

Fundamental Concept of Institutional Repositories

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Abstract

Purpose: The paper examines the concept of institutional repository and opens access repositories that explore how institutional repositories can integrate value-added services to support the scholarly communication and digital research. **Design/Methodology/Approach:** Here, we have studied some points of Directory of Open Access Repositories (Open DOAR) as well as understand the meaning of institutional repositories and why it is the hot topic for every institution.

Keywords: Institutional Repositories (IR), evaluation, open access repositories

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INTRODUCTION

Information and Communications Technology (ICT) continues to transform the scholarly environment and management of higher education institutions. For example, ICTs are core resources required for institutional repositories because ICT has created platforms and opportunities for scholars to work collaboratively through extensive infrastructures with access to resources and knowledge services in borderless environments. The rapid growth of digital assets creates challenges in the use, management, and archiving all types of digital information shows the importance of Institutional Repositories; and the Massachusetts Institute of Technology (MIT) announced a research project titled DSpace "to build a stable and sustainable long-term digital storage repository that provides an opportunity to explore issues surrounding access control, rights, management, versioning, retrieval, community feedback, and flexible publishing capabilities" that begun in parallel with the Open Access Initiative [1] (Cullen & Chawner, 2011), the growth of institutional repositories has become ceaseless as is evident from sources like Open DOAR (<http://www.opendoar.org/>) [2] and Open ROAR (<http://roar.eprints.org/>) [3]. Institutional repositories have been successfully introduced and now institutional repositories have become a platform for researchers and other academicians worldwide. They have helped the researchers to break the

chains of time and space and on another hand presently we have 3286 repositories worldwide.

INSTITUTIONAL REPOSITORIES

In a very simple way, we can say that an institutional repository is a digital archive of the intellectual product created by the faculties, research scholars and students of an institution and accessible to end users both within and outside of the institution with few if any barriers to access. Whereas some information scientists as Lynch, defined IR viz. "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 [4]. 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".

Johnson defines an IR simply, as "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" [5]. All repositories hold a similar mission to disseminate the research output of the scholarly community. The success of a repository depends on the quality of its content and service it provides. So, it is important that various features like acquisition,

access of various materials and associated policies and various issues are needed to be evaluated.

Features of Institutional Repository

There are some features of institutional repository which give credibility to the researcher. The Scholarly Publishing and Academic Resources Coalition (SPARC) position paper illustrated that [6]:

- **Interoperability**

Interoperability means that system works properly in different formats also; and the Open Archives Initiative (OAI) designed a shared code for metadata tags (e.g., 'date', 'author', 'title', 'journal' etc.). So full-text documents may be in different formats and locations, but if they use the same metadata tags, they become interoperable. It means that their metadata can be harvested and all the documents can then be jointly searched and retrieved as if they were in one global collection, accessible to everyone (Open Archives Initiative 2002)

- **Institutionally Defined Showcase**

It is an institutional property, so it captures only intellectual things of the institute, therefore, we can say that it is shining showcase of institute.

- **Focused on Academic Content**

IR keeps may be purely scholarly or may comprise administrative, teaching, and research materials, both published and unpublished, of the host institute.

- **Cumulative and Perpetual**

Once items are submitted, they should not be withdrawn. This carries a long term obligation on the host institution to preserve IR content.

Present Status of IR World Wide

The chart in Figure 1 is based on the number of repositories in each continent.

According to the chart in Figure 2, at present, there are 3288 repositories in the world by 2774 organizations. However, some organizations have two or more repositories, over 20 in some cases, and this arguably skews the results.

And this data has kept from Open DOAR (<http://www.opendoar.org/index.html>).

OpenDOAR maintained by the Securing Hybrid Environment for Research Preservation and Access (SHERPA) project of University of Nottingham, lists the open access repositories around the world. OpenDOAR takes initiatives to harvest and assign metadata to the contents of the registered repositories and to allow categorization and analysis to assist the wider use and exploitation of repositories.

Most Prominent Software of IR

Here it is very clear that DSpace is the most acceptable software world web. It has 44.2% organizations are accepted by worldwide, on other hand, E-Print, Digital Commons etc. are also doing well (Figure 3).

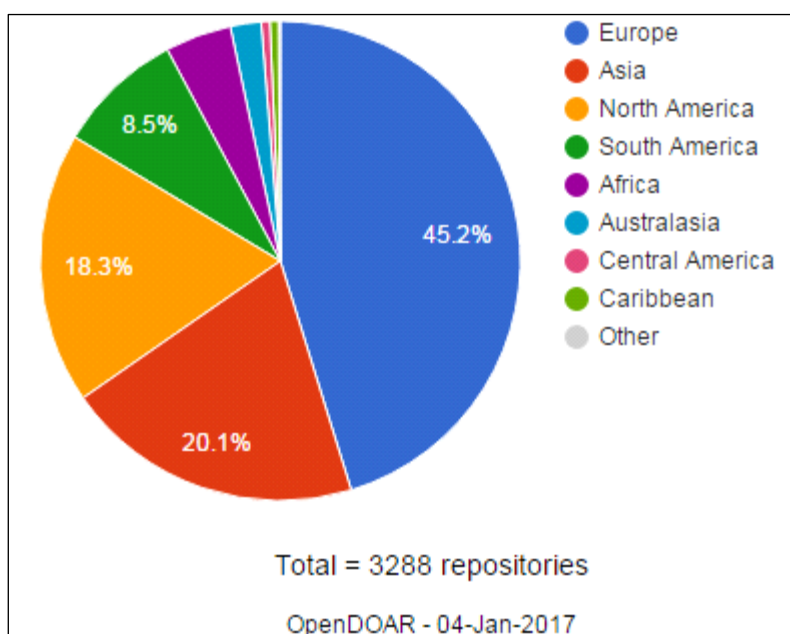


Fig. 1: Proportion of Repositories by Continent, Worldwide.

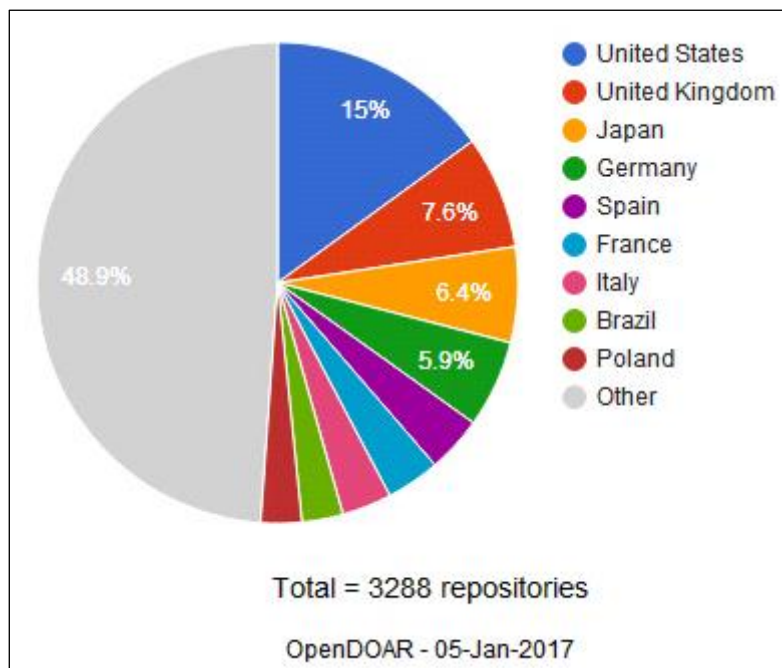


Fig. 2: Proportion of Repositories by Country, Worldwide.

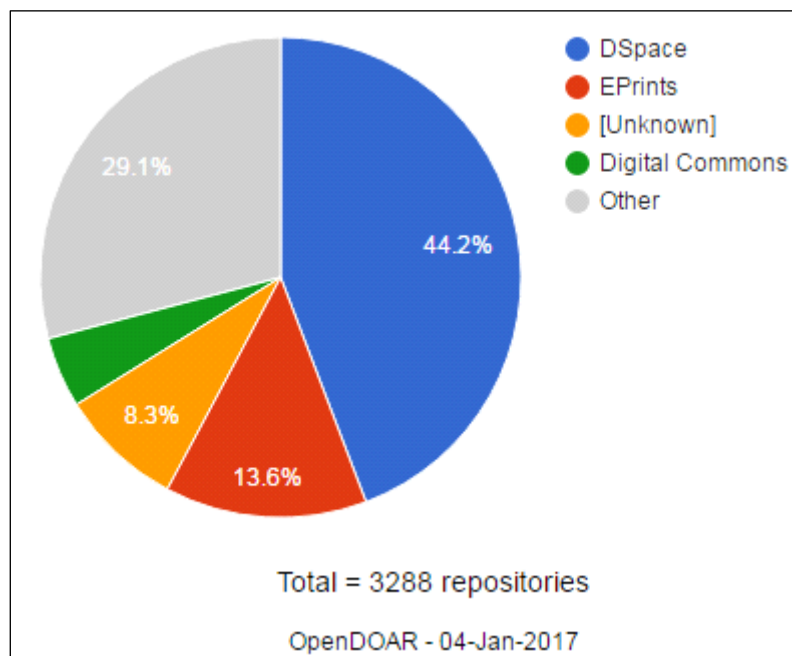


Fig. 3: Usage of Open Access Repository Software, Worldwide.

Who Uses Institutional Repositories?

An institutional repository is the property of host organization and anyone with intranet/internet access can find themselves arriving at an article or dataset in a university or research institutions repository via a web search; intranet for inside user and the internet for the global user. An outsider can access repository with username and password [7].

Some examples of Indian repositories with their URLs are shown in Table 1.

IR BENEFITS AND CONCLUSION

Institutional repositories involve the management of digital assets through a large part of the information lifecycle, particularly regarding (1) digital collection building, (2) access to digital collections, (3) use of IR

Table 1: Some Examples of Indian Repositories with URLs.

Name	Host Institution	URL	Soft. Used
Eprints@IISc	Indian Institute of Science, (IISc) Bangalore	http://eprints.iisc.ernet.in/	EPrints
Dspace@IIMK	Indian Institute of Management, Kozhikode (IIMK)	http://dspace.iimk.ac.in/	EPrints
Dspace@IIA	Indian Institute of Astrophysics (IIA)	http://prints.iiap.res.in/	DSpace
Dspace@NITR	National Institute of Technology, Rourkela (IITR)	http://dspace.nitrkl.ac.in/dspace/	DSpace
ETD@IISc	Indian Institute of Science (IISc)	http://etd.ncsi.iisc.ernet.in/	DSpace
Dspace@INFLIBNET	INFLIBNET	http://dspace.inflibnet.ac.in	DSpace
Librarian's Digital Library (LDL)	Docum. Res. & Training Centre (DRTC)	https://drtc.isibang.ac.in/	DSpace
NAL Institutional Repository	Nat. Aerospace Laboratories (NAL)	http://nal-ir.nal.res.in/	Eprints
EPrints at NCL	Nat. Chemical Laboratory (NCL)	http://dspace.ncl.res.in/	DSpace
Digital Repository Service of NIO	National Institute of Oceanography (NIO)	http://drs.nio.org/drs/	DSpace

materials, and (4) long-term preservation. Our findings indicate that IR policies and practices for digital curation in terms of collection and access. Although we have already examined the benefits of IR from Open Doar, it informed us that from worldwide level, 3288 repositories have been developed by 2774 organizations and highly the accepted software of IR is DSpace, then E-print and then Digital Commons. So throughout this discussion we analyzed that in future, latest technology adopted by IR that would be made more attractive and more interoperable etc.

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