



Integrating Digital Libraries and Traditional Libraries: Collaborating for Sustainability

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iLumina Digital Library

- One of 356 collections of the National Science Digital Library (NSDL)
- Features 1600 digital learning objects for undergraduate education in science and mathematics
- Funded by the National Science Foundation Digital Library Initiative Phase II (NSF DLI-II)
- Created by scientists using IMS-compliant metadata in XML

Sustainability Issues

- 80-88% of NSDL projects are university-based
- Libraries' traditional roles are adaptable to the digital environment
 - Innovative use of technology
 - Standards of bibliographic description
 - Philosophy of open access

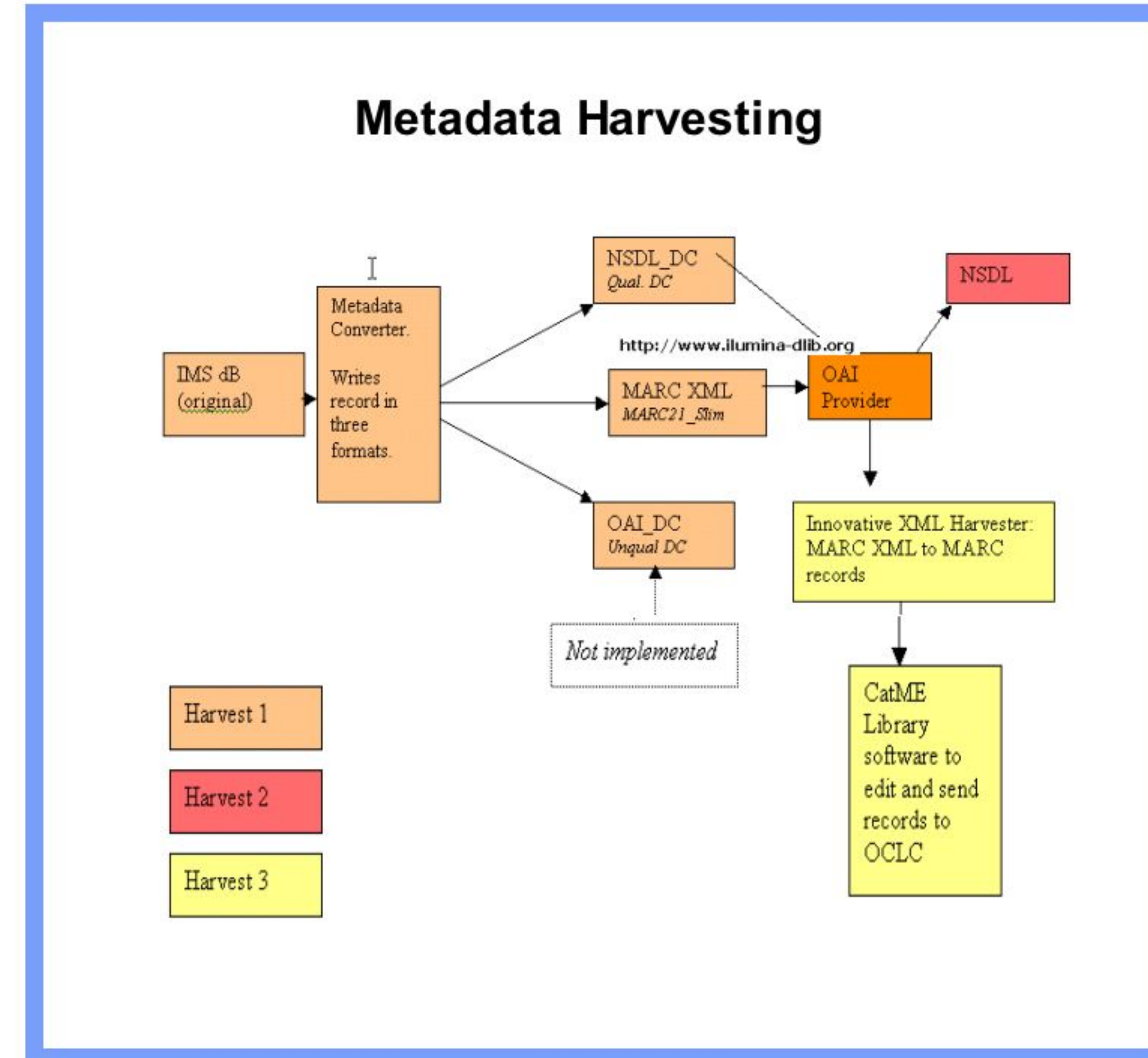
Integration Issues

- What is gained by integrating iLumina into a traditional library catalog?
 - Wider dissemination
 - Stable environment
- What is lost?
 - Contribution form for new submissions not integrated into catalog
 - Robust search form with multiple pull-down menus

Librarians' Roles

- Provide expertise in bibliographic standards
- Analyze iLumina record fields
- Create metadata crosswalks
- Harvest the digital library's metadata
- Convert metadata to MARC format
- Add records to local library catalog and WorldCat

The screenshot shows the iLumina website with a search bar, navigation links, and a list of resources including 'Fluency With Information Technology' and 'Digital Logic and Computer Organization'.



The left screenshot shows the iLumina record for 'Hydrogenic v4.0 Package' by Wolfgang Christian. The right screenshot shows the same record in the UNC Wilmington Library Catalog, demonstrating the integration of digital metadata into a traditional library system.

Cataloging Challenges

- iLumina record fields vs. MARC fields
 - Fields not in local system load table
 - Fields not indexed in local system
 - Lack of label for 5xx fields in MARC
- Limiting searches to iLumina
 - Advanced keyword search
 - Location scoping
- Determining publisher, distributor

iLumina's Future

- Integration of submission, review, & cataloging processes within library
- Determination of usage trends by monitoring library holdings added to iLumina records in WorldCat
- Implementation of plans to increase size of the collection
- Creation of model for sustainability through documentation of the integration process

Collaboration & Teamwork

- Teamwork beneficial to scientists and librarians
- Scientists learn about record structure and bibliographic standards and conventions
- Librarians learn about NSF environment, grant writing, new resources for science instruction, and new XML/OAI applications
- Both groups explore ambiguous meanings of terminology: "library," "cataloging," "metadata"

Implications

- Sustainability is an important challenge for digital collections
- Integrating digital collections into an established university library catalog is a feasible model
- Non-librarians will be increasingly involved in creating digital collections
- Librarians can provide critical expertise in bibliographic standards and conventions