What’s Required in Knowledge Technologies – A Practical View

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Knowledge Management

... Improving organizational capability

Create a new working environment where knowledge and experience can easily be shared

Enable information and knowledge to emerge and flow to the right people at the right time so they can act more efficiently and effectively
Apply everywhere what you learn anywhere
Apply everywhere what you learn anywhere

Connecting

People to Information → People to Business →
• Make better decisions
• Make faster decisions
• Do more with less
• Speed up learning
• Improve motivation

People to People → People to Communities

Collaborating
First Wave KM

Technology
Portals, Collaboration, Document Management, Little Integration

Process
Best Practices, Validation

People
Communities of Practice
Enterprise Information Portal

All important information from both inside and outside the company delivered to the desktop

- unstructured & structured data
- thin client → web browser
- Search & Browsing

• Services
  • Presentation – Visualization
  • Collaboration
  • Publishing & Distribution
  • Data Feeds
  • Subscription – Notification
  • Personalization
  • Data Feeds
  • Security

• Trends
  • Finding → Doing
  • Multi-Purpose Information
Infrastructure

- e-business
- XML
- Wireless Devices
Knowledge Representation

Transparent Interfaces
Workflow Capture
Expertise
Incomplete, Ephemeral Knowledge
Integration
Standards
One-Stop Search / Case-Based Reasoning
Speed, Precision, Recall
Natural Language Integration / Interaction
Multilanguage
Multiple Media
JIT Knowledge Delivery

Agents
Help Wizards
e-learning
Knowledge Powered Enterprise

Real-Time Knowledge Management
- Everyone Contributes
- KM Embedded in Workflow

Seamless Information Space
Integrated Simulation / Decision Support
Data Mining / Knowledge Discovery
Decisions ... in Real Time

OilCo Well Engineer: We're planning to sidetrack well B23 in the Fifties field and are hoping you’ll buy in. For $10 million you can become a full 1-percent partner. A 96-hour shut-in test ended a few minutes ago. It indicates additional reserves of 750,000 barrels of oil and an initial sand-free production rate of 4,300 barrels per day.... We could do this tomorrow.

Investor, consulting his Knowledge Hub: I see that a sidetrack can double my rate of return, with a payback time of 30 days for 1-percent interest.... Count me in.
Today

First Wave KM
Technology
- Portals, Collaboration, Document Management, Little Integration
Process
- Best Practices, Validation
People
- Communities of Practice

Knowledge Representation
- Transparent Interfaces
- Workflow Capture
- Expertise
- Incomplete, Ephemeral Knowledge
- Integration
- Standards

One-Stop Search / Case-Based Reasoning
- Speed, Precision, Recall
- Natural Language
- Integration / Interaction
- Multilanguage
- Multimedia

Infrastructure
- e-business
- XML
- Wireless Devices

JIT Knowledge Delivery
- Agents
- Help Wizards
- e-learning

Knowledge Powered Enterprise
- Real-Time Knowledge Management
  - Everyone Contributes
  - KM Embedded in Workflow
- Seamless Information Space
- Integrated Simulation / Decision Support
- Data Mining / Knowledge Discovery

Knowledge Creation / Innovation
- Continuous Learning

Long Term

Everyone Contributes – KM Embedded in Workflow

Seamless Information Space

Integrated Simulation / Decision Support

Data Mining / Knowledge Discovery

Continuous Learning