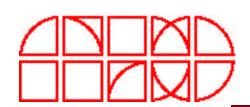


Knowledge Management in the Information Age

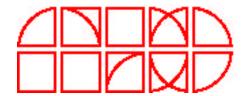
Documation '98
"Whither KM Technology?" Panel
March 11, 1998

Avron Barr Aldo Ventures, Inc., Los Altos, CA Stanford Computer Industry Project www-scip.stanford.edu/scip/avsgt/



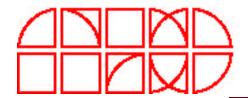
Knowledge Management — The Evidence

- Articles in Forbes and HBR
- Hot new business book titles
- ◆ A conference a week
- New practices at the big consulting firms
- ◆ Dozens of new software products (and old ones "repositioned")
- ◆ Half a dozen sessions at Documation '98



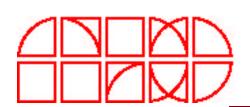
Why is KM Happening Now?

- ◆ The fad gap
 - Deep need for business religions
- Technology creates potential
 - * KM is to networked computing what payroll was to data processing
- Real business needs
 - Better, faster, cheaper
 - ❖ Flat organizations, BPR span of control
 - Onset of the Information Age



The Information Age

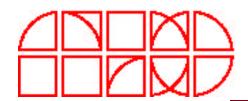
- ◆ The Agricultural Age Land
- ◆ The Industrial Age Capital
- ◆ The Information Age ?
 - Global competition
 - Rapid technological change
 - Changing business environments (e.g., regs.)
 - Product variety & customization
 - Innovation, short product lifetimes
 - Crowded markets, focus on customer loyalty



The Information Age — The HP Pavilion Line of PCs

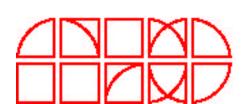
- Every aspect of the business is outsourced
 - * R&D
 - Component manufacturing
 - Assembly and testing
 - Warehousing and shipping
 - Sales and marketing
 - Service and support
- What does HP bring to the business?

Haim Mendelson, Stanford GSB, unpublished research, 1997.



The Role of KM in the Information Age

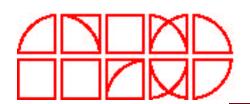
- You can't manage knowledge
 - * Knowledge is an ascribed characteristic
- Knowledge management is a set of perspectives on people, information, technology & organizations
 - Applied knowledge management focuses on information systems that can help people use more information more effectively



People, Information, Technology and Organizations

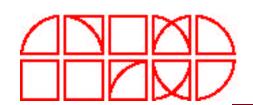
- Document management
- Information retrieval
- ◆ AI knowledge systems
- Learning organization
- Human resources dev.
- **◆** Internet/intranet tech.
- ◆ Functional perspectives like call center and sales automation
- Product data mgmt.

- Intellectual capital
- Library science
- Workflow and BPR
- Collaboration
- Teleconferencing
- Decision support
- **♦** CBT, performance support
- Data mining
- Data visualization



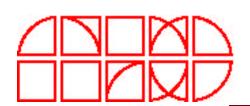
The Business Value of Knowledge Management

- Saving money vs. making money
- **◆** Example: Customer Relations
 - Reduce cost of call center operations
 - ❖ Better decisions, e.g., compliance with policy
 - Service quality as a market differentiator
 - Customer loyalty and customer retention
- Sometimes, you can sell the knowledge!
 - ServiceWare, Trilogy, Foundation Tech., ...



Who Requires Knowledge About Product Use?

- Engineering (design, improvements)
- Product documentation and training
- Sales & fulfillment (demos, configuration)
- **◆** Call-center & field service representatives
- Marketing (competitive positioning)
- Customers (new ways to use products)
- Corporate planning and decision making



Types of Knowledge in Service and Support Operations

```
problem history
    products Policy know-how
                                 personnel
                 sales prospects
preventative
                                organization
  trade secrets
                   Customer
                                   procedures
       priorities
      problem solving regulations
                                     manufacturing
              attitudes
   books training preferences expertise design expertise
                                         accounting
```