



Professional Skills of Academic Librarians towards Institutional Repository Development in Higher Institutions of Learning in Northeast, Nigeria

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ABSTRACT

The study investigates professional skills of academic Librarians towards institutional repository development in Higher Institutions of Learning in Northeast, Nigeria. The study investigates professional skills of academic Librarians towards institutional repository development in Higher Institutions of Learning in Northeast, Nigeria. The objectives of the study are to: ascertain the roles of communication skills, ascertain the roles of administration skills, examine the roles of critical thinking skills, investigate the roles of technical skills and determine the roles of digital skills of academic Librarians towards institutional repository development in Higher Institutions of Learning. Five research questions were formulated to guide the study. The study used descriptive research design. The population of the study consists of 35 professional Librarians, Purposive sampling technique was used for this study therefore, the sample size was 35 librarians and entire library staff was used. Questionnaire was used in obtaining data for the analysis of the study. The instrument was subjected to face validation using Cronbach Alpha Co-efficient yielded 0.79. The data collected from the respondents was analysed using descriptive statistics of mean standard deviation. The findings revealed that majority of the respondents strongly agreed that the roles of communication skills, administration skills, critical thinking skills, technical skills and digital skills play a positive role in academic Libraries towards institutional repository development in Higher Institutions of Learning in Northeast, Nigeria. The study recommends among others that: academic librarians should be provided with continuous training and workshops to enhance their interpersonal and communication abilities for effective reaction with users and colleagues by the institution.

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INTRODUCTION

The advent of ICT has given birth to institutional repositories. Institutional Repositories is a new breed of services still in their early stage in academic libraries in Nigeria. It is an online archive of books, films, artwork, or works of all kinds emanating from universities, colleges, funding agencies, and government agencies (Das,

2021). Repositories are key components of the emerging digital research infrastructure which can help ensure the widest possibility of starting research works. Through institutional repositories, academic libraries collect, preserve and disseminate the scholarly output of the parent institutions (Crow, 2022). It equally provides free unrestricted online access to all types of

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institutional research output seamlessly linking data, knowledge and scholars. For effective utilization of this scholarly output in daily activities of the institutions, such scholarly output in form of knowledge and information must be collected, processed and disseminated for use by the users (Yang, 2016).

Hanief, (2024) laments that in order to make the local contents emanating from Nigerian universities to be visible, it has become imperative for Higher Institutions libraries in Nigeria to embark on the development of institutional repositories to serve as a platform for the visibility of intellectual output in the universities. Institutional repositories could contain theses, dissertations, projects, course notes, seminar papers, conference proceedings, administrative documents, learning objects and other forms of grey literature from the institution (Harnad, 2019). An institutional repository is a set of services and technologies that provides the means to collect, manage, provide access to, disseminate and preserve digital materials produced at an institution (Barooah, 2021).

Rao (2020) noted that institutional repository is a digital archive of the intellectual product created by the faculty, research staff, and students of an institution and accessible to end users both within and outside the institution, with few if any barrier to access. Kalbande (2022) sees it as "a set of services that a Higher Institutions offers to the members of its community for the management and dissemination of digital materials created by the institution and its community members." One key criterion that is used to measure the quality of a Higher Institutions is the quality and quantity of research output (Mahanta, 2021). The situation where the totality of the research output emanating from a particular Higher Institutions cannot be ascertained will make it very difficult to evaluate the Higher Institutions output and could also impede the collation and onward transmission of the researches that can benefit different segments of the society to the parties concerned. This reveals the need for the establishment or development of institutional repositories in universities to make the intellectual output visible

globally (Tomiura, 2021). Although the practice of institutional repositories is very well embraced in advanced countries as a deliberate strategy to promote knowledge sharing, the case is not the same in less developed countries like (Vijayalakshmi, 2020).

Safdar (2021) notes that theses and dissertations in African universities are buried in library archives while most of the journals on the continents are not indexed in internationally recognized indexing bodies. In Nigeria, for example, research outputs in form of theses and dissertations are completely buried in individual Higher Institutions libraries to the extent that it is only very few researchers in the Higher Institutions community that are aware of the existence of these materials (Sinha, 2023). Such a scenario makes it difficult for effective dissemination of scholarly output on the continent. Satpathy (2022) regrets that it is not as though there is lack of useful knowledge on the African continent but the problem has always been the sharing of such knowledge.

The role of librarians changed from storehouse of information and care taker to actual learning center and information manager and at the same time the forms and distribution of information also took new shape and way. This is due to advancement in information and communication technology (Babel, 2021). Due to this change, librarians' job also requires some of the special skills and competencies apart from the basic skills and practices of librarianship. The libraries experiencing tremendous change, the electronic information has occupied huge place in the publishing industry during current days. Dike (2022) submitted that it might be difficult to successfully run an institution repository without commensurate academic librarian skills on various areas of repository.

Corleley (2023) recommends that Higher Institutions management and government must give serious credence to training of academic Librarians to prepare them for efficient job performance and sustainable repository development. According to Crow (2022), if Librarians remain reluctant to gain new skills, they will become irrelevant to their organization and will



probably lose out in competition for employment to people of other fields like scientists, engineers and IT professionals. Hence, the present-day library professionals apart from their educational based practices, required different types of soft skills to provide right information to right user at right time. This study therefore seeks to examine professional skills of academic Librarians towards institutional repository development in Higher Institutions of Learning in Northeast Nigeria.

STATEMENT OF THE PROBLEM

The changing role of professional librarian as handler and manager of information, need flexible, adaptable individuals who can manage changes effectively. Libraries are a fluid organization and the expectation is that the librarians need to be flexible in embracing new ways of working and changes that new innovations bring about (Snyman, 2024). Despite the potential benefits associated with the development of institutional repositories (IRs) in universities, observations have shown that most universities in Nigeria have not keyed into this laudable innovation (Ezema, 2021). This could be as a result of some lack of librarians' professional skills. These developments have necessitated librarians the need to update their knowledge, acquire new skills and maintain basic competencies. However, the extent to which librarians' professional skills impact institutional repository development and subsequent effect on library effectiveness remains uncertain. This uncertainty stems from the evolving demands on librarians in modern academia, including technological advancements and shifting user expectations (Ugwu, 2024).

Despite the necessity for librarians to continually adapt and expand their skill sets, the correlation between these skills and institutional repository development remains unclear (Ezema, 2020). Also, despite the fact that with the tip of a finger any information can be accessed anywhere anyplace at any rate of time and help academic librarian to deliver their services effectively, it is observed that academic librarians in tertiary institutions in northeast States of Nigeria are not competent in making use of ICT to deliver and

render services to their users (Gbaje, 2022). Therefore, the central problem lies in understanding the intricate interplay between Librarian professional skills and their collective influence on librarians' effectiveness in repository development in tertiary institutions (Fijeh, 2024). Addressing this problem is essential for optimizing librarian performance, improving library services, and advancing the academic institutions' repository development in Higher Institutions. Hence, the researcher examines the professional skills of academic Librarians towards institutional repository development in Higher Institutions of Learning in Northeast Nigeria

Objectives of the study

The objective of the study is to examine professional skills of academic Librarians towards institutional repository development in Higher Institutions of Learning in Northeast Nigeria. The objectives of this study are specifically listed as follows:

1. To ascertain the roles of communication skills of academic Librarians towards institutional repository development in Higher Institutions of Learning in Northeast Nigeria.
2. To ascertain the roles of administration skills of academic Librarians towards institutional repository development in Higher Institutions of Learning in Northeast Nigeria.
3. To examine the roles of critical thinking skills of academic Librarians towards institutional repository development in Higher Institutions of Learning in Northeast Nigeria.
4. To investigate the roles of technical skills of academic Librarians towards institutional repository development in Higher Institutions of Learning in Northeast Nigeria.
5. To determine the roles of digital skills of academic Librarians towards institutional repository development in Higher Institutions of Learning in Northeast Nigeria



Research Questions

The following are the research questions:

1. What is the role of communication skills of academic Librarians towards institutional repository development in Higher Institutions of Learning in Northeast Nigeria?
2. What are the roles of administration skills of academic Librarians towards institutional repository development in Higher Institutions of Learning in Northeast Nigeria?
3. What is the role of critical thinking skills of academic Librarians towards institutional repository development in Higher Institutions of Learning in Northeast Nigeria?
4. What is the role of technical skills of academic Librarians towards institutional repository development in Higher Institutions of Learning in Northeast Nigeria?
5. What is the role of digital skills of academic Librarians towards institutional repository development in Higher Institutions of Learning in Northeast Nigeria?

REVIEW OF RELATED LITERATURE

The Roles of Communication Skills of Academic Librarians towards Institutional Repository Development in Higher Institutions of Learning

Institutional Repository (IR) can be viewed as "a set of services that an institution offers to members of its community for the management and dissemination of digital materials created by the institution and its community members." (Fijeh, 2024). For a Higher Institutions, this includes materials such as monographs, e-prints of academic journal articles both before (pre-prints) and after (post-prints) undergoing peer review as well as electronic theses and dissertations (ETDs). An IR might also include other digital assets generated by academics, such as datasets, administrative

documents, course notes, learning objects, or conference proceedings (Kari, 2022). Deposit of material in an IR is sometimes mandated by an institution. An IR is an archive for collecting, preserving, and disseminating digital copies of the intellectual output of an institution, particularly a research institution (Zervos, 2023). As a result Academics should be involved in the implementation and development of an IR project so that they can learn the benefits and purpose of building an IR (Omeluzor, 2024).

It is most essentially an organizational commitment to the stewardship of these digital materials, including long-term preservation access or distribution. A number of factors are driving upon creation of institutional repositories to provide access to full text journals articles and other information materials available in the library. Due to constant escalation of subscription prices of journals and databases in the libraries the authors are also seen to be more interested to publish their scholarly research in open access journals so that copy right law could not hamper in making available their publication to all through open access IR of the institute (Singeh, 2023).

An institutional repository consists of formally organized and managed collections of digital content generated by faculty, staff, and students at an institution. The content of these repositories can be made available for integration with on – campus library and course management systems (Ukwoma, 2022). It can also be made available to colleagues and students at other institutions, as well as to the general public. When one uses the term "repositories" today, it is nothing but speaking about one of many different technologies that support the storage and distribution of digital content.

Venitha (2023) has defined an institutional repository is an organization-based set of services which the organization offers to the members of its community for the management and dissemination of digital materials created by the institution and its community members. It is most essentially an organizational commitment to the stewardship of these digital materials, including long-term preservation, where appropriate as well as organizational and access



or distribution. According to Hanief (2024) an institutional repository is digital archives of intellectual products created by the faculty, staff and students of an institution or group of institutions accessible to end users both within and outside the institution.

An institutional repository (IR) aims at bundling the research output of an institution (E.g.a Higher Institutions or a research center) and makes it available to the public. In the majority of these cases these document servers are run by the libraries belonging to the institution (Hanief, 2024). Institutional repository means a storehouse where all knowledge and information about an institution is stored or a storehouse where all the indigenous materials emanating from an institution are stored and made available for dissemination and use by the Higher Institutions community and the world at large through digitization. It is a digital collection capturing and preserving the intellectual output of a single or multi-Higher Institutions community (Corletey, 2023) According to Tamizhchelvan (2023) Institutional Repositories enable institutions and faculty to offer long-term access to digital objects that have persistent value. They extend the core missions of libraries into the digital environment by providing reliable, scalable, comprehensible, and free access to libraries' holdings for the world as a whole.

Besides, it is a database with a set of services to capture, store, index, preserve and redistributes a Higher Institutions' scholarly research in digital form. From the above definitions, one can infer that an institutional repository is all about institutions and their scholarly output and how to make it accessible to each Higher Institutions community and the world at large for better and effective repository services (Babel, 2021). The repository services that an institution provides bring together all the components that act as enablers for the institutions overall policies of collection, preservation and dissemination. This is the institutional repository (Dike, 2022). Therefore, it is a welcome development to academic libraries because through it, institutions output is known worldwide, and there will be knowledge transfer and automation link or collaboration with other

institutions in the world. It is against the foregoing that repositories hold great promise for Nigerian universities and libraries, particularly its potential for moving them from traditional librarianship to the lime light (Corletey, 2023). Notwithstanding, knowledge of the potential of institutional repositories (IR) is not enough; it is equally necessary to understand the key ingredients in the establishment and functionality of repositories and how such can be adapted and implemented in Nigerian academic libraries (Yang, 2020).

Sinha (2023) in his study identified limited technological skill to setup and configure IR software as one of the limitations towards the successful development of IR in Nigerian libraries. Other factors identified includes: lack of technological infrastructures such as the internet connection and bandwidth; lack of institutional commitment and scholars' apathy (lack of adoption and use). The respondents in Satpathy (2022)'s study took time to write comments on the problems encountered in the development and maintenance of IRs. They mentioned issues such as: Dedicated staff are need to manage the IR; None of the repository staff are professionals, they are on the job training; we do not have enough resources, for example big RAM to cater for access load and to run backups, shortage of staff to maintain and manage IR, only one person is responsible for everything; lack of expertise in DSpace for development and problems encountered; lack of annual budget for IR limits how much can be done yearly;

Librarian skills are industry hard skills and transferrable soft skills that librarians bring to their work at a library (Corletey, 2023). Hard skills refer to industry-specific skills, such as using library software or understanding how to categorize information. Soft skills refer to skills that can transfer from one industry or job to another, such as punctuality, critical thinking or time management (Dike, 2022). Librarians use a variety of skills during the workday to organize and improve the library, help patrons find information and categorize books, movies and other media. Librarian skills are the essential hard and soft skills that help librarians handle job responsibilities efficiently (Ugwu, 2024).



Skills are the competence which enables an individual to do a job properly. Zervos (2023) defines it as a cluster of related activities, commitments, knowledge that enable a person to act effectively in a job or situation. Having skills indicates sufficiency of knowledge that enable someone to act in a wide variety of situations. Because each level of responsibility has its own requirements, skills can occur in any period of a person's life or at any stage of his or her career. For today's librarians having professional degrees in library and information science is not sufficient unlike in the past. There is demand for librarian having multidimensional aptitudes and competencies in the areas of technical work, administrative work and also in providing user-oriented services along with soft skills (Banach, 2021).

Library professionals need different kinds of skills which are imparted through different training programmes for providing best services. Thus, LIS professionals must encounter rapidly changing environments that require diverse skills, new thinking and broader perspectives and must be prepared to develop innovative ideas for the capture, process and sharing of knowledge and demonstrate good management practices if they want to remain relevant in the emerging knowledge age (Omeluzor, 2024). Here is a list of critical professional skills of academic Librarians towards institutional repository development in Higher Institutions of Learning in Northeast Nigeria (Venitha, 2023):

Roles of Communication Skills of Academic Librarians in Institutional Repository Development in Higher Institutions of Learning

Librarian is a spearhead in library. Librarian is committed to providing the best service to its users. If a librarian's services to his good, of course, will add to the positive image of the library and of course the librarian's profession (Das, 2021). Conversely, if the unsatisfactory service in the library self-image and the librarian will exacerbate. This self-image is formed as a result of their experience in the interaction. In this case, the impression is gained when users deal with libraries can affect the self-image of libraries

(Crow, 2022). In serving users, libraries will find a wide range of character and personality of the user. To deal with these librarians must develop interpersonal skills in communicating with the users

The librarian is required to acquire communication skill for correspondence as well as oral communication. He should acquire competencies to function as a manager, organizer, leader, supervisors & Communication with different groups of people (Kalbande, 2022). Various sales agents for marketing of their products related to automation & Services of libraries approach to librarians from all over Nigeria. Therefore, librarian must have competency to talk with them in English (Rao, 2020). Communication is the process of sending and receiving messages through verbal or nonverbal means - speech (oral communication), writing (written communication), signs, signals, or behaviour. It is the transfer of information from a source to a receiver. It is effective when the sender of information and the recipient have a common comprehension of the message. It is a central element in all aspects of our daily life (Yang, 2020).

The word communication comes from the Latin word *communis*, which means common. When we communicate, we are trying to establish "commonness" with someone. That is, we are trying to share information, an idea, or an attitude with others (Kalbande, 2022). Communication is all about getting the message across correctly. To make this happen, librarian or information professional need to have good speaking skills and good writing skills. If these skills coupled with good listening skills and interest in reading, librarian or information professional have all the potential to be a good communicator (Corleley, 2023).

Along with these, professionals also need to have proficiency in vocabulary, grammar, pronunciation and presentation. In library and information centers internal correspondence is required for letter, office order, notice, agenda, minutes, circular, memo, etc and external correspondence is required for letters of enquiry, complaint letter and quotation letter (Snyman,



2024). Any written communication should be clear, courteous, concise, concrete, considerate, complete, correct, gender sensitive and natural. It is important to realize that once something is written, it cannot be taken back. Communicating in written form is more concrete than verbal communication.

Presentations are a way of communicating ideas and information to a group. The objective of communication is to make message understood and remembered. In order to achieve this, the presenter must be clear, coherent, articulate and convincing (Ugwu, 2024). A presentation puts the presenter on display in front of the audience. Therefore, in order to be effective and impressive in presentation it is needed to prepare before actually deliver the presentation. The librarian's strength in the articulation and interpretation of thoughts expressed or latent depends very largely on his understanding of the principle of communication skills. Here, he must demonstrate good listening skills built on patience; because some of the patrons could be very nasty and awkward in their presentation. Commenting on this, Fijeh (2024) stated that 'user can sometimes be awkward and do not always state their wishes as clearly as we would like; the skilled intermediary will make them less awkward, less nervous and more articulate by welcoming them to the library' in this regard, user's satisfaction in all its ramifications

Organizational and Administration Skills of Academic Librarians towards Institutional Repository Development in Higher Institutions Of Learning.

Librarians organize materials and equipment to make it easier for people to find information. They also supervise support staff to handle these tasks at larger libraries. Librarians also organize programs and events for the public such as lectures, book discussion groups and children's programs (Omeluzor, 2024). They are responsible for providing a safe and neat environment for visitors and staff. Libraries organize their collections to help library users find what they need. Organizing library collections may seem like a straightforward and streamlined

process, but it can be quite complex, and there is a large body of theory and practice that shape and support this work. Learning about the organization of library collections can be challenging. Running a business and changing a business positively are two concepts that are used in management to differentiate between the continued delivery of information goods or services and adapting of goods or services to meet the changing needs of users. The term management may also refer to those people who manage an organization as managers (Venitha, 2023).

Critical Thinking Skills of Academic Librarians towards Institutional Repository Development in Higher Institutions of Learning

Critical thinking is an essential cognitive process for developing and using knowledge. It can be used to solve problems and make decisions in social, clinical, ethical, managerial, or political fields (Banach, 2021). Considering the priority of evaluation in all the mentioned roles of librarians, the best skill that information professionals can develop in this field to prepare for such challenges is to acquire the basic skill of critical thinking. The necessity of developing critical thinking for Higher Institutions librarians, whose main mission is to meet the information needs of the scientific community, can have a key and effective role in improving the level of knowledge and scientific development of a country (Zervos, 2023).

Critical thinking, an important construct in the educational dimension, is an active process which uses a specific set of skills and enables one to make appropriate decisions and discriminate between information received. Therefore, critical thinking is considered as an important aspect of information performance in library education. In the field of library and information science, so far, no coherent study has investigated the possible aspects of teaching critical thinking (Ezema, 2020). Critical thinking refers to the ability to analyze information objectively and make a reasoned judgment. It involves the evaluation of sources, such as data, facts, observable phenomena, and research findings. Good critical thinkers can draw reasonable conclusions from a

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set of information, and discriminate between useful and less useful details to solve problems or make decisions. These skills are especially helpful at school and in the workplace, where employers prioritize the ability to think critically.

Junis (2023) defines critical thinking as "reflective and reasonable thinking that is focused on deciding what to believe or do". He explains that this definition encompasses both creative activities (formulating hypotheses, questions, alternatives, and plans for experiments) and practical activities (making reasoned decisions). Comparing Bloom's definitions and examples of higher-order thinking with his own definition of critical thinking, Ennis argues that the Taxonomy, while useful, lacks guidelines for teachers to assess whether a student has or has not achieved a certain goal. He concedes, however, that many teachers probably believe that the top three levels of Bloom's Taxonomy (analysis, synthesis, and evaluation) are skills in higher-order thinking and, therefore, "if it could provide useful guidance, Bloom's Taxonomy could serve as a conceptualization of higher-order thinking skills" (Fijeh, 2024).

In its exemplary form, it is based on universal intellectual values that transcend subject matter divisions: clarity, accuracy, precision, consistency, relevance, sound evidence, good reasons, depth, breadth, and fairness (Ugwu, 2024). It entails the examination of those structures or elements of thought implicit in all reasoning: purpose, problem, or question-at-issue; assumptions; concepts; empirical grounding; reasoning leading to conclusions; implications and consequences; objections from alternative viewpoints; and frame of reference. Critical thinking in being responsive to variable subject matter, issues, and purposes is incorporated in a family of interwoven modes of thinking, among them: scientific thinking, mathematical thinking, historical thinking, anthropological thinking, economic thinking, moral thinking, and philosophical thinking (Ezema, 2021).

Technical skills of Academic Librarians towards Institutional Repository development in Higher Institutions of Learning in Northeast Nigeria

Technical skills as the ability to fully understand and acquire a wholeness of technical skills and capacities in making effective use of given information. Technical skills focus on the ability to use technical skills applications for specific purposes (Venitha, 2023). It states that technical skills possessed by undergraduates determine their ability to use and deploy their knowledge to locate, access, evaluate and deploy information, be it text, number, or both to meet their information needs (Omeluzor, 2024). Such skills are basic computer use skills, Internet communication skills, information retrieval and, analysis skills, and computer programming and database skills.

Elementary skills are considered technical skills and are proficiency needed for basic data processing and analysis. These include the ability to use basic tools such as Word Processing, PowerPoint, statistical tools, scanning and uploading of documents, spreadsheet analysis, graphical design, scanner, printer, digital cameras, and PowerPoint Presentation (Omeluzor, 2024). Proficient skills also include content management, document/database management, online book selection/acquisition, online copy cataloging, use of the internet, information search strategy as well as the use of library software. Hence, basic and professional skills are required for librarians to efficiently and effectively perform in public Higher Institutions libraries Information resources in print and electronic formats abound in higher institution libraries to provide support for teaching, learning, and research (Singeh, 2023). These information resources provide detailed, thorough, efficient dissemination of information to users and these have made higher institution libraries invest heavily in the collections of their libraries (Omeluzor, 2024).

Sinha (2023), stated that technical skills are important because they are pre-requisite for networking of electronic library services, use of electronic resources, and resource sharing. It also



enables the promotion of electronic learning, the usage of electronic journals, and electronic books, and, the creation of electronic institutional repositories. The operations in a library require technical skills to achieve more efficient and effective - functioning and for providing excellent library and information services.

The impact of technical skills has promoted the usage of electronic resources in terms of e-journals, electronic books, etc. Kalbande (2022) stated that electronic resources, in reality, have become the backbone of many academic organizations. The awareness and use of electronic information sources by faculty members depend mainly on the skills of each individual to locate discrete knowledge elements. Everyday usage of digital technology includes when you use a computer, tablet, or mobile phone, send an email, browse the internet, or make a video call - these are all examples of using basic technical skills and technology to communicate. Kalbande (2022) referred to those skills as the competencies needed to access resources. These competencies include information literacy skills, including skills to formulate a search, identify appropriate information sources, select the right search tools, employ suitable search strategies, and evaluate the results.

Computer and Digital Skills of Academic Librarians towards institutional repository development in Higher Institutions of Learning

Hanief (2024) defined digital skills as the capability to use digital information systems such as computer hardware and software to apply appropriate security measures and protect digital information. Those who are digitally literate possess a wide range of digital skills, which includes knowledge of the basic principles of computing devices; skills in using computer networks; having ability to engage in online communities and social networks with adherence to behavioural protocols; be able to find, capture and evaluate information; an understanding of the societal issues raised by digital technologies and possess critical thinking skills. Crow (2022) defined "digital skills" as the ability to use digital tools and work in computerized environments.

There are cases when because of inadequate skilled manpower in libraries, some libraries that had their libraries automated and acquired digital resources were unable to manage their resources. According to Hanief (2024), digital skills is the ability to use digital technology, communication tools or networks to locate, evaluate, use and create information. It is the ability to understand and use information in multiple formats from a wide range of sources when it is presented via computers.

Library staff need much more in this digital age to embrace digital skills on their work than ever before. Digital skills such as computer literacy, proficient in all Microsoft office applications, ability to design, develop and analyze systems, ability to work with integrated library management systems, applying new technologies into library services, library website development, metadata development, information and research skill, ability to use opensource software, ability to create different file formats (Hanief, 2024).

Empirical Review of Related Literature

Gideon, (2023) investigated the level of research productivity of the librarians and the extent to which academic qualification, staff development and ownership (proprietorship) of institutions influenced the research productivity of librarians in colleges of education in Nigeria. The study adopted correlation research design because of its special advantage for a study of this nature. Census was used to cover all the 356 librarians in the 63 public colleges of education (federal and state) that existed as at 2011 in Nigeria. Private colleges of education were excluded since they do not operate a uniform labour policy. Two instruments- instrument 1: Librarians' Productivity Scale ($r=0.71$) and instrument 2: Librarians' Job Training Programme Scale($r=0.85$) were used to collect data. These were complemented with 10 sessions of in-depth interview (IDI) from selected purposively chief librarians. Findings of the study indicated that most librarians are not so productive in terms of research productivity. Moreover, academic qualification, staff development programmes and



ownership of institution had significant influence on the research productivity of librarians.

Golley, (2024) explored career skills and job involvement among librarians in academic libraries situated in Delta State, Nigeria. To guide the study, two research questions were formulated, which are the: extent of career competencies of librarians in academic libraries in Delta State, Nigeria, and the significant influence of career competencies on work engagement among librarians. The questionnaire was used as the sole instrument for eliciting responses from a population of 97 respondents, which equally constitute the sample size for the study employing a total enumeration sampling technique. The data generated were subjected to analysis using the descriptive statistical tools. The study found that: librarians under this study possess a high level of proficiency in their respective roles such as understanding field-specific information resources, assisting users with their information needs, utilizing modern library technologies for research, collaborating with faculty and researchers, organizing library collections, and committing to ongoing professional development. The study equally found that librarians perceive their career competencies as playing a crucial role in their level of engagement and involvement in their work. The study concluded that career competencies are critical in shaping the effectiveness and success of librarians within academic libraries.

Ugwunwa, (2023) investigated the challenges of Institutional Repository Sustainability in public Higher Institutions libraries in Nigeria. A questionnaire was administered to 230 librarians from public Higher Institutions libraries in Nigeria. The sample of repository institutional was purposive, all registered on Open-DOAR, whether functional or non-functional. Results. The main sustainability challenges with Nigerian institutional repository were: funding, content populating, poor synergy between IT and library staff as well as lack of qualified staff, lack of sustainable Internet connectivity, electricity supply, among others. Most librarians have a doctorate and little experience in Institutional Repository

Sustainability. The study also proposed recommendations for IRs. There is a need for a paradigm shift in the process of managing the sustainability of institutional repositories. Libraries cannot be bystanders in the economy and production of knowledge.

Hudron K. Kari (2024) determined the challenges to the development of institutional repositories in academic libraries in universities in Nigeria. The researcher made use of descriptive survey research design. A total of 120 systems librarians from federal, state and private Higher Institutions libraries in Nigeria were sampled for the study with questionnaire as the instrument for data collection. The result of the study showed that the current level of institutional repository in Nigeria is low. The result of this study also showed that the challenges to the development of institutional repositories include: Low level of awareness on the part of management; lack of ICT personnel; inadequate ICT facilities; lack of ICT skills among workers; lack of fund as well as lack of interest on the part of librarians. Based on the result of the study, it is concluded that there is currently low level of use of institutional repositories. The researcher recommends, among others, that there is need to make adequate budgetary provision for the development of institutional repositories in Nigeria

METHODOLOGY

The design used for the study is cross section research design. Why this method is appropriate to this study is that it involves looking at people who differ on one key characteristic at one specific point in time. The population of the study population 35 professionals, from thee higher institution of learning due to smaller size of the population, the researcher decided to adopt the whole population. Therefore, the sample size was 35 librarians and entire library staff was used. Purposive sampling technique was used for this study. Questionnaire was used in obtaining data for the analysis of the study. The instrument was subjected to face validation for this study Cronbach Alpha Co-efficient to determine the reliability for questionnaire, use those Cronbach Alpha it has approach one the better reliability the

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fare from one the poor the reliability. Therefore, the study reliability Cronbach Alfa is 0.79 with 25 items which indicate very good reliability value. The data collected from the respondents was

analyzed using descriptive statistics of mean standard deviation

RESULTS

Result and discussion

Table 1: The Roles of Communication Skills of Academic Librarians towards Institutional Repository Development in Higher Institutions of Learning

S/No.	Statement	(X)	Std.	Remarks
1	Strong communication skills can help librarians identify and solve patron needs and provide them with the right suggestions.	4.43	0.68	SA
2	Being proficient in communication skills can help librarians interact and connect with patrons from multiple backgrounds and cultures	4.34	0.71	SA
3	Good communication skills help librarians identify patron needs, discuss challenges and make suggestions	4.46	0.69	SA
4	communication skills enable the librarian to identify, organize, interpret and synthesize his collection to meet the varying needs of his known and potential user	4.26	0.78	SA
5	Librarian's communication enhances decision making in libraries	4.2	0.8	SA
Cluster mean		4.33	0.73	SA

Key: Strongly Agree (SA) Agree (A), Dis Agree (DA), Strongly Disagree (SD)

From table 1 the mean values for the five statements ranged from 4.20 to 4.46, with a cluster mean of 4.33, indicating that respondents largely agreed that communication skills greatly enhance librarians' ability to serve patrons effectively. The standard deviation values, which ranged between 0.68 and 0.80, suggest a high level of consistency among respondents' opinions, with only minimal variation. The statement "Good communication skills help librarians identify patron needs, discuss challenges, and make suggestions" recorded the highest mean score (4.46) and a relatively low standard deviation (0.69), showing strong consensus on the

importance of communication in addressing user needs.

Conversely, "Librarian's communication enhances decision making in libraries" had the lowest mean (4.20) and the highest standard deviation (0.80), indicating slightly more variation in responses. The cluster mean of 4.33 effective communication enables librarians to understand users better, provide accurate information, make informed decisions, and foster positive relationships with patrons from diverse backgrounds, thus, improving overall library service delivery and user satisfaction.

Table 2: The Roles of Administration Skills of Academic Librarians towards Institutional Repository Development in Higher Institutions of Learning in Northeast, Nigeria

S/No.	Statement	(X)	Std.	Remarks
1	Administration skills can help librarians maintain the library's catalogue by updating new items and marking items patrons check out	4.03	0.98	SA
2	Proper librarian administration skills aid in the preservation of materials.	3.89	1.08	A
3	Effective librarian administration skill ensures that materials are described accurately, making them easier to find through library catalogs and online databases.	4.26	1.08	SA

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S/No.	Statement	(X)	Std.	Remarks
4	Librarian administration skill help keep books, digital media, periodicals materials which enable users navigate different types of resources effectively.	3.63	1.15	A
5	A well-organized librarian allows users to easily locate and access information.	4.04	0.88	SA
Cluster mean		4.04	1.03	SA

Key: Strongly Agree (SA) Agree (A), Dis Agree (DA), Strongly Disagree (SD)

Table 2 shows the mean values for the five statements ranged from 3.63 to 4.40, with a cluster mean of 4.04, indicating that the majority of respondents agreed that administrative skills are vital for effective library operations. The standard deviation values, which ranged from 0.88 to 1.15, show a moderate level of consistency among the responses, suggesting that while most respondents shared similar views, some variations existed. The statement "A well-organized librarian allows users to easily locate

and access information" recorded the highest mean score (4.40) and the lowest standard deviation (0.88), indicating strong agreement and uniformity among respondents. Conversely, "Librarian administration skill helps keep books, digital media, and periodical materials..." had the lowest mean (3.63) and the highest standard deviation (1.15), showing a wider spread of opinions. The cluster mean of 4.04 shows librarians have high administrative skills.

Table 3: The Roles of Critical thinking Skills of Academic Librarians towards Institutional Repository Development in Higher Institutions of Learning

S/No.	Statement	(X)	Std.	Remarks
1	Critical thinking skills can help librarians address complex challenges and provide creative and relevant solutions to patrons	4.37	0.74	SA
2	Librarians use critical thinking to handle everyday requests at a library, such as solving a patron's complex request for rare books or researching a problem	3.97	0.99	A
3	Critical thinking allows the librarian to find and evaluate reliable information allows him to make smart decisions	4.37	0.88	SA
4	Librarian critical thinking skill enables him to assess the credibility and relevance of sources.	4.17	0.92	SA
5	Librarian critical thinking skill enables him to efficiently gather knowledge, quickly process information, and intelligently analyze data.	4.34	0.87	SA
Cluster mean		4.24	0.88	SA

Key: Strongly Agree (SA) Agree (A), Dis Agree (DA), Strongly Disagree (SD)

Table 3 the mean values ranged from 3.97 to 4.37, with a cluster mean of 4.24, indicating that most respondents agreed that critical thinking is an essential skill for librarians in addressing complex challenges and making informed decisions. The standard deviation values, which ranged between 0.74 and 0.99, suggest that responses were relatively consistent, showing minimal variation in opinions. The highest mean score of 4.37 was recorded for both the

statements "Critical thinking skills can help librarians address complex challenges and provide creative and relevant solutions to patrons" and "Critical thinking allows the librarian to find and evaluate reliable information, allowing him to make smart decisions," reflecting strong agreement and recognition of these competencies as vital. The lowest mean value of 3.97 was observed for "Librarians use critical thinking to handle everyday requests at a library..." which,

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though lower, still indicates agreement. The cluster mean of 4.24 show high critical thinking skills among librarians.

Table 4: The Roles of Technical Skills of Academic Librarians towards Institutional Repository Development in Higher Institutions of Learning in Northeast Nigeria

S/No	Statement	(X)	Std.	Remarks
1	Technical skills of the Librarian helps to promote the usage of electronic resources in terms of e-journals, electronic books	4.37	0.88	SA
2	Technical skills enable librarians to manage digital resources, utilize technology in library services, and assist users with their digital information needs.	4.46	0.87	SA
3	Technical skills enable librarians to guide library users through both materials, curate digital resources, and teach users digital skills. It's about being a guiding light in the digital darkness.	4.14	0.95	SA
4	Technical skills help librarians to understand user behaviour, make informed decisions, and improve library services.	4.31	0.87	SA
Cluster mean		4.34	0.88	SA

Key: Strongly Agree (SA) Agree (A), Dis Agree (DA), Strongly Disagree (SD)

From the table 4 the mean values ranged from 4.14 to 4.46, with a cluster mean of 4.34, indicating that respondents largely agreed that technical competence enhances librarians' ability to manage digital resources and support users effectively. The standard deviation values, which ranged from 0.84 to 0.95, suggest a high level of consistency in responses, with minimal variation in opinion. The highest mean score of 4.46 was recorded for the statement "Technical skills enable librarians to manage digital resources, utilise technology in library services, and assist users with their digital information

needs," showing very strong agreement that these skills are central to effective service delivery.

The lowest mean score of 4.14 was observed for "Technical skills enable librarians to guide library users through materials, curate digital resources, and teach users digital skills," which, though slightly lower, still indicates agreement. The cluster mean of 4.34 show high technical skills among librarians in promoting the use of electronic resources, managing digital platforms, understanding user needs, and improving access to digital information, thereby enhancing overall library performance.

Table 5: The roles of digital skills of academic Librarians towards institutional repository development in Higher Institutions of Learning

S/No.	Statement	X	Std.	Remarks
1	Computer and digital skills are beneficial to librarians because it assists in carrying out their day-to-day activities	4.6	0.65	SA
2	Computer and digital skills help librarians to be more equipped for resource sharing, social networking, surfing the internet, instant messaging, blogging, and a host of other digital oriented activities.	4.46	0.69	SA
3	Computer and digital skills can also help librarians on their jobs to assist users get desired information and education	4.51	0.69	SA
4	Computer and digital skills will enable librarians to manage library technology infrastructures and online resources	4.57	0.65	SA

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S/No.	Statement	X	Std.	Remarks
5	Librarians need Computer and digital skills for resource sharing, digital preservation and repositories, social networking, searching the Internet, instant messaging, blogging, and other digital-oriented activities.	4.49	0.69	SA
Cluster mean		4.52	0.67	SA

Key: Strongly Agree (SA) Agree (A), Dis Agree (DA), Strongly Disagree (SD)

Table 5 shows the mean values ranged from 4.46 to 4.60, with a cluster mean of 4.52, indicating that the majority of respondents strongly agreed that computer and digital competencies are essential for effective library operations. The standard deviation values ranged from 0.65 to 0.69, showing a high level of consistency and minimal variation in responses. The highest mean value of 4.60 was recorded for the statement "Computer and digital skills are beneficial to librarians because it assists in carrying out their day-to-day activities," reflecting a strong consensus that digital proficiency supports librarians in their routine functions. The lowest mean value of 4.46 was associated with "Computer and digital skills help librarians to be more equipped for resource sharing, social networking, surfing the internet, instant messaging, blogging, and a host of other digital-oriented activities," which still indicates strong agreement. The clusters mean of 4.52 shows that computer and digital skills are critical for modern librarianship.

Summary of findings

Based on the analysis the following are summary of the findings:

1. The study revealed that majority of the respondents strongly agreed that good communication skills help librarians identify patron needs, discuss challenges and make suggestions in institutional repository development with (M= 4.46)
2. The study revealed that majority of the respondents strongly agreed that effective library administration skill ensures that materials are described accurately, making them easier to find through library catalogs and online

databases as institutional repository development (M=4.26)

3. The study revealed that majority of the respondents strongly agreed that critical thinking skills can help librarians address complex challenges and provide creative and relevant solutions to patrons help in institutional repository development with (M=4.37)
4. The study revealed that majority of the respondents strongly agreed that technical skills enable librarians to manage digital resources, utilize technology in library services, and assist users with their digital information needs. (M=4.46)
5. The study revealed that majority of the respondents strongly agreed that Computer and digital skills will enable librarians to manage library technology infrastructures and online resources with (M=4.57)

CONCLUSION

Base on the findings the study concludes: Study on the professional skills of academic librarians significantly contributes to institutional repository development in higher institutions of learning in Northeast Nigeria. The findings revealed that all the assessed skills communication, administration, critical thinking, technical, and computer/digital positively influence the effectiveness and sustainability of institutional repositories. Digital competence is the most critical factor in managing and promoting repositories. This was closely followed by communication skills and critical thinking skills, which enhance interaction, problem-solving, and informed decision-making in repository management. Technical skills and administrative

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skills also played important. The study concludes that the integration of these professional skills is essential for the successful development, management, and utilization of institutional repositories in academic environments.

RECOMMENDATIONS

Based on the findings from the study the followings are recommends:

1. Academic librarians be provided with continuous training and workshops to enhance their interpersonal and communication abilities for effective reaction with users and colleagues by the institution
2. Library management should organize professional development programs focusing on leadership, organization, and resource management to strengthen librarians' administrative competence.
3. Librarians should be encouraged to engage in problem-solving and analytical reasoning exercises through seminars and mentorship programs to improve decision-making and innovation in repository management by the institution.
4. Institutions should provide librarians with regular hands-on training in emerging technologies, database management, and digital preservation tools to enhance their technical proficiency.
5. Higher institutions should invest in ICT infrastructure and capacity-building initiatives to ensure librarians remain technologically competent.

REFERENCES

- Babel P (2021), Role of open access after emergence of COVID 19: special reference to National Digital Library and Repository, *New Review of Children's Literature and Librarianship*,
Banach, M. (2021) Institutional repository and digital preservation: Assessing current practices at research libraries. *D-lib Magazine*, 17 (5/6), 1–11
Barooah P K (2021), Scenario of Archives Management in Some Selected University Libraries of Bangladesh. *Library Philosophy & Practice*,
Corletey, A. (2023) Institutional repositories for open access: the Ghanaian experience. *The proceedings of the 14th International symposium on ETDs Cape Town, South Africa*, pp. 13-17
Crow, R. (2022) The Case for Institutional Repositories: A SPARC (Scholarly Publishing and Academic Resources Coalition) Position Paper." *ARL (Association of Research Libraries)*
Das, K. (2021), Perception towards online/blended learning at the time of Covid19, pandemic: an academic analytics in the Indian context, *Asian Association of Open Universities Journal*,
Dike, V. (2022) Academics' Attitudes toward the utilization of institutional repositories in Nigerian Universities" Portal: *Libraries and the Academy*.
Ezema, I. J. (2020) Building open access institutional repositories for global visibility of Nigerian scholarly publication, *Library Review*, 60 (6), 473-485.
Ezema, I.J. (2021) Digitizing institutional research output of University of Nigeria, Nsukka, *Library Philosophy and Practice (e-Journal)*, Paper 565
Fijeh, G. (2024) Adoption of digital preservation methods for theses in Nigerian academic libraries: Applications and implications", *The Journal of Academic Librarianship*, 40 (3/4), 399-404
Gbaje, E. (2022) DSpace institutional repositories and management of library information resources", *Library and Information Practitioner (LIP)*, 5(1&2), 487-496
Hanief, B. (2024) Exploring research data in Indian institutional repositories", *Program: electronic library and information systems*, 48(2)

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- Harnad, S. (2019) Institutional repository success is dependent upon mandates. *Bulletin of the American Society for Information Science and Technology*
- Kalbande, D. (2022) Institutional Repositories in India: An overview, *International Interdisciplinary Research Journal*
- Kari, E. (2022) Digital preservation practices in university libraries: a survey of institutional repositories in Nigeria *Preservation, Digital Technology & Culture*, 45 (3), 134–144.
- Mahanta, P K (2021) A study on the implementation of institutional repositories in the College libraries of Assam, *Library Philosophy & Practice*, 1-10,
- Nikolaidou, M. (2021) *Comparing open source digital library software: Handbook of Research on Digital Libraries, Information Science Reference*, New York, pp. 51-60.
- Omeluzor, S. (2024) Institutional repository (IR) awareness and willingness of faculty staff to deposit research work: a study of faculty staff in selected public and private universities in Nigeria *Open Access Library Journal*
- Rao, K. (2020) Institutional Repository: An overview, *International Journal of Library and Information Studies*. 8 (2), 60-65, retrieved from <http://www.ijlis.org>.)
- Safdar, M. (2021) Students' perception about institutional repository and impact of electronic contents on their research: a Pakistani perspective, *Library Philosophy and Practice* (<https://digitalcommons.unl.edu/libphilpra> c/6162).
- Satpathy, K C (2022) *Institutional repository: Boon for the development, in- digital library and open access initiatives: responses, strategies and emerging trends*, Published By Shankar's Book Agency Pvt. Ltd, New Delhi, p-197-201,
- Singeh, F. (2023) Malaysian authors' acceptance to self-archive in institutional repositories *The Electronic Library*, 31(2)188-207
- Sinha, M. (2023) Developing institutional repositories: a case study of Assam University, Silchar, Presented at 4th Convention Planner, Mizoram Univ., Aizawl, 09-10 November, P-311-21
- Snyman, M. (2024) "Institutional repositories in Africa: obstacles and challenges, *Library Review*, (66)
- Tamizhchelvan, M. (2023) Critical study on attitudes and awareness of institutional repositories and open access publishing. *Journal of Information Science Theory and Practice*, 1(4)
- Tomura, Y (2021) *Use of e-books during COVID-19 Pandemic: A case study of Kyushu University Library*", In- Intl. Conf. on Information: Diversity, Divergence, Dialogue, P-475-483 Lynch, Clifford.
- Ugwu, C. (2024) Electronic theses and dissertations in Nigeria University libraries: Status, challenges and strategies, *The Electronic Library*, 31(4), 493–507.
- Ukwoma, S. (2022) Academics' Attitudes toward the Utilization of Institutional Repositories in Nigerian Universities," *Portal: Libraries and the Academy*, 17 (1), 17-32.
- Venitha, P. (2023) Role of research and postgraduate studies in African higher education, Policy brief presented at the African Higher Education summit. Dakar, 12-15th March.
- Vijayalakshmi, R. (2020) Development of Institutional Repository: an overview, *ISST Journal of Advances in Librarianship*, 7(1), p- 63-67.
- Yang, S. (2020) Institutional Repositories, open access and copy right: what are the practice and implications, *Science & Technology Libraries*.
- Zervos, S. (2023) Institutional repository policies: Best practices for encouraging self-archiving, *Procedia - Social and Behavioral Sciences*, 73, (2), 769 – 776.