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Knowledge Management and the Information Specialist: dancing in step or missing a beat?

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Academic Information Service
University of Pretoria

2nd SLIS/OSALL/SAOUG Conference, Midrand, 11 June 2002

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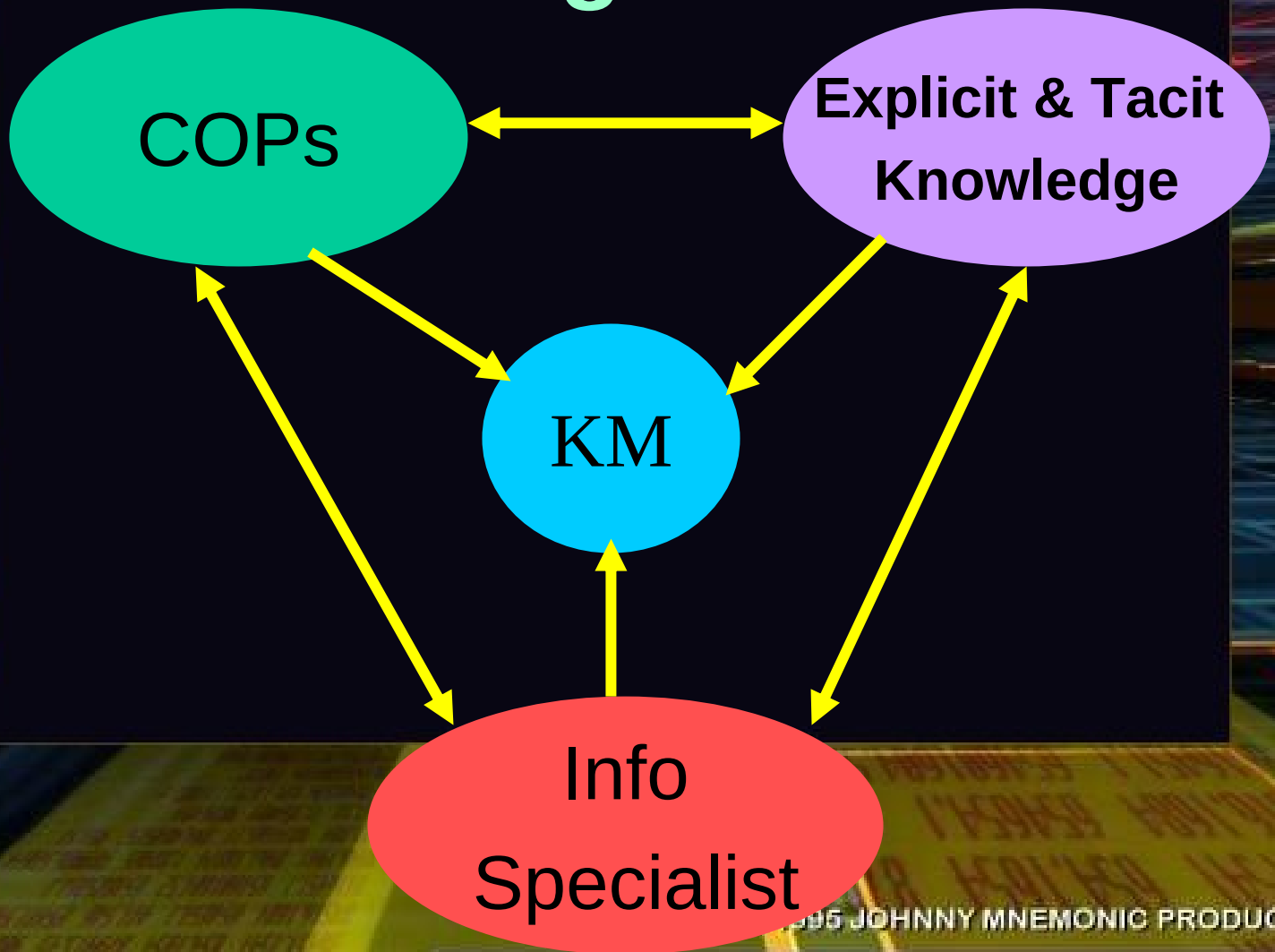
Role players in Knowledge Management



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Definition of Knowledge Management

- Utilisation and exploitation of knowledge assets
- Including all its info and its human experience and expertise
- To ensure sustainability and competitive advantage

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Definition (cont)

- Utilises its culture, processes and infrastructure to
  - Create, identify, capture, share, use & re-use knowledge
  - Adding optimal value to client's knowledge base

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Types of Knowledge

- Explicit
  - documented
  - recorded

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Types of Knowledge (cont)

- Tacit
  - expertise & experiences in person's mind
  - derived from experience
  - embodies beliefs and values
  - actionable knowledge
  - generation of new knowledge

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Communities of Practice

- A COP is a network of people emerging spontaneously
- Held together by informal relationships
- Sharing common knowledge, expertise and tools
- Learning from one another

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Stage 1
Potential

Stage 2
Formation

Stage 3
Commitment

Stage 4
Active

Stage 5

Adaptive

Disengaging

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COP lifecycle

1. **Potential**

   The possibility for the formation of a community exists

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1.Role of Information Specialist

- Identify candidates
- Market COP to potential members
- Identify existing communities
- Sell COP to management
- Conduct interviews and facilitate group dialogue
- Act as a Community Champion

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COP lifecycle(cont)

2. **Formation**

The members come together, form a community and set out its operating principles

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2.Role of Information Specialist

- Act as facilitator
- Set up, facilitate and document informal meetings
- Map knowledge flows and knowledge relationships
- Build group identity

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COP lifecycle(cont)

3. Commitment

The community executes and improves its processes

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3.Role of Information Specialist

- Design knowledge capture and documentation systems
- Design, convene and facilitate seminars and conferences
- Develop support strategies for the group learning agenda

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COP lifecycle(cont)

4. **Active**

   The community understands and demonstrates benefits from Knowledge Management and the collective work of the community

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4.Role of Information Specialist

- Encourage members to stay committed
- Make online links to members' papers
- Publish in newsletters
- Address organisational issues
- Negotiate role of the COP
- Forge linkages

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COP lifecycle (cont)

5a. Adaptive

The community and its supporting organisation are adapting to changes in the environment and by doing so they are using knowledge for competitive advantage

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5a. Role of Information Specialist

- Mentor/teacher
- Facilitator
- Innovator

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COP lifecycle (cont)

5b. Disengaging

The usefulness of the community for its members and supporting organisation has been outlived and its members move on

The community and its supporting organization are using knowledge for competitive advantage

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5b. Role of Information Specialist

- Facilitate
- Convene reunions
- Maintain directory

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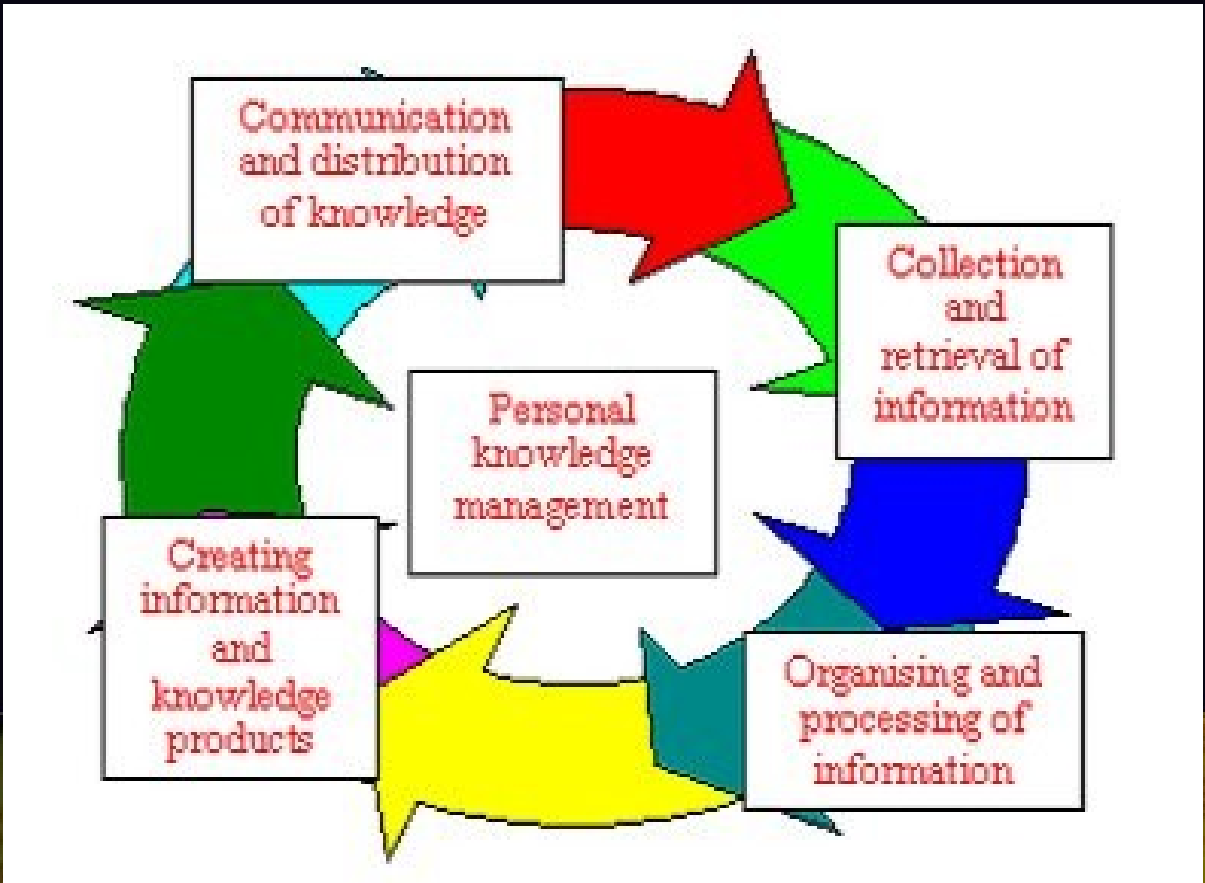
Academic Personal Knowledge Management chart



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Flow of Knowledge

- Retrieval / collection (finding)
- Organising / indexing
- Creating Info / Knowledge products
- Communicating / distributing

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Infoportal

- To support academic personal Knowledge Management

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Infoportal: Search function

- Finding information
  - Library catalogue
  - Databases
  - Internet
  - Home page

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Infoportal

- Content :
  - e-journals
  - databases
  - links to websites
  - conferences
  - etc

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Learning to dance in step

- The challenge
- Ongoing process
- Meetings
- Effective communication

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Micro database function

- Organising information
- Micro database tool

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Virtual workspace function

- Virtual groups
  - messages (e-mails)
  - documents
- Communities of Practice

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Publishing function

- Support electronic publishing
  - Articles
  - Theses

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Choreography of the Dance

- Case studies – Service Unit Vet Science

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African Goats website

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African Goats : e-articles

CONFERENCES AND PAPERS ON GOATS

- CONFERENCES
  - Past Conferences
  - Future Conferences
- PAPERS
  - Current Status of Goat Research
  - Milk production from goats for households and small-scale farmers in South Africa
  - Research and training strategies for goat production systems in South Africa: proceedings of a workshop, 1998.

Created by Amelia Breytenbach
Updated March 2002

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African Goats : list of experts

STATE/PROVINCIAL GOAT RESEARCH AND DEVELOPMENT FACILITIES

(With permission from Prof E.F. Donkin)

Province	Facility	Production environment	Current activities	Contact person
Northern	Messina ADC	Arid sweet bushveld	Mixed production systems Bush control	JJ Jordaan Towoomba ADC Private bag X 1615 Warmbaths 0480 +27-12-7362250
	Mara ADC	Arid sweet bushveld	Comparison of boer and unimproved goats Integrated production systems Bush control	J J Jordaan
	Delftzyl ADC	Mixed sweet/sour bushveld	Integrated production systems Fluoride tolerance (with MEDUNSA)	J J Jordaan

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African Goats

- Website
- Full text articles
- Proceedings full text
- Listserv
- List of experts
- Community of Practice
- Indigenous Knowledge

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African Goats - role of Information Specialist

- Initiator
- Co-facilitator of COP
- Documentalist
- Searcher and storer of tacit (Indigenous Knowledge)
- Adding value

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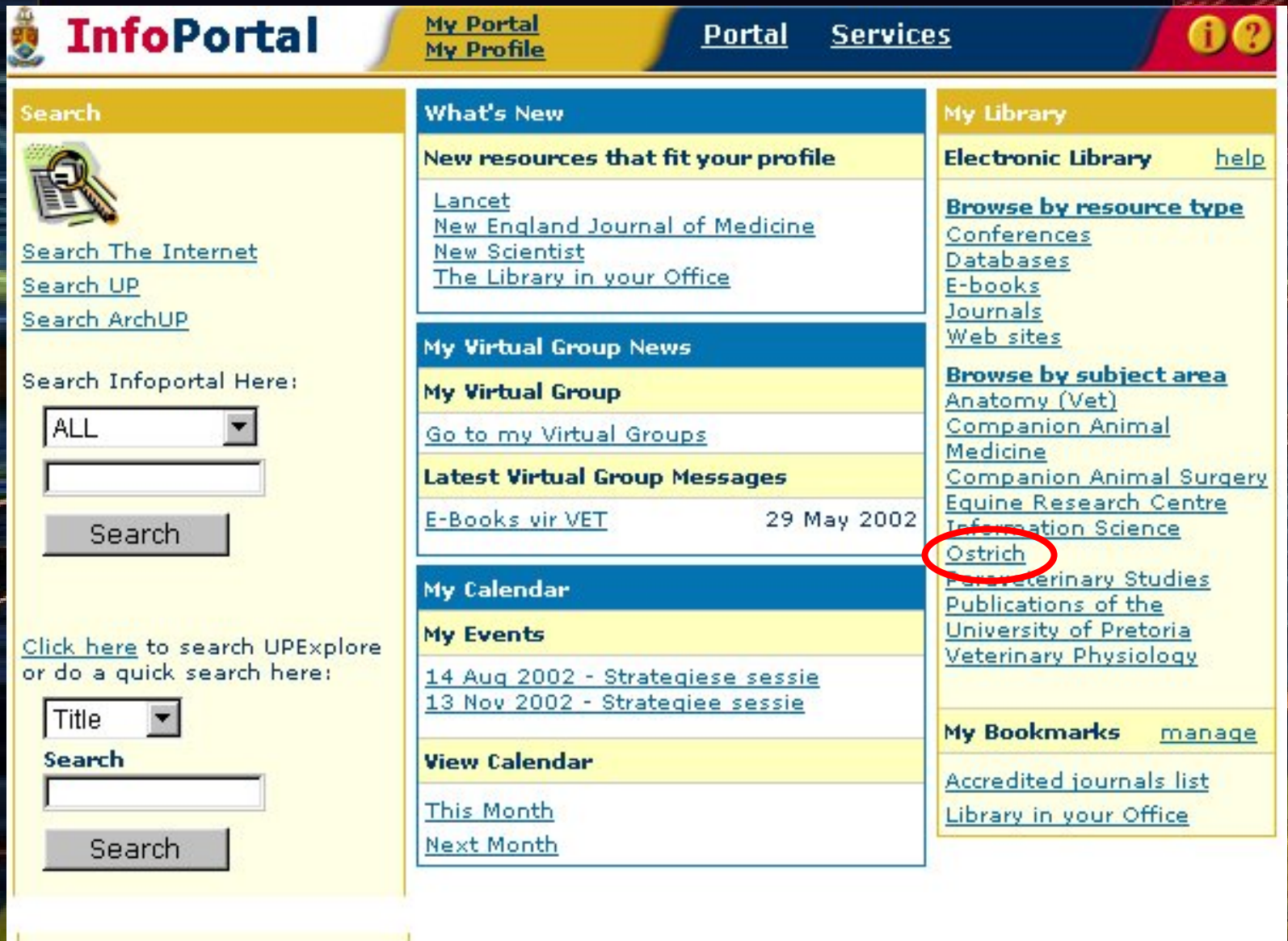
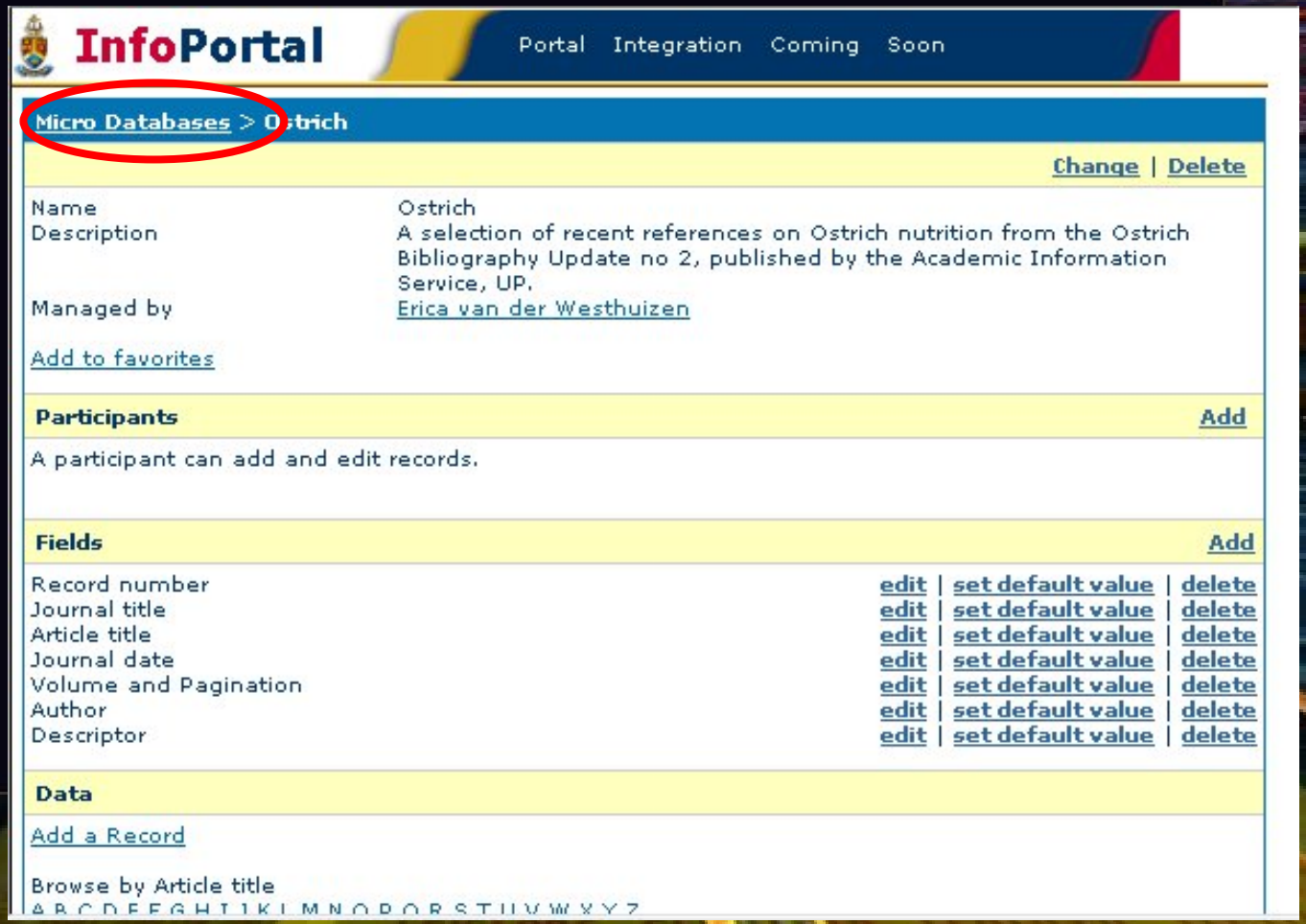
Ostrich and Infoportal

- Ostrich experts – lecturers and researchers

Ostrich via Infoportal



Ostrich micro database



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Ostrich

- Virtual Group
  - Messages
  - Document storage
- Knowledge flow and sharing - COP

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Ostrich – role of Information Specialist

- Identifying the need
- Virtual group – COP
- Placing content
- Supporter
- Facilitator
- Indexer

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Choreography of the dance

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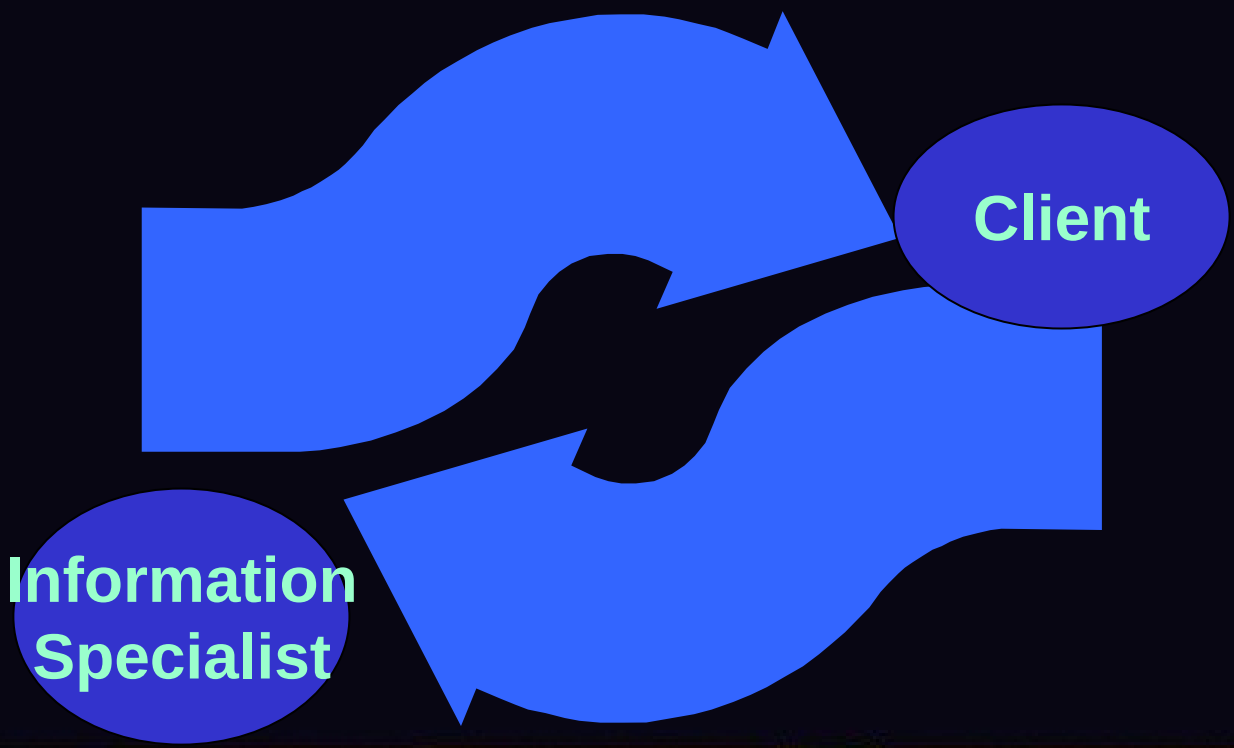
Dancing a successful tango



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Results of the Knowledge Management Tango

- Role of the Information Specialist
  - Capture and store
    - Traditionally : bookmarks, web links
    - Results: limited access
  - Infoportal structure
    - Subject indexing
    - Value added

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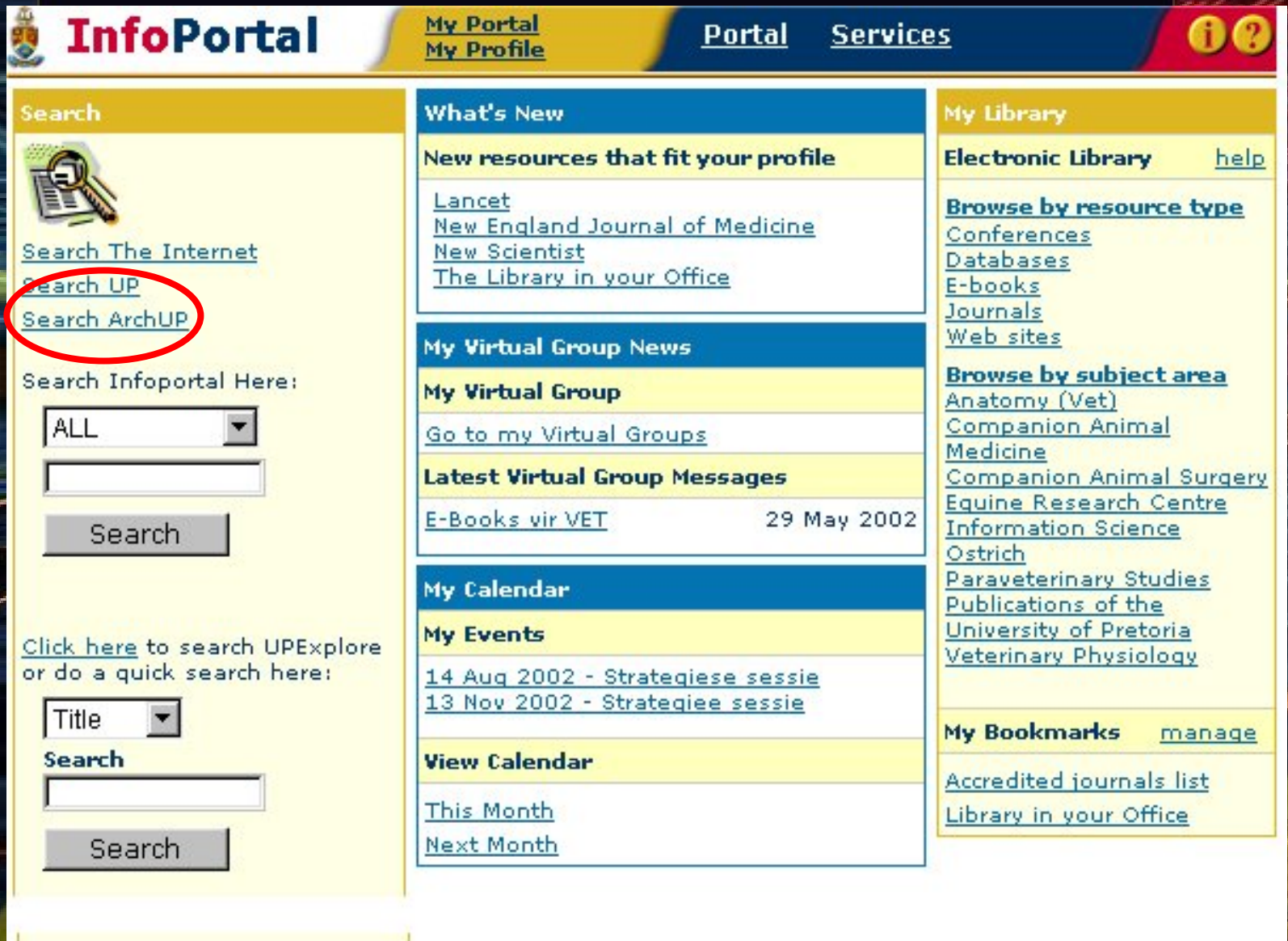
ArchUP


InfoPortal
My Portal
My Profile
Portal
Services
Search
Search The Internet
Search UP
Search ArchUP
Search Infoportal Here:
ALL
Search
Click here to search UPExplore or do a quick search here:
Title
Search
Search
What's New
New resources that fit your profile
Lancet
New England Journal of Medicine
New Scientist
The Library in your Office
My Virtual Group News
My Virtual Group
Go to my Virtual Groups
Latest Virtual Group Messages
E-Books vir VET
29 May 2002
My Calendar
My Events
14 Aug 2002 - Strategiese sessie
13 Nov 2002 - Strategiee sessie
View Calendar
This Month
Next Month
My Library
Electronic Library
help
Browse by resource type
Conferences
Databases
E-books
Journals
Web sites
Browse by subject area
Anatomy (Vet)
Companion Animal Medicine
Companion Animal Surgery
Equine Research Centre
Information Science
Ostrich
Paraveterinary Studies
Publications of the University of Pretoria
Veterinary Physiology
My Bookmarks
manage
Accredited journals list
Library in your Office

Architecture Micro database

- Background
  - Architecture Department
  - Indexing of architecture journals
  - Database :TOBI
- Access and control
  - Architecture Reading Room
  - Searches and Indexing
  - Problem !

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Architecture Micro database (cont)

- Solving problem
  - Wider access : web + control
  - Software options

  Infoportal as a Webtool – extends availability

  Controlled access

  Cost module

  UP’s intellectual property

  Result : ArchUP

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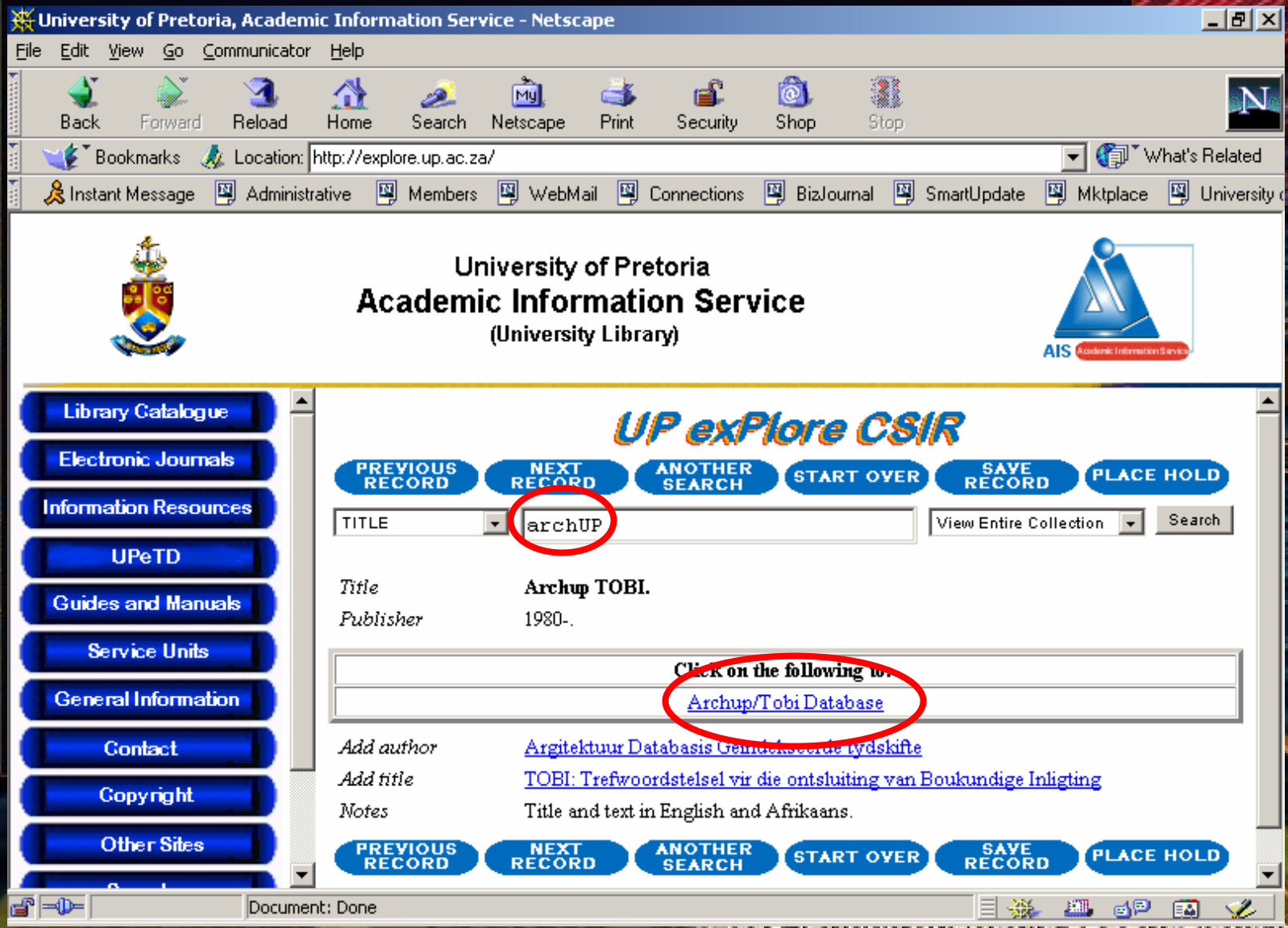
ArchUP via UPexPlore



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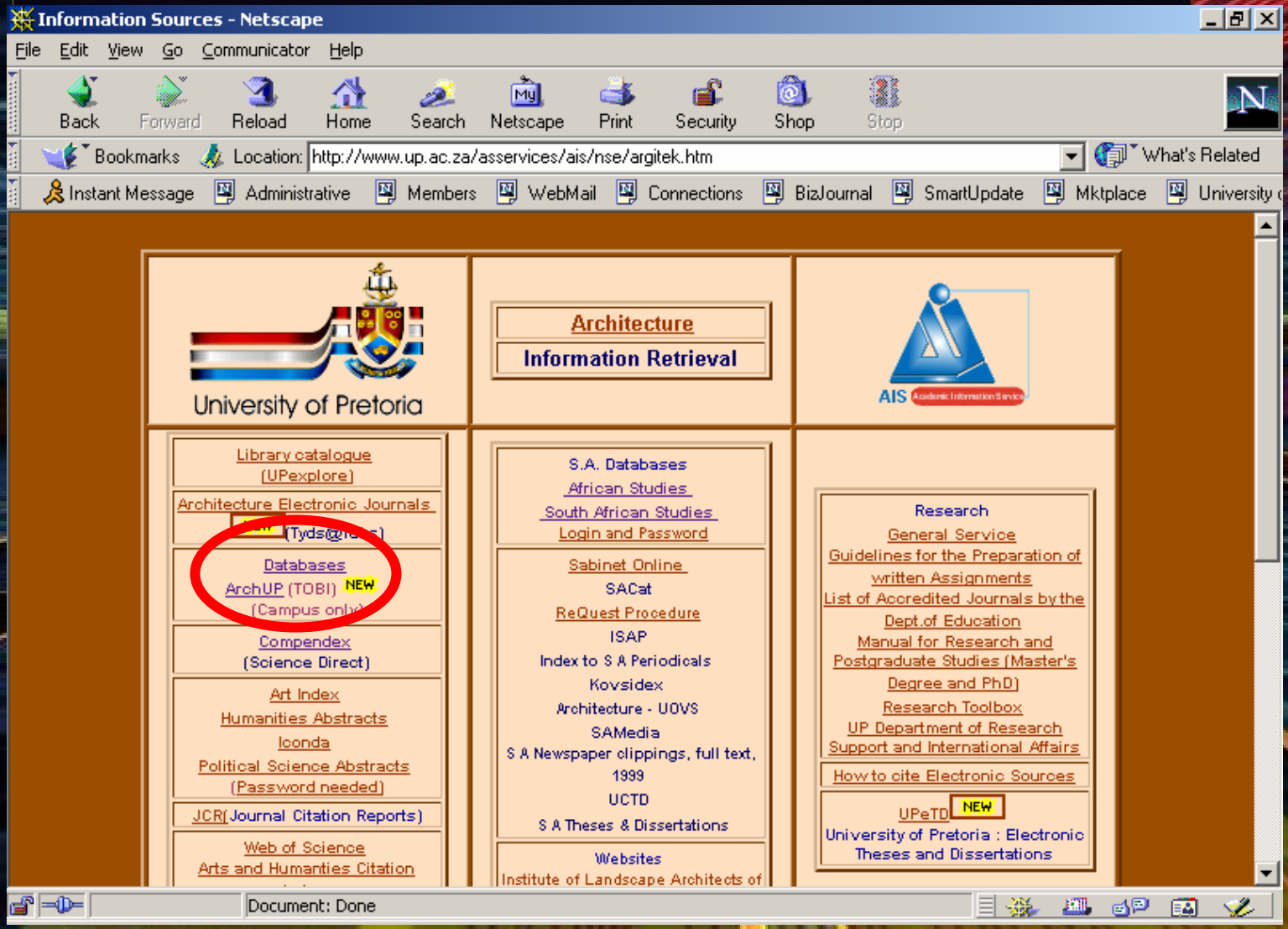
ArchUP via Web page



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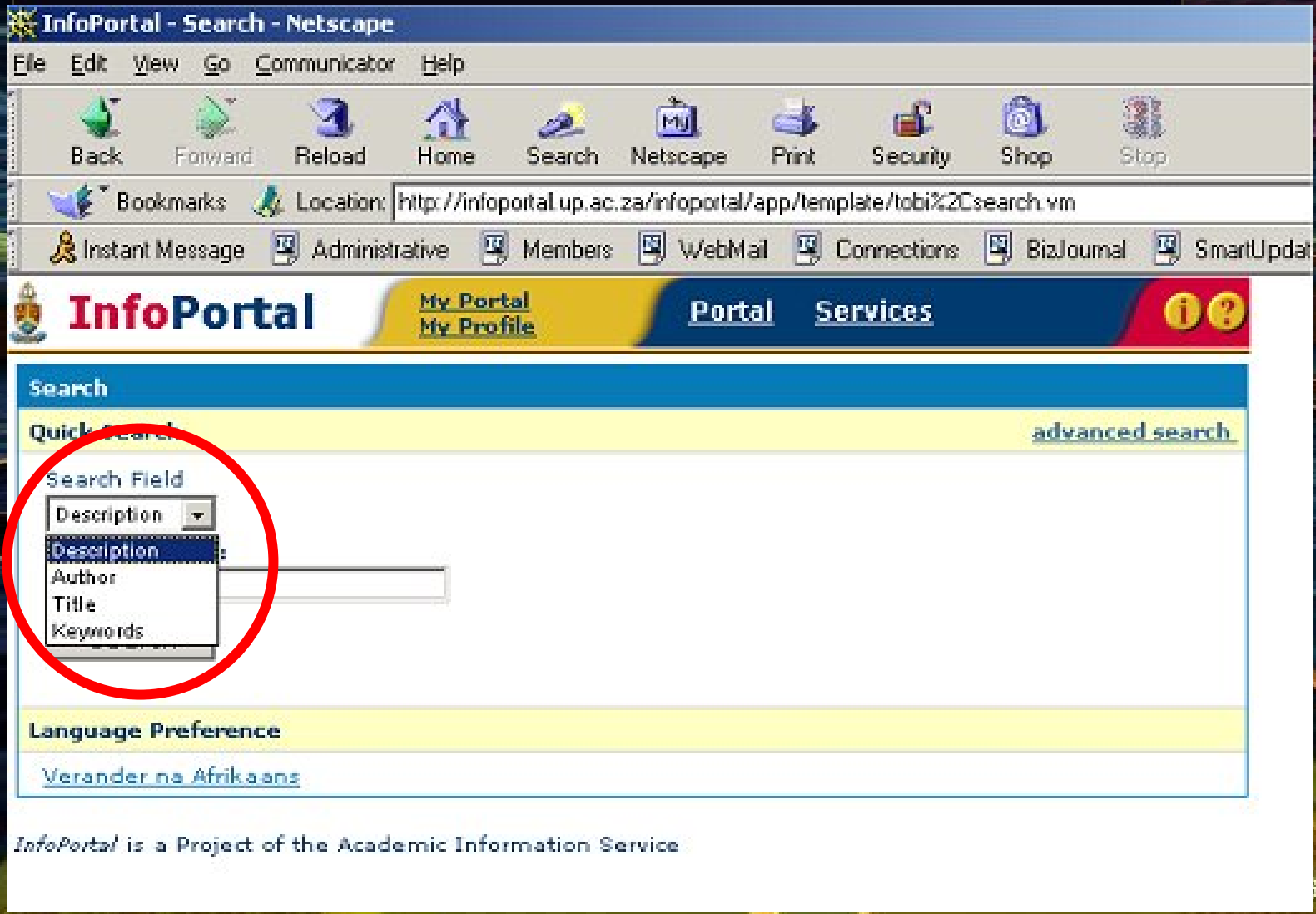
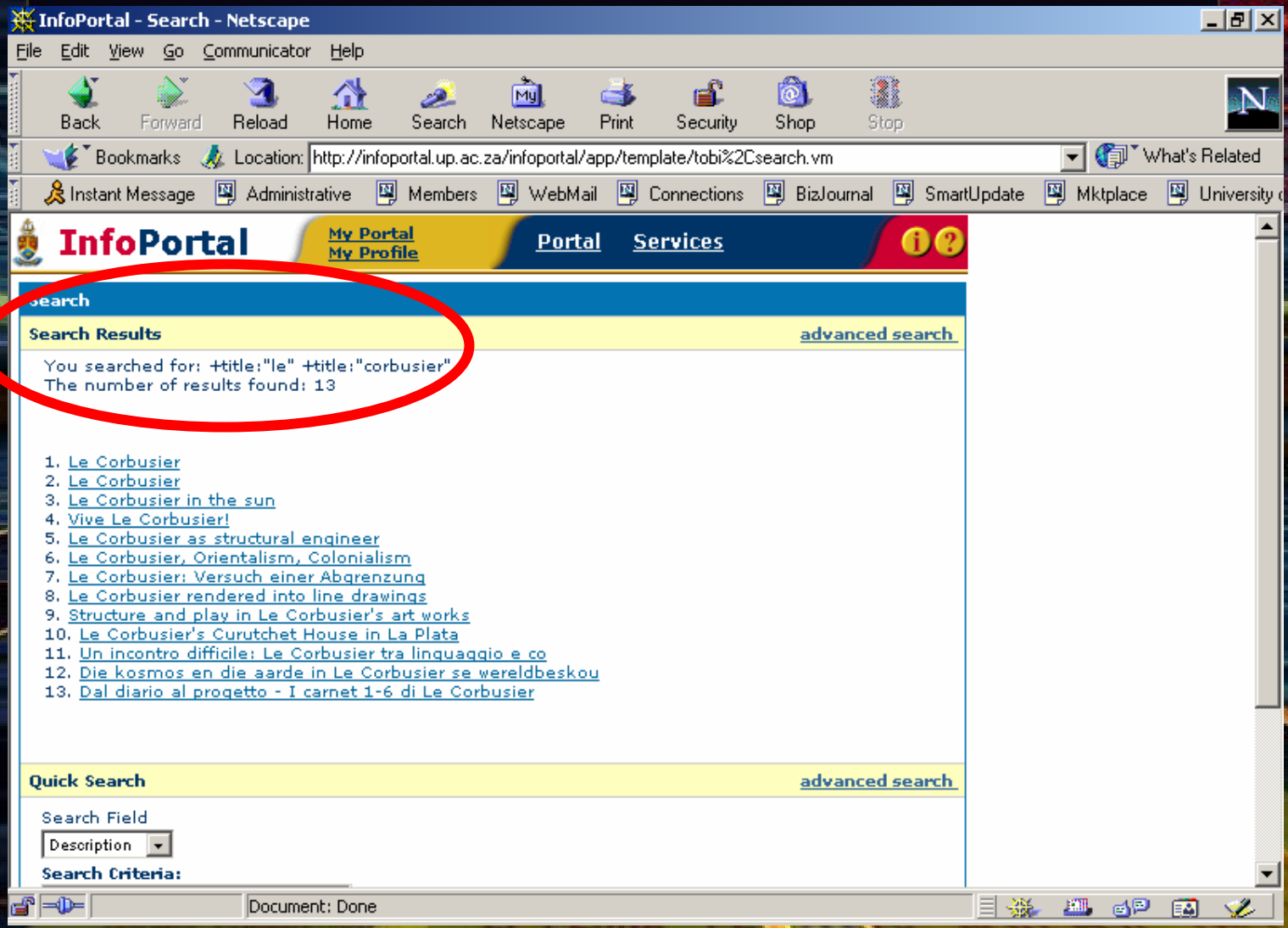
ArchUP : search options



ArchUP: results



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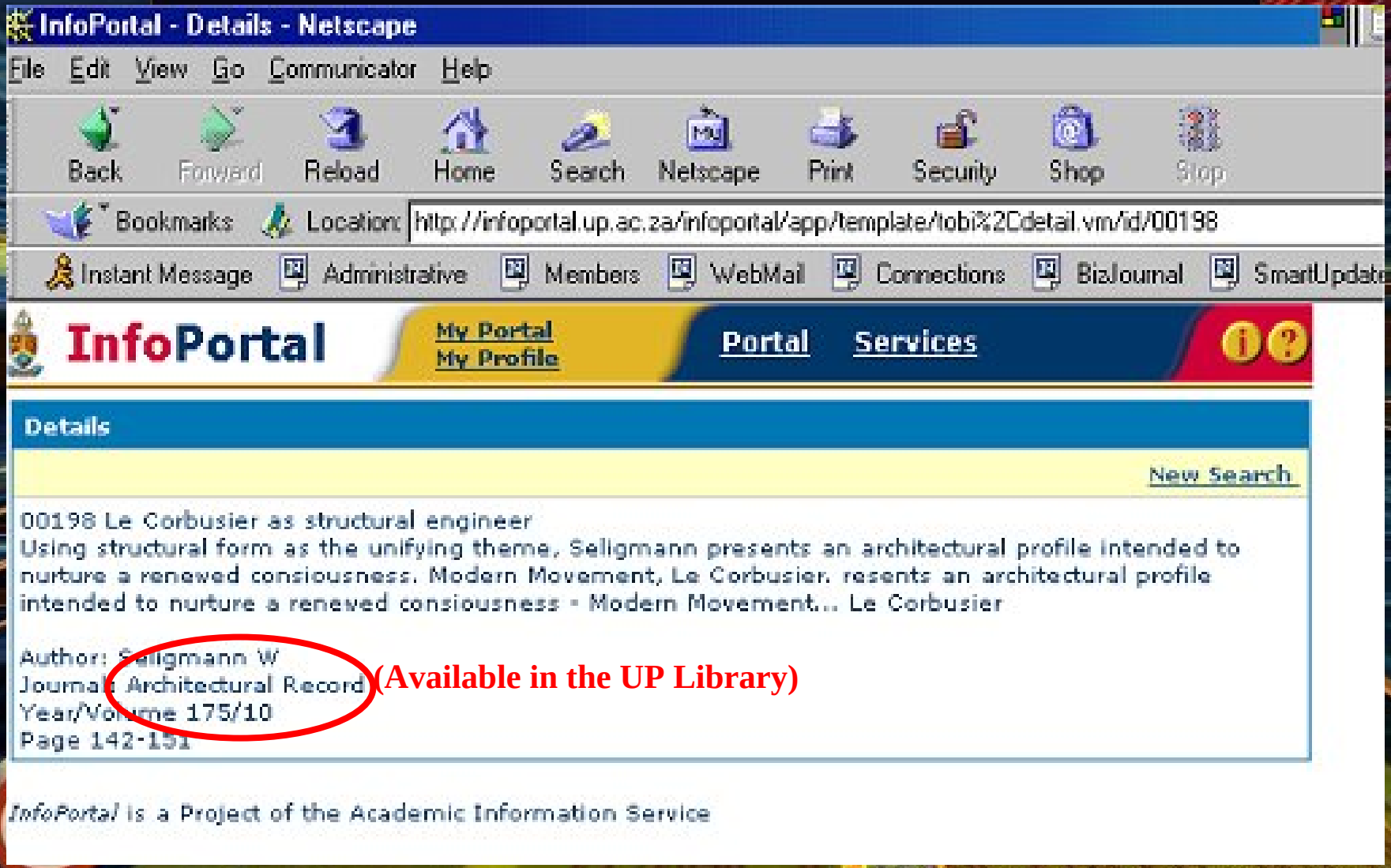
ArchUP : record



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More needs

- Indexing of in-house material by academic departments
- Development of Micro database
- Role of Information Specialist
  - Identify material
  - Facilitate the Micro database function to index material

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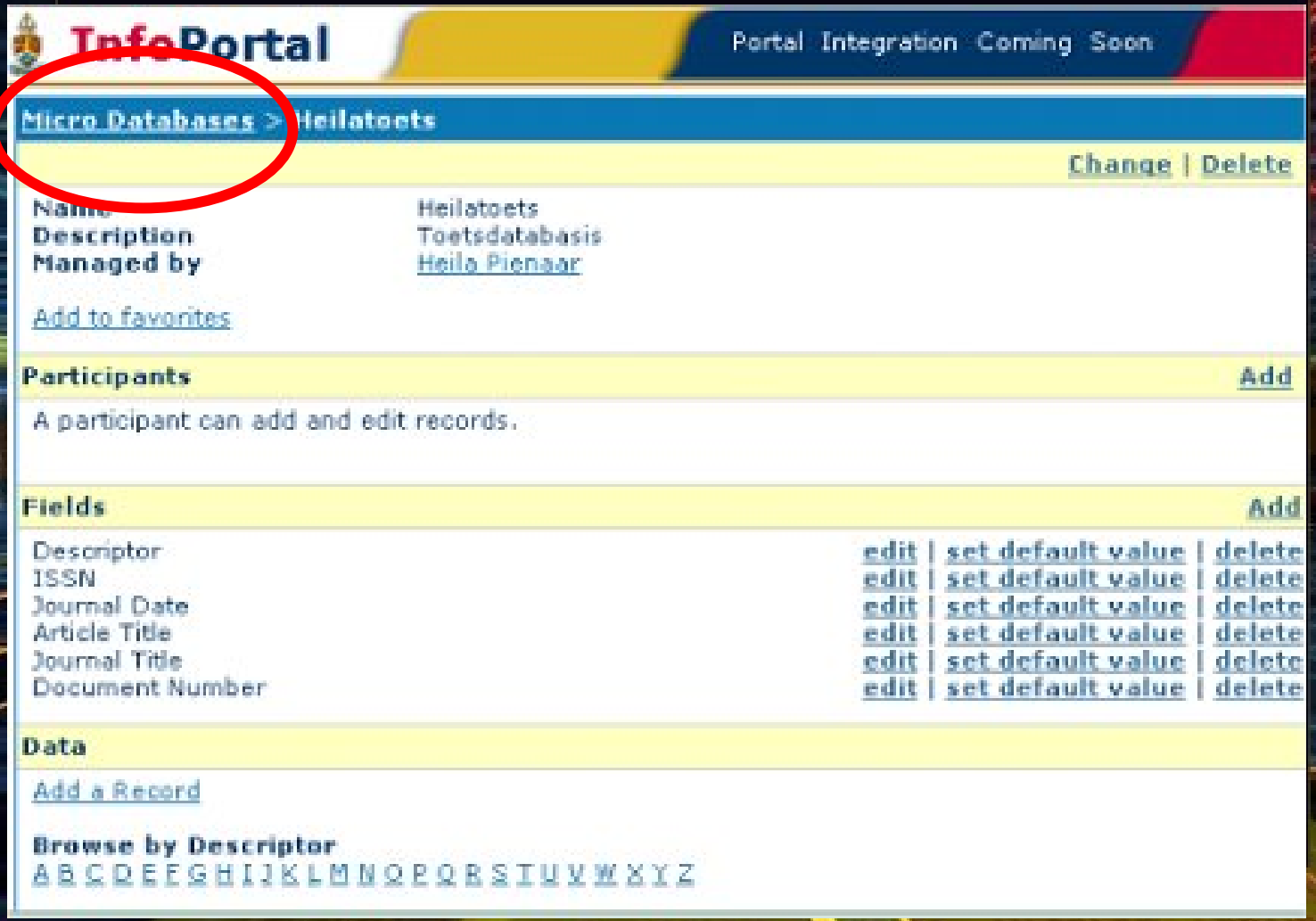
Micro Database function



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Other needs

- Conference Refereeing
- Opportunities for Information Specialists

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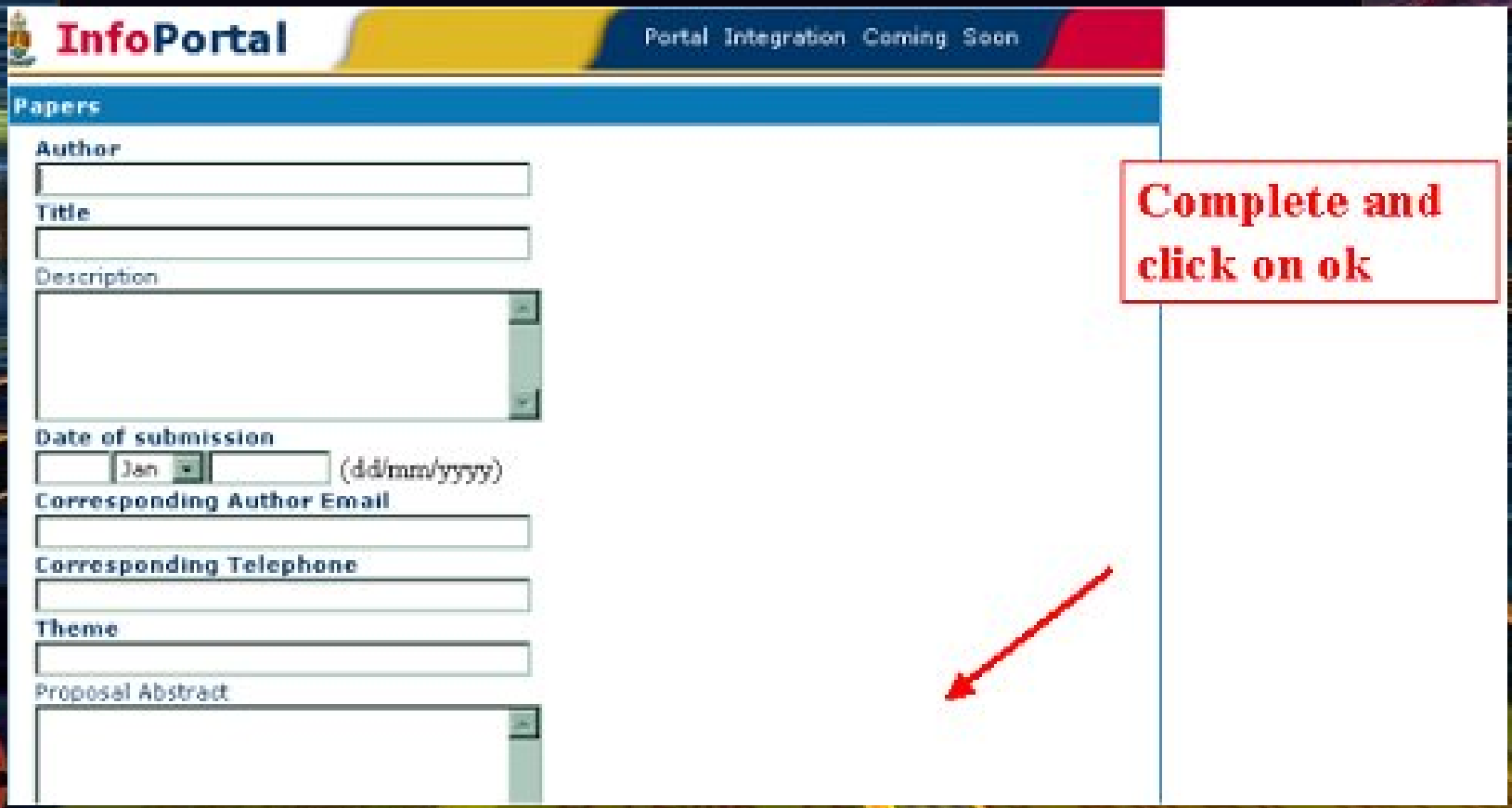
Conference refereeing



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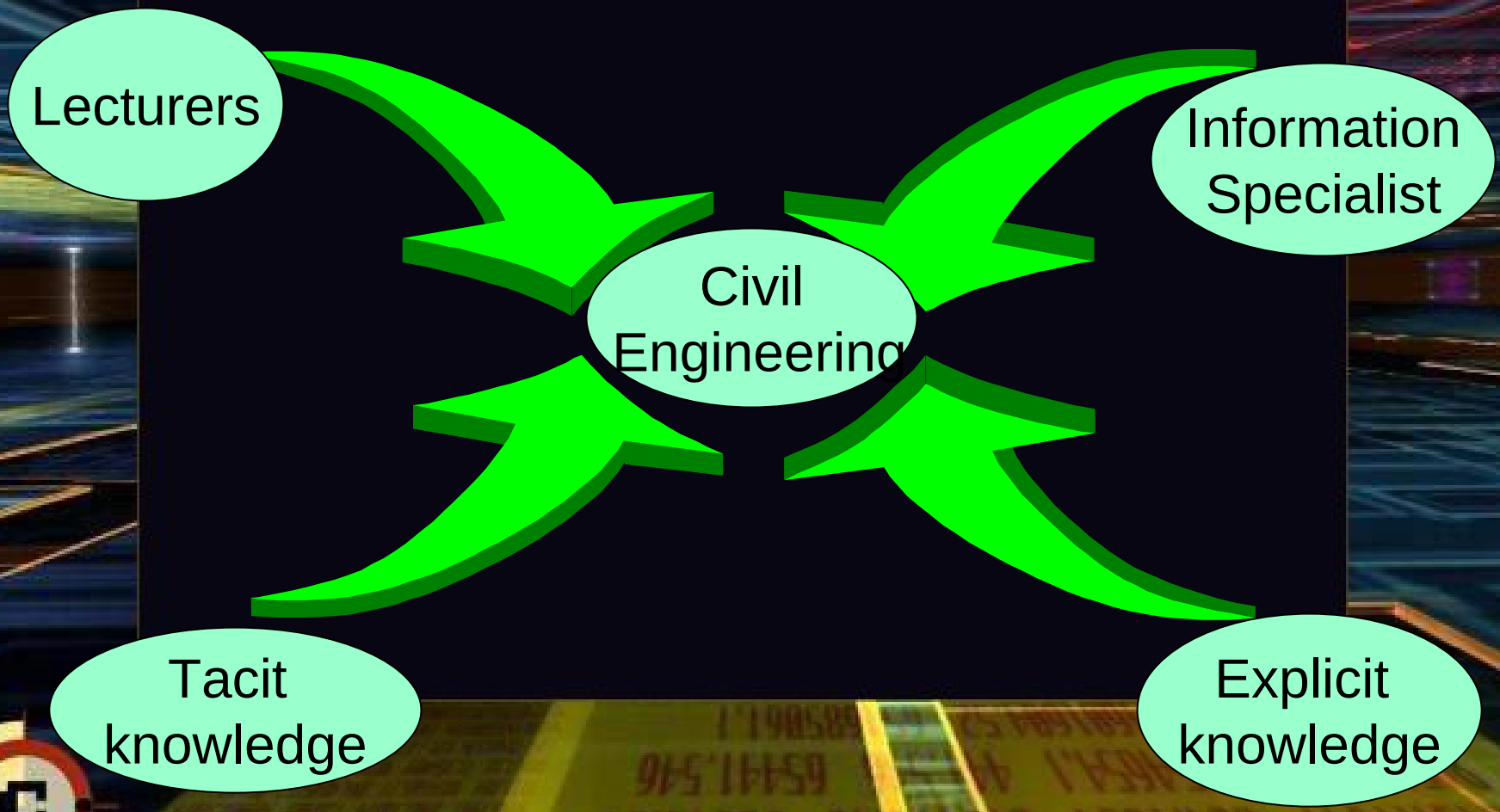
Virtual Group



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Civil Engineering virtual group

- Communication
  - E- mail
  - list serv
  - in person
  - Knowledge flow in department
- How to capture ?

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Civil Engineering virtual group (cont)

- Intercept Knowledge flow by:
  - Virtual Communication Group
  - Information Specialist
  - Lecturers

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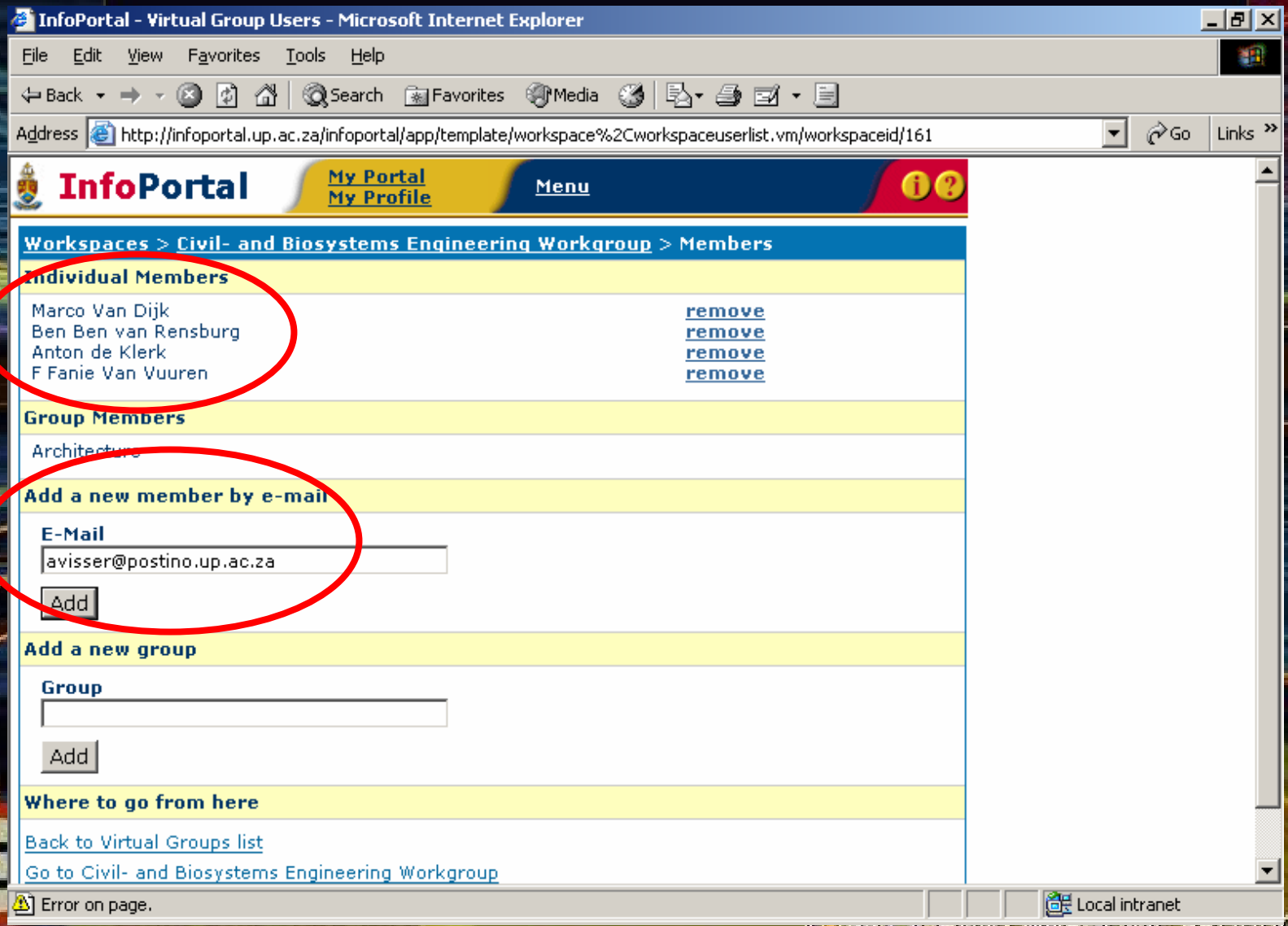
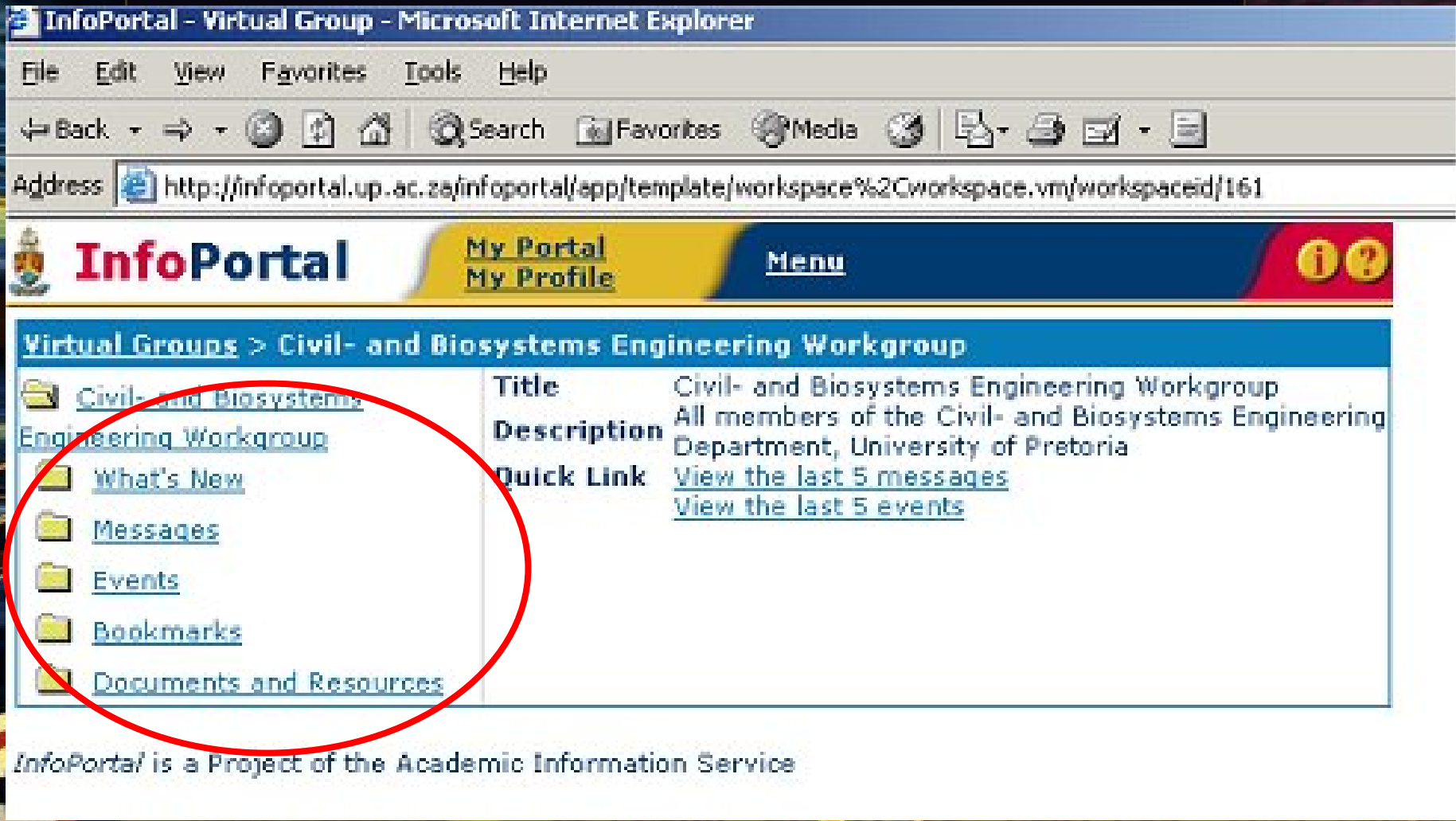
Forming a Virtual Group



Communication options in Virtual Group



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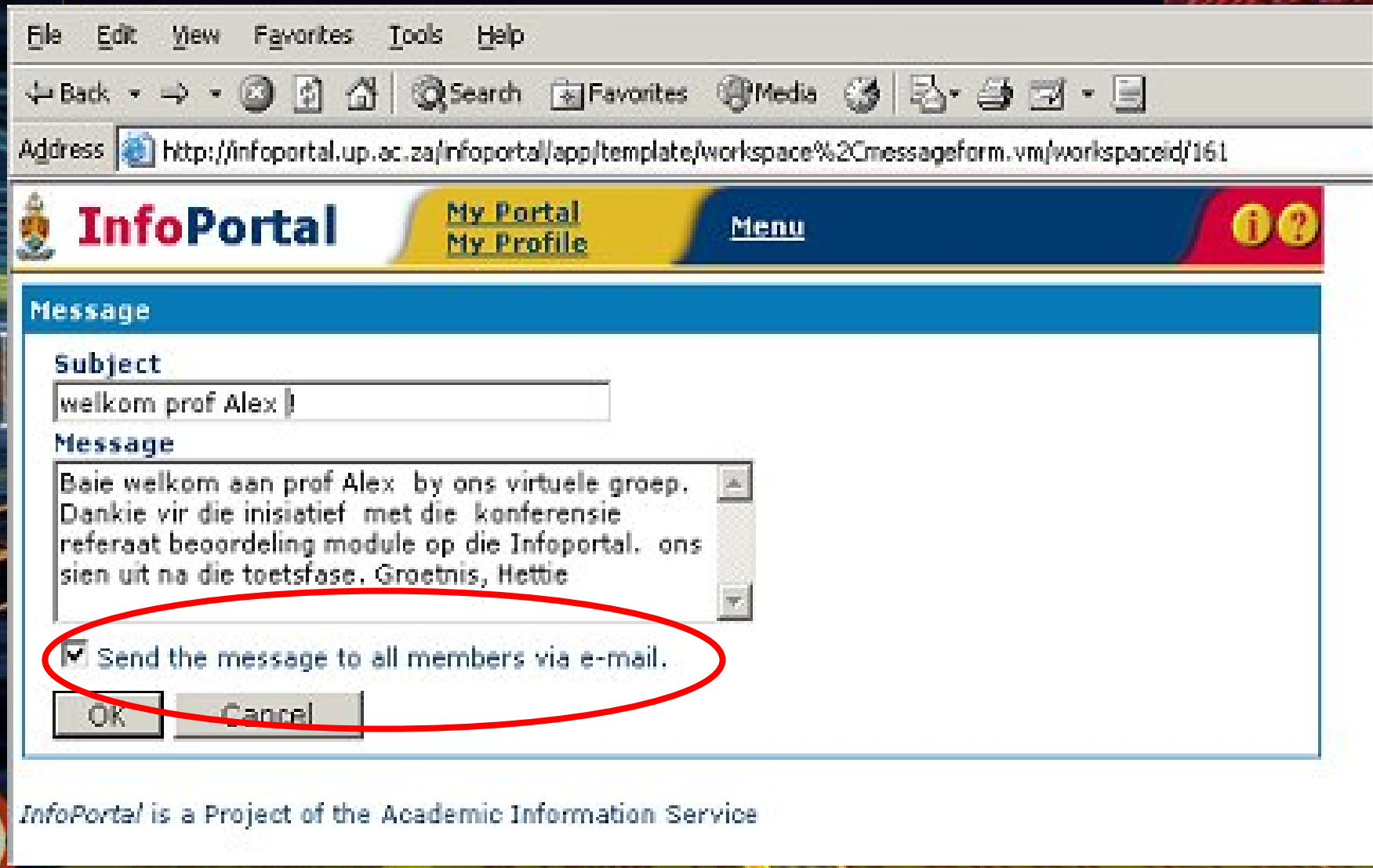
Message sent



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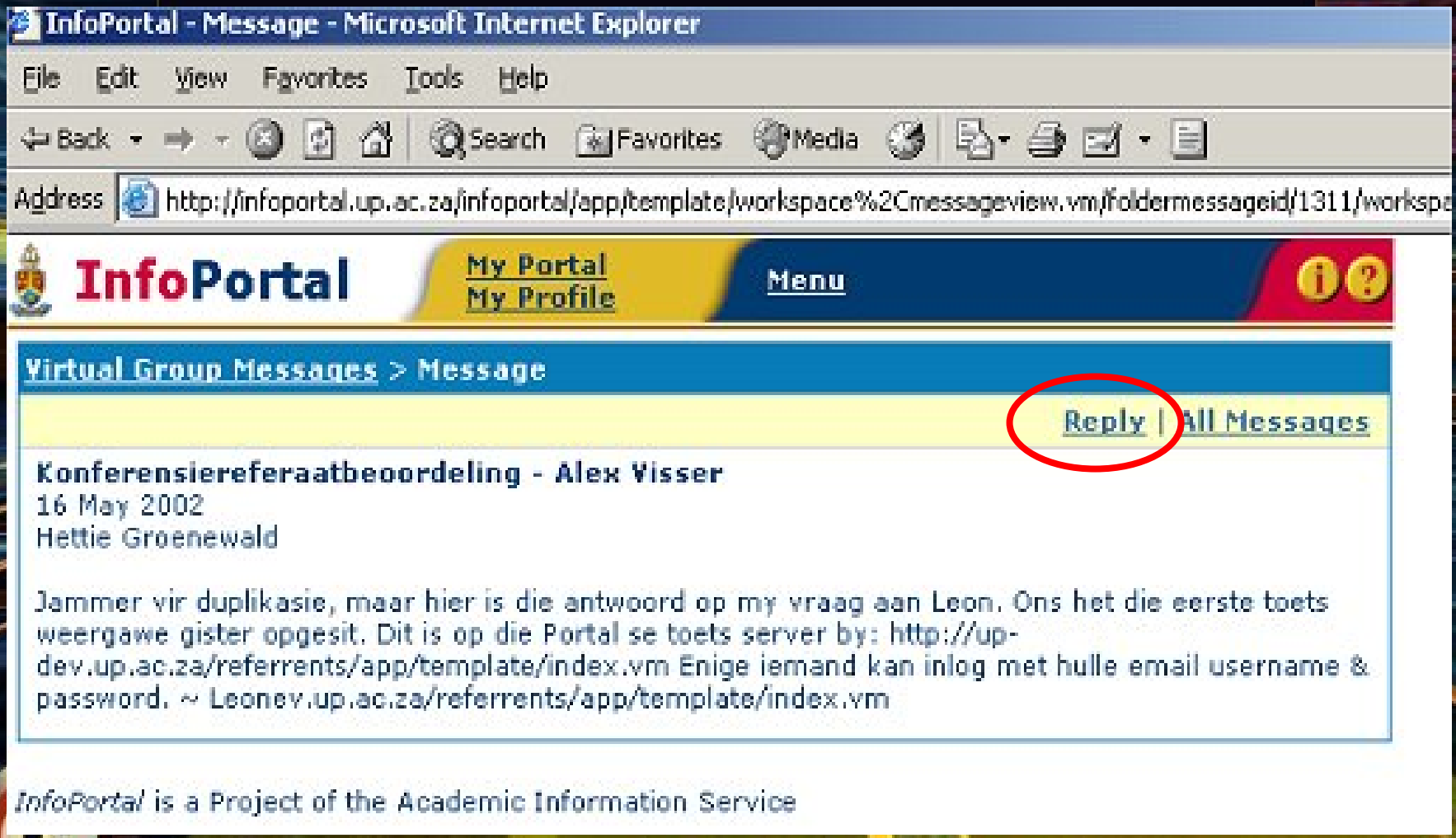
Message received



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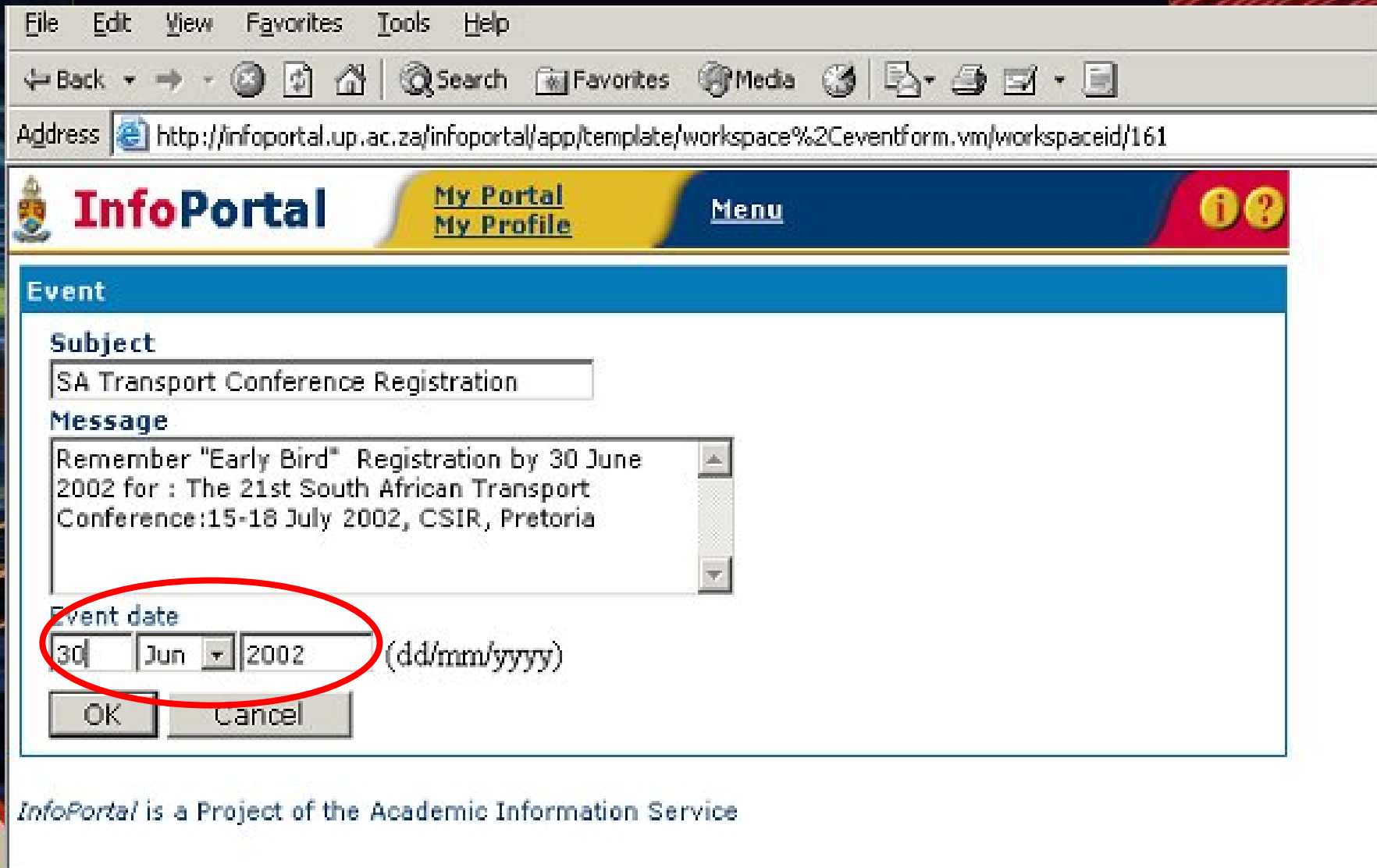
Booking an event



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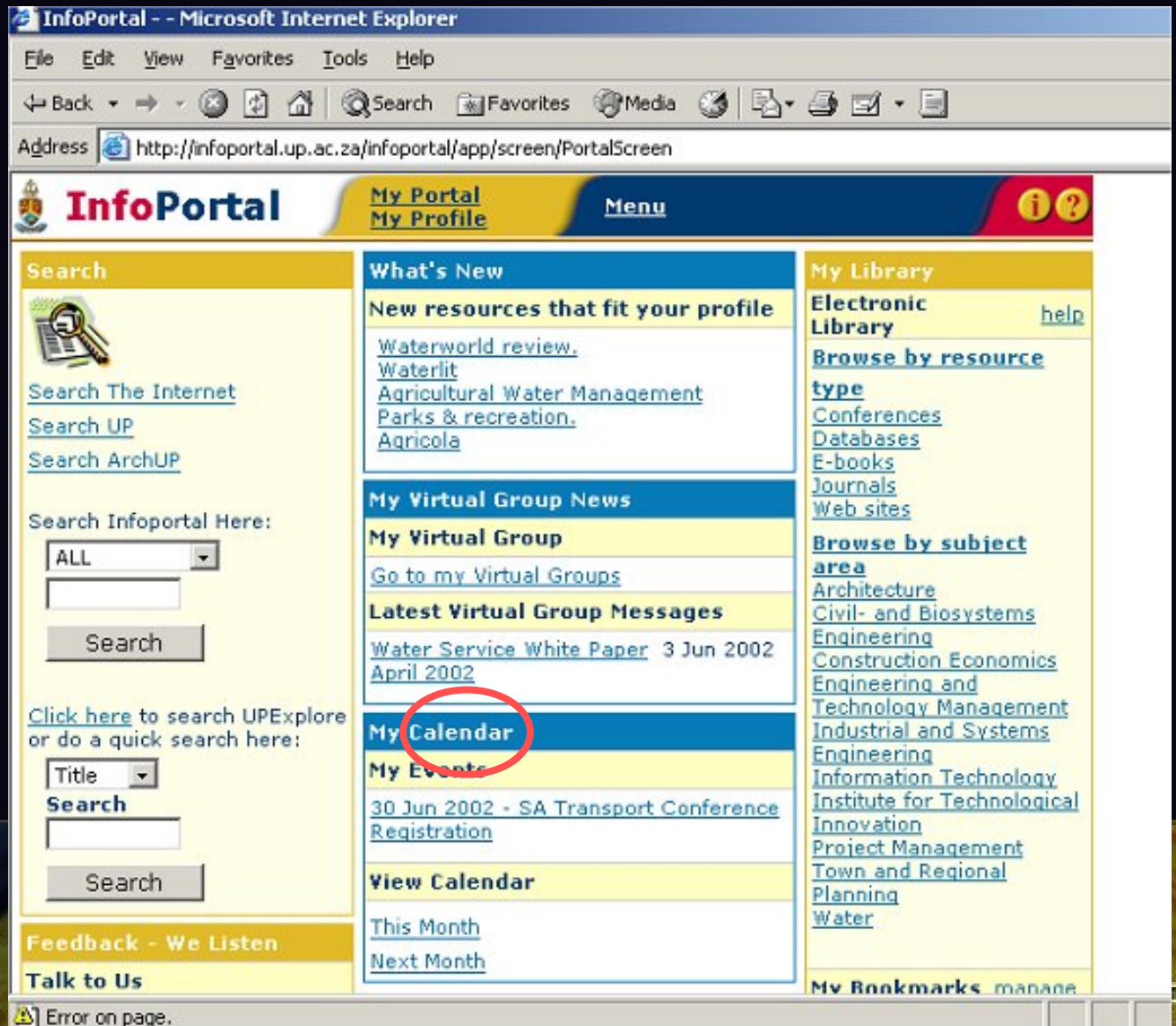
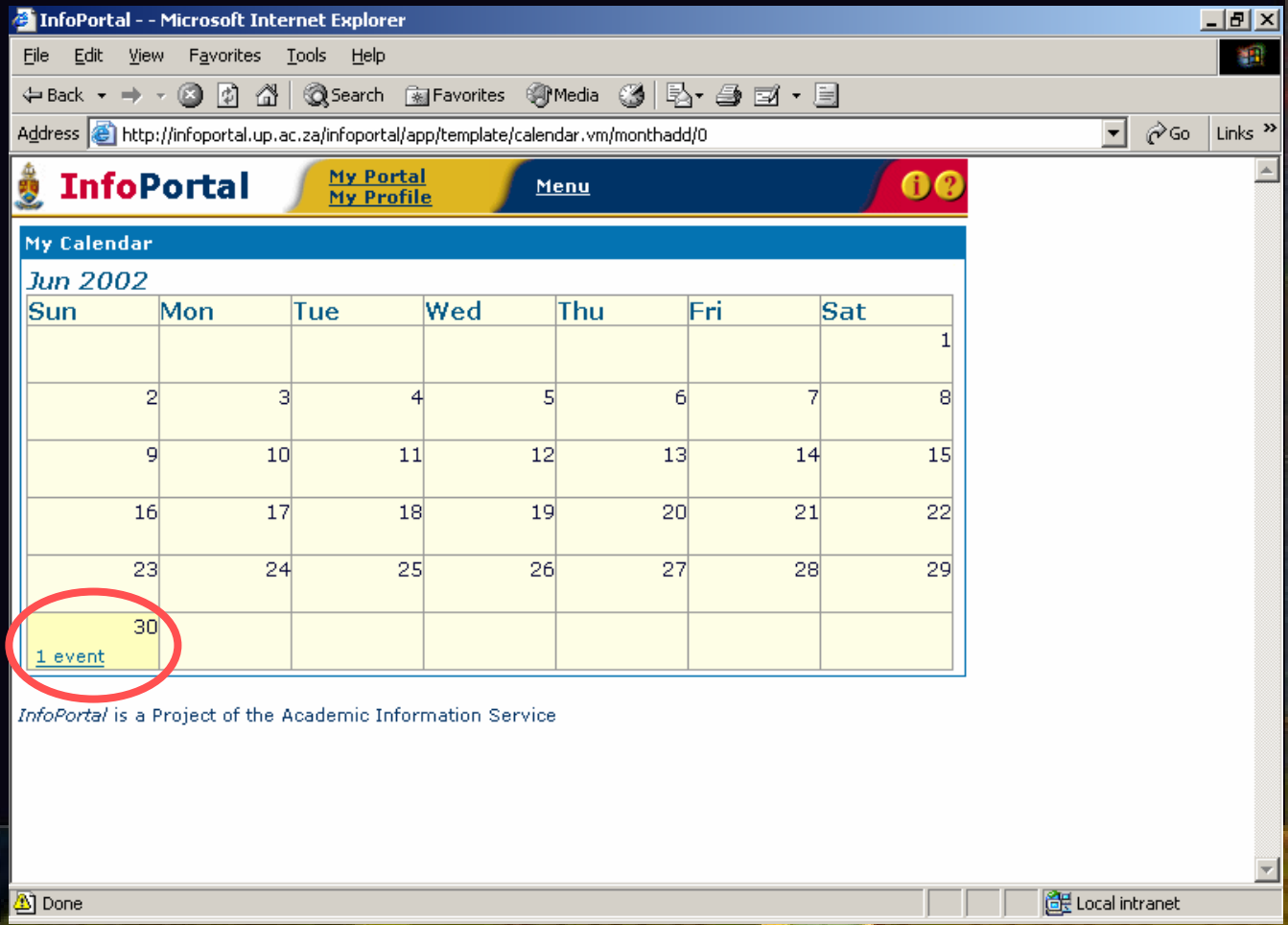
View Calendar



Event shown on calendar



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Role of Information Specialist

- Recognise potential
- Formation
- Facilitating knowledge flow
- More opportunities
  - Lecturers and postgraduate students
  - Lecturers and other experts

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Water @UP

Political Science

Law

Landscape Architecture

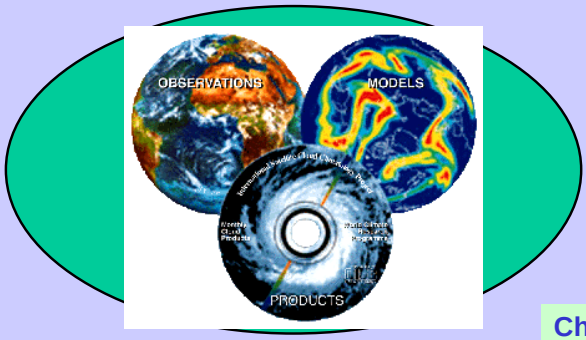
Hydraulic Engineering

Microbiology

Agriculture

Hydrology

Botany



Geology

Plant Pathology

Geography

Plant Production

Chemical Engineering

Soil Science

Town- and Regional Planning

Waterbiotechnology

Environmental Engineering

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Water@UP Virtual Group

- Mapping *water* as a potential COP
- Contact Information Specialists and lecturers
- Virtual group formed
- Commitment
- Future ?
  - division into smaller groups
  - expanding off-campus

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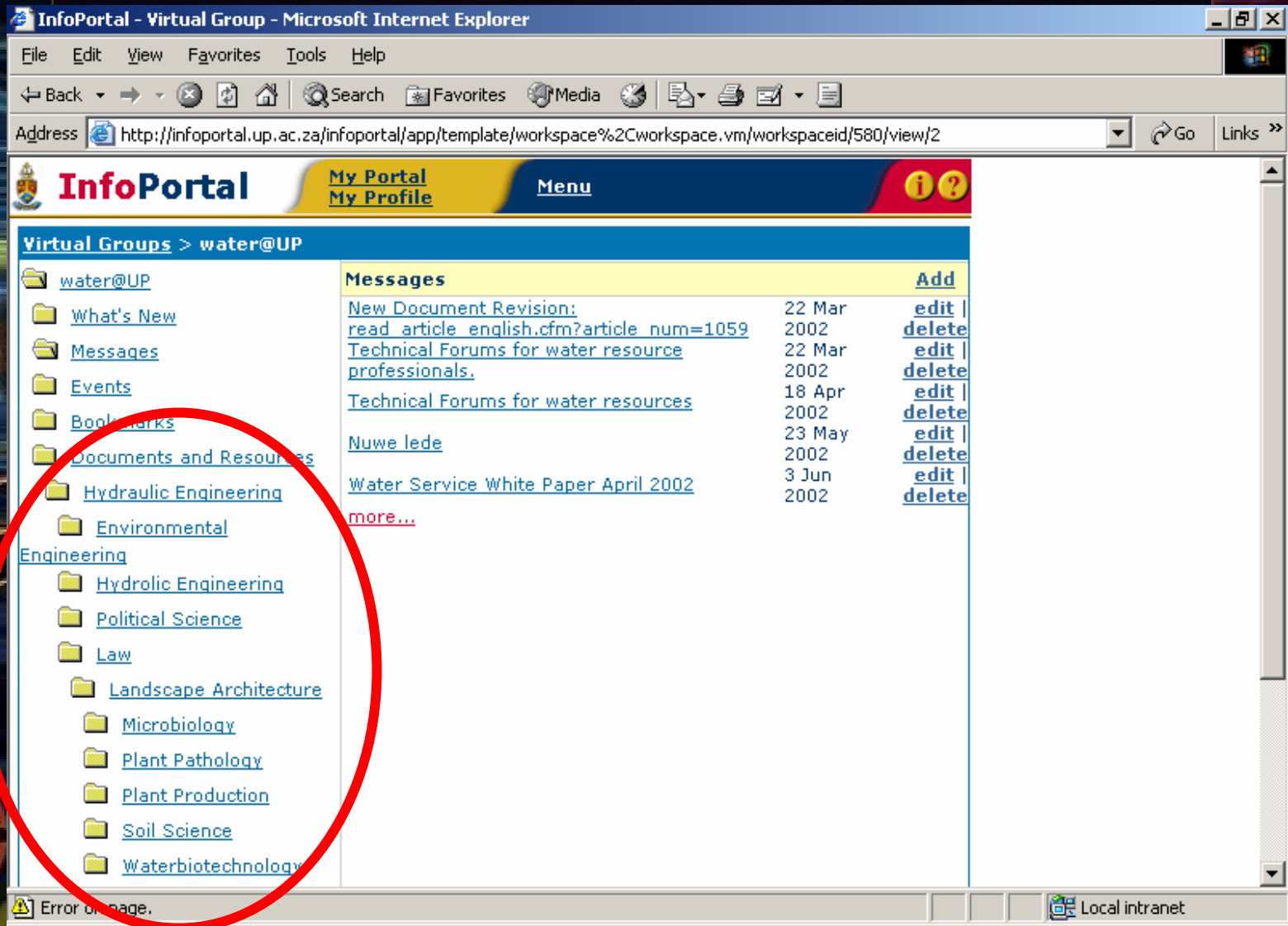
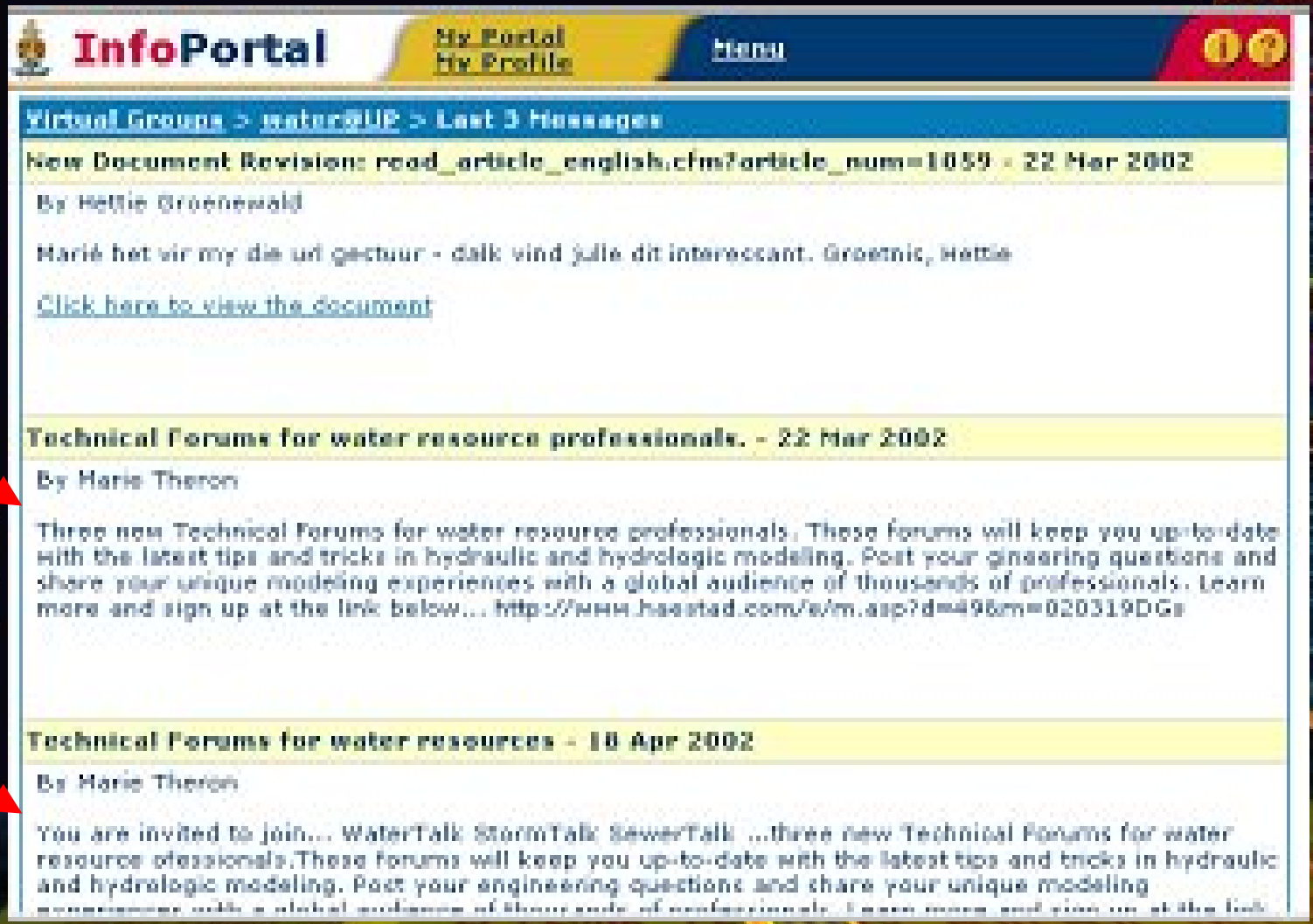
Water@UP Participants



Water @UP- Knowledge flow



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Essential lesson learned from case studies

A **Relationship of trust**
between
Information Specialist
and Lecturers **i**s necessary

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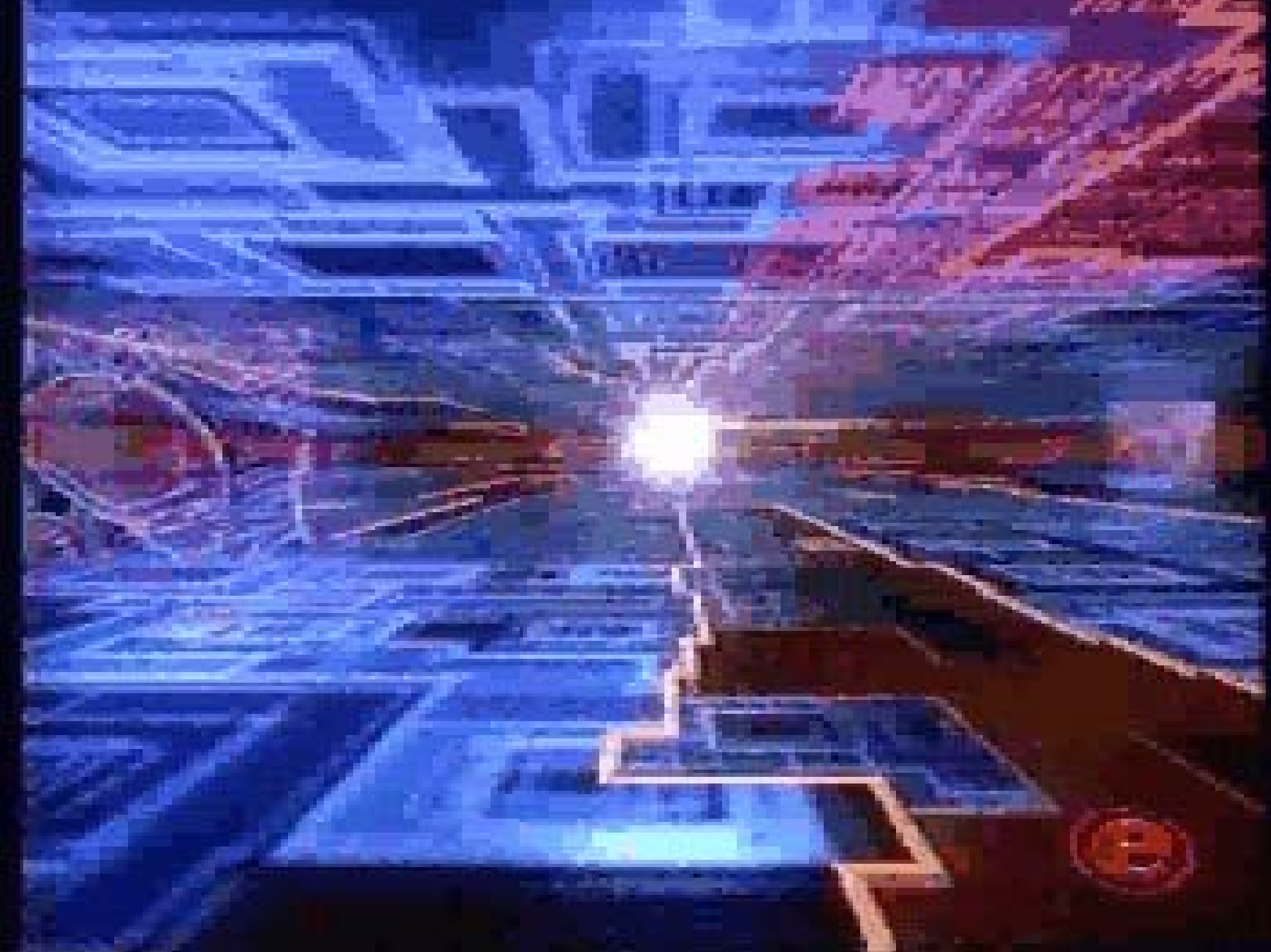
Conclusion

- Are we dancing in step with Knowledge Management ? ?
- Our role ? ?

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