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Article

Library Services Platform (LSP): An Overview

Pallab Pradhan, Scientist B (LS)

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e-ShodhSindhu

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InfiStats: Usage Statistics Portal for e-Resource

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From Director's Desk

Dear readers

My heartiest greetings on the occasion of 'Holi', the Festival of Colours!

I am happy and glad to share that INFLIBNET Centre received 'EduShine Excellence Award 2019' from Shri Suresh Prabhu, Hon'ble Minister for Commerce & Industry and Civil Aviation, Government of India presented by ASSOCHAM in the 12th National Education Summit on 2^{1st} February 2019 in the presence of Shri Pranab Mukherjee, Hon'ble Former President of India for its digital initiative execution, for the largest ETD repository 'Shodhganga'.

As always INFLIBNET Centre is continuing its pace by plying the information services and requirements to the stakeholders by adding innovative projects. The Team at INFLIBNET Centre is on the toes keeping them involved and busy in executing the new projects and streamlining the existing projects for better outreach to a large number of professionals across the nation.

The Centre continued to do the important task of conducting training programmes for the library & information science community of the universities and colleges. Two training programmes on SOUL 2.0 were organized at the INFLIBNET Centre during this period. Three specialized Training Programmes and National Workshops of variable durations were organized at the INFLIBNET Centre on various topics including Creation and Management of Digital Libraries, Libraries on Cloud and Trends in LIS Research: Approaches and Methods.

The Centre has a very special day as the Hon'ble Chairman, University Grants Commission and President, INFLIBNET Council, Prof D P Singh made his debut visit to the INFLIBNET Centre on 08th March 2019 to chair the 19th Governing Council Meeting. Prof Singh congratulated the INFLIBNET Centre for its contributions to the academic stakeholders and the tireless support to the UGC for automating their schemes and activities. It was a great opportunity for the INFLIBNET staff to meet the Hon'ble Chairman.

Further, I am happy and glad to congratulate the INFLIBNET Centre team in getting associated with two newly launched projects: 'Pandit Madan Mohan Malviya National Mission on Teachers and Teaching (PMMMNMTT)' and 'Scheme for Higher Education Youth for Apprenticeship and Skills (SHREYAS)'. Also, the team at INFLIBNET Centre is rigorously working behind the screen for the forthcoming NIRF 2018 ranking, which is going to be launched on 08th April 2019.

This issue of Newsletter feature an article entitled "Library Services Platform (LSP): An Overview" by Mr. Pallab Pradhan, Scientist-B (LS) which briefly elaborates on the concept of Library Services Platform, its characteristics, features, and functions in detail.

I am sure that in this new year, the Centre will bring new more achievements thorugh its activities.

(J P Singh Joorel)

Training Programme on SOUL 2.0, INFLIBNET Centre, Gandhinagar

The INFLIBNET Centre regularly conducts SOUL 2.0 Training Programmes to impart training on Installation and Operation of SOUL Software for its users. The following two training programmes were organized at the INFLIBNET Centre,

Gandhinagar during this quarter. These programmes were coordinated by Dr H G Hosamani, Scientist C (LS), INFLIBNET Centre. 31 participants attended these two training programmes as per the details given below:

SI. No.	Name of the Programme	Date of the Programme	No. of Participants
1	146 Training Programme on SOUL 2.0	28 th January – 02 nd February 2019	17
2	147 Training Programme on SOUL 2.0	25 th – 30 th March 2019	14



Participants of 146th Training Programme on SOUL 2.0 with the Director and Technical Staff of the INFLIBNET Centre



Participants of 147th Training Programme on SOUL 2.0 with the Director and Technical Staff of the INFLIBNET Centre

Specialized Training Programmes/National Workshops/ National Conferences

Five-day National Workshop on Creation and Management of Digital Libraries Using Open Source Software, Panjab University, Chandigarh, 07th - 11th January



Participants of National Workshop on Creation and Management of Digital Libraries Using Open Source Software at Panjab University, Chandigarh

Panjab University, Chandigarh in collaboration with INFLIBNET Centre, Gandhinagar organized a Five-day National Workshop on Creation and Management of Digital Libraries Using Open Source Softwares during 7th to 11th January 2019 at A C Joshi Library. Prof Raj Kumar, Vice-chancellor was the chief guest; Prof. Shankarji Jha, Dean of University Instructions; Prof. Sanjay Kaushik, Dean of College Development Council & Director of ICSSR; and Dr Rashmi Yadav, University Librarian

graced the occasion. Dr Mritunjay Kumar, Assistant Archivist was the Organizing Secretary of the workshop. In his inaugural speech, Prof Raj Kumar emphasized the importance of creating and maintaining the digital library by keeping the shift or change to the virtual world; through the process of digitization, the information reach can be maximized to all the stakeholders. Prof Shakarji Jha, Dean of University Instruction said that in the age of information and technology, digitization

plays a great role in learning. Prof Sanjay Kaushik, Dean of College gave importance for the open source technology & cloud computing, and how they are interlinked in the internet age. Prof Preeti Mahajan, in her keynote address to the workshop participants and invitees, briefed the changes took place from a traditional library to a digital library. She discussed about the shift from traditional library to digital environment, and emphasized on providing 24X7 information through user friendly interface giving access to multimedia resources through various search operations and provide unlimited storage space. Prof Anu Gupta, Department of Computer Science and Applications delivered a presentation on Open Source Software: An Overview. Prof. Harish Kumar, University Institute of Engineering and Technology delivered a presentation on 'Information retrieval'.

Mr Swapnil Patel, Scientist B (CS), INFLIBNET Centre delivered presentations on 'Meta Data and Metadata Standards for Interoperability in

Information Retrieval and 'DSpace: an overview' and 'DSpace: Workflow & Submissions'. Followed by invited guest lectures delivered by subject experts Dr. Jatinder Kumar Samyal, BUEST, Baddi Solan; Dr. Parminder Singh, Associate Professor, Dev Samaj College for Women, Chandigarh; Dr Rupak Chakravarty, DLIS, Panjab and Dr Naveen Aggarwal, Associate Professor, UIET, PU on various topics followed by "hands-on" practical sessions on the software modules by the participants. Mr Swapnil Patel, Scientist B (CS) and Vijay Shrimali STA (CS), INFLIBNET Centre were the resource persons for practical sessions. Ms Nirupma Chohda, Assistant Librarian presented overview report of the workshop. Prof. Karamjeet Singh, Registrar said that libraries are the lamp for the educational society. Dr Jivesh Bansal, Deputy Librarian proposed the vote of thanks to all the dignitaries and participants.

Five-day National Workshop on Libraries on Cloud, INFLIBNET Centre, Gandhinagar, 11th - 16th March 2019

Five-day National Workshop on Libraries on Cloud was organised at INFLIBNET Centre, Gandhinagar from 11th to 16th March 2019. Mr Divyakant Vaghela, Scientist B (CS), Dr Miteshkumar Pandya, Scientist B (LS), Mr Raja V, Scientist B (CS) and Dr H G Hosamani, Scientist C (LS), INFLIBNET Centre coordinated the workshop. The Workshop aimed to equip participants in cloud computing technology. Mrs Hema Cholin, STO (LS) welcomed

all the dignitaries and participants. Dr Miteshkumar Pandya briefed about the workshop. Prof J P Singh Joorel, Director, INFLIBNET Centre, inaugurated the workshop. Mr Divyakant Vaghela extended the vote of thanks at the end of the workshop. Details of lectures delivered by Scientists of the INFLIBNET Centre during the national workshop were as follows:

Topics	Name of the Experts from INFLIBNET
INFLIBNET Activities and Services	Mr Manoj Kumar K, Scientist D (CS)
Introduction to cloud computing & Public Cloud An overview and AWS Features and Demonstration, Understanding EPrints (Features, Statistics, Bazzar, Altmetrics etc.), Creation of IR using EPrints and	Mr Raja V, Scientist B (CS)
Installation, Advanced configuration	
Met Registration on Cloud with special reference to Azure, Installation and Configuration of Joomla on Cloud, Modules, Components and Menu Configuration & Creating and Managing User Forum and Online Form and Koha: Acquisition Module	Dr Miteshkumar Pandya Scientist - B (LS)
Virtualization and Linux Basic Commands	Mr Hitesh Solanki, Scientist B (CS)
Overview of KOHA and Administration Module	Mr Vijay Shrimali, STA (CS)
KOHA Installation in Ubuntu on Cloud, Catalogue & Circulation Module	Mr. Divyakant Vaghela, Scientist B(CS)
Eprints Administration, Record Submission, Maintenance, Backup and Restore	Mr K Siva Shankar, Scientist B (LS)

Mr Vijay Shrimali, STA (CS), Mr Gaurav Kumar and Ms Vaishali Prajapati, Project Associates served as practical resource persons for the workshop. 09 participants participated in the workshop. Dr H. G. Hosamani, Scientist (LS) chaired the valedictory.



Participants of National Workshop on Libraries on Cloud with the Director and Technical Staff of the INFLIBNET Centre

Five-day National Workshop on Trends in LIS Research: Approaches and Methods, Mizoram University, Aizawl, 11th -15th March 2019

Five-day National Workshop on "Trends in LIS Research: Approaches and Methods" was organized by Department of Library and Information Science, Mizoram University during 11th to 15th March 2019. in collaboration with INFLIBNET Centre, Gandhinagar, Gujarat; and sponsored by the Defence Research and Development Organisation (DRDO), New Delhi and ICSSR-NERC, Shillong. Prof S N Singh, Head, DLIS, Mizoram University welcomed the dignitaries and participants. Prof KRS Sambasiva Rao, Vice-Chancellor of Mizoram University, Aizawl was the Chief Guest of the function. In his brief speech, he stressed upon the requirement of the recent trends in LIS and focused upon the digitization of ancient books for better preservation and access to the user community. He stressed upon to make use of the latest technologies like a virtual library, virtual learning systems, and social media applications in the library sector to make the information reach to a larger community. Prof

Pravakar Rath, Senior Professor, DLIS, Mizoram University, Aizawl pointed out the recent trends in LIS curriculum as well as the impact of research in an online environment. Prof H N Prasad and Prof. NVR Jyoti Kumar, Dean, SEMIS, Mizoram University were the Guest of Honour. Prof NVR Jyoti Kumar stressed upon to conduct such kind of workshops for increasing academic integrity. He also stressed upon the qualitative and quantitative assessment of LIS research conducted in India, 44 registered participants comprising of library professionals, faculty members and research scholars from Assam, Manipur, Meghalaya, Tripura, Uttar Pradesh and Research scholars from DLIS, Mizoram University participated in the workshop. Dr Manoj Kumar Verma, Coordinator of the National Workshop extended a vote of thanks to all the workshop participants. Details of lectures delivered by experts during the national workshop were as follows:

Topics	Name of the Experts
Research in Library & Information Science: Trends,	Prof. H. N. Prasad, Senior Faculty Member and
Problems and Issues; Research Methodology for Library	University Librarian, Banaras Hindu University,
& Information Science; Information Users', Information	Varanasi
Need and Information Seeking Behaviour	
Statistical Methods for Research	Prof. L. S. K. Sharma, Department of Management,
	Mizoram University, Aizawl
Academic Integrity and Prevention of 3 Plagiarism	Prof. Pravakar Rath, Senior Professor, DLIS, Mizoram
	University, Aizawl
Framing and Testing of Hypothesis	Prof. C. Lalfamkima Varte, Department of
	Psychology, Mizoram University, Aizawl
Application of Library 2.0 in Library Cataloguing	Prof. S. N. Singh, Head, DLIS, Mizoram
	University, Aizawl

Topics	Name of the Experts
Research Trends in Public Library and Copyright	Prof. R. K. Ngurtinkhuma, DLIS, Mizoram
and IPR in Research	University, Aizawl
Data Analysis with SPSS	Prof. L. S. K. Sharma, Department of
	Management, Mizoram University, Aizawl
Research Impact Matrices: Calculation and Context	Ms. Kruti J Trivedi, Scientist B(LS), INFLIBNET
and Advanced Search Techniques of Web of	Centre, Gandhinagar
Science and Scopus	
Network Analysis and Visualizations using R	Mr. Hitesh Solanki, Scientist B(CS), INFLIBNET
(demonstration-cum-hands on)	Centre, Gandhinagar
Webometric Research Trends and Evaluation	Dr. Akhandanand Shukla, Assistant Professor,
Methods of Blog Content	DLIS, Mizoram University, Aizawl
Significance of Information Literacy in LIS Research	Dr. F. Chanchinmawia, Assistant Librarian,
	Academy of Integrated Christian Studies, Aizawl

Republic Day

he INFLIBNET Centre celebrated 70th Republic Day on 26th January 2019 at INFLIBNET Centre, Infocity, Gandhinagar. The National Flag was hoisted by Mr Yatrik Patel, Scientist D (CS), INFLIBNET Centre. Mr Yatrik Patel, Dr H G Hosamani, Scientist C (LS) and Mr Swapnil Patel, Scientist B (CS) addressed the staff and family members of INFLIBNET Centre.



70th Republic Day

Award

EduShine Excellence Award 2019

INFLIBNET Centre, Gandhinagar received EduShine Excellence Award 2019 on 21st February 2019 at Le Meridien, New Delhi from Shri Suresh Prabhu, Hon'ble Minister for Commerce & Industry and Civil Aviation, Government of India, presented by ASSOCHAM (The Associated Chambers of Commerce and Industry of India). The award was

based on the Shodhganga project to recognize INFLIBNET Centre as "Emerging Institute Promoting Government Digital Initiatives" during 12th ASSOCHAM National Education Summit under the theme "Making India a global Knowledge Powerhouse: Catalyzing Reforms and Innovation".



EduShine Excellence Award 2019

Meetings of 19th Council, 36th Governing Board and 28th Finance Committee, INFLIBNET Centre

The 19th Council, 36th Governing Board and 28th Finance Committee meetings of INFLIBNET Centre was held in the Board Room of INFLIBNET Centre, Gandhinagar on Friday, 15th March 2019 at 12.00 Noon and 03.00 PM respectively. Prof Dhirendra Pal Singh, Chairman, Council, INFLIBNET; Chairman, UGC, New Delhi; and Former Director NAAC chaired the meetings. Prof D P Singh during his visit to the INFLIBNET Centre planted a sapling in the lawns of the Centre's premises to mark his debut visit to the INFLIBNET Centre, Gandhinagar.

He also visited the infrastructural facilities at the Centre including Auditorium, Database Management R & D, Data Centre / Shodhganga, and Library / walk-in User Area. Later, Prof D P Singh had a one to one interaction with the core staff of the Centre in the Auditorium to know the Centre's development activities and discussed about the staff related issues. Prof J P Singh Joorel, Director, INFLIBNET Centre and Senior Staff members of the Centre felicitated Prof D P Singh with a shawl and a memento as a token of gratitude.



Prof J P Singh Joorel, Director, INFLIBNET Centre with Prof D P Singh, Chairman, UGC

New Project @ INFLIBNET Centre

SHREYAS (Scheme for Higher Education Youth in Apprenticeship and Skills)

The Minister for Human Resources Development, Shri Prakash Javadekar has launched the Scheme for Higher Education Youth in Apprenticeship and Skills (SHREYAS) for providing industry apprenticeship opportunities to the general graduates on 27th February 2019. Its aim is to enhance the employability of Indian youth by providing 'on the job work exposure' and earning of stipend. The INFLIBNET Centre was assigned the task of developing a platform for SHREYAS. Mr Abhishek Kumar, Scientist C (CS), INFLIBNET Centre, Gandhinagar delivered a technical presentation during the programme.

National Council for Teacher Education Accreditation Management System

The INFLIBNET Centre was assigned to develop the NCTE Accreditation Management System and this project is in the pipeline.

Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT)

The Scheme of Pandit Madan Mohan Malviya National Mission on Teachers and Teaching is the culmination of the Government of India efforts in launching a comprehensive umbrella scheme aimed at improving the quality of education at all levels by infusing quality and excellence in our teachers and teaching. The INFLIBNET Centre was assigned the task of creating a portal for digitizing the entire process, including receiving of

applications, sanction, fund release, online reporting, monitoring etc.

Evaluation Meeting for Atal Ranking of Institutions on Innovation Achievements (ARIIA), INFLIBNET Centre, Gandhinagar, $20^{th} - 23^{rd}$ March 2019

The INFLIBNET Centre organized an Evaluation Meeting for Atal Ranking of Institutions on Innovation Achievements (ARIIA) at INFLIBNET Centre, Gandhinagar from 20th to 23rd March 2019. Mr. Abhay Jere, Chief Innovation Officer, Mr. Dipan Kumar Sahu, Executive Consultant and Ms. Shweta Bhatnagar from MHRD Innovation Cell, New Delhi; Ms. Sridevi Pankajam, Group General Manager, ANZ, Bengaluru; Ms. Bhanu Rekha, Senior Manager, Chairman's Office and Ms. Tvishee Kumar, Manager, Market Intelligence from Cyient, Hyderabad; Mr. Abhishek Kumar, Scientist C (CS), Mr. Hiteshkumar Solanki, Scientist B (CS), Mr. Raja V, Scientist B (CS), Mr. Dharmesh Shah, STA (CS), Mr. Mihir Prajapati and Mr. Sachin Mali, Sr. Project Officers (CS) from INFLIBNET Centre, Gandhinagar attended the evaluation meeting. They assessed the criteria and weightage for the current evaluation; fine-tuned the existing data by removal of anomalies, and validated the criteria based as the parameter in determining the accuracy in the ranking framework.

Library Services Platform (LSP): An Overview

Pallab Pradhan, Scientist B (LS)

The application of information and communication technology (ICT) in libraries has gradually changed the day-to-day functions and services of libraries. Libraries had dramatically transited over the years, starting from "library automation" in the 1930s to the current evolving genres of the next generation of integrated library systems or library services platforms (LSP) since more than a half-decade. The LSP can be defined as the next generation of library management systems that has beyond all inbuilt features of an ILS, built on multi-tenant SaaS platform, taking advantage of cloud computing, web technologies and discovery service to provide capabilities to manage physical, digital and electronic materials, and other services in a single unified system. Various LSP products are available in the market such as OCLC WorldShare Management Services, Ex Libris Alma, Sierra from Innovative Interfaces, ProQuest Intota, Kuali OLE, SirsiDynix BLUEcloud Suite, and FOLIO. This article briefly elaborates on the concept of Library Services Platform (LSP), its features, functions and characteristics in detail.

1. Introduction

Change is the law of nature. In today's world, every aspect of life is getting changed rapidly and evolving with time. Latest information and technological development have brought a dramatic change in every field, and libraries are no exception to it. Due to the advent, especially the application and continuous development of information and communication technology (ICT), the library and information world had a great impact. It has affected the functioning of each and every aspect of a library: beginning with the selection of materials, acquisitions, classification, cataloguing, collection development and management, serials control, storage, organization, automation, searching, processing, retrieval, reference services, ILL-sharing, analysis, reporting, etc. However, the applications of ICT in libraries can be considered as an opportunity as

well as a challenge. New concepts, new technological systems are being added/adapted to ease the functions of libraries, but it is also becoming very challenging for the library staff to cope up with the continuous changing patterns and accepting new technologies in their profession.

In the 1930s, the efforts of library automation system were started by Herman Hollerith of the US Census Bureau who invented punched card technology, with the help of Dr Jolul Shaw Buildings, the then Director of Surgeon-General's Library (now the National Library of Medicine). In 1935, Dr Ralph H. Parker created a circulation control system at the University of Texas at Austin using the Hollerith Punched Card or IBM Punched card equipment. However, due to slow progress in the development of computer systems, the efforts were put into an experimental project of a library automation system. Later in the 1960s, the first

trend of library automation was developed in the US, using computers for creating bibliographic databases as library catalogues. Library of Congress developed a machine-readable catalogue of its holdings records using the MARC input format. In 1967, the OCLC (Online Computer Library Center), was started as the first computer-based library network. During the 1970s the development of the integrated computer chip and storage devices led to an explosion of library automation. RLIN (Research Libraries Information Network) and WLN (Washington Library Network) started the online library networks. In this decade, a number of libraries started automation using the microcomputers of their organizations. During the 1980s, when the rapid development of lower cost microcomputers and its easy availability in libraries happened, the automation becomes a possible proposition for all types and sizes of libraries. Many library automation packages also came into the market. The introduction of CD-ROMs in late 1980s has changed the way libraries were

operated. Information previously available only through print became available in the market through CD-ROMs which made the information more accessible. The 1990s have seen the rise of computer networking. By linking computers together, networks were formed where access was provided with both locally and remotely, and resources were shared over these networked computers. Libraries also started using Internet and the World Wide Web (WWW) on a large-scale, providing quick library and information services to their users. Then, hardware-specific automation packages, packages with web-interface, came into the market. The traditional library catalogues were largely replaced by computerized catalogues or OPACs (Ashikuzzaman, 2014). The resources became in an electronic/on-line form, various online databases were being subscribed, and repositories were being developed by libraries. Figure 1 depicts the technological evolution along with the evolution of libraries.

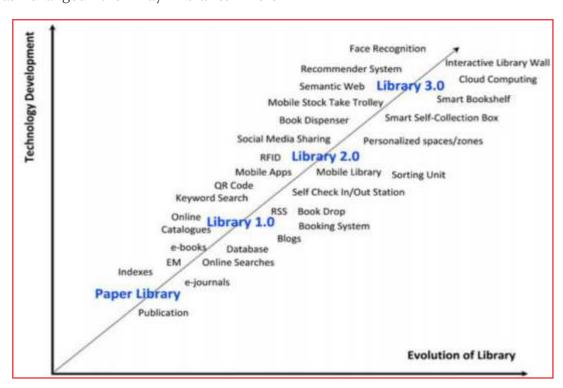


Figure 1: Current Situation in Libraries' Technology Development adopted from Chan (2015)

Technological advances have led to open new opportunities for libraries to unify their services in a single platform, link to other computer networks and discovery worldwide. For the past two-three decades the integrated library systems (ILS) have rapidly changed and developed, and their presence was felt in the libraries. Thus, the library world has seen a great transition phase in itself with the evolving genres of library automation/library management/integrated library systems. And, since a half-decade the latest in this segment is the emergence of the next generation of integrated library systems or library services platforms (LSP. This article briefly elaborates about LSP, its features & functions, and details about the LSP products available in the market for libraries across the globe.

2. Library Services Platform (LSP): Concept

For more than a half-decade, the library services platforms (LSPs) are being used which are swiftly replacing the Integrated Library Systems (ILSs) in libraries.

Renowned library technologist and consultant Marshal Breeding coined the term "library services platform" in the year 2011 to describe a new set of products that were being developed and promised to take a much different approach to library resource management with a set of new characteristics than the incumbent integrated library systems. These all-new inclusive systems reframe the library workflows and combine the management of all library materials, print and digital. These platforms promise to provide an integrated system environment to include acquisitions, cataloguing, circulation, electronic resource management (ERM), serials, reporting,

link resolver, discovery platform (the next-Gen catalogs), and any other software that may be part of delivering library services (http://www.librarytechnology.org/ltg-displaytext.pl?RC=16501)..

According to Marshall Breeding; a library services platform enables libraries to acquire and manage their collections, spanning multiple formats of content, including at a minimum physical material and electronic content. These products support multiple procurement processes, including those related to items purchased for permanent ownership, those made available through paid licenses and subscriptions, and those selected from open-access sources. They offer a metadata management environment offering multiple schemas as appropriate for each of the respective material formats, including at a minimum the MARC family of metadata standards and Dublin Core (Breeding, 2015).

A Library Services Platform (LSP) is the "next generation" of library management systems that provides the capabilities to better manage our collections in all formats, and handle the evergrowing means of access to electronic resources and print materials (https://news.lib.uci.edu/newlibrary-services-platform-lsp-launching). According to Mohammed Ali (2018), "Library Services Platforms take advantage of cloud computing & Web technologies to provide capabilities to manage physical, digital & electronic materials in a single unified system." The Library services platform is a Web-based, clientless system in the cloud with advanced set of features from searching to managing electronic/digital collections (http://www.valenj.org/conference /session/b21-libraries-transition-integrated-librarysystems-library-services-platforms).

The LSPs can be defined as the next generation of library management systems that has beyond all inbuilt features of an ILS, built on multi-tenant SaaS platform, taking advantage of cloud computing, web technologies and discovery service to provide capabilities to manage physical, digital & electronic materials, and other services in a single unified system.

3. Characteristics of a Library Services Platform

The characteristics of Library Services Platforms may vary from product to product. In general, the various characteristics of a Library Services Platform are outlined below.

Functional Characteristics:

- Management of Print formats of Materials & ERMS
- Replacement of Multiple Incumbent Products
- > Extensive Metadata Management
- Multiple Procurement Workflows
- Knowledge Bases
- > Collection Management
- > Data Repository and Management
- Discovery Services
- Data Analytics & Reporting
- Conceptual Organization
- License Management
- > ILL and Resource Sharing
- Link-Resolver

Technical Characteristics:

- Beyond Client/Server Computing
- Cloud-based Architecture
- SaaS/DaaS Platforms
- Web-Based Interfaces
- Multi-Tenant Platforms
- Services-Oriented Architecture

APIs Exposed for Extensibility & Interoperability

4. Library Services Platform Products

There are many vendors available in the market who are developing and providing library services platform products to libraries/institutions of different types across the globe.

4.1 BLUEcloud/BLUEcloud Campus: products of SirsiDynix

BLUEcloud suite was first announced in March 2013 at the COSUGI 2013 user conference in Utah, USA and the subsequent first production was **BLUEcloud Library** released in June 2013. Services Platform (LSP) is a browser-based system that comprises SirsiDynix's cloud-based "administration, discovery, acquisition, and collection management applications" that augment libraries' current Horizon and Symphony systems. It can be accessed from a desktop, laptop, tablet or smart phone. BLUEcloud can be integrated with both SaaS and locally hosted Horizon and Symphony systems. The BLUEcloud Library Services Platform is next-generation software for libraries of all types and sizes that allows the library to do more for less-less hardware, less maintenance, and less cost.

The BLUEcloud LSP is made up of three major components which help to stop the duplication of data and integrate all searches across products.

BLUEcloud Staff: includes cloud-based Administration, Cataloging, Circulation, Acquisitions, and Serials applications for the price of ILS maintenance. It also includes premium applications such as SirsiDynix MobileCirc and the powerful Analytics application.

- ➢ BLUEcloud Discovery: gives your community facet-based searching with BLUEcloud PAC and BookMyne, included in ILS maintenance. It also includes Social Library for Facebook integration and BookMyne+, Enterprise, and Portfolio for robust customization and additional features.
- ▶ BLUEcloud Marketplace: offers libraries end-toend eResource management with eResource Central. It also includes the upcoming Global Titles Lists and Global Vendor Access to give libraries, instant access to available titles from multiple vendors for the price of ILS maintenance (https://librarytechnology.org/pr/17776).

BLUEcloud Campus was first announced in June 2014. BLUEcloud Campus is a unique collaboration between SirsiDynix and EBSCO, designed specifically for academic and school libraries. BLUEcloud Campus gives academic and school libraries native access to EBSCO content, robust eResource management, and integration with learning management systems and other education-oriented software. It helps to bring all library resources and staff tools to the cloud.

4.2 Intota[™]: a product of Serials Solutions, ProQuest

Intota[™] was first announced in June 2011, and the subsequent first production was released in June 2014. The innovative Intota Library Services Platform (LSP) designed to address the key issue in library operations: the lack of integrated systems that capture all the formats contained in library collections. Intota is an integrated suite of services delivered via multi-tenant SaaS architecture and

helps the library meet its goals and serve its users while offering critical workflow efficiency by streamlining the selection, acquisition, cataloguing, fulfilment and assessment of resources. Unlike other library management systems, Intota features eresource lifecycle management, including, Demand Driven Acquisition (DDA) and the industry's most authoritative and comprehensive Knowledgebase of library resources.

Intota integrates multiple workflows into one platform and increases value and efficiency by leveraging best-in-class features and functionality.

- "My Intota' feature provides an "Activities" and "Databases" workspace that includes tasks, deadlines and associated action steps—with multiple filtering capabilities and access to more detail relevant to the specific task—all within an easy-to-navigate single interface.
- Management Intota offers a flexible approach to managing all aspects of the library's eresources. Its unified intelligent workflows break down data silos, while automating manual processes. The advanced support for DDA and evidence-based acquisition models streamlines the entire e-resource lifecycle.
- ➤ Discovery Integrated into Intota, the Summon® service generates unbiased search results with one-click access to full-text resources using direct linking and 360 Link.
- Assessment Integrating both quantitative and qualitative analysis of print and digital content, Intota includes Intota™ Assessment. Exclusive to ProQuest, highly valued data from Resources

for College Libraries[™] and Books in Print[®] gives libraries a holistic view of their holdings. Libraries needing only a best-in-class collection assessment solution can subscribe to Intota Assessment as a stand-alone service.

- ➤ Demand Driven Acquisition (DDA) Using a unique approach to interoperability, Intota fully automates library DDA programs. Libraries benefit from an affordable acquisition model and the entire workflow is optimized from acquisition to management and discovery to assessment.
- ➤ Knowledgebase ProQuest's global Knowledgebase of electronic, print and digital resource metadata is foundational to Intota. Enriched and maintained by librarians with expertise in data curation, this comprehensive and authoritative compilation of data is centrally updated on behalf of thousands of libraries (https://www.proquest.com/about/news/2014/Intota-Enables-Transformation-of-Library-Workflows.html).
- ➤ Integrated Services: Intota also has integrated services via its Summon Service; Intota Assessment; 360 Link and 360 Resource Manager (https://www.proquest.com/products-services/intota.html#accordionOne).

4.3 Alma: a product of Ex Libris, ProQuest

Ex Libris Alma was first announced in July 2009, and the subsequent first production was released in July 2012. Ex Libris Alma is a unified library services platform which helps to manage print, electronic, and digital materials in a single interface. It is a completely cloud-based service.

Major features of Ex Libris Alma are outlined below:

Unified Management: A unified system, it helps to streamline the management of catalogs, collections, and electronic, print and digital resources, as well as curation, acquisitions, discovery and analytics.

Digital Resources: Alma's unified management supports discovery of all digital collections of a library. Alma supports easy data migration and uploads from third-party systems using standards like the OAI-PMH, either one-by-one or via an efficient bulk ingest program as well as automatic collection creation from EAD-formatted metadata.

Analytics: Alma Analytics is an integrated, and integral component of the Alma solution. It provides comprehensive usage data from both COUNTER reports and Alma Link resolver.

Collaborative Networks: Libraries working together can collaborate easily across Alma's cloud architecture, expanding their workflows and services. Through Shared Catalog, libraries can coordinate metadata management, including batch imports and asset searches.

Open Platform: With comprehensive support for open standards and over 150 REST APIs, Alma can be quickly integrated with library infrastructure. Alma supports an array of widely adopted standards such as NCIP, SRU, Z39.50, SIP2 or OAI/PMH to streamline interoperability with other systems. (https://www.exlibrisgroup.com/products/alma-library-services-platform/).

4.4 Sierra: a product of Innovative Interfaces

Sierra was first announced in April 2011, and the subsequent first production was released in April 2012. Sierra is a leading LSP, and is designed to make a library much effective by integrating separate workflows into one, to seamless integrations.

Sierra has the following features:

Unified Application: Sierra integrates multiple workflows - eResource Management, Circulation, Cataloging, Acquisitions, and more into one easy to use interface to allow uninterrupted progress on a day to day initiatives or special projects, and save valuable time.

RESTful APIs: Sierra facilitates libraries to have connections with the communities they serve. Whether it is finance applications, learning management systems, or any community the library exists within, Sierra is open and can connect.

Workflow on the Go: Working seamlessly with Mobile Worklists, Sierra liberates library staff with a mobile experience that moves library operations into the stacks and away from repetitive material handling.

With MyLibrary! feature of Sierra, patrons can access library resources, place holds, check out digital items, and visit their library on social media all in one place on their mobile device.(https://www.iii.com/products/sierra-ils/)

4.5 Bibliovation[™]: a product of LibLime, PTFS

The Bibliovation[™] is a highly flexible Library Services Platform (LSP) offered as a SaaS solution. It

runs on Amazon AWS. It is completely web-based and is hosted in a FedRAMP-compliant cloud facility providing mobile access from all devices. Bibliovation is a full-featured open development LSP that uses relational databases storing all data types including bibliographic, patron, transaction, acquisitions as well as digital objects.

Some of the components included in Bibliovation are:

Bibliovation Discovery Layer: The Bibliovation Discovery Layer can incorporate the results from database vendors such as EBSCO, ProQuest and even 'boutique' databases that are not part of the database aggregator's offerings.

Biblios Cataloging Editor: Biblios is a MARC21-compliant, web-based cataloguing editor which provides full support for bibliographic, holdings, and authority records. MARC21 validation rules are built into Biblios and provide library staff with color coded displays when there are rules breaches.

GetIt Acquisitions: GetIt Acquisitions is a web-based, EDI-compliant fund accounting application. It includes support for purchase orders, invoices, multi-layer fund hierarchy, and Z39 searching. GetIt Acquisitions has its own relational database and uses APIs to exchange data with the catalog (http://www.ptfs.com/bibliovation).

4.6 WorldShare® Management Services (WMS): a product OCLC

WorldShare® Management Services (WMS) was first announced in April 2009, and the subsequent first production was released in November 2010. OCLC WorldShare Management Services is open,

cloud-based library services platform. WorldShare Management Services (WMS) provides all of the applications needed to manage a library, including acquisitions, circulation, resource sharing, metadata and electronic resource management, and discovery service for library users. WorldShare Management Services enables to draw on the collaborative data and work of libraries worldwide for more efficient workflows.

It provides: (i) an integrated library workflows consisting a complete set of library management applications and platform services which are built on the OCLC WorldShare Platform (ii) streamline workflows helps to perform routine tasks, including e-resource management and cataloguing, (iii) realize cost savings by eliminating fees related to the purchase of separate serials management, course reserves, OpenURL resolver and A – Z list services, , (v) provide an intuitive search experience through WorldCat Discovery for library users, which enables searching simultaneously across all library's electronic, digital and physical resources, and (vi) to get better information about library systems by generating standard reports based on local data on acquisition, circulation, cataloging/collection, and e-resources. WorldShare Report Designer and Collection Evaluation are add-on services of WMS.

Worldshare Management services have almost all the features which are required for a library to execute a smooth and proper workflow system. The key modules are WorldShare Acquisitions, WorldShare Circulation, WorldShare Metadata, WorldShare Collection Manager, WorldShare Record Manager, WorldCat Discovery, WorldShare Interlibrary Loan, WorldShare License

Manager, WorldShare Report Designer and WorldShare Collection Evaluation (https://www.oclc.org/en/worldshare-management-services.html).

4.7 Kuali Open Library Environment (OLE): an Open Source product

Kuali OLE was first announced in June 2008, and the subsequent first production was released in Aug 2014. The Kuali Foundation is a non-profit 501(c)3 organization dedicated to the development of open source administrative software solutions for higher education. Kuali delivers administrative software built specifically for higher education to more than 160 institutions using modern, cloud-based technologies. Kuali, a SaaS software company focused exclusively on serving higher education. Current modules of Kuali OLE allow for acquisitions, metadata management, rights management, discovery tools, and a host of other functions (http://opensource-ils.cci.utk.edu/content/kuali-ole).

OLE automates core library functions in a way suited to modern workflows and that interoperates with business and content applications beyond the library. OLE allows libraries to manage their scholarly content, and to continue with their business functions through OLE or through the enterprise integration of OLE with Identity Management, Enterprise Resource Planning systems and Virtual Learning Environment systems (http://guides.library.upenn.edu/strategicplan/curr entprojects/ole).

4.8 FOLIO: an Open Source project

FOLIO, which stands for the "Future of Libraries is Open", is a community project to develop an open

source library services platform (LSP). FOLIO, an open source project, aims to reimagine library software through a unique collaboration of libraries, developers and vendors. It moves beyond the traditional library management system to a new paradigm, to develop an open source library services platform (LSP), where apps are built on an open platform, providing libraries more choice and delivering new services to users (https://www.folio.org/). FOLIO is hosted by the Open Library Foundation, an independent, not-forprofit organization designed to ensure the availability, accessibility and sustainability of open source and open access projects for and by libraries (https://www.folio.org/about/).

Major features of FOLIO are provided below:

FOLIO architecture is based on microservices: which is an easy and innovative method to quickly add new capabilities. With microservice architecture, there is no need to replace an entire system, rather apps and modules can be continually renewed and replaced.

FOLIO is inspired by cloud technologies and by open-ended platforms: such as smartphones and operating systems. It is essentially a web-based system for administering complex workflows in and between organizations, in which the individual work tasks are supported by "apps" on the platform.

The FOLIO platform provides shared facilities: such as notifications, permissions, and task management, but the organization of the workflows is entirely up to the library, and the possible tasks that FOLIO can support depends on the apps that are installed.

FOLIO is an app-based platform: Similar to how users have the freedom to choose from a variety of smartphone apps, libraries can choose which FOLIO apps to use. A library could continue to use its existing automation system (such as Koha or Evergreen) and make use of apps, such as electronic resource management.

The FOLIO project has been in development for about two years. FOLIO kicked off in January 25, 2019 with the release of the FOLIO Aster Release which is the first in a series of named releases.

Index Data has been the lead architect and developers for FOLIO, and now it offers a complete set of services that enable libraries to leverage FOLIO's innovative open source library platform designed to support the collaboration of libraries, developers, and vendors in creating new k i n d s o f l i b r a r y s e r v i c e s (https://www.indexdata.com/folio/).

5. Conclusion

In this article, a brief profile of different Library Services Platforms (LSPs) is provided. A total number of seven LSP products have been covered in the article which are in use by the libraries worldwide. Among those, Kuali OLE and FOLIO LSPs are open source in nature. As like any system, it is always very difficult to choose the best among all as each of these products have their own set of features, characteristics and functions to perform various library services and tasks in their own way. It is found that till today, no libraries in India whether it's academic or special have been using such LSP systems. However, Indian Library Technology companies/vendors and libraries are embracing and adopting technologies such as

cloud service, SaaS architecture, discovery services, etc. along with their full-fledged integrated library systems in place.

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Visitors

As a part of curriculum industrial visits, 90 students and 3 faculty members of Computer Engineering and Information Technology, Shankersinh Vaghela Bapu Institute of Technology, Gandhinagar visited INFLIBNET Centre, Gandhinagar on 2nd January 2019. 100 students and 3 faculty members of Shri Mahila BCA College, Junagadh visited INFLIBNET Centre, Gandhinagar on 4th January 2019. 12 students and 3 faculty members of the Dept. of Library and Information Science, Maharshi Dayanand Saraswati University, Ajmer visited INFLIBNET Centre, Gandhinagar on 13th March 2019. The centre also witnessed the below dignitaries as our esteemed visitors from 14th to 15th March 2019.

Prof Dhirendra Pal Singh, Chairman, UGC, New Delhi

Dr Braj Bihari Kumar, Chairman, New Delhi

Prof Yogesh Singh, Vice Chancellor, Delhi Technical University, Delhi

Mr P K Thakur, Finance Advicer, UGC, New Delhi

Prof Dileep Malkhede, Adviser – I (RIFD), AICTE, New Delhi

Prof S K Singh, Vice Chancellor, Lalit Narayan Mithila University, Darbhanga

Dr Anand Byrappa, Librarian, IISc, Bengaluru

Prof B K Tripathi, Director, IUCTE for Teacher Education, BHU, Varanasi

 $Prof\,Kamlesh\,P\,Joshipura, Former\,VC, Saurashtra\,University, Rajkot$

Prof Pratosh Bansal, Institute of Engineering & Technology, Devi Ahilya Vishwavidyalaya, Indore

Mr Gurinder S Malik, Senior Consultant, MHRD, New Delhi

Mr Parameswaran N, Advisor MHRD, New Delhi

Staff News

Prof J P Singh Joorel, Director

Prof Joorel delivered the following inaugural lectures and also nominated as a member during the period under report:

- i) Conferred as a Guest of Honour and delivered the inaugural lecture on "From e-books to e-learning" at Cochin University of Science & Technology, Cochin on 23rd January 2019 during Library Technology Conclave jointly organized Informatics, Bengaluru and by Cochin University of Science & Technology, Cochin.
- ii) Conferred as a Guest of Honour and delivered the inaugural lecture during the National Seminar on "Transformation of Indian Rural Economy" at GH Patel Institute of Business Management, Sardar Patel University, Anand, Gujarat during 9th -10th February 2019.
- iii) Delivered lecture in the "Inter-Disciplinary Refresher Course" organized by Human Resource Development Centre, University of Jammu, Jammu on 18th February 2019.
- iv) Conferred as a Guest of Honour and delivered the inaugural lecture during the National Seminar organized by Department of Statistics, Sardar Patel University, Anand, Gujarat during 1st 2nd March 2019.
- v) Delivered 'Prof S Dasgupta Memorial Lecture' titled "INFLIBNET: Role in Higher Education and Research in India" during 81st Foundation Day Celebration of Delhi Library Association at Delhi on 10th March 2019.

vi) Delivered the inaugural lecture during the National Seminar on "The Role of Library and Information Services in the New Millennium" at Dr Babasaheb Ambedkar Open University, Ahmedabad on 16th March 2019.

Prof J P Singh Joorel was Chief Guest in the inaugural function of two days National Seminar on "Toolkit to Accelerate Research" organised by Department of Library Science, Kuvempu University, Shivmogga in collaboration with LIS Academy, Bengaluru during $22^{nd} - 23^{rd}$ March 2019. Prof J P Singh Joorel was nominated as a Core Committee member of Consortium for Academic and Research Ethics (CARE) UGC. As a member of the Committee of Inter-University Center For Teacher Education (IUCTE), he attended the meeting of Vision Document preparation of IUCTE, BHU Varanasi at UGC, New Delhi on 19th February 2019. As a nominated member of the Court of Central University of Haryana, he attended its meeting held at Central University of Haryana, Mahendragarh on 26th March 2019.

Mr Manoj Kumar K, Scientist D (CS)

Mr Manoj Kumar was invited to deliver a guest lecture on Shodhganga, Research Ethics and IRINS in the Academic Activity Series organized at the JSS Medical College by JSS Academy of Higher Education & Research on 24th January 2019. He presented an invited paper on "Shodhganga: a boon for research & its impact in Indian Universities" during the 2nd International Conference of Changing Landscape of Science & Technology Libraries (CLSTL 2019) held at Indian Institute of Technology Gandhinagar (IIT

Gandhinagar) from 28th February to 2nd March 2019. He was invited as Plenary Speaker in a National Seminar on 'The Role of Library and Information Services in the New Millennium' at Dr Babasaheb Ambedkar Open University, Ahmedabad on 16th March 2019.

Mr Ashok Kumar Rai, Scientist D (CS)

Mr Ashok Kumar was invited to deliver a lecture on 'INFLIBNET Activities and its benefits in Research and MOOCs' during National Workshop on Academic Writing and Research Productivity at IK Gujral Panjab Technical University, Kapurthala, Panjab during 4th to 5th February 2019. He was also invited to deliver a lecture on e-Learning MOOCs as a resource person during Training-cum-Workshop on E-learning in Higher Education at Iswar Saran Degree College, University of Allahabad, Prayagraj (UP) from 07th-13th February 2019. As a special invitee, he delivered a presentation on e-ShodhSindu (eSS) status for the year 2019 during 2nd International Conference of Changing Landscape of Science & Technology Libraries (CLSTL 2019) held at Indian Institute of Technology Gandhinagar (IIT Gandhinagar) on 3rd March 2019.

Mr Abhishek Kumar, Scientist C (CS)

Mr Abhishek Kumar was invited to attend a meeting regarding e-governance at UGC, New Delhi on 10th January 2019. He was also invited for a review meeting of Swayam Prabha at CEC, New Delhi on 11th January 2019. He was also invited to demonstrate NCTE Accreditation Work Flow Management at NCTE, New Delhi on 24th January 2019. He was invited to deliver a lecture on MOOCs at Sophia College, Mumbai on 25th January 2019. He was invited to demonstrate the

post data capturing system for Atal Ranking of Institutions on Innovation Achievements (ARIIA) on 22nd February 2019. He was also invited to demonstrate NCTE Accreditation Management System during two days Northern Regional Conference on Prospects & Challenges in Teacher Education organized by All India Association of Private Colleges and National Council for Teacher Education at NCTE, Jaipur from 8th to 9th March 2019. He demonstrated about NMTT portal to all PMMMNMTT Centre nodal officers through Video Conferencing on 13th March 2019. He was invited to demonstrate the work status of UGC-DEB Portal at MHRD, New Delhi on 19th March 2019.

Dr Miteshkumar Pandya, Scientist B (LS)

Dr Miteshkumar was invited to deliver lectures in National Workshop on SWAYAM organized by Arts College Bamkhede in collaboration with North Maharashtra University, Jalgaon on 28th February 2019 at Arts College Bamkhede, Ta. Shahada, Dist Nandurbar, Maharashtra.

Mr Raja V, Scientist B (CS)

Mr Raja was invited by JSS Academy of Higher Education & JSS Science and Technology University, Mysuru as a resource person on 11th January 2019 to deliver a guest lecture on 'Technology Platforms for Teaching-Learning Academic Tools from INFLIBNET' giving emphasis on Cloud-computing technology. Mr Raja V was invited by National Institute of Design (NID), Gandhinagar to deliver a guest lecture on 'Role of INFED @ NID' on 5th February 2019.

He was one of the participants representing South-Asia in the 'Identity and Access Management (IAM)' workshop and meetings held in conjunction with the 47th Asia Pacific Advanced Networking

(APAN) Conference held during 18th to 22nd February 2019 at Daejeon, South Korea. His conference presentation was on "Indian Access Management Federation updates and New initiatives about INFED. Attendance at this event was funded by the BACKFIRE project within the framework of the European Commission funded Asi@Connect project. The goal of this project is to develop the eduroam and eduGAIN services within the Asia Pacific region, and this was the 3rd meeting in the series on its path. On 19th March 2019, Mr Raja took a Video Conferencing presentation with IUCAA Technical Team, Pune for integrating LIGO-India Services with INFED.



Mr Raja V participated in the Identity and Access Management (IAM) Workshop and 47th Asia Pacific Advanced Networking (APAN) Conference, Daejeon, South Korea

Mr Kimidi Siva Shankar, Scientist B (LS)

Mr K Siva Shankar as a Co-author presented an abstract presentation titled 'Indian research information network system: research impact & analytics' from one of the conference themes 'Trends In Scholarly Communication: Open Science, Open Access & Open Data' during 2nd International Conference, "Changing Landscape of Science & Technology Libraries (CLSTL 2019)" organized by Indian Institute of Technology Gandhinagar from 28th February – 2nd March 2019. The presentation received the conference best abstract presentation.



Mr Siva Shankar K and Mr Kannan P receiving memento from Amit Prashant, Professor, Department of Civil Engineering, IIT Gandhinagar



User's Speak

On Shodhganga

Respected Sir,

With your continuous effort Shodhganga is becoming as beautiful and very wide Ganga. I am so happy of your contribution. Good Luck for you and your dedicated and tireless team members.

With kind regards.

A.Thirumagal

Librarian, ManonmaniamSundaranar University, Abishekapatti

Tirunelveli - 627 012, Tamilnadu.

Shani Minogue sminogue.london@gmail.com

Dear Staff at Shodhganga,

I hope this email finds you well. Firstly, thank you for creating this resource: I've just stumbled upon it, and as an undergraduate doing my dissertation on Indian urban planning, the content I have found is invaluable.

Kind regards,

Shani Minogue, London

Dear Sir,

I am an independent scholar and greatly appreciate the service that is being provided through Shodhganga. However I am having challenges in my searches for material. If I search for a topic I am very grateful that I am often led to one of the dissertations that are posted on your website.

Again, Many thanks
In appreciation, Mary Girard
Madison, WI USA

Thanks a lot for generous gestures through extending such nice services. I wish all the best for the future endeavours.

Regards to the team.

Modi DS,

BVM Engineering College, Vallabh Vidyanagar, Anand, Gujarat

Dear Shodhganga
As a researcher, I often use your wonderful website. We often do land on very interesting research.
best
Anand
Forwarded message
From: Gabe Hiemstra <info@wisdomlib.org></info@wisdomlib.org>
Date: Fri, Nov 23, 2018 at 4:43 AM
Subject: Inquiry regarding copyright
To: <suboohi@inflibnet.ac.in></suboohi@inflibnet.ac.in>
Dear Shodhganga,
Your repository truly is unique and I always enjoy browsing the vast amount of knowledge contained in it. Some of the thesis are truly enlightening works. Thanks for all your hard work!
I noticed you encourage the use of a "Attribution-NonCommercial-ShareAlike4.0International". Does this apply to all of your thesis (unless otherwise specified)?
So, for example, if I would like to place some documents on my website, would I be able to do so under the terms of this license?
Thank you!
Best regards,
Gabe Hiemstra
Forwarded message
From: Manonmaniam Library < msulibrarytvl@gmail.com >
Date: Tue, Mar 26, 2019 at 10:32 AM
Subject: Re: Requesting - update - reg
To: Shodhganga Inflibnet < shodhganga@inflibnet.ac.in > , Manoj Kumar K < manoj@inflibnet.ac.in >
Respected Sir,
Thank you very for accepting our uploaded theses of our Manonmaniam Sundaranar University. We are so happy on seeing our University in one of the top 10 Universities.
Thank very sir to you and your dedicated untried team members.
With kind regards,
A.Thirumagal

12th International CALIBER 2019

Convention on Automation of Libraries in Education and Research Institutions (CALIBER)

November 28-30, 2019



Organised by

INFLIBNET Centre, Gandhinagar, Gujarat in collaboration with KIIT, Bhubaneswar, Odisha



Venue

KIIT Bhubaneswar Odisha, India

Convention Theme

Library 2030: Moving Towards Smart Technologies, Services and Resources

Sub Themes



Cutting Edge Technologies for Library

- > Data Science: Machine Learning, Big Data, Artificial Intelligence, Business Intelligence, Information Visualization
- Smart Libraries, Internet of Things (IoT)
- Data Repositories
- Case Studies

2

Next Generation Library Services

- e-Learning: Learning Management System, MOOCs
- Shared Services, Collaborative Resource Sharing Models, Personalized Service and User Modelling
- Cloud based Services
- Role of Social Media in Services
- Technology Impact on Services
- Privacy and Security
- Case Studies



Resources and Capacity Building

- Information Literacy, Management, Entrepreneurship
- LIS education, Competency Development
- Professional Code of Ethics, Quality Assurance
- Capacity Building Challenges and Solutions
- Case Studies

Editor-in-Chief

Important Dates

Receipt of Paper

31st July, 2019

Registration (Last date)

31st October, 2019

Convention Tutorials

Study Webs of Active Learning for Young

Aspiring Minds (SWAYAM)

Indian Research Information Network Services

Prof J P Singh Joorel Director

Convener

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Jt-Convener

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Email: caliber2019@inflibnet.ac.in INFLIBNET Centre, Gandhinagar-382007, Gujarat, India

Organising Secretary

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Phone: +91-9937401113

Workshop on management of digital libraries

TRIBUNE NEWS SERVICE

CHANDIGARH, JANUARY 7

PU Vice-Chancellor Prof Raj Kumar inaugurated a fiveday workshop on 'Creation and management of digital libraries through open source software', which is being organised by AC Joshi Library, in collaboration with Information and Library Network (INFLIRNET).

Prof Kumar said creation and management of digitised library was important keeping in mind the shift to the virtual world. He said there was abundant data material available with the library and



PU VC Prof Raj Kumar (2nd from right) during the inauguration of the workshop on Monday, trisung photo: PRADEEP TENNE:

for maximum utilisation of services by all stakeholders. The efforts for digitisation have been initiated by the PU

library and would soon extend to the other parts of the university, he said.

He advised the workshop tion of usability.

team to connect the students and teachers of various departments with the workshop.

Prof Preeti Mahajan talked about shift of traditional library to digital library keeping in mind that the digital library provided 24X7 information, user-friendly interface, multi-media resources. advance search options. solved preservation policy and unlimited storage space. She talked about the why. whom, what, when and how of the digitisation keeping in mind the users, the depository, planning, budgeting, software, timeline and evalua-





Information and Library Network Centre

(An Autonomous Inter-University Centre of UGC)

Infocity, Gandhinagar - 382007, Gujarat, India Email: director@inflibnet.ac.in

https://www.inflibnet.ac.in/