



AGLIS: Global Knowledge Management

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Collaborative Course Development!

Thanks to my colleague Prof. Dr. Markus Bick who has developed the introduction to Knowledge Management for a common Summer School Course in 2008.

For those materials, please contact
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 - Theoretical Frameworks
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Introduction – What is Knowledge Management? Main Drivers

- Co-evolution of society, organization, products, services, work and workers
- Globalization of business
- Distribution of organizations
- Fragmentation of knowledge
- Need for speed and cycle-time reduction
- Need for organizational growth
- Complex organizational interlacings
- Increasing pace of organisational redesign and increasing employee mobility
- Business process reengineering and lean management
- New information and communication technologies

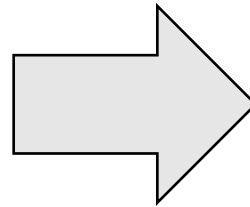


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Introduction – Global Knowledge Management

- Geographic dispersion
 - Level of dispersion
 - Synchronicity
- Organizational issues
 - Type of stakeholders
 - Type of projects
 - Complexity
- Individual Issues
 - Perceived distance
 - Trust
- Methodology and processes
 - Systems methodology
 - Policy and standards
- Culture
 - Knowledge & communication



Some Issues

- Coordination
- Communication
- Culture and Awareness
- Technology Support
- Process Alignment
- ...



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Definition – Knowledge Management

“Knowledge management is defined as the management function responsible for the regular selection, implementation and evaluation of goal-oriented knowledge strategies that aim at improving an organization’s way of handling knowledge internal and external to the organization in order to improve organizational performance. The implementation of knowledge strategies comprises all person-oriented, organizational and technological instruments suitable to dynamically optimize the organization-wide level of competencies, education and ability to learn of the members of the organization as well as to develop collective intelligence.”

(Maier 2002)

“Planned and ongoing management of activities and processes for leveraging knowledge to enhance competitiveness through better use and creation of individual and collective knowledge resources.”

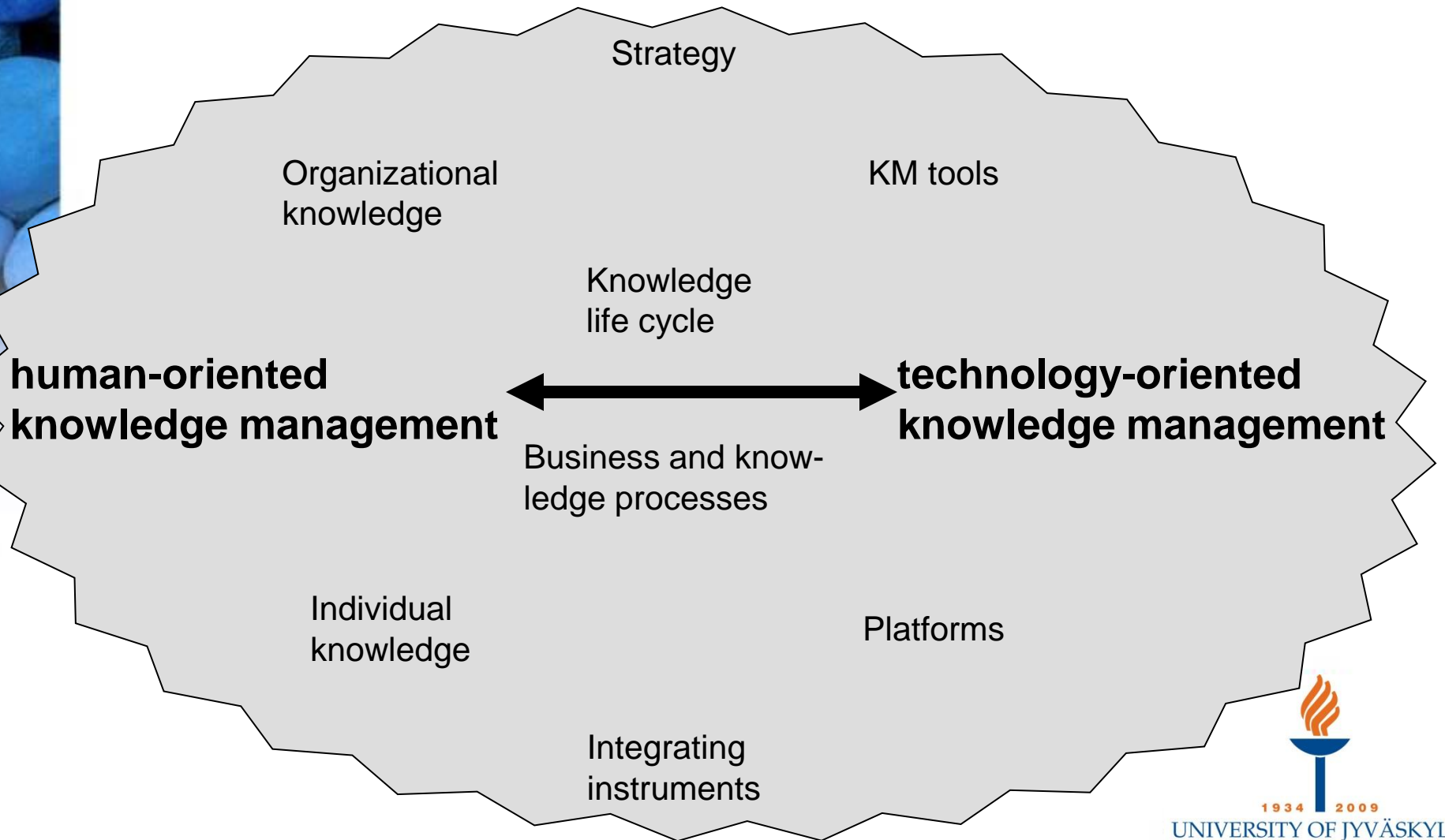
(CEN 2004)



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Conceptual Roots

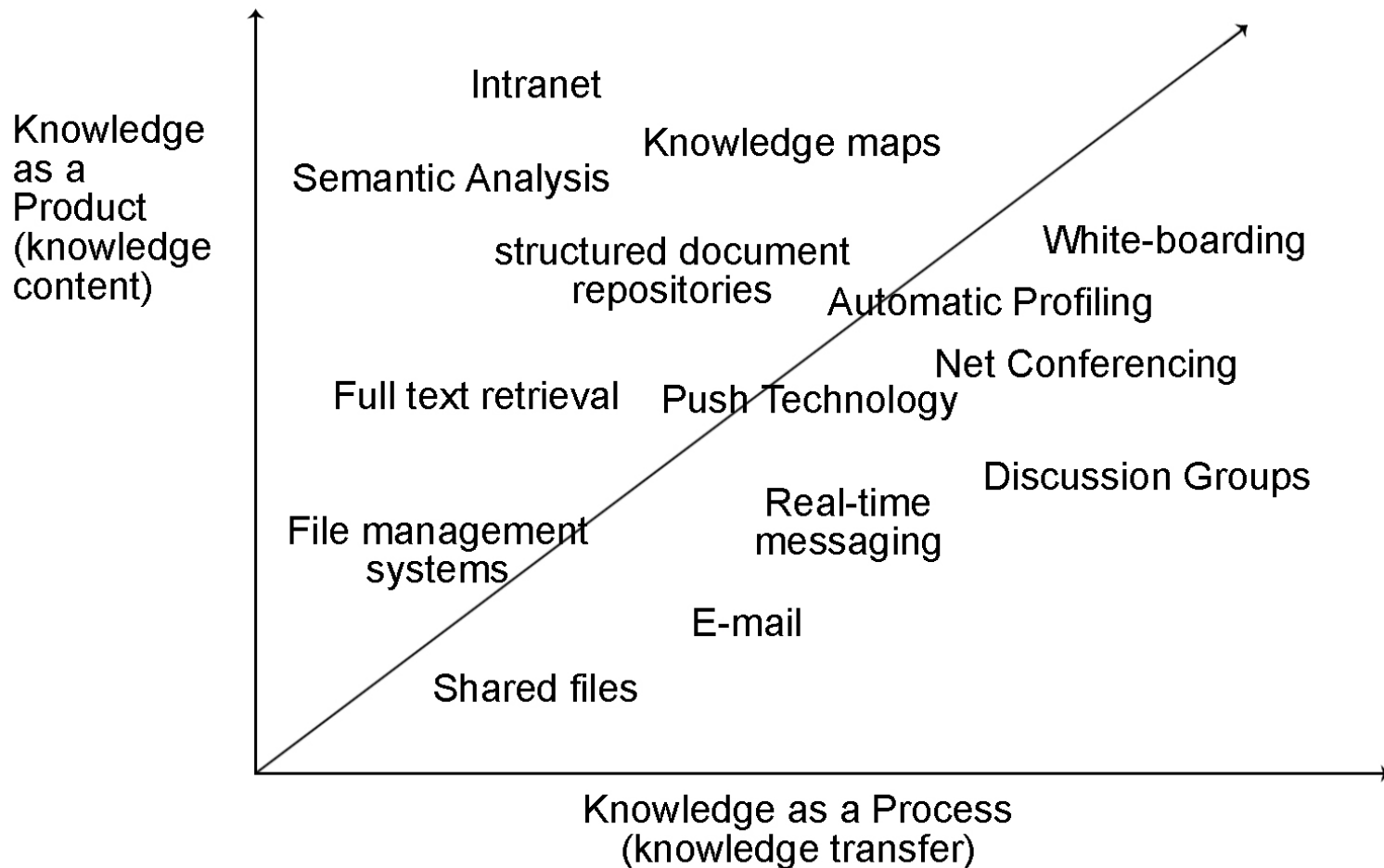


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Types and Classes of Knowledge

(back up)



Global aspects to KM

- ❏ **Coordination:** In international team work several problems such as time differences have to be taken into consideration and managed.
- ❏ **Communication:** Common ways of communication including language need to be agreed on.
- ❏ **Collaboration:** Team work has to be facilitated by providing suitable mechanisms and support.
- ❏ **Knowledge Management** including knowledge sharing and transfer is crucial to establish a common knowledge base of all team members
 - KM as a horizontal aspect!



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Global aspects to KM (2)

Challenges

- Lack of Trust
- Different vocabularies, frames of reference
- Status and rewards of knowledge owners
- Behavior towards mistakes...



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Global aspects to KM (Vaidyanathan, 2007)

Dimensions	Factors	Description	References
Structural	Ties	Strong ties between members; Prior partner relationships and repeated transactions; constructive consensus	Inkpen & Tsang (2005); Griffith et al. (2003); Fjermestad (2005)
	Configuration	Decentralization of authority by headquarters; group structure	Inkpen & Tsang (2005); Rulke & Galaskiewicz (2000)
	Stability	Personnel relationships; Low personnel turnover	Inkpen & Tsang (2005)
	Flexibility	Flexible work rules; lack of formal structure; synergistic group processes	Lee & Choi (2003)
	Management	Disciplined project management; leadership	Massey et al. (2002); Bassellier & Benbasat (2004); Grover & Davenport (2001)
Cognitive	Shared goals	Shared vision; collective goals; goal clarity	Inkpen & Tsang (2005)
	Shared Culture	Cultural diversity; accommodation	Inkpen & Tsang (2005)
	Learning	Learning environment; training; mentoring	Lee & Choi (2003); Alavi & Leidner (2001)
Relational	Trust	Clear and transparent reward; incentives to reduce mistrust	Inkpen & Tsang (2005); Ba et al (2001)
	Collaboration	Active available help within team; sharing of knowledge; expertise credibility; perceived status	Lee & Choi (2003); Herzog (2001); Thomas-Hunt et al. (2003); Sussman & Siegal (2003)
Technical	Tools	IT to enable DKM; technology acceptance & adoption; compatibility; ontology; security	Bonifacio et al. (2003); Ba et al (2001); Grover & Davenport (2001); King et al. (2002); Gregor & Benbasat (1999); Edgington et al. (2004)
	Support and Maintenance	Support from IT; knowledge maintenance; loose structure	Lee & Choi (2003); Hahn & Subramani (2000)

Preliminary Summary

- ❏ Broad field with
 - ...a variety of conceptual foundations
 - ...interdisciplinary approaches
 - ...different viewpoints
 - ...possibilities of interventions
 - ...uncertain success probabilities
 - ...unknowns!
- ❏ Need for frameworks and comparable models!

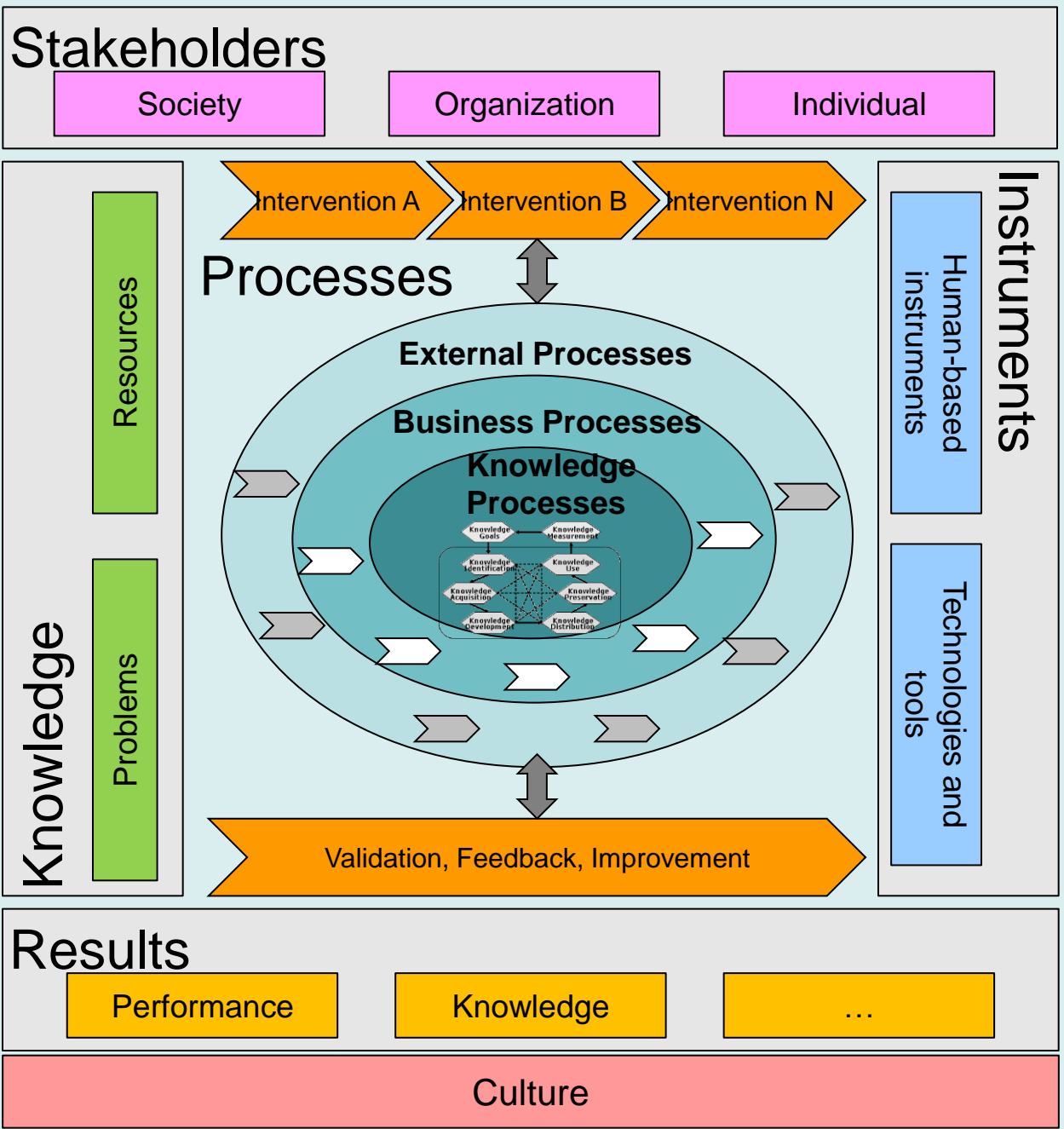


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Global Knowledge Management Framework

Context



Global Knowledge Management Framework

Context

Context

- Society: (National, regional) culture, legal aspects, infrastructure, ...
- Organization: Culture, Strategies, Structure, Processes, ...
- Individuals: Characteristics, preferences, knowledge / skills / competences, barriers



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Knowledge Management Framework Business Focus (CEN, 2004)

Context

Processes

- The **business focus** should be in the centre of any KM initiative and represents the value-adding processes of an organization, which may typically include
 - strategy development
 - product/service innovation and development, manufacturing and service delivery, sales and customer support.
- Processes represent the organizational context, creating critical knowledge on
 - products and services
 - Customers
 - technology
 - ...
- Processes are inter-organizational in distributed networks

(CEN 2004)



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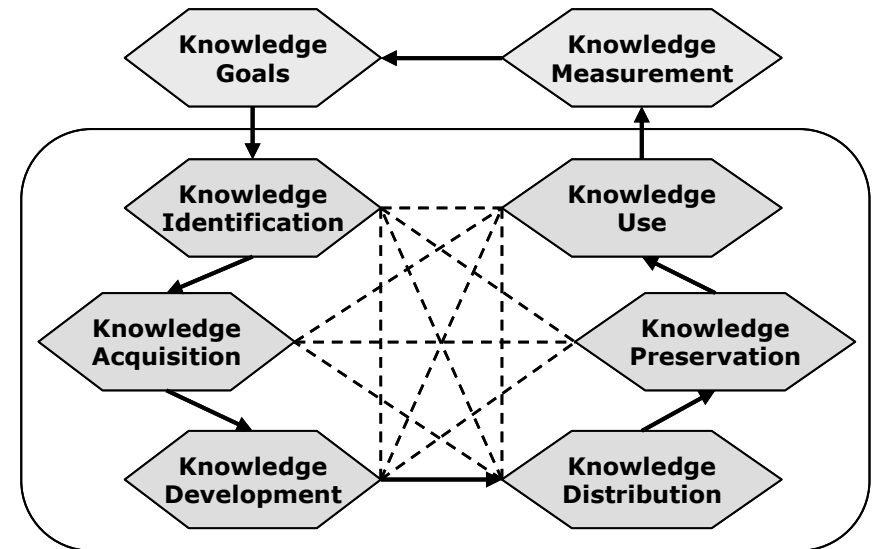
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Knowledge Management Framework

Core Knowledge Activities

Knowledge Management Tasks (Maier, 2004)

- creation, building, anticipation or generation
- acquisition, appropriation or adoption
- identification, capture, articulation or extraction
- collection, gathering or accumulation
- (legally) securing
- conversion
- organization, linking and embedding
- formalization
- storage
- refinement or development
- distribution, diffusion, transfer or sharing
- presentation or formatting
- application, deploying or exploiting
- review, revision or evolution of knowledge



(Probst & Romhardt 2000)



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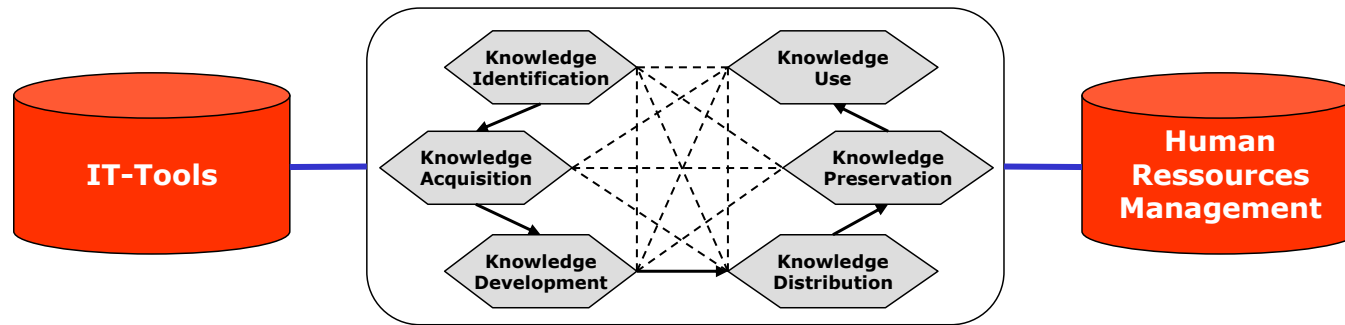
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Knowledge Management Framework: Enabler

Instruments

Knowledge Services

Knowledge Services support the work of knowledge workers and their organizations



IT-Tools

- Document Management
- E-Mail
- CSCW
- Search
- Data Mining
- List-Server
- Multi-Point-Videoconference
- News-Channel / News-Feed
- Application Sharing
- Social Software
- etc.

Human- & Structure-oriented Tools

- Mentoring
- Open Space
- Job Rotation, Job Enlargement
- Career Planning
- Team Development
- Simulation Games
- Future Search Conference
- etc.



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Barriers and success factors

- Which are the main barriers to successful Knowledge Management activities?
- Which are success factors?
- How do those barriers and success factors differ in global settings?



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Some barriers...

Individual Barriers

bad experiences in the past
too much concern for other people's opinions
fear of superiors
lack of time
apparent lack of communication skills
lack of sensitivity in dealing with others
worries of losing out as others will exploit and benefit from your ideas
general reluctance to invest time for the sake of the knowledge
occasionally lack of humor among colleagues

prejudices
fear of criticism
lack of confidence

Organizational Barriers

closed corporate cultures
rigid hierarchies
tedious search routines without appropriate support
no or insufficient dissemination of information among staff
quick-fix solutions prevailing
management lacking understanding
outdated procedures being left unchanged
procedures being kept vague

constant time pressure

Technology Barriers

(too) strong ICT focus

lack of IS acceptance



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Success Factors

Context.
Organization /
Individuals

Instruments

- Holistic, integrated and standardized approach
- Knowledge-oriented culture
- Management support
- ICT and organizational infrastructure
- Multiple/Redundant channels for knowledge transfer
- Exact vision and language
- Continuous participation of employees

(Maier 2002)



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Global success factors

Context.
Organization /
Individuals

Instruments

- Provide instruments to acquire globalization competences
- Creating awareness between employees
- Creating communication across time zones
- Creating awareness on culture and a culture of knowledge sharing
- Creating alternative communication channels
- Establishing a common organizational culture
- Establishing standards on knowledge activities
- Reducing and overcoming fears and misunderstandings
- ...



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KM Success Factors and Guidance (De Long & Fahey, 2000)

Context.
Organization /
Individuals

Instruments

- Cultural assumptions
 - Which knowledge is common & useful?
 - Analyze cultural influences on priorities (e.g. knowledge sharing vs project management)
 - Identify critical knowledge tasks (e.g., customer knowledge)
 - Identify current practices
- Understanding and defining knowledge
 - How do different groups define (important, common, priority) knowledge
 - Identify skills / motivation for different instruments (e.g. repositories)
- Importance of individual knowledge
- Enable cross-function knowledge sharing



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KM Success Factors and Guidance (De Long & Fahey, 2000)

Context.
Organization /
Individuals

Instruments

- Enable cross-function knowledge sharing
 - Changes of ownership of knowledge?
 - Which new behavior patterns are needed by leaders
 - Provide examples of practices
- Culture as context for social interaction
 - Vertical interactions
 - Approachability
 - Horizontal interactions
 - Interactivity
 - Sharing and teaching
 - Dealing with mistakes

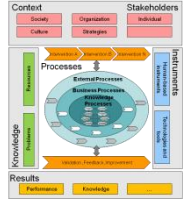


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The challenge

- Analyzing the cultural, organizational, and individual context
- Identifying barriers and potential success factors
- Choosing and creating solutions (=interventions / methods)
 - Aligned with strategies and processes
 - Addressing barriers
 - Involving all stakeholders
 - Not overloading people

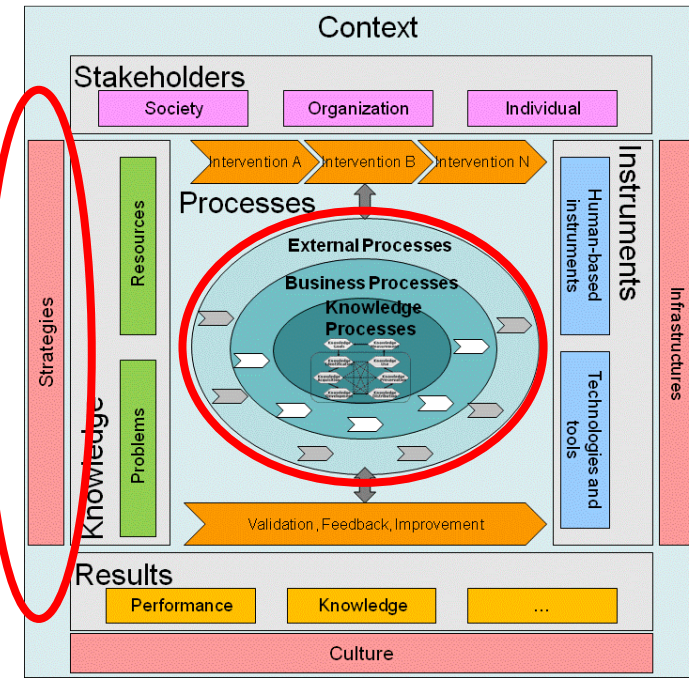


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GKM Step by Step: Strategy and Requirements

- Assess organization's strategy and vision regarding KM
- Assess core knowledge of the organization
 - Knowledge cluster
- Assess core (business) processes
 - Business Process Model
- Specify and improve the strategy
 - Strategy specification



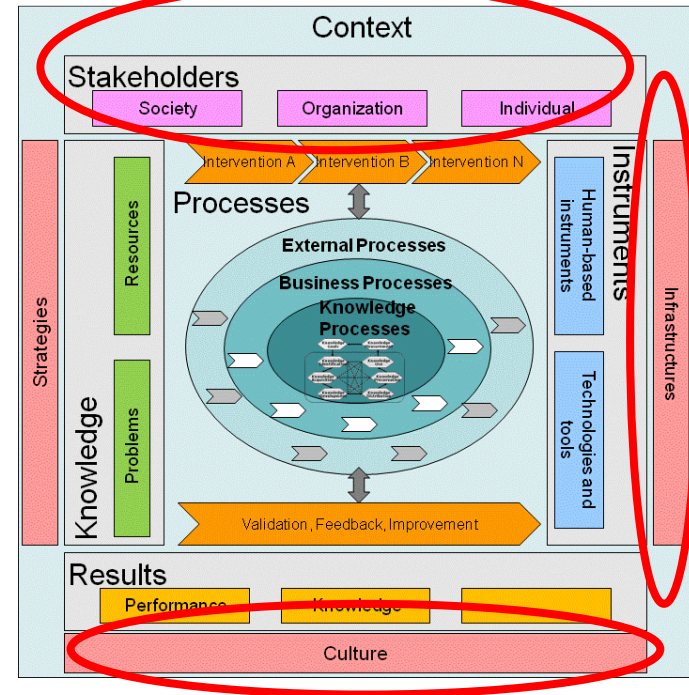
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GKM Step by Step: Context

Describe key context aspects

- Stakeholders and roles
 - Organization / individual profiles
 - Knowledge and competence profiles
- Culture
 - Culture profiles
- IT Infrastructure
 - Regional infrastructure
 - Enterprise Architecture

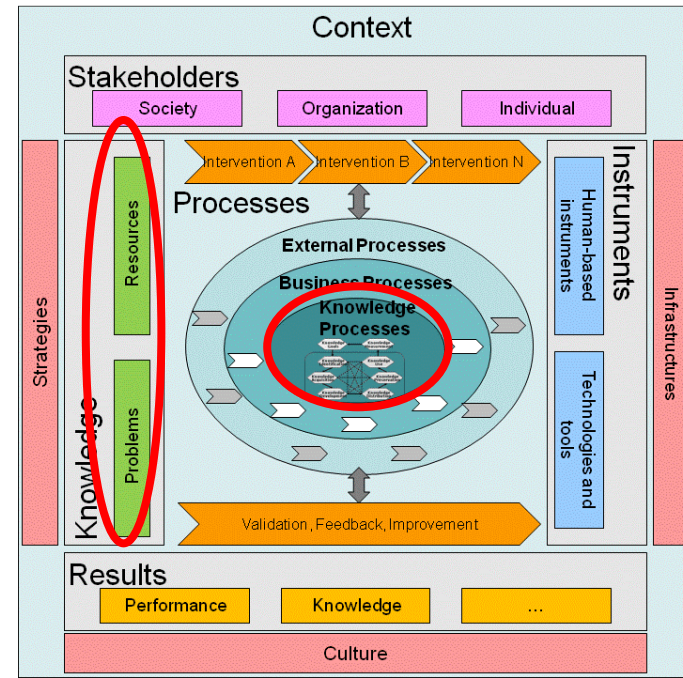


GKM Step by Step: GKM Design (1)

Design Knowledge Processes

Aligned with the context, you should...

- Design potential knowledge processes
 - Specify processes
 - Embed with business processes
 - Agree / integrate with international collaborators
 - Prepare change processes
- Knowledge description
 - Develop knowledge descriptions / standards
 - Incorporate collaborators
 - Develop problem specifications



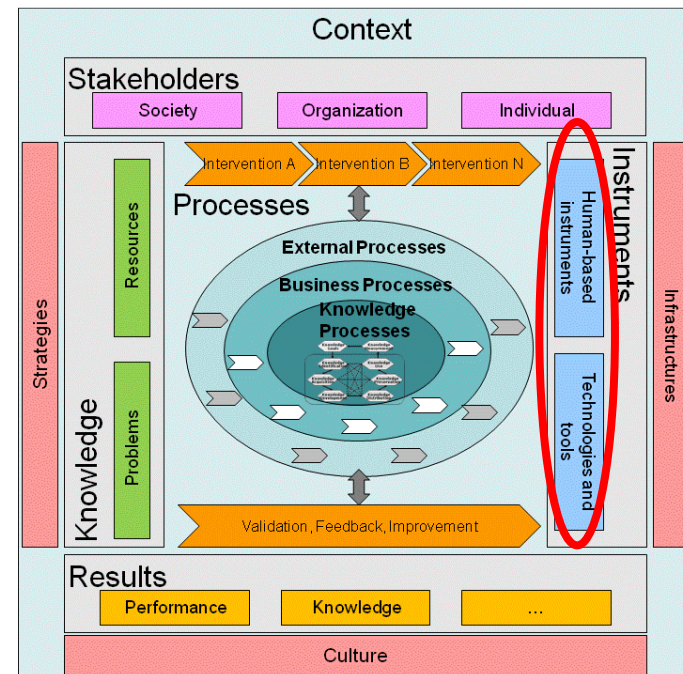
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GKM Step by Step: GKM Design (2)

Design interventions

- Choose a barrier / success factor
- Identify candidate instruments
- Integrate process
- Identify influences / context
- Validate process – context – instrument impact
- Validate, refine, improve...



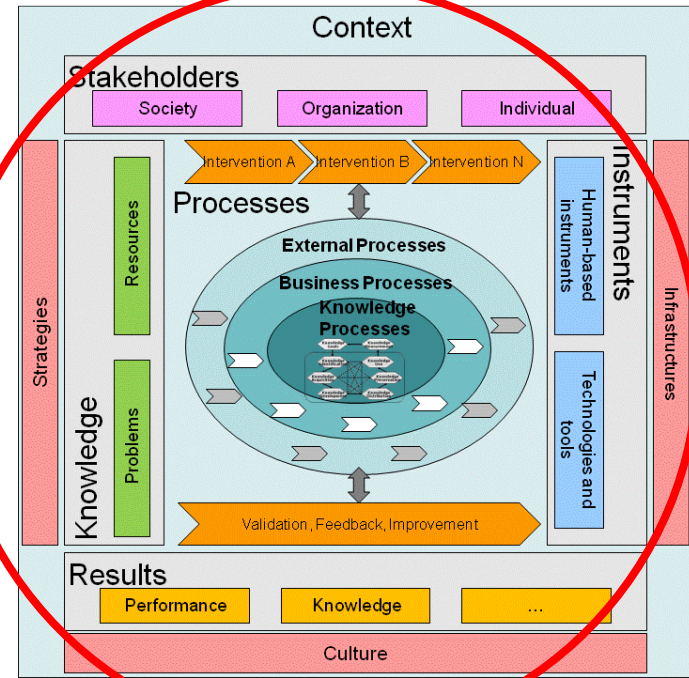
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GKM Step by Step: Realization

Deploy & adopt

- Initiate change processes
- Integrate processes
- Realize interventions
- Validate results
 - Short term and long term
 - Staff knowledge
 - Productivity
 - ...
- Develop improvement recommendations



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Summary

- ❏ Successful Global KM is still a creative, explorative design activity
- ❏ Factors are identified but their interdependencies and context-correlations are unclear
- ❏ Step by step, participatory approaches with validations and continuous improvement
- ❏ More research to be done...



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