Technologies for Knowledge (D&P)

- KM is much more than technology
- “Techknowledge” is part of KM
- Availability of WWW and Lotus Notes

‘Since knowledge and the value of harnessing it have always been with us, it must be the availability of these new technologies that has stoked the knowledge fire.’
HP and Knowledge Management

- Lotus Notes and WWW, common tools
- Electronic Sales Partner system
- Metaknowledge, searching, browsing, access, archival and navigation
- Connex – identification of experts
  - Human side and technical side
- Trainer’s Trading Post
Technology’s Role in KM

- Extending the reach and range
- Enhancing the speed of knowledge transfer
- Extraction, Structuring, Codification, Generation
- Wide variety of technologies
- Combine with human-oriented KM approaches – dynamic K environments
Expert Systems and AI

- IT to capture and manipulate K ? I?
- Overly high expectations and over hype
- Limitations of AI and Expert Systems
- Benefits of AI and Expert Systems ??
**Dimensions of KM Performance**

- **Increasing Returns**
  - From Hi Structure to Lo Structure
  - From Stable to ‘White Waters’ (Speed, Range)
- **Non-Routine**
- **Hi Structure**
- **Lo Structure**
- **Stable**

**KM for Whitewaters**
AI, Expert Systems and CBR

- McDonnell Douglas – Landing Planes
- CBR – Customer Service Database
- Rule Based Systems and Qualitative Text Analysis Based Systems
- Role of technology vs. role of people
- Videoconferencing, telephone, PCs (??)
- Data Management vs. K Management
- How about C Management???
State of K Technologies

- K Repositories, Intranets, Portals ???
- Human brokers and Artificial brokers
- WWW and Lotus Notes – Beyond ??
- AA KnowledgeExchange – Future?
- Hoover et al., WebLuis, GrapeVINE ??
- K, Meta-K, XML, DAML, Beyond??
- On-line thesaurus – how about misspellings?
State of K Technologies

- Search and retrieval – beyond text based
- Expert databases – implementation problems
- Use of tools needs time and intelligence
- “Let a thousand flowers bloom”
- Focused, stable, ‘constrained’ K domains
- CBR Tools – of humans and machines
- K based component analysis
Searching for the Holy Grail!

• Neural Nets, Genetic Algorithms (??)
• Beyond Black Boxes – Street and elsewhere
• Data Mining and ‘knowledge discovery’
• What Technologies Cannot Do ??
  – Human, Cultural, Social, Behavioral issues
  – ‘Dynamic discontinuous change’ issues
  – Gaps Between Data and Knowledge ??
• K-Use, K-Creation and K-Renewal ??
• IT serves two primary functions ??
  – Storage and retrieval
  – Communications

• Network – transfer and collaboration ?

• Selecting Technology ?
  – Find K, Create new K, Package and Assemble K, Apply K, Reuse and revalidate K
Knowledge and Technology

• Two dimensions of K ??
  – object or “thing”
  – Process
  – (Remember the wave and the particle)
• On learning and unlearning – role of T
• Of MIS, OIS, KWS and DSS – ‘old hat’
• Lotus Notes vs. Web
  – Whither Notes? Hello Web!
Collaborative Intelligence and Filtering

- Use what works – how do you know
- ‘Philosopher’s trap’ versus ‘foresight’
- Customer Knowledge, Marketing Knowledge, Competitor Knowledge, Market Performance – Link with T
- Stuck in the old model of static product, service and market definitions ???
Other Issues

- Expert Systems
- CBR, Genetic Algorithms, Neural Networks, Fuzzy Logic, etc.
- Evolving Search Technologies
- Of tags, metatags and XML
- Push versus Pull – with Personalization and customization spin