COIS20077 Knowledge Management

- Course Profile
- Aims of Course
- Pre-requisites
- Practical component

- Tutorials
- Lectures
- References
- Assessment
Smart people need smart organizations.

- Basics of knowledge and knowledge management,
- Tacit versus explicit knowledge,
- Knowledge management life cycle.
- Apply technologies that assist in knowledge creation and in knowledge codification.
- Knowledge sharing, ethics and managing knowledge workers.
COIS20077 Course Objectives

After this course you should be able to:

- Describe what knowledge is, differentiate between knowledge and information.
- Differentiate between explicit and tacit knowledge.
- Describe and apply the principles of the knowledge management systems life cycle.
- Describe how knowledge can be captured, created and shared.
- Understand the role of (KBS) in the codification of knowledge.
- Apply technology to knowledge capture, codification and sharing.
- Discuss the ethical and professional issues in knowledge management.
This course has five major themes.

- **What is knowledge & KMLC**
- **Knowledge creation and capture**
  - tools for capturing tacit knowledge; turning tacit knowledge into rules; extracting problem solving knowledge from experts; creating tacit knowledge from groups of knowledge workers; other tools for knowledge creation/extraction.
- **Knowledge codification and transfer**
- **Finding, sharing and transferring knowledge**
- **Ethics & Management Issues**.
Assessment

- To be eligible to attain a grade of **Pass or higher** in this course a student must:
  - Score at least 50% of the marks available in the Examination; **AND**
  - Score at least 50% Overall.
ASSESSMENT

Assessment for all students

- 30% Assignment 1 – What knowledge is
- 45% Assignment 2 – Codifying and sharing knowledge
- 25% Final examination (40 multiple choice questions, 60 minutes only).
Working Smarter, Not Harder

Chapter 1
OBJECTIVES

- What is Knowledge Management?
- Why Knowledge Management
- How It Came About
- KM Myths
- Implications for Knowledge Management
“Knowing ignorance is strength; ignoring knowledge is sickness”

- Lao Tsu

- The knowledge race is on
- United Kingdom - “ambition is to turn Britain into the leading knowledge-based economy of the world.” Prime Minister Tony Blair, November 16, 1998
Economic reliance on knowledge workers is increasing

- Knowledge gap
- Customers and businesses want a more integrated approach
- Best to say you are in the knowledge business
Three primary causes of change

- Global literacy
- Invention of electronic infrastructures
- Social revitalization
1900 Literacy

Adult Literacy

Source: http://www.erols.com/mwhite28/literacy.htm
A knowledge society requires literacy

“-because of the vastly expanding corpus of knowledge we will also be required to learn how to learn.”

Peter Drucker, Managing For the Future, 1992,
Literacy - Knowledge Business Jargon

- “Community of Practice”
- The Learning Organization
- Corporate University
- Chief Learning Officer (CLO)
- Chief Knowledge Officer (CKO)
- Dean of Corporate Education
2. Electronic infrastructures

- 1990 - Toffler’s **Powershift** - five features of electronic infrastructure
  - Interactivity
  - Mobility
  - Convertibility
  - Connectivity
  - Globalization
“Result produces a revolutionary nervous system... a far more adaptable, intelligent, and complex nervous system than ever before imagined.” Alvin Toffler, Powershift, 1990, page 364

- Methods of creating, storing, accessing and selling knowledge are changing
- Customers are demanding access to “just-in-time” inventories of knowledge
- Invest in a well-designed electronic infrastructure
"[Knowledge management] embodies organizational processes that seek synergistic combination of data and information-processing capacity of information technologies, and the creative and innovative capacity of human beings."

Electronic Infrastructures - Knowledge Business Jargon

- Innovation
- “Leveraging intellectual capital”
- Bill Gates - “Digital Nervous System”
- Bill Gates – “Banks are on the way out; not banking”
3. Social Revitalization

- Literacy and technology skills cannot replace physical human interaction
- People want more meaningful connections both professionally and personally
“Concern for personal well-being:

- Augmentation of intellect education, entertainment, information
- Health - physical and mental
- Security - personal safety and financial
- Personal services - customization
- Spiritual well-being - spiritualism, religion and ethnic affiliation”

The overriding questions are Who am I? What is my purpose in life?

Result is a new language of revitalization.
Revitalization - Knowledge Business Jargon

- “Corporate Soul”
- “Balanced Lifestyle”
- “Workplace Diversity”
- “Values Based Management”
- “Inspirational Leadership”
The Changing Education Business

- Education is BIG business
- In 2001, the U.S. spent $5 billion on elementary books and $3.7 billion on college books
- Lifelong learning is BIGGER business
- Who is a Teacher?
Literacy and Education

- “Just-in-time learning”
- Communities of Practice

When is recess?
The message is Hurry Up and Learn
Revitalization and Education

- Educators, parents, communities are concerned about the well-being of children
- Revitalization movements are increasing
- More people are calling for values education, spiritual training, and customized learning programs
Working Smarter, Not Harder

- Overlapping Human/Organizational/Technological factors in KM:
  - People (workforce)
  - Organizational Processes
  - Technology (IT infrastructure)
What is knowledge management?

- Process of capturing and making use of a firm’s collective expertise anywhere in the business
- Doing the right thing, NOT doing things right
- Viewing company processes as knowledge processes
- Knowledge creation, dissemination, upgrade, and application toward organizational survival
- Part science, part art, part luck
Overlapping Factors of KM

- PEOPLE
- TECHNOLOGY
- ORGANIZATIONAL PROCESSES
Explicit and Tacit Knowledge

Oral Communication
“Tacit” Knowledge 50-95%

Information Request

Explicit Knowledge Base
5%

Information Feedback
The Knowledge Organization

Knowledge Organization

- Create
- Collect
- Organize
- Refine
- Disseminate
- Maintain

Culture

Leadership

Technology

Intelligence

Competition

KM Drivers

Knowledge Management Process

COIS 20077 Knowledge Management
The Knowledge Creation Spiral

Figure 1.1 The knowledge creation spiral

Source: Hasan
The Knowledge Organization (fig. 1.3)

- The middle layer addresses the KM life cycle
- A knowledge organization derives knowledge from customer, product, and financial knowledge. Also from financial practices
- Indicators of knowledge: thinking actively and ahead, not passively and behind
- Using technology to facilitate knowledge sharing and innovation
Ideal Knowledge Management

- Outside Environment
- Existing methods/processes
- Knowledge Creation
- Knowledge Base
- Codified Technology

Conversion

PEOPLE
Organizational Benefits

- New products
- New markets
- Smarter problem-solving
- Value-added innovation
- Better quality customer service
- More efficient processes
- More experienced staff
## Ideal Knowledge Management

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<th>Strategy</th>
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<th>Content</th>
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**Strategies:**
- Policy
- Measurement
- Content
- Process
- Technology
- Culture

**People:**
- Knowledge Exchange
- Knowledge Capture
- Knowledge Reuse
The ideal knowledge organization allows people to exchange knowledge across functional areas via technology and established processes.

Knowledge internalized and adopted within the culture of the organization.
KM Cycle & the Organization

- Organizational personnel
- Management Decision making
- KM Life Cycle: Capture, gathering, organizing, refining, transfer
- Culture
- Information technology

Figure 1-6 The KM cycle and the organization
What KM is not about

- Reengineering
- Discipline or philosophic calling
- Intellectual capital, per se
- Based on information or about data
- Information value chain or knowledge capture
- Limited to gathering information from the company’s domain experts or retiring employees and creating databases accessible by intranets
- Digital networks
Why Knowledge Management?

- Sharing knowledge, a company creates exponential benefits from the knowledge as people learn from it.
- Building better sensitivity to “brain drain”
- Reacting instantly to new business opportunities.
- Ensuring successful partnering and core competencies with suppliers, vendors, customers, and other constituents.
- Shortens the learning curve.
KM System Justification

- Is current knowledge going to be lost?
- Is proposed system needed in several locations?
- Are experts available/willing?
- Can experts articulate how problem will be solved?
- Is there a champion in the house?
THE DRIVERS

- Technology Drivers.
- Process Drivers
- Personnel-Specific Drivers
- Knowledge-Related Drivers
- Financial Drivers
What triggers interest in KM?

- Innovation as core competency
- Globalization & geographic dispersion changed the organization’s scope
- Downsizing & reengineering resulted in staff attrition & knowledge drain
- Networking & data communications made it easier & faster to share knowledge
- Increasing dominance of knowledge as a basis for improving efficiency and effectiveness triggered the need for utilizing knowledge gained from previous experiences
Key Challenges

1. Explaining what KM is and how it can benefit a corporate environment
2. Evaluate the firm’s core knowledge, by employee, by department, and by division
3. Learning how knowledge can be captured, processed, and acted on
4. Addressing the still neglected area of collaboration
5. Continue researching KM to improve and expand its current capabilities
6. How to deal with tacit knowledge
The KM Myths

1. KM is a fad
2. KM and data warehousing are essentially the same
3. KM is a new concept
4. KM is mere technology
5. Technology distributes human intelligence
6. KM is another form of reengineering
7. Company employees have difficulty sharing knowledge
8. Technology is a better alternative than face-to-face
9. It is “no brainer” to share what you know
KM Life Cycle

Four-Process View of KM:

1. **Capturing** - data entry, scanning, voice input, interviewing, brainstorming
2. **Organizing** - cataloging, indexing, filtering, linking, codifying
3. **Refining** - contextualizing, collaborating, contextualizing, collaborating, compacting, Projecting, mining
4. **Transfer** - flow, sharing, alert, push
Promoting Trust

- Decentralize organization structure - allow decision making by teamwork
- Reduce control-based management. Encourage management by results
- Revisit company’s mission statement & ethics policy to demonstrate its new views about values
- Assess & improve employee responsibilities & accountability
- Eliminate unnecessary directives or barriers
- Install programs to improve employee commitment to knowledge sharing
Conclusion

Literacy
+ Electronic Infrastructure
+ Social Revitalization

= Opportunity for New Societal Infrastructure
- Strategists needs all three change elements
- Literacy and Electronic infrastructures relate to knowledge distribution
- Social revitalization relates to motivation
The world of re-everything

- Knowledge is productive ONLY when captured in people’s mind
- Shareability requires decentralized intelligence
- We need to empower knowledge workers
- Top performers can be a problem; they are not the most humble
The Knowledge Business has already changed
Are you in the knowledge business?
How will you close your knowledge gap?
Is your mind geared to re-think what you think you know?

Note last paragraph of the text