LIBRARY AUTOMATION BY USING NEWGENLIB SOFTWARE: A CASE STUDY OF OSMANIA UNIVERSITY LIBRARY

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ABSTRACT

In this paper it explains about Library Automation process at Osmania University Library and steps involved. NewGenLib software is used for automating its function and activities. Presently University Library providing its services through automated way. It also explains about the important features of NewGenLib software which is very essential for a big library. Users are utilizing its services through WebOPAC from all the corners. While automating library collection Osmania University Library taken care of all the standards which are very essential in importing and exporting data.

Keywords: Library Automation, Software Selection, NewGenLib Library Software

UNIVERSITY LIBRARY

The University library system consists of a Main Library and College / Department/Seminar Libraries. The University Library coordinates the library system, which links the libraries in all the campus and constituent college libraries

The main library was established in 1918 along with the University. The Library was shifted to the present building, which was inaugurated by Dr.S.Radhakrishnan, the then President of India on 3rd August 1963. The main library building departs from the traditional use of the Indo-Saracenic arch, but it seeks unity with the older buildings of the campus through the dominant pillars of the entrance portal. It stands majestically inviolable on the highest point of the campus, commanding a panoramic view of the unusually beautiful Deccan landscape. The new building has a floor area of 62,000 sq. ft. It is a fitting symbol of the present decade of progress. The Library is divided into a number of Sections basing on the collection and services offered. They are Text Book Section, Periodical Section, Reference Section, Acquisition & Cataloguing Sections. Additionally, it has Vision of Osmania, Manuscript Section, Theses Section, CERL Section & U.N. Section, which are highlighted.

WORKING HOURS

The library is kept open throughout the year except for six days (three national and three festival holidays). It is kept open from 9.00 a.m. to 9.00 p.m. on all working days, 9.00 a.m. to 11.00 p.m. during examinations and 10.00 a.m. to 4.30 p.m. on holidays.

1) Ordering, 2) Technical, 3) Stacks, 4) Text Books, 5) Lending, 6) Reference 7) Periodicals, 8) Computer/Internet Cell, 9) UN Depository, 10) Theses & Dissertations, 11) Government Documents, 12) Competitive Examinations Reference Library (CERL), 13) Manuscript, 14) Vision of Osmania, 15) Digital Library of India (DLI)

SERVICES

1) Lending, 2) Inter Library Loan, 3) Photocopy facilities, 4) Reference Service,
5) CD-ROM Search, 6) Internet & E-mail facility, 7) Digital Documents on demand,
8) WebOPAC

Total Collection as on 31-3-2012

Sl. No.	Particulars	Total Collection
1.	Books	5,28,000
2.	Periodicals (Journals/Magazines/News Papers)	253
3.	Bound Volumes of Journals	35,082
4.	Theses and Dissertations	11,500
5.	UN Documents	11,900
6.	Manuscripts/Palm Leaves	6825
7.	Films	273
8.	CD-ROMs (Abstracting & Indexing services)	12
9.	E-Journals (Provided by UGC-Infonet)	7500+
10.	Digitized Documents	45,000

NEWGENLIB SOFTWARE

Introduction

We live in an increasingly globalized and interconnected world. Globalization is in a sense synonymous with networking. Computers, telecommunications infrastructure and the Internet are not only essential but also indispensable in the world we live in today.

It's a Knowledge driven world that we live. Today the world at large is wealthy by virtue of its knowledge wealth. Our country is a knowledge superpower. It's interesting to note that every state government is increasing its focus towards progressing with Knowledge as the driver for prosperity.

Student Benefits

- Students have wider access to resources.
- Access to information resources from remote locations especially the **rural areas**.
- Teaching materials may be put on the network and made accessible to all via the web.
- Resources outside of the libraries (e.g., free full text reference books) could be made accessible.

Teaching and the Faculty benefits

- Knowledge of and access to resources.
- They can make their teaching materials available to other teachers across the globe and also benefit from that of others who contribute their teaching resources.
- Downloaded information/learning resources become available

Administrative Benefits: To the Group

New types of materials, e.g., multimedia content may be prepared at the headquarters or at the institute level and made easily accessible across the network.

Brief on the Software Application

Some of the most important features of the software and its unique selling propositions

- Multilingual Support.
- Supports international standards such as MARC-21, AACR-2, UNICODE, XML and Dublin Core.
- As a result of its support to international standards, the software allows seamless import of metadata directly from freely available MARC-21 data sources on the web. This feature alone will save considerable costs of creating metadata records apart from ensuring better consistency, accuracy and completeness of records and the possibility of exchanging records between libraries.
- Uses n-Tier Architecture to ensure easy scalability when a library's needs require it to move into higher-end database and/or application server and web technologies over a period of time.
- Allows the attachment of digital objects such as full text in PDF or MS-Word, image files, sound, video clips, etc., to catalogue records. This will allow users of an institutions (e.g., students and faculty of a University and affiliated colleges to view not only the metadata but the full text of, monographs, serial articles, research reports, presentations, pamphlets, audio recordings, video tapes, contents pages of books, etc., online). In other words, the library can participate more effectively in the activities (teaching, research) of the Institution by providing access to such materials in an online manner.
- The online public access catalogue (OPAC) module is an integral part of the software offering.
- The software has recently added functionality to use the Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH). This will enable a library to build its own archive of digital materials (e.g., papers by the University faculty and research

scholars) and also for harvesting of documents from other OAI-PMH data providers.

- Available with open source back-end Relational Database Management Systems (RDBMS) servers so that small libraries need not invest in costly licenses for commercial RDBMS servers such as MS-SQL Server. ORACLE, etc.
- Portable to open source operating systems such as Linux Redhat 9.0 and above apart from the Windows 2000 and XP operating system family.
- Available in versions starting from single library-single user to multi-library multi-user networking consortium versions.
- Allow multilingual data entry, storage and retrieval in Indian languages.

Advantages

- It is very scalable because each layer can be sized depending on the need
- It is very reliable/robust because specialized components can be used at each layer
- It is better maintainable because problems can be easily identified
- Migration to other layers, e.g., presentation layer is possible very easily.
- It is more efficient because of the middle layer, viz., the application layer.
- XML messaging is used to minimize network traffic.
- The technology also uses many open source components to minimize costs for the user.

The technology to be used will allow multiple user access to the database and digital content either via the University LAN/Intranet or from a web client.

Automation at Osmania University Library

Osmania University was started Automation in the year 2003 by using NewGenLib Software. After purchase of NewGenLib software entry of data (Retrospective conversion) was started by preparing data sheets written by library professionals for each and every book which includes multiple copies.

After verification of the data entry sheets the same was handed over to data entry operators where they were outsourced by piece work. They were completed more than 1 lakh books in a short period of eight months.

The same data again verified in system by library professionals for error free data for easy retrieval. After compilation of outsourcing of 1 lakh books, University appointed four Data Entry Operators and engaged in various sections in University Library to enter remaining books (English and Language).

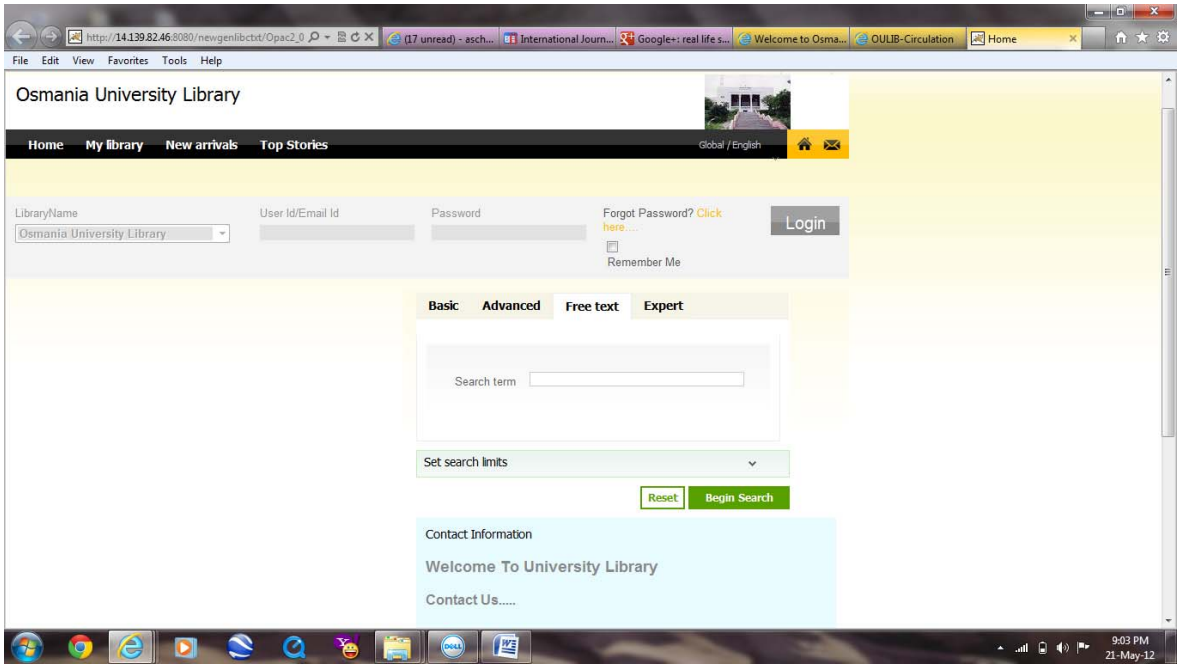
For entry of language books into computer University Library followed transliteration for easy entry and also for easy retrieval of the same. Almost all the language books were entered in English into system by using NewGenLib software. It took 4 to 5 years for completing all the books (Retrospective conversion) entering into system.

Simultaneously other modules which are very important in Library Automation like: Acquisition, Technical Processing, Circulation, Serials Management, System Administration, Budgeting, Users maintenance are also started from the year 2007 and started entering of new books with Acquisition module and Technical Processing. Majority of the books are added by using MARC 21 standard format downloaded from various sources.

From 2008 onwards library is providing OPAC as well as WebOPAC where user can access bibliographic data through online from Osmania University Website.

The server where it is working 24X7 in a week which was connected through Public IP serving all the users which includes Students/Faculty Members/Research Scholars and they are also utilizing the services of WebOPAC and its web 2.0 services/Features.

Simultaneously University was started Bar-coding of its documents since it was started automation project. At present all the documents in the library are bar-coded. Through Scanners these bar-coded books are issuing and returning through circulation section.



University Library WebOPAC

Hardware and Software Used

Two Intel Xeon Dual Processor servers are exclusively using for Library Automation which is having PostgreSQL RDBMS database with 4 GB RAM and 1 TB Hard disk space each.

Windows Server 2003 Operating system is the OS serving its clients spread across the building. Around 20 (client) systems are placed in various sections for information storage and retrieval. For clients Windows XP and Client version of JAVA is used to operate NewGenLib. 6 Systems are placed in various locations exclusively for student service for accessing OPAC.

Second server is used exclusively for Users profiles with photos and digital contents or any digital attachments which is stored and while retrieving information about users it automatically connects to that server.

University Library bar-coded all its collection by using barcode printers from various sections. A Standard and Universal Barcode **Code39** is used in creating barcode labels. Whenever a new user comes to library for membership staff issuing membership card with a unique barcode so that circulation activity will be easy. circulation activities like Issue, Return etc are performing through three Scanners.

CONCLUSION

Osmania University Library Started Library Automation by Using NewGenLib library software and successfully completed automation of all the records and also providing automated serves by using Barcode Technology, students are taking advantage with this technology by saving their valuable time while issuing and returning of documents. Through OPAC users are getting full information about the document with status and location through O.U. Library OPAC as well as WebOPAC where users can access O.U. Library bibliographic database online 24X7 from any corner of the world. Some of the colleges are taking advantage of downloading Libraries MARC21 format bibliographic data through its WebOPAC and building their college database.

REFERENCES

1. < http://www.osmania.ac.in/oulwebpage/About%20Library.htm >

2. Rama Verma and Janak Raj, ‘‘Practical aspects of library automation in the Indian context,’’ In Information Technology Application in Academic Libraries, edited by A.L. Moorthy and P.B. Mangla (Ahmedabad:INFLIBNET Centre, 1997) pp. 10–14.

3. Ravichandra Rao, I.K., ‘‘Automation of academic libraries in India: status problems and future,’’ In Information Technology Application in Academic Libraries, edited by A.L. Moorthy and P.B. Mangla (Ahmedabad:INFLIBNET Centre, 1997) pp. 1–4.

4. Salgar S.M., ‘‘Network services for libraries. Automation of academic libraries in India: status problems and future,’’ In Information Technology Application in Academic Libraries, edited by A.L. Moorthy and P.B. Mangla (Ahmedabad: INFLIBNET Centre, 1997) pp. 78–81.

5. Rajesh Chandrakar, Premchand and Murthy T.A.V., ‘‘INFLIBNET Centre: bridging the digital divide in Indian academic libraries,’’ In Library and Information networking, edited by H.K. Kaul and M.D. Baby (New Delhi:Delnet, 2002) pp. 45–54.

6. Cholin, V.S., Vijayakumar J.K., and Murthy T.A.V., ‘‘Resource sharing in the digital environment in India: role of INFLIBNET,’’ Library Hi-Tech News, 20(2003): 10–13.

7. Vijayakumar J.K. and Manju Vijayakumar, ‘‘Knowledge, Connections and communities: a special reference to Indian University Libraries,’’ The International Information & Library Review, 35(2003): 375–382.

8. Manoj Kumar Sinha, ‘‘Scenario of automation and networking of library and information centers of north eastern region of India: an evaluative study,’’ In Information Technology Application in Academic Libraries, edited by A.L. Moorthy and P.B. Mangla (Ahmedabad:INFLIBNET Centre, 1997) pp. 1–4.

9. Anil Singh, ‘‘Library automation and networking software in India,’’ Information Development, 19(2003): 51–55. March 2005 159.

10. Amekuedee, J.O. Barriers to Successful University Library Automation in Ghana with particular reference to the Balme Library. International Information & Library Review (1995) vol.27, pp 171-181.

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