

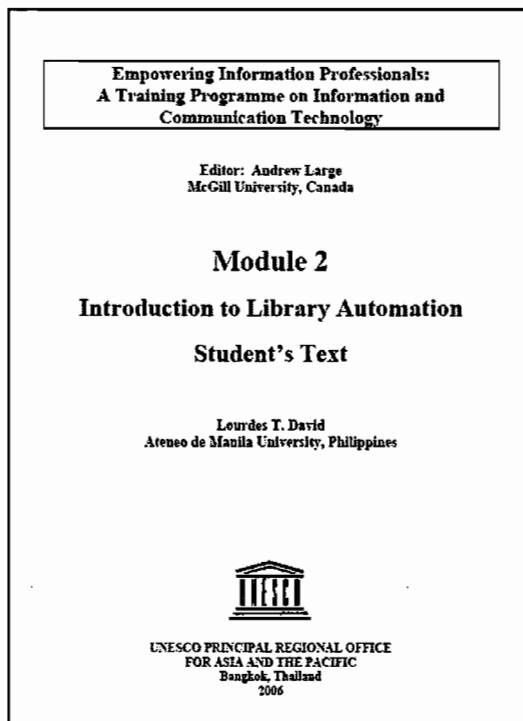
# Training programme for library staff Ho Chi Minh City spring 2008

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The National Library of Sweden,  
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and The Ministry of Information and Culture, Laos

## Module 4: Introduction to Library Automation

Instructor: Dr. Mats Lindquist



Contains  
the material  
from the  
UNESCO  
Training  
Programme

Module 2

**Empowering Information Professionals:  
A Training Programme on Information and  
Communication Technology**

**Editor: Andrew Large  
McGill University, Canada**

**Module 2  
Introduction to Library Automation  
Student's Text**

**Lourdes T. David  
Ateneo de Manila University, Philippines**



**UNESCO PRINCIPAL REGIONAL OFFICE  
FOR ASIA AND THE PACIFIC  
Bangkok, Thailand  
2006**

## EIPICT\_M2\_ST

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## **Module 2**

# **An Introduction to Library Automation**

## **Student's Text**

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# Empowering Information Professionals: A Training Programme on Information and Communication Technology

## General Guidelines for the Student

### Introductory Note

Library schools are now changing their curricula to produce graduates who are prepared for the changing service requirements in libraries. The majority of practitioners, however, graduated before the advent of the Information Age or studied in schools that did not teach ICTs for various reasons. This group of practitioners is now finding itself unprepared for the new demands of the profession. This *Training Programme* is in response to this identified need.

People working in libraries and information centers are the primary target group of the *Training Programme*. It is intended to provide them with the knowledge and skills to deal with the application of ICTs to library and information services. It is also intended for use by teachers of students in library schools and of personnel in library and information centers. The Package has been developed by the UNESCO Asia and Pacific Regional Office with funding from the Japanese Funds in Trust for Communication and Information.

### Rationale

In 1961, Marion Harper Jr. wrote, “To manage a business well is to manage its future; and to manage the future is to manage information.”<sup>1</sup> Less than 25 years later, John Naisbitt, in discussing the ten megatrends in his opinion were happening in the US, said “None is more subtle, yet more explosive, I think than this first, the megashift from an industrial to an information society.”<sup>2</sup> According to Naisbitt, “In 1950, only 17 percent of us worked in information jobs. Now more than 60 percent of us work with information as programmers, teachers, clerks, secretaries, accountants, stock brokers, managers, insurance people, bureaucrats, lawyers, bankers and technicians.” He groups librarians among professional workers who “are almost all information workers...”<sup>3</sup> Today, society is in the “Information Age,” an age where information is power.

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<sup>1</sup> Harper, Marion Jr. 1961. “New profession to aid management,” *Journal of Marketing*, January, p. 1

<sup>2</sup> John Naisbitt entitled *Megatrends : Ten new directions transforming our lives* (New York, N.Y. : Warner Books, 1982), p11

<sup>3</sup> *Ibid*, p. 14-15

## **Content of the Training Programme**

The Training Program contains nine modules:

- Module 1 - Introduction to Information and Communication Technologies
- Module 2 - Introduction to Library Automation
- Module 3 - Information Seeking in an Electronic Environment
- Module 4 – Creation and Management of Databases Using CDS/ISIS
- Module 5 - The Internet as an Information Resource
- Module 6 - Web Page Concept and Design: Getting a Web Page Up and Running
- Module 7 - Library Management and Promotion
- Module 8 - Digital Libraries and Open Access
- Module 9 - Intellectual Property Rights in the Digital Age

The Student's Text contains the following:

- General Guidelines
  - Introductory Note
  - Rationale
  - Content of the Training Programme
  - Prerequisites
  - Typographical Conventions
- Overview of Module
  - Learning Outcomes
  - Schedule
  - Module Outline
  - Grading Policy
  - Lessons
  - List of Activities
  - Reading/Reference List
  - Glossary

## **Prerequisites**

The student must have a genuine interest in understanding the impact of new information technologies on the practice of Library/Information Service.

## **Typographical Conventions**

The following conventions are used through out the module.



### **Course Guide**

### **General introduction to the Modules**



**Course Objectives**

**General introduction to the learning outcomes of the Module**



**Note**

**General note to the teacher and additional information**



**Tip**

**Teaching tips and supplemental materials**



**Activity**

**Activity for the students**



**Assessment**

**Questions/Activities to measure learning**

**End of General Guidelines**

## Module 2

# An Introduction to Library Automation

## Student's Text

### Overview



This is the **Student's Text of Module 2** of *Empowering Information Professionals: A Training Programme on Information and Communication Technology*. Module 2 is an introduction to library automation.

Module 2 covers the basic concepts of library automation, the impact of ICTs on the library and the steps in automating your library. It is not a prerequisite to the other eight modules. Prior knowledge could be credited but the student must take and pass all the tests for Module 1 to be allowed to take this module.



### Learning Outcomes

The goal of this Module is to provide the practicing librarian with the skills and knowledge needed to handle the demands of the Information Age. In addition, this course will provide insights on library automation

By the end of the Module, students should be able to:

1. Understand the scope of library automation.
2. Become aware of existing automated library/information systems.
3. Become aware of factors that must be considered in planning and implementing ICT applications in libraries and information centers.

### Schedule

Day	Lessons
1-2	Lesson 1: What is library automation?
3-4	Lesson 2. What factors must be considered in planning and implementing library automation?



## Outline

<b><i>Lesson 1. What is Library Automation?</i></b>	
<p><b><i>Scope</i></b></p> <ul style="list-style-type: none"> <li>• What is library automation?</li> <li>• What are the benefits and difficulties of library automation?</li> <li>• What is an integrated library system?</li> <li>• What are the general features and functional modules of an integrated library system?</li> <li>• What are some examples of ALS?</li> <li>• What is the role of standards in library automation and resource sharing?</li> </ul>	<p><b><i>Objectives</i></b></p> <p>At the end of the lesson, students should be able to:</p> <ul style="list-style-type: none"> <li>• Define library automation.</li> <li>• Identify the benefits and difficulties of library automation.</li> <li>• Define integrated library systems.</li> <li>• Describe the general features and basic functional modules of an integrated library system.</li> <li>• Identify some off-the-shelf and open source ALS.</li> <li>• Understand the role of standards in library automation and resource sharing.</li> </ul>
<b><i>Lesson 2. What factors must be considered in planning and implementing Library Automation?</i></b>	
<p><b><i>Scope</i></b></p> <ul style="list-style-type: none"> <li>• What factors must be considered in planning for library automation?</li> <li>• What factors must be considered in planning and implementing library automation?</li> <li>• What are the difficulties in implementing an integrated library system?</li> </ul>	<p><b><i>Objectives</i></b></p> <p>At the end of this lesson, students should be able to:</p> <ul style="list-style-type: none"> <li>• Appreciate the importance of planning.</li> <li>• Identify factors that must be considered in planning and implementing library automation.</li> <li>• Identify potential problems in planning and implementing library automation.</li> </ul>

## Grading Policy

A score of 40 points is needed to pass the Module. The breakdown of the points for the module exercises is as follows:

<b>Lessons</b>	<b>Points</b>
1. What is Library Automation?	30
2. What factors must be considered in planning and implementing library automation.	20
<b>Total</b>	<b>50</b>

**End of Overview Module 2**

**Module 2**  
**An Introduction to Library Automation**

**Student's Text**

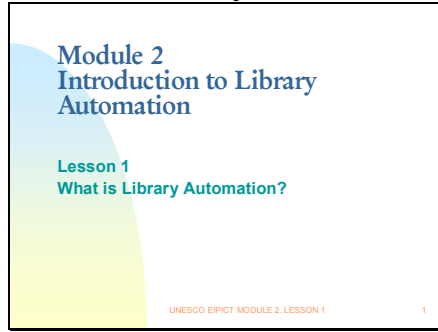
**The Lessons**

**Lesson 1: What is Library Automation?**

**Lesson 2: What Factors must be considered in Planning and implementing Library Automation?**

# Lesson 1: What Is Library Automation?

Slide 1



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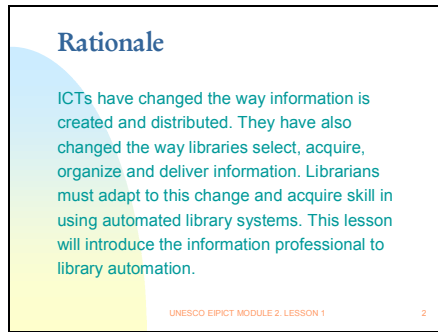
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Slide 2



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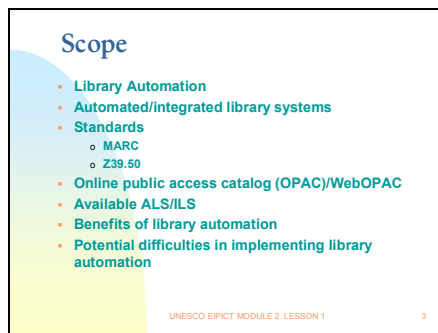
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Slide 3



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Slide 4

**Learning Outcomes**

By the end of the lesson you should be able to:

- Define library automation
- Define an automated/integrated library system and identify its general features
- Be aware of standards
  - MARC
  - Z39.50?
- Define an online public access catalog/Web catalog
- Be aware of available ALS/ILS
- Identify the benefits of library automation
- Identify potential difficulties in implementing library automation

UNESCO EIPICT MODULE 2, LESSON 1 4

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Slide 5

**What is Library Automation?**

Library automation is the application of ICTs to library operations and services. The functions that may be automated are any or all of the following: acquisition, cataloging, public access (OPAC and WebPAC), indexing and abstracting, circulation, serials management, and reference.

UNESCO EIPICT MODULE 2, LESSON 1 5

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Slide 6

**What is an Integrated Library System (ILS)?**

An integrated library system is an automated library system in which all of the functional modules share a common bibliographic database. In an integrated system, there is only one bibliographic record for a book. All transactions involving this book are linked to its bibliographic record. For a discussion of ILS go to:

[www.od.state.ok.us/servlibs/l-files/glossi.htm](http://www.od.state.ok.us/servlibs/l-files/glossi.htm)  
[en.wikipedia.org/wiki/Integrated\\_library\\_system](http://en.wikipedia.org/wiki/Integrated_library_system)

UNESCO EIPICT MODULE 2, LESSON 1 6

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Slide 7

**What are the Advantages of an ILS?**

- There is no duplication of records since the bibliographic database can be viewed before new records are encoded.
- Opportunities for errors are reduced since the record is entered only once.
- Library staff and patrons can view the status of the material from the OPAC or WebPAC.
- Library staff use the same masterfile for cataloguing, circulation, the OPAC and other services as needed.

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Slide 8

**What are the General Features of an ILS?**

- Functional modules-- most systems offer: cataloguing, OPAC and circulation. Some ILS also have additional modules such as acquisitions, serials management and WebPAC.
- Operating systems—Some systems have proprietary OS. Most systems use Windows. Some use LINUX, an open source OS.
- Database systems – major systems normally make use of DBMS offered by vendors like Oracle and Informix. Open source systems are also available and downloadable from the Internet.

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Slide 9

**What are the General Features of an ILS?(2)**

- Library automation standards
  - Database structure—MARC21
  - Protocol—Z39.50
  - Search features
- Network architecture – major systems run on client-server architecture and use TCP-IP to communicate across networks (LANs and WANs)

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Slide 10

**The Cataloging Module**

- Used for the creation, storage, retrieval and management of bibliographic records and/or indexes.
- Usually there are two different interfaces for search and retrieval of the electronic catalog : one used by the catalogers that allows them to maintain the library database (the main cataloging module), and one provided for users that allows them to search and display the results – the Online Public Access Catalog (OPAC).
- A third interface for search and retrieval of the catalog which may or may not be present in some systems is the WebPAC

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Slide 11

**What is MARC?**

- The Machine-Readable Cataloging (MARC) formats are standards used for the representation of bibliographic and related information for books and other library materials in machine-readable form and their communication to and from other computers.
- MARC 21 is the new standard for MARC. For more information about the MARC 21 standard visit the following site:  
<http://lcweb.loc.gov/marc/marc.html>

UNESCO EIPICT MODULE 2, LESSON 1 11

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Slide 12

**What is the Importance of MARC?**

The MARC format allows libraries to:

- Describe resources in the format that will enable the library to correctly print, display, catalog records.
- Search for and retrieve certain types of information within specific fields
- Have a common format that makes sharing bibliographic resources with other libraries possible
- Easily migrate into another library system without need for re-encoding records.

UNESCO EIPICT MODULE 2, LESSON 1 12

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Slide 13

**What is Z39.50?**

- Z39.50 is generally defined as the information search and retrieval protocol standard used primarily by library and information related systems.
- The standard specifies a client/server-based protocol for searching and retrieving information from remote databases simultaneously using a single interface.
- Read more about Z39.50 by reading this article: "Z39.50, Part 1 - An Overview," from *Biblio Tech Review* at [http://www.bibliotech.com/html/z39\\_50.html](http://www.bibliotech.com/html/z39_50.html) <http://www.loc.gov/z3950>

UNESCO EIPICT MODULE 2, LESSON 1 13

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Slide 14

**Why are Standards Necessary?**

Standards are necessary for networking and for information exchange. For example:

- MARC 21 and Z39.50 allow searching, retrieval and exchange of records across platforms
- Unicode allows encoding, searching and retrieval of information in different scripts.

UNESCO EIPICT MODULE 2, LESSON 1 14

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Slide 15

**The Online Public Access Catalog (OPAC)**

- The OPAC is an electronic catalog. It is the equivalent of the card catalog but it is searchable online.
- The OPAC could also be Web based called a WebPAC. The WebPAC is used by libraries to share bibliographic information

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Slide 16

### The Circulation Module

- The basic components of an integrated library system are the cataloguing module, the OPAC and the circulation module.
- The circulation system is the transaction module that allows the system to loan out and receive returned materials. The transactions are automatically linked to the cataloguing module to enable users to find out if materials are available for loan or have been borrowed.

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Slide 17

### What are the Other Modules in an ILS?

- The basic modules are cataloguing, circulation and the OPAC
- Other modules which may be present are:
  - Serials management
  - Acquisitions
  - Interlibrary loan
- For a discussion of ILS modules please go to "Integrated Library System Reports: Vendors info." URL:  
<http://www.ilsr.com/search2.cfm>

UNESCO EIPICT MODULE 2, LESSON 1 17

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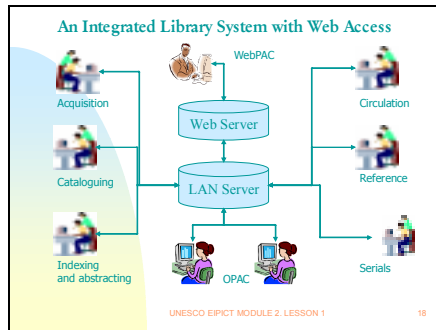
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Slide 18



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Slide 19

**Off-the-shelf or Customization?**

- There are many commercial systems that are available off-the-shelf. These systems observe standards for ILS. However, the needs of libraries are not always met by these systems.
- There are also open-source systems that can be downloaded from the Internet.
- Some are not open-source but are also free.
- Many libraries still develop their own ILS.

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Slide 20

**Commercial Library Systems**

Access the following sites to know more about the integrated library systems available on the market:

- AcqWeb's Guide to Automated Library Systems, Library Software, Hardware and Consulting Companies  
<http://acqweb.library.vanderbilt.edu/pubr/opac.html>
- Integrated Library System Reports: Vendors info  
<http://www.ilsr.com/search2.cfm>

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Slide 21

**Open Source Library Systems**

The open source model is a collaborative programming infrastructure that co-opts copyright law by freely releasing source code to the general public for any use, modification, and redistribution without licensing restrictions...(*Open Source Initiative* 2003)

Avanti PYTHEAS (OSDLS) Learning Access ILS phpMyLibrary GNUTeca OpenBiblio Firefly Greenstone Koha
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UNESCO EIPICT MODULE 2, LESSON 1 21

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Slide 22

**Benefits of Library Automation**

- Improved productivity/efficiency
- Better use of information resources through improved access
- Improved resource sharing through the virtual catalog or network
  - Facilitates interlibrary loan
  - Reduces duplication
  - Avoids duplication of cataloguing effort
- Optimizes the use of human and other resources
- Enhances the national and regional information infrastructure

UNESCO EIPICT MODULE 2, LESSON 1 22

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Slide 23

**Benefits to Staff**

- Development of new patterns of communication among staff, especially between computer services and library staff
- Empowerment of the staff in making decisions
- Acquisition of new skills and knowledge

UNESCO EIPICT MODULE 2, LESSON 1 23

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Slide 24

**Potential Difficulties**

- Fear of adverse impact on employment
- Apprehension that the technology could be too expensive
- The library staff have to undergo extensive training. New knowledge and skills are needed.
- Lack of support from the management, may be owing to budget constraints
- The need to convert data into machine readable form

UNESCO EIPICT MODULE 2, LESSON 1 24

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Slide 25

**Conclusion**

- Benefits outweigh disadvantages
- ICTs are here to stay and society is becoming an information society demanding the use of ICTs to improve access to information.

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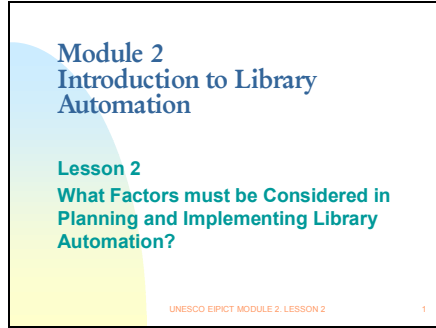
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**End of Lesson 1 Module 2**

## Lesson 2. What Factors Must Be Considered in Planning and Implementing Library Automation?

Slide 1



Module 2  
Introduction to Library  
Automation

Lesson 2  
What Factors must be Considered in  
Planning and Implementing Library  
Automation?

UNESCO EIPICT MODULE 2, LESSON 2 1

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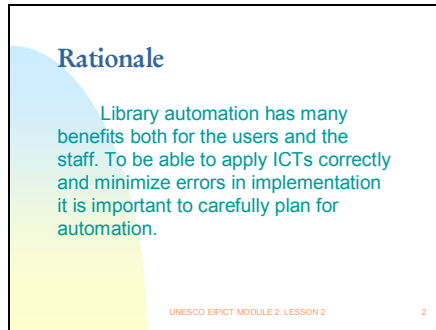
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Slide 2



Rationale

Library automation has many benefits both for the users and the staff. To be able to apply ICTs correctly and minimize errors in implementation it is important to carefully plan for automation.

UNESCO EIPICT MODULE 2, LESSON 2 2

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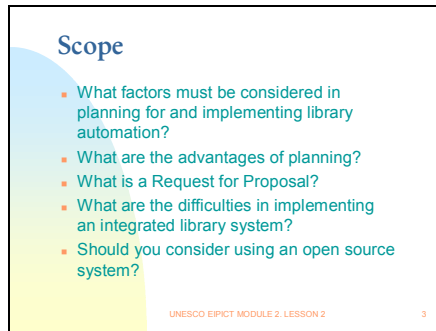
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Slide 3



Scope

- What factors must be considered in planning for and implementing library automation?
- What are the advantages of planning?
- What is a Request for Proposal?
- What are the difficulties in implementing an integrated library system?
- Should you consider using an open source system?

UNESCO EIPICT MODULE 2, LESSON 2 3

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Slide 4

### Learning Outcomes

At the end of this lesson, students should be able to:

- Appreciate the importance of planning.
- Identify factors that must be considered in planning and implementing library automation.
- Understand the importance of a Request for Proposal
- Evaluate the pros and cons of using open source systems.

UNESCO EIPICT MODULE 2, LESSON 2 4

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Slide 5

### Library Automation Today

Today's users expect the automated library system to provide access to the cataloguing, circulation, public catalog (OPAC) and acquisitions modules of the library and also to provide access through the system to information in other libraries, CD-ROM databases on a local area network (LAN), and the Internet.

UNESCO EIPICT MODULE 2, LESSON 2 5

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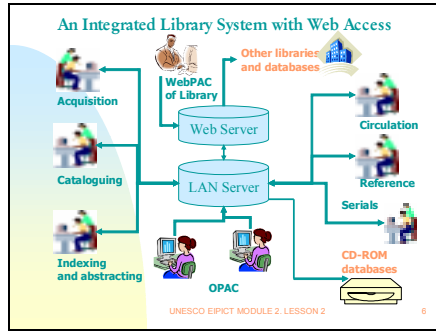
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Slide 6



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Slide 7

**Why is Planning Necessary?**

The Library must plan for library automation because

- It has to establish priorities based on need
- It has to determine the ICT competence and training needs of staff
- It must work within budget constraints
- It must be able to select the right software
- It must address future developments and needs

UNESCO EIPICT MODULE 2, LESSON 2 7

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Slide 8

**What are the Basic Steps in Planning? (1)**

**Systems analysis phase**

- Collect basic statistical information about the library (# titles, #users, #catalog records, #materials acquired annually, # materials circulated annually, other)
- Find out status of the records (are all in cards? are some in print? is data conversion from digital format needed)

UNESCO EIPICT MODULE 2, LESSON 2 8

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Slide 9

**What are the Basic Steps in Planning? (2)**

**Systems analysis (continued)**

- Find out the status of the collection. (Are all catalogued materials still useable and used? Is an inventory needed?)
- Find out the ICT competence of the staff.
- Find out systems in use in your institution. You might need to integrate with the existing system)
- Budget constraints

UNESCO EIPICT MODULE 2, LESSON 2 9

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Slide 10

**What are the Basic Steps in Planning? (3)**

**Systems design phase**

- Set service priorities (What functions are you going to automate first?)
- Develop a strategic development plan for the library (not only for automation) with the help of the staff
- Develop a technology plan based on the overall goals of the library.

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Slide 11

**Cost Considerations**

- Planning and consulting costs
- Purchase of the system
- Telecommunications costs
- Conversion
- Operating and maintenance costs
- System upgrade
- Staff training and recruitment

UNESCO EIPICT MODULE 2, LESSON 2 11

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Slide 12

**What are the Basic Steps in Implementation?**

- Create a format specifications document (RFP) for vendors or ICT staff (If open source systems will be used)
- Evaluate vendor proposals/ open source systems against RFP)
- Select/purchase/develop the system
- Install
- Create databases
- Train staff and other users

UNESCO EIPICT MODULE 2, LESSON 2 12

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Slide 13

**The RFP**

- Instructions for the vendor re submission of bid
- Background information about the library
- Evaluation criteria for the proposals/bids
- Required functional and technical specifications
- Description of the required functionalities
- Questions re vendor system maintenance programs and services, site preparation requirements, delivery and installation methodologies, system performance guarantee, vendor training and documentation, and their detailed pricing and cost strategies

UNESCO EIPICT MODULE 2, LESSON 2 13

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Slide 14

**Considerations for Open Source Systems**

- Staff readiness
- Staff knowledge and skill
- Development team
- Availability of Internet access

UNESCO EIPICT MODULE 2, LESSON 2 14

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Slide 15

**User/Staff Readiness**

- Readiness to accept change
- Training needs
- Training programs
- Participation in planning

UNESCO EIPICT MODULE 2, LESSON 2 15

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Slide 16

**Database Creation**

- Inventory and weeding
- Matching stock with records
- Manual/electronic conversion
- Catalog maintenance
- Consider standards for future networking and record exchange

UNESCO EIPICT MODULE 2, LESSON 2 16

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Slide 17

**Site Preparation**

- Technology needs
  - Hardware
  - Software
  - Network
- Staff and user training

UNESCO EIPICT MODULE 2, LESSON 2 17

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Slide 18

**Marketing and Promotion**

- Target audience
- Strategies
  - Announcements
  - Orientation
  - Workshops
  - Demos and presentations

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Slide 19

**Potential Problems in Implementing Library Automation**

- Lack of staff readiness
- Lack of user readiness
- Operating and maintenance costs
- Data conversion
- Hardware not arriving on time
- Telecommunications facilities not available

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Slide 20

**Conclusion**

- Automation in libraries is desirable. It is however, a complex project and needs to be carefully planned. Planning ensures success and further development.
- Automation is a means to an end and not the end itself. Planning for automation must be part of the strategic development plan of the library.
- Implementation of an ILS is a never ending process. The future holds many new developments that need to be addressed.

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**End of Lesson 2 and Module 2**

**Module 2**  
**An Introduction to Library Automation**

**Student's Text**

**Appendix**

**Appendix 1: List of Activities**

**Appendix 2: Reading/Reference List**

**Appendix 3: Glossary**

## Appendix 1: List of Activities

### Lesson 1



Module 2  
Lesson 1

#### Activity 2.1.1

To learn more about the features of ILS visit the following sites:

- [www.itcompany.com/inforetriever/sys.htm](http://www.itcompany.com/inforetriever/sys.htm)
- [www.librarysupportstaff.com/4automate.html](http://www.librarysupportstaff.com/4automate.html)
- [en.wikipedia.org/wiki/Integrated\\_library\\_system](http://en.wikipedia.org/wiki/Integrated_library_system)



Module 2  
Lesson 1

#### Activity 2.1.2

For more information about the MARC standard and UNIMARC visit the following sites:

- <http://lcweb.loc.gov/marc/marc.html>
- <http://www.ifla.org/VI/3/p1996-1/unimarc.htm>



Module 2  
Lesson 1

#### Activity 2.1.3

To know more about Z39.50 read the article “Z 39.50. Part 1 – An Overview” in Biblio Tech Review: [http://www.biblio-tech.com/html/z39\\_50.html](http://www.biblio-tech.com/html/z39_50.html)



Module 2  
Lesson 1

#### Activity 2.1.4

View some OPACs on the Web by visiting homepages of university libraries and linking to their web catalogs. These pages may also be good sources of MARC records.

To view a home grown WebOPAC visit: <http://rizal.lib.admu.edu.ph>

You can also view a consolidated catalog for three libraries at this site as well as portions of the library catalog for the special collections.

To view a catalog running on an open source system go to:

<http://ccfls.org/catalog/search.html>



Module 2

#### Activity 2.1.5

The basic modules are cataloguing, OPAC and circulation. To find out about other modules go to:

- Lesson 1
- AcqWeb's Guide to Automated Library Systems, Library Software, Hardware and Consulting Companies.  
<http://acqweb.library.vanderbilt.edu/pubr/opac.html>
  - Integrated Library System Reports: Vendors information.  
<http://www.ilsr.com/search2.cfm>



Module 2  
Lesson 1

### **Activity 2.1.6**

To view a home-grown serials WebOPAC visit: <http://rizal.lib.admu.edu.ph> and look for the link to the WebOPAC.



Module 2  
Lesson 1

### **Activity 2.1.7**

Visit the following sites for descriptions of big and small systems.

<http://www.librarysupportstaff.com/4automate.html>  
<http://www.ilsr.com/search2.cfm>



Module 2  
Lesson 1

### **Activity 2.1.8**

Visit the following sites for descriptions and examples of open source systems as well as of libraries using them.

- Koha: [www.koha.org](http://www.koha.org)
- Oss4lib open source system for libraries. [www.oss4lib.org](http://www.oss4lib.org)
- To see an opac using open source. <http://ccfls.org/catalog/search.html>
- phpMyLibrary: <http://www.phpmylibrary.org>
- for a discussion go to Open Source Integrated Library Systems An Overview: <http://www.anchil.org/users/eric/oss4ils.htm>

For the library system WEBLIS which is based on CDS/ISIS access.

[http://portal.unesco.org/ci/en/ev.php-URL\\_ID=16840&URL\\_DO=DO\\_TOPIC&URL\\_SECTION=201.html](http://portal.unesco.org/ci/en/ev.php-URL_ID=16840&URL_DO=DO_TOPIC&URL_SECTION=201.html)



Module 2  
Lesson 1

### **Activity 2.1.9**

- Visit the following sites for a discussion of the future of ILS.  
<http://www.libraryjournal.com/article/CA302408.html>
- Visit the following site for a discussion of some issues in sharing integrated library systems.

<http://www.dpi.wi.gov/pld/sharing.html>

**Lesson 2**



Module 2  
Lesson 2

**Activity2.2.1**

Visit the following sites for sample plans.

[http://dlis.dos.state.fl.us/bld/Library\\_Tech/Autoplan.htm](http://dlis.dos.state.fl.us/bld/Library_Tech/Autoplan.htm)

<http://www.documentorsconsultants.com/txtplan%20for%20automation.htm>

<http://www.ilsr.com/leading.htm>



Module 2  
Lesson 2

**Activity2.2.2**

Visit the following sites for descriptions and evaluation of ILS.

<http://www.ilsr.com/search2.cfm>

<http://acqweb.library.vanderbilt.edu/pubr/opac.html>



Module 2  
Lesson 2

**Activity 2.2.3**

Visit the following sites for sample RFPs.

<http://www.ilsr.com/sample.htm>

<http://www.webdevelopersjournal.com/columns/writerfp.html>



Module 2  
Lesson 2

**Activity2.2.4**

Visit the following sites to view and evaluate some open source systems.

[www.oss4lib.org/readings/oss4lib-getting-started.php](http://www.oss4lib.org/readings/oss4lib-getting-started.php)

[www.emilda.org/](http://www.emilda.org/)

[www.manageability.org/blog/stuff/how-to-evaluate-open-source-library/viewlibrary.rider.edu/scholarly/ecorrado/il2004/](http://www.manageability.org/blog/stuff/how-to-evaluate-open-source-library/viewlibrary.rider.edu/scholarly/ecorrado/il2004/)

<http://library.rider.edu/scholarly/ecorrado/il2004/ossfeatures.html>



Module 2

**Activity 2.2.5**

Visit the web site <http://www.greenstone.org>. for a description of Greenstone.

**EIPICT\_M2\_ST**

Lesson 2

**End of Activities Module 2**

## Appendix 2: Reference/Reading List



### Module 2

1. Cohn, J. M. & Kelsey, A. L. 1996. *Planning for Automation and Use of New Technology in Libraries*.  
<http://web.simmons.edu/~chen/nit/NIT'96/96-065-Cohn.html>
2. Harrassowitz. *Electronic Journals: A Selected Resource Guide*.  
[http://www.harrassowitz.de/top\\_resources/ejresguide.html](http://www.harrassowitz.de/top_resources/ejresguide.html)
3. IFLA. 1996. *Universal Bibliographic Control and International MARC Core Programme*. <http://www.ifla.org/VI/3/p1996-1/unimarc.htm>
4. Integrated Library System Reports. *Sample Request for Proposals (RFPs) and Request for Information (RFIs) for library automation projects*.  
<http://www.ilsr.com/sample.htm>
5. *Integrated Library System Reports: Vendors info*.  
<http://www.ilsr.com/search2.cfm>
6. Kirby, C. & Wagner, A. *The Ideal Procurement Process: The Vendor's Perspective*. <http://www.ilsr.com/vendor.htm>
7. Library of Congress. *MARC Standards*.  
<http://lcweb.loc.gov/marc/marc.html>
8. Library of Congress. *Z39.50 Gateway to Library Catalogs*.  
<http://lcweb.loc.gov/z3950/gateway.html>
9. Library of Congress. *Z39.50 Maintenance Agency Page*.  
<http://www.loc.gov/z3950/agency/>
10. McNamara, C. *Strategic Planning*.  
[http://www.mapnp.org/library/plan\\_dec/str\\_plan/str\\_plan.htm](http://www.mapnp.org/library/plan_dec/str_plan/str_plan.htm)
11. McNamara, C. *Basic Overview of Various Strategic Planning Models*.  
[http://www.mapnp.org/library/plan\\_dec/str\\_plan/models.htm](http://www.mapnp.org/library/plan_dec/str_plan/models.htm)
12. Millard, M. *Tips and Hints on Library Automation and Automated Library Systems*. <http://www.ilsr.com/hints.htm>
13. National School Boards Foundation. *Education Leadership Toolkit. Planning: Creating a Vision*. <http://www.nsba.org/sbot/toolkit/cav.html>
13. *Planning and Evaluating Library Automation Systems*.  
[http://dlis.dos.state.fl.us/bld/Library\\_Tech/Autoplan.htm](http://dlis.dos.state.fl.us/bld/Library_Tech/Autoplan.htm)
14. *Sample RFP*. Library HQ. <http://www.libraryhq.com/rfp.doc>
15. SUNY Library Automation Migration RFP. State University of New York. *Integrated Library Management System. Request for Proposals*.  
<http://ublib.buffalo.edu/libraries/units/cts/ctsplus/sunyrfp.html>
16. Swets & Zeitlinger Swetsnet . <http://www.swetsnet.com>
17. University of Arizona Library. *Vision & Mission Statements*.  
<http://www.library.arizona.edu/library/teams/list/missvision.htm>
18. University of Illinois Library. *Strategic Plan. FY2001-FY2003*.  
<http://www.library.uiuc.edu/committe/strategicplanning/reports/jan00report.htm>
19. University of Wisconsin Madison. *Proposal Writing: Internet Resources*.  
<http://www.library.wisc.edu/libraries/Memorial/grants/proposal.htm>
20. Wisconsin Department of Public Instruction. Public Library Department. *Library Technology Planning: An Outline of the Process*.



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21. Z39.50. Part 1 - An Overview. *Biblio Tech Review*. [http://www.biblio-tech.com/html/z39\\_50.html](http://www.biblio-tech.com/html/z39_50.html)

**Other references are provided in the activities**

**End of Reference/Reading List Module 2**

## Appendix 3: Glossary



### Module 2

1. **Acquisition Section.** The section in the library that is concerned with selecting, ordering, receiving and paying for library materials.
2. **Automated library system (ALS).** An automated library system is software that has been developed to handle basic housekeeping functions of a library. The software may be focused on one library system only or may be capable of manipulating data from two or three modules to perform another basic function.
3. **Barcode number.** A representation of a number by means of a code, which uses vertical lines.
4. **Bibliographic database.** A collection of bibliographic records that are stored in a database for easy retrieval.
5. **Carpal tunnel syndrome.** An ailment characterized by painful wrists because of inflammation of the joints between the carpal bones. It is usually caused by repetitive action such as typing on a computer keyboard. It is one of the ailments known as repetitive strain injury.
6. **Cataloging.** The process of describing a book using conventions and standards such as AACR2 and the Library of Congress Classification Scheme and Subject Heading Lists. Other standards are available and may be in use in other countries.
7. **CDS/ISIS.** A powerful information storage and retrieval software developed by UNESCO. It is distributed free of charge to libraries in developing countries. The latest version of the software is Windows ISIS.
8. **Circulation section.** The section in the library that is in charge of lending books and other materials to users.
9. **Copy cataloging.** The process of copying catalog entries from other libraries and adapting them to one's own library. In an electronic environment, the transfer of records and importation into the library system is effected by the Z39.50 protocol.
10. **Data conversion.** The processes of converting data stored in catalog card into electronic format. It can also mean the processes of converting electronic records from one format to another.
11. **Database.** A collection of related files.
12. **Electronic catalogs.** Catalogs of books, serials, and other library materials that are online and could be access online. They are popularly known as OPACs.
13. **Electronic indexes.** They are similar to catalogs but the records are for articles from serial publications.
14. **Faculty number.** A borrower's number assigned to a faculty member. It is usually his/her employee number.
15. **Feasibility study.** A document that contains the results of a systems study, the proposed solutions and financial requirements to implement the project.
16. **Goals.** Long-term aims of an institution that are aligned with its mission.
17. **Home page.** The index or main page that accompanies a Web site.

18. **Indexing.** The process of describing an article and providing it with a link to the source for purposes of identifying articles and retrieving them.
19. **Information networking.** The interconnectivity of computers to share information and other resources.
20. **Information storage and retrieval software.** A program designed to store and retrieve information. An example is CDS/ISIS.
21. **In-house.** Library management or information storage and retrieval software that is developed by an institution using its own staff and other resources.
22. **Integrated library systems (ILS).** An automated library system that is capable of managing the operations of more than one basic library functions by sharing the files in the server to perform them. For example, data from the book catalog master file and the patron master file can be retrieved and used in the circulation module to perform the circulation function of the ILS.
23. **Interlibrary loan.** One of the functions of a library that is a member of a consortium or network, where materials are loaned to member libraries.
24. **Item number.** The number assigned to a library document. It may or may not be the same as the accession number or the bar code number.
25. **Library automation.** A generic term used to refer to the application of computers in libraries to automate operations.
26. **Library management system.** See ALS or ILS.
27. **Library networks.** The formal organization among libraries that have agreed to share resources. They may or may not be connected together electronically.
28. **Library software developers.** Programmers or groups that develop automation software for libraries.
29. **Library staff.** The non-professional personnel of a library.
30. **Library system.** Software for automating the functions of a library.
31. **Library user.** The patron, client or user of a library.
32. **Local area network.** An interconnected group of computers located inside a room or building.
33. **MARC records.** The Machine-Readable Cataloging (MARC) formats are standards for the representation of bibliographic and related information for books and other library materials in machine-readable form and their communication to and from other computers.
34. **Off-the shelf systems.** Ready made commercial ILS packages.
35. **OPAC.** Online public access catalog that is used to access and retrieve information about the holdings of a library. It may or may not contain full text and/ or multimedia and may or may not be connected to the Internet.
36. **Reference Section.** The section in the library in charge of assisting users in the conduct of their research. They may also take care of interlibrary loan requests and document delivery services.
37. **Request for proposal.** A 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.
38. **Security system.** The system of providing checks against theft of library materials. They are usually gates that have electromagnetic detectors and produce sounds when the materials passing through the magnetic field have not been properly checked out.
  39. **Self check-in system.** The process of returning materials without the assistance of the library staff.
  40. **Self-check out system.** The process of borrowing library materials without the assistance of the library staff.
  41. **Serials management.** The function concerned with the monitoring of serials acquisitions.
  42. **Software packages.** Programs which are available off-the-shelf.
  43. **Strategic planning.** The process of solving problems in an organized and logical manner. It is usually not long term but top priority.
  44. **Systems analysis and design.** The process of studying the system and designing solutions for it.
  45. **Systems study.** Collection of data about the library's operations, facilities, collection, procedures, staff expertise, etc. In general, the assessment involves gathering information about user needs and wants and matching these with what the library can presently offer.
  46. **Systems requirement study.** Specifications for the system based on the systems study. It is also called systems design.
  47. **Technology plan.** A technology plan is the document that puts the vision, goals, and objectives in writing. It is an overall plan for all the technology components of a project. It includes the specifications for your system requirements, financial estimates, the action plan and the timetable for the project.
  48. **Turnkey systems.** Turnkey means that the package is ready to use, data has been converted, and the hardware and network have been installed by the supplier.
  49. **UNIMARC.** The common MARC format.
  50. **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.
  51. **WebOPAC.** The online public access catalog that is accessible via the Internet.
  52. **Z39.50 standard.** The protocol observed in importing and exporting catalog records through the Internet.

**CONGRATULATIONS! YOU HAVE JUST FINISHED MODULE 2**