraries in Northern Nigeria and when published, it will be readily available to all kinds of users for the purpose of future reference and research.
2. The study has revealed that more efforts needs to be put in place by both the

library staff and management of the universities in Northern Nigeria on the use of technology for collection development processes in the selection and acquisition of current and relevant information resources that will meet the information needs of their users.

3. The study has equally added to the already existing body of literatures in librarianship.

5.4 Suggestion for Further Research

1. User needs and information technology use as determinants of collection development pattern in university libraries in Southern Nigeria
2. There is also the need for research on polytechnic and college of education libraries to get more findings on how user needs and information technology use as determinants of collection development pattern in university libraries in Northern Nigeria.

REFERENCES

- Abubakar, D. & Adetimirin, A. (2015). Influence of Computer Literacy on Postgraduates' Use of E-Resources in Nigeria University Libraries. *Library Philosophy and Practice*. 1-18. Retrieved from <http://digitalcommons.unl.edu/libphilprac/1207>
- Achonna, A.U. (2008) .Awareness, Access and Usage of E-Journal Resources of the Library, by the Students of Yaba College of Technology, Yaba –Lagos Nigeria, *Samaru Journal of Information Studies*, 8, (1) 26-34. Available from <http://www.ajol.info/viewarticle.php?jid=335&id=44510&layout=abstract> 06-03-10.
- Adekanmbi & Boadi (2008). Problems of Developing Library Collections: a study of Colleges of education libraries in Botswana.
- Adekanmbi, A. R., & Boadi, B.Y. (2008). Problems of developing library collections: a study of colleges of education libraries in Botswana. *Information Development*, 24(4): 275-288
- Adomi, E. E. (2016). *Collection development and Management in context*. Warri Goddick Publishers.
- Afolabi, M. O. (2017). Paper presented at Electronic information for libraries Network (eIFL. Net) workshop at Obafemi Awolowo University, Ile-ife, Nigeria.
- Ahmed, N. (2015). *University library practices in developing countries*. London: Rutledge and Kegal Paul. Ltd. ati,pp,83-99
- Aina (2013). The 27th IEEE International Conference on Advanced Information Networking and Application Barcelona, Spain, March 25-28, 2013.
- Aina, L.O. (2004). Library and Information Science Text for Africa. Ibadan, Third world Information Services.
- Akporhonor, B.A. & Akpojotor, L.O. (2016). Challenges Confronting Postgraduate Library and Information Science Student in the use of Electronic Resources in Southern Nigeria. *Library philosophy and practice* . Retrieved from <http://digitalcommons.unl.edu/libphilprac/131>
- Alhassan, J.A and Macaulay, S. O (2015). Availability and Utilization of Electronic Resources by university students in Niger State, Nigeria. Proceedings of international Conference on 21st century Education at HCT Dubai Men's College, UAE
- Aliyu, M.U. (2011). The challenges posed by information communication technologies (ICT) facilities to students of tertiary institutions in Bauchi State. *Journal of Information and Knowledge management*, 1(3), 45-50.
- Ayele, A.A & Sreenivasarao, V. (2013). A case Study of Acceptance and Use of Electronic Library Services in Universities Based on SO-UTAUT Model.

International Journal of Innovation Research in Computer and Communication Engineering, 1(4), 903-911.

- Bhatti *et al.* (2013) established that poor supply of electricity was their major problem confronting users when using the library.
- Bhatti, Rubina, (2013). Pervasiveness and Purposes of Library Usage by LIS Students at the Islamia University of Bahawalpur. *Library Philosophy and Practice* (e-journal). Paper 940. <http://digitalcommons.unl.edu/libphilprac/940> facilities were their major obstacles when using the library.
- Cox, J. (2010). Academic Libraries in Challenging Times. The Irish Library Available from WorldWideWeb: <http://aran.library.nuigalway.ie/xmlui/bitstream/handle/10379/1412/JohnCoxArticle.pdf?sequence=1>
- Dulle, F.W. & Minishi-Majanja, M.K. (2011). The Suitability of the Unified Theory of Acceptance and Use of Technology (UTAUT) Model in Open Access Adoption Studies. *Information Development*, 27 (1), 32-45.
- Dulle, W.F., et' al, (2010). Factors influencing the adoption of OAJs scholarly Communication in Tanzania public Universities. World library and Information congress: 76th IFLA general conference and assembly 10-15 August 2010, Gothenburg, Sweden available <http://www.ifla.org/en/ifla76> accessed 21st June 2019.
- Echezona, R. & Ugwuanyi, C. F. (2010). African University Libraries and Internet Connectivity: Challenges and the way forward.
- Elam, B. (2017). Readiness or avoidance: e-resources and the art historian. *Collection building*, 26(1), 4-6.
- Emezie, N.A and Nwaohiri N.M. (2013). 21st Century Librarians and Effective Information service Delivery. *Information impact* 4 (1).
- Evans, G. E. (2014). *Developing library and information centre collection*, (4th ed.). Colorado: Greenwood Publication.
- Eyo, E.B.E. & Ebaye A.S. (2009). Utilization of ICT Facilities for Effective Service Delivery in Academic Libraries in Nigeria: Oniong: *a Contemporary Journal of Interdisciplinary Studies*, 1(1), 213-224.
- Fabunmi, B. A. (2014). Planning the university libraries for effective customer services in Nigeria. In Madu E. C. (Ed), *Technology for information Management and Services: Modern libraries and information centres on developing countries: Ibadan* Evi-Coleman. 147-158.
- Ferguson, A. W. (2016). Print to Electronic: the University of Hong Kong Case. *Collection Building*, 25(3), 85-88.

- Fischer, (2012). Human behaviour and sustainability. *Frontiers in Ecology and the Environment* /volume10, issue 3. <https://doi.org/10.1890/110079>
- Frascotti, J; Levenseler, J; and Wiegand, K. (2017) Improving library use and Information Literacy at Caritas Vath College. An Interdisciplinary Qualifying Project.
- Gilbert, K. (2015). Utilisation of Electronic Information Resources by Postgraduate Student of Modibbo Adama University of Technology, Yola. *IOSR Journal Of Humanities And Social Science*, 20(8), 58-65. DOI: 10.9790/0837-20835865
- Harper, P. V., Goldbeck, K., Hogarth, M., Greenebaum, D., Magolis, D., & Jackson, M. (2016).<https://doi.org/10.1111/J.1467-8721.2009.01605.x>
- Ibrahim, U. (2013). *Techniques for Writing and Presentation of thesis/dissertation*. Zaria: A.B.U. Press Ltd.
- IFLA (2012). Key issues for E-resources collection accessed from: <http://www.ifla.org/files/acquisition-collection/development/publications>.
- IFLA (2017). Acquisition and collection development perspective. Accessed from: <http://www.ifla.org/files/acquisition-collection/development/publications>.
- Ihejirika, K. T. & Ekere, F. C. (2016). Retrospective catalogue Conversion in selected federal university in Southern Nigeria. *Library philosophy and practice (e-journal)*. Accessed from: <http://digitalcommons.unl.edu/libphilprac/1441>.
- Kaur, Rajinder & Rupesh Gaur.(2017). Collection Development In Academic Libraries With Special Reference To Digital Era, *IJDLS*, Vol.7, No.2, pp.107-114
- Khademizadeh S. (2012). Use of Information and Communication Technology (ICT) in Collection Development in scientific and Research institute Libraries in Iran: A Study. *International Journal of Advancement in Research and Technology*, 1 (3), 1-3.
- Kibirige, H. M., & DePalo, L. (2011). The Internet as a source of academic research information: Findings of two pilot studies. *Information Technology and Libraries*, 19(1), 11-16.
- Kinengyere, A. A. (2017). The effect of information literacy on the utilization of electronic information resources in selected academic and research institutions in Uganda. *The Electronic Library*.25(3), 328-341. Retrieved form <http://emeraldinsight.com/Insight/ViewContentServlet;jsessionid=351FEDAF3A54B11743C8AAD939DA66A1?Filename=Published/EmeraldFullTextArticle/Articles/2630250306.htm>
- Koehler, Wallace, Jitka H, Wanda D, Joanna W (2000). Ethical Values of Information and Library Professionals: An Expanded Analysis." *International Information & Stephen* 217

- Kolo, J. J. (2010). Collection Development Practices in Academic Libraries in Niger State. An MLS Project submitted to the Dept. of Library and Information Sciences, University of Nigeria, Nsukka
- Kothari, C. R. & Grag, G. (2014). *Research Methodology, Third Edition*, New Delhi: Age International Publishers
- Kumar, M. (2009), "Academic Libraries in Electronic Environment: Paradigm Shift", A paper present at the *International Conference on Academic Libraries (ICAL)* held at the University of Delhi, India. P. 105.
- Lawal-Solarin, E. O. (2013) The use of Information and Communication Technology (ICT) in Academic Libraries in Nigeria: A case study of Covenant University, Ota, Nigeria. *Benue Journal of Library Management and Information Science (BJLMIS)*, 3(1): 39-50.
- Leung, L. (2015). *Journal of Family Medicine and Primary Care*. 4(3), 324-327
- Lilili, K. (2009), "Emerging Technologies for Academic Libraries in Digital Age", Oxford: Chandos: 24.
- Lwoga E. T, Site A. S, Busagala, L. S. P and Chilimo W. (2009) The role of universities creating ICT awareness, literacy and expertise: experience from Tanzanian public universities. www.bsprimer.com/mukpdfs/TROU.pdf Retrieved 20th September 2009. Menou, M.J.
- Mansur, Sunil. E-resources collection development in engineering college libraries: A challenge for knowledge centre managers. *International journal of digital library services*, 2012, 2(1), p.166-177.
- Mohammed A. S. (2011). The importance/ Usefulness of ICT in information storage and Retrieval. *The communicator, A Journal of Association of library and information science students*, Vol.12 March, 2011
- Msonge, V.T. (2013). Challenges of Journal Collection Development and management in selected Academic and Research libraries in Tanzania, A thesis submitted in fulfilment of the requirement of the requirement of the Doctor of philosophy (information studies) of the University of Da res Salaam, Dar es Salaam.
- Nosrat,R. (2010) A citation analysis study of MA dissertations in the library and information science field in universities in Tehran. *Library Review*,59 (1) 56-64 <http://www.ingentaconnect.com/content> [Accessed. 23/10/2011].
- Noruzi A (2004). Application of Ranganathan's Laws to the Web. *Webology*, 1(2), Article 8. Retrieved from, <http://www.webology.org/2004/v1n2/a8.htm>

- Nwalo, K.I.N. (2013). New mode of Universal Access: Challenge to Nigerian Cataloguers. *The Nigerian Cataloguer*
- Ogunrombi SA (2005) Incidence of theft Reference Materials in Nigerian University Libraries. *SCAULWA Newsletter* 5(2),21-22.
- Okello-Obura, C., & Magara, E. (2018). Electronic information access and utilization by Makerere University students in Uganda. *Evidence Based Library and Information Practice*, 3(3), 39-56.
- Okiki, and Asiru (2011). Use of electronic information sources by postgraduate student in Nigeria. Influencing factors. *Library philosophy and practice*. Retrieval from <http://www.webpages.vlddo.edu>.
- Ololube, N.P. (2016). Appraising the Relationship between ICT usage and integration and the standard of teacher education programmes in a developing economy. *International Journal of Educational Development using ICT*, 2(3).
- Onuoha, U.D. and Subair, M. O. (2013). Undergraduates' use of libraries in federal universities in south-west, Nigeria.
- Ossai, N.B. (2019) Library use pattern of law students at the University of Benin, Benin City, Nigeria. *Simbiosis* 6 (1), 2-14.
- Oyedum, G.U, Abedoh, G.O., Saka, K.A & Alhassan, J.A. (2015). Impact of electronic resources in university library services: A comparative analysis of Federal University of Technology, Minna and Ibrahim Badamasi Babangida University, Lapai. *Journal of Information, Science and Technology*, 2(2), 70-79.
- Oykiy, R. B. (2010). Globalisation and ICT in Academic Libraries in Nigeria the way forward. Retrieve on 19, june-2019 from <http://unilib.UNL.edu/lpp/Oykiy.pdp>.
- Philip, A., Oluwagbemi, O., & Oluwaranti A. (2010). An Evaluation of the Impact of Information and Communication Technologies. Diffusion in Nigeria's Higher Education Institutions, *Journal of Information Technology Impact*, 10 (1), 25-34
- Popoola, S.O. (2018). The Use of Information sources and services and its effect on the research social Output in Nigeria Universities. Available at <http://www.webpages.uidaho.edu/~mbolin/popoola.htm>. (Accessed October 4, 2013).
- Radijeng, K. F. (2017, October). Demand for Electronic Legal Information at the University of Botswana. In *Starr Workshop Papers* (p. 1).
- Reddy, Harinath.(2015).Collection Development in University Libraries, MPhil.Dissertaion, submitted SV University,Tirupati,pp,83-99
- Sampath K. B. T and Biradar, B. S. (2010). "use of ICT in college libraries in Karnataka, India: a survey." *Program: electronic library information system* 44(3):271-282.

- Sanchez, V, Susana, B. & Meneses, G. (2015). Collection development policies in university libraries: A space reflection. *Collection Building*, 24 (1), 36.
- Shuling, W. (2017). Investigation and analysis of current use of electronic resources in university libraries. *Library management*, 28(1/2), 72-88.
- Tavakol, M. & Dennick, R. (2011). Post-examination analysis of objective test. *Medical Teaching* 33(4), 47-58.
- Tenopir, C. (2013). Use and Users of Electronic Library Resources: An Overview and Analysis of Umar, A. at, el (2016). Introduction to library and information resources and services.
- Tenopir, C. & King, D.W. (2013). Reading behaviour and online journals. *Learned Publishing*, 15 (4) 259-265. [http://www.ingentaconnect.com/content/\[25/3/2012\]](http://www.ingentaconnect.com/content/[25/3/2012]).
- Ugah, A. D. (2017). Evaluating the use of University Libraries in Nigeria: A case study of Michael Okpara University of Agriculture, Umudike. Available at <http://www.webpages.uidaho.edu/~mbolin/ugah2.htm> (Accessed November 7, 2013). University Library. Official publication of the pacific northwest library Association.75. (summer2011). Wed13 jul.2013.<http://www.unib.uni.edu/iip/PN LA>
- Uzoagulu A. E. (2011). Practical guide to writing research project report in tertiary institutions. Enugu Cheston Publishers.
- Woodward, D. (2019). Current Directors in psychological Science. Research Articles from The 1st Electronic Resources and Libraries Conference: A Report. *Library Hi Tech News*.

APPENDIX A

FEDERAL UNIVERSITY OF TECHNOLOGY MINNA
SCHOOL OF INFORMATION AND COMMUNICATION TECHNOLOGY (SICT)
DEPARTMENT OF LIBRARY AND INFORMATION TECHNOLOGY

VICE – CHANCELLOR:
Prof. Abdullahi Bala PhD,fssn



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HEAD OF DEPARTMENT:
Dr. K. A Saka, NCE, BLIS (ABU), MLS (BUK), Ph.D (UniMaid)

E-mail:s.katamba@futminna.edu.ng
Tel: 07038706880

11th July 2019

LETTER OF INTRODUCTION

I hereby present to you, MAINA, Elisha Yohanna M.Tech student of Library and Information Technology Department with Mat No: M.Tech/SICT/2017/6923. He is writing his project titled: “INFLUENCE OF USER NEEDS AND NEW TECHNOLOGY USE ON COLLECTION DEVELOPMENT PATTERN IN UNIVERSITY LIBRARIES IN NOTHERN NIGERIA”. Please kindly render him the necessary assistance to enable him complete his research work.

Thanks for your cooperation.

A handwritten signature in blue ink, appearing to read 'K. A. Saka', is written over a vertical line.

Dr. K. A. Saka
HOD/LIT

APPENDIX B

Department of Library and Information Technology,
School of Information and Communication Technology,
Federal University of Technology,
Minna,
Niger State.

Dear Sir/Ma

I am a postgraduate student of the above mentioned institution pursuing a master's degree in Library and Information Technology. I am currently carrying out a research on **'User Needs and the Application of Information Technology Facilities as Determinants of Collection Development Practice in University libraries in Northern Nigeria.'**

The purpose of this questionnaire is to collect data that would be used for academic purpose only. I am requesting your assistance in conducting this research by answering all the questions in this questionnaire. The information given shall be treated as confidential. Your assistance will be highly appreciated.

Yours Sincerely,

Maina, Elisha Yohanna

MTECH/SICT/2017/6923

INTRODUCTION

Please tick () in the appropriate option box.

SECTION A

1. Name of Institution.....
2. Status: Collection development librarians () others specify.....
3. Designation: library Assistant () Assistant Librarian () Librarian II () Librarian I () Senior Librarian () Principal Librarian () Deputy University Librarian () University Librarian ()

Any other (please specify)

4. Gender: Male () Female ()
5. Years of working experience in the library: below 5 years () 6-15 years () 16-25 years () above 25 years ()
6. Age group: less than 25 years () 25-35 years () 36-45 years () 56-65 years ()
7. Marital Status: Married () Single () Divorced () Widowed ()
8. Highest Academic Qualification obtained: DLIS () BLS () MLS/MLIS () MPHIL () Ph.D () any other (please specify).....

PART TWO. Tick as Applicable

SECTION B: Processes of Collection Development Practice in University Libraries in Northern Nigeria.

1. What are the processes of collection development practice in university libraries in Northern Nigeria?

Key: SA- Strongly Agreed, A- Agreed, D- Disagreed- SD- Strongly Disagreed

S/N	Collection Development Practice	SA	A	D	SD
1	Information resources are provided through Purchase				
2	Information resources are provided through Gifts (Donations)				
3	Information resources are provided through Renting				
4	Information resources are provided				

	through Exchange				
5	Information resources are provided through Legal Deposit				
6	Information resources are provided through Bequeaths				
7	Information resources are provided through Subscription to databases				
8	Information resources are provided through Open sources				
9	Others (please specify)				

SECTION C: Determine the Availability of information technology facilities for Collection Development processes in University Libraries in Northern Nigeria

ON D: What is the Level of User Needs Influence on Collection development Practice?

2. What is the influence of user needs on collection development practice?

Key: VH= **Very High**, H= **High**, L= **Low**, VL= **Very Low**

S/N	Collection Development Practice	VH	H	L	VL
1	The needs of users in the library is mostly influenced through printed information resources Books, Journals				
2	The needs of users in the library is mostly influenced through non-printed information resources CD-ROM, Floppy Disc				

SECTION E: What is the Influence of Information Technologies on Collection Development Practice in University Libraries in Northern Nigeria?

3. To What Extent has New Technologies Influence Collection Development Practice in University Libraries in Northern Nigeria?

Key: VGE: Very Great Extent, GE, Great Extent, LE, Low Extent, VLE, Very Low Extent

S/N	Statements	VGE	GE	LE	VLE
1	Quick access to information resources				
2	Breaking barriers of distance to information				
3	Provision of unrestricted access to information resources				
4	Facilitate communication to various vendors				
5	Resource sharing among university libraries in different location				
6	Saves time in selection, acquisition of information resources				
7	Access to aggregators				
8	Conduct complex analysis and large data set				
9	Communication links				

SECTION F: What are the Challenges of User Needs and the Application of Information Technology Facilities on Collection Development Practices in University Libraries in Northern Nigeria?

4. What are the Challenges of User Needs and the Application Information Technology Facilities on Collection Development Practice?

Key: SA- Strongly Agreed, A- Agreed, D- Disagree, SD- Strongly Disagree

S/N	Challenges of User Needs and New Technology Use	SA	A	D	SD
1	Insufficient computers with Internet facilities				
2	Absence or poor Internet connectivity				
3	Lack of new technology skills				
4	Inadequate new technology infrastructure				
5	Irregular power supply				
6	Download delay				
7	Difficulty in assessing some websites				
8	Difficulty in finding relevant information				
9	Lack of implementation of new technology policy				
10	Slow speed of ;personal computers due to virus				
11	Unavailability/disappearance of some websites				
12	High cost of subscription				
13	Lack of technical assistance by library staff				
14	Cost of acquiring new technology facilities				
15	Others specify				

SECTION G: What are the Practical Solutions to Challenges of Collection Development in University Libraries?

5. What are the practical solutions to the challenges of collection development?

Key: SA- Strongly Agreed, A- Agreed, D- Disagree, SD- Strongly Disagree

S/N	Practical solutions to the challenges	SA	A	D	SD
1	Government and the university management should pay serious attention to the funding of university libraries				
2	The expected 10% of university statutory allocation should be disbursed to the library in addition to TETFUND's grant				
3	Staff development is also very essential because the professional quality of library personnel determines the quality of service rendered				
4	Proper ICT seminars/workshops in the university				
5	Provision of sufficient new technology facilities				
6	Government and university management support on provision of stable power supply				
7	Provision of adequate and effective Internet services provider				
8	The nation information technology policy to be fully implemented				
9	Reduction of telecommunication/computer importation tariff				
10	Others specify				

APPENDIX C

Observation checklist

Key: A-Available, NA- Not Available

S/N	Information technology facilities	Available	Not Available
1	Desktop computers		
2	Laptop and Ipads computer		
3	Printers		
4	Plotters		
5	Photocopy machine		
6	Scanners		
7	Digital camera		
8	Projector		
9	Computer output microfilm (COM)		
10	Telephone/GSM		
11	Local Area Network (LAN)		
12	Wide Area Network (WAN)		
13	Internet network facilities		
14	Facsimile		
15	Videoconferencing/teleconferencing facilities		
16	Television		
17	Radio		
18	e-mail facilities		
19	World Wide Web (WWW)		
20	Operating system softwares (windows, Unix, Linux, Mac OS, Solaris/Sun OS)		
21	Application software (word processor, spreadsheets, presentation, graphic application)		
22	Web browser (Internet explorer, Netscape, Mozilla Firefox, opera)		
23	Bibliographic online database		
24	Full text online database		

APPENDIX B

Department of Library and Information Technology,
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Dear Sir/Ma

I am a postgraduate student of the above mentioned institution pursuing a master's degree in Library and Information Technology. I am currently carrying out a research on **'User Needs and the Application of Information Technology Facilities as Determinants of Collection Development Practices in University libraries in Northern Nigeria.'**

The purpose of this questionnaire is to collect data that would be used for academic purpose only. I am requesting your assistance in conducting this research by answering all the questions in this questionnaire. The information given shall be treated as confidential. Your assistance will be highly appreciated.

Yours Sincerely,

Maina, Elisha Yohanna

MTECH/SICT/2017/6923

INTRODUCTION

Please tick () in the appropriate option box.

SECTION A

1. Name of Institution.....
2. Status: Registered library users ().....
3. Gender: Male () Female ()
4. Years of library usage: below 1 years () 2 years () 3 years () 4years () 5 years () 5 years and above ()
5. Age group: less than 18 years () 18-20 years () 21-23 years () 24-27 years () others (please specify).....

SECTION A: What is the Influence of Information Technology Facilities on Collection Development Practice in University Libraries in Northern Nigeria?

1. To What Extent has Information Technology Facilities Influence Collection Development Practice in University Libraries in Northern Nigeria?

Key: VGE: Very Great Extent, GE, Great Extent, LE, Low Extent, VLE, Very Low Extent

S/N	Statements	VGE	GE	LE	VLE
1	Quick access to information resources				
2	Breaking barriers of distance to information				
3	Provision of unrestricted access to information resources				
4	Facilitate communication to various vendors				
5	Resource sharing among university libraries in different location				
6	Saves time in selection, acquisition of information resources				
7	Access to aggregators				
8	Conduct complex analysis and large data				

	set				
9	Communication links				

SECTION B: What are the Challenges of User Needs and the Application of Information Technology Facilities on Collection Development Practice in University Libraries in Northern Nigeria?

2. What are the Challenges of User Needs and the Application of Information Technology Facilities on Collection Development Practice?

Key: SA- Strongly Agreed, A- Agreed, D- Disagree, SD- Strongly Disagree

S/N	Challenges of User Needs and Information Technology Use	SA	A	D	SD
1	Insufficient computers with Internet facilities				
2	Absence or poor Internet connectivity				
3	Lack of new technology skills				
4	Inadequate new technology infrastructure				
5	Irregular power supply				
6	Download delay				
7	Difficulty in assessing some websites				
8	Difficulty in finding relevant information				
9	Lack of implementation of new technology policy				
10	Slow speed of ;personal computers due to virus				
11	Unavailability/disappearance of some websites				
12	High cost of subscription				
13	Lack of technical assistance by library staff				
14	Cost of acquiring new technology facilities				
15	Others specify				

SECTION C: What are the Practical Solutions to Challenges of Collection Development in University Libraries?

3. What are the practical solutions to the challenges of collection development?

Key: SA- Strongly Agreed, A- Agreed, D- Disagree, SD- Strongly Disagree

S/N	Practical solutions to the challenges	SA	A	D	SD
1	Government and the university management should pay serious attention to the funding of university libraries				
2	The expected 10% of university statutory allocation should be disbursed to the library in addition to TETFUND's grant				
3	Staff development is also very essential because the professional quality of library personnel determines the quality of service rendered				
4	Proper ICT seminars/workshops in the university				
5	Provision of sufficient new technology facilities				
6	Government and university management support on provision of stable power supply				
7	Provision of adequate and effective Internet services provider				
8	The nation information technology policy to be fully implemented				
9	Reduction of telecommunication/computer importation tariff				
10	Others specify				

APPENDIX D

Cronbach Alpha Reliability Analysis Result

Notes

Output Created		4-SEP-2019 01:35:51
Comments		
Input	Data	C:\Users\dell\Desktop\DEFAULT BACKUP\ ANALYSIS\ELISHA.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	24
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=SB1 SB2 SB3 SB4 SB5 /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.01

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	16	100.0
	Excluded ^a	0	.0
	Total	16	100.0

Reliability Statistics

Cronbach's Alpha	N of Items
.898	2

Reliability Statistics

Cronbach's Alpha	N of Items
.874	2

Reliability Statistics

Cronbach's Alpha	N of Items
.750	5

Reliability Statistics

Cronbach's Alpha	N of Items
.862	5

Reliability Statistics

Cronbach's Alpha	N of Items
.631	5

Reliability Statistics

Cronbach's Alpha	N of Items
.781	9

Reliability Statistics

Cronbach's Alpha	N of Items
.737	14

Reliability Statistics

Cronbach's Alpha	N of Items
.692	9

$$\text{Average} = \frac{0.898+0.874+0.750+0.862+0.631+0.781+0.737+0.692}{8} = \frac{6.225}{8} = 0.778$$

The result of the analysis shows that the instrument is fit for study.

APPENDIX E

Correlations

		the need of users in the library is mostly influenced through printed information resources	the needs of the users in the library is mostly influenced through non printed information resources
the need of users in the library is mostly influenced through printed information resources	Pearson Correlation Sig. (2-tailed) N	1 19	.869** 19
the needs of the users in the library is mostly influenced through non printed information resources	Pearson Correlation Sig. (2-tailed) N	.869** .000 19	1 19

** . Correlation is significant at the 0.01 level (2-tailed).

Correlations

		quick access to information resources	facilitate communication to various vendors
quick access to information resources	Pearson Correlation Sig. (2-tailed) N	1 19	.706** 19
facilitate communication to various vendors	Pearson Correlation Sig. (2-tailed) N	.706** .001 19	1 19

** . Correlation is significant at the 0.01 level (2-tailed).