Library Automation: Planning and Implementation

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Planning is a systematic process to create or development of any specific project.

In the sense of library automation planning, a thorough study of the library’s existing system as well as the library’s vision is necessary to enable you to prepare a good technology plan and project proposal.
Who should be planned of library automation?

- Library authority
- Library committee
- Librarian or library staff
- Computer Specialist or Engineer
Steps of Planning for Library Automation

- Objectives or vision
- Present status of library
- Requirement gape
- Feasibility
- Technology plan
- Project proposal
- Approval of proposed project
Objectives or Vision

A vision is a dream. It is a vivid picture of what you would like your library to become in the near future. It is based on the mission of your library, the needs of your users and on the trends in library service. A vision provides direction and a philosophy for the library.
Present status of Library

- A systems study is conducted to assess the library’s status and needs. It involves all the following issues:
  1. Nature of Library and its purpose
  2. Total collection of library
  3. Number of users
  4. Daily circulation
  5. Numbers of multi lingual documents
  6. Information service
  7. Available staff
  8. Working process of library
  9. Users need
Sources of data

- Statistics
- Staff profile
- Patron profile
- Policies and procedures
- Functional specifications
Requirement gape

- By comparing the actual status with the objectives of the project, the systems requirements can be determined.
Feasibility

Immediately after the analysis and design for the system has been completed, a feasibility study must be conducted. It is designed to answer:

- Is the proposed system possible?
- Is it necessary?
- What other options are available?
- Is it affordable?

The end product of a feasibility study is a report to management.
Technological plan

The technological plan should be a written document

Contains:

– Vision, Goals and Objectives
– Components of the project in terms of needs to achieve the vision
– Specifications for your system requirements,
– Financial estimates,
– Action plan and
– Time table for the project.
Project Proposal

- Project proposal should be based on the technology plan.
- Project proposal should be prepared for presentation to funding agencies.
Request For Proposal

- RFP is a formal request for a bid from suppliers of library systems. The RFP is a comprehensive document that provides the vendor with the outline, purpose, scope, description, minimum requirements, etc. for the system.

- Some steps for prepared of RFP are following;
  1. Writing RFP
  2. Approval
  3. Request quotation
  4. Receiving proposal from vendors
  5. Evaluating proposals
  6. Preparing a short list of vendors
  7. Requesting a demo of the system
  8. Purchasing the system
  9. Preparing the contract
  10. Delivery and installation of system
  11. Evaluation of installed system
Selection of Hardware

1. Pentium -4
2. 64 MB RAM
3. 4 GD hard disk
4. 150 MB cartridge tape drive
5. Floppy drive
6. CD drive
7. USB Card or pin
8. BGA- color monitor
9. 8 port intelligent i/o card
10. Internal modem
11. Cables: Fiber optics, Coaxial and Twisted pair
12. Scanner, Printer
13. Barcode scanner, Sensor system
14. Telephone connection
Selection of Software

- To determine the best package for our library, analyze and identify our needs and match it with the features and functions of integrated library systems.
- At present lot of library software's are available in the market. In which we can choose any software that will be fulfilled the vision or objectives of library automation.
Library Automation: Implementation

- Implementation includes all activities after management has decided to automate the library and approved the plan.
- After purchasing our system we must make it operational. Thus even before we purchase our system, we must design implementation strategies, which should include:
  1. Allocating resources
  2. Implementation for hardware
  3. Implementation for software
  4. Data conversion
  5. Implementation for System maintenance
  6. Training
  7. Making changes as necessary
Allocating resources

- Resources include the hardware, the network, the data, the staff, etc.
- The layout of the network must be designed.
- Identify each service point and put the necessary hardware in place. For example, you must have a computer at the circulation desk to be able to carry out the circulation function. The same is true for acquisitions, accessioning, cataloging, serials control, reference, etc. For every service offered there should be a computer available. In certain cases these functions can share hardware.
- You must also identify a place for the server.
- Shared services like printing, scanning could be done on the network or if desired in a common service center.
Implementation For Hardware

- Time to time checking of all the computer stations
- Checking of all the hardware accessories such as cables, power supply connections, printer, scanner, etc.
- Checking of furniture and other machineries
Implementation For Software

- Determine the problems related with the software's and moving them.
- Time to time testing and measurement of all the modules of software.
- Improvement and changes in library software
Data Conversion

- Data conversion of manual records to computer readable form.
- Data conversion of computer record to computer readable form.
- Checking the formatting of bibliographical description of documents.
- Standardization of data according to MARC-II or Z39.50
Implementation for System Maintenance

- Environmental care:
  1. Sunlight,
  2. Air,
  3. Water,
  4. Dust

- Data security:
  1. Hackers
  2. Viruses
  3. Malicious insiders
  4. others
Training

- Staff training
- Users training

Making Changes as Necessary
Difficulties in Implementing Library Automation

- Lack of staff preparation for automation project
- Data conversion
- Lack of resources and expertise
- Turns out to be more expensive
- Lack of administrative support
Key Factors for Successful implementation

- Support from administration
- Staff competence
- Consideration of user requirements
- Presence of infrastructure
- Available data
- Excellent managerial skill from coordinator of the project
- User interface