

## The Knowledge Management Field

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Ver 1.05 – 2006.05.24

## Background

- The emerging knowledge society poses new challenges
  - Increasing relevance of knowledge as economic resource
    - *Accelerating pace of innovation*
    - *New organizational configurations*
  - Growing significance of knowledge work and workers
  - Changing institutions (*e.g. property, modes of collective action*)
- The knowledge management field has been advanced in response to such challenges
  - A growing body of research, with contributions from a wide range of disciplines
  - An emerging set of practices focusing on knowledge and its management

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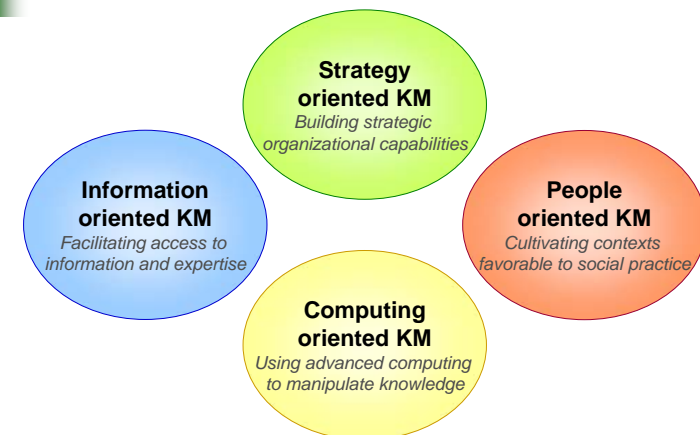
## Perspectives on knowledge

- The classical view (Descartes, 1637)
  - Objective and universal propositions
- Knowing how (Ryle, 1949; Heidegger, 1927)
  - Thinking is acting, knowing is doing
- Tacit knowing (Polanyi, 1962)
  - Tacit integration of tacitly internalized particulars
- Social knowing (Bourdieu, 1977; Giddens, 1984)
  - Construction and reproduction of shared practices and meanings
- Knowledge vs. information (Dell, 1999; Boisot, 1995)
  - Judgment based on experience, theory, or both

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## Theoretical approaches to knowledge management



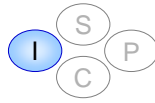
**Knowledge management:** a deliberate and consistent effort to improve the creation, transfer and utilization of knowledge in organizations

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## Information-oriented KM

*K as relevant content*

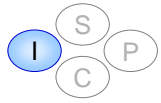


### KM as managing information

- Research topics
  - Information organization (taxonomies, information architecture, etc.), knowledge repositories
  - Information needs, sources and flows, knowledge audits, knowledge mapping
  - Information retrieval, user behavior
  - KM systems (corporate portals, content management, document management, workflow, etc.), KMS architecture
  - Process-oriented KM (organizing information around business processes)

## Information-oriented KM

*K as transferable expertise*

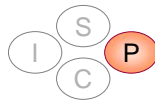


### KM as replicating experience and practices of individuals and teams

- Research topics
  - Organizational memory (preserving critical knowledge and information)
  - Capturing tacit knowledge (narratives, multimedia, etc.)
  - Mapping expertise

## People-oriented KM

*K as social practice*

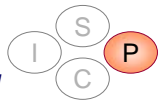


### KM as cultivating shared contexts and collective engagement in action and practice

- Research topics
  - Communities of practice
  - Individual and organizational identity
  - Contexts for communication and collaboration (*ba*)
  - Social capital (structural, relational, cognitive), trust, social cooperation
  - Social networks (structure, tie strength), structural holes, weak ties

## People-oriented KM

*K as organizational sense-making*

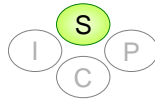


### KM as facilitating negotiation of meaning and organizational change

- Research topics
  - Sense making, enactment
  - Organizational culture (shared values, beliefs, norms)
  - Interests and agency
  - Power and conflict
  - Symbolism and rhetoric
  - Legitimacy

## Strategy-oriented KM

*K as organizational capabilities*

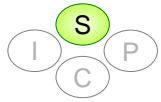


KM as creating, transferring and protecting knowledge for competitive advantage

- Research topics
  - Knowledge creation
  - Dynamic capabilities
  - Innovation, path dependence, absorptive capacity
  - Collaboration, networks, regional clusters
  - Management of technology, road mapping
  - Knowledge strategies

## Strategy-oriented KM

*K as new management paradigm*

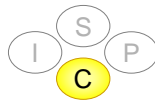


KM as practicing management through a knowledge-based perspective

- Research topics
  - Knowledge-based view, organizational identity, firm boundaries, interpretive flexibility
  - Resource-based view, organizational resources
  - Evolutionary perspectives, organizational routines
  - Complexity theory, systems science

## Computing-oriented KM

*Knowledge-based computing*

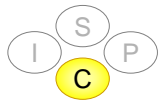


KM as intelligent computing

- Typical topics
  - Knowledge-based systems (expert systems, case-based reasoning, decision support systems, etc.)
  - Knowledge engineering, knowledge representation, ontologies
  - Knowledge discovery and data mining, data warehousing, search, data visualization
  - Intelligent agents, distributed agents

## KM research

*Creative and collective computing*



KM as creative computing

- Typical topics
  - Creativity support systems (idea generation, idea management, group thinking, etc.)
  - Awareness support

KM as collective computing

- Typical topics
  - Social software (blogs, wikis, social networking, etc.)
  - Social tagging (folksonomies)
  - Web 2.0, open models