

International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 2, Issue 4, November 2022

A Study of SLIM21 library Software

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Abstract: The paper deals with study of SLIM 21 is Multi-user, multitasking integrated library management software working either on a single machine or in a client-server multi-platform environment. SLIM21 Basic Modules includes for Cataloging, Circulation, Serials Control, Acquisitions, OPAC.

Keywords: SLIM21, Library software.

I. INTRODUCTION

SLIM is a library which implements the Sparse Linear Methods (SLIM) for top-n recommendation.SLIM21 is designed and developed in modules to take care of complete functionality required for automating libraries.

About SLIM SLIM21 is developed by SLIM. SLIM is an ISO 9001: 2008 certified software company Established in 1986. Founded by : Mr. Madhusudan Gaikaiwari -An alumnus of IIT Mumbai - having done his B.Tech in Civil Engineering • & Mrs. Meera Gaikaiwari -An alumnus of IIT Mumbai - having done her B.Tech in Electrical Engineering and M.Tech with elective Computer Engineering.

SLIM21 is a highly comprehensive and user friendly library management software brought to you by Algorhythms Consultants Pvt. Ltd.

SLIM21 is the latest product from the family of SLIM : System for Library Information and Managment. The first version of SLIM software was launched in the year 1988. Since then it has been continuously improved by incorporating feedback from clients and adopting to the latest technical innovations.

SLIM21 is backed by unflinching after sales support from Algorhythms Consultants Pvt. Ltd, an ISO 9000: 2008 certified company. Algorhythms project execution and quality control procedures make every library automation project a total success.

Today, Algorhythms counts over 450 libraries of different types such as academic institutions, engineering firms, pharmaceutical companies, hospitals, banks and financial institutions, software houses, schools and colleges as its satisfied customers.

Library Software package is the most crucial for the success of library automation as it has many implications for a library is operations services staff and users. The success of library

automation depends largely on the selection of right software and its effective implementation. A wide variety of library software packages are available in the market. Selection of an appropriate package suited to a particular library and its intelligent implementation are challenging computer task in library automation process. Therefore libraries should evaluate and compare all the available software packages carefully in order to select the best one that can match both the priority requirements and available financial resources.

1.1 Objectives of the study

1. To Study the SLIM21 Library software

1.2 Need of the Study

Today's Libraries are hybrid libraries. Resources are available in print format and digital format to provide quality services to the user's efficient administration of the library. Automation of the library is very essential. Library software the main part of the library automation, hence the selection of the library software is very important. SLIM21 software is available commercially.

Software Problems in Library Automation in India A.T. Francis Important software problems faced by the library professionals in India are analyzed and points out various compatibility and suitability issues in the selection of library





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software. The paper also hints that these problems have affected the progress of computerization of libraries. Up to date and detailed information on software's available in India can prevent several issues that may arise in the course of computerization. An agency/mechanism to continuously evaluate the software's may be formed to meet this requirement. Library Automation in Academic Libraries in India: Problems and Prospects Yogendra Sing Traces briefly the history of library automation in India. Tries to analyze the various factors that directly or indirectly affect the progress of library automation such as management issues, resources available with the libraries, level of skill of staff, availability of suitable software, geographic location area. Also discusses the areas in which automation has taken place and why. Role of INFLIBNET has also been discussed. Concludes that thing is changing for the better as library automation in academic libraries is now being regarded as an urgent need.

II. HARDWARE CONFIGURATION FOR A LIBRARY TO IMPLEMENT SLIM21 SOFTWARE SERVER MACHINE (STANDALONE)

- Intel Pentium IV processor onwards
- 256 MB RAM
- 10 GB HDD
- Is not connected to internet/network
- Data is stored in HDD

SERVER MACHINE (NETWORKING)

- Intel Pentium III processor onwards
- 256 MB RAM
- 10 GB HDD
- Is connected to internet/network
- Data is stored in the server

SYSTEM SOFTWARE REQUIREMENT

SERVER MACHINE

Operating System-Win XP Prof / Win 2000 Server / Win 2003 Server CLIENT MACHINE **Operating System-**Win XP (any) / Win 2000 (any) / Win 2003 (any)

DATABASE-SQL Server (Optional) Structured Query Language

Network Issues

- SLIM21 software is a multi-user system, which works on the network of computers.
- SLIM21 database resides on a centralized computer and gets updated from other computers as per the access rights assigned to different users.
- Therefore for the smooth functioning of the system the physical network needs to be of high quality. \Box Some of the networking standards which should be followed for SLIM21 to work properly are as follows:

Range

High Quality Cables and Connectors

- Cable should be straight
- UPS Necessary

Features

- Adherence to Windows Standards with menu bar, taskbar, window resizing, window moving, multi-tasking using simultaneous operations in multiple windows.
- Point and Click, reduces users learning requirements
- Drag & Drop, Cut & Paste reduces data entry effort and thereby increases uniformity and accuracy of the data.

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- Wizard mode for beginners . Users don't have to remember steps, neither can they miss out any steps.
- Extensive online help
- Tool tips
- Use of RTF (rich text format) for reporting allows user specified fonts, colors and sizes for texts
- Double click to open files and multi-media links to sounds, films, drawings, bitmaps, web sites etc.
- Interface with standard Windows applications like WordPad, MS-Word, Mail Exchangers, Object packagers etc.
- Use of Windows standard dialogues for saving, opening and searching

SLIM21

- SLIM has exhaustive set of library management functions. Hence the library gets computerised in all respect.
- SLIM is implemented at over 250 libraries. It is a stable product.
- Continuous up gradation of the software to keep pace with the latest technological

In-house software

- Library staff has to work with the manual procedures as well as with the computer system.
- In case of in-house system, the development cycle will go through many trials and errors.
- Continuous up gradation may not be possible as maintaining library software need not be the focus area of the

Standards

- SLIM21 has the support for Z39.50 Server and also Z39.50 Client. Z39.50 (also known internationally as ISO 23950) was developed in the late 1980s and early 1990s. It defines a strict protocol for searching and retrieving remote MARC-record based bibliographic records.
- SLIM21 has implemented NCIP protocol and is presently in the testing phase.
- SLIM21 implements the SIP2 protocol to make communication between the Slim21 circulation system and any other package feasible.

SLIM21 is designed and developed in modules to take care of complete functionality required for automating libraries. All modules support data entry in Unicode and thus support all Indic scripts

Basic Modules

SLIM21 Basic modules cover functionality required for day to day library management.

- Cataloguing
- Circulation
- Serials Control
- Acquisition
- OPAC

SLIM21 Cataloguing is based on AACR2 (Anglo American Cataloguing Rules).

SLIM21 Advance Data Entry

It catalogues any type of material, print as well as non-print. It supports material in digital form and helps you build digital library.

SLIM has virtually no limit on length of bibliographic details. Example, a Title can be 10 characters or 500 characters; summary can be 50 words or 500 words; article can have one author or 10 authors.

Unlimited number of added entries (access points) per card is allowed such as title, uniform title, main entry, multiple keywords, place of conference, etc. Any subject classification system such as UDC, DD, or CC etc. is permissible.



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Circulation

Front desk operations

- Issues, returns, reissues
- Title or copy specific reservations/cancellations
- Bulk transactions for a borrower
- Backdated transactions

Issue / Return with Barcode

- Easier interface to the barcode system, offering basic transactions like Issue and Return
- Print transaction report for a borrower

Letter Generation

- Collect reserved item
- Overdue loans notice
- No dues certificate
- Membership renewal reminder
- Recall a book in circulation
- Self Check-in and Check-Out (optional feature)

SLIM serials control system helps achieve an effective utilization of periodicals budget. It allows for tracking receipts of issues, filing claims for issues not received, preparing binding orders, etc.

The Journal Title Information includes:

- Title, Abbreviation, ISSN and other identification numbers
- Publisher / Agent
- Periodicity
- Delivery Mode
- Gratis / Exchange / Depository
- Multiple Addresses for Communications
- Holding note for Union catalogue
- Separate list of journals on proposals

Letter Generation

- New subscription
- Renewal of subscription
- Reminders / replacements for issues
- Binding order
- Request / acknowledgment for gift / exchange
- Payment forwarding note

Additional facilities

- Generation of arrival schedule for issues of journal
- Subscription history for journals
- Popularity statistics
- Accessioning of bound volumes
- Publication history
- Integrated with article indexing

SLIM Acquisition system supports the entire range of activities from the time someone makes a proposal to acquire an item, until it is finally paid for and accessioned.

Acquisition system covers:

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Payment details of purchase bills





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Inquiry to book sellers/publishers Purchase orders (foreign / local) Books on approval memos Purchase bills

Credit note Detailed information about vendors Multiple currencies and conversion rates

The data on documents is automatically picked up for generating letters. These can be simply printed, signed and posted. Associated payments information is maintained. Purchase follow-ups are made easy with:

- Purchase order status report
- Purchase order follow up letters
- Payment advises
- Entries in accession register are generated automatically

The items under acquisition can be kept in the catalogue and can be made visible through OPAC and WebOPAC searches. These items are grouped by proposers, subjects, recipients, etc. and can be retrieved in many ways:

- Those on requests, orders, bills or approval memos
- Those awaiting approval
- Those received on donation or exchange basis

On-line Search Facilities for Readers:

SLIM OPAC (On-line Public Access Catalogue) offers powerful on-line search facilities to search through library catalogues:

Author	Place of conference
Keyword	Subject name
Subject class	ISBN / ISSN
Title	Year of conference
Publisher	Series Titles
Place of publication	Serials Title
Main entry	Year of publication
Material type	

The repository of words, names, titles, keywords, etc. is available for on-line browsing while the search phrase is being entered. This displays alternate spellings; words derived from same root, etc. and thus helps the searcher by providing a view of the data. In addition to these conventional searching methods, OPAC indexes every word in the description of the item. Thus, to conduct a search one need not be aware of the cataloguing style of the library.

Optional formats are available to display information such as:

- Abstract of the item
- Keywords for the item
- Number of copies
- Bound volumes of a journal
- Loose issues of a journal
- Inventory status such as lost / missing /withdrawn

An interactive query builder with:

- Boolean operators such as and, or, not
- Wild card matching
- Proximity and adjacency operators
- Set formation and combination operators
- A query result can be presented as a neatly formatted bibliography in multiple sorting orders.

Enterprise Modules:

SLIM21 enterprise modules help reach library users by providing user oriented library services.





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- Web based OPAC
- Current Awareness Service (CAS)
- Selective Dissemination Information (SDI)
- Web Proposals
- Inter Library Loan (ILL)
- Statistical Analysis

Web based OPAC:

Your Library on the Net

SLIM has the capability of putting your library information on the Internet / Intranet. This module allows the user to login as a library member and view his/her loans and reservations. He/She can even reserve an item in the library through the Internet. Along with all these features, catalogue browsing, circulation details, word / phrase search, view card etc. are also available. All this information appears as different web pages on the NET. You can customize the appearance of these pages.

Retrieval of the data is simple, fast and efficient. Even a catchy phrase in the description of the catalogued item can be used for searching. Please visit us at www.slimpp.com to get the URLs of our client libraries to browse through their collection on web using SLIM web based OPAC.

Current Awareness Service (CAS)

SLIM helps in the publication of an information bulletin containing particulars of the latest additions of books or articles. The list in the bulletin is arranged in the order of subjects. The particulars of the items can include abstracts besides the standard bibliographic data and library call numbers. The Keyword index or the author name index, or both these indices can get appended to this report.

The Current Awareness Service report can be prepared either in the Rich Text Format or the HTML Format. The report when created in the HTML format gets automatically linked to the Web Aware OPAC module of SLIM. Fonts, sizes, colours, elements of bibliography and their sequence are defined by users and are placed in a persistent form. With the RTF format output, it is possible to further enhance the publication using word processors, if required. Such a CAS bulletin can be published in print format, or as an HTML page on the web site of the library, or can be sent as email messages to all, or any selected members receiving this service.

Selective Dissemination Information (SDI)

SLIM users can either from the web interface or through the librarian record their preferred subjects and change their preferences any time. The library wanting to provide this service periodically produces subject wise reports (similar to CAS service above) covering the recently acquired material. These reports can be in HTML or RTF formats as usual. The format and the layout of such reports can be specified by the library.

The SDI report can be published in print format, or as an HTML page on the web site of the library, or can be sent as email messages to all, or any selected members receiving the SDI service.

Web Proposals

This module allows library members to propose (suggest) books for purchase using web-based suggestion forms. These forms are viewed by the library staff using acquisition module and books are either marked for approval with the name of the approving authority or approved for purchase by the staff. The approver sees the list of books meant for his/her approval on web and can mark some of the books for purchase.

Web Proposals covers

- View Proposals List.
- Propose an Item online.
- View the list of Proposals proposed only by the member.
- View List of items for approval if the member is an approver.





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• View the details of item.

Inter Library Loan (ILL)

SLIM21 helps you to circulate books, which are on loan from some other library to your members. It has following features:

- Allows you to send a request for books to another library
- Generates acknowledgment letter when books are received from the parent library
- Reports ILL books which are issued out to your members
- Generates Dispatch transaction at the time sending the book to the parent library
- Thus maintains the complete track of books, which are presently on ILL along with the history of books, which were on ILL in the past.

Statistical Analysis

This Module produces different statistical information required for library management such as:

- Distribution of transactions over working-hours, week-days, or months
- Popularity of subjects
- Popularity of item types
- Most active or inactive items and members

L2L Modules (Library to library resource sharing)

SLIM21 L2L modules help in effective resource sharing.

- Import Export
- Copy Cataloguing
- Z39.50 Client
- Z39.50 Server

Import Export

SLIM21 helps you to take data from standard exchange formats such as MARC $\ CCF \ ISO2709$ in SLIM database. You can also convert data entered in SLIM21 into the above formats

Copy Cataloguing

This module helps in speedy and accurate record creation by way of *copy cataloguing* from different websites. You can select records from specific websites and use them either to create new records or to upgrade existing records. You can also export selected records in intermediate mnemonic file, carry out local variations to the records and then use the file to create or update records in SLIMdatabase.

Z39.50 Client

The Z39.50 Client provides various functionalities like:

- Talks to many servers simultaneously
- Collected data can be imported to your SLIM database
- Compatible with the BATH profile

Z39.50 Client

SLIM Z39.50 server establishes connectivity between SLIM database and remote Z39.50 client. It supports TYPE-1 query and presents MARC record

Additional utilities

Additional utilities (ADD-Ons) help libraries with their specific requirements.





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- Colon classification shelving order
- Smart Card / RFID interface
- Touch Chip Interface (Biometrics)
- Library Map
- Newspaper monthly billing
- News clipping publishing

Colon classification shelving order

Slim21 supports the Colon classification system and thus if you wish to apply colon classification system in your library all you have to do is click on the check box, provided in the preferences.

Smart Card / RFID interface

The SLIM21 software provides support for library automation devices like Smart card / RFID. This in turn increases the security of the system as well as improves the efficiency of the system by allowing it do transactions at a faster rate and that too without any chance of human error, since everything is automated.

Touch Chip Interface (Biometrics)

SLIM21 provides support for biometric devices which can scan the thumb impression of the software user and accordingly grant him/her the appropriate rights. This makes the software more secure to be used. The biometric devices can also be used to scan the barcodes of the items and the borrowers of the library, which can be very useful in case of issue return transactions. Even during physical inventory checking the barcode scanner can scan all theitems and accordingly mark the physical status of that item. This saves a lot of time and effort of the library staff.

Library Map

There is a lot of chaos in the libraries over the exact location of any item in the library. Most of them are misplaced or lost in such a scenario. Hence it is required that the items be arranged in a systematic way. Even in this case we have to remember the shelf number in order to locate the item, whereas the librarian does not have so much time for doing this searching business. Especially in huge libraries which span across a couple of floors it is difficult to locate the shelf itself ; forget about items. The Library map module provides an efficient way of locating a particular item in a library. Using the library map module the librarian can get a graphical representation of the various shelves, rooms or floors of the library.

The library map module is very helpful for libraries having huge collections or which spread over a large area.

Newspaper monthly billing:

The newspaper monthly billing module is used to prepare the bills of all the newspapers that the Library has subscribed over the past one month.

News clipping publishing:

The newspaper clipping publishing module is used in publishing some articles from the newspaper on the library system so that even the news clipping can be used as a source of information like any other items (books,CDs).

ADVANTAGES:

- Improved customer service through greater access to accurate information.
- Increased productivity and job satisfaction among staff members as it eliminates duplication of effort.
- Greater accountability and transparency in operations.
- More reliable security for sensitive and confidential information.
- Easier access to Information like management reports and stock etc, as well as more accurate and faster results from statistical analyses.

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DISADVANTAGES: Expensive If software becomes corrupted, there is danger of losing all data.

III. CONCLUSION

SLIM21 helps you catalogue books, e-books, films, sound recordings, drawings, clippings, articles, reports, letters, pamphlets, serials publications. Cataloguing adheres to popular international standards. With SLIM21 retrieval of information is simple, fast and efficient. Even a catchy phrase in the description of the catalogued item can be used for searching. It also supports flexible workflow to cover activities related to acquisition of books, serials control and funds monitoring.SLIM21 is designed and developed in modules to take care of complete functionality required for automating libraries. All modules support data entry in Unicode and thus support all Indic scripts

REFERENCES

- [1]. Kavle R. L (2004) Modern Trends in Library and Information Science (MTLIS) Latur, Rajarshi Shahu Mahavidyalaya,
- [2]. Moorthy A. L., Rao Laxman N, (2006) Technology Management in Libraries, New Delhi, Allied Publishers
- [3]. Rama Reddy E, Library Automation Course Material, Hyderabad Center for Distance Education, University of Hyderabad
- [4]. SLIM21: User Manual
- [5]. http://www.slimpp.com
- [6]. https://www.slimkm.com/slim21-modules.php
- [7]. https://karmaveerlibrary.files.wordpress.com/2016/10/slim21-and-koha-a-comparative-study-1.pdf