



Knowledge Transfer (D&P)

- Bottom Line – “Get smart people to talk and listen to one another”
- Problem? Counter-intuitive – based on industrial notion of ‘work’
- Everyday ‘knowledge transfer’ is an informal and spontaneous process
- How can KM facilitate this process?
- How Japanese engineering firms do it?



Strategies for K Transfer

- K abounds, but its ‘existence’ doesn’t guarantee its ‘use’ (cf: I and IT)
- Case studies of MCC and Sematech
 - Why Sematech Succeeded?
 - Why MCC did not succeed?
- Documents, document databases, intranet Web, groupware, etc. – What is missing?



Water Coolers and Talk Rooms

- Outdated notion of ‘work’ (and ‘organizations’)
- ‘Conversations are work’
- Are the way K workers discover what they know, share it with others and create new K
- “Start talking and get to work!”
- Barriers – industrial age mind set and ‘virtualization’ of work (??) COPs
- Need for ‘informal’ knowledge transfer (?)



Water Coolers and Talk Rooms

- Japanese ‘o-cha’ rooms for ‘chatting’
- ‘Water coolers’ may be hit or miss
- Serendipity – emerges from informal interactions (conversations?)
- Unstructured nature of ‘informal’ chats
- Reconciling ‘formal’ work and ‘formal’ organization with ‘informal’ interaction (??)



Knowledge Fairs and Open Forums

- Serendipitous K sharing across boundaries
- Creating locations and occasions for informal interactions
- Case of E&Y and CSIRO – Will it work in your company or companies you know??
- Relatively unstructured – allow to wander and mingle and create “own markets”
- Mix structured with unstructured K-points

What Kinds of Knowledge?

- Tacit knowledge vs. explicit knowledge
- Tacit K transfer – through partnership, mentoring, or apprenticeship... some kind of ‘working relationship’ is necessary (??)
- Of aerial photographer and system designer
- Formal mentoring – older – younger – older
- ‘Knowledge Maps’ – Raychem, BP
- More rich and tacit K – more IT enables (?)

Culture of K Transfer

- Trust – how to cultivate, feasible, possible?
- Common ground – vocabularies and XMLs
- Time and place – formalize ‘informal’ stuff
- Motivation – rewards, incentives, status (?)
- Absorptive capacity – open minds needed
- Turf battles for K – non-hierarchy (?)
- Errors and omissions – how to handle (?)
- Velocity and viscosity – IT enables K-xfr ?

Endnote on K-Transfer

“Too often K Transfer has been confined to improved access, electronic communication, document repositories, etc. It is time to shift attention to the more human aspects – from access to attention, from velocity to viscosity, from documents to discussions... Firms need to exploit both ‘hard’ and the ‘soft’ aspects of K transfer...”

The Leveraged Infrastructure (T)

- Hype of the ‘ultimate KM tool’
- Need to leverage *existing* infrastructure
- IT’s role in KM – broaden the reach and enhance the ‘velocity’
- Computing resources, processing power – storage and communications



What to Look For?

- Innovation, generation of new ideas, ...
- Collaboration, K sharing, learning and continuous improvement
- Real knowledge, not *artificial intelligence* (?)
- Conversation as medium of thought
- Sources and originators – ‘K maps’
- Golden rule – KMS for the people
- DSS, quality, scalability, pragmatism...
- User is the King (??)

Leveraging the 'binding glue' of Internet

- Global reach
 - Cost-effective (?)
 - Anyplace, anywhere
 - Distributed connectivity
 - Robust global data path
- Platform Independence (??)
 - Different data formats – still different (?)
 - Paper documents abound
 - Disparate information sources



Enabling Technologies for KM

5 Meta Components

- Knowledge Flow – facilitate K flow
- Information Mapping – link and map I flow
- Information sources – ‘data sources’
- Information and Knowledge exchange
 - Tools and non-technological facilitators
 - Enable exchange across tacit and explicit sources
 - Help create and share context, facilitate sensemaking ?
- Intelligent agent and network mining



1. Knowledge Flow Meta Component

- Facilitate K Flows
- Intranets, extranets – paths for explicated K
- GSS and CSCW – paths for explicated content and tacit context
- K Pointers – direction to location of tacit K
- Goupware – document repository, remote integration and a base for collaborative work
- Intranets & Extranets – secure, cost-effective, unrestricted communication (?)

Knowledge Flow Meta Component

- Groupware – for collaboration, transparent capture, document exchange, conversation / email
- Collaborative filtering tools – e.g GrapeVine
- Pointers to Expertise – Electronic Yellow Pages – limit to ‘explication’



2. Information Mapping Meta Component

- Maps paths for both sources and destinations influencing I
- Document management systems, repositories with context, information distribution channels, meta-data, data about informal conversations, paths of external networks



Information Mapping Meta Component

- Intranets – Collaboration / Connectivity, Information distribution, Publishin / Push feed, Yellow Pages / Directory
- Tools – Web publishing tools, Frontpage, WWW servers, App servers, Dynamic web page generators
- Document management – creation of documents, tools supporting versioning
- E.g. Vignette Storyserver (Cnet)

3. Information Source Meta Component

- Provide I feeds to KMS
- Distributed search and retrieval, multimedia content for 'thick' interactions, electronic bulletin boards, OLTP summaries
- Project Management Tools – allow to trace back documents and artifacts resulted in formal workflows
- Need better WWW-integration, developing...

4. Information and K Exchange Meta component

- CB Tools and non-technological facilitators
- Allow people and systems to exchange, contextually share, transfer explicit and tacit forms of K
- Include collaborative annotation tools, messaging integration, conversation threading, information beading (E)
- Context addition, rich-media Internet conferencing, video conferencing, community building networks, mind maps, white boards, etc.



Information and K Exchange Meta component

- Transparent capture enablers
- White boards and legal pads – capture of independent thoughts, discarded solutions
- Crosspads, electronic whiteboards
- Web conferencing, water coolers, and telephones: virtual meetings, document collaboration, informal communication (?)
- Mind maps, concept maps, thought maps,...
- Smile, you are on ‘K capture camera’!
- E.g. Caucus, Web Crossing, O'Reilly WebBoard, etc.

5. AI Agent / Network Mining Meta component

- Intelligent DSS, search engines, content aggregation, push- and pull-, content mining, web farming, clustering, automatic indexing, tag-based (XML) classification...
- Intelligent DSS – CBR, contextual I retrieval, data mining tools
- AI Agents – filtering, editing, searching and organizing overcome limitations of ‘conventional’ tools – excessive hits, breadth tradeoffs, meaning...
- Thunderstone, Verity, Fulcrum, Excalibur, Autonomy,...



Where do we go from here?

- “Key driver for KMS – proper leverage and tight integration of existing technology tools and information sources”
- ... using K servers
 - allow for seamless integration across multiple enterprises that use the same K server
 - Provide extensible architecture for unifying and organizing access to disparate corporate repositories and Internet data sources
- E.g. Plumtree – other EIP plays in recent years...

