Development of a Library 2.0 service model for an African library

Heila Pienaar & Ina Smith
LIASA Gauteng North Branch Meeting
23 October 2007
Development of a Library 2.0 service model for an African library

Theme: Second life for libraries

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Academic Information Service, University of Pretoria,
South Africa

Meeting: 146 Information Technology

Simultaneous Interpretation: No

WORLD LIBRARY AND INFORMATION CONGRESS: 73RD IFLA GENERAL CONFERENCE AND COUNCIL
19-23 August 2007, Durban, South Africa
http://www.ifla.org/ifla73/index.htm

Access presentation on UPSpace: http://hdl.handle.net/2263/3335
Agenda

• University of Pretoria context
• Library’s e-Information Strategy & Structure
• Variables that influence the role of academic libraries
• Web 2.0 & Library 2.0
• Development of a Library 2.0 service model
In 2006, student numbers were 49 226. The University has nine faculties and a business school (http://web.up.ac.za/).
Library’s e-Information Strategy

• **Integrated seamless e-Service**

• Objectives
  – Support education innovation & research excellence
  – Optimal e-information (portal) services
  – Participate & contribute to national & international e-information phenomena

• Key sub strategies
  – Create e-information environment
  – E-Information plan
  – Learning/ e-learning & research/ e-research support strategies
  – Library structure, business processes, skills, facilities
Library Structure

- Clients & Environment
- Subject Librarians
- Operations
- E-Services
- Special Units
- Support Units

E-Information Strategy

Matrix teams
Variables that influence the role of academic libraries

• Global library **digitization** projects, e.g. Google, European Union
• Impact of **e-Research** (a.k.a. e-Science (UK) or Cyber infrastructure (USA))
• Needs of **Net-Generation** students
• Possibilities created by **Web 2.0 / Library 2.0 technologies**
• These variables influenced the development of a **Library 2.0 service model** for the University of Pretoria Library Service
Web 2.0
Web 2.0

• Web 2.0
  – Users build networks (professional, recreational etc.)
  – People are the content of sites (O’Reilly)
  – Emphasize online sharing and collaboration

• 2.0-style Service Examples
  – Google Scholar & Scholar SFX
  – User tagging, ratings & comments
  – Mashups, Wikis, Blogs, RSS-feeds
  – Community citation (CiteULike), photo and book services
  – Websites with 2.0 characteristics: Flickr, eBay, De.licio.us (social bookmarking), MySpace, MyTube, LibraryThing
“With Library 2.0, library services are frequently evaluated and updated to meet the changing needs of library users. Library 2.0 also calls for libraries to encourage user participation and feedback in the development and maintaining of library services. The active and empowered library user is a significant component of Library 2.0.”

With information and ideas flowing in both directions – from the library to the user and from the user to the library – library services have the ability to evolve and improve on a constant and rapid basis. The user is participant, co-creator, builder and consultant – whether the product is virtual or physical.”

http://en.wikipedia.org/wiki/Library_2.0
Library 1.0 vs Library 2.0

- Closed collections
- Collection development
- Pre-organized catalogue
- Walk-in services
- “Read-only” catalogue
- Print newsletter mailed
- Easy = Dumb users
- Limited service options
- Focus on bringing them in
- Catalogue is core operation

- Open collections
- Library suggestion box
- User tagging
- Globally available services
- Amazon-style comments
- Team-built blog
- Easy = Smart systems
- Broad range of options
- Focus on finding the user
- User services are core

(Schneider 2007)
Library 2.0 Service Model

Enable (e) Research

Library that LETS
- Library that fits that suggests that learns that gathers that combines that organizes

Integration with (e) learning environment

STAFF
- Creation of an Emerging Technology Committee

Library is a framework for integrating change into all levels of library operations

1. User-centricity
2. Technology-savvy environment
3. Reaching of the patrons long tail
4. Content for more than one device
5. Component-based software, not monolithic ILS
6. Constant change
7. Use of Web 2.0 apps and services
8. Open standards

The library has no barriers

The library is human

Patron 2.0 = from content consumer to content creator

The library is everywhere

The library uses flexible, best-of-breed systems

THE PHYSICAL LIBRARY
- Loud spaces for collaboration & conversation
- Mobile devices for users

OPAC
- Federated search
- RSS for cataloging records & search results
- Records tagging
- User reviews

Social computing apps to meet users’ needs when, where and how they need it

Enable e-Research

A New Science / Research Paradigm

• Thousand years ago:
  Experimental Science
  - description of natural phenomena

• Last few hundred years:
  Theoretical Science
  - Newton’s Laws, Maxwell’s Equations …

• Last few decades:
  Computational Science
  - simulation of complex phenomena

• Today:
  e-Science or Data-centric Science
  - unify theory, experiment, and simulation
    - using data exploration and data mining
• Data captured by instruments
• Data generated by simulations
• Data generated by sensor networks
  – Scientist analyzes databases/files
The e-Science / e-Research Data Life Cycle

- Data Acquisition
- Data Ingest
- Metadata
- Annotation
- Provenance

- Data Storage
- Data Cleansing
- Data Mining
- Curation
- Preservation
The Living Cell – A Grand Challenge
For the Physical Sciences

- Decoding the human genome
- Proteomics
- Computation and information processes
- Immunological responses
- Cell structure issues
- And many more...

The Genomic Data Explosion

Measured Genomic Sequence is growing three times faster than Moore’s Law

© 2006 Hans Hoffmann
E-Research Support Service for SA

**Future eResearch activities**
- Research Portal (incl global searching)
- Data Transfer and Sharing (processes and protocols, 3As, helpdesk)
- Open Access (Standards, common software, institutional repositories)
- The eResearch Librarian (Training and re-orientation)
- Digital Curation Services (Standards, software, marketing & training services)
- Portable & access constraints

**Immediately**
- SASLI+
- National Research and Education Network
- Centre for High Performance Computing

**Usually sub-contracted to competent agents in the system**

**http://www.sajim.co.za**
Integrated VRE for Malaria Research in South Africa

To improve research efficiency
To create a conceptual model of the entire research process in South African context
To surface the VRE needs/constraints across CSIR/UP boundaries – linked to a specific project
To identify the conceptual requirements for developing a pilot VRE for the CSIR/UP project

Researchers: Drs Heila Pienaar (UP) & Martie van Deventer (CSIR)

Virtual Research Environment

- Training
- Dissemination and artifacts
- Real time communication
- Scientific workflow (daily activities relating to research agenda)
- Identification of research area in wider context
- Identification of funding sources
- Identification of collaborators
- Proposal writing
- Literature review and indexing
- Project management

http://www.vre.ox.ac.uk/ibvre/IBVRE%20Initial%20Analysis%20Report.pdf
Creation of emerging technology committee

Library e-Service Steering Committee
Library e-Service Steering committee: terms of reference

1. **Purpose**: The main purpose of this strategic steering committee is the creation of the Library e-Service and the co-ordination of Library e-Activities in support of UP research, teaching and learning.

2. **Composition**:
   Library executive management team member responsible for Library e-Information strategy is ex officio chair
   Library executive management are ex officio members
   Chairs of Library e-Steering committees are ex officio members
   Leader of Library IT unit is ex officio a member
   Faculty library mangers (2 or 3) to facilitate innovation transfer

3. **Terms of reference**:
   To co-ordinate the implementation of the Library e-Information strategy
   To co-ordinate Library e-Services, e-Products & e-Initiatives on a strategic level
   To create & align Library e-Steering committees e.g. Library Web steering committee, Library System steering committee
   To co-ordinate the different e-Budget requests & spending e.g. IT budget, IT systems budget, Library strategic plan
   To align Library IT policies & architecture with UP IT policies & architecture
   To create & maintain the necessary personal networks with UP, national, regional & international stakeholders, opinion leaders & experts
   **To be aware of & to implement new relevant IT trends & e-Applications**
   To communicate & market new e-Trends & e-Applications
Integration with e-Learning environment
Federated search

Google Scholar + Scholar SFX = Solution for Africa
Access full text within “3 clicks”
Library Catalogue (OPAC) RSS Feeds
<table>
<thead>
<tr>
<th>Author</th>
<th>McNabb, David E.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
<td>Knowledge management in the public sector: a blueprint for innovation in government / David E. McNabb.</td>
</tr>
<tr>
<td>Publisher</td>
<td>Armonk, N.Y. : M.E. Sharpe, c2007.</td>
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<td>INI</td>
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**Physical Description**

xvii, 325 p.: ill., 24 cm.
Patron 2.0 = from content consumer to content creator

Current best example is our academics’ & students’ involvement with collections on the University’s digital research repository, UPSpace.

The Library is responsible for the management of this repository.
https://www.up.ac.za/dspace/
Specialist / expert roles:

- **Metadata**: Amelia Breytenbach
- **Digitisation**: Ria Groenewald
- **Open Access**: Elsabé O./ Monica H.
- **IT Specialist**: Leonard Daniels
- **Consultant**: Theo Bothma

UP Digital Repository
UPSpace Manager: Ina Smith

- **Special Collections**
  - Collection Manager: Pieter vd Merwe

- **EMS**
  - Collection Manager: Ujala Satgoor

- **Education**
  - Collection Manager: Johann van Wyk

- **EBIT & NAS**
  - Collection Manager: Elna Randall

- **Veterinary Sciences**
  - Collection Manager: Erica vd Westhuizen

- **Health Sciences**
  - Collection Manager: Magriet Lee

- **Humanities & Theology**
  - Collection Manager: Maureen du Pisanie

- **Law**
  - Collection Manager: Shirley Schröder
The influence of high energy proton bombardment on the electrical and defect properties of single-crystal 
ZnO

F. El Ansari, S. A. Goodenough, M. H. Habib, M. J. Miller, and B. C. Logan

Physics Department, University of Pretoria, Pretoria 0002, South Africa

Research Inst., Institute of Nuclear Science, Pretoria, South Africa

Published in Acta physica 1991

Abstract

We report on the changes of the electrical and defect properties of single-crystal ZnO, before and after high-energy proton bombardment. The electrical properties of ZnO, including the Seebeck coefficient, the Hall effect, and the resistivity, are measured and compared before and after the irradiation. The results indicate that the proton bombardment results in a decrease in the electrical conductivity of ZnO, which is attributed to the introduction of defects and impurities in the crystal lattice. The defect properties are studied by temperature-dependent measurements, and the results are compared with theoretical predictions. The present work provides a better understanding of the defect behavior in ZnO, which is important for the development of new electronic and optoelectronic devices.
Use of Web 2.0 apps & services at our Library

- **feedblitz**
- **RSS Feeds**
Special Collections Book of the Month
-Blog & feedback
-Links to amazon.com/kalahari.net

Library/Web 2.0 Tools
http://www.ais.up.ac.za/library2

Skype
Upspace

From Wikipedia, the free encyclopedia

UPSpace (Institutional research repository of the University of Pretoria) is the name of the open access digital institutional repository of the University of Pretoria, South Africa. A digital institutional repository in the context of a higher education institution can be defined as “a set of services that a university offers to the members of its community for the management and dissemination of digital materials created by the institution and its community members. It is most essentially an organizational commitment to the stewardship of these digital materials, including long-term preservation where appropriate, as well as organization and access or distribution.”[1] UPSpace contains a collection of the intellectual research output produced by past and current researchers of the University of Pretoria. The spectrum of material covered in UPSpace includes the following:

Historical archival material - after it has been digitized; Research articles (scholarly publications); Popular research material; Unpublished research; Inaugural addresses; Conference proceedings; Technical reports; Open lectures, and many more.

The main objectives of an institutional repository are: 1) to enhance the visibility of the knowledge products created by an institution’s members by providing easy open access, and 2) to preserve the intellectual output of the members of that community for years to come.

The open source platform, DSpace, which was developed by an MIT-Hewlett Packard alliance, is used for UPSpace.

Communities & Collections on UPSpace

- Centre for the Study of AIDS (CSA)
- Department of Library Services
- Economic & Management Sciences
- Education
- Education Innovation
- Engineering, Built Environment & Information Technology
- Health Sciences
- Humanities
- Law
- Mapungubwe Collections
- Natural & Agricultural Sciences

University of Pretoria institutional digital repository (UPSpace) on Wikipedia
Contribute/ Review

Check the catalogs in your library.

- Libraries worldwide that own this item
- Search the University of Pretoria library catalogue

Be the first to contribute

More like this
Search for versions with same title and author | Advanced options...

Title:

Ontologies: a silver bullet for knowledge management and electronic commerce /

Author(s):

Fensel, Dieter

Publication:

Berlin, New York: Springer,

Year:

2001

Description:

ix, 136 p.; 25 cm.

Language:

English

Standard no:


Descriptor:

Ontologies

Electronic commerce

Semantic Web

Note(s):

Includes bibliographical references (p. 123-133)

Class Descriptors:

LCC: QA76.8.C65; Dewey: 005.74

Language:

English

Display Options:

Print this record

Download citation format:

BibTeX

HTML

Plain text

RTF

PDF

Add this information to your library catalog

Accession no: 5995941010213

Database: WorldCat
Google Talk

A Google approach to instant communications

Google Talk Gadget

Start using Google Talk instantly, with no download, and get:

- Instant messaging
- Video previews in chat
- All of your Gmail contacts
- Photo previews in chat

Launch Google Talk

Google Talk is not a telephony service and cannot be used for emergency dialing.

By using Google Talk, you agree to our Terms and Privacy Policy.

Want to add the Google Talk Gadget to your webpage or blog? Get the code here.

Google Talk Client

Download the Google Talk client for more features including:

- File transfers
- Voice calls
- Voicemail
- Gmail notifications

Scopus

Welcome to Scopus Live Chat.

Scopus Live Chat is an online technical support service available 24 hours a day, Monday to Friday.

Please enter your name and e-mail address if you are experiencing problems using Scopus and would like online assistance.

Required items indicated with *.

Please enter your name:

Live person
International examples of Web / Library 2 tools

- Amazon
- Stockholm Library
- Google / LMS Mashup
- Virtual world & library
- Tagging
International examples of Web / Library 2 tools

Amazon

Google / LMS Mashup

Stockholm Library

Virtual world & library

Tagging
In conclusion … we are well on our way to become a Library 2.0 Library!

- User-centered & Web 2.0
- VRE
- eService Steering Committee
- Patron 2.0 - UPSpace
- OPAC
- Federated Search Engine
- RSS Feeds
- Blogs
- Wiki’s
- Etc.
- Client feedback/ Reviews
- E-Learning
1st African Digital Management and Curation Conference and Workshop

12 and 13 February 2008, at the CSIR Convention Centre, Pretoria

Preliminary Programme

Conference fee: R2 500 p/p

Day 1: Conference

08:00 – 08:30 Registration

08:30 – 09:00 Welcome and Keynote: The implications of the OECD declaration for African/ South African policy on research data and information management and curation, Department of Science and Technology representative

09:00 – 11:00 Theme 1: Overview: International trends

- oScience: providing context, Hans Falk Hoffmann, CERN
- International data policy overview, Paul Uhlen Director, Office of International S&T Information Programs and Services

A collaborative initiative under the auspices of:

[Logo of science & technology]

[Logo of ASSAf]

[Logo of NRF]

[Logo of HSRC]
Bibliography


Presenters

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