

Archiving Scholarly Works in Institutional Repositories by Academic Staff of Federal Universities in Nigeria

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ABSTRACT

The study investigated archiving scholarly works in institutional repositories by academic staff of federal universities in Nigeria. Four research questions were formulated. The study used a quantitative research methodology using cross-sectional survey design to collect data from the respondents. The population of the study is one thousand two hundred and eight-eight (1288) academic staff of federal universities in Nigeria that archives scholarly works in their respective institutional repositories. Two sampling techniques were employed, namely probability and non-probability sampling techniques. Probability sampling techniques were employed in selecting the required respondents needed for each university under study. Under the probability sampling, a proportionate stratified sampling was used in selecting the required number of respondents for the proposed study. In the second stage, the researcher used purposive sampling techniques in selecting the respondents of the study. Three hundred and six (306) copies of questionnaire were administered to the respondents, out of which 268 which represent 88% were filled, returned and found useful. The data collected were analysed using descriptive statistics and inferential statistics. Under descriptive analysis, data were presented using tables, frequencies, mean and standard deviation while the inferential analysis uses Pearson Product-moment Correlation. The finding of the study revealed that academic staff in federal universities have low level of archiving scholarly works in their institutional repositories. The study found that seminar papers, pre-print journals, post-print journals conference papers, theses/dissertations, book chapters, books and workshop papers were the types of scholarly works archived by academic staff in their institutional repositories. The study also found that poor electricity supply, delay in uploading, inadequate ICT connectivity and infrastructure were the major challenges militating against archiving scholarly works, while in addition to this too many academic schedules, lack of accessibility of full text were found to be most barriers for accessing the content of their institutional repositories. The study further established that there is a significant relationship between performance expectancy and archiving scholarly works in institutional repositories by academics of federal universities in Nigerian. The study recommended that the journal publishers should make a clear written policy regarding submission of post print journals in open access outlets among others.

Keywords: Archiving, Scholarly Works, Institutional Repositories, Academic Staff

Introduction

Institutional repository is a way of ensuring that academics' research outputs are accessible to academic staff both within and outside the institutions. It provides academic staff with a centralized platform to which everyone in the institution can contribute scholarly materials to promote information sharing among colleagues worldwide. The development of an institutional repository

reimagines the creation and dissemination of scholarly material both within and outside of the affected academic community. According to the Library and Information Science Education network (2023), institutional repository (IR) is a digital platform designed to collect, preserve, and provide access to the intellectual output of an institution. It serves as a centralized and organized repository for scholarly and creative works produced by the institution's faculty, researchers, students, and staff. Based on this, one can deduce that the institutional repository's function is to capture

and preserve an institution's research and other intellectual property while disseminating the content openly keeping the content cumulative and everlasting, and making accessible those digital contents on a long-term basis.

It serves as a system for disseminating and managing an institution's intellectual life and scholarship. It provides the institution with a new avenue for contributing to the larger world of scholarship. It is a novel approach to collection development, expanding the function from the identification and purchase of published materials to the gathering and dissemination of faculty works. The system is seen as a collaborative effort by libraries and faculty to improve access to the institution's scholarship. There are factors that motivate archiving scholarly works in institutional repositories. These factors to a great extent influence the archiving or otherwise of scholarly works into the repositories. Performance expectancy is presume to be among these factors which is the degree an individual believes that using institutional repositories will help in improving his performance.

Statement of the Problem

This study examined archiving scholarly works in institutional repositories by academic staff of federal universities in Nigeria. Institutional repositories have become important platforms for academic participation in scholarly communication process. It makes it possible for users to have access to the research outputs of their colleagues within and outside their educational environment. The use of institutional repositories in Nigerian academic environment is full of positive prospect. This is obvious from the bounties of benefits attached to their usage. The relevance of institutional repositories depends largely on how effectively the academic staff contributes their research outputs. However, despite the aforementioned benefits of institutional repositories to research and knowledge sharing, it has been observed that there is a low participation of academic staff towards archiving scholarly works in institutional repositories. The success of these repositories depends on the archiving of scholarly works by the academic staff. Hence, low participation of academics on archiving scholarly works in

institutional repositories would hinder institutional repositories to achieve their full potentials. It is in line with this regard that Jayakanathan and Jeyaraj (2023) maintained that academic staff members did not consistently archive their research work in the institutional repository. The study aims at investigating archiving scholarly works in institutional repositories by academic staff of federal universities in Nigeria.

Research Questions

The study is guided by the following research questions:

1. What types of scholarly works do academic staff in federal universities in Nigeria archive in their institutional repositories?
2. To what level academic staff in federal universities in Nigeria archive their scholarly works in the institutional repositories?
3. What challenges are militating against archiving of scholarly works in institutional repositories by academic staff in federal universities in Nigeria?
4. Is there any significant relationship between performance expectancy and the archiving of scholarly works in the institutional repositories by the academic staff in the federal universities in Nigeria?

Research Objectives

1. To identify the types of scholarly works academic staff in federal universities in Nigeria archive in their institutional repositories.
2. To determine the level to which the academic staff in federal universities in Nigeria archive their scholarly works in the institutional repositories.
3. To find out the challenges militating against archiving of scholarly works in institutional repositories by academic staff in federal universities in Nigeria.
4. To find out if there is significant relationship between performance expectancy and the archiving of scholarly works in the institutional repositories by the academic staff in the federal universities in Nigeria.

Research Hypothesis

H1: There is a significant relationship between performance expectancy and archiving of scholarly works in institutional repositories by academic staff in Federal Universities under study.

Literature Review

Institutional repositories play important roles in information management and knowledge sharing. The universities and other research institutions across the globe established institutional repositories for information sharing among colleagues. Anenene (2017) maintained that the factors that increase the probability of archiving of scholarly works in the institutional repositories are increasing the visibility, prestige, ranking and public value of researchers and the universities. Additionally, the study of Musa (2016) showed that academic librarians are primarily motivated to archive their publications because of the potential benefits of open access, which include increased research visibility, citation rates, and collaboration among researchers.

Paul and Dutta (2014) found in their research that the elements that motivate faculty participation include academic reward, professional recognition, accessibility, and publicity. In the same vein, the study of Oguz and Assefa (2014) established that there was a strong correlation between academic outputs and faculty perceptions of the institutional repository and their desire to contribute to it. It is clear from this that what motivate most of the researchers to archive their research outputs in institutional repositories are increase chance to communicate a researcher's findings with peers, increased citations of researchers work as a result of making it available in the repository and improve researcher's image within their respective institution and increase external recognition were found as motivating factors for depositing research outputs in institutional repositories. This signifies that performance expectancy influenced archiving of scholarly works in the institutional repositories.

It is also evident that authors prefer that their works be read and cited more frequently, which eventually benefits

researchers by increasing the number of citations for their work. Hence, this indicates that having more citations of their work (performance expectancy) is what motivated them to archive their research works. Based on the literature reviewed, it is clearly indicated that there are many factors that influence academic staff towards archiving scholarly works in their institutional repositories such as increased citation of their work, boosts a researcher's image, professional recognition among others.

Methodology

Quantitative research method was adopted using cross-sectional survey design. The population of the study consists of one thousand two hundred and eighty-eight (1288) academic staff of federal universities in Nigeria that archived their scholarly in their respective institutional repositories. Two sampling techniques were employed. In the first stage, a probability sampling technique was employed in selecting the required respondents for each university under study, whereas in the second stage, the researcher used a purposive sampling technique to select the respondents of the study. The sample size for this study is three hundred six (306) academic staff of federal universities that have institutional repositories and also archive their scholarly works in their respective institutional repositories. An adapted questionnaire of the UTAUT Model was used as a data collection instrument. The data collected were analyzed quantitatively with the aid of statistical software.

Data Analyses and Results

Table 1: Response Rate

Questionnaire	Frequency	Percentage
No of questionnaire administered	306	100%
No of questionnaire returned	268	88%
No of questionnaire not returned	38	12%

Source: Survey, 2021

Table 1 show that three hundred and six (306) copies of the questionnaire were administered to the respondents, out of which 268 which represent 88% were filled, returned and found useful. The high response rate obtained is attributed to the personal collection of data by the researcher and the research assistants.

Table 2: Types of scholarly works archived by academic staff in their institutional repositories

S/N	Types of scholarly works archived	Frequency	Percentage
1.	Seminar Papers	186	69.4%
2.	Pre-print Journal	54	20.1%
3.	Post print Journal	128	47.8%
4.	Conference papers	130	48.5%
5.	Theses/ Dissertations	86	32.1%
6.	Book chapters	82	30.6%
7.	Book	78	29.1%
8.	Workshop papers	138	51.4%
9.	Others (specify)	3	1.1%

Respondents were asked to indicate the types of scholarly works they archived in their institutional repositories. Findings from table shows that majority 186 (69.4%) archived

seminar papers, 138 (51.4%) workshop papers and 130 (48.5) conference papers more than other types of scholarly works.

Table 3: Level of Archiving of Scholarly Works

Levels of Archiving	Frequency	Percentage	M	SD
Depositing				
High Level of Archiving	112	42%	25.64	3.74
Low Level of Archiving	156	58%	18.25	2.17

Descriptive statistics was used in determining the level of archiving of scholarly works among academic staff of federal universities in Nigeria. Table 3, Archiving of scholarly works was ranked as high and low. Computed responses from the table shows that a total of 112 academics which represents 42% of the population were having high level of archiving of scholarly works with an average score on the archiving scale of M= 25.64, M= 3.74. On

the other hand, a total of 156 academic staff which represents 58% of the respondents were found to have low level of archiving of scholarly works with an average score of M= 18.25, SD= 2.17. Based on the obtained results, it shows that academic staff in federal universities were having low level of archiving of scholarly works in their institutional repositories.

Table 4: Challenges towards Archiving Scholarly Works

Challenges	Frequency	Percentage
Lack of time to archive scholarly works in my university IR.	186	(69%)
Lack of adequate technical skills.	154	(57%)
Poor electricity supply.	212	(79%)
Inadequate professional assistance from the librarians.	160	(60%)
Inadequate ICT connectivity and infrastructure.	190	(71%)
Fear of plagiarism.	156	(58%)
Inadequate maintenance of institutional repository.	143	(53%)
Inability to access the repository outside the university.	146	(55%)
Delay in uploading.	192	(72%)

Descriptive statistics was used in examining the factors militating against archiving of scholarly works by academic staff in their institutional repositories. From table 4 multiple

factors were identified as challenges militate against archiving of scholarly works in the institutional repositories. Among the factors, poor electricity supply 212 (79%), too much

academic schedules 208 (78), delay in uploading 192 (72) and inadequate ICT connectivity and infrastructure 190 (71%) were found to be the major challenges affecting archiving of scholarly works in the institutional repositories. On the other hand, inadequate maintenance of institutional repositories

143(53%), inability to access the repository outside the university 146 (55%), lack of technical skills 154(57%), fear of plagiarism 156 (58%) were found to be the least challenges affecting archiving of scholarly works in their institutional repositories.

Table 5: Relationship between Performance Expectancy and Archiving of Scholarly Works

<i>Variables</i>	<i>M</i>	<i>SD</i>	<i>r</i>	<i>Sig.</i>	<i>Decision</i>
Archiving of Scholarly works	18.64	5.38			
Performance Expectancy	22.84	5.84	.327	.000	Accepted

Pearson Product Moment Correlation was used in examining the relationship between performance expectancy and archiving of scholarly works in the institutional repositories among academic staff of federal universities in Nigeria. Table 5, computed result ($r = .327$, $p = .000$, $p < .05$) revealed that a statistically significant relationship exist between performance expectancy and archiving of scholarly works by academic staff of federal universities in Nigerian. Based on the obtained result, the stated hypothesis was accepted.

Discussion of Findings

Research question one revealed that majority of the respondents archived seminar papers, workshop papers and conference papers more than other types of scholarly works. The finding is in line with that of Abdelrahman (2017) which revealed that the University of Khartoum Digital Repository contains different types of digital materials which include articles, conference papers, graduate theses and dissertations, undergraduate dissertations, books, and the University of Khartoum archives documents. Moreover, the types of scholarly materials works archived in the present study is also similar to that of University of Namibia institutional repository which include materials such as, dissertations, conference papers (Henok and Yule, 2019). The finding could be attributed to the fact that workshop/conference papers have no any legal hindrance (copyright) as the case of journals. (Move to Discussion of Findings)

Moreover, the finding of the research question two revealed that academic staff in federal universities were having low level of archiving of scholarly works in their institutional repositories. The finding reaffirmed the study of Ivwighreghweta (2012) title investigation to the challenges of institutional repositories development in six academic institutions in Nigeria which reveals that majority of the respondents did not archive their work in their institutional repositories. It also collaborates with that of Omeluzor (2014) and Bamigbola (2014) only negligible percentage of academic staff archived scholarly works in their institutional repositories. This implied that if the trend is maintained, the available contents in the institutional repositories would become exhausted and there could be less new contents being deposited, so the purpose of institutional repositories is at jeopardy.

The finding of research question three identified multiple challenges militate against archiving of scholarly works in the institutional repositories such as poor electricity, too much academic schedule, delay in uploading and inadequate ICT connectivity and infrastructure. The finding collaborates that of Fasae, Larnyoh, Esew, Alanyo and Holmner (2017) which attributed the challenges of archiving of scholarly works in the institutional repositories to the insufficient funds, an unstable power supply and software problems. The finding of Uwa and Okoro (2009) revealed that most researchers find it difficult to utilize IT facilities in the provision of information services, which could be as a result of power

failures as one of the factors. This implied that the identified challenges can deprive the academic staff to fully populate the content of their institutional repositories.

Furthermore, the finding of research question four revealed that there is statistically significant relationship between performance expectancy and archiving of scholarly works in institutional repositories. The finding collaborates that of Saulus, Mutula and Dlamini (2018) which found that performance expectancy influenced university of Swaziland faculty of agriculture and consumer sciences (UNISWA) decisions to adopt and use the institutional repository. The study confirms that performance expectancy influenced the academic staff to archive their scholarly works in the institutional repositories. This indicates that archiving scholarly works in the institutional repositories highly depends on the expected benefits of such deposition to the academic staff. This implied that the benefits derived by the academic staff as a payback lead to the archiving of scholarly works in the institutional repositories.

Conclusion

The study concluded that academic staff in federal universities in Nigeria have low level of archiving of scholarly works in their institutional repositories and also established that seminar papers, pre-print journals, post-print journals conference papers, theses/dissertations, book chapters, books and workshop papers were the type of research outputs deposited in to the institutional repositories. It is also statistically significant relationship exists between performance expectancy and archiving of scholarly works.

Recommendations

1. The library should work closely and collaborate with academic staff in order to promote the benefits of institutional repositories and among faculty members and other stakeholders in the community. Moreover, the universities should put in place a archiving of scholarly policy that will encourage members of academic staff to submit their research outputs to the repositories. Such policy should make submission of works to the institutional repositories as part of promotion assessment

for academic staff of the universities. This is necessity in order to avoid the attitude of none populating the content of the institutional repositories.

2. It is recommended that the journal publishers should make a clear written policy regarding submission of post print journals in open access outlets. This would help academic staff to know their rights regarding the deposition of research outputs in their respective institutional repositories and other open access avenues.

3. It is recommended that the university management should provide adequate sources of electricity supply to address issues of inadequate power supply, and also to provide powerful bandwidth that would ensure effective provision of internet so that challenges related to delay in uploading of research outputs and accessing the contents of the institutional repositories will be minimized.

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