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

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Academic Information Service
University of Pretoria
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Role players in Knowledge Management

COPs

KM

Explicit & Tacit Knowledge

Info Specialist
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
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
Types of Knowledge

- Explicit
  - documented
  - recorded
Types of Knowledge (cont)

- Tacit
  - expertise & experiences in person’s mind
  - derived from experience
  - embodies beliefs and values
  - actionable knowledge
  - generation of new knowledge
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
Stage 1
Potential

Stage 2
Formation

Stage 3
Commitment

Stage 4
Active

Stage 5

Adaptive

Disengaging
COP lifecycle

1. Potential
   The possibility for the formation of a community exists
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
COP lifecycle (cont)

2. Formation

The members come together, form a community and set out its operating principles
2. Role of Information Specialist

- Act as facilitator
- Set up, facilitate and document informal meetings
- Map knowledge flows and knowledge relationships
- Build group identity
COP lifecycle (cont)

3. Commitment

The community executes and improves its processes
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
COP lifecycle (cont)

4. Active

The community understands and demonstrates benefits from Knowledge Management and the collective work of the community.
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
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
5a. Role of Information Specialist

- Mentor/teacher
- Facilitator
- Innovator
COP lifecycle (cont)

5b. Disengaging

The usefulness of the community for its members and supporting organisation has been outlived and its members move on.
5b. Role of Information Specialist

- Facilitate
- Convene reunions
- Maintain directory
Academic Personal Knowledge Management chart
Flow of Knowledge

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

- To support academic personal Knowledge Management
Infoportal: Search function

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

- Content:
  - e-journals
  - databases
  - links to websites
  - conferences
  - etc
Learning to dance in step

- The challenge
- Ongoing process
- Meetings
- Effective communication
Micro database function

- Organising information
- Micro database tool
Virtual workspace function

- Virtual groups
- Messages (e-mails)
- Documents
- Communities of Practice
Publishing function

• Support electronic publishing
  – Articles
  – Theses
Choreography of the Dance

• Case studies – Service Unit Vet Science
African Goats website

Information on goats and goat production systems in Africa

- Bibliography on African Goats
- Conferences and Papers on Goats
- Links to Goat Websites
- Lists of African Expertise on Goats
  - State/Provincial Goat Research and Development Facilities
  - Provincial and District goat Research and Development Facilities
- Goat Research Centres / Departments
- South African Goat Associations / Organizations
- Southern African Development Community - Small Ruminant Network
- Goat Newsletters
  - International Goat Association newsletter
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

Created by Amelia Breytenbach
Updated March 2002
### STATE/PROVINCIAL GOAT RESEARCH AND DEVELOPMENT FACILITIES

(With permission from Prof E.F. Donkin)

<table>
<thead>
<tr>
<th>Province</th>
<th>Facility</th>
<th>Production environment</th>
<th>Current activities</th>
<th>Contact person</th>
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| Northern | Massino ADC | Arid sweet bushveld | Mixed production systems
Bush control | J J Jordaan |
|          |          |                        |                    | Toowoomba ADC |
|          |          |                        |                    | Private bag X 1615 |
|          |          |                        |                    | Warmbaths 0480 |
|          |          |                        |                    | +27-12-7362250 |
| Mara     | Mara ADC | Arid sweet bushveld | Comparison of bber and unimproved goats
Integrated production systems
Bush control | J J Jordaan |
|          |          |                        |                    | |
|          |          | Mixed sweet/sour bushveld | Integrated production systems
Bush control | J J Jordaan |
|          |          |                        |                    | |
|          |          |                        | fluoride tolerance (with MEUUSA) |
African Goats

- Website
- Full text articles
- Proceedings full text
- Listserv
- List of experts
- Community of Practice
- Indigenous Knowledge
African Goats - role of Information Specialist

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

- Ostrich experts – lecturers and researchers
Ostrich via Infoportal

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 - Strategiese sessie

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
  - Veterinary Studies
  - Publications of the University of Pretoria
  - Veterinary Physiology

My Bookmarks manage
- Accredited journals list
- Library in your Office
Ostrich micro database

Micro Databases > Ostrich

Name: Ostrich
Description: A selection of recent references on Ostrich nutrition from the Ostrich Bibliography Update no 2, published by the Academic Information Service, UP.
Managed by: Erica van der Westhuizen

Participants
Add to favorites
A participant can add and edit records.

Fields
Record number | edit | set default value | delete
Journal title | edit | set default value | delete
Article title | edit | set default value | delete
Journal date | edit | set default value | delete
Volume and Pagination | edit | set default value | delete
Author | edit | set default value | delete
Descriptor | edit | set default value | delete

Data
Add a Record
Browse by Article title
ABCDEFHIJKLMNOPQRSTUVWXYZ

© 1995 JOHNNY MNEMONIC PRODUCTIONS INC.
Ostrich

• Virtual Group
  – Messages
  – Document storage
• Knowledge flow and sharing - COP
Ostrich – role of Information Specialist

• Identifying the need
• Virtual group – COP
• Placing content
• Supporter
• Facilitator
• Indexer
Choreography of the dance
Dancing a successful tango

Client

Information Specialist
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
ArchUP
Architecture Micro database

• Background
  – Architecture Department
  – Indexing of architecture journals
  – Database : TOBI

• Access and control
  – Architecture Reading Room
  – Searches and Indexing
  – Problem !
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
ArchUP: search options
ArchUP: results

You searched for: +title:"le" +title:"corbusier"
The number of results found: 13

1. Le Corbusier
2. Le Corbusier
3. Le Corbusier in the sun
4. Vive Le Corbusier!
5. Le Corbusier as structural engineer
6. Le Corbusier, Orientalism, Colonialism
7. Le Corbusier: Versuch einer Abgrenzung
8. Le Corbusier rendered into line drawings
9. Structure and play in Le Corbusier's art works
10. Le Corbusier's courtyard House in La Plata
11. Un incontro difficile: Le Corbusier tra linguaggio e co
12. Die kosmos en die aarde in Le Corbusier se vereldeeskou
13. Dal diario al progetto - I carnets 1-6 di Le Corbusier
ArchUP: record

00198 Le Corbusier as structural engineer
Using structural form as the unifying theme, Seligmann presents an architectural profile intended to nurture a renewed consciousness. Modern Movement, Le Corbusier, represents an architectural profile intended to nurture a renewed consciousness. - Modern Movement... Le Corbusier

Author: Seligmann W
Journal: Architectural Record
Year/Volume: 175/10
Page: 142-151

(Available in the UP Library)
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
**Micro Database function**

![Micro Database Interface](image)

- **Name**: Heilatoets
- **Description**: Toetsdatabasis
- **Managed by**: Heila Pienaar

**Participants**

A participant can add and edit records.

**Fields**

<table>
<thead>
<tr>
<th>Field</th>
<th>Edit</th>
<th>Set Default Value</th>
<th>Delete</th>
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<tbody>
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</tr>
<tr>
<td>Document Number</td>
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<td></td>
</tr>
</tbody>
</table>

**Data**

- **Add a Record**

**Browse by Descriptor**

A-Z: ABCDEFGHIJKLMNOPQRSTUVWXYZ
Other needs

- Conference Refereeing
- Opportunities for Information Specialists
Conference refereeing
Virtual Group

Lecturers

Tacit knowledge

Civil Engineering

Explicit knowledge

Information Specialist
Civil Engineering virtual group

• Communication
  – E-mail
  – list serv
  – in person
  – Knowledge flow in department

• How to capture?
Civil Engineering virtual group (cont)

• Intercept Knowledge flow by:
  – Virtual Communication Group
  – Information Specialist
  – Lecturers
**Forming a Virtual Group**

In the image, there is a screenshot of a webpage from an InfoPortal showing a virtual group with members. The members include:
- Marco Van Dijk
- Ben Ben van Rensburg
- Anton de Klerk
- Fanie Van Vuuren

There is also an option to add a new member by e-mail, with the e-mail address provided as `avissor@postino.up.ac.za`

Additional options for adding a new group are available, along with links to other related sections such as the Virtual Groups list.
Message sent

[Image of a webpage showing a message form with the subject 'welkom prof Alex' and the message 'Baie welkom aan prof Alex by ons virtuele groep. Dankie vir die inisiatief met die conferensie referaat beoordeling module op die Infoportal. Ons sien uit na die toetsfase. Groetnis, Hettie'. There is a checkbox selected with the text 'Send the message to all members via e-mail.' and two buttons labeled 'OK' and 'Cancel'.]
Message received

Konferensiereferaatbeoordeling - Alex Visser
16 May 2002
Hettie Groenewald

Jammer vir duplikasie, maar hier is die antwoord op my vraag aan Leon. Ons het die eerste toets weergawe gister opgesit. Dit is op die Portal se toets server by: http://up-dev.up.ac.za/referents/app/template/index.vm Enige iemand kan inlog met hulle email username & password. ~ Leon@up.ac.za/referents/app/template/index.vm

InfoPortal is a Project of the Academic Information Service
Booking an event

Subject: SA Transport Conference Registration

Message:

Event date: 30 Jun 2002
View Calendar
Event shown on calendar

InfoPortal is a Project of the Academic Information Service
Role of Information Specialist

- Recognise potential
- Formation
- Facilitating knowledge flow
- More opportunities
  - Lecturers and postgraduate students
  - Lecturers and other experts
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
Water@UP Participants
Water @UP- Knowledge flow

Virtual Groups > water@UP > Last 3 Messages

By Hettie Groenewald
Marié het vir my die url gesê - dalk vind julle dit interessant. Groenewald, Hettie
Click here to view the document

Technical Forums for water resource professionals. - 22 Mar 2002
By Marie Theron
Three new Technical Forums for water resource professionals. These forums will keep you up-to-date with the latest tips and tricks in hydraulic and hydrologic modeling. Post your engineering questions and share your unique modeling experiences with a global audience of thousands of professionals. Learn more and sign up at the link below... http://www.haestad.com/e/m.asp?d=49&m=020319DGe

Technical Forums for water resources - 10 Apr 2002
By Marie Theron
You are invited to join... WaterTalk StormTalk SewerTalk ...three new Technical Forums for water resource professionals. These forums will keep you up-to-date with the latest tips and tricks in hydraulic and hydrologic modeling. Post your engineering questions and share your unique modeling experiences with a global audience of thousands of professionals. Learn more and sign up at the!
Essential lesson learned from case studies

A Relationship of trust between Information Specialist and Lecturers is necessary.
Conclusion

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