



IFLA International Newspaper Conference 2010

# Digital Preservation and Access to News and Views

## CONFERENCE PAPERS

IFLA International Newspaper Conference 2010



Editors  
Ramesh C. Gaur, Frederick Zarndt  
D. R. Gupta, Kavita Gaur



Indira Gandhi National Centre for the Arts, New Delhi  
IFLA Newspaper Section



IFLA International Newspaper Conference 2010

**Digital Preservation and Access to  
News and Views**

CONFERENCE PAPERS

(25<sup>th</sup> – 28<sup>th</sup> February, 2010)

**Editors**

Ramesh C. Gaur

Frederick Zarndt

D. R. Gupta

Kavita Gaur



Indira Gandhi National Centre for the Arts, New Delhi



IFLA Newspaper Section

# ARCHIVING NEWS IN A UNIVERSITY USING OPEN SOURCE SOFTWARE

Surendran Cherukodan

and

Dr. Sheeja N.K.

## ABSTRACT

*Newspapers cover a large amount of information everyday on topics of varied interests. To a university, newspapers are essential components of communication as they cover various happenings in a university. These items of information are neither stored properly nor put in retrieval systems for future use. The news and views appeared in newspapers can effectively be organized in a digital library making use of open source software. The CUSAT digital library (<http://dspace.cusat.ac.in/dspace/>) has organized some news items that appeared in local newspapers about the university under a special community named "CUSAT-News". This article describes the methods of collecting, selecting, organizing, providing access and preserving news items required by a university using DSpace open source software.*

**Keywords:** News archiving, Digital libraries, Open source, free software, DSpace

## INTRODUCTION

Newspapers occupy an important place among various information sources in a library. They satisfy the requirement for information on recent events occurred at local, regional, national and international levels. They popularize understanding and awareness on numerous issues. They are at the reach of majority of population in any society. They take the multiple roles of informing, investigating, interrogating, trend setting, leading and recording social life. Hence, providing access to news and views is fundamental to libraries and information centres.

To a university community, newspapers are essential source of information on topics ranging from general knowledge to research specific news. They report the activities occurred in the campus. They give announcement of events, achievements and issues important to the university community one way or the other. They also publish views of experts on issues relevant to the academic community. They publish articles on several topics containing valuable information. Using newspapers is an important part of information gathering process of students, faculty and staff of any university. But apart from subscribing to a number of newspapers and providing access to the current and old newspapers, many university libraries are not doing the work of indexing newspapers, keeping them as clippings, preserving them on microfilming, or

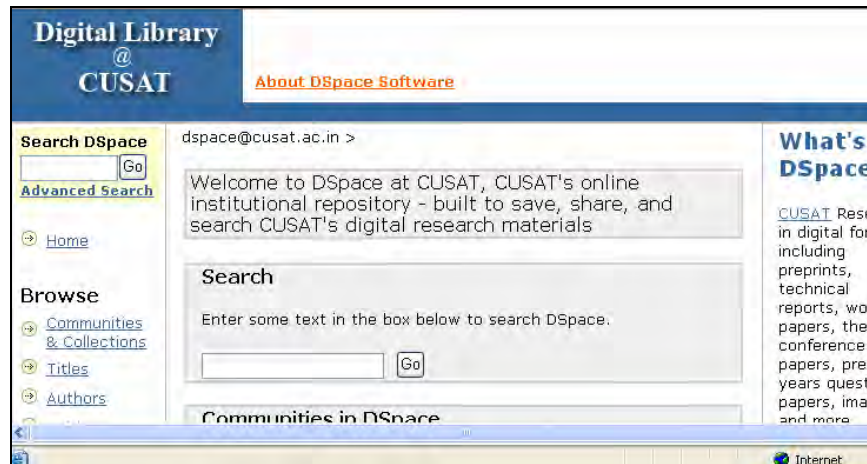
digitizing them for keeping online. As a result, the items of information available in various print media are lost for future use. The management of news items appeared in print media is an important task for university libraries. This paper attempts to share knowledge on the strategies and techniques of managing news items in Cochin University of Science and Technology by using DSpace open source software.

## **REVIEW OF LITERATURE**

Ojo-Igbinoba<sup>1</sup> conducted a study in 1988 that covered 19 out of 28 university libraries in Nigeria to find out the method of managing newspapers in these libraries. The study revealed that newspapers, for the most part, are not classified and therefore have not been fully integrated into the service provisions of university libraries. It was also noticed that newspapers in university libraries have not been exploited to their full potential. The author suggested that in order that newspapers may continue to fulfill their worthwhile roles in making knowledge more popular and more accessible; in fulfilling research needs and in contributing to the community intelligence, scientific, legal and historical study, the library's newspaper collection should be organized for maximum effectiveness because newspapers are documents of history. For a start each library should have a newspaper committee which would formulate a suitable policy on the place of newspaper collections in libraries.

## **COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY: A CASE STUDY**

Cochin University of Science and Technology (CUSAT)<sup>2</sup>, Kerala is one among the top universities in India. CUSAT is academically organized into 9 faculties; Engineering, Environmental Studies, Humanities, Law, Marine Sciences, Medical Sciences and Technology, Science, Social Science and Technology. CUSAT has 29 departments of study and research offering Graduate and Post Graduate programmes across a wide spectrum of disciplines. As per the study by Gangan Prathap and Gupta<sup>3</sup> for ranking of research performance of 67 Indian engineering and technological institutes during 1999-2008 using data from SCOPUS database, CUSAT bagged the 10th Rank with 1625 research papers published during the period. Among the universities, CUSAT has come up third on the list. Among the wide variety of innovative academic practices, Free/ Open Source Software (F/OSS) implementation is a priority area in CUSAT. CUSAT is running a digital library service using DSpace<sup>4</sup> open source software. Giving access to news items relevant to CUSAT community is an important area in the digital library framework. Figure 1 shows the screenshot of CUSAT Digital Library Home page

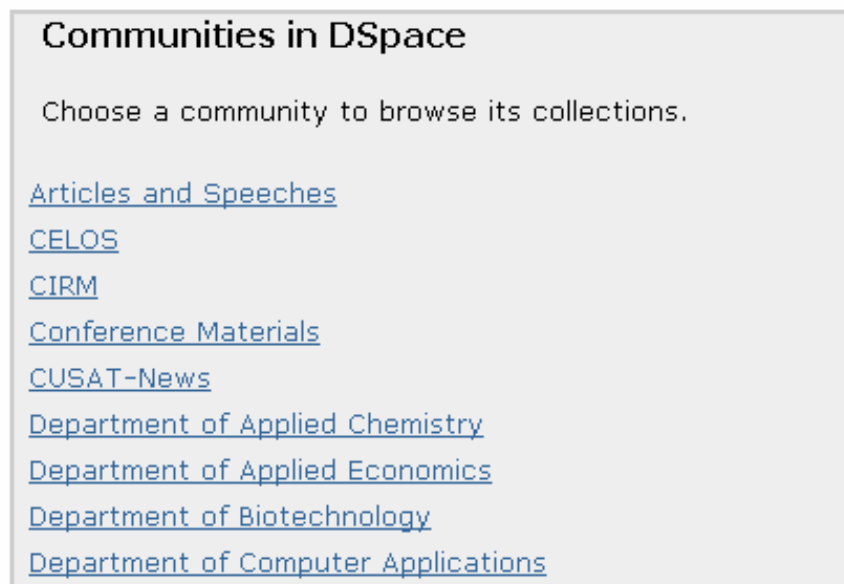


**Figure 1:** CUSAT Digital Library Home Page

## ABOUT DSPACE

DSpace is the most widely used open source software for building institutional repositories/ digital libraries across the world by universities and research institutions for managing digital and digitized research materials. Developed by MIT Libraries and Hp Labs in 2002, DSpace has also been applied for subject based repositories, dataset repositories and media based repositories. DSpace accepts all manner of digital formats that include documents, books, theses, data sets, computer programmes, multimedia publications, administrative records, published books, overlay journals, bibliographic datasets, images, audio files, video files, reformatted digital library collections, learning objects and web pages. The DSpace software can be freely downloaded from the sourceforge<sup>5</sup> open source software repository. The code is currently licensed under the BSD open source license. Any organization has the freedom to fully customize the look and feel of DSpace.

The structure of DSpace is composed of Communities, Sub Communities, Collections and Items. A community is the highest level of the DSpace content hierarchy. They correspond to an organization's departments or schools. In a University, various teaching departments form a community as shown in Figure 2. A department may have several components: faculty, library, lab, special centres, projects etc. This can be matched to the concept of Sub Communities. A sub community may have its own sub communities for example; a library may have different sections as sub communities. Collection denotes the particular group of documents in a community/sub community. Eg. The set of articles written by a teacher in a sub community of faculty constitute a collection. Items denote individual articles/ files in a collection.



**Figure 2:** Communities in DSpace

### NEWS IN DSPACE

CUSAT has organised in DSpace some news items appeared in print media that cover issues related to the University. It is available in a Community called “CUSAT-News”. This is made possible by selecting the item from the print media, scanning the item as a pdf file, assigning some key words, and uploading the item to the community. Figure 3 shows the news items in CUSAT Digital Library. If we click on one entry, it further displays the title, author, key words, the date of uploading, abstract given, collection name, etc. The figure 4 shows the description of one news item.

Issue Date	Title	Author (s)
2-May-2009	<a href="#">CUSAT developing project to protect State's coastline</a>	Media
2-May-2009	<a href="#">Honour for Madhusoodana Kurup</a>	Media
5-May-2009	<a href="#">Jagdish Arora at CUSAT</a>	Media
7-May-2009	<a href="#">Lalu Prasad Yadav at CUSAT</a>	Media
21-May-2009	<a href="#">National Conference on Copyright Law</a>	Media
1-Apr-2009	<a href="#">News on CUSAT Budget 2009-2010</a>	Media
3-Apr-2009	<a href="#">News on CUSAT Budget 2009-2010 Mathrubhumi Daily</a>	Media
3-Apr-2009	<a href="#">News on CUSAT Budget 2009-2010 The Hindu Daily</a>	Media
5-May-2009	<a href="#">Resul Pookutty at CUSAT</a>	Media

**Figure 3:** News items in CUSAT Digital Library

**Title:** CUSAT developing project to protect State's coastline

**Authors:** Media

**Keywords:** Coastal zone management  
Rubberised Coir  
sea erosion  
Joy Job Kulavelil

**Issue Date:** 2-May-2009

**Abstract:** News item appeared in the Hindu Daily on 30-4-2009

**URI:** <http://hdl.handle.net/123456789/2440>

**Appears in Collections:** [News](#)

**Files in This Item:**

File	Description	Size	Format
<a href="#">CUSAT developing project to protect State's coastline.pdf</a>		50 kB	Adobe PDF

[View/Open](#)

**Figure 4:** Description of one news item in DSpace

For viewing the full text there is option for **view/open**. When clicking on it, the scanned news content is opened as a pdf file. The figures 5 and 6 show the display of actual news content in DSpace. The name of the newspaper and date is written on the news item before scanning so that those who save and print it need not trace this information in the abstract section. The clarity of the news item in pdf depends on the quality of the original. The performance of the scanner is also a factor for image quality. However, it is better to keep the actual physical features of the original as far as possible.

address: <http://dspace.cusat.ac.in/dspace/bitstream/123456789/2440/1/CUSAT%20developing%20project%20to%20protect%20State's%20coastline.pdf>

Save a Copy Print Email Search Review & Comment Sign

Select Text 100%

**Cusat developing project to protect State's coastline**  
THE HINDU 30-4-2009

G. Krishnakumar

**KOCHI:** Cochin University of Science and Technology is developing an ambitious plan to save the ecologically-sensitive coastal belt by involving the traditional coir and rubber farmers in the State.

The objective of the project is to evolve a multi-disciplinary coastal zone management by incorporating hard and soft measures. The project will be used to provide a geo-textile protection to the coastal region. According to the project, rubberised coir will be used to check sea erosion.

**Farmers to benefit from demand for coir and rubber**

the ailing coir and rubber sectors in the State. Dr. Kulavelil said that the university scientific team, led by its Registrar N. Chandramohanakumar, has suggested that the rubber and coir farmers will get support, as the project requires several tonnes of coir and rubber during its implementation. It will also promote the plantation of rubber and coconut trees in the State, he

**Figure 5:** News in PDF file in DSpace

## MANAGING NEWS IN DSPACE IN A UNIVERSITY

DSpace structure maintains a decentralized pattern for knowledge organization. The organizational structure of a university can be easily mapped in DSpace.

Here each community can build data relevant to them. The first task of archiving news in DSpace is the creation of a Sub Community named “News and Views” in each Community. Within this Sub Community, we can create “Collection” with suitable name. In each collection we can store individual news items. The responsibility of collecting/identifying required news and views from newspapers can be assigned to a staff member in each Community. The process of scanning the item, saving it in pdf, the work of uploading the item to Community collection, providing abstract, giving keywords and keeping file backups can be done either by a central agency or by the respective Community.



Figure 6: News Item in local language in DSpace

For systematic course of collecting and storing news in a university, there need to be a policy for the work. The information appeared in newspapers may lack authority, clarity and relevance. Some news items may be critical and controversial. Archiving of these items may not be recommended by the authority. These issues can be solved only through a sound institutional policy for news archiving.

### BENEFITS OF USING DSPACE FOR NEWS ARCHIVING

News and views appeared in print media may not be read by many users as the newspaper editions are region specific. The news items being preserved in DSpace can be viewed and used online by all. It shall enhance access to news and views. Getting top search result in Google is another advantage of DSpace. The Figure 7 shows the screenshot of Google results when searching “news at CUSAT”.

[DSpace at Cochin University: News And Views](#)

**News And Views.** Community home page. In: All of DSpace, **News And Views**, Important Events.

Search for, or browse. Collections in this community...

[dspace.cusat.ac.in/dspace/handle/123456789/2073](http://dspace.cusat.ac.in/dspace/handle/123456789/2073) - [Cached](#)

Figure 7: Google result for searching “news at CUSAT”



The retrieval of pertinent items from large number of files can be managed by assigning relevant keywords to each file. The archiving of news shall help the process of teaching, learning and research in a university. If the archive can be accessed online, the educational and informative contents can be used by the wide public. Since DSpace is having a large community of developers and users the world over, the institution shall get support in matters of using and developing DSpace platform for news archiving.

### **CHALLENGES OF NEWS ARCHIVING**

The successful archiving of news in a university by using DSpace open source software requires the continuous effort from the faculty and library professionals in monitoring and capturing news and views by their respective community. They must also be alert in indexing, abstracting and converting the documents in the bit stream accepted by Dspace software. Technical challenges include the support of the university in procuring required hardware, customisation, server maintenance, effective mechanism for back-up and coordination of document management in the system.

### **CONCLUSION**

The process of archiving news and views is an essential activity in a university. It shall improve the way people use news and views. It shall help the university to store the required news items in an organized, secure, and searchable archive and preserve it for long time. The use of open source software platform for news archiving helps to save software cost. The support of experts in the field is also available through email forum. The practice of using DSpace open source software for news archiving is a simple, cost effective and reliable method for all types of institutions.

### **ACKNOWLEDGEMENT**

The authors acknowledge the help and support of G.Santhosh Kumar, Lecturer, Department of Computer Science, CUSAT and CUSAT Digital Library administrator who is currently the south Indian Ambassador of DSpace.

### **REFERENCE**

1. Ojo-Igbinoba, M.E The Role and Management of newspapers in Nigerian libraries, *International Library Review* (1991) 23, 83-90
2. <http://www.cusat.ac.in>
3. Prathap, Gangan, and Gupta, B.M “Ranking of Indian engineering and technological institutes for their research performance during 1999-2008”, *Current Science* Vol.97 No.3 10 Aug 2009. pp 304-306.
4. <http://www.dspace.org/>
5. <http://sourceforge.net>