



Readiness on the Adoption of Institutional Repositories by Selected Federal Universities in North Western Nigeria

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Abstract

The study investigated the readiness on the adoption of Institutional repositories by selected Federal Universities in North Western Nigeria. The Survey method was adopted for the study, the population of the study consisted of one hundred and twenty five (125) respondents and the targeted respondents of the study were the Professional librarians and IT professionals, Stratified random sampling technique was adopted for the study because of its appropriateness in conducting the study, this ensures that no part of the populations is excluded. Six (6) Federal universities were selected for the conduct of this research. The study used questionnaire as instruments for data collections of this study. Out of 119 copies of the questionnaires distributed to the respondents, 102 were duly completed, returned and found usable for this study, this gave response rate of 85.7% the findings revealed that the Universities under study were ready to establish Institutional repositories, though the funds to start up and sustain it were not adequate, these formed one of the challenges of the study.

Key words: Readiness, Institutional Repositories, Adoption, Northwest, Federal Universities, Nigeria

Introduction

Institutional Repository (IR) is a set of services offered by an academic institution for the management and dissemination of different digital research materials created by the institution's scholars. It helps in identifying, collecting, organizing, preserving, and disseminating scholarly publications and relevant research and information materials. Oak and Patil (2015), opined that Institutional Repositories are valuable research tools provide scholars research outputs within the institutions which enables sharing and reuse of Research resources. They further stated that the main purpose of Institutional Repositories in academic institution is to centralize, preserve, and make accessible the intellectual outputs generated by them. Furthermore, Institutional Repository may be described as an electronic system that captures, disseminates and preserves intellectual outputs of a group of universities and/or a single university (Johnson, Appah, Olufumilayo, and Imuwaham, 2017). These consist of electronic publication such as Thesis, Journal, Books and Conference Papers (Okumu, 2015).

Institutional repositories not only help in evaluation of universities but also assist the agencies concern in the ranking exercise of those universities based on their intellectual output. The situation where the totality of the research output emanating from a particular university cannot



be ascertained will make it very difficult to evaluate the university's output and could also impede the collation and onward transmission of the researches that may benefit different segments of the society. This brings us to the need for the establishment of institutional repositories (IRs) in universities (Ese, 2017). Kakai (2018) expressed the belief that institutional repositories helps to unlock the gray literature such as unpublished Research Report, Thesis, and Dissertations, Seminar and Conference Papers. Thus, Institutional repositories have become important in scholarly communication, Institutional Visibility, University ranking and feasible foundation of institutional knowledge management (Kakai, 2018; Avenene, Alegbeleye and Oyewole, 2017). Similarly, adopting Institutional Repositories is in the best interest of both the institutions and contributors as was indicated in the work of Omeluzor (2014).

Institution and Contributors will benefit from IR, as they are likely to enjoy access to articles without hindrance and charges, open access to a wider audience of researchers, increased impact of researchers' work, easy accessibility to research work and creation of further research approaches, self-archiving and increased citation to published scholarly works among others (Ese, Gabriel and Olawale, 2017). Despite all these benefits associated with this laudable innovation, yet there are some factors hindering its way forward in Nigerian universities as confirmed in the work of Aghwotu & Ebriere (2016), who expressed that few Nigerian universities have been able to establish repository in order to provide intellectual outputs staff and students to use for teaching, learning and research work. This clearly shows that many Universities in Nigeria were left behind for the establishment of Institutional repositories. In line with this, Ese (2017), stressed that the factors that could influence the adoption of IRs include issues like awareness, perception and availability of funds, perceived ease of use and usefulness of the innovation (IR), management and ethical concerns associated with IR like submissions, management policy, restrictions, preservation and copyright issues.

Readiness is the state of being fully prepared and willing to adopt the institutional repositories. For the adoption of institutional repository to be successful and serve its full potentials, the institution would be fully prepared and willing. The adoption of institutional repository improves the development of knowledge and continuing access to relevant and reliable information.

Statement of the Problem

Institutional repository is a very important aspect in the academic community as it provides free access to information materials, which influence the visibility of institution and growth of research work. Anenene, Alegbelaye and Oyewole, (2017) provided that; An Institutional Repository (IR) could be viewed as a digital archive that provides the platform where the universities can archive their intellectual output. They further stated that IRs could include Theses, Dissertations, Projects, Course Notes, Seminar Papers, Conference Proceedings, Administrative Documents, Learning Objects and other forms of a grey Literature. Omeluzor (2014) identified that, institutional repository serve as tangible indicators of institution's quality, increase visibility, prestige and public value, it also increase ranking of an institution both local and international level, enhance learning, online teaching, research and resource sharing.

Despite all the benefits associated with the use of institutional repositories by universities. Aghwotu & Ebriere (2016) Opined that few Nigerian universities have been able to establish repository in order to provide information resources for members of staff and students which can be used for academic purpose. This suggest that, the level of adoption and utilization of institutional repositories in Nigeria is still low, Observations made overtime by these



researchers have shown that in the northwestern part of Nigeria, most of the universities have not keyed into this laudable innovation. In fact with the exception of Ahmadu Bello University, Zaria, none of the federal Universities situated in the region has a functional institutional repository. Therefore, in response to this problem, a study of this nature becomes necessary in order to Determine/identify the impact of their readiness to establish institutional repositories.

Research Objectives

The objectives of this study are:

1. To access the extent of and level of readiness for the establishment of IRs in the selected Federal Universities in North West Nigeria.
2. To identify the benefit of institutional repositories enjoyed by those that have them among the university under study.
3. To determine the factors that influenced the adoption of institutional repositories in selected Universities in Northwest Nigeria.
4. To identify the challenges associated with the establishment of institutional repositories.

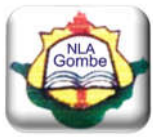
Literature Review

Institutional repositories serve as research online platform provided to manage and preserve effectively an institution's intellectual assets and knowledge base and other forms of institutional intellectual outputs, which are generally not published or preserved elsewhere (Prabhakar, & Manjula, 2016). Institutional Repositories is an information system set to identify, collect, preserve and allow digital access of the intellectual output of research institutions. Kaladhar, Naick and Rao, (2018) opined that, institutional repository is an Extension of an academic institutional activity in support of research and developmental activities of the institution, protecting intellectual efforts and scholarly communication among the users within the institution.

Institutional repository is an online resource for storing in digital forms scholarly or academic publications such as research articles, dissertation and thesis on behalf of the institution, (Oni, Ekhaguebo and Momoh, 2019). From this definitions it can be deduced that institutional repositories emerged as a strategy that allows collecting, preserving and disseminating information materials in digital formats. According to Dhanavandan, (2013) institutional repository consists of formally organized and managed collections of digital contents generated by faculty, staff, and students within an institution.

Prabhakar and Manjula, (2016) stated that, The building of an institutional repositories is highly needed in the present scenario of digital world because of the Technological change, Significant increase in overall volume of research, increasing need for archival and access to unpublished information, increasing demand to access knowledge objects from anywhere at any time and increasing uncertainty over who will handle the preservation, and archiving of digital scholarly research materials. When there is need to establish institutional repositories the institution has to be willingly prepared and be ready to adopt the institutional repository to make its scholarly publications accessible. In his view and to simplify the concept, Bhardwaj (2014), stated that an institutional repository is a means to ensure that the published works of scholars are available to the academic community.

Pfister and Zimmermann (2008) also provided justifications for institutional repository to include increase in visibility and impact of research output, change in the scholarly publication paradigm and improvement of internal communication within the institution. In the case of research and academic institutions in developing countries, development of institutional



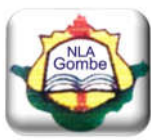
repository will not only boost the global visibility and utility of their research, but will also introduce a novel research culture focused on meeting international standard and values. Knowledge by a researcher that his research will be openly accessible by a global audience will have an impact on his focus and standard. (Egwunyenga 2010)

The Readiness according to Malik and Mahmood, (2014) is the Organizational preparedness for a large scale systematic change in terms of awareness, motivation level, planning, and sources strength. Some scholars argued that readiness is somehow associated with awareness, as it's justified in Omeluzor's 2014 reported that A common problem that most faculty members have is lack of awareness he further explained that, most of them are bored with lots of academic work and do not have time to access regular publications about their institution nor realize to deposit in IR of their institution. However, Dhanavandan, S. and Tamizhchelvan, (2013) conducted a research and found that most of the respondents were aware of IR, the results of their finding shows that 61.88% assistant professor, 24.38% associate professors and 7.5% Professor were aware of IR and their sources of awareness was through library professionals and their assistants, library website and manual, bulletin, periodicals, workshop, seminars and orientation programs among others.

Institutions benefit from IR as it; serves as tangible indicators of an institution's quality, thus increasing its visibility, prestige, and public value; Increases the ranking of an institution both at local and international level; enhances learning, online teaching and research especially in higher institution of learning; and presents an institution's intellectual capital to a whole lot of scholars (Crow, 2002; Sharma, Meichio & Saha, 2008: Murray, 2008: and Omeluzor, 2014). Other benefits to the institutions as expressed by the authors are that IR; provides a central component in reforming scholarly communication by stimulating innovation in a disaggregated publishing structure; provides immediate and valuable complement to the existing scholarly publishing model, while stimulating innovation that evolve and improve overtime; and enhances resource sharing and provides long-term solution. All these are the benefits that universities as higher institutions can derive from IRs.

Several factors pose challenge to successful implementation of IR in institutions of higher learning. Motivation and encouragement of major contributors, policy and understanding among professionals and their acceptance constitute some of these challenges (Omeluzor 2014 According to Dutta, and Paul, (2014) persuading the academics to deposit materials into IR is a challenge especially pre-published article, in their study they found out that, only 19.15% of the total respondents accepted to deposit their research out puts as some of them complained of plagiarism and copyright issues. This suggested that, administrative attention and long term commitment to ensure preservation and maintenance of the repository over time, providing the necessary confidence to enable faculty members to contribute their works to the repository and willingness to deposit publications into IR are major challenge.

Ivwithreghweta, (2012) highlighted intellectual property as another issue that may affect the development of institutional repository. Intellectual property right is an aspect of law that covers diverse legal rights that exists in creative work. Intellectual property law embraces such exclusive rights in copyright, patent, trademark, industrial designs, trade secret, trade name etc. Copyright law determines how a person can deal with a written work such as a journal article or a research paper. Generally, a copyright holder has the exclusive right to authorize the copying, recopying or distribution of the written work. In other words, she/he has the right to determine whether the work shall be available in a closed or open access format (Christian, 2011).



Some of the issues identified by existing literatures as being responsible for the slow uptake of Institutional repositories in Africa According to Christian, (2011) include lack of knowledge or awareness of open access institutional repository, poor state of information and communication technology, inadequate advocacy for open access repositories, poor or inadequate funding, and copyright and intellectual property rights. Based on the cited studies, the followings are the highly reported scholarly communication problems facing the Nigeria University Libraries: Inadequate funding for research and higher education; Low staff morale due to low salaries and unrewarding research system; Brain drain; Overburdening of researchers with teaching and administrative loads; Low exploitation of information and communication technologies (ICTs); the serial crisis.

Methodology

Survey research design was adopted for the study. The choice of the survey as the research design for the research was necessitated by the nature of the study.

The research covered Bayero University, Kano, Federal University, Dutsin Ma, Federal University, Dutse, Federal University, Gusau, Usman Danfodio University, Sokoto, and Federal University, Birnin Kebbi. .

The population consisted of 125. The respondent includes Professional Librarians and IT professionals working in the institutions' libraries. Stratified random sampling was adopted for the study. The sample size of 119 respondents was selected to represent the entire population.

The researchers collected data for this study through the use of questionnaire. The data was analyze using descriptive statistics with the help of statistical package for social science (SPSS)

Findings

Out of 119 Questionnaire distributed a total of 102 were completed and returned. This gave a response rate of 85.7% which considered adequate. The 102 respondents are subsequently treated as 100% in this analysis.

The results indicated that the total male respondents were (83) 81.4% and female respondents were (19) 18.6%. These shows that the male respondents are the majority staff working in the Institutions libraries under study. The age bracket of the respondents 36-45 holds highest number of respondents with (49) 48.0%, followed by 46-above range with (43) 42.2% and 20-35 group are minority group with (10) 9.8%. These indicated that the majority of the respondents were between the ages of 36-45.

The highest number of respondents were holders of Master's degree with (44) 43.1%, followed by first degree with (39) 38.2% and PhD recorded lowest with (19) 18.6%. These indicated that the majority of respondents were holders of Master's Degree.

Readiness to establish institutional repositories by selected federal universities, (99) 97.1% of the respondents were indicated their readiness which shows that the institutions under study were ready to establish institutional repository because (3) 2.9% respondents indicated they are not ready to established institutional repositories.



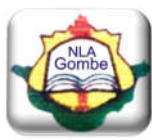
Table 1: Level of Readiness to establish Institutional Repository

Level of Readiness	Very High%	High%	Moderate%	Low%
Available funds to start up IR in your institution	7(6.9%)	11(10.8%)	50(49.0%)	34(33.3%)
Funds available to sustain IR in your institution	10(9.8%)	9(8.8%)	49(48.0%)	34(33.3%)
Outlined various tasks and strategies related to creation of IR	10(9.8%)	37(36.3%)	43(42.2%)	12(11.8%)
Identified and designated project strategies and team for the implementation of IR project	6(5.9%)	48(47.1%)	35(34.3%)	13(12.7%)
Determined resources required and timeline for the establishment of IR	18(17.6%)	39(38.2%)	37(36.3%)	8(7.8%)
Collection acquisition and Collection management processing	18(17.6%)	35(34.3%)	37(36.3%)	12(11.8%)
Providing Content dissemination on how user will access the resources, marketing and promoting strategies	13(12.7%)	46(45.1%)	32(31.4%)	11(10.8%)
Intellectual property right provision	16(15.7%)	35(34.3%)	38(37.3%)	13(12.7%)

The table 1 describes the level of readiness to establish IR in the selected federal universities under study. Identified and designated project strategies and team for the implementation of IR project recorded high responses with highest percentage of (48) 47.1% followed by providing content dissemination on how user will access the resources, marketing and promoting strategies with (46) 45.1% and Determine resource required and timeline for the establishment of IR with (39) 38.2% while Available funds to start up IR are moderate with highest percentage of (50) 49.0% followed by Funds to sustain IR with (49) 48.0%. Outlined various tasks and strategies related to the creation of IR are also moderate with the percentage of (43) 42.2% followed by intellectual property right provision with (38) 37.3% and Collection acquisition and Collection management processing with (37) 36.3% is also moderate.

Table 2: Benefit of Institutional Repositories

Benefit of IR	Strongly Agree%	Agree%	Disagree%	Strongly Disagree%
IR Serves as tangible indicator of your institution quality	22(21.6%)	70(68.6%)	8(7.8%)	2(2.0%)
IR Increases your institution Visibility, Prestige, and Public value	34(33.3%)	61(59.8%)	5(4.9%)	2(2.0%)
IR Increases the ranking of your institution both at local and international level	58(56.9%)	36(35.3%)	6(5.9%)	2(2.0%)
IR enhances learning, online teaching and research in your institution	47(46.1%)	51(50.0%)	2(2.0%)	2(2.0%)
IR enhance resource sharing and provides long-term solution in your institution	32(31.4%)	63(61.8%)	5(4.9%)	2(2.0%)



IR aids proper monitoring and assessment of your institution's research output	37(36.3%)	62(60.8%)	1(1.0%)	2(2.0%)
IR enables researchers to get access and use scholarly publications	47(46.1%)	50(49.0%)	3(2.9%)	2(2.0%)

Table 2 Result of the study shows the benefit of institutional repositories to the selected federal universities under study. The table indicated that, the respondents are strongly agree that IR increases the ranking of their institution both at local and international level with highest percentage of (58) 56.9%. While they agreed that IR serves as tangible indicator of their institution quality with highest percentage of (70) 68.6%, followed by IR enhance learning, online teaching and research in their institution with (63) 61.8%, they also agreed that IR aids proper monitoring and assessment of institution's research output with (62) 60.8%, IR increases their institution visibility, prestige and public value as agreed by the respondent with (61) 59.8%, IR enhances learning, online teaching and research of your institution (51) 50.0% and agreed that IR enable researches to get access and use scholarly publications.

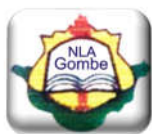
Table 3: Factors influencing the adoption of Institutional repositories

Factors influencing the adoption of IR	Strongly Agree%	Agree%	Disagree%	Strongly Disagree%
Aids research monitoring and assessment	37(36.3%)	59(57.8%)	4(3.9%)	2(2.0%)
Aids monitoring of research outputs by Funders	39(38.2%)	56(54.9%)	4(3.9%)	3(2.9%)
IR benefits researchers and academics in Nigeria immensely	39(38.2%)	56(54.9%)	3(2.9%)	4(3.9%)
Preserve research outputs	46(45.1%)	48(47.1%)	3(2.9%)	5(4.9%)
Capture the intellectual capital of your University	52(51.0%)	43(42.2%)	6(5.9%)	1(1.0%)
Provide access to research output	42(41.2%)	50(49.0%)	7(6.9%)	3(2.9%)

Table 3 shows the factors influencing the adoption of IR in the institutions under study, and indicated that, the respondents strongly agreed that IR Capture the intellectual capital of your University (52) 51.0%. While they agreed that, IR Aids research monitoring and assessment (59) 57.8% followed by Aids monitoring of research outputs by Funders and IR benefits researchers and academics in Nigeria immensely with (56) 54.9% respectively, they also agreed IR Provide access to research output with (50) 49.0% and Preserve research outputs with (48) 47.1%.

Table 4: Challenges associated with the adoption of institutional repositories

Challenges	Strongly Agree%	Agree%	Disagree%	Strongly Disagree%
Lack of Proper knowledge of open access repository	36(35.3%)	47(46.1%)	14(13.7)	5(4.9%)
Poor state of information and communication technology	18(17.6%)	55(53.9%)	22(21.6%)	7(6.9%)
Poor funding	73(71.6%)	20(19.6%)	7(6.9%)	2(2.0%)



Inadequate advocacy for open access repository	26(25.5%)	48(47.1%)	26(25.5%)	2(2.0%)
intellectual property right	22(21.6%)	50(49.0%)	23(22.5%)	7(6.9%)
Licensing agreement	32(31.4%)	44(43.1%)	20(19.6%)	6(5.9%)
Technological changes	27(26.5%)	54(52.9%)	18(17.6%)	3(2.9%)
Access control and rights management: to restrict access	12(11.8%)	63(61.8%)	24(23.5%)	3(2.9%)

Table 4 Shows the challenges associated with the adoption of institutional repositories, it's indicated that, the respondents strongly agreed that poor funding is major challenge with highest percentage of (73) 71.6%. While the respondents all agreed thus, Access control and rights management: to restrict access has a highest percentage of (63) 61.8%, followed by Poor state of information and communication technology with (55) 53.9%, Technological changes recorded (54) 52.9%, intellectual property right with (50) 49.0%, Inadequate advocacy for open access repository recorded (48) 47.1%, also Lack of Proper knowledge of open access repository has (47) 46.1%, and lastly Licensing agreement with (44) 43.1%.

Discussions

The analysis of the data from this study revealed that, the Universities under study were ready to establish Institutional repositories, though the funds to start up and sustain it were not adequate, these formed one of the challenges of the study.

Furthermore, the analysis of the data revealed that Institutional repositories has a great benefit to the selected universities understudy the respondents are strongly agree that IR increases the ranking of their institution both at local and international level with highest percentage of (58) 56.9%. While they agreed that IR serves as tangible indicator of their institution quality with highest percentage of (70) 68.6%, followed by IR enhance learning, online teaching and research in their institution with (63) 61.8%, they also agreed that IR aids proper monitoring and assessment of institution's research output with (62) 60.8%, IR increases their institution visibility, prestige and public value as agreed by the respondent with (61) 59.8%, IR enhances learning, online teaching and research of your institution (51) 50.0% and agreed that IR enable researches to get access and use scholarly publications. This finding is similar to that of Crow, (2002); Sharma, Meichieo & Saha, (2008): Murray, (2008): and Omeluzor, (2014) in their studies.

The factors influence the adoptions of Institutional repositories were significant to this study as most of the respondents strongly agreed that IR Capture the intellectual capital of your University (52) 51.0%. While they agreed that, IR Aids research monitoring and assessment (59) 57.8% followed by Aids monitoring of research outputs by Funders and IR benefits researchers and academics in Nigeria immensely with (56) 54.9% respectively, they also agreed IR Provide access to research output with (50) 49.0% and Preserve research outputs with (48) 47.1%.

From the analysis there was a poor funding of Institutional repositories, which recorded 71.65% this shows that Funding is the major challenge face by these universities understudy, which will continue to limit these universities from the development and benefit provided by institutional repositories.

Conclusion

From the study , it can be confirmed that the university understudy are ready to established institutional repositories as they have identified and designed strategies, team, content



dissemination, and resource required for the implementation of institutional repositories in their institutions but the funds to start up and sustained the project are not adequately available.

Recommendations

Based on the findings of this study, it is recommended that:

1. The university management of these institutions should give emphasis to adequate funding of the project in order to have functional institutional repositories to grab the benefit provided.
2. Libraries also should be given more emphasis on Intellectual property right provision.
3. The e-resources including open access repositories should be given priority attention due to the nature of the information society.
4. The Librarians should encourage training and retraining as a way of keeping them abreast of the new development in both librarianship and Information and communication technology field. It's also recommended that of different related policies for the implementation of institutional repositories should be strictly monitored by relevant government agencies

References

- Aghwotu, T. P. & Ebiere, E. J. (2016). Awareness and attitude of lectures toward establishing institutional repository in Niger delta university, Bayelsa State, Nigeria. *Information and Knowledge Management*, 6:6, 23-32
- Anenene, E. E., Alegbeleye, G., & Oyewole, O. (2017). Benefit and perspectives of Institutional Repositories in academic libraries. *Scholarly research Journal for humanity science and English language*, 5:25, 1-7
- Bhardwaj, R.K. (2014). Institutional repository literature: A bibliometric analysis. *Science and Technology Libraries*, 33(2), 1-18. Retrieved December 5, 2020 from <http://www.freepaperdownload.us/1246/Article1145826>
- Christian, G. M. (2008). Issues and Challenges to the development of Open access Institutional Repositories in academic and research institutions in Nigeria. *A Paper prepared for the International Development Research Centre (IDRC)*. Retrieved May 5, 2021 from <http://idl.bnc.idrc.ca/dspace/handle/123456789/36986/1/127792.pdf>
- Dhanavandan, S. & Tamizhchelvan, M. (2013). A Critical Study on Attitude and Awareness of Institutional Repositories and Open Access Publishing. *Journal of Information Science Theory and Practice*, 1, 67-75.
- Ese, E. A., Gabriel, B. & Oluwale, O. (2017). Factors contributing to the adoption of institutional repositories in Universities in south-west Nigeria: Perspective of library staff. Retrieved June 6, 2021 from <https://www.researchgate.net/publication/317590959> 1-17
- Ivwithreghweta, O. (2012). An investigation to the challenges of institutional repositories development in six academic institution in Nigeria. Institutional repository: An overview. *International journal of digital Library services*, 2(4): 1-16. Retrieved January 15, 2021, from <http://www.ijodis>
- Kakai, M. (2018). Open access institutional repositories in selected East African universities: achievements, challenges and way forward; *Kampala, Makerere University*. Retrieved December 12, 2021 from https://www.scecsal.org/publications/papers2018/012%20kakai_2018.pdf Retrieved on 16, Jan. 2021



- Kaladhar, A., Naick, D. B., & Rao, K. S. (2018). Institutional repository: An overview. *International journal of Library and information studies*, 8:2, 60-63
- Malik, A. & Mahmood, K. (2014). Readiness for digital reference service (DRS) in university library: A survey in the Punjab, Pakistan, *Information development*, 30:2, 19-25
- Oak, M. & Patil, S. K. (2015). Planning and implementation of Institutional repository: A case study of IMCC, 2015 4th international symposium on emerging trends and technologies in libraries and information services
- Okumu, O. D. (2015). Adoption of institutional repositories in dissemination of scholarly information in universities in Kenya with reference to United States International University Africa: Nairobi, Kenya: University of Nairobi
- Omeluzor, S. U, (2014). Institutional repository (IR) awareness and willingness of faculty staff to deposit Research work: A study of Faculty staff in selected public and private university in Nigeria, *Open access Library journal*. Retrieved on December, 2020 from <http://dx.doi.org/10.4236/oalib.1101139> On 26, 1-11
- Oni, O., Khague, K. O., & Momoh, A, U. (2019). Academic Libraries and institutional repository: The Nigerian polytechnics perspective, *Information and Knowledge Management*, 9:9, 113-122
- Prabhakar, S. V. R., & Manjula, S. V. R, (2017). Benefits and perspectives of institutional repositories in Academic Libraries, *Scholarly research journal for humanity science and English Language*, 5:25, 6905-6908.