Knowledge Management: Three Stages or Two Generations?
Presentation to: KMCI GWA Chapter
September 17, 2002

By
Joseph M. Firestone, Ph.D.
Executive Vice President
Co-CEO, KMCI
CKO
Executive Information Systems, Inc.
eisai@comcast.net
www.dkms.com
Koenig’s Three Stages

- Stage 1: all about use of IT (intranets) for knowledge sharing and coordination across the enterprise (1992)
  - Getting value out of IC
  - KM is managing above process
- Stage 2: added focus on human and cultural factors as essential in getting humans to implement KM (Senge, N & T, CoP, OL) (1995 - 2002)
- Stage 3: all about finding relevant content, and also taxonomy development and content management to facilitate this goal (present)
Koenig’s Three Stages

- Shows no change in the purpose of KM throughout 3 ‘stages’
  - Always about K sharing, distribution, or transfer
- Stage 2, not knew in 1995
  - May be earlier than stage 1
- Stage 3, also not knew in 2002, CM concern goes back to 1998, at least.
  - May be earlier than stage 2
- No underlying conceptual framework to guide development
  - Ad hoc moves through stages in response to problems
  - About techniques and tools, not basic purposes of KM
- Inadequate explanation of past
- Inadequate map for the future
The New Knowledge Management:
Unified Theory of Knowledge

Unified theory: Knowledge is an encoded, tested, evaluated and surviving structure of information that helps the system that developed it to adapt

- Three types
  - Encoded structures in physical systems allowing those objects to adapt to their environment (world 1)
  - Tested, evaluated, and surviving beliefs (in minds) about the world (world 2)
  - Tested, evaluated, and surviving, sharable (objective), linguistic formulations about the world (world 3)
The Old Knowledge Management

Knowledge Outcomes: The pre-existing DOKB

KM Processes

Knowledge Sharing and Distribution Processes

Knowledge Outcomes: The Refined DOKB

Business Processing Environment

The DOKB impacts Business Processing through the DEC

Business Outcomes
Problems Generated
By The Old KM

- Old KM doesn’t account for how knowledge created, produced, or discovered.
  - So under its assumptions “demand side” of knowledge processing, the heart of innovation, goes unmanaged.

- Old KM doesn’t clearly distinguish between knowledge and information content of DOKB.
  - Thus, under its guidance we never know whether we are engaged in information management or knowledge management, information distribution, or knowledge distribution, and information sharing or knowledge sharing.

- Old KM doesn’t distinguish clearly between knowledge processing and knowledge management.
  - Thus, under its guidance “management” is often confused with “processing”.

Copyright © 2002 Under License to KMC For Exclusive Use in CKM Program
Reproduction Without Permission Strictly Prohibited
The New Knowledge Management

Knowledge Processing Problems

KM Knowledge Processes

Other KM Processes

Socio/Techno Outcomes

Knowledge Processes

Problems

Business Processing Environment

Knowledge Outcomes: The DOKB

Business Outcomes
Knowledge Production

Knowledge Integration
(Diffusion)

Organizational Knowledge

Distributed Organizational Knowledge Base
(Solutions)

Business Process Environment

Feedback
(Including the Detection of Problems)
OK = Organizational Knowledge

From: Knowledge Production

To: Knowledge Integration

UKC - Undecided Knowledge Claims
SKC - Surviving Knowledge Claims
FKC - Falsified Knowledge Claims

Info About SKC
SKC
Info About UKC
UKC
Info About FKC
FKC
**Industry-Standard Reference Model For KM: The ‘KLC’**

- **Knowledge Production**
- **Knowledge Integration** (Diffusion)

**Business Process Environment**
- Business Process Behaviors of Interacting Agents (Knowledge Use)
- Organizational Knowledge ‘Containers’
  - Artifacts & Codifications
  - Individuals and Teams

- Feedback (Including the Detection of Problems)
- Internal/External Events
- Distributed Organizational Knowledge Base (Solutions)
Industry-Standard Reference Model For KM: The ‘KLC’

Knowledge Production
- Individual and Group Learning
- Information Acquisition
- Knowledge Claim Formulation

Knowledge Integration (Diffusion)

Organizational Knowledge

Business Process Environment
- Business Process Behaviors of Interacting Agents (Knowledge Use)
- Internal/External Events

Organizational Knowledge ‘Containers’
- Artifacts & Codifications
- Individuals and Teams

Distributed Organizational Knowledge Base (Solutions)
Industry-Standard Reference Model For KM: The ‘KLC’

Knowledge Production

- Individual and Group Learning
- Information Acquisition
- Knowledge Claim Formulation

Knowledge Claims ➔ Knowledge Claim Evaluation

Knowledge Integration (Diffusion)

- Sharing
- Broadcasting
- Searching
- Teaching

Organizational Knowledge

Feedback (Including the Detection of Problems)

Business Process Environment

Business Process Behaviors of Interacting Agents (Knowledge Use)

Organizational Knowledge ‘Containers’
- Artifacts & Codifications
- Individuals and Teams

Internal/External Events

Distributed Organizational Knowledge Base (Solutions)
Perspective On The KM Function

Focus is on managing the KM function

Knowledge Management

- KM Knowledge Processes (KLC)
- KM Management Processes
- KM Business Processes

Focus is on managing knowledge processing policies, rules, and programs in KM Level BP Environment
Nine KM Processes

- Symbolic Representation
- Building External Relationships with Others
- Practicing KM
- Leadership

- KM-level Knowledge Production
- KM level Knowledge Integration

- Crisis Handling
- Changing Knowledge Processing Rules
- Negotiating for Resources with Representatives of Other Organizational Processes and
- Resource Allocation for knowledge processes and for other KM processes
The New KM

- Also referred to as second generation KM;
  - Does not assume valuable knowledge simply exists
  - Takes view people create it
  - Offers unified theory of knowledge
  - Brings comprehensive life cycle view of ‘knowledge processing’ to table
  - Sees knowledge production and integration as two key parts of cycle, and sees individual and group learning as embedded within cycle
  - Differentiates between business processing and knowledge processing, and also defines KM as both a management discipline and a set of processes aimed at improving knowledge processing
  - Heavily influenced by complexity theory as basis for understanding human behaviors in organizations
  - Brings KM Process Methodology to table
New Problems Generated By The New KM

- How is knowledge produced in organizations?
- How can knowledge managers have impact on enhancing knowledge processing in organizations, not just information processing?
- How do information and knowledge differ?
- What role can KM play in enhancing production and value of intellectual capital?
- If knowledge processing is social process, shouldn’t we be looking to make social interventions, not just IT interventions?
- What IT tools do we use?
- What is the new KM’s value proposition?
The extent to which a portal product or solution is an EKP depends on the knowledge processing and KM use cases it supports!

- This chart relates KM, the Metaprise and the AKMS
- The link is through knowledge processes and “use cases.”
- The use cases we develop to support KM, knowledge processes and the Metaprise will determine the functionality, form, and content of the AKMS.
- A use case is "A behaviourally related sequence of transactions performed by an actor in a dialogue with the system to provide some measurable value to the actor.” This definition emphasizes that the use case is a dialogue or interaction between the user and the system. In the Unified Modeling Language (UML) they are defined as: “a sequence of actions, including variants, that the system can perform and that yields an observable result of value to a particular actor.” This definition emphasizes the use case as something the system performs, as well as the fact that there are different variants, or scenarios that can be used to perform a use case.
Finally, New Value Propositions

- Because focus on knowledge production (making), not just sharing TNKM:
  - Enhances ability to satisfy demands for new knowledge
  - Enhances rate and quality of organizational learning and innovation
  - Enhances organizational capacity to adapt
- Makes valuable distinctions between business processing, knowledge processing, and KM
- Unlike old KM, tackles definition of knowledge head on
- Finally brings clear definitions of knowledge and KM to the table!
The End

Questions?
Call Joe at 703-461-8823
or write to:
eisai@comcast.net