# Development of Institutional Repositories, a Mechanism for Sharing Information Resources

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**Abstract.** Information resources in libraries as the most significant scientific resources are shared by universities. Development of information networks has immensely changed recently. Libraries are used as new model of open access to resources. Institutional repositories as well as new methods for archiving, recording, keeping managing and sharing produced by people who work for institutions. Therefore they are closely connected to the activities related to open archives and institutional repositories. This paper is about the necessity of institutional repositories sharing university resources; therefore if development is to be achieved in institutional repositories, a long term cooperation needs to be established between universities, data centers and academic libraries.

**Keywords:** Institutional Repositories (IRs), Academic Libraries, Resource Sharing, Information Economy, Information Resources Management.

#### 1. Introduction

The volume of available information in libraries has multiplied in a very short time. Adding the interconnected to this amount of electronic information makes the organization of the information even more difficult. In such a case no academic library can provide all the resources. Even providing a very small percentage of this value is not possible for many libraries; such an increase in information resources has not only made their accessibility easier, but has also exponentially increased the expenditure of scientific resources.

The increasing price of scientific resources has already been discussed as a basic problem in academic library at the new century and has been noticed as the crisis of scientific journals in researches[1]. The mentioned crisis has dramatically affected the budgets of preparing scientific resources. So that according to the Association of Research Libraries in America (ARL), American academic libraries have increased thier costs of purchasing information resources between 1986 and 2008 (ARL, 2011). The present paper has tried to give a practical solution by examining academic libraries' response worldwide, especially in areas of resource sharing and setting up institutional repositories at universities.

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### 2. Mutual costs of universities

Most of the papers presented in scientific publications are results of researches in universities. In other words, universities are paying a significant amount of initial cost which is necessary to prepare scientific papers [2]. Universities are the main producers of scientific articles and they are the main buyers as well. Annually, millions of dollars are paid to publishers for sharing scientific journals. Therefore libraries have been formed in different regions of the world academically in order to share consortiums. These consortiums have disrupted ex orders of scientific publications' worldwide and have created a new order. But we should claim that although the consortiums could be economically advantageous for academic libraries, however they could not solve all the problems of open accesses. Recession in providing information resources has motivated academic libraries, which were most dramatically influenced by monopolistic policies of publishers, to eradicate the financial crisis of the academic libraries [3].

## 3. Resource Sharing Development in the Electronic Environment

Many research centers have given special attention to publishing "Open Access" (OA) models for publishing scientific resources in different areas and also to manage resources provided in recent years. Open access can be considered as a new model for sharing academic libraries. The main goals of expanding open access are:

-rapid spread of scientific researches' result;

-to increase the impact of researches;

-to increase available resources by other academic libraries;

-to make access easier to the required resources;

Open access is rapidly spreading among the universities, so that open access journals (OAJ) are also published by universities. Open access can be considered as an access to the information resources in an electronic environment through the internet without any restrictions, so that these resources can be used by everyone freely, worldwide with their full texts available [4].

## 4. Institutional Repositories

Among the types of open archives, institutional repositories have been more popular, because the goal of institutional repositories is giving greater amount of scientific information to a higher number of researches as quick as possible. Institutional repository is a new approach for archiving publications for those who work at the same place. On this basis it can be claimed that institutional repository is one of the most common methods for storing, archiving, managing and sharing information resources. These repositories are important in two ways:

-expanding access areas of information resources;

-determining the main state of institutions of scientific researches [5].

These repositories can also be a place for electronic information resources [6]. In other words institutional repositories can be defined as:

"An archive for storing and organizing a collection of the mental products of one or several universities which can be openly accessed" [7].

## 5. The University's Role in Developing Repositories

Universitiesenable researchers to put their own scientific work in these repositories. The universities concern in institutional repositories is more focused on maintaining their own repositories. Holding Documents provided by researchers and authors related to these universities should be freely available to the other people who are outside of the organization. With the help of institutional repositories of universities, steps towards a policy of resource sharing are being taken. Because organizations take responsibility for maintaining the resources in the archives for as long as possible [8, 9].

Besides taking steps toward an information economy policy; universities can also manage the information resources, because these resources have been guaranteed for the researches by the organizations.

Therefore, to achieve an appropriate management, following a specific policy from their research institutions is also important [10].

#### 6. Librarians' Role

Academic libraries are best sponsors of institutional repositories and open access. Librarians have the main role in designing, setting up and supporting these repositories [11]. In these repositories new communication equipment widely affects the methods of information access and management. Library management should act promptly in connection with these changes. For the proper management of academic libraries all components should be clearly identified. The University of Melbourne Eprint Repository (UMER) contacts the authors through continuous meetings at the university departments [12].

Generally these resources can be found in 5 groups: *Identification*, *initiating*, *management*, *results* and *librarians' role*[13].

Roles of librarians in institutional repositories are defined as follows:

- -familiarity with repository software;
- -design, control and management of repositories;
- -familiarity with collections;
- -describing metadata standards, in order to coordinate resource
- -research on metadata that can provide resources with appropriate quality;
  - -create appropriate conditions for permanent use of authors of repositories (Ibid: 333-334).

In fixing troubles, librarians and university managers are taking high responsibility. Faculty members may have shown different responses in this area.

## 7. Summary

First the idea of open access model and related repositories was proposed as a mechanism to deal with the rising cost of information resources. But gradually changed as one of the most essential issues of academic libraries to manage, organize and share of non-commercial information resources.

Among the types of repositories, institutional repositories are appropriate models for maintaining electronic information resources of a university. It seems many academic libraries in Iran, have enough potential for setting up such repositories. While most of the software related to set up institutional repositories can be obtained freely and most academic libraries which have a long history in this area easily give their experiences to academic libraries worldwide. Currently we can certainly consider development of institutional repositories in Iranian academic libraries is the fundamental approach for organizing information resources.

Archiving, organizing, maintaining and servicing have become one of the most important functions of information centers especially in academic libraries. However many universities have been established in different parts of Iran. But many areas need technological infrastructure for the use of electronic information. Also the need to expand management models of academic libraries is one of the most essential matters. Otherwise limited access to information resources will be awaiting researchers.

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