320 PLANNER - 2008

# Pilot Study of Institutional Repository For Swami Ramanand Teerth Marathwada University, Nanded.

S P Satarkar

R G Dharmapurikar

R D Kale

#### **Abstract**

An Institutional Repository is an online locus for collecting, preserving, and disseminating — in digital form — the intellectual output of an institution, particularly a research institution. For a university, this would include materials such as research journal articles, before (preprints) and after (postprints) undergoing peer review, and digital versions of theses and dissertations, but it might also include other digital assets generated by normal academic life, such as administrative documents, course notes, or learning objects. Present Paper discusses about the outcome of a pilot study of IR at S. R. T. M. University, Nanded.

**Keywords:** IR, Web-Based database, Open Access, OPAC.

#### 1 Introduction

The Institutional Repository is a very powerful tool now a days. It serve as a key of change for the institutions and more broadly for the scholarly faculties that they support. If properly developed, it advances a surprising number of goals and addresses an impressive range of needs. It is vital that institutions have realized Institutional Repositories as a gainful and long-lasting commitment to the community that should not be made lightly.

The potential uses of Institutional Repositories content in other digital environment are unlimited. Institutional Repositories content should not be stored and locked in Institutional Repositories only. It should be disseminated into new digital environments where it can be easily used, represented and manipulated with other research and academic activities. The Institutional Repositories content also should be collected in systematic ways and not depend solely on being submitted by individual faculty.

There are now different softwares available to create and maintain an institutional repositories and as a result there are less challenges in setting up an Institutional Repositories to do with technology and more to do with, organizational, managerial and social issues.

In a information technology age, to be successful information services providers, library needs to strengthen services that allow creators, content managers and end users to manipulate the content in a ways they like. In order to fulfill variety of needs of users demands, content managers such as librarians must be capable to send/service, store, organise and archive content. Academic institutions are required to design their repositories into the knowledge bank. This will help in changing scholarly communication more broadly.

Present pilot study is an effort to initiate the Institutional Repository to serve the intellectual creations created by the university concerned for the next generation. This may cover the contributions of teaching, non-teaching, researchers, students and faculties in national, international journals, seminars and conferences, as well as the events conducted and documents published by the university on various occasions.

#### 2. About Swami Ramanand Teerth Marathwada University

The Swami Ramanand Teerth Marathwada University was established at Nanded by bifurcating the MarathwadaUniversity at Aurangabad Maharashtra on 17th September 1994, the day on which, in 1948 erstwhile Hyderabad State was liberated from rule of the Nizam. Nanded is a district headquarters as well as a holy city situated on the banks of Godavari river in southeastern part of Maharashtara state.

The University has been named after Swami Ramanand Teerth the Doyen of the Hyderabad Liberation Struggle and also a renowned educationalist and social activist. The University is to cater for southern part of Marathwada region of Maharashtra state, specifically to the districts of Nanded, Latur, Parbhani and Hingoli.

In the short time of operation, the University has been granted recognition by the University Grants Commission (UGC), the apex educational body of Government of India, under 2(f) in March 1995 and under 12 (B) in May 1998, before completion of five years. It has been accredited by NAAC in 2001 with two stars status. At present University has more than 300 colleges affiliated, 3000 teachers and more than 1 lakh students are studying for various courses.

Most of the population's main occupation is farming but it has a rich background of Sikh religion and has a historical value due to the role played in Hyderabad Liberation Struggle. There is a lot of literature scattered in various form on both the aspects. Moreover, as discussed above intellectual and highly scholar teaching staff working in the university and affiliated 300 colleges. Literature, articles, research reports created by them is huge, which requires proper organization and its storage for future and current literature for research and study purpose.

Keeping all these aspects in mind, this university came up with an idea of pilot study for institutional repository.

#### 3. Definition: Institutional Repository

An institutional repository is a web-based database (repository) of scholarly material. It is institutionally defined as depend upon the each institution. It could be cumulative and perpetual (a collection of record). It must be open and interoperable (using OAI-complaint software). The institutional repositories collect stores and disseminate digital resources and long term preserves these digital materials.

Institutional repositories—digital collections that capture and preserve the intellectual output of university communities—respond to two strategic issues facing academic institutions:

- 1) They provide a central component in reforming scholarly communication by stimulating innovation in a disaggregated publishing structure;
  - a. Conference papers
  - b. Articles published in Journal
  - c. Reports submitted by researchers
- 2) They serve as tangible indicators of an institution's quality, thus increasing its visibility, prestige, and public value.
  - a. Literature on Hyderabad Liberation Struggle
  - b. Literature of Sikhism
  - c. Events conducted and documents published by the university on various occasions.
  - d. Literature on Local history.

An institutional repository is a set of services that a institute/university offers to the members of its community for the management and dissemination of digital materials created by the institution and its community members.

By considering the above definition university selected the present activity. This will have a role to create an effective institutional repository with collaboration amongst librarian, information technologists, archives and record managers, faculty and administration and policy makers.

The main objective of the study, as described by the K.T. Anuradha, can fit to the present pilot study with slight modification and functioning IR successfully:

- 1. To publish and archive scholarly work of an institution locally, using authentic information sources.
- 2. To enable long-term preservation of scholarly, religious, liberation work.
- 3. To facilitate constituent members of an institution an easy and rapid way to publish and archive their research locally.
- 4. To provide an integrated view of and act as a single entry point to scholarly work of university.
- 5. To provide wider accessibility, visibility and distribution of the scholarly work of university.
- 6. To act as a self-evaluation tool for the management.

## 4. Benefits of Institutional Repositories

Institutional Repositories by capturing, preserving and disseminating collective intellectual capital, serves as meaningful indicators of an institution's academic quality. It has been seen that much of

intellectual output and value of an institution's intellectual property is defused through thousands of scholarly journals. An Institutional Repository concentrates the institutional product credited by academic or other institutions researchers, making it easier to demonstrate its scientific, social and financial values. Thus, Institutional Repositories complements existing metrics for gauging institutional land productivity and prestige.

The Institutional Repository increased visibility reflects a high quality of scholarship, this demonstration of value can translate into tangible benefits including the funding from public and private sources that drives in part from an institution status and reputation.

Institutional repositories have many benefits such as;

- 1. It provide long term solution;
- 2. Improve scholarly communication;
- 3. Remedying the weakness of self archiving i.e. lack of proper security, long term preservation, wasting time of faculty;
- 4. Extending the work of disciplinary repositories;
- 5. Improve online teaching both on campus and via net.

As per Crow (i) there are two key rationales for Institutional repositories

- i) reform of scholarly communication and in particular scholarly publishing and
- ii) institutions prestige; enhancement thereof by making visible the out put of its faculty's academic and research labour.

The rationale for university and colleges implementing institutional repositories rests on two integrated propositions

- i) Support a broad pan-institutional efforts and
- ii) Offers direct and immediate benefits to each institution that implemented a repository.

## 5. Essential Elements of an Institutional Repository Suitable for Swami Ramanand Teerth Marathwada University, Nanded

A digital institutional repository could be any collection of digital material hosted, owned or controlled, or disseminated by a college or university, irrespective of purpose or provenance. Here, however, we will narrow our definition to focus on a particular type of institutional repository-one capable of supporting two complementary purposes: as a component in a restructured scholarly publishing model, and as a tangible embodiment of institutional quality.

Defined for our purposes then, an institutional repository is a digital archive of the intellectual product created by the faculty, research staff, and students of an institution and accessible to end users both within and outside of the institution, with few if any barriers to access. In other words, the content of an institutional repository is:

Institutionally defined;

Scholarly;

Cumulative and perpetual; and

Open access and interoperable.

## 5.1 Institutionally Defined

The Institutional repositories can be in many forms and can serve a variety of purposes. It is important to identify essential defining elements to be covered in above discussion that is the organizational, technical, financial, and cultural issues relevant to implementing an institutional repository.

Based on the nature of present university under study, an institutional repository may complement or compete with the role served by the university archives. The aim of this University archives will serve two purposes:

- 1) To manage administrative records to satisfy legally mandated retention requirements, and
- 2) To preserve materials pertaining to the institution's history and to the activities and achievements of its officers, faculty, staff, students, and alumni.

Compared to institutional repositories, which aims to preserve the entire intellectual output of the institution, university archivists exercise broad discretion in determining which papers and other digital objects to collect and store. The potential overlap of roles of the two repository types merits consideration at institutions that support both.

## 5.2 Scholarly Content

Depending on the goals established by this University, an institutional repository could contain any work product generated by the university faculty, non-faculty researchers, staff and students. This material might include student electronic portfolios, classroom teaching materials, the institution's annual reports, video recordings, computer programs, data sets, photographs, and art works - virtually any digital material that the university wishes to preserve. On scholarly communication and on changing the structure of the scholarly publishing model, we will define institutional repositories here - whatever else they might contain - as collecting, preserving, and disseminating scholarly content. This content may include pre-prints and other works-in-progress, peer-reviewed articles, monographs, enduring teaching materials, data sets and other ancillary research material, conference papers, electronic theses and dissertations, and gray literature.

To control and manage the access to this content requires appropriate policies and mechanisms, including content management and document version control systems.

### 5.3 Cumulative and Perpetual

Essential to the institutional repository's role both within the university and within the larger structure of scholarly communication is that the content collected is both cumulative and maintained in perpetuity. This has two implications.

First, whatever the content submission criteria for a repository, items once submitted cannot be withdrawn - except in presumably rare cases involving allegations of libel, plagiarism, copyright infringement, or "bad science." This removal would be the functional equivalent of revoking the registration initially granted to the contribution on accession into the repository. This does not necessarily mean that all content will be universally accessible in perpetuity. Institutions must develop criteria and policies – and implement rights management systems - for allowing access to a repository's content, both inside the institution and from outside, that balance the goal of the broadest available access with the reality of encouraging faculty participation. The cumulative nature of institutional repositories also implies that the repository's infrastructure is scaleable. While initial processing and storage requirements might prove modest, institutional repository systems must be able to accommodate thousands of submissions per year, and eventually must be able to preserve millions of digital objects and many terabytes of data.

Second, institutional repositories aim to preserve and make accessible digital content on a long-term basis. Digital preservation and long-term access are inextricably linked: each being largely meaningless without the other. Providing long-term access to digital objects in the repository requires considerable planning and resource commitments. The institution needs to see the desire to accept the structure of file formats acceptable with various disciplines, in order to simplify content submission and encourage faculty participation, with the complications that migrating some of those formats or media might present as new standards evolve. While it is possible for an institution to dictate digital formatting standards for students-in the submission of electronic theses and dissertations, for example-prescribing such format for faculty, for both attitudinal and practical reasons, proves far more problematic.

#### 5.4 Interoperability and Open Access

The Open Archives developed by this university will promotes interoperability standards that aim to facilitate the efficient dissemination of content. OA has its roots in the open access and institutional repository movements. Continued support of this work remains a cornerstone of the Open Archives program. This will promote broad access to digital resources created by the university under study.

Providing no- or less-barrier to access the Sikh religious literature and Hyderabad Liberation Struggle literature and scholarly literature of faculties collected and preserved by the university will increase awareness of research contributions in this field. The goals motivating this university to create and

maintain a digital repository for which users beyond the university community gains access to the content.

Open access helps to ensure long-term access to scholarly collections of articles, published and unpublished literature on Sikh religions and Hyderabad liberation Struggle.

## 6. Management of Institutional Repository Policy

The repository management framework and technical infrastructure must provide University authorities the flexibility to control who can contribute, approve, access, and update the digital content coming from a variety of academic communities and interest groups including academic departments, libraries, research centers, and individual authors. For the above purpose, university management needs to frame a high level committee responsible for the management of Institutional Repository policy. This committee is expected to meet every quarterly. The members of the committee may comprise Vice Chancellor as a Chairman & two Management Council members, two Senate members, Deans of every faculty all these work as a member and Librarian will work as a Secretary of the Committee. The nature and scope of this committee will be to frame the policies and needs of each individual institution, possibly of each participating affiliated institutional community The Chairperson of Sachkhand Gurudwara Board and senior most Freedom Fighter who took part in Hyderabad Liberation Struggle. The committee will take review and validate the author's institutional affiliation and/or authorization to add materials in the repository; in other word, the review will be more qualitative and extensive, serving as a primary certification.

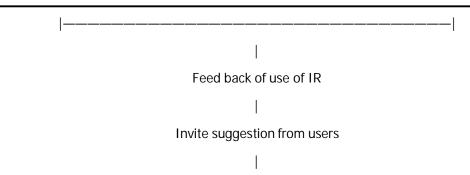
#### 6.1 Work Flow

WORK FLOW FOR PROPOSED INSTITUTIONAL REPOSITOIRY OF SWAMI RAMANAND TEERTH
MARATHWADA UNIVERSITY, NANDED

1	
1	
Make available budget	
I	
I	
Evaluation & Checking its Authenticity & Duplica	ations
I	
I	
Selecting the Collection	
I	
Single copy of discarded literature will be preserved for	
I	future references
I	
	I
Processing Hard copy for	Converting digital literature
-	in a standard & pre decided format
Maintain & updates for data security	
Create web based OPAC of digitized collection	
Provide links to web based access	

Access based on ID & password

Open Access



Accept needful suggestions & refine the flow work

**Description of Work Flow:** Systematic way to approach towards Institutional Repository will be carried out by following steps. Those are:

Trace out Historical and Current Literature on Selected areas for IR: The job of collecting the historical and current literature is most important task in present process. Library of this university is having the collection of Hyderabad liberation struggle as well as on Sikh religion. This collection is in hand at present. But however, it does not claim that this literature is complete in all respect. Some efforts will have to take in assembling or consolidating the scattered literature on the decided topics. Scholarly literature presently is not complete in all respect. At the time of preparation of NAAC effort of collecting scholarly literature was done few years back. Now some additions have to be made in that. For tracing out the literature survey will be conducted on large scale. Some representatives will be appointed for the purpose. In this process private, public, special libraries, personal collection of freedom fighters will be consulted, as well as visits to Gurudwaras and their literature collection will be observed.

Collection available with library is in hard copy i.e. in the form of books, journals, papers, manuscripts, autobiographies, diary, photos, maps, unpublished matter etc. which needs to be digitized in standard format.

Some literature is also available in digitized form which is not in uniformity. It needs to be converted in matchable format. Local history is available in university in the form of microfilm. This needs to be converted in digitized form this is a huge task. This university makes mandatory to the researcher for submitting a thesis in hard copy as well in CD form. But again uniformity is not observed. It needs to be matched.

**Budgeting:** The work mentioned above can not be completed without the support of adequate finance. Budget provision is to be made permanently in every financial year for this purpose. Financial support is needed for purchasing computers, scanners, printers, supporting software data storage devices, annual maintenance, and for human resources.

Evaluation & Checking its Authenticity & Duplications: Collection decided to include in present institutional repository is very large scattered. But it is very difficult to access whether it is fit to include in the present repository. Some identification or scrutiny committee will work for this purpose. Committee will check the duplication and will take review of collected literature authenticity and will guide for inclusion in the present work.

**Selecting the Collection:** Based on the committees report and guide lines the collected literature will be selected for the repository.

**Single copy of discarded literature will be preserved for future references:** The collected literature which is secured with lot of efforts but if found duplicate will not be thrown out. It will be preserved for future references in the existing format.

**Processing Digitization in a standard format:** Standard format will be fixed based on the principles of AACR for capturing the details of literature. Hard copy will be scanned and will be converted in the required format. While selecting format care will be taken of its quick retrieval while searching.

**Existing and available digital literature has several angles:** Digitized literature appears in different file formats like .doc, .pdf, .jpg, .ppt. exl, and so on, some new formats may appear in future. All these kinds of traced digital documents will have to be an identical.

**Maintain & updates for data security:** Data security and updating is a continuous process. Strong measures like regular backups, debugging, indexing, mirroring needs to be observed as a security measures. This will be done under experts advice.

**Create web based OPAC:** Now a days several advanced software are appearing for designing for the web page in converting the database for retrieval purpose. Quick search is possible through OPAC. This OPAC will have its link on the web site of the university.

Work of IR will not stop here it gets a feedback and comments of the users through the link created on the web site which will be used for self evaluation and updating. This will be a long life ongoing process.

#### 7. Conclusions

Three important categories of literature are under consideration for Institutional Repository of Swami Ramanand Teerth Marathwada University. These are

- 1. Sikh religious literature.
- 2. Hyderabad Liberation Struggle literature

3. Scholarly work related to the subjects taught in the university and affiliated colleges produced by university concerned.

Above entire literature is again divided into two section that is consolidation of current literature and consolidation of past literature. Past literature will be compiled on the basis of trusted internal and external sources. For scholarly prospective work a suitable framework will be developed and some motivational activities will be carried out. Contributing members will be honored time to time. Strong filteration will be developed using information technology for avoiding duplicate entries. Latest hardware, software and networking resources will be utilized under the supervision of experts in the filed. Bibliographical databases will be structured on standardized protocols. Entire repository will be kept open for free access.

#### References

- Ahmed, Fayaz and Rather, Rafiq. Open Access Digital Repositories: An Indoan Scenario. KnowGenesis Intenational Journal for Technical Communication (IJTC). Vol 2 No.2, March 2007
- 2. www.arl.org/sparc
- 3. Berin, Andrew (2002) "Unbundled journals: trying to predict the future." Learned Publishing 15 (2): 109-112.
- 4. Crane, Gregory (2001) "Commercial Digital Libraries and the Academic Community." D-Lib Magazine 7 (1).
- 5. Teper, Thomas H., and Beth Kraemer (2002) "Long-term Retention of Electronic Theses and Dissertations." College and Research Libraries 63 (1): 61-72.
- 6. Sharma P.L. Institutional Repositories: An Essential tool for Information and knowledge Sharing
- 7. Anuradha, K.T. Design and Development of Institutional Repositories: A case study, The International Information & Library Review (2005) 37, 169-178.
- 8. Corrado, Edward M., The Importance of Open Access, Open Source, and Open Standards for Libraries, Science and Technology Librarianship Spring 2005

#### **About Authors**

Mr. S P Satarkar, Librarian, S. R. T. M. University, Vishnupuri, Nanded 431 606.

Mr. R G Dharmapurikar, Information Scientist, S. R. T. M. University, Nanded 431 606

Mr. R D Kale, Senior Library Assistant, S. R. T. M. University, Vishnupuri, Nanded 431606