

Developing Institutional Repository in College Library: A Case Study of Shri Pancham Khemraj College, Sawantwadi

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ABSTRACT

The present study highlights the project undertaken that is developing institutional repository in library of S.P.K. college Sawantwadi. The institutional repository is a newly concept for collecting, organizing, storing and disseminating intellectual works created in a digital form by staff and students in individual institutions. The institutional repository is to collect the intellectual materials to store and disseminate in digital format for wider use. Therefore, the project for creating institutional repository was undertaken. The main aim of this project is to provide the access to the literature highlighting institution's scholarship and to increase the visibility of the institution's scholarship. The benefits of institutional repository are to provide open access platform and other institutional digital assets, including published and unpublished materials.

1. Introduction

An institutional repository is a web based database of any institute's scholarly resources. Institutional repository may include articles, books, book chapters, photographs, maps, musical scores, animations, datasets, learning objects, plan or blueprint, pre-print, presentations, recordings, software's, technical reports, thesis, videos, working papers, course materials, Journals articles accepted for publication, student projects, free online journals, free e-books, audio/video recordings on concerned subjects, annual report of the institution, course wise syllabus, previous exam question papers, academic programs reports of the institution. The aim of the develop institutional repository is to collect the scholarly materials to store and disseminate in digital format.

Definition:

Dictionary of library and information science define IR as "a set of services offered by a university or group of universities to members of its community for the management and dissemination of scholarly materials in digital format created by the institution and its community members, such as eprints, technical reports, theses and dissertations, data sets, and teaching materials" (Crow, 2002).

According to Lynch (2003), "a university-based institutional repository is a set of services that a university offers to the members of its community for the management and dissemination of digital materials created by the institution and its community members". He further elaborates that, "it is most essentially an organizational commitment to the stewardship of these digital materials, including long-term preservation where appropriate, as well as organization and access or distribution".

About S. P. K. College and Library:

Shri Pancham Khemraj Mahavidyalaya was established in year 1961 and affiliated to Mumbai University. It is a lead college of South Konkan Region of Maharashtra and re-accreditation by NAAC "A" grade in third cycle with 3.06 CGPA in May 2019. The College library was established with started of

college in the year 1961. The name of library is given as "Shrimant Rani Parvatidevi Granthalaya and Abhyasika". The College library is a source of knowledge, is an integral and important part of our institute of higher learning. The library has been fully automated using SLIM21 software and has applied Barcode system for charging, discharging of the documents available in library. Library has also subscribed N-LIST consortium for access e-books and e-journals. The College Library has more than 55,000 books, reference books as well as rare collection. Rare collection includes "Administration Report of the Sawantwadi State" published from (1924 to 1943) available in 15 volumes in English language and "Vainatey" (weekly publication) published from (1936 to 1973) available in 18 volumes in Marathi language. Both are valuable resources for those are working in the field of historical research. Till today many researchers refer this resources for our research. The presently library working on development of institutional repository.

2. Objective of the Study:

- To develop IR at Shri Pancham Khemraj College, Sawantwadi.
- To decide the software and hardware required for creating IR.
- To select and scan the rare documents for digitization.
- To upload the digitize documents and develop Metadata in IR.
- To store and preserve other institutional digital assets, including published and unpublished materials.
- To provide access to the literature highlighting institution's scholarship.
- To increase the visibility of institution's scholarship.
- To provide open access IR available on Intranet or Internet.

3. Research Methodology:

The defined three areas of feasibility study, namely technical feasibility, social feasibility and economic feasibility.

The feasibility study was the use for the software selection for the creation of institutional repository, then finalized that DSpace would be used for institutional repository. as, it is a software supporting each and every format of file for storage. firstly, install open source IR software and necessary hardware for processing the digitization of rare documents. The process of digitization includes scanning, cleaning, cropping, conversion to text (OCR), conversion to PDF/A, then upload the document in IR software and develop the metadata.

4. Software and Hardware for IR:

The selection of required hardware and software for developing an IR can be summarized as under:

Software: DSpace software

The necessary Software and Installation of DSpace include the followings:

- UNIX-like OS or Microsoft Windows or Linux
- Sun Java JDK 5 or later (standard SDK is fine; you don't need J2EE)
- Apache Maven 2.0.8 or later (Java build tool)
- Configuring a Proxy
- Apache Ant 1.7 or later (Java build tool)
- Relational Database: (PostgreSQL or Oracle)
- Servlet Engine: (Jakarta Tomcat 4. xJettyCaucho Resin or equivalent)
- Perl (required for [dSPACE]/bin/dSPACE-info.pl)

Required hardware listed below:

- Server (IBM Server, Web Server)
- Storage device (HDD, Pen drive) etc.

Software and hardware require for digitization:

- Scanner
- Digital Camera
- Image editing software
- Optical Character Recognition (OCR) software.

5. Implementation of the Project:

- **Installation of DSpace:** for the building Institutional Repository in S. P. K. College, it was decided to opt for DSpace for following reasons. DSpace software is open source completely customizable to fit the needs. It has qualified Dublin Core. Its structure allows to

create the repository collections according to various communities and sub-communities of them. DSpace is being used by many libraries. This is regularly updated software; it helps in enhancing the performance of the retrieval system.

- **Digitization:** The Selection of document for digitization in which only rare collection, they are valuable sources for reconstruction of history and culture. The library has very rare, copyright free collection in which includes "Administration Report of the Sawantwadi State" published from (1924 to 1943) available in 15 volumes in English language and "Vainatey" published from (1936 to 1973) available in 18 volumes in Marathi language. Both are valuable resources for those are working in the field of historical research. The process of digitization includes scanning, cleaning, cropping, conversion to text (OCR), conversion to PDF/A.
- **Workflow in DSpace:** for the submission of document in DSpace. It has to pass through a seven-step workflow process. The first three steps include basic descriptions about the materials and metadata elements. The qualified Dublin core metadata standard used in DSpace for describing items. In which only three fields are required i.e. title, language, and submission date etc. and other fields are optional. It has additional fields for document abstracts, keywords, technical metadata and rights metadata, among others. This metadata is shown in show full item record in DSpace. The fourth step in which upload the digital document i.e. pdf files and image files and others which are earlier stored in the computers. fifth steps are verification and making of corrections, if any, to the data submitted in the earlier stages. The sixth step in which presents the license agreement and the seventh step confirms the submission process.

6. Creation of Communities:

Provide the facility to create communities in DSpace, i.e. choose a community to browse its collection, so create the communities under the heading of "Shri Panoram Khemraj Mahavidyalaya, Sawantwadi".

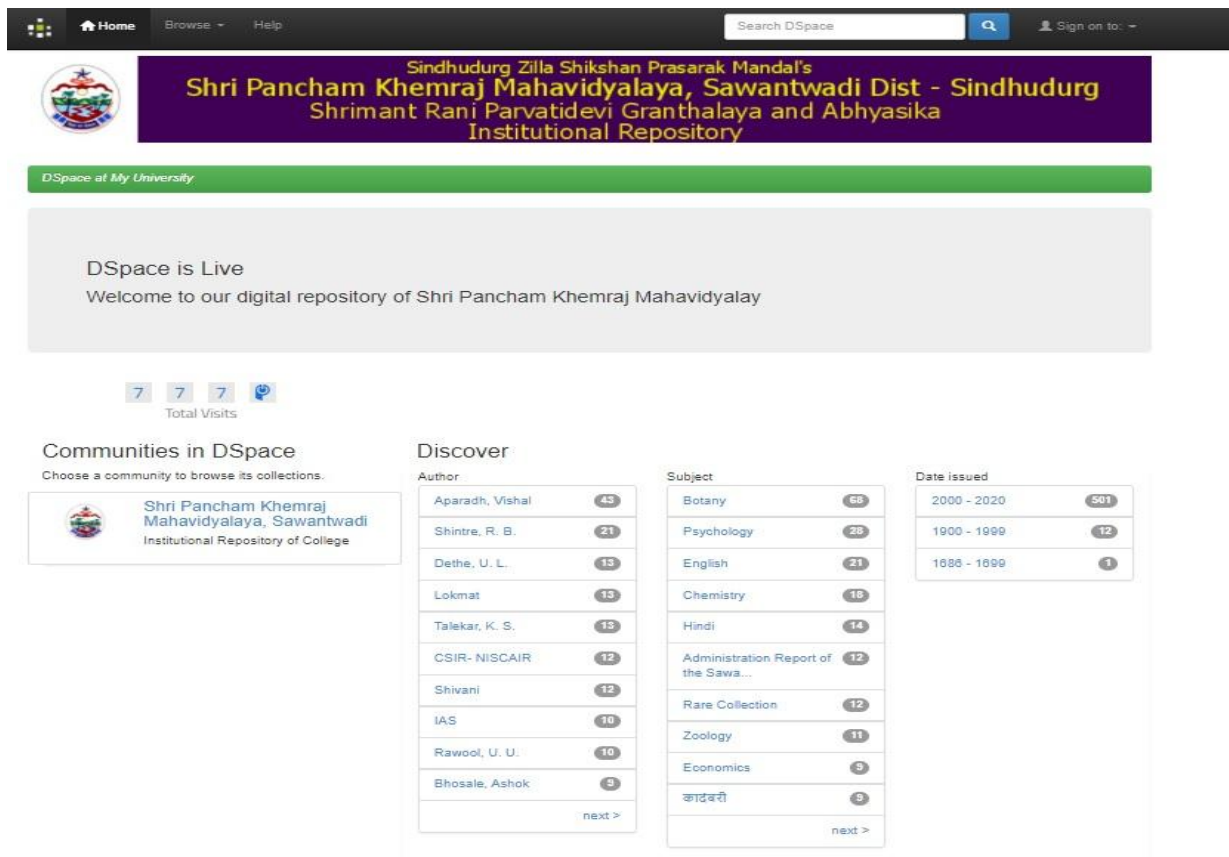


Fig: 1 Communities created in DSpace

Sub-communities within this community:

DSpace has to facility to create various communities and sub-communities, so various sub-communities have created under heading such as College in News, College Magazine,

College Prospectus, E-Books, E-Thesis and Dissertations, Event Photographs, Faculty Publications, Free E-Journals, Previous Year Question Papers, Rare Collection, Study Material, Syllabus etc.

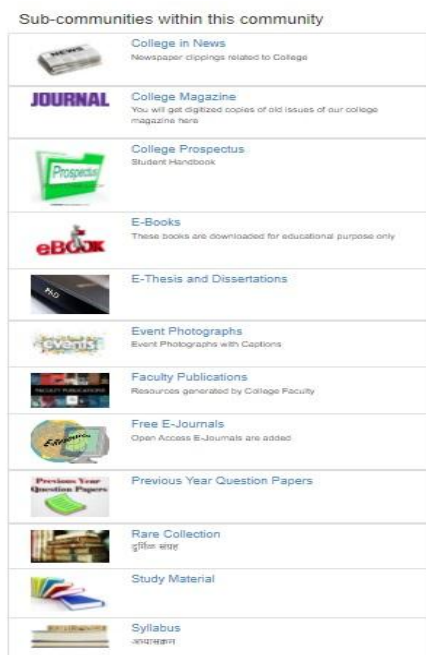


Fig. 2. Sub-Communities

Creating Metadata and Linked Data: DSpace used a qualified Dublin Core metadata standard for describing items.

the submission of document in which field such as author, title other title, date of issue, publisher citation, series/report no.,

identifiers (ISSN, ISMN, Govt. Doc #, URI, ISBN) type (article, book, book chapter, dataset, image, video, working paper), language, subject keywords, abstract, sponsors and

description. Then, follow the process upload, verify, license and completed process for the submission of document.

Full metadata record		
DC Field	Value	Language
dc.contributor.author	Shewale, Rahul	-
dc.date.accessioned	2020-07-16T06:13:29Z	-
dc.date.available	2020-07-16T06:13:29Z	-
dc.date.issued	2020	-
dc.identifier.isbn	2277-5730	-
dc.identifier.uri	http://hdl.handle.net/123456789/743	-
dc.description.abstract	In this paper bibliometric study of 150 articles published in Annals of Library and Information Studies (ALIS) from 2015-2019 has been conducted to find the contributions published during the period, authorship pattern, length of articles published, citation analysis and distribution of citation in yearly. During the period from 2015 to 2019, the majority of 25.33% articles contribute in year 2015. Maximum number of articles 48.87% are contributed by joint authors. Majority of authors 71.77% contributed from India. Maximum number of 23.34% authors contribute in year 2015 (Vol. no. 62). A total of 2884 citations appeared in ALIS from 2015-2019 and majority of articles 34.88% have 10-19 citations. Majority of articles 76.86% published in journals are between 1-9 pages in length. Out of 2884 citations, majority 22.81% citations appear in year 2015.	en_US
dc.subject	Library Science	en_US
dc.subject	Bibliometric Analysis	en_US
dc.subject	Citation Analysis	en_US
dc.subject	Quantitative Methods	en_US
dc.subject	ALIS	en_US
dc.title	Bibliometric Study of Annals of Library and Information Studies (ALIS): 2015-2019	en_US
dc.type	Article	en_US
Appears in Collections:	Rahul K. Shewale	

Fig. 3. Full metadata record

7. Benefits of Institutional Repository

The benefits of institutional repository for users, contributors and organizations as following.

1. It increases the visibility and impact of the research outputs by providing easy access to the best quality materials in digital format for the users.
2. It supports the research students by providing access to thesis and dissertation, provision of gray literature in the form of working papers, conference presentations, pre-prints and also locating the development of e-portfolios.
3. It provides a platform to the contributors by increasing citations and also providing a digital platform for their publications.
4. As the scholarly content of an institution is available at one place the intellectual achievements of an institution are reflected which serve as an effective marketing tool.

5. The documents can be preserved for future generation for reference.
6. It facilitates the development and sharing of digital materials required for the teaching and learning process.
7. Platform and preserve scholarly output and historic documents.

8. Conclusion

The institutional repository offers to access research publications and other digital documents of particular institutions. This is in the higher educational and research institutions rapidly growing to disseminate newly emerged knowledge and expertise. The institutional repository is an educational resource for its success and its long-term sustainability. It is a platform and preserve scholarly output and historic documents.

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