

## **INSTITUTIONAL REPOSITORY AS HARBINGERS OF ADVANCED ACADEMIC LIBRARY FOR OPEN ACCESS: A STUDY**

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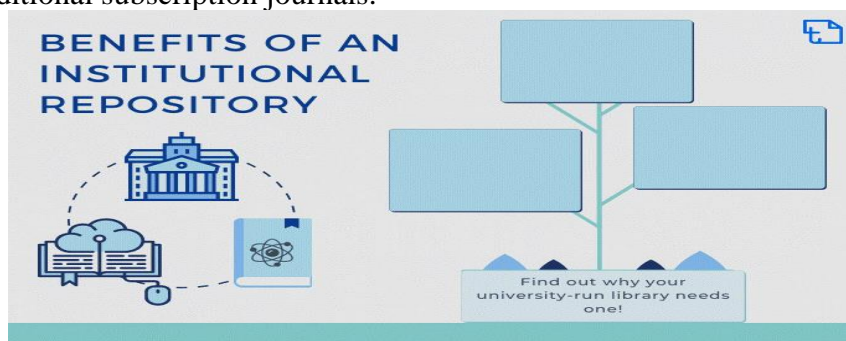
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**ABSTRACT:** Our Research “Institutional repository as Harbingers of advanced Academic library for open Access: A Study” is a 170 journal articles stored in DigiNole Commons, the institutional repository of Florida State University, this study examines the extent to which a repository makes publications available and accessible on the public Internet. We carried out separate known-item title searches on Google and Google Scholar (GS) to look for faculty papers stored in DigiNole Commons in order to examine the repository's effects on accessibility and availability. The repository's availability and accessibility of its articles was quantified, and the discoveries that couldn't be quantified were qualitatively examined. For a total of 199 (85.398%) of 179 entries, links to DigiNole metadata and complete texts were found using Google and Google Scholar searches, respectively. With one exception, accessing the complete text or the information didn't take more than three clicks. Overall, the findings support the institutional repository's role in making articles accessible and available. The findings also point out some barriers to the success of open access, including barriers related to author-publisher contract agreements, barriers related to the policies, practises, and technologies governing the repository itself, and the low participation rate of faculty in the repository.

**KEY WORDS:** Institutional, repository, Harbingers, advanced, Academic, library, open Access, Study.

### **INTRODUCTION:**

Open access describes a number of strategies for making scholarly research outputs publicly available for use and, in some circumstances, repurposing by others. According to several writers open access promotes the accessibility of research publications by decreasing or removing access limitations brought on by the licencing procedures and copyright agreements typical of traditional subscription journals.

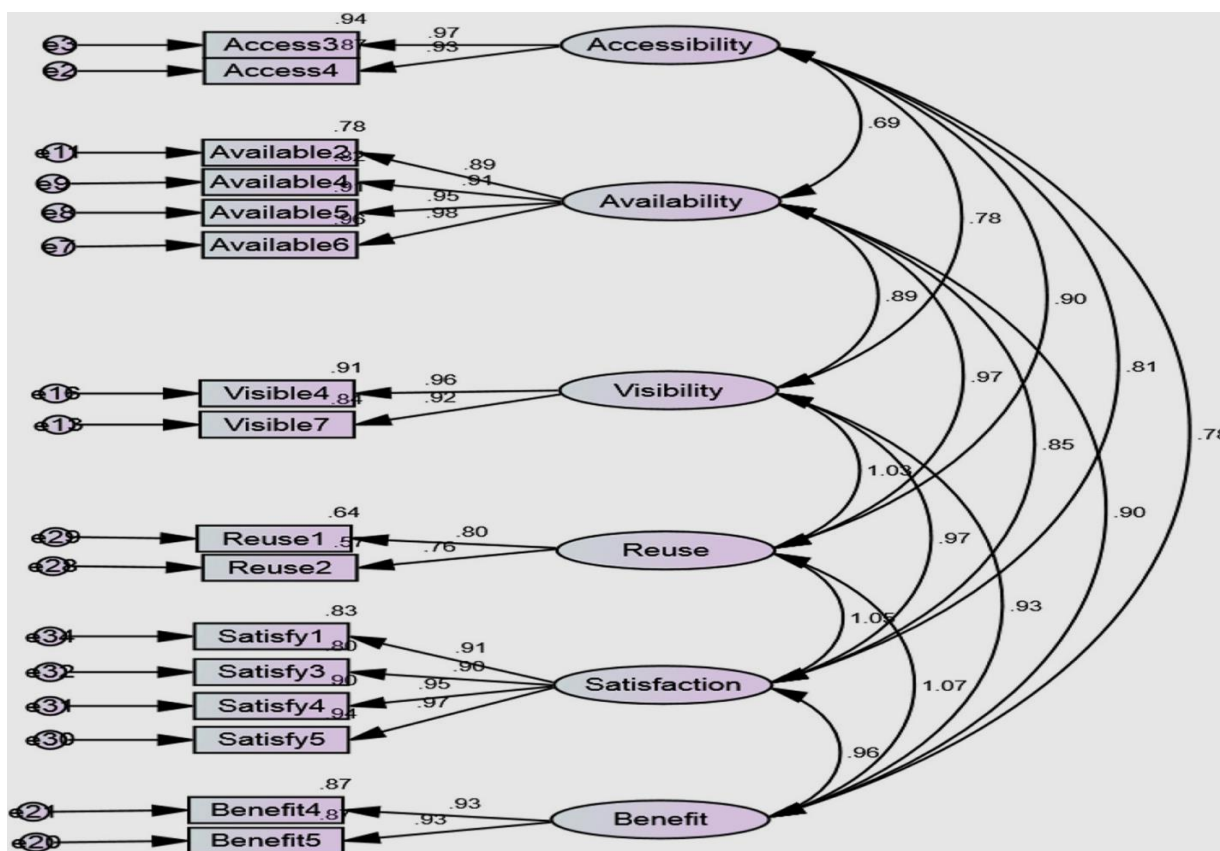


**Fig.1: Institutional repository as Harbingers of advanced Academic library for open Access Process.**

Financial justifications have been advanced for a shift to open access, as fast rising journal subscription fees might limit reading if libraries cut the quantity of their subscriptions. Additionally, several academics assert that open access has an advantage over conventional publication methods in terms of citations.

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Due to the growing number of journals and repositories that provide author self-archiving, green open access has traditionally been seen as the most successful strategy.



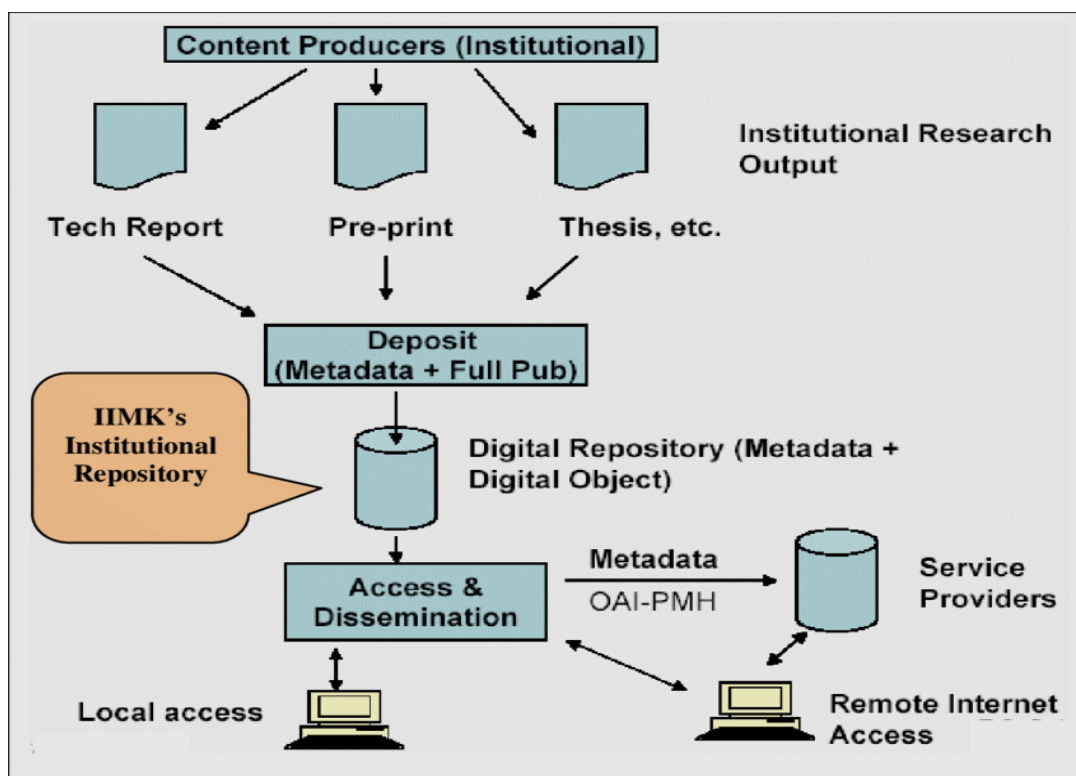
**Fig.2: Institutional repository as Harbingers of advanced Academic library for open Access Structure.**

For instance, Miguel et al. (2022) showed that just 9.19% of journals included in SCOPUS adopted the genuine gold open access policy, whereas 32.9% did so by contractually enabling authors to self-archive. Authors have the option of self-archiving their articles by placing them in institutional repository (IRs), subject-specific government repositories, or their own personal websites. Numerous discipline repositories have been created and maintained as a result of a tradition of preprint exchange between researchers in various scientific domains.

**OPEN ACCESS CITATION ADVANTAGE:**

Three postulates have been used in several earlier studies to try and explain the reasons behind the open access citation advantage. According to the first (the open access postulate, open access raises the number of citations by directly enhancing the accessibility of articles. The

assumptions underlying the open access postulate are expressly rejected by the second and third postulates (early access and selection bias), on the other hand. The early access postulate contends that as open access articles are frequently made available in early pre-print editions and are therefore accessible for a longer period of time than non-open access publications, they are more likely to be referenced.

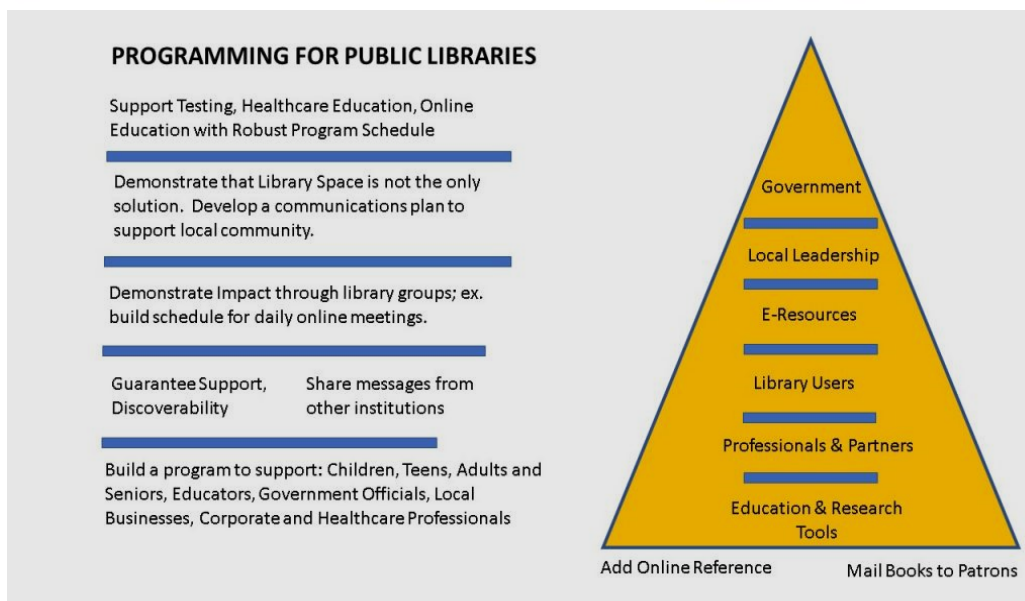


**Fig.3: Institutional repository as Harbingers of advanced Academic library for open Access Display.**

Similar to this, the selection bias hypothesis contends that when choosing which resources to make available in institutional repositories, writers frequently prioritise their best quality—and hence most likely to be cited—work. After studying 199,924 conference papers in computer science and related fields, Lawrence (2022) investigated the relationship between paper availability on the Web and citation count. He discovered that publications on the Web are more likely to be referenced. When articles from a non-open access journal were deposited by authors into institutional repositories, Harnad and Brody (2018) compared the citation counts to those of papers from the same journal that had not been deposited. They discovered that the citation rates of open access publications were higher in the domains of physics, astronomy, and computer science.

**STATUS OF INSTITUTIONAL REPOSITORIES:**

Early research by Crow (2022) made the case that institutional repositories might play a role in "a new disaggregated model" of scholarly publishing, one that might help to lessen the traditional academic journal system's monopolistic control over scholarly communication.

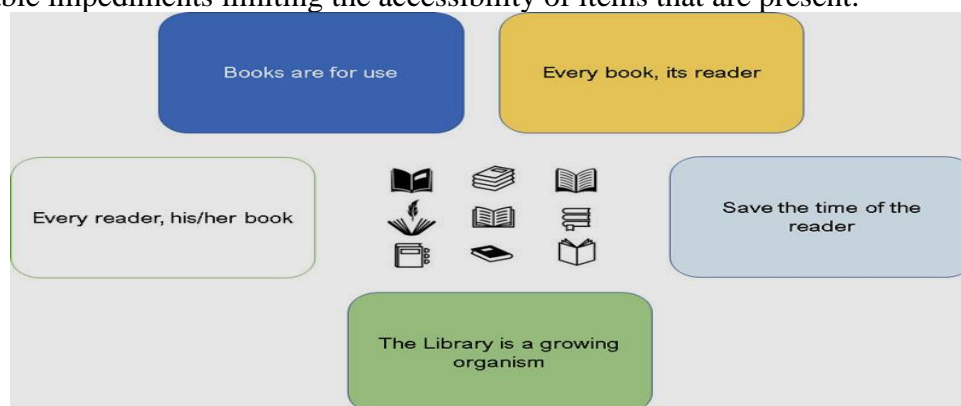


**Fig.4: Institutional repository as Harbingers of advanced Academic library for open Access Cycle.**

He claims that by centralising the intellectual work of their members and maintaining "institutionally defined," "scholarly," "cumulative and perpetual," and "open and interoperable" repositories, institutions can boost their visibility and prestige and make it simpler for researchers to find pertinent materials. In order for repositories to be effective, Shearer (2022) suggested a number of possible aspects that should be taken into account, including "input activity," "disciplines," "advocacy activities," "archiving policies," "copyright policies," "content type," and "staff support." 'Quality control policies', 'software', and 'usage' Shearer wanted to know how input activity—the submission of papers by researchers—related to other aspects since he believed it to be one of the most crucial ones. However, this 2022 study did not present the findings based on the data analysis.

**AVAILABILITY AND ACCESSIBILITY:**

A book may be available but shelved on a top shelf, creating significant barriers to accessibility for users in wheelchairs. In online settings, such as institutional repositories, there may be comparable impediments limiting the accessibility of items that are present.



**Fig.5: Institutional repository as Harbingers of advanced Academic library for open Access Method.**

Because the sheer existence of publications in an institutional repository does not ensure their accessibility, in this study we regard availability as a required but insufficient component of accessibility. Approach enables us to pinpoint any barriers that can prevent users from accessing papers stored in institutional repositories. Like Fidel and Green (2021), we view availability as a component of accessibility, arguing that, despite being a requirement for users to access and "use a source at a particular time," availability does not guarantee that users will have easy access to that source.

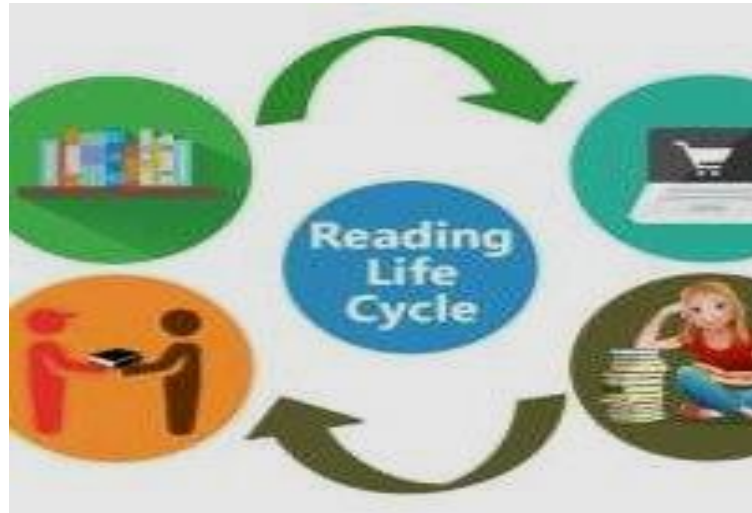
**METHOD:**

In this study, we conducted a case study of the institutional repository at Florida State University (FSU) to better understand how open access improves physical accessibility. DigiNole Commons, Florida State University's institutional repository, was introduced in the middle of 2012 to offer a shared, publicly accessible repository for the university's faculty's intellectual and creative works. As of now, Florida State University Libraries have been hosting this repository using the Berkeley Electronic Press (bepress)-provided Digital Commons institutional repository software. By the end of 2022, DigiNole Commons has 6,600 electronic theses and dissertations, 546 undergraduate honours theses, and 514 faculty works in its collection.



**Fig.6: Institutional repository as Harbingers of advanced Academic library for open Access: A Study**

A portion of the latter, comprising 670 faculty papers discovered in the institutional Repository and peer-reviewed journal publications, is the dataset used in this analysis. We searched independently for faculty articles stored in DigiNole Commons using known-item titles on Google and Google Scholar (GS) in order to examine the influence of the institutional repository on physical accessibility. A justification for utilising Google and Google Scholar to find research materials has been offered in a number of earlier studies.



**Fig.7: Institutional repository as Harbingers of advanced Academic library for open Access Cycle.**

Because its crawlers "run databases of the largest and most well-known scholarly publishers and university presses; their digital hosts/facilitators; societies and other scholarly organisations and government agencies; and preprint/reprint servers," according to Jacso (2021), Google Scholar is a potent tool for searching scholarly information.

### **RESULTS:**

Availability 88 (45.998%) out of 670 items had links to DigiNole metadata on the first two pages of Google search results; 84 (74.760%) out of 100 full texts stored in DigiNole Commons could be accessed either directly (via a Google link to the item itself) or indirectly (via a Google link to DigiNole metadata). Comparatively, searches in Google Scholar yielded connections to DigiNole metadata in 127 (74.7%) of 670 instances and to complete texts in 88 (78.98%) of 100 instances. At the 0.005 alpha level, a chi-square test comparing two proportions reveals a statistically significant difference in the metadata availability between Google (45.9%) and Google Scholar (74.79%;  $\chi^2 = 28.306$ ,  $df=1$ ,  $p = 0.001$ ).

### **CONCLUSION:**

Although availability is a component of accessibility, separating the two allowed us to pinpoint potential barriers to institutional repositories' success. In this case study, we performed known-item title searches in Google and Google Scholar to assess the level of accessibility and physical accessibility of a collection of limited size stored in a specific open access institutional repository. Overall, the results indicate that the collection's pieces are, for the most part, both accessible and available. However, slightly more than 40% of the items, which correspond to scenarios four and five, could not be retrieved at all, and although 16% of the remaining objects could be, that retrieval required a membership or other fees to be paid by the institution or certain users, restricting how much of their accessibility could actually be deemed open. Taking things into account, obstacles to open access typically fall into the following two categories:

- i. Obstacles resulting from contractual agreements between writers, publishers, and suppliers, such as the price of institutional subscriptions and item embargo.
- ii. Problems with the rules, procedures, and tools controlling the institutional repository itself, such as broken links, issues with file uploads, and issues with the internal search tool.

**BIBLIOGRAPHY:**

Crow, Raym (2022). "The Case for Institutional Repositories: A SPARC Position Paper". ARL (223): 1–4.

Ukwoma, Scholastica C.; Dike, V. W. (2017). "Academics' Attitudes toward the Utilization of Institutional Repositories in Nigerian Universities". *Portal: Libraries and the Academy*. **17** (1): 17–32. doi:10.1353/pla.2017.0002. ISSN 1530-7131. S2CID 64042164.

Safdar, Muhammad (2021-01-01). "Students' Perception about Institutional Repository and Impact of Electronic Contents on their Research: A Pakistani Perspective". *Library Philosophy and Practice (E-journal)*.

Lynch, Clifford. "Institutional Repositories: Essential Infrastructure for Scholarship in the Digital Age" (PDF). Association of Research Libraries. Retrieved 3 January 2022.

Harnad, Steve; McGovern, Nancy (2009). "Topic 4: Institutional repository success is dependent upon mandates". *Bulletin of the American Society for Information Science and Technology*. **35** (4): 27–31.

doi:10.1002/bult.2009.1720350410. hdl:2027.42/62145. ISSN 1550-8366

Jump up to:<sup>a</sup> <sup>b</sup> Smith, Ina (2015). *Open access infrastructure*. UNESCO Publishing. p. 20. ISBN 978-92-3-100075-1.

Smith, Ina (2015). *Open access infrastructure*. UNESCO Publishing. p. 19. ISBN 978-92-3-100075-1.

Callicott, Burton B.; Scherer, David; Wesolek, Andrew (2015). *Making Institutional Repositories Work*. Purdue University Press. p. 1. ISBN 978-1-61249-422-7.