

**VOLUME: 23**  
**DECEMBER, 2018**

**ISSN : 0972-8570**

# **Vidyasagar University**

## **Journal of**

### **Library and Information Science**



**Department of Library and Information Science**  
**Vidyasagar University**  
**Midnapore, West Bengal**

## Vidyasagar University Journal of library and Information Science (VUJLIS)

ISSN: 0972-8570

Vidyasagar University Journal of Library and Information Science is a peer reviewed journal published annually by the Department of Library and Information Science, Vidyasagar University. The first volume of the journal was published in the year 1987. Since 1991 the journal received its ISSN. The aim of the journal is to publish original research work in Library and Information Science to cater the need of Library professionals, Information scientists, Researchers, Scholars and Students. Papers accepted for publication in the journal are those which are not submitted for publication elsewhere and contain new thinking which contribute to the universe of knowledge.

### Editor

Prof P K Jana  
Department of Library and Information Science  
Vidyasagar University, Midnapore, West Bengal  
Email: pkjanavu@gmail.com

### Associate Editors

Prof D S Rath Department of Library and Information Science Vidyasagar University, Midnapore, West Bengal Email: dsrath@mail.vidyasagar.ac.in	Mrs S Sett Associate Professor Department of Library and Information Science Vidyasagar University, Midnapore, West Bengal Email: smita@mail.vidyasagar.ac.in
--	---

### Editorial Board

Prof A Chatterjee Former Professor Department of Library and Information Science Jadavpur University, Kolkata, West Bengal Email: chatterjeeamitabha19@yahoo.co.in	Dr S Mallik Asst Professor Department of Library and Information Science Vidyasagar University, Midnapore, West Bengal Email: soumenmallik@gmail.com
Prof B K Sen Chairman, Bibliometrics Expert Committee Department of Science and Technology Government of India Email: bkzen1938@gmail.com	Dr B Dutta Asst Professor Department of Library and Information Science Vidyasagar University, Midnapore, West Bengal Email: bidyarthi.bhaswati@gmail.com
Dr N Bhattacharyya Sahu Asst Professor Department of Library and Information Science Vidyasagar University, Midnapore, West Bengal Email: nives.b22@gmail.com	

Indexing/ Full- text The Journal is covered in Google, Google Scholar, Open DOAR, WorldCat  To accept a paper for publication in the journal the manuscript is judge on its importance, originality, clarity and relevance to the scope and content of the journal. Adequate written record has been taken for errors and major flaws for a published paper. Performance of individual member of the board of editors as well as the review quality is periodically judged to assure optimal journal performance. Proper decision has been taken in all respect to improve journal performance. Fairness, equality, transparency and confidentiality have been maintained at every step in the publication process.	Subscription Information India: ₹ 75.00 (25% discount on Individual subscription and 15% to Publisher/ Vendor) Outside India: \$ 15/ £ 8  © 2017 by the Registrar, Vidyasagar University. All rights reserved.  Information for contributors, please visit <a href="http://inet.vidyasagar.ac.in">http://inet.vidyasagar.ac.in</a> : 8080/jspui/handle/123456789/93  Publication Office Registrar, Vidyasagar University, Midnapore, West Bengal. Tel- (03222) 276554-555-557, Fax (91) 03222 - 275329, Email: registrar@mail.vidyasagar.ac.in
--	---

All articles are freely accessible on the website (<http://inet.vidyasagar.ac.in:8080/jspui/handle/123456789/93>)

Printed by : Koushik Computers, Midnapore

Volume: 23

December, 2018

ISSN : 0972-8570

**Vidyasagar University  
Journal of  
Library and Information Science**



**Department of Library and Information Science  
Vidyasagar University  
Midnapore, West Bengal**

Vidyasagar University  
**J**ournal of Library  
and Information  
Science

---

VOLUME 23, 2018

DECEMBER 2018

ISSN :0972-8570

- An Open Institutional Repository Model for a University: Study of Central University of Himachal Pradesh (CUHP)** 1  
*Dimple Patel*
- Indian Journal of Radio & Space Physics (IJRSP):  
A Scientometric Analysis** 18  
*Amit Kumar Das, Gopinath Das and Dr. Bidyarthi Dutta*
- Published Researches on Dewey Decimal Classification: An Analytical Study** 25  
*Sudeshna Panda and Pijush Kanti Jana*
- Indigenous Knowledge used in Paddy Cultivation by Rajbanshi Community of Cooch Behar District of West Bengal: A Study** 34  
*Sangita Sarkar*
- Weeding out: a systematic review on what practiced  
and best practices** 43  
*Amalendu Das and Prof. Durga Sankar Rath*
- Dilemma of potato growers in Paschim Medinipur District of West Bengal:  
Information dearth, miscommunication or information illiteracy? -  
An analysis with the Wilson's Model** 60  
*Bibek Mahata and Dr. Soumen Mallik*
- Information Services in the Blind Schools at Presidency Division,  
West Bengal: A Study** 73  
*Dr. Nivedita Bhattacharyya Sahu and Laltu Mondal*

# An Open Institutional Repository Model for a University: Study of Central University of Himachal Pradesh (CUHP)

Dimple Patel \*

## Abstract

Presently, libraries all over the world are reeling under the pressure of ever increasing prices of journal subscriptions and unsustainable eBooks models from commercial publishers. In this scenario open access model of scholarly publishing and communication is one of the solutions at least for current and future publications. Institutional repositories play a very crucial role in open access scholarly communication. The paper discusses the need for institutional repositories, especially for Indian universities. It presents a model for an institutional repository based on open technologies, standards and formats for a university taking the Central University of Himachal Pradesh as a case study. It also discusses the steps to be followed in design, collection development and implementation of an institutional repository.

**Keywords:** Institutional Repository, Open Access, Open Source Software, Planning, Designing

## 1 Introduction

Indian research institutions and universities over the past few years have realized the importance and need to preserve their legacy collections as well as the current research output of their faculty and research students. Digitization activities are going on in many institutions in India presently. Being a young and dynamic university especially in academics, CUHP can take a step forward in the direction of encouraging its academia to contribute their research output as Open Access for the benefit of young students, research scholars and the research community of the nation at large. This will not only foster further research in the country but also the authors will be recognized worldwide for their research contributions.

Universities	Total No.
State Universities	399
Deemed to be Universities	126
Central Universities	48
Private Universities	330
<b>Total</b>	<b>903</b>

Table 1: Total number of universities in India

---

\*Assistant Professor, Library and Information Science, Central University of Himachal Pradesh, Dharamshala, H.P., [dimplerp@gmail.com](mailto:dimplerp@gmail.com)

(“University Grants Commission”)

There are 903 universities in India as of 18.12.2018 as reported on the University Grants Commission (UGC) website (Table 1). However, a search on the ROAR and Open DOAR websites (“Directory of Open Access Repositories”, n.d.) (“Registry of Open Access Repository Mandates and Policies”, n.d.) reports a total of only 82 digital repositories for India. Among these only 18 institutional repositories are hosted by Indian universities.

## **2 CUHP (“Central University of Himachal Pradesh”, n.d.)**

To understand the need of institutional repository at CUHP in particular and in Indian universities in general this section discusses the genesis, vision and objectives of the university.

The Central University of Himachal Pradesh is established under the Central Universities Act 2009 (No. 25 of 2009) enacted by the Parliament. The precursor to this was the Prime Minister of India’s address to the nation on 15<sup>th</sup> August, 2007, in which he announced the establishment of a Central University in each of the states that did not have a central university so far. The inherent idea is that students from all states of India get access to quality higher education. Subsequently, 11th Plan provided for the establishment of 16 new Central Universities. On 20th March 2009, Presidential assent was accorded to the Central Universities Act 2009 (No. 25 of 2009) which provided for the establishment of Central University of Himachal Pradesh on 20th January 2010. The University is funded and regulated by the University Grants Commission (UGC).

### **2.1 Vision of the University (“Central University of Himachal Pradesh”, n.d.)**

The Central University of Himachal Pradesh (CUHP) is still in the process of development. It may take some time to develop the entire required infrastructure. The development of the university is guided by vision document of the university. The vision document states that

*“Central University of Himachal Pradesh strives for Inclusive Access to Excellence in Higher Education and Research to emerge as Premier University of the Country at par with the best Universities of the World in terms of Programme Offerings, Curricular Framework, Pedagogy, Research, Publications and Integration with the World of Work.”*

## 2.2 Objectives of the University (“Central University of Himachal Pradesh”, n.d.)

Objectives of the University as given in the Central Universities Act 2009 are as under:

1. To disseminate and advance knowledge by providing instructional and research facilities in such branches of learning as it may deem fit;
2. To make special provisions for integrated courses in humanities, social sciences, sciences and technology in its educational programmes;
3. To take appropriate measures for promoting innovations in teaching-learning process and inter-disciplinary studies and research;
4. To educate and train manpower for the development of the country;
5. To establish linkages with industries for the promotion of science and technology;
6. To pay special attention to the improvement of social and economic conditions and welfare of the people, their intellectual, academic and cultural development

## 3 IR @ CUHP?

*“A university based institutional repository is a set of services that a university offers to the member 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 organization and access or distribution.”* (Lynch, 2003)

### 3.1 Need for Institutional Repository

The purpose of an Institutional Repository may differ from one university to another university based on the institutional policy and need of the users of that institution. However, the common objectives across various types of universities can be summarized as follows:

- To fulfill the vision and objectives of the university as stated in its Vision Document.
- To preserve university’s research output.
- To showcase its academic research output worldwide.
- To increase the visibility of the university and its academic community i.e. faculty members, research scholars and students.
- To encourage Electronic publishing of the university’s publications.
- To contribute towards the Knowledge management of the university’s knowledge base.
- To increase the role of the university in the process of Scholarly communication.
- To store, preserve and make accessible the learning materials and courseware of the university's faculty members.

- \* To encourage open access to scholarly research output.

### 3.2 Why Open Access?

The most common sense response to this question is that it is the responsibility of publicly funded universities to make their research output openly accessible to the public with minimal copyright restrictions. But there are many loopholes in the present commercial models of scholarly publishing which have been discussed by Patel (2015) as follows:

- \* “Publicly-funded research published with commercial publishers is getting effectively locked up for a very long period. In fact, much of the retrospective scholarly material is already locked up with commercial publishers.
- \* There is pressure from commercial publishers and authors' alliances to increase the term of copyright and make copyright laws stricter at an international level. While developed countries may not be affected largely by a stricter copyright regime, developing and under-developed countries definitely will suffer a major setback in academics and R&D.
- \* Commercial publishers are constantly increasing the prices of scholarly journals and books at unreasonable rates.
- \* In order to deal with the rising prices many library consortia have been formed around the world. But indeed, these library consortia are given package deals with a false sense of offering discounts, with no choice to select relevant and / or high-impact journals.
- \* In case of electronic publications, many additional limitations are enforced by the publishers like:
  - ⇒ In case of e-journals, limited or no access is provided to retrospective articles or issues , many a times even in case of subscribed content.
  - ⇒ In case of E-books, access is limited to number of views, downloads, printing.”

### 3.3 Why Open Source Software (OSS)?

It is not enough that the content is made open access on institutional repositories. The supporting technologies, standards, formats should also be open. (Prasad & Madalli, 2007) Open Source Software provide many advantages as compared to proprietary software. Like,

- \* OSS are released under open licenses which encourage release of any updates or modifications also to be released under the same license as the original software. So, practically an OSS will remain OSS forever.
- \* Open licenses enable users to use the OSS as they wish.
- \* There are no restrictions on the number of times an OSS can be installed on a machine.



- \* There are no restrictions on the number of machines on which an OSS can be installed.
- \* OSS can be freely distributed and shared with friends, family, colleagues without resorting to piracy.
- \* OSS have an open architecture, hence integration with other modules/software is allowed.
- \* Open architecture allows interoperability between various institutional repositories.
- \* OSS are extensible. Newer modules / features are easier to add in OSS.
- \* OSS are vendor-independent.
- \* OSS have very strong support communities in form of email lists, groups, social media groups, etc. Reaching out to these support communities and getting a response is much faster and easier.
- \* Developers all over the world are involved in developing, updating and maintaining OSS, so OSS are in a sense future-proof with less chances of becoming obsolete.
- \* Even if OSS do become obsolete, user data is not locked up in proprietary codes. Since source code is open, retrieving data will not be hampered or blocked due to restrictive IPR as in case of proprietary software.
- \* Most library-related OSS like DSpace, EPrints, Koha are as of now free-of-cost also (though being free-of-cost is not a requirement for OSS). This is a boon to libraries with small to medium budgets.

#### **4 Earlier work: OUDL**

The author was involved in a similar project at her previous institution i.e Osmania University. The university digital repository was named as Osmania University Digital Library (OUDL). OUDL was envisioned to be a one-stop access point for the electronic resources (including E-books) of the university as well as an Institutional Repository for the publications produced by its faculty members, research scholars and students. The organization of OUDL was very simplistic to begin with a the collection was very small i.e around 25000 documents. OUDL had the following two communities:

##### ***OU-EMMRC Video Collections***

This community consists of video lectures by eminent teachers, academicians, subject experts and scholars on various topics. These videos have been recorded at the Electronic Multimedia Research Centre, Osmania University.

##### ***OU Legacy Archives***

This community consists of digitized documents of out-of-copyright collection of the Osmania University Library. It has two collections "Manuscripts" and "Publications". The documents are

being batch-imported into these collections. As of the date of this article being written, 6560 documents have been uploaded in the “Publications” collection. (<http://oudl.osmania.ac.in/browse?type=title>)



**Fig. 1:** Osmania University Digital Library (OUDL) <http://oudl.osmania.ac.in>

These Communities and Collections were searchable as well as browsable by Author, Title, Subject, Issue Date (Date of Publications).

## 5 Developing IR @ CUHP

### 5.1 Plan

Based on the LEADIRS Workbook (Barton & Waters, 2004-2005) the IR @ CUHP will be developed in two phases. Each phase consisting of step-wise action plan.

### 5.2 First phase

#### \* Development of Service Model for the Institutional Repository

##### ☞ Creating Service Definition

- ☞ Types of Scholarly material to be included in the repository (E.g. Faculty publications, Student Theses & Dissertations, Seminar / Conference / Workshop publications, Classroom courseware, etc.)

- ☞ User Services (E.g. Online help, FAQs, Listserv, Online documentation, etc.)
- ☞ Ways of Organizing Content
- ☞ School-wise / Department-wise
- ☞ Discipline-wise
- ☞ Material-wise (e.g. PDF files, Presentations, Text Documents, etc)
- \* Purchase of hardware
- \* Selection of software
- \* Installation and configuration of the server (including operating system, local IP address, Public IP address)
- \* Installation and configuration of Digital Library Software
- \* Develop a test-bed institutional repository

### 5.2.1 Hardware

The CUHP has already acquired a blade server with 8 blades of which one blade is allocated for implementing the institutional repository. (Specifications: HP BLADE SERVER-2P – Server having two nos. of x86-64 bit processor (Intel Xeon E5-2620 v4); 64 GB DDRIII expandable to 256 GB; SAS RAID Controller supporting RAID 0,1; 2 \* 600 GB SAS Hot Swap HDD (10 K or Higher RPM); Dual 10G FCoE port). For Data Backup and large storage needs of the university SAN Storage solution of 10 TB will be acquired in the near future. The university already has a strong LAN connectivity via the NKN (National Knowledge Networ) and also WiFi connectivity under the Campus Connect programme of the MHRD (Ministry of Human Resources and Development).

### 5.2.2 Software

Latest versions of the following software will be used:

#### *Operating System*

Debian is a free Linux operating system (OS). Debian uses the Linux kernel (the core of an operating system), but most of the basic OS tools come from the GNU project; hence the name GNU/Linux. Debian GNU/Linux provides more than a pure OS -- it comes with over 51000 packages, precompiled software bundled up in a format for easy installation on any machine. ("Debian", 2018) The producers of the Debian GNU/Linux system, have created the Debian Social Contract ("Debian Social Contract", 2004) which states that:

- ☞ "Debian will remain 100% free

- ☞ We will give back to the free software community
- ☞ We will not hide problems
- ☞ Our priorities are our users and free software
- ☞ Works that do not meet our free software standards (...although non-free works are not a part of Debian, we support their use and provide infrastructure for non-free packages)"

Firmware required for the server during installation, are available from the Debian website.

### ***Digital Library Software: DSpace***

DSpace is an open source software platform that enables organisations to:

- \* capture and describe digital material using a submission workflow module, or a variety of programmatic ingest options
- \* distribute an organisation's digital assets over the web through a search and retrieval system
- \* preserve digital assets over the long term

### ***Prerequisite software for DSpace***

- \* OpenJDK
- \* Apache Maven
- \* Apache Ant
- \* Relational Database (PostgreSQL)
- \* Servlet Engine (Tomcat)
- \* Perl

### **5.2.3 Content**

While, orienting and training the CUHP academia in contributing and submitting their work to the repository may take sometime, the repository can be put in place with the existing e-publications of the university as a test-bed installation. CUHP already hosts a number of its e-publications on its website (<http://cuhimachal.ac.in>). As on date, the university website hosts the following e-documents:

- \* Acts and Statutes
- \* Returns and Information
  - ☞ Annual Reports
  - ☞ Annual Accounts
  - ☞ Minutes of Executive Council

- ☞ Minutes of Academic Council
- ☞ Minutes of Finance Committee
- \* CUHP Chronicle
- \* Students' Corner
  - ☞ Exam Results
  - ☞ Format of Forms
  - ☞ Degrees Awarded
- \* Tenders and Notices

These are also made searchable on the website by using Google Search Bar. But unlike digital library software, Web search engines like Google, index the full-text of the documents on the website. Hence, the results retrieved many a times are not relevant to the information needs of the users/searchers.

Whereas a digital library software will enhance the retrieval rate of relevant documents as each digital document can be attached with enriched metadata (like author, title, abstract, publisher, date of publication, type of document, document identification numbers, etc). Digital library software allow for fielded searches by author, title, abstract, etc. as well as full-text searches. Thus saving the user/searcher a lot of time and frustration. Moreover, the visibility of these publications will increase if hosted on an Institutional Repository.

#### **5.2.4 Design of IR@CUHP**

In a digital repository, the design of the repository plays a very important and long-lasting role. The main purposes of an institutional repository is long-term preservation and seamless access to the collections over that time. In order to provide seamless access to the content of a repository the design of the repository has to be well thought out and planned very meticulously. Seamless access for long term can be ensured only if the design of the repository is consistent over a long period of time. In other words, once as design is finalized there should be no changes in the design for a considerable period of time. Any design change in the repository may lead to inaccessible links to the content the user is searching for. Hence, design change(s), if any, should be done only if absolutely necessary. In fact, it is recommended that the design of the institutional repository be approved by the Library Authority of the university and documented in the institutional policy of the university. This will ensure that the IR design is not tampered or modified without proper authorization.

The way data is organized in DSpace is intended to reflect the structure of the organization using the DSpace system. Each DSpace site is divided into communities, which can be further divided into sub-communities reflecting the typical university structure of college, department, research center, or laboratory. Communities contain collections, which are groupings of related content. A collection may appear in more than one community. Each collection is composed of items, which are the basic archival elements of the archive. Each item is owned by one collection. Additionally, an item may appear in additional collections; however every item has one and only one owning collection. Items are further subdivided into named bundles of bitstreams. Bitstreams are, as the name suggests, streams of bits, usually ordinary computer files. Bitstreams that are somehow closely related, for example HTML files and images that compose a single HTML document, are organised into bundles.

Firstly, the list of active schools of studies and their respective departments and centres were compiled from the university website. Based on the data Communities, Sub-communities and Collections will be developed. The content of the institutional repository is organized at various levels (Fig. 1):

- I. The Schools of studies were organized in the Top-level communities for the institutional repository.
- II. Within these communities Departments and Centres were organized as the second-level as Sub-Communities (Sub-Community Level - 1).
- III. The third and fourth levels are organized by the following types of resources as Sub-Communities (Sub-Community Level – 2) and Collections respectively. In some cases, the Sub-Community Level – 2 maybe further divided into one or more than one Sub-Community Levels depending on need.
  1. Class Lectures (Sub-Community Level - 1)
    - i. Presentations
    - ii. Videos
    - iii. Audio
    - iv. Notes
  2. Conferences / Seminars / Workshops (Sub-Community Level - 1)
    - i. Proceedings
    - ii. Presentations
    - iii. Videos
    - iv. Photographs
    - v. Brochures / CFPs

3. Electronic Theses and Dissertations (ETDs) (Sub-Community Level - 1)
  - i. PG dissertations / theses
  - ii. Doctoral Synopsis (Research Proposals)
  - iii. Doctoral dissertations / theses
4. Project Reports (Sub-Community Level - 1)
  - i. UG Project Reports
  - ii. PG Project Reports
  - iii. Funded Research Projects
5. Publications (Sub-Community Level - 1)
  - i. Faculty Publications (Sub-Community Level – 2)
    - (a) Each collection under this sub-community will be created by name of the individual faculty of the respective department / centre
  - ii. Student Publications
6. Examinations (Sub-Community Level - 1)
  - i. UG Examinations (Sub-Community Level – 2)
    - (a) Question Papers (Past)
    - (b) Datesheets
    - (c) Notices
  - ii. PG Examinations (Sub-Community Level – 2)
    - (a) Question Papers (Past)
    - (b) Datesheets
    - (c) Notices
  - iii. Ph.D. Examinations (Sub-Community Level – 2)
    - (a) Question Papers (Past)
    - (b) Datesheets
    - (c) Notices

### 5.2.5 Implementation

Once the test-bed is developed, it will be made available for use by all faculty members and students of the university. However, to evaluate the test-bed installation, a group of selected faculty members and students will be asked to give feedback through questionnaires and interviews. The following steps will be put into action step-wise for the implementation of the institutional repository.

- \* Evaluate the IR for design, organization and functionality on basis of feedback from university faculty and students

- \* Incorporate modifications to improve the institutional repository services for the users
- \* Establish the full-fledged institutional repository
- \* Subscription to CNRI for Handle prefix for CUHP Institutional Repository for persistent identification

### 5.3 Second phase

Once the full-fledged institutional repository is in place content addition, description and promotion activities will be taken up in the following step-wise manner.

- \* Conduct awareness & orientation programmes for all the university faculty members, research scholars and students to train them to submit their publications to the university repository as well as to search and retrieve documents from CUHP Repository.
- \* Adding Content to the Service
  - ☞ Batch entry of retrospective publications of the university
  - ☞ Submission of publications by faculty members, research scholars and students
- \* Metadata entry or/and editing for the documents submitted to the repository
- \* Promoting the institutional repository services on campus through
  - ☞ Meetings
  - ☞ Website announcement
  - ☞ Announcements through university publications
  - ☞ Postings on Email, mail groups and social media platforms

## 6 Conclusion

In the year 2012, Harvard University Library, one of the most well-funded libraries in the world, brought out a memo for its faculty, staff and students. This memo categorically stated that the university was no longer in a position to sustain journal subscriptions of two very reputed commercial publishers due to steep costs. The memo suggested that faculty and researchers should shift "*pride*" to open access publications. The memo also urged its faculty from resigning from editorial boards of journals which do not support open access model. ("Faculty Advisory Council Memorandum", 2012) The successful result of the memo was that Harvard University started its own open access institutional repository called Digital Access to Scholarship at Harvard (DASH). ("Digital Access to Scholarship at Harvard", 2018) In the year 2017, around 70+ academic institutions in Germany have unanimously boycotted Elsevier for the same reason. (Kwon, 2017) However simply boycotting commercial publishers is not enough. It is a fact that most of the retrospective knowledge is still locked up with commercial publishers. However, steps can be taken



to ensure that future knowledge does not fall prey to commercialization by private entities. Like Harvard University, faculty and researchers in Indian universities also need to realize the importance of open access to scholarly information in fostering R & D activities in particular and for the betterment of society in general. Here universities can play an important role by developing open access policies, motivate faculty by linking contributions in open access publications to promotions, encouraging faculty to enter into non-exclusive intellectual property rights with commercial publishers, negotiate with commercial publishers to allow self-archiving on author website or institutional repository after a reasonable embargo period, developing open access institutional repositories, so that authors can reuse and share their research with the public seamlessly.

### References

1. Barton, Mary R. and Waters, Margaret M. (2004-2005). Creating an Institutional Repository: LEADIRS Workbook. Retrieved from <http://www.ais.up.ac.za/toolbox/Leadirs%20Workbook.pdf>
2. Central University of Himachal Pradesh. (n.d.). Retrieved from <http://cuhimachal.ac.in>
3. Debian Social Contract. (2004.04.26). Retrieved from [https://www.debian.org/social\\_contract](https://www.debian.org/social_contract)
4. Debian: The universal operating system. (2018.07.31). Retrieved from <https://www.debian.org/>
5. Digital Access to Scholarship at Harvard (DASH). (2018). Retrieved from <https://dash.harvard.edu/>
6. Directory of Open Access Repositories. (n.d.). Retrieved from <http://v2.sherpa.ac.uk/opensoar/>
7. Dspace – A turnkey institutional repository application. Retrieved from <https://duraspace.org/dspace/>
8. Faculty Advisory Council Memorandum on Journal Pricing. (2012.04.17). Retrieved from <https://osc.hul.harvard.edu/about/highlights/2012/04/faculty-advisory-council-memorandum-journal-pricing/>
9. Kwon, Diana. (2017.07.17). Major German Universities Cancel Elsevier Contracts. *The Scientist*. Retrieved from <https://www.the-scientist.com/news-analysis/major-german-universities-cancel-elsevier-contracts-31208>
10. Lynch, Clifford A. (2003). Institutional Repositories: Essential Infrastructure for Scholarship in the Digital Age. *ARL: A Bimonthly Report*, no. 226. Retrieved from <http://old.arl.org/resources/pubs/br/br226/br226ir~print.shtml>

11. Patel, Dimple (2015). Open Higher Education: Universities as leaders in open access. *IASLIC Bulletin, Vol. 60, No. 4.*
12. Prasad, A.R.D. and Madalli, Devika P. (2007). OPEN MANTRA for Open Access to Information. In Achim Osswald, Maximilian Stempfhuber and Christian Wolff (Eds.), *Open Innovation. Proc. 10 th International Symposium for Information Science*. Retrieved from <http://fiz1.fh-potsdam.de/volltext/isi07/15008.pdf>
13. Registry of Open Access Repository Mandates and Policies. (n.d.). Retrieved from <http://roarmap.eprints.org/>
14. University Grants Commission. <https://www.ugc.ac.in/oldpdf/Consolidated%20list%20of%20All%20Universities.pdf>

**Acknowledgement:**

*I would like to thank Supriya Pradhan and Tashi Dava Bodh for their invaluable help during writing of this article.*

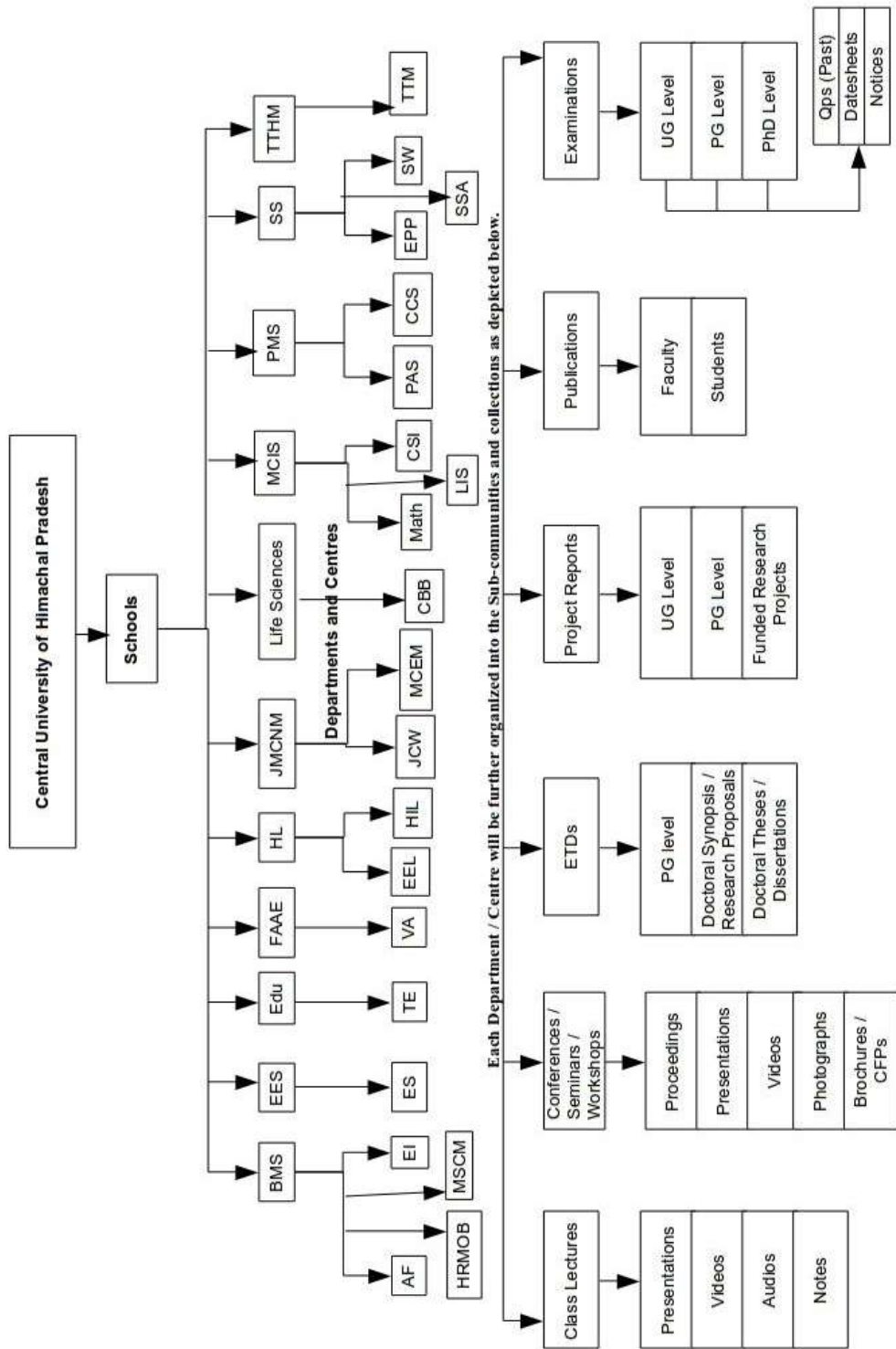


Fig. 1 Institutional Repository Design for CUHP

Note: Full names of Schools, Departments, Centres are given in Annexure - I

**ANNEXURE – I**

<b>Acronym used in Fig. 1</b>	<b>Full name of the School</b>
<b>BMS</b>	<b>Business &amp; Management Studies</b>
<b>EES</b>	<b>Earth &amp; Environmental Sciences</b>
<b>Edu</b>	<b>Education</b>
<b>FAAE</b>	<b>Fine Arts &amp; Art Education</b>
<b>HL</b>	<b>Humanities &amp; Languages</b>
<b>JMCNM</b>	<b>Journalism, Mass Communication &amp; New Media</b>
<b>MCIS</b>	<b>Mathematics, Computer &amp; Information Sciences</b>
<b>PMS</b>	<b>Physical &amp; Material Sciences</b>
<b>SS</b>	<b>Social Sciences</b>
<b>TTHM</b>	<b>Tourism, Travel and Hospitality Management</b>

**Table 2: Schools of CUHP**

<b>Acronym used in Fig. 1</b>	<b>Full name of the Department / Centre</b>
<b>AF</b>	<b>Accounting &amp; Finance</b>
<b>MSCM</b>	<b>Marketing &amp; Supply Chain Management</b>
<b>EI</b>	<b>Entrepreneurship &amp; Innovation</b>
<b>HRMOB</b>	<b>Human Resource Management &amp; Organisational Behaviour</b>
<b>ES</b>	<b>Environmental Sciences</b>

<b>TE</b>	<b>Teachers Education</b>
<b>VA</b>	<b>Visual Arts</b>
<b>EEL</b>	<b>English &amp; European Languages</b>
<b>HIL</b>	<b>Hindi &amp; Indian Languages</b>
<b>JCW</b>	<b>Journalism &amp; Creative Writing</b>
<b>MCEM</b>	<b>Mass Communication &amp; Electronic Media</b>
<b>CBB</b>	<b>Computational Biology &amp; Bioinformatics</b>
<b>Math</b>	<b>Mathematics</b>
<b>CSI</b>	<b>Computer Science &amp; Informatics</b>
<b>LIS</b>	<b>Library &amp; Information Science</b>
<b>PAS</b>	<b>Physics &amp; Astronomical Science</b>
<b>CCS</b>	<b>Chemistry &amp; Chemical Science</b>
<b>EPP</b>	<b>Economics &amp; Public Policy</b>
<b>SW</b>	<b>Social Work</b>
<b>SSA</b>	<b>Sociology and Social Anthropology</b>
<b>TTM</b>	<b>Tourism &amp; Travel Management</b>

**Table 3: Departments and Centres**