Identifying Core Competencies for KM at OUM: the Library Perspective

By

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&

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FLOW OF PRESENTATION

LIBRARIAN AS INFORMATION MANAGER

PUSHING THE FRONTIER: CHALLENGES OF KNOWLEDGE MANAGEMENT

LIBRARIAN AS KNOWLEDGE MANAGER

INFORMATION vs. KNOWLEDGE MANAGEMENT

COMPETENCIES FOR KNOWLEDGE MANAGEMENT
MISCONCEPTION OF LIBRARIAN’S ROLE

i. Buy books → Bookshop function

ii. Catalog books → Describe book → Primary School function

iii. Lend Books → Chop & stamp → Post-office function

iv. Preserve books → Get rid of silver fish → Pest Control function
(i) Commercial databases
- Books (print & e-Books)
- Journals & e-journals
- Internet

(ii) Local Content
- Exam papers
- Conference papers
- Management reports
- Circulars
- Theses

PROCESSES
- Selection
- Acquisition
- Evaluation
- ILL

COMPETENCIES
- Selection skills
- Evaluation skills
- ICT skills (Acquisitions Module)
- Subject Knowledge
(i) Cataloguing
Cataloguing:
Describe physical characteristics of books/articles/etc.

Author, Title, imprint, collation,

(ii) Classification
Library of Congress Classification Scheme

Subject analysis

General to specific

Eg.
HD30 General work management
HD30.2 Electronic data processing
HD30.212 Multimedia system in management
HD30.2122 Virtual reality
HD30.213 Multimedia Information Systems
ORGANISATION OF INFORMATION

(Cognitive Input)

PROCESS

• Subject analysis
  • Analyse contents of books
  • Refer to Subject encyclopedia
  • Refer to LCSH/Schedules for appropriate subject heading / class no.

COMPETENCIES

• Subject analysis
• Thinking skills.
### Classification number for Knowledge Management in LCCN


<table>
<thead>
<tr>
<th>Classification</th>
<th>Description</th>
<th>Notes</th>
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<tbody>
<tr>
<td>HD30.17</td>
<td>Terminology. Abbreviations. Notation</td>
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<tr>
<td>HD30.19</td>
<td>Theory. Method. Relation to other subjects</td>
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<tr>
<td>HD30.2</td>
<td>Relation to the social sciences</td>
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<tr>
<td>HD30.2.2</td>
<td>Electronic data processing. Information technology including artificial intelligence and knowledge management</td>
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<tr>
<td>HD30.2.212</td>
<td>Multimedia systems in management</td>
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<td>HD30.2.2122</td>
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<td>HD30.2.213</td>
<td>Management information systems. Decision support systems</td>
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<td></td>
<td>Including dashboards</td>
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<td></td>
<td>Cf. T53.6-52 Industrial engineering</td>
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<tr>
<td>HD30.2.215</td>
<td>Statistical methods</td>
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<td>Cf. HF1017 Commercial statistics</td>
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<tr>
<td>HD30.2.22</td>
<td>Managerial accounting see HF5657.4</td>
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<td>HD30.2.23</td>
<td>Managerial economics</td>
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<td></td>
<td>Decision making</td>
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<td></td>
<td>For decision support systems see HD30.213</td>
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Cf. HF5548.125-6 Commerce [HR]
Services:
- Loans (incl. ILL)
- Current awareness (Portal)
- Preservation/Conservation

Processes:
(i) Planning & Managing Circulation system (e.g., Loans/ILL)
Putting items in the hands of those who need them
(ii) Planning and managing Current awareness program
communicate with clients via “alerting” program
via push information/customisation/update
(iii) Planning and Managing Preservation / Conservation programs incl. training

Competencies:
- Planning skills
- Communication skills
- Repackaging skills
DELIVERY
(i) Library Integrated Management System (ILMS)
(ii) LMS
(iii) Portal

(i) INTEGRATED LIBRARY MANAGEMENT SYSTEM (ILMS)
(ii) LEARNING MANAGEMENT SYSTEM (LMS)
(iii) PORTAL

USING SINGLE-SIGN-ON PORTAL SYSTEM

COMPETENCIES
- ICT skills
- Management skills

PROCESS
- Managing
- Monitoring & evaluating system
- Report writing functions
INFORMATION LITERACY

USER EDUCATION
(Information Literacy Programs: UG & PG)

(i) Information Skills program (Undergraduate)
(ii) Advanced Information Skills program (Postgraduate)

COMPETENCIES
- Planning and developing learning modules (module writing skills)
- Presentation skills
- Information retrieval skills
- Information repackaging and consolidation skills
- Communication skills
- ICT skills

PROCESS
1. Develop learning modules
2. Strategising delivery
3. Monitor program
4. Enhance program
UNDERGRADUATE PROGRAMME

Since September 2003 (not compulsory/voluntary basis)
Total no. of students = >23,000 (for 7 semesters)
Compulsory 3-credit course (since January 2004)
Features

Holistic approach → in context of learning:
- managing learning
- Importance of information in learning
- Information retrieval: search strategies
- Information Processing: Reading, Note taking, Presentation

Designed for ODL environment

Develop independent lifelong competencies →

Learning skills
ICT skills
Information Retrieval & Processing skills
<table>
<thead>
<tr>
<th>Topics - UG</th>
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<tbody>
<tr>
<td>1. MANAGING YOUR LEARNING</td>
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<tr>
<td>2. ON-LINE LEARNING ENVIRONMENT IN OUM</td>
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<td>3. COPING WITH YOUR ASSESSMENT</td>
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<td>4. INFORMATION GATHERING PROCESS</td>
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<td>5. SKILLS IN INFORMATION RETRIEVAL</td>
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<td>6. EVALUATION OF INFORMATION</td>
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<td>7. READING FOR INFORMATION</td>
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<td>8. NOTE-MAKING AND NOTE-TAKING SKILLS</td>
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<td>9. PRESENTING INFORMATION</td>
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<td>10. USING MICROSOFT APPLICATIONS</td>
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POSTGRADUATE PROGRAMME

- Since 2006
- Not compulsory - guidelines
- Features
  - Designed for ODL environment
  - Emphasis on scholarship (academic input)
  - Learning management skills (coursework, tutorials, seminars, etc)
  - Research management skills (data gathering/analysis/communicating findings, etc)
  - Exploratory, investigative nature of postgraduate studies
  - Exploratory, investigative search strategy -- KEYWORD
  - Lifelong competencies → Learning/research skills
    ICT skills
    Information Retrieval & Processing skills
A systematic examination of information use, resources and flows, with a verification by reference to both people and existing documents in order to establish the extent to which they are contributing to an organization’s objectives.
PUSHING THE FRONTIER

CHALLENGES OF KNOWLEDGE MANAGEMENT
What is KM?

• To the systems person it is about Artificial Intelligence, search engines, delivery and access capabilities of the system, system architecture, etc.

• To the CEO of a company, it is about sharing strategic information in order to gain or maintain its competitive edge over rival companies.

• To the academia, it is about the cognitive process of developing and contributing towards the corpus of knowledge through teaching and research activities.

• To the librarians, who have made information management and delivery their career, it is really an extension of their role.
For librarians, KM goes beyond the development of collections or cataloguing and classification.

KM is not just about buying books and journals for the clients. It is about helping clients access and transform information into knowledge.
KM incorporates the following disciplines/technologies:

- **Cognitive science**: learning insights → gathering & transferring knowledge
- **Computer groupware**: facilitates communication and sharing of ideas
- **Library and information science**: Management of knowledge database content
- **Document management**: making documents accessible
- **Organisational science**: management of information
- **Decision support system**: provide information to support decision making
- **Technical writings**: technical communication
- **Semantic network**:
- **Relational and object databases**
- **Simulation**
- **Network technology**
- **Expert systems and AI**

CONCEPT OF KNOWLEDGE MANAGEMENT AT OUM

 Tacit
 --Corporate memory (oral tradition)
 --views
 --Ideas
 --Opinions

 Explicit
 --files
 --minutes
 --research reports
 --corporate reports
 --statistical reports
 --student information

 ORGANISATION
 (KNOWLEDGE FLOW)
 Taxonomy

 DELIVERY
 KM System Architecture

 ACCESS –
 Information portal

 USER EDUCATION
 Information literacy vs knowledge literacy

 KNOWLEDGE TRANSFORMATION (USAGE)
 From Information to knowledge

 KNOWLEDGE
 Decision Making
 Policy-making
 Marketing of programs
 Development of corpus of knowledge

 ACQUISITION/CONTENT CREATION

 ACCESS –
 Information portal

 University for A
CONTENT CREATION

Knowledge Transformation

Information Dissemination

Information Repackaging and Consolidation

Organisation of Information (Taxonomy)

Corporate Information
Digital Lib. Content
Research Reports
Student Information
Minutes/policies/Decision
Financial Reports
STUDENT INFORMATION

- Student Data/Profile
- Exam Results
- Email system
- Program/courses/assignment
  - Announcement
  - OLP
  - Contents modules
  - Quizzes
  - Forum
- Time-table
- Credit transfer
- Transcripts
- MUET
- Finance
- Information, messages, announcement
- Link to Registry, Online Services, E-forms, Faculty
- MyLibrary
HRM Circulars and Policies

- Communication and Warm Clothing Allowance
- Annual Salary Increment Rate
- Telephone Bill Claims
- Staff Dress Code
- Record of Attendance via WORKMATE
- Purchase of Notebook for Staff
- Leave Plan for RLC’s Staff
- Implementation of 5 working day
- Policy for Non-Academic staff as Tutor OUM
- Policy for Payment of Bonus 2006
- Car loan scheme
- Computer loan scheme
- Terms and conditions for Program Fees for OUM staff
Digital Library Contents

- **Electronic Resources**
  - Databases
    - Internal
      - Digitisation projects
      - Modules
    - External
      - Subscription
  - E-books
    - Ebrary
    - Books24x7
  - E-journals
    - Ebsco
    - Proquest
    - Emerald
  - OPAC
CONCEPT OF KNOWLEDGE MANAGEMENT AT OUM

ACQUISITION/CONTENT CREATION

KNOWLEDGE
- Decision Making
- Policy-making
- Marketing of programs
- Development of corpus of knowledge

ORGANISATION/KNOWLEDGE FLOW
- Taxonomy
- Metadata

ACQUISITION/CONTENT CREATION

ORGANISATION/KNOWLEDGE FLOW
Program Structure

Core Courses
- Managerial Economics
- Management
- Accounting for Marketing Management
- Managerial Finance
- Business Law
- Organisational Behavior

Elective Courses
- Marketing
- Finance
- Human Resource Mgt

Project work
- Project work 1
- Project work 2

Area of Specialisation
- Human Resource Management
- Industrial Relations
- Human Resource Development

Marketing
- Marketing Research
- Consumer Behavior

Entrepreneurship
- Entrepreneurship
- New Venture Development
CONCEPT OF KNOWLEDGE MANAGEMENT AT OUM

ACQUISITION/CONTENT CREATION

ORGANISATION/KNOWLEDGE FLOW
- Taxonomy
- Metadata

KNOWLEDGE
- Decision Making
- Policy-making
- Marketing of programs
- Development of corpus of knowledge

DELIVERY/ACCESS
- KM system infrastructure & INFORMATION PORTAL
DELIVERY/ACCESS

KM system infrastructure & Information Portal
KNOWLEDGE

Decision Making
Policy-making
Marketing of programs
Development of corpus of knowledge

ACQUISITION/
CONTENT CREATION

ORGANISATION /
KNOWLEDGE FLOW
Taxonomy
Metadata

DELIVERY/ACCESS
KM system infrastructure & Information Portal

KNOWLEDGE
TRANSFORMATION
(USAGE)
Information to knowledge

CONCEPT OF KNOWLEDGE MANAGEMENT AT OUM
EXAMPLE:
REPORT ON A CASE STUDY USING STUDENTS INFORMATION

LEARNERS’ PRIORITY-SATISFACTION MATRIX AS A DIAGNOSTIC TOOL IN MANAGING OPEN AND DISTANCE LEARNING (ODL) AT OPEN UNIVERSITY MALAYSIA (OUM)

By Open University Malaysia
14 September 2004
Prof. Madya Dr. Latifah Abdul Latif and Prof. Madya Ramli Bahroom

A Case Study of Teachers Coping as Distance Learners at the Open University Malaysia

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Open University Malaysia

Abstract

Compared with full-time on-campus learners, part-time distance learners are faced with greater challenges as they pursue their higher education. Currently, Open University Malaysia (OUM) has 10,000 teachers out of its 23,000 learners. These teachers are sent by the Ministry of Education under a special contractual programme. Being distance learners, they have to cope with their responsibilities as full-time teachers while at the same time study on a part-time basis. As part of an effort by both OUM and the Ministry to ensure that this group is able to cope with their studies, OUM examined the academic performance of these teachers to see if special measures need to be taken to help them manage their learning effectively. This paper reports on their performances and compares them with those of the learners from the open market. The paper also discusses the issues and challenges faced by this special group of learners, and highlights some of the measures that have been taken to help them improve their academic performances.
CONCEPT OF KNOWLEDGE MANAGEMENT AT OUM

**KNOWLEDGE**
- Decision Making
- Policy-making
- Marketing of programs
- Development of corpus of knowledge

**ACQUISITION/CONTENT CREATION**

**ORGANISATION/KNOWLEDGE FLOW**
- Taxonomy
- Metadata

**DELIVERY/ACCESS**
- KM system infrastructure
- Information Portal

**USER EDUCATION**
- Information literacy vs. knowledge literacy

**KNOWLEDGE TRANSFORMATION (USAGE)**
- Information to knowledge
ISSUES ARISING FROM KM

- New resources → implicit, explicit (live data)
- New target audience (university management, academic management, marketing/business management)
- New activities (marketing, internationalisation, AI, policy making, decision making, etc)

NEED FOR NEW COMPETENCIES?
# KM PROCESSES: Challenges for Librarians

<table>
<thead>
<tr>
<th>KNOWLEDGE MANAGEMENT</th>
<th>ACTIVITIES</th>
<th>ISSUES</th>
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<tbody>
<tr>
<td>FIND IT</td>
<td>Identifying sources (ext. /int.)</td>
<td>Organisation-wide, not library-based</td>
</tr>
<tr>
<td>GET IT</td>
<td>Gathering &amp; collecting (resources)</td>
<td>Subject knowledge (interpret, analysis, evaluate, etc.)</td>
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<tr>
<td>EVALUATE IT</td>
<td>Selection/Evaluation</td>
<td>Integration and consolidation of information (reporting of information)</td>
</tr>
<tr>
<td>COMPILE IT</td>
<td>Organise &amp; Consolidate</td>
<td>Knowledge transformation</td>
</tr>
<tr>
<td>UNDERSTAND IT</td>
<td>Interpretation</td>
<td></td>
</tr>
<tr>
<td>ANALYSE IT</td>
<td>Analyse &amp; evaluate</td>
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<tr>
<td>DISSEMINATE IT</td>
<td>Disseminate to right people</td>
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<tr>
<td>ACT ON IT</td>
<td>Implement</td>
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<td>MAINTAIN/COMBINE/UPDATE</td>
<td>Update</td>
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IMPLICATIONS FOR KNOWLEDGE MANAGEMENT

What competencies to develop?
- Information retrieval & processing
- Taxonomy – develop/apply
- KM technology (beyond ILS/Internet)
- Information repackaging & consolidation

What approach to use?
- Expert collaboration
- Interactive portal modules

What strategies to adopt?
- Develop competencies for virtual management culture
# Competencies of Librarians as Information Managers

## Information Management Processes (Librarian)
- User needs analysis
- Acquisitions of information/resources
- Organisation of information
- Delivery via services
- Delivery via systems
- Access via information literacy
- Information audit

## Activities
- Data gathering/analysis
- Selection/evaluation
- Indexing/classification
- Loans, references, research, etc.
- Integrated library systems
- MyLMS, MyPortal
- Auditing Services = User needs

## Competencies
- Research data gathering/analysis
- Analytical thinking
- Selection/evaluation
- ICT
- Subject classification (read, understand, analyse)
- Information retrieval/processing
## COMPETENCIES OF LIBRARIANS AS KNOWLEDGE MANAGERS

<table>
<thead>
<tr>
<th>KNOWLEDGE MANAGEMENT</th>
<th>ACTIVITIES</th>
<th>LIBRARIANS’ COMPETENCIES</th>
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<tr>
<td>✓ FIND IT</td>
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COMPETENCIES OF LIBRARIANS

**Knowledge Managers**
- Research (data gathering/analysis)
- Analytical thinking
- Selection/evaluation
- ICT (ILMS)
- Taxonomy
- Information retrieval/processing
- Subject knowledge (Training)
- ICT (Delivery architecture)
- Expertise in Developing TACIT Knowledge Databases
- Developing expertise in K-Transformation process

**Information Managers**
- Research data gathering/analysis
- Analytical thinking
- Selection/evaluation
- ICT
- Subject classification (read, understand, analyse)
- Information retrieval/processing

**Knowledge Management**
- FIND IT
- GET IT
- EVALUATE IT
- COMPILE IT
- UNDERSTAND IT
- ANALYSE IT
- DISSEMINATE IT
- ACT ON IT
- MAINTAIN/COMBINE/UPDATE
Issues such as:

Where does information end and knowledge begin?

What are the processes inherent in KM?

What is the role of the Digital Library in KM?

What are the competencies required by librarians for KM?
DEALING WITH ISSUES IN KM:

Issue 1. Where does information end and knowledge begin?

When knowledge transformation process occurs:

- **KTP (Level 1)**
  - Raw data
  - Report on Student performance

- **KTP (Level 2)**
  - Senate decisions and policies on Academic programs (curriculum, exam, marking schemes, etc.)

Note: Knowledge can be information in the Knowledge Transformation Process.
Issue 2. What are the processes inherent in KM?

**KNOWLEDGE MANAGEMENT PROCESSES FROM USER VIEWPOINT**

1) FIND IT
2) GET IT
3) EVALUATE IT
4) COMPILE IT
5) UNDERSTAND IT
6) ANALYSE IT
7) DISSEMINATE IT
8) ACT ON IT
9) MAINTAIN/COMBINE/UPDATE
Issue 3. What is the role of the Digital Library in KM?

KM is organisation based not library based. The digital library is part of the delivery and access infrastructure.
Issue 4. What are the competencies required by librarians for KM?

- Research (data gathering/analysis)
- Analytical thinking
- Selection/evaluation
- ICT (ILMS)
- Taxonomy
- Information retrieval/processing
- Subject knowledge (Training)
- ICT (Delivery architecture)
- Expertise in Developing TACIT Knowledge Databases
- Developing expertise in K-Transformation process
HOW TO DEVELOP COMPETENCIES?

- **Awareness ➔ Role of libraries, Librarians Association and Library School**

- **Training ➔ In service and continuing education**

- **Education ➔ Responsibility of library school to review curricula and academic programs**
THANK YOU

SHARIPAH HANON BIDIN and DATO’ DR. ZAITON OSMAN

Identifying core competencies for KM at OUM: the library perspective

presented at EG2KM Conference, 12 September, 2006