

Essentials of Institutional Digital Repository in Academic Library: A Case Study

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Abstract - Present research covers a systematic study of Institutional Digital Repository in Jadavpur University. This study has shown that the large number of people needs a global awareness and understanding of institutional digital repository and different aspects associated with it, such as, software, sources for user's awareness, motivators for developing a repository, demand of the users in changing paradigm from traditional to digital environment, etc. In the present days, libraries are also adopting the latest technologies to provide best possible services in user friendly form. This paper also describes the potential role of institutional repositories and its easiness and simplicity of use are attracting more patrons to the use of institutional repositories. Only a wide range of user awareness is needed to proper usage of its beauty. Eventually, it is recommended that the library authority should continue to organise seminars, workshops and user awareness programme to educate potential users on the relevance of Institutional Digital Repository to the academic community.

Keywords: Institutional Digital Repositories, Open Access, User Awareness

I. INTRODUCTION

An Institutional repositories (IR) is 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 e-prints, technical reports, theses and dissertations, data sets, and teaching materials. Stewardship of such materials entails their organization in a cumulative, openly accessible database and a commitment to long-term preservation when appropriate. Some IRs are also used as electronic presses to publish e-journals and e-books. An institutional repository is distinguished from a subject-based repository by its institutionally defined scope. IRs is

part of a growing effort to reform scholarly communication and break the monopoly of journal publishers by reasserting institutional control over the results of scholarship. An IR may also serve as an indicator of the scope and extent of the university's research activities (Reitz, 2004). Permanence, Policy of granting agencies and publishers, Timeliness, Registration are the reasons for using a digital repository. The most popular IR software platforms are DSpace, ePrints.org, Fedora. According to Wikipedia, the free encyclopaedia (2011) the four main objectives for having an institutional repository in an institution are given below:

- 1) To provide open access to institutional research output by self-archiving it;
- 2) To create global visibility for an institution's scholarly research;
- 3) To collect content in a single location;
- 4) To store and preserve other institutional digital assets, including unpublished or otherwise easily lost ("grey") literature (e.g., theses or technical reports).

Jadavpur University is located in Kolkata and comprises two campuses - the main campus at Jadavpur and the new campus at Salt Lake. The main campus of Jadavpur University is adjacent to research institutes like the Indian Association for the Cultivation of Science, Indian Institute of Chemical Biology and the Central Glass and Ceramic Research Institute. The University Grants Commission has identified JU as one of the first five universities in the country with "Potential for Excellence" (Wikipedia, the free encyclopaedia, 2012). Electronic publishing, institutional repositories and other new technological innovation have changes in academic publishing. One effect has increased

accessibility of research output. The delivery technique for scientific publications has changed rapidly; the economic complications have not changed much. The open access movement was triggered by the journal crisis due to exorbitant price increase of the publications (Manjunatha, Thandava, 2001). The present study intended to facilitate a practical discussion of institutional repository in users' point of view and management issues amongst operational decision makers.

II. OBJECTIVES

The present study is undertaken to fulfil some objectives, by means of users' awareness towards Institutional Repository in Indian perspective are summarised here:

- a) To determine the awareness about Institutional Repository;
- b) To determine the awareness about Institutional Repository Software;
- c) To know the sources from where users are aware about Institutional Repository;
- d) To assess the academic publishing in Institutional Repository;
- e) To know different types of Institutional Repositories;
- f) To know the motivators for developing Institutional Repository;
- g) To assess user's attitude towards Institutional Repositories.

III. REVIEW OF THE LITERATURE

Allen (2005) compared the attitudes and behaviours of academics from different disciplines towards depositing their work in institutional repositories. The study revealed that the number of humanities documents in institutional repositories is currently far lower than that in STM disciplines. Awareness of Open Access amongst humanities academics is also low. However they perceive many advantages to depositing their work in institutional repositories, especially for the reader, not for themselves. The experiences of Barwick (2007) highlighted some of the challenges involved in setting up an institutional repository. The work gives a direct insight into the different types of work involved in the setting up of an institutional repository and is an example of a system set up outside the boundaries of project funding. Another research findings show a steady increase in the usage of the repository for archiving and sharing digital resources, and an item-tagging scheme that suggests user preference of the resource

as a platform for enhancing professional rather than personal interests. User interactivity by way of textual scholarly discussions on the repository platform is however almost nonexistent (Asunka, Chae, Natriello, 2011). Erickson, Rutherford & Elliott (2008) have investigated ways to apply basic techniques to the problem of identifying and harvesting related materials from other, heterogeneous sources such as external blogs, wikis, and web sources, and combining them with methods for managing the publication and sharing of research artefacts within the individual's scholarly network. Manjunatha and Thandavamoorthy (2011) identified that the humanities and social science researchers are found to have a low level awareness of the institutional repository but are interested in contributing their research work to the University Institutional Repository and have a positive attitude towards providing free access to scholarly research results of their University. Therefore, there is a scope to study the users' awareness of institutional repositories to measure local scenarios.

IV. SCOPE FOR THE STUDY

The present study covers users study in Jadavpur University main campus only. JU is a premier educational and research institute in India. It is located at Jadavpur in Kolkata, West Bengal. Jadavpur University has been accorded the highest grading and rated as a "Five Star University" in India by the National Assessment and Accreditation Council (NAAC). Jadavpur University Library was started along with the establishment of the University in 1955 in order to cater the academic and research needs of the faculty, research scholars, students, officers and non-teaching staff. Since then, the University Library has gone from strength to strength to live up to the expectations of its immediate clientele. It is one of the best-equipped libraries in the country.

V. METHODOLOGY

The survey method was employed to collect the required data. A detailed questionnaire was prepared for this purpose and in order to enhance the validity and reliability of the questionnaire, experts in the field of library science, psychology and statistics were consulted and were requested to review the questionnaire critically. Questionnaire was revised based on the suggestions. Total 200 questionnaires were distributed to collect the primary data. After all, total 170 filled in questionnaires were collected. Finally collected data were analysed, tabulated and presented in reasonable form.

VI. ANALYSIS OF DATA

A structured questionnaire were distributed among the selected group of 200 users out of which 50 users were Teacher, 50 users were Staff and 100 users were Students.

Total 170 questionnaires were received from the respondents. Among the filled in questionnaires 45 respondents were from teacher, 40 respondents were from staff and 85 respondents were from student's community including research scholar (Table I).

TABLE I DISTRIBUTION OF QUESTIONNAIRE

Particulars	Teacher	Staff	Student	Total
Number of questionnaire distributed	50	50	100	200
Number of questionnaire received	45	40	85	170

Faculty awareness about institutional repository was found so high, i.e. 93.33% of teachers correctly identified that the repository hosted by the Jadavpur University Library. Table II represents that the awareness of institutional

repository among the stakeholders of the university. It reveals that 93.33% of teachers, 62.50% of staff and 76.47% of students are aware about institutional repository in Jadavpur University.

TABLE II AWARENESS OF INSTITUTIONAL REPOSITORY

Awareness of IR	Teacher	Staff	Student
Yes	42 (93.33%)	25 (62.50%)	65 (76.47%)
No	0 (0%)	9 (22.50%)	15 (17.64%)
No Opinion	3 (6.67%)	6 (15.00%)	05 (5.89%)

On the other hand, some people, i.e. 22.50% staff and 17.64% students do not know what the institutional repository is. Rest of the people, like, 6.67% of teachers, 15.00% of staff and 5.89% of students under investigation were not given any opinion about institutional repository.

There are a number of open-source software packages available for running a institutional repository including DSpace, Eprints, Fedora and also proprietary software services, including Digital Commons, Simple, etc. Jadavpur University uses DSpace as institutional digital repository.

TABLE III AWARENESS OF INSTITUTIONAL REPOSITORY SOFTWARE

Awareness of IR software	Teacher	Staff	Student
Yes	44 (97.77%)	29 (72.60%)	70 (82.35%)
No	0 (00.00%)	8 (20.30%)	13 (15.29%)
No Opinion	1 (02.23%)	3 (07.10%)	02 (02.36%)

Table III shows the awareness of institutional repository software among the stakeholders of Jadavpur University. Result sketches that among the respondents, 97.77% teachers, 72.60% staff member and 82.35% of the students' are aware about institutional repository software. But, unfortunately

20.30% Staff and 15.29% Students are not aware about institutional repository software. Rest 2.23% Teachers 7.10% Staff and 2.36% students are not given their opinion about institutional repository software.

It is most important to know the source from where users' community are aware about the institutional repository and its usability. Table IV displays that the sources from where user's awareness about institutional repository are generated.

Maximum number of the teaching faculties (i.e. 31.11 %) said that they are known about institutional repository from their colleagues or friends. Side by side 21.17% of students responds said that they are headed this from their friends.

TABLE IV SOURCES FOR USER'S IR AWARENESS

Sources For User's IR Awareness	Teacher	Staff	Student
With Colleague/Friends	14 (31.11%)	10 (25.00%)	18 (21.17%)
From Teacher	11 (24.44%)	12 (30.00%)	32 (37.65%)
Through Library website	8 (17.77%)	8 (20.00%)	16 (18.84%)
From Bulletin Board	7 (15.56%)	6 (15.00%)	9 (10.58%)
Through Internet	5 (11.12%)	4 (10.00%)	10 (11.76%)

Table IV reveals that teachers are playing a great role to aware users about IR. Among the students 37.65% express that teachers aware them how to use IR. In the same way 30% staff also leaned from teaching faculty of the university. Library website is another source to learn about IR. Among the respondents, 17.77% of teachers, 20% of staff and 18.84% of students said that the library website is their sources for

IR awareness. Besides these, few people conveyed that their main sources for awareness about institutional repository are the library bulletin board or internet.

Consequently, Table V discloses one of the most important results, which is nothing but the reasons for developing an institutional digital repository.

TABLE V REASONS FOR DEVELOPING A REPOSITORY

Reasons for developing institutional repository	Teacher	Staff	Student
Response to administrative interest	3 (06.68%)	2 (05.00%)	7 (08.23%)
To provide open access to materials	8 (17.77%)	8 (20.00%)	16 (18.84%)
To preserve scholarly material on campus	14 (31.11%)	11 (27.50%)	25 (29.41%)
To participate in the scholarly communication process	6 (13.33%)	5 (12.50%)	9 (10.59%)
Response to requests from faculty	2 (04.44%)	4 (10.00%)	10 (11.76%)
To support the Archives	7 (15.55%)	7 (17.50%)	9 (10.59%)
To develop collaborative workspace/file sharing space	2 (04.44%)	2 (05.00%)	5 (05.88%)
To increase the visibility of the institution	3 (06.68%)	1 (02.50%)	4 (04.70%)

Above table reveals that according to 6.68% teaching faculties, 5% staff and 8.23% students' respondents, the main reason for developing an institutional digital repository is only administrative interest. On the other hand, 17.77% teaching faculties, 20% staff and 18.84% students said that the reason is to provide open access to materials. But, highest number, i.e. 31.11% of teaching faculties, 27.50% staff members and 29.41% of student's respondents' point of view the main reason is to preserve scholarly material on

campus. Side by side, 15.55% of teaching faculty, 17.50% staff and 10.59% students' point of view, the main reason for developing an institutional digital repository is to support the archives. To increase the visibility of the institution widely is another reason for developing an institutional digital repository said few people in this university (i.e. 6.68 % teaching faculties, 2.5% staff and 4.7% students). Therefore, the above mentioned points are the important reasons for developing an institutional digital repository.

TABLE VI USER'S FEEDBACK

User's feedback	Teacher	Staff	Student
Satisfied	40 (88.88%)	30 (75.00%)	67 (78.82%)
Not satisfied	2 (04.45%)	8 (20.00%)	14 (16.47%)
No Opinion	3 (06.67%)	2 (05.00%)	4 (04.71%)

Finally, Table VI represents user's feedback about institutional repository service in Jadavpur University. 88.88% teaching faculties, 75.00% staff and 78.82% students respondents are satisfied with the service provided by the Jadavpur University. But, 4.45% teaching faculties, 20.00% staff and 16.47% of students are not satisfied with this service provided by the university. Rest 6.67% teaching faculties, 5.00% staff and 4.71% students are not given their opinion whether they are satisfied or not.

VII. CONCLUSION

This research has approached multidimensional aspects of institutional digital repository. Result sketches that the Faculty awareness about institutional digital repository was found so high, but comparatively other user communities are not utilizing it properly. It is clear that the institutional repository is a very powerful idea that can serve as an engine of change for our institutions of higher education, and more broadly for the scholarly enterprises that they support. If properly developed, it advances a surprising number of goals, and addresses an impressive range of needs. Apex bodies for development of education, like UGC, AICTE have to take initiatives to build up institutional repositories at higher education level. LIS professionals have to play a major role in developing successful repositories for their institutions and thus permanently changing the landscape of scholarly communication. Present research study reveals that a large number of people in Jadavpur University to have awareness of the institutional repository, institutional repository software and reasons for developing an institutional repository. In the present era, IR system provides access to scholarly content at least possible time and even from remote places. Its easiness and simplicity of use are attracting more patrons to the use of institutional repositories. Eventually, it is recommended that the library authority should continue to organise seminars, workshops and user awareness programme to educate potential users on the relevance of Institutional Digital Repository to the academic community.

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