UNIVERSITI TEKNOLOGI MARA

BENGKEL PUSTAKAWAN 2001

MAKLUMAT SEJAGAT:
CABARAN KEPADA PUSTAKAWAN

17-19 JULAI 2001
INSTITUT LATIHAN FAMA
PORT DICKSON NEGERI SEMBILAN

ANJURAN:
PERPUSTAKAAN TUN ABDUL RAZAK
UITM SHAH ALAM
Libraries store the energy that fuels the imagination. They open up windows to the world and inspire us to explore and achieve, and contribute to improving our quality of life. Libraries change lives for the better.

Sidney Sheldon
...Librarians are 'ordainers of the universe'

"A history of reading"
- Alberto Manguel

Callimachus of Cyrene
One of the most distinguished poets of Alexandria. More than 800 literary works are attributed to him both poetry and prose. His "Pinakes" (the catalogue of the ancient library of Alexandria) was the first bibliographic catalogue in history.
Selection and acquisition policies have "ordained" the view of knowledge and learning.

Organization of knowledge in a learning environment and the "organized reading-spaces" in a network society.
Landscape
scenery of a land area
layout an area attractively with natural features

- English Oxford Dictionary

Through the Looking Glass... and what Alice Found There
By Lewis Carroll

Richard Heseltine

Underlying technical architecture to underpin the new learning & working environment.

Concept of a 'landscape' as a way of conceptualizing the organization of communication and information services.
Alice's adventures in Wonderland

"What is the use of a book...
without pictures and conversation?"
Information Landscapes

How will these landscapes support users and how will they relate to existing places and services?

The Information Landscape of the future will weave together electronic services and existing services in ways that join users to the materials and tools that they need, when they need them.
Information Landscapes

*Current information and learning systems exist as functional islands, a series of individual, unconnected opportunities*

Information Landscapes

*How will library services combine physical places and digital information spaces; the print and the electronic; learning and information*
Characteristics of Networked Resources

- Heterogeneous, and grow in volume and variety, with different access characteristics; diverse data schema and exchange formats.

- Autonomously managed
Characteristics of Networked Resources

- Individually controlled. Information providers wish to protect the value of their resources

- Different aggregations of functions
Broad Framework of MODELS

Information Architecture (MIA)

- User
- Presentation
- Brokerage
- Data and services

MODELS (Moving to Distributed Environments for Library Services)

Information Landscape within MODELS describes the presentation of information environments to users, projects the underlying business processes in a user-oriented way, describes the available resources, provides navigation and selection support, provides links to resources, matches user profiles against collection descriptions, for personalized landscape.
Broad Framework of MODELS
Information Architecture (MIA)

User

1. User access interaction with the user
2. Applications framework
3. Distributed service access

Information Landscape within MODELS
- Programs and data to orchestrate the service components for the business functions
- Brings together user requests with appropriate services such as distributed document delivery, cross-domain resource discovery

User

1. User access interaction with the user
2. Applications framework
3. Distributed service access

Information Landscape: provides links to resources, matches user profiles against collection descriptions, for personalized landscape
Metadata and Network Protocols

- Encoded Archival Description
- Distributed information systems with common record structure and network application protocols, i.e. MARC and Z39.50; Archives integrated access system and EAD; Museums integrated access system with CMI standard
- Consortium for Computer Interchange of Museum Information

Interoperability within domains

The Dublin Core and interoperability across domains

Common Ground In Information Space

- Core elements
- Key identifiers
- Generic access points for searching
- Attributes in collated displays of hit lists (brief details)
- Diverse local search mechanisms
- Heterogeneous classification schemas and data formats
metadata facets

metadata in the brave new world
- Four aspects that might influence resource description in the research, learning process

landscape perspectives

thesauri
authority files
supplementary funding aids
purposes
services
locations
The Learning Environment Challenge
The Learners & the Learning Information Landscape

Kolb learning styles

Concrete
- Type 1: Why?
- Motivator: Enabler

Abstract
- Type 2: What?
- Expert: Coach

Reflective
- Type 3: How?

Active
- Type 4: What If?

Activities
- Open-minded and enthusiastic learners: throw themselves in, live for the here and now, ready to try anything, battle or challenge but soon become bored with routine.

Reflective
- Learns by collecting all the data they can and then considering it from different perspectives before reaching conclusions: cautious, thoughtful, steady, not easily when confronted.

Pragmatist
- Down-to-earth and practical people, they learn by putting theories and techniques into practice. Like to get on with things and act confidently.

Theorist
- Like to learn in a logical step-by-step manner, they collect and organize data, devise their own theories for how it all fits together.

Honey & Mumford: Learning Styles Research
The Research Process

- Discover
- Retrieve
- Represent
- Collect
- Analyze

Getting using

Role of Metadata in Unifying Our Cultural Memory

- Dublin Core
- Format metadata
- Catalog record
- Descriptive schema
- Heuristic
- Transliteration method
- Analyze
- We use
- Collate
- Provider
### Pivotal Role of Metadata

<table>
<thead>
<tr>
<th>Metadata packets in five stages of research by layers in the reference model for business-acceptable communications</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Handle</strong></td>
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<tr>
<td>Publisher or distributor</td>
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</table>
Metadata packets in five stages of research by layers in the reference model for business-acceptable communications

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<thead>
<tr>
<th>Pivotal Role of Metadata</th>
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<tbody>
<tr>
<td>Discovery</td>
</tr>
<tr>
<td>Problem definition</td>
</tr>
<tr>
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Metadata packets in five stages of research by layers in the reference model for business-acceptable communications

<table>
<thead>
<tr>
<th>Context</th>
<th>Discovery</th>
<th>Retrieval</th>
<th>Collation</th>
<th>Analysis</th>
<th>Re-Presentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creator</td>
<td>Functional provenance, creator name, date</td>
<td>Link, functional dependencies</td>
<td>Toolset and analytical methods</td>
<td>Disciplinary schema</td>
<td>Value tables and organizational schemes</td>
</tr>
<tr>
<td>Relations</td>
<td>Collection/klas/association</td>
<td></td>
<td></td>
<td></td>
<td>Creditworthiness</td>
</tr>
</tbody>
</table>

**Pivotal Role of Metadata**
Metadata packets in five stages of research by layers in the reference model for business-acceptable communications

<table>
<thead>
<tr>
<th>Layer</th>
<th>Discovery</th>
<th>Retrieval</th>
<th>Collation</th>
<th>Analysis</th>
<th>Presentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use history</td>
<td>Publication of citation history</td>
<td>Citation data</td>
<td>Analysis</td>
<td>Presentation</td>
<td>Citations</td>
</tr>
</tbody>
</table>
Goal of the Hybrid Library

Overcome the fragmentation of the library service into multiple islands

How do we move forward?

Information Landscape?
"If emerging network places are to support Rich Learning Experiences, they must be designed, organised and supported in ways that make USERS comfortable there.

- Lorcan Dempsey

- Learners have needs.
- Identify USERS and their learning experiences as central to the design of Information Landscapes.

- Shift in emphasis which sees the Information Resources organized around User Interests of the library service into multiple islands.
Authentication

System interworking
- intra-function
- inter-function integration
User makes information request

Library determines

§ What privileges does this user possess?
§ What conditions does this information request carry with it?
§ What do we know about the user (e.g. level)?

Library maps this request onto its landscape (and may extend the landscape in respect of this particular query) (*)

Library determines which sources it might offer and determines the conditions they carry (e.g. price)

Library determines who will pay this price (library or user)

If Library: are we willing to pay for this user on this occasion (if no go back two places)

If user, library determines if user will pay. If not, go back three places.

If user is to pay, library carries out debit

User supplied with information
Library views information universe and determines suitability of each source for its clientele

Library makes decision on which standard products to offer and thus creates a "landscape" 3

Library negotiates "deals" with selected information suppliers:

Library sets up infrastructure to enable selected information products to be acquired or accessed

Library sets up infrastructure to enable information products to be used

Library creates user interface to enable information requests to be processed

The Process of Setting Up a Suitable Information Landscape and Infrastructure

Point-to-Point model (CIMI/CHIO)
BROKERS

Provide a common point of the access to a range of repositories and distributed resources

LIDDAS (Local Interlending & Document Delivery Administration System)

- Australian project
- Broker access to databases
- Search & location of desired items
- Request & delivery of items
- Directory services for environment and business information; authentication service

AQUARELLE

- EU Telematics Applications Programme
- "Mediator" service for museum repositories
- Single point access to interrelated multimedia

UNIVERSITIES IN MALAYSIA

<table>
<thead>
<tr>
<th>UNIVERSITY</th>
<th>MAIN LIBRARY</th>
<th>LIBRARY URLs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universiti Malaysia</td>
<td>UM Library</td>
<td><a href="http://www.library.unim.my">http://www.library.unim.my</a></td>
</tr>
<tr>
<td>Universiti Islam Antaraengsa</td>
<td>International Islamic University Library</td>
<td><a href="http://library.uia.edu.my">http://library.uia.edu.my</a></td>
</tr>
<tr>
<td>Universiti Kebangsaan Malaysia</td>
<td>Perpustakaan Tun Sri Lanang</td>
<td><a href="http://library.ukm.edu.my">http://library.ukm.edu.my</a></td>
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<td>Universiti Putra Malaysia</td>
<td>Universiti Putra Malaysia Library</td>
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<tr>
<td>Universiti Sains Malaysia</td>
<td>USM Library</td>
<td><a href="http://www.library.usm.my">http://www.library.usm.my</a></td>
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<tr>
<td>Universiti Teknologi Malaysia</td>
<td>Perpustakaan Sultanah Zainab</td>
<td><a href="http://library.utm.my">http://library.utm.my</a></td>
</tr>
<tr>
<td>Universiti Utara Malaysia</td>
<td>UUM Sultanah Bahiyah Library</td>
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<tr>
<td>Universiti Malaysia Sabah</td>
<td>Perguruanan Universiti Malaysia Sabah</td>
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<td>Multimedia University</td>
<td>Sti Hasmah Digital Library</td>
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<tr>
<td>Universiti Teknologi MARA</td>
<td>Perpustakaan Tun Abdul Razak</td>
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<td>Universiti Malaysia Sarawak</td>
<td>Centre for Academic Information Services Universiti Malaysia Sarawak</td>
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</tr>
<tr>
<td>Universiti Tun Abdul Razak</td>
<td>UNITAR Virtual Library</td>
<td><a href="http://library.unitar.my">http://library.unitar.my</a></td>
</tr>
<tr>
<td>Universiti Tenaga Nasional</td>
<td>UNITEN Library</td>
<td><a href="http://library.uniten.my">http://library.uniten.my</a></td>
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</table>

Source: Evaluation of Academic Library Web Sites in Malaysia
Broker model (Aquarelle)
**eSPACE CONCEPTUAL MODEL**

**USER**

INTERNET/AARNET

**e-PORTAL**

AUTHENTICATION

MyPortal

http/ WebZ

**ILL/DD/IIIDAS**

Z39.50 & ILL protocol

**DIGITAL RESOURCES**

Metadata repository

- Subject gateways (e.g. MetaChem, Agrigate, AVEL)
- Directories (e.g. Australian Libraries Gateway)
- Images

Consortium digital collections (full text & citation databases)

Online Library Catalogues, etc.

Commercial DocDel Suppliers

READS etc.

• Subject gateways (e.g. MetaChem, Agrigate, AVEL)
• Directories (e.g. Australian Libraries Gateway)
• Images

Consortium digital collections (full text & citation databases)
**Scenario of Information Request**

- I want to search
  - Z39.50

- I want to view
  - Z39.50
  - METADATA

- I want to borrow
  - Z39.50
  - ILL
  - Logistics, Bank

- I want to buy
  - Z39.50
  - Vendor, Logistics, Bank
The library is not a shrine for the worship of books. It is not a temple where literary incense must be burned or where one’s devotion to the bound book is expressed in ritual. A library, to modify the famous metaphor of C. S. Lewis, should be the delivery room of the birth of ideas – a place where history comes to life.

Norman Cousins