Introduction

Background

Purpose of this Presentation

Expecting Ex Libris/Voyager to improve and provide good ILS and services to our End Users!

- Voyager merged to Ex Libris
- New Products / Functions for ILS
- New Technologies Applied for Libraries
- New Types of Resources and Library Functions

Background

- **Chicago State University** (1867 - )
  - Public, urban, state academic institute
  - 7,200 students in 36 undergraduate and 19 graduate programs
  - 450 faculty members, 1,200 support staff and administrators

- **University Library**
  - CARLI membership (97 members’ Consortium)
  - Voyager ILS system (ASRS, RFID, Web, etc.)
  - 420,000 volumes, plus 5,174 titles of E-Resources
  - 300 networked workstations with 1000 mbps / CAT6 cabling / T3 internet access in a new library building since 2006

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History of ILS

See Marshall Breeding’s History of mergers and acquisitions in the library automation industry

- **ILS** --
  - Started at the end of 1960s and 1970s (NOTIS, Innovative, CLSI, VTLS, etc.)
  - Popularly developed and applied in 1980s and 1990s
  - Mergers and Acquisitions of ILS industry since the end of 20th Century

Traditional ILS Features

- Computerized the manual functions of library management – the CORE technology and system in the library
- Use MARC and AACR to describe and organize printed materials (majority of library collections) plus, some other types of materials (microforms, AVs, etc.)
- A set of centralized databases in a CORE system
- Traditional catalog searching methods to be used by the users (searching by Author / Title / Keyword / Call Number with Boolean operators)
Traditional Modules of ILS
- Acquisitions
- Cataloging
- Serials Control
- Circulation
- OPAC
- Systems Administration
- Other associated modules (Binding, ILL, Course Reserves, etc.)

Current ILS Features - 1
Since the End of the 20th Century:
- Electronic Resources Used
- Information Technology (WWW/Internet, local area network, wireless network)
- Multimedia Technology (digitized materials, images, computer files, etc.)
- Computer Technology (powerful PC workstations and servers, various application software, etc.)
- End User expectations and computer skills

Current ILS Features - 2
- Resources
  - Printed and electronic resources (text based as majority, etc.)
  - Local and remote access
  - Centralized databases and distributed databases through internet (OpenURL links, etc.)
- Use various standards (MARC, MetaData, etc.) to organize and describe materials (text based descriptions)
- Web interfaces and various searching approaches used by users (text terms searching)
- Extended application systems from different vendors linked to ILS – ILS as Core Tech (???)
(See Figure: The Structure of CSU Library ILS and Associated Systems)

New Generation of ILS
Since the 21st Century:
- Trends of Information Resources
- Trends of Information Technology
- Trends of Libraries
- Trends of ILS
- New Generation of ILS Expected from Users

Trends of Information Resources - 1
- Types of Resources: All types of resources
  - Traditional Resources (less): Printed / Microforms / AV
  - Electronic Resources (more): Full-Text, Images, Video, Multimedia
- Systems to Manage Resources:
  - All as Web/Internet access
    - local=>Intranet=>Internet
    - remote=>Internet
  - Linked various databases and systems
  - Shared systems (Consortium =>Shared E-Resources)
Trends of Information Resources -2

New Standards to Organize & Describe Resources:
- Web Metadata => MARC System
  - e.g. Dublin Core, TEI, EAD, etc.
  - e.g. METS, MODS, etc. (LC DL)
- Functional Requirements for Bibliographic Records (FRBR) / Resource Description and Access (RDA) => AACR

Trends of Information Technology

- Web 2.0 / Lib 2.0 – Web Society
  - Users / People oriented
  - Multimedia oriented
  - Social Network oriented
  - Searching Engine - Social Technology (Social Software) oriented
  - Microsoft LiveSearch (links all related information for users)
- WAN & LAN Linked / Mixed
  - Internet and Intranet
  - Intranet and LAN
  - Wireless and Wired
- Image Based Visual Retrieval Engines
  - e.g. Global Memory Net (International Digital Library)
  - e.g. eVision (eVision Visual Search Technology)
- Mixed Types of Technologies for Information Process and Management

Trends of Libraries - 1

Library Management and Functions
- Digital library / Virtual library for information services in the society
- High Tech based “Comprehensive Integrated Technology Environment”
- No CORE system but all functional systems in the library and institute linked together through WAN/LAN – “Information Network System”
- Functional operations / Management structure changes

Trends of Libraries - 2

Librarians and Support Staff:
- Increased IT Knowledge and Skills
- Staff Development with IT
- Education of Library and Information Science
  - Increased IT related courses (e.g., UIUC-GSLIS)
  - Unlimited contents of information management and services related
  - Flexible careers for MLIS graduates in the information society

Trends of Libraries -3

Library Services and Users
- Services Scope / Environment
  - Virtual and Universal Services
  - Comprehensive Technologies Based Environment
- Services Tools – Social Tech Based
  - e.g. Library of Congress Wiki
  - e.g. Library Instructions Wiki
  - e.g. Illinois libraries Blog
- End Users – Millennial Generation (1990s -)
  - IT / Web / Social Technologies Skills and Background
  - Expecting for Web 2.0 Based Information Services

Trends of ILS - 1

Processing Electronic Resources
- RDA / FRBR with MARC / AACR combined
- XML based description tools (METS, MODS, etc.)
- ERM to manage electronic resources
- Consortia of ILS to share resources
- Mixed databases and e-resources in ILS
- Mixed local and remote e-resources
Trends of ILS - 2

For Library Functions and Management
- Consortia based ILS
- Multi-Databases system structure and complex data storage allocations
- High Speed - system operations
- Comprehensive system management
- Library Operations changed in ILS
- Shelf Ready (e.g., GOBI from Yankee Book Peddler (YBP))
- Social Cataloging (e.g., LibraryThing)
- Web Interface to work with system
- Web browser interface - no client software
- Unique operator’s interface – no multi-modules
- Open Source ILS
  - Evergreen, Koha, Learning Access Institute ILS
- Users oriented
- Partial Open Sources (Possible from Vendors ???)

Trends of ILS - 3

For Library Services to the Users
- All systems as Web based
- Social networking
- Real-time communications with Users
  - Cullom-Davis Library, Bradley University
  - LibraryThing (Social Cataloging)
  - Microsoft LiveSearch
- Graphic / Video instructions rather than text based
- Web Interface to access resources
  - Faceted navigation and federated search engine (Primo)
  - User tagging (e.g., LibraryThing)
  - Visual search (e.g., Global Memory Net, Kart00)
  - Relevancy ranking results (Endeca at NCSU, etc.)
  - Results delivered through RSS, etc. (Polaris, etc.)

New Generation ILS Expected From Users

For Libraries:
- Productively and effectively operations
- Digital media archiving technologies to manage electronic resources
- Analytical and intelligence tools to manage ILS
- Cost-effectively system

For Library End Users:
- Easy and Powerful Search Engine and Interface

For ILS Vendors:
- Professional services

The End

Thank you!