


Global Knowledge Management

Instruments, Tools, Social Software

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UNIVERSITY OF JYVÄSKYLÄ





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Collaborative Course Development!

Thanks to my colleagues Prof. Dr. Markus Bick and Prof. Dr. Franz Lehner who have developed parts of the Knowledge Management Course which we taught together during the Jyväskylä Summer School Course 2011.

Prof. Dr. Markus Bick (Introduction, CEN Framework)

ESCP Europe Campus Berlin

Web: <http://www.escpeurope.de/wi>

Prof. Dr. Franz Lehner (Assessment, Process Integration)

University of Passau

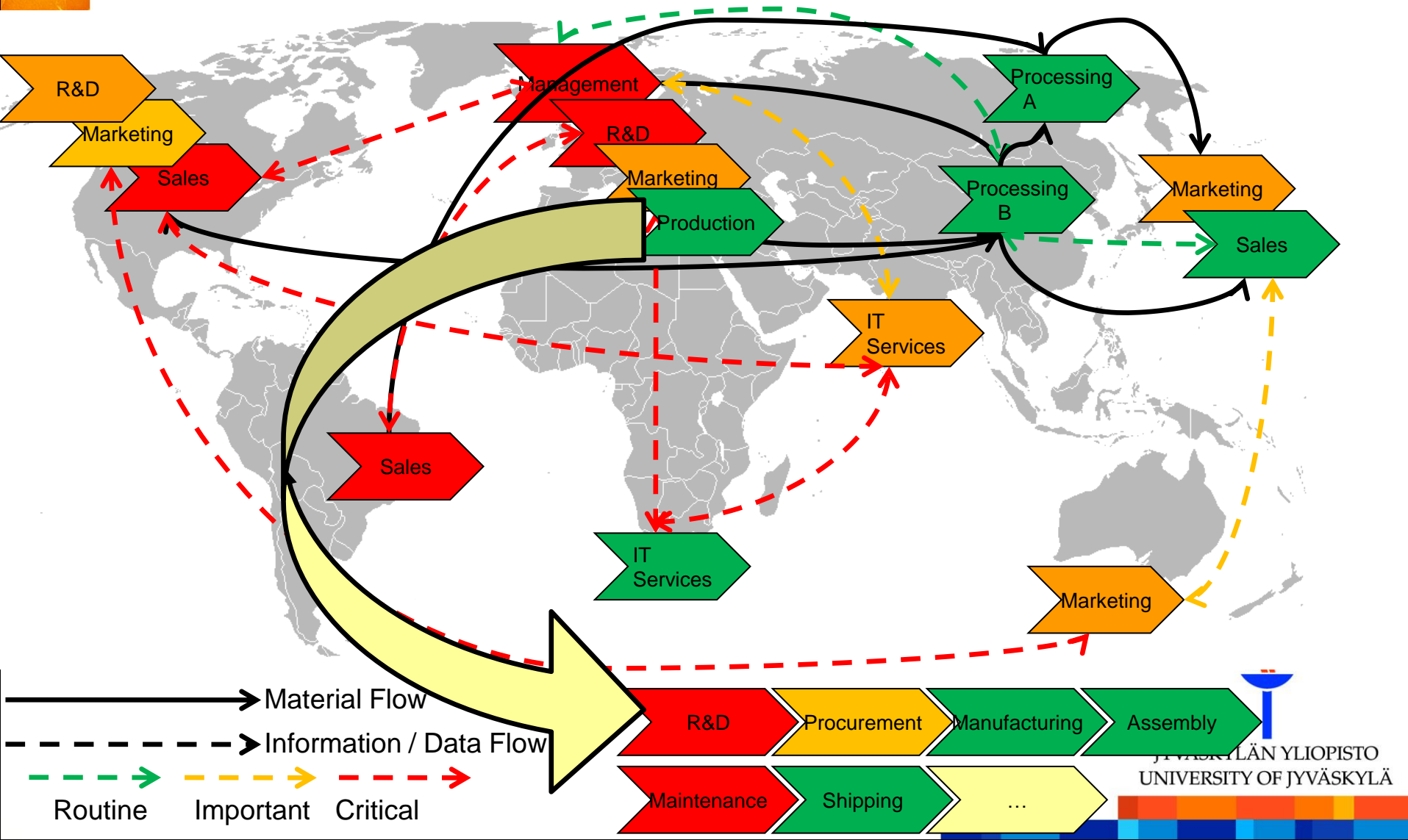
Web: <http://www.wi.uni-passau.de/>

Starting points

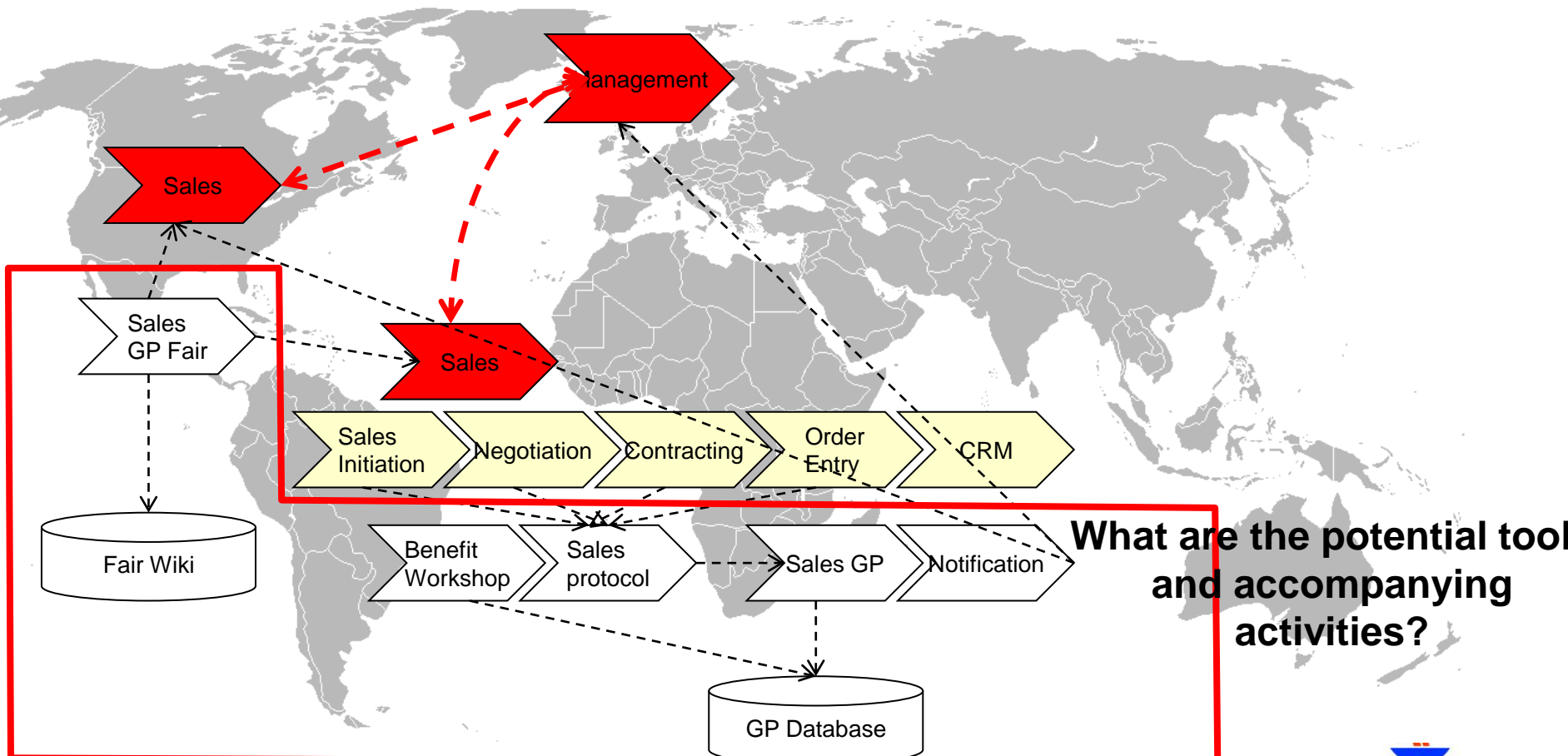
- We have analyzed and understood the context, business processes and critical knowledge
- Main task
 - Selecting tools for knowledge management activities according to the purpose
 - Creating accompanying activities (e.g. awareness, tool training, early adopter groups)
 - Balancing human- and technology-orientation
- Specialization: Social Software
- Intended Outcome
 - A selection of tools and activities
 - Implementation plan
 - Validation ideas (following lecture)



Business Process Management in a Networked Business



Business Process Management in a Networked Business

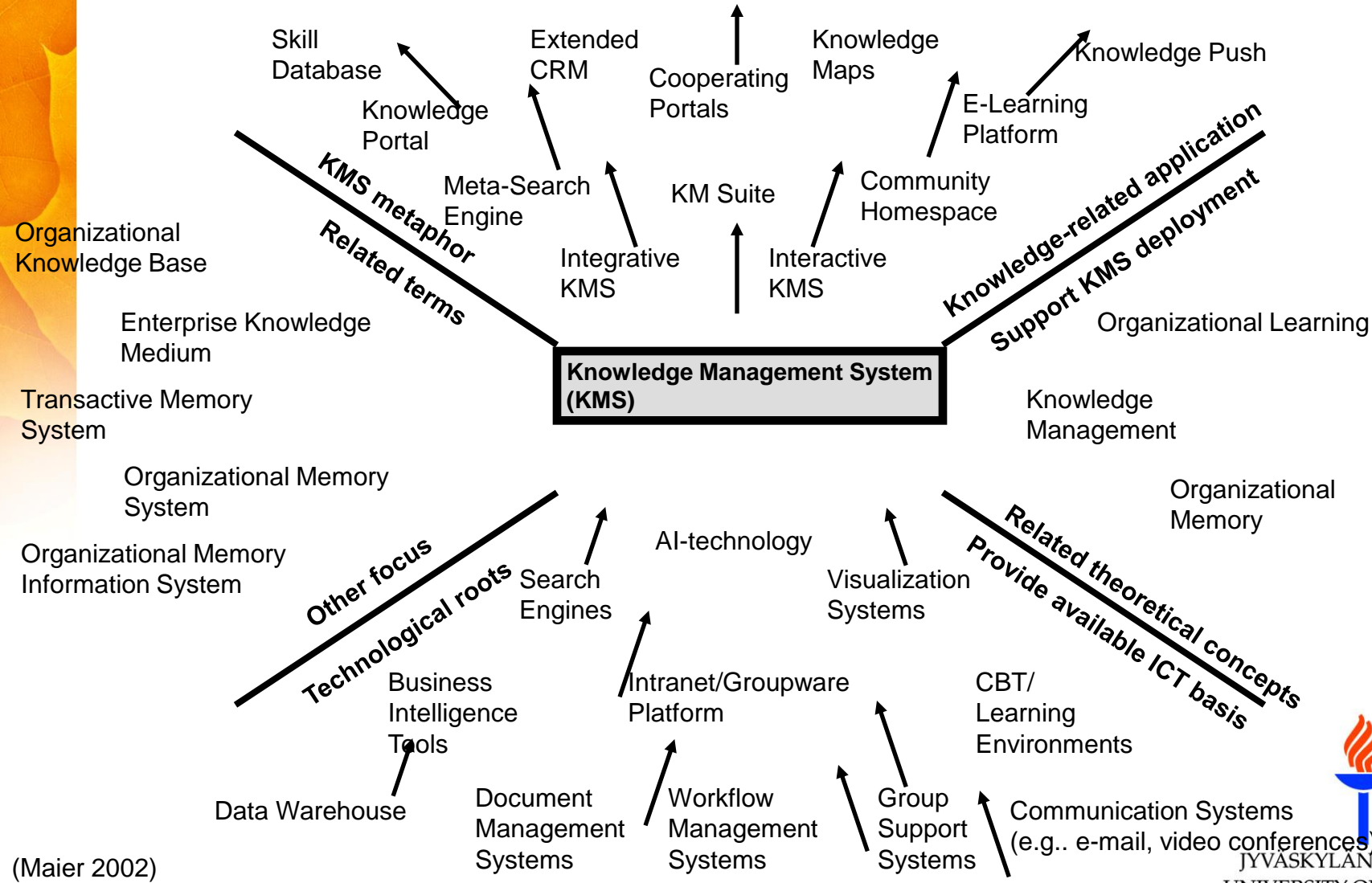


What are the potential tools and accompanying activities?

- Material Flow
- - - - - Information / Data Flow
- - - - - Routine
- - - - - Important
- - - - - Critical

Knowledge Management Systems

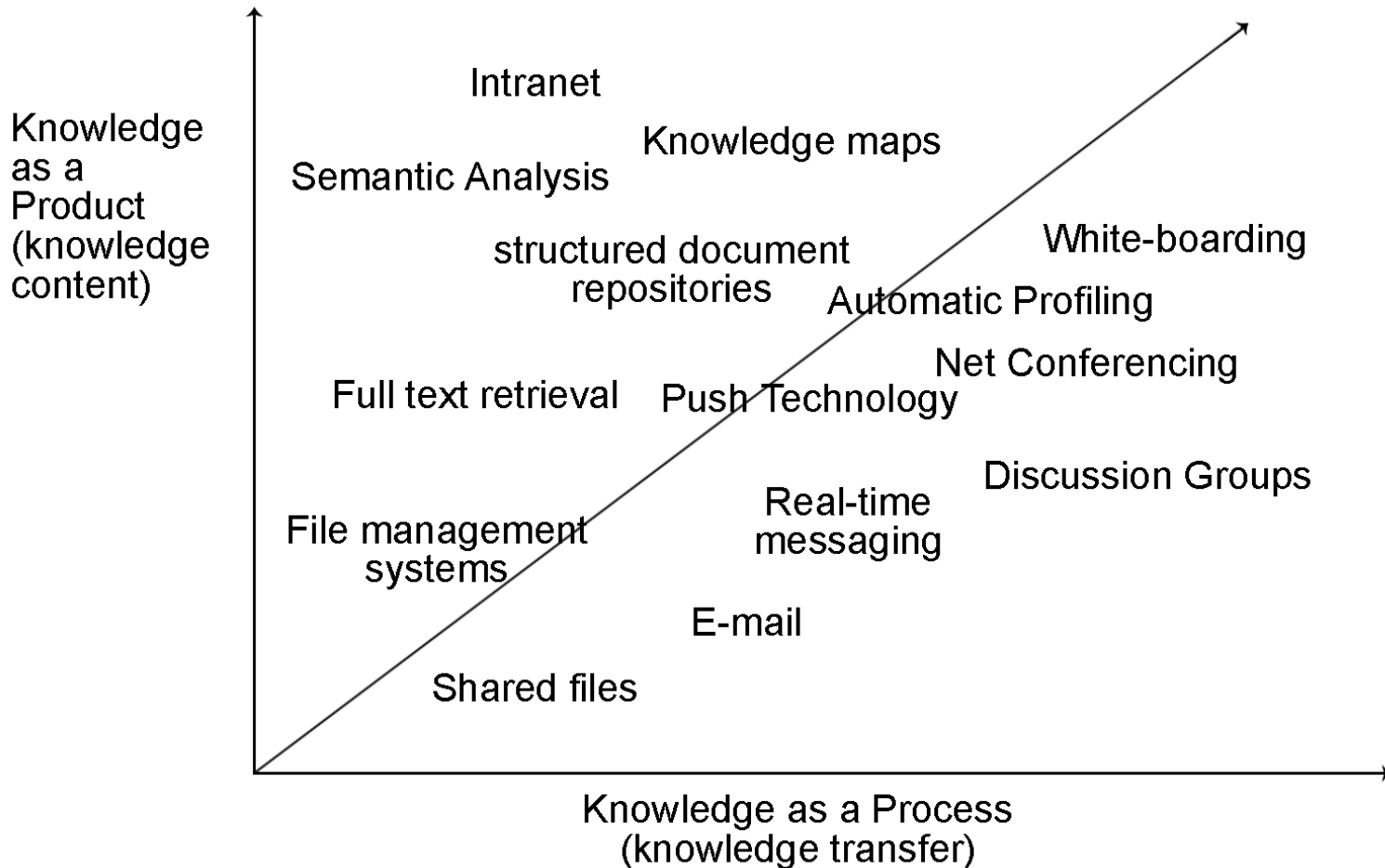
Technological roots and influences



(Maier 2002)



Types and Classes of Knowledge



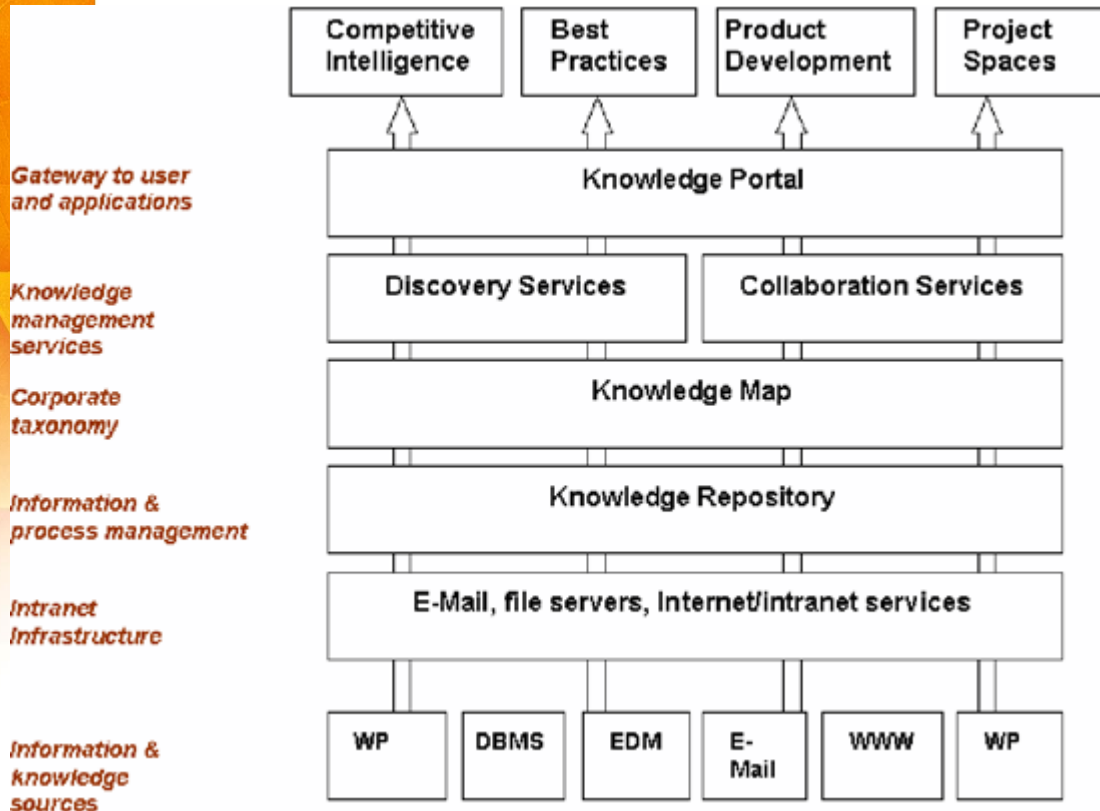
(Mentzas et al. 2001)



From Ontologies to Tools and Knowledge Activities (Abecker & van Elst, 2009)

	Share knowledge	Distribute knowledge	Capture & codify knowledge	Create knowledge
Traditional systems	E-Mail, Group Collaboration, Discussion Groups, P2P technology, Intranet Portals	Word processing, DTP, Document Management	<i>All systems that codify knowledge are knowledge-based</i>	Brainstorming software, mindmapping, statistical analysis
Knowledge-based systems	Ontology-based portals	Expert Systems, Lessons-Learned + Best Practice Systems	Knowledge acquisition and coding tools	Knowledge discovery and data mining systems, Creativity systems

From Ontologies to Tools (Abecker & van Elst, 2009)

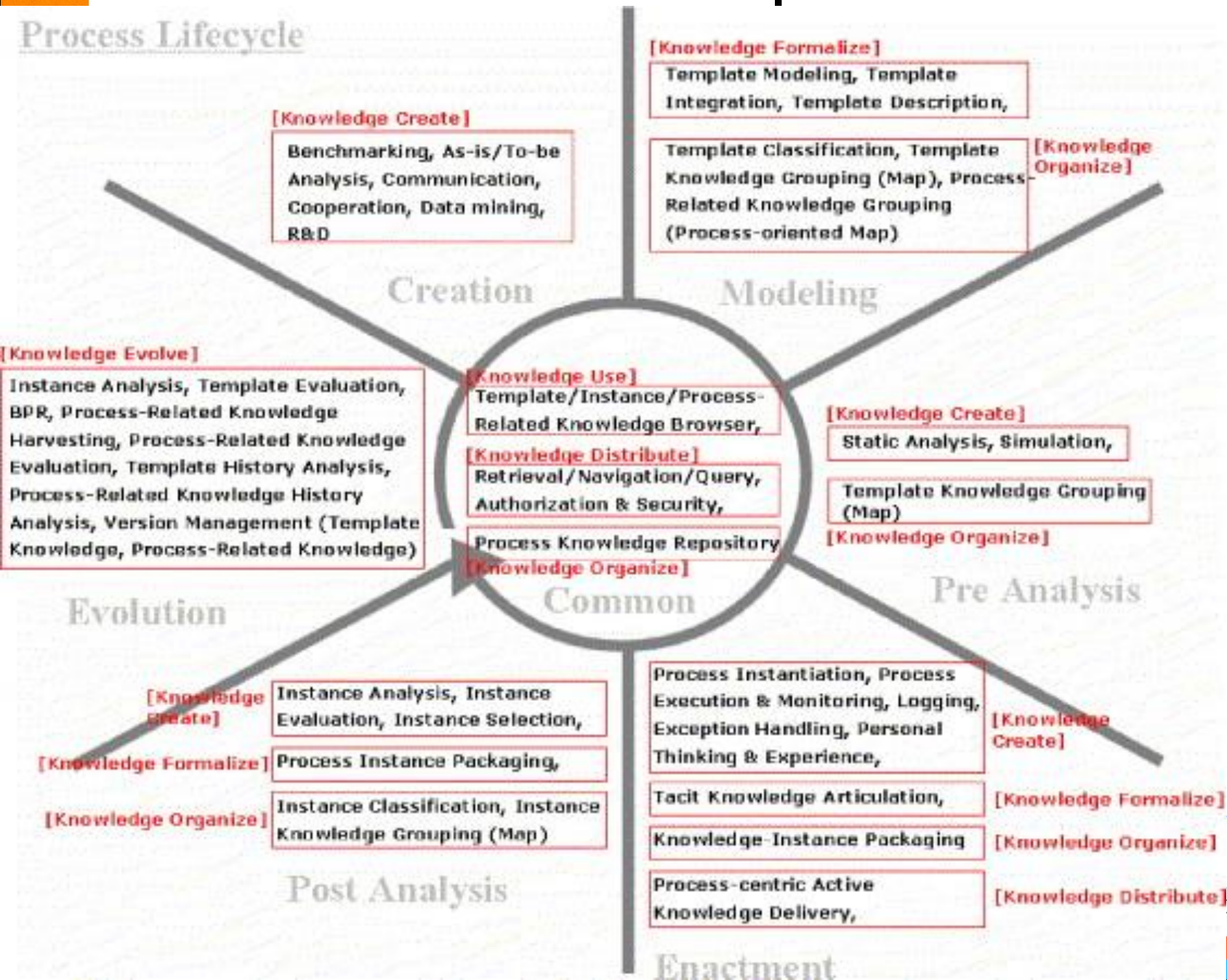


- Intelligent Search and Retrieval in Intranet and Internet
- Information Gathering, Information Extraction and Information Integration with ontologies as target data structure
- Semantic Community Web Portals
- Expert Systems and Intelligent Advisor Systems



Tools and phases

Process Lifecycle



Knowledge Services (Maier, 2004, Bick, 2008)

IT-Tools

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

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

Source: (Maier, 2004)

Human- & Structure-oriented Tools

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



Choosing technology / human-centered instruments: A simplified process

- Identify influences / context
- Addressing barriers
 - Is it a persistent barrier
 - If not: awareness / accompanying activities are more useful
 - For persisting barriers: Consider appropriate tools (e.g. knowledge cockpit to see knowledge development for barrier “lack of understanding knowledge sharing benefits)
- Addressing knowledge goals
 - Identify candidate instruments
 - Identify accompanying activities
- Integrate processes / activities
- Plan roll out / deployment
- Validate process – context – instrument impact
- Validate, refine, improve...

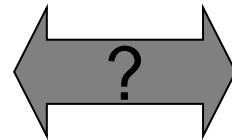


Social Software for Knowledge Management

Knowledge Management Tasks

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Source: (Maier, 2004)



Social Software for KM: Contents

Social Software – possibilities and limitations

Knowledge Management – where are we now?

Impressions and strategies

Social Software in KM



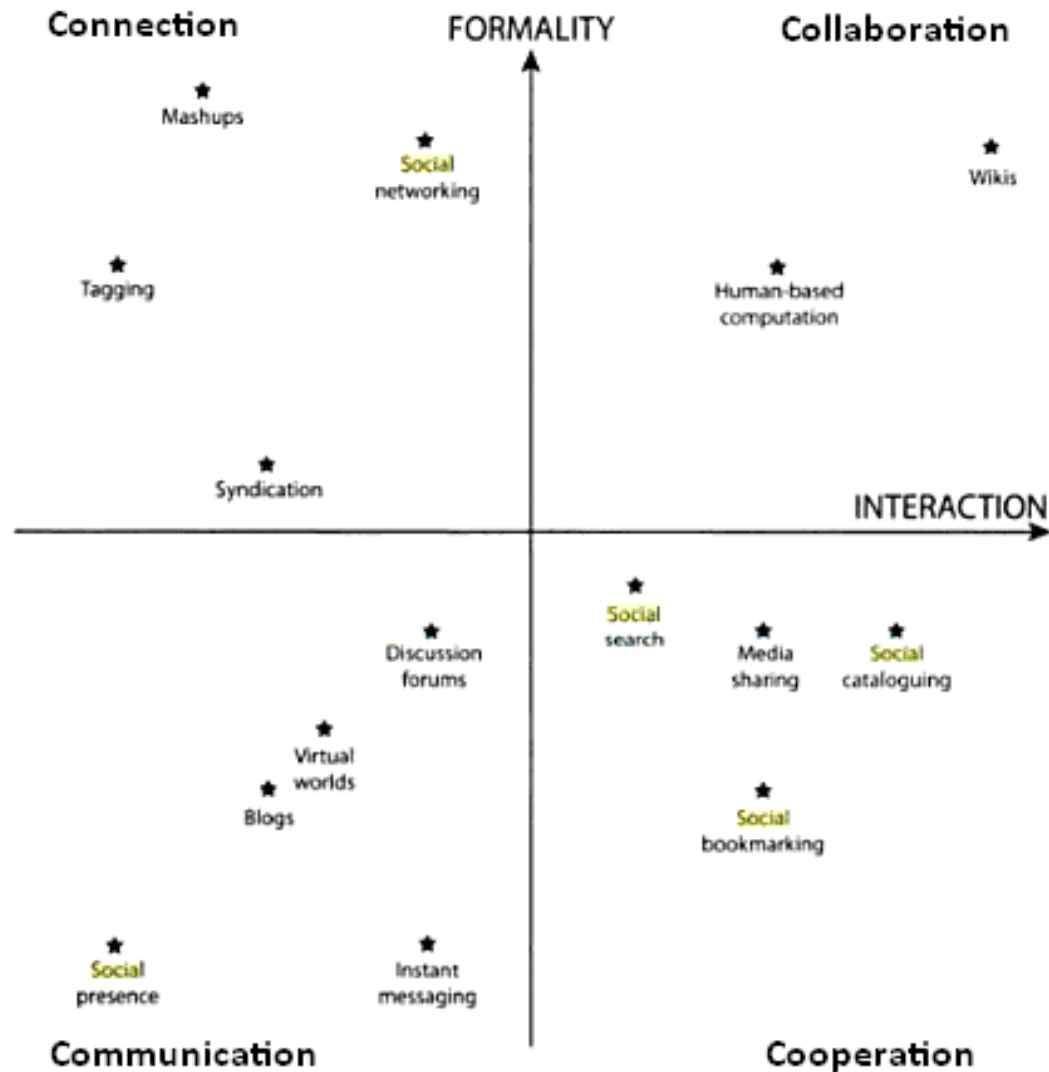
Social Software

“Social Software enables an interactive way of collaboration, managing content and connecting to online networks with other people. It supports the desire of users to be pulled into groups in order to achieve their personal goals”

(Wever, Mechant, Veevaete & Hauttekeete 2007)



Social Software

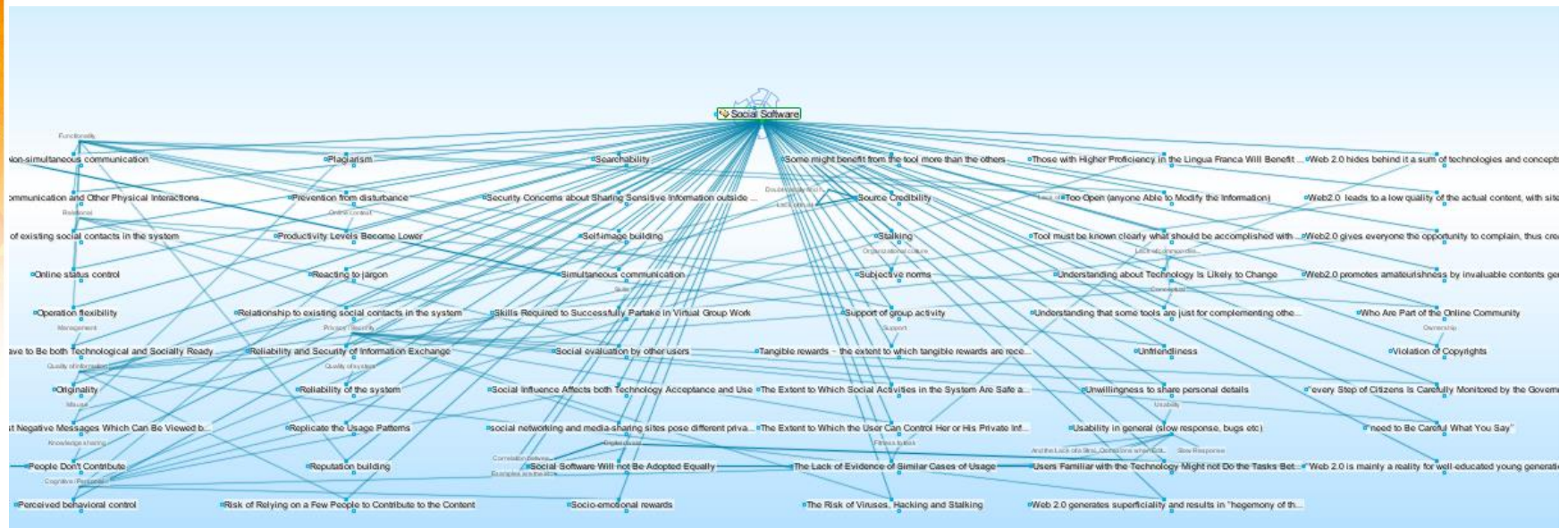


4 Cs of Social Software (Cook 2008)



Barriers

Social Software



(Pirkkalainen & Pawlowski 2011)

... 119 barriers from the literature



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Barriers

Social Software

Very much discussed at the moment

Same barriers discussed under different terminology

(Social Software, Social Media etc.)

Related to knowledge sharing, group collaboration etc.

Higher Education, Business and IT, B2B...

At the moment trying to recognize relevant barriers. No clear context-aware understanding of the biggest problems



Barriers

Social Software

Financial (resources, time)

Management/Coordination/support

Technology fit

Organizational culture

Social

Relational, knowledge sharing, skills, cognitive, background, preferences

Technical

Availability, Interoperability, Functionality, Usability, conceptual, privacy/security, misuse

Quality

Legal (IPR, copyright)



Social Software in Knowledge Management



[social-media-marketing.jpg](#)
govloop.com

- ▣ Individuals, process/culture, technology
- ▣ In many cases generalizing the purpose of Social Software/media unnecessarily
E.g. “social media is essentially a social networking site, with subscribing”
- ▣ Support of Social Software for different levels of KM:
Knowledge evolution, knowledge use/reuse, knowledge sharing/transfer

Not to replace but to support?

Are we discussing a specific service
or about the web in general?



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Social Software in Knowledge Management



social-media-marketing.jpg
govloop.com

Social media takes knowledge and makes it highly iterative. It creates content as a social object. That is, content is no longer a point in time, but something that is part of a social interaction, such as a discussion. It easily disassembles the pillars of structure as it evolves. As examples: content in a micro-blogging service can shift meaning as a discussion unfolds; conversations in enterprise social networks that link people and customer data can defy categorization; and internal blogs and their comments don't lend themselves to obvious taxonomy.

The days of the single, authoritative voice are coming to an end. The community has prevailed.

the future is about managing unstructured content

<http://radar.oreilly.com/2011/03/knowledge-management-social-media.html>

“it’s the interaction with customers that social media provides”

<http://phoneboy.com/2535/knowledge-management-and-social-media>



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Social Software in Knowledge Management



[social-media-marketing.jpg](#)
govloop.com

Social networking as awareness support for Knowledge Management (Groth 2002)

Social media and knowledge management aren't at odds at all. In fact, the most successful knowledge management systems embrace social media, but with a business mindset. The smart KM implementations leverage blogs, subscriptions, communities, discussion forums, and member profiles. They tie it together with search in a single working environment. And they look for opportunities to tie in other tools to streamline knowledge sharing — everything from instant messaging (i.e. Sametime) to micro-blogging (i.e. Yammer).

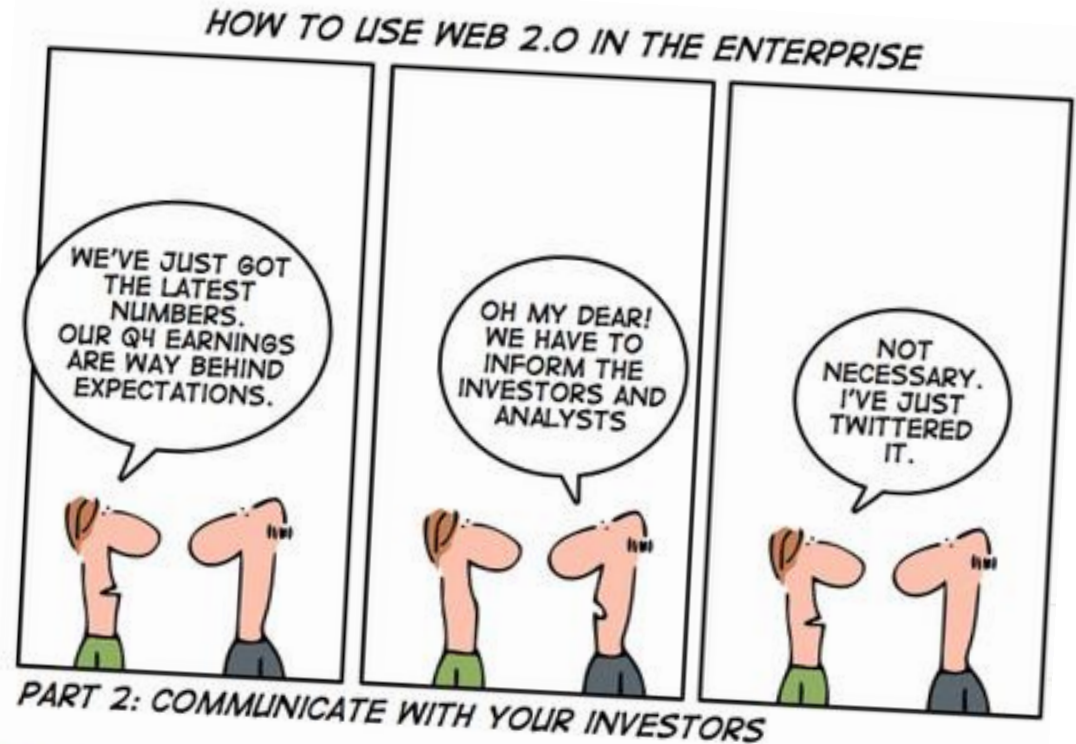
<http://www.jeffhester.net/2011/02/22/social-media-and-knowledge-management/>



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Social Software in KM

Web 2.0



“Web as a platform”

“basis for social media”

[ep203_2.jpg](#)

[wanharris.com](#)

Linked to Enterprise 2.0



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Web 2.0??



© Scott Adams, Inc./Dist. by UFS, Inc.

[dilbert_web20.jpg](#) [thenextweb.com](#)



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Social Software in internal collaboration

- Different modes: Open/closed
 - internal
 - Between units
 - Between organizations
 - ...

- Reasons for selection: Easiness to use, availability, effortless

- Strategies differ

Develop from scratch

Use what we know from before
Selection process/evaluation?

Role to support
to replace

Baggs and Schmitt [2] describe collaboration as the act of planning, making decisions, solving problems, setting goals, assuming responsibility, working together, communicating, and coordinating openly. Collaboration however is still a word that means different things to different people. Some have stated collaboration to be the art of discovering what no one can produce or invent by oneself. Some have described it to be the art of working with others



Social Software in KM

“Enterprise Social Software”

-Business / Commercial usage

Should allow (McAfee 2006)

search (users, content)

links (groups, semantic content)

authoring (blogs, wikis etc.)

extensions (personalized recommendations)

signals (subscribing to changes, RSS etc.)

Web 2.0



Social Software in KM

Enterprise 2.0

- ▣ Collaboration
- ▣ Awareness
- ▣ Documentation
- ▣ Customer engagement
- ▣ Interaction with stakeholders
- ▣ ...



PART 1:
COMMUNICATE WITH YOUR EMPLOYEES



audience.gif
greatpublicspeaking.blogspot.com



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Social Software in activities and tasks

- Not all tools are meant to support all knowledge steps/tasks

Identifying



Collection, modification, collaboration

Annotation



Sharing, awareness



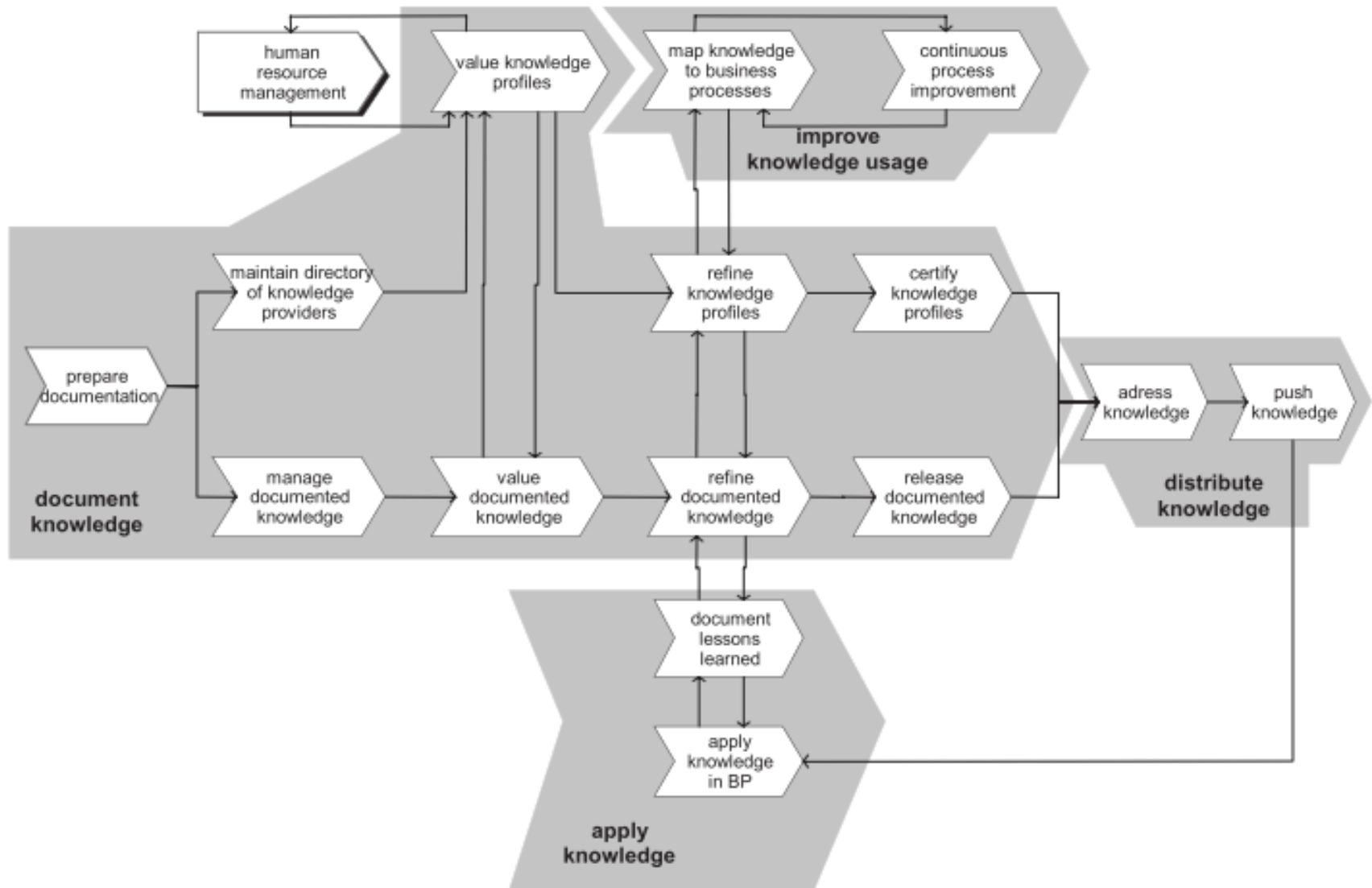
Knowledge Management Tasks

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Source: (Maier, 2004)

Social Software

Supporting processes



Process: Push Knowledge

ID	Category	Process	Description
	KM process	Push Knowledge	Pushing knowledge to relevant audiences (within the organization)
Sub-processes / aspects		<ul style="list-style-type: none"> • Training of Social networking use • Benefit workshop • Good practice reporting • Wiki entry • Notification 	
Objective		<ul style="list-style-type: none"> • To activate knowledge flow by sharing relevant information • Identifying necessary channels to ensure awareness 	
Constraints		<ul style="list-style-type: none"> • Informal / formal networks and communities • Barrier: Lack of conceptual understanding • Barrier: Technology fitness to task • Barrier: Unwillingness to share 	
Method		<ul style="list-style-type: none"> • Awareness building activities / training • Relation of content and skill management • GP reporting 	
Systems		<ul style="list-style-type: none"> • Social networking service (internal) • Wiki (closed) 	
Actors		<ul style="list-style-type: none"> • Employee / staff member / knowledge carrier, IT support, manager 	

Social Software in KM

Enterprise 2.0

Adoption of web software infrastructure

or

Adoption of web software applications

Ajax
Light modules
SOA

Wiki Blogs Tagging
Social networking

Knowledge Management VS Web 2.0

Conceptual (humans are complex systems, utilize multiple channels
“Lighter tools go where larger KM systems often don’t”)

Principles (Web 2.0 principles and concepts very close to KM ones.... Except the
centralization, control)

Functional abilities of tools and applications (Can be
used as is/ creating tools from scratch, Web 2.0 tools have roots in KM tools)

Organizational culture (People used to Web 2.0 tools expect them
to be available)



Table I Comparison of WEB 2.0 and KM principles

<i>WEB 2.0 principle</i>	<i>Knowledge management matching principle</i>
1. WEB as a platform	<p>Technology as a platform</p> <p>The knowledge management world is based on four complementary components: culture, process, technology and content. None is independent. In their book, <i>Working Knowledge</i>, Davenport and Prusak emphasize this principle: "It is important to keep in mind their (technology- m.l.) limitations . . . effective knowledge management cannot take place without extensive behavioral, cultural and organizational change" (Davenport and Prusak, 2000). They state that if an organization invests more than third of a knowledge management project in technology, it stops being a knowledge management project and turns into an IT project (Davenport and Prusak, 2000)</p>
2. Services development	<p>WEB services.</p> <p>WEB services, is the most popular way for sharing data and information, context related, in portal window-lets and in the portal professional desktop</p> <p>In the knowledge management world, ones does not care (for ideological reasons) where the information is stored, rather how it is used by us in various knowledge applications. The portal is a broker, via which services present the data, information and knowledge</p>
3. Active participation of users	<p>Active participation of users.</p> <p>Knowledge management deals with sharing the knowledge and preserving it. The knowledge is based on users, and without them, such activities cannot take place. Active participation of users is a necessity</p> <p>Nevertheless, in knowledge management, the users' participation is encouraged by a central team usually convincing people to add content; in many cases, they will even settle with users only using knowledge (built by several key users). Sharing is controlled. In some cases, content added is moderated before published</p> <p>In WEB 2.0, by comparison, activities are decentralized and people add voluntarily</p>
4. The service improves automatically, the more it is used	<p>Partly correct in knowledge management</p> <p>Of course, if people participate more, there is more content, and richer content, adding value to service offered to the user. But, this cannot be compared to the situation of WEB 2.0 applications. In WEB 2.0 the software itself is based on automatic improvement the more it is used</p>

(Levy 2006)

5. Collective intelligence (the long tail) Knowledge management is based on the collective knowledge of its users. Nonaka and Takeuchi in their book, *The Knowledge Creating Company*, described the success of the Japanese companies in developing knowledge, based on the Japanese sharing culture which builds the collective organizational new knowledge (Nonaka and Takeuchi, 1995)
A major difference between the two has to do with dealing with the LONG TAIL concept. WEB 2.0 sanctifies it, knowledge management ignores it. Knowledge management solutions are based, in many cases, on a mass of 20 percent of the users (content experts), contributing 80 percent of the knowledge
6. Content as the core Content is one of the four components on which knowledge management stands: culture, processes, technology and content. It does not stand for itself, yet it is part of the core, and no knowledge management solution can take place without a rich content segment
A decade ago, when knowledge management was initiated, it was not yet understood that content drives knowledge management. Books and articles written in the 1990s did not emphasize on content. Over time the importance of content was recognized. Organizing content, filtering and processing it, became a central issue, bringing search engines and navigation issues to front stage
7. The perpetual beta At first glance the concept of perpetual beta may seem irrelevant to knowledge management
Knowledge management does not deal with technology, but knowledge management uses technology. Working with a perpetual beta, can serve knowledge management a great deal. One of the knowledge management challenges has to do with understanding this potential. Organizations can design communities of practice, portals and knowledge sites with care and thought, yet only after launch and use, do people realize what more can be added in. Potential is learnt via use. Changes are required frequently, adjusting the technology to the people using it as they and their needs mature. The perpetual beta is certainly a great enabler
8. Rich user experience development via small modules Irrelevant to knowledge management

(Levy 2006)

Table II Comparison of WEB 2.0 and KM tools and attributes

<i>WEB 2.0 component</i>	<i>Attribute</i>	<i>Relevant attribute in knowledge management</i>
WIKI	Structured content pages	Web content management (WCM) tools. These tools are part of the knowledge management toolbox and are used for rich content sites (also inside the organization). Known software tools include among others CMS, Stellent and Interwoven.
Blog	Personal diary, including access to the diary as a whole (not only standalone pages for each date). Enables fast access to new pages, with easy access to history	Can be implemented using a variety of knowledge management tools, whether Enterprise Content Management (ECM) tools or portal style tools The solution provided by Blogs reminds one of another knowledge management tool (physical, not virtual): Storytelling
		Tagging (folksonomy)
		Social computing
RSS	Alerts regarding new content items and changes among existing ones, by categories	Alerts are a known and well used mechanism in Enterprise Content Management tools as well as in Portals. Search engines enable running fixed searched, giving the same results as alerts Another tool informing users about alerts is a common web-let of "what's new" in almost every organizational and professional portal

Everyone can subjectively tag his or her own information

Tags are provided in several tools:
In portals – via navigation menus;
In search engines – via filtering attributes;
In ECM tools – by both of the above
Yet, all these are built as part of taxonomy, either organizational or departmental, trying to be objective (inside the group) as far as possible

Communities of practice

Building social communities over the net

(Levy 2006)



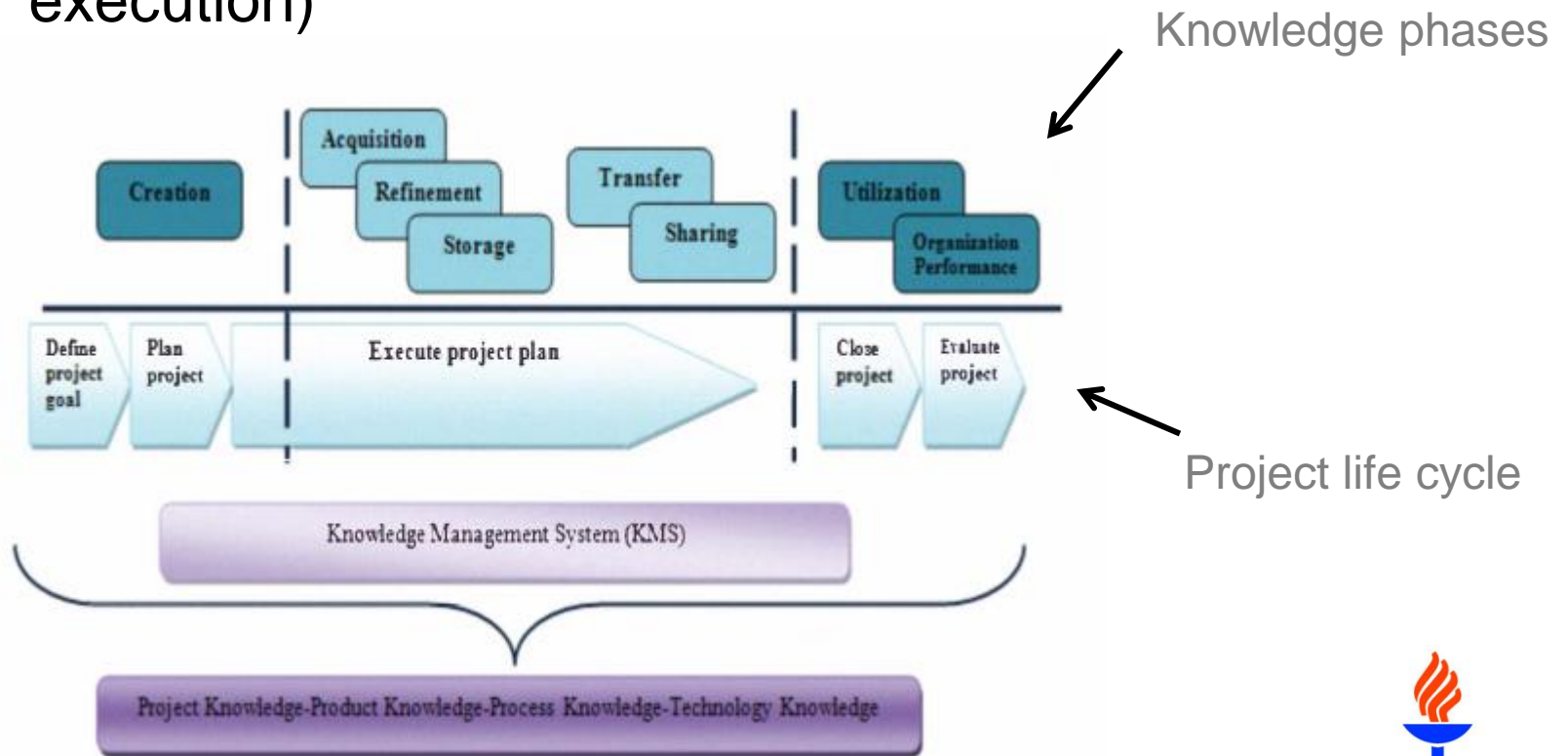
From barriers to decisions

- Utilizing barrier-knowledge for different purposes
 - KM projects
 - KM activities in general
 - Choosing/evaluating technologies for KM
 - Designing and developing technologies
- Barrier-knowledge available for KM in general, for communication/collaboration, Global aspects, technology, content/information etc.
- Who takes actions on these? Roles and responsibilities?



Identifying and utilizing barrier-knowledge (technology, global KM)

- Crucial in KM projects (in requirements analysis to execution)

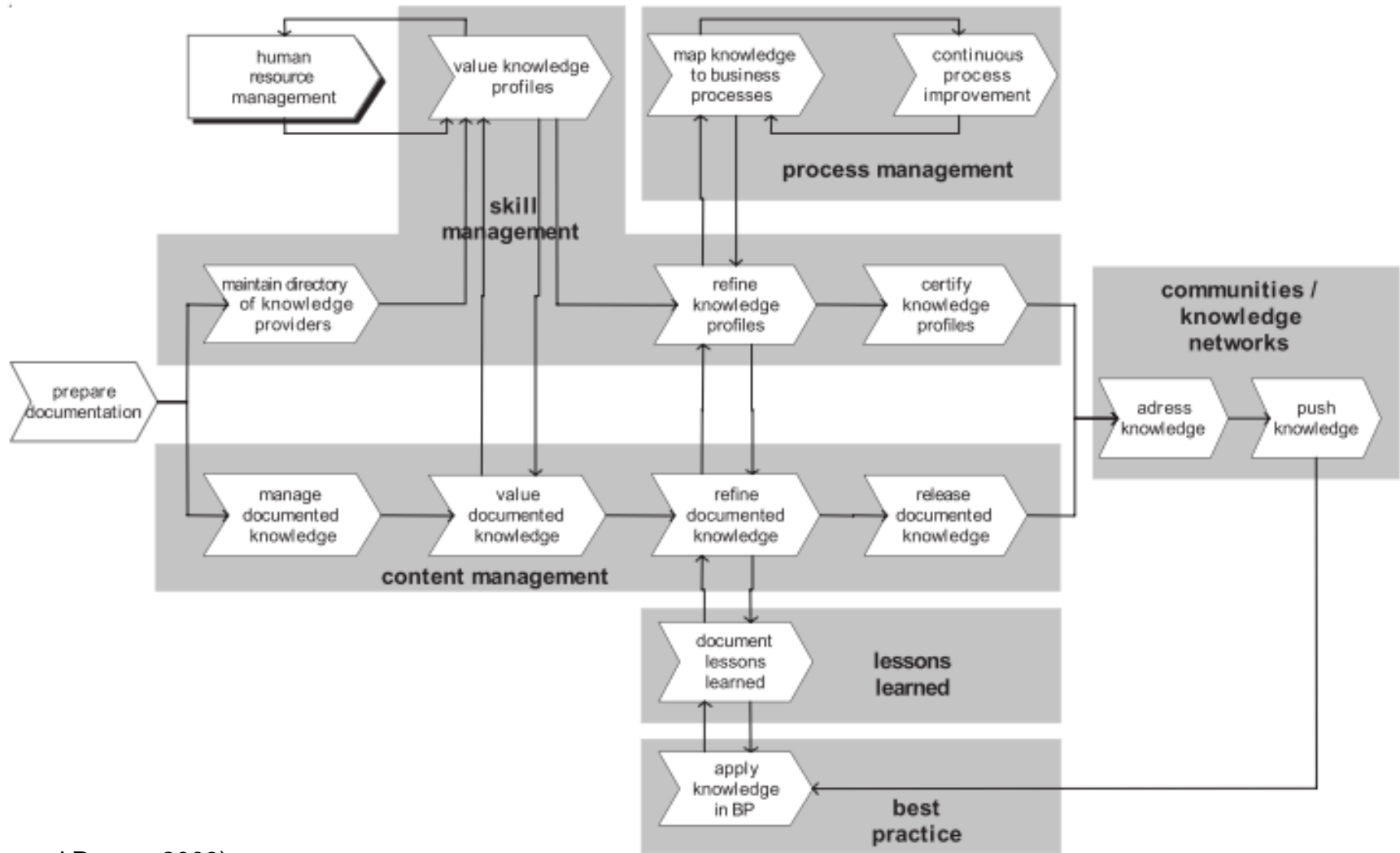


Knowledge phases carried out according to project life cycle (Beiryaei and Vaghefi 2010)



Barrier-knowledge

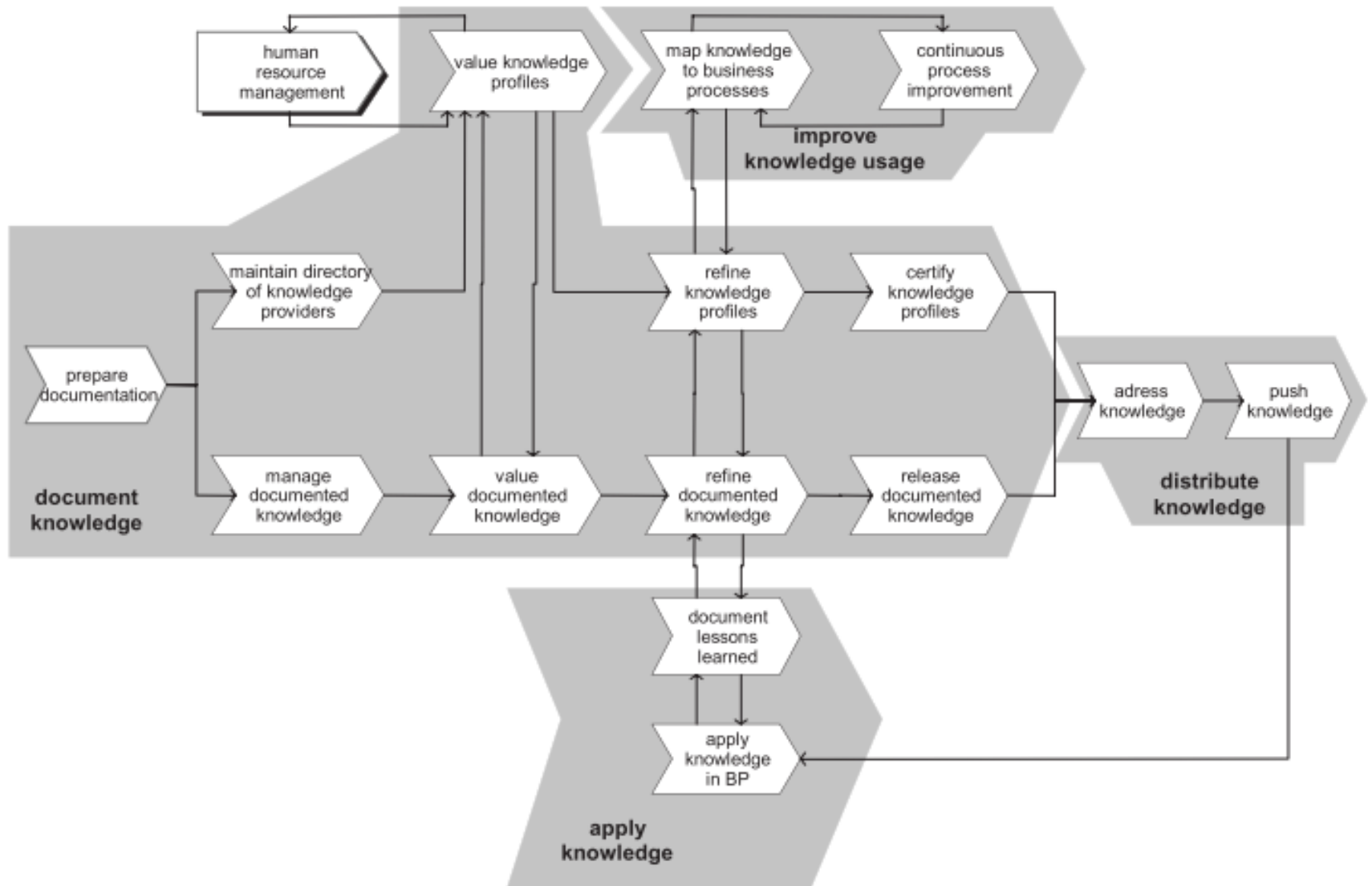
KM activities & instruments



(Maier and Remus 2003)

Barrier-knowledge

Processes



Barrier-knowledge

Knowledge management starter

- Potential case for recognizing and analyzing barriers
- Initiation of KM in an organization, potentiality, awareness, barriers and knowledge gaps



Social Software

“Social Software enables an interactive way of collaboration, managing content and connecting to online networks with other people. It supports the desire of users to be pulled into groups in order to achieve their personal goals”

(Wever, Mechant, Veevaete & Hauttekeete 2007)



Social Software in global settings

- ▣ Collaboration
- ▣ Awareness
- ▣ Documentation
- ▣ Customer engagement
- ▣ Interaction with stakeholders
- ▣ ...
- ▣ ...



Enterprise 2.0



**But what does
really improve our
work and global
operations?**

Global IS barriers

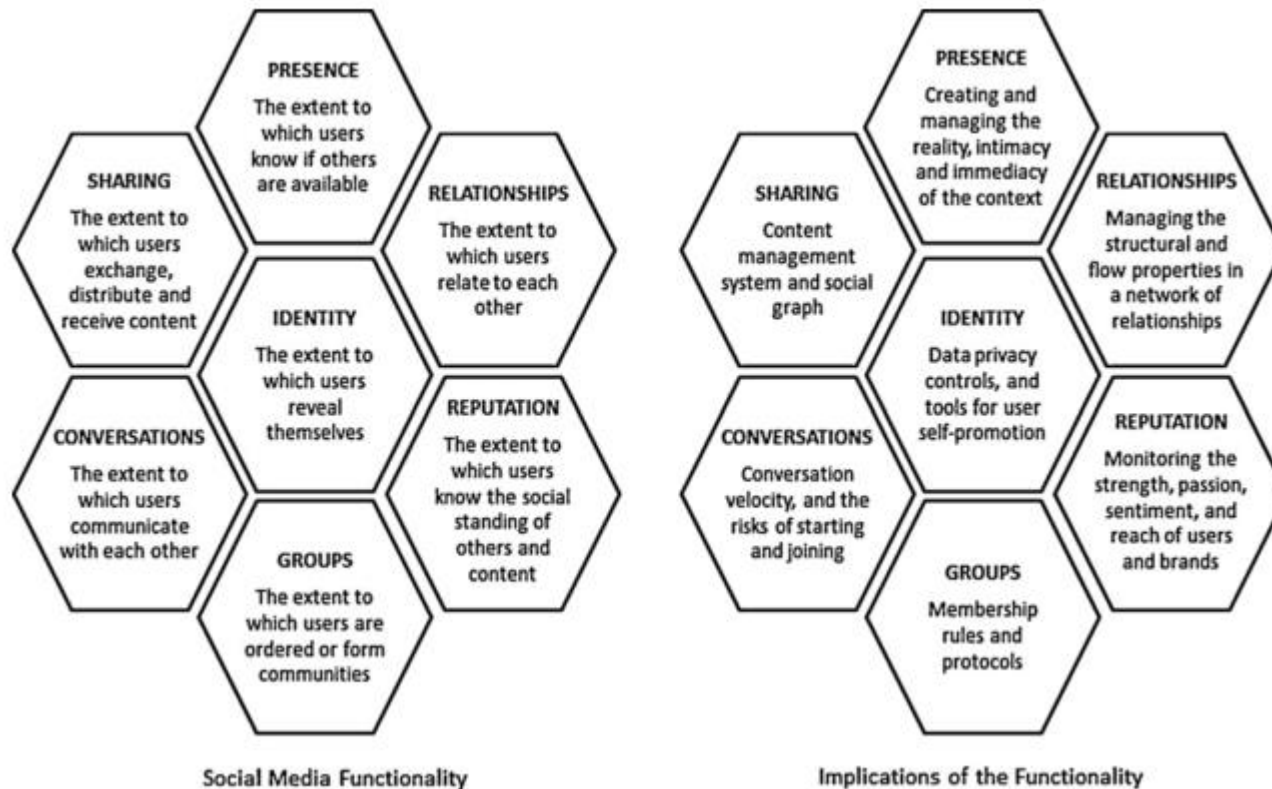
Barrier	Description
<i>Cultural and language distance</i>	Do the collaborators share the same language, skills as well as cultural norms, corporate culture, interpretations etc. Most occurred barrier in Noll <i>et al</i> , (2010) analysis on collaboration barriers in GSD.
<i>Geographical distance</i>	Distributed collaboration (within a country or cross-border). Third most occurred barrier in Noll <i>et al</i> , (2010) analysis on collaboration barriers in GSD.
<i>Temporal distance</i>	Distributed collaboration (Time-zone differences). Second most occurred barrier in Noll <i>et al</i> , (2010) analysis on collaboration barriers in GSD.
<i>Lack of trust</i>	Geographic, temporal, and cultural distance have a significant impact on trust among globally distributed team members (Noll <i>et al</i> , 2010)
<i>Infrastructure</i>	In distributed collaboration teams and employees must rely on technology to support the communication (Noll <i>et al</i> , 2010)



Social Media

Social media employ mobile and web-based technologies to create highly interactive platforms via which individuals and communities share, co-create, discuss, and modify user-generated content.

Figure 1. The honeycomb of social media



Kietzmann et al. 2011



Social Software in KM activities and tasks

- Not all tools are meant to support all knowledge steps/tasks

Identifying

Co YAHOO! GROUPS identification, collaboration

Annotation

Sharing, awarene

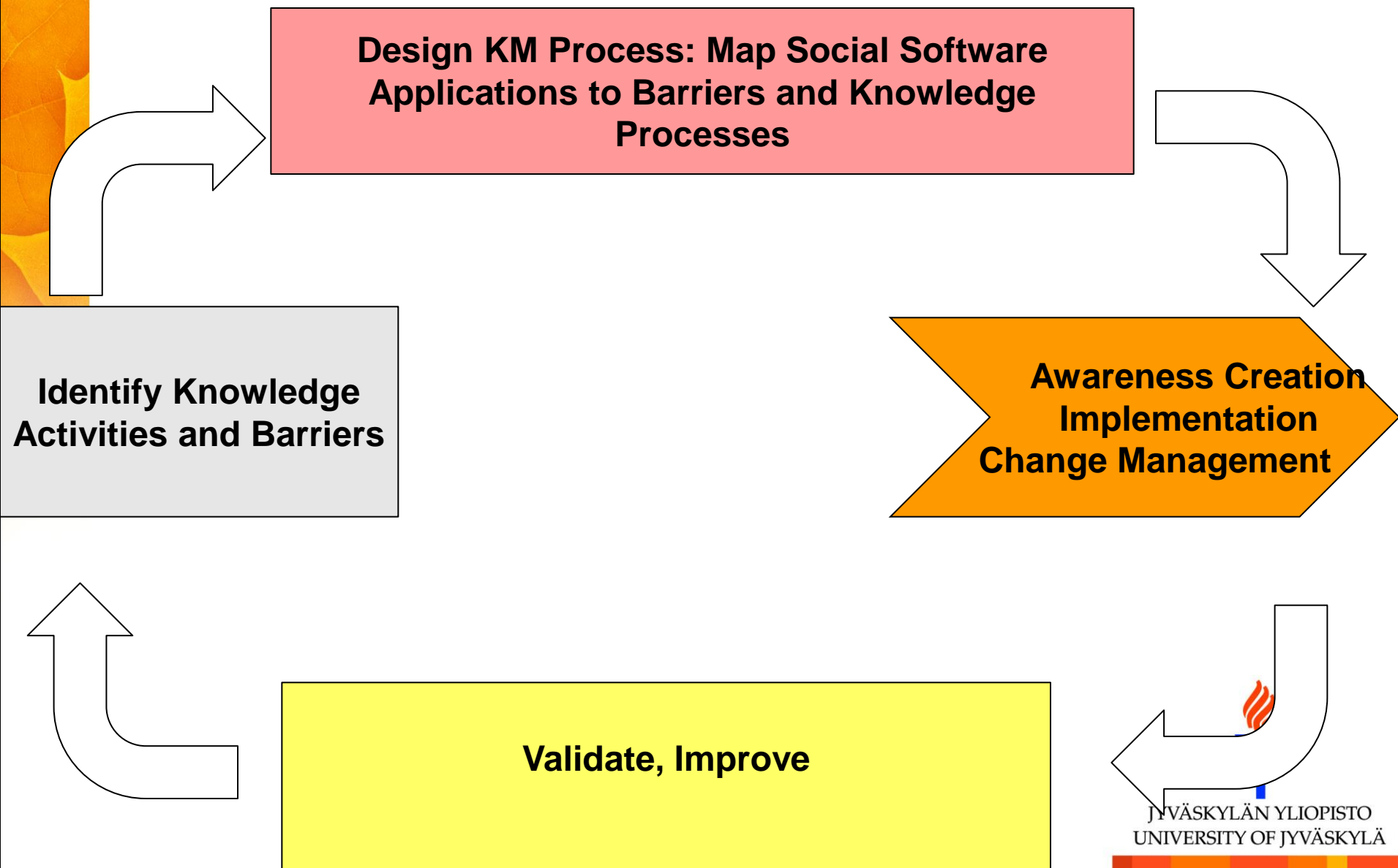


Knowledge Management Tasks

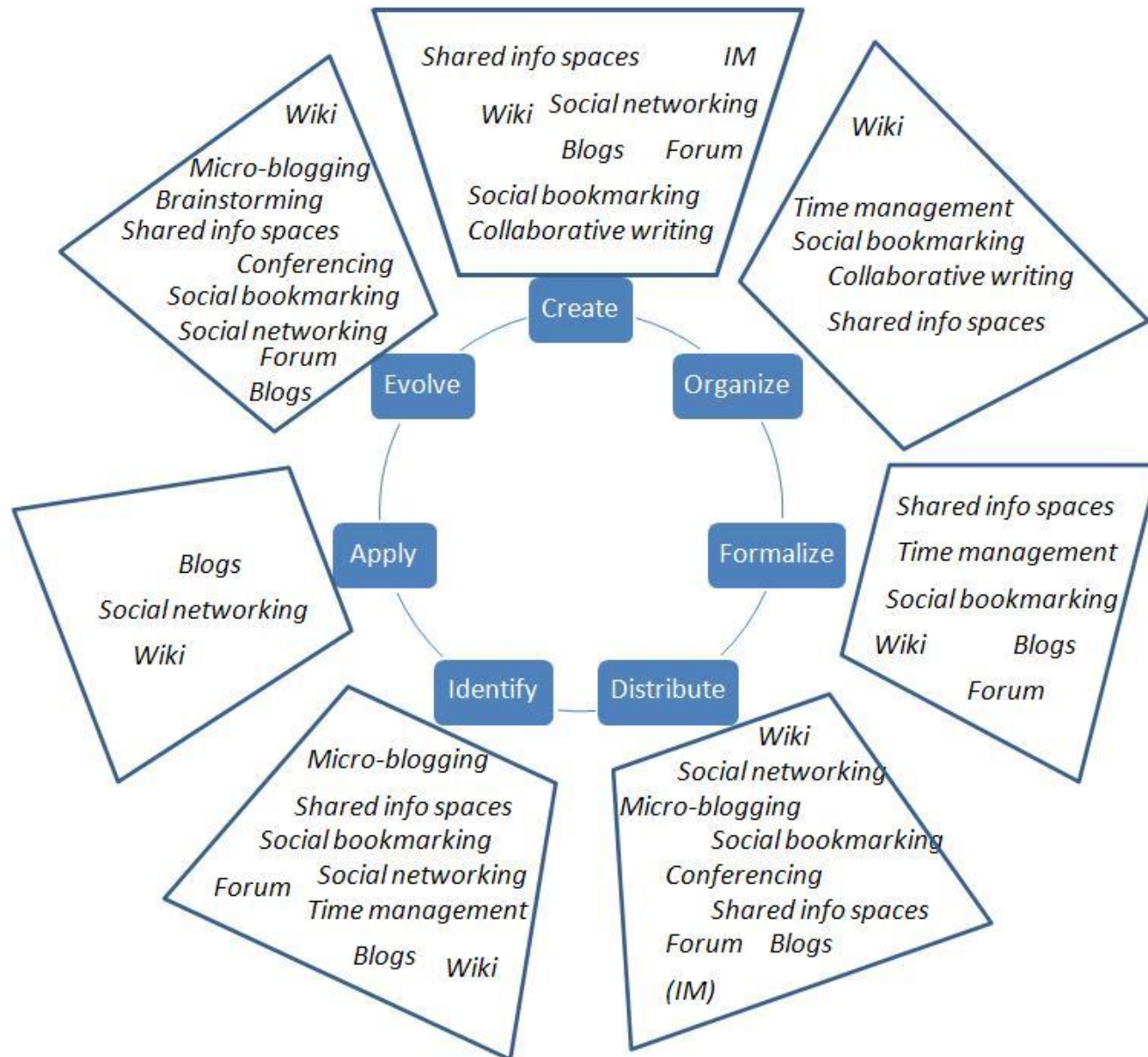
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Source: (Maier, 2004)

Some simple steps to match barriers, activities/processes and social software tools...



Knowledge Activities and Tools



From barriers to tools...

Tool category	Purpose	Key End user Functionality	KM Activities & processes	Main Barriers
Blogging tools	Communication	<ul style="list-style-type: none"> -Post writings -Comment on writings -Share writing (external/internal) -Evaluate writings -Extend with plugins / integrate to other systems -RSS (alerts) 	<ul style="list-style-type: none"> -Active & passive exchange of professional information (Fiedler & Welpe 2011). -Acquire / capture / create, Apply/share/transfer. Incentive for (Reuse/innovate/evolve/transform), alerting (Avram 2006) -Knowledge Evolution (Zheng & Zheng 2010) -Idea-generation and problem-solving (Zhang 2010) -Externalization, combination (Chatti et al, 2007) -Creation, codification, sharing, collaboration, organization (Razmerita 2009) 	<p><i>Organizational, Cultural, Social</i></p> <p>Organizational (Zhang 2010), Fitness to task (Thom-Santelli 2010) Cognitive (Kim 2008)</p>
Micro-blogging tools	Connection awareness. /	<ul style="list-style-type: none"> -Post micro writings -Comment / share / evaluate micro writings -Share material / Information via micro writings -Manage profile (notifications (RSS), privacy) -Follow other users -Send direct messages 	<ul style="list-style-type: none"> -Retrieve knowledge for use (Zheng & Zheng 2010), -Enhancing information sharing (easy to identify information updates), building common ground, sustaining connectedness among colleagues, supporting informal communication (Zhao & Rosson 2009) -Alerting, informing users of changes (Levy 2009; Avram 2006) -Socialization, combination (Chatti et al, 2007) 	<p><i>Organizational, Social</i></p> <p>Fitness to task (Thom-Santelli 2010), Social (trust) (Zhao & Rosson 2009)</p>



From barriers to tools...

<p>Social bookmarking tools</p>	<p>Identification, collaboration, sharing</p>	<ul style="list-style-type: none"> -Save links / bookmarks for personal/ community use / sharing (social tagging) -Comment on pages / bookmarks / links -Include saving options for browser or to mobile device -Follow users activities -Include feeds (RSS) / notifications 	<ul style="list-style-type: none"> -Scan/Map, Acquire/capture/create (Avram 2006), -Collaborative building of a knowledge structure (Cayzer 2004) -Alerting, informing users of changes (Levy 2009; Avram 2006) -Combination (Chatti et al, 2007) -Sharing, collaboration, organization (Razmerita 2009) 	<p><i>Organizational, Social</i></p> <p>Conceptual / fitness to task / knowledge sharing (why to use, what are the benefits) (Millen et al, 2006)</p>
<p>Wiki</p>	<p>Collaboration, sharing, identification, communication.</p>	<ul style="list-style-type: none"> -Collaborative page writing / editing -Cross-linking pages/ concepts/ information -Managing page versioning -Commenting on pages -Notifications (RSS) -Wide extension and integration possibilities 	<ul style="list-style-type: none"> -Active & passive exchange of professional information (Fiedler & Welpel 2011) -Scan/Map, Package / codification / representation, Apply / share / transfer, Reuse / innovate / evolve / transform, alert (Avram 2006) -Idea-generation and problem-solving (Zhang 2010) -Externalization, combination (Chatti et al, 2007) -Creation, codification, sharing, collaboration, organization (Razmerita 2009) 	<p><i>Technical, Social</i></p> <p>Social (Cowan et al, 2009), Cognitive (Cowan et al, 2009), Skills, Usability (Kear et al, 2010; Cowan et al, 2009)</p>

Summary

- Many tools for different purposes
- Clearly defined process
 - Start from barriers and activities
 - Select tool candidates for each barrier / activity
 - Evaluate whether all project members can / would use those
 - Make a clear selection (e.g. maximum of 3-5 tools) towards the process goals
 - Validate and monitor the use
- First step towards better understand of social software in global settings
- Further development towards a decision support model



Support in selection of technologies

- Recognizing the barriers crucial for decision process
 - Differences in usage of Social Software (networking, collaborative work etc.)
- Criteria to evaluate against must be clear (needs)
 - How do you identify
 - Preferences, interoperability, security etc.
- Reacting vs. proacting
 - Changing traditions and tools after the damage is done?
 - Clear conceptual understanding before technologies are introduced to the organization?

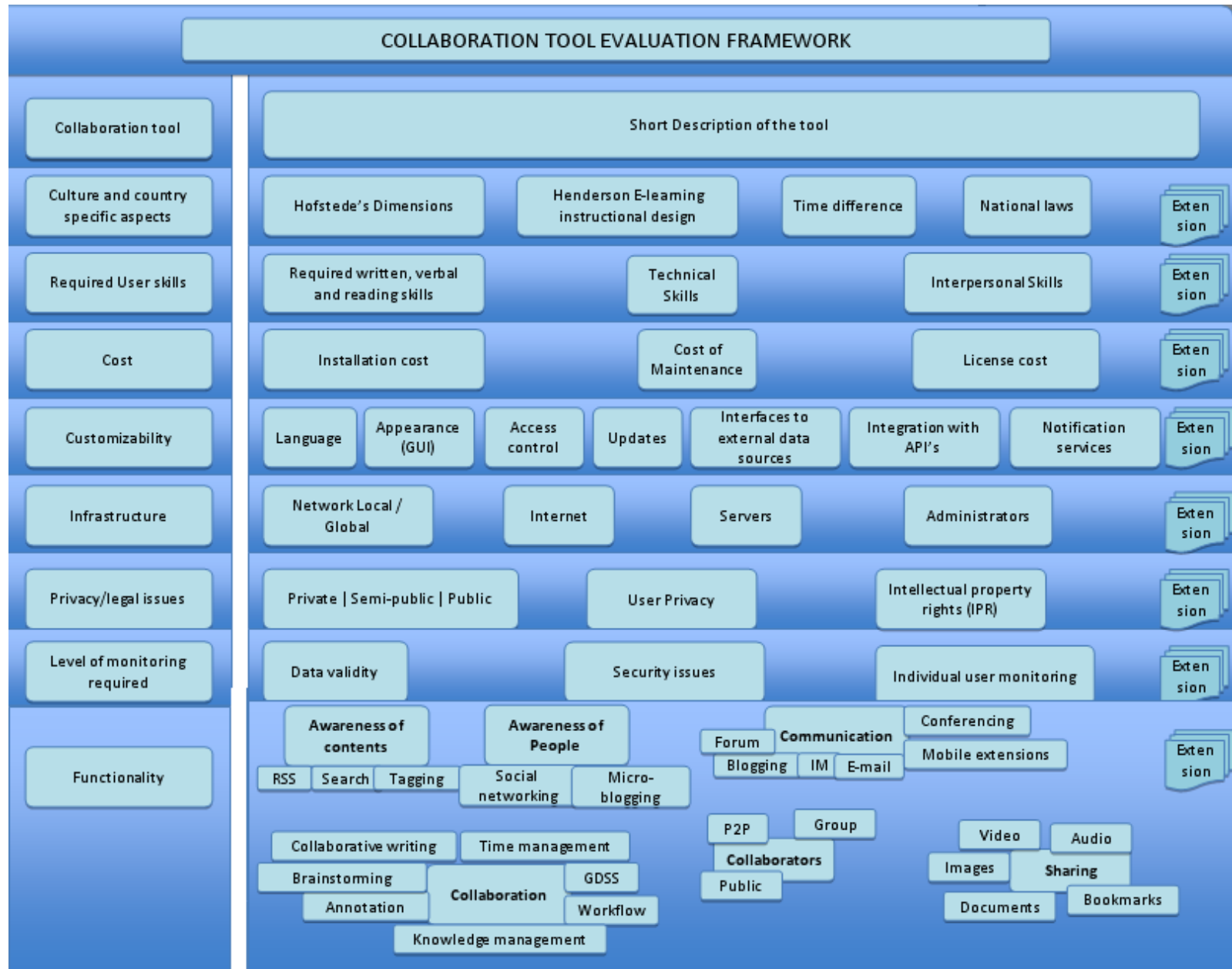


Evaluating technologies

- Different tools, different criteria
- Context-dependent
- Approaches vary from formal to informal
 - Applied by an expert, consultant
 - Applied by IT department, manager, assigned person/ group



Evaluation framework 1/2



Evaluation framework 2/2

- Evaluation (step 2) - fitness of the functionality to the processes
- the functionality of tool is compared to the processes

	Awareness of contents	Awareness of people	Communication	Collaboration	Collaborators	Sharing
Processes						

The criteria for the reasoning consists of four options (tool is necessary for the process (++)), tool is recommended but not crucial (+), tool is not relevant but possible (-) or tool is not usable in the certain process (--)) that show the possibility to use the tool in that setting.



Process improvement

ID	Category	Process	Description
	KM process	Continuous process improvement	Selection of Social Software for KM support
Sub-processes / aspects		<ul style="list-style-type: none"> • Evaluation of technologies • Needs analysis • State of the art analysis 	
Objective		<ul style="list-style-type: none"> • complement or replace existing ICT support for KM with Social Software tools 	
Constraints		<ul style="list-style-type: none"> • Organizational culture, existing practices • Barriers: Conceptual understanding, Preferences, fitness to task, privacy/ security 	
Method		<ul style="list-style-type: none"> • Requirements gathering • External consulting support 	
Systems		<ul style="list-style-type: none"> • Decision support systems • Social Software 	
Actors		<ul style="list-style-type: none"> • managers, employees, consultants, IT support (infrastructure, interoperability) 	

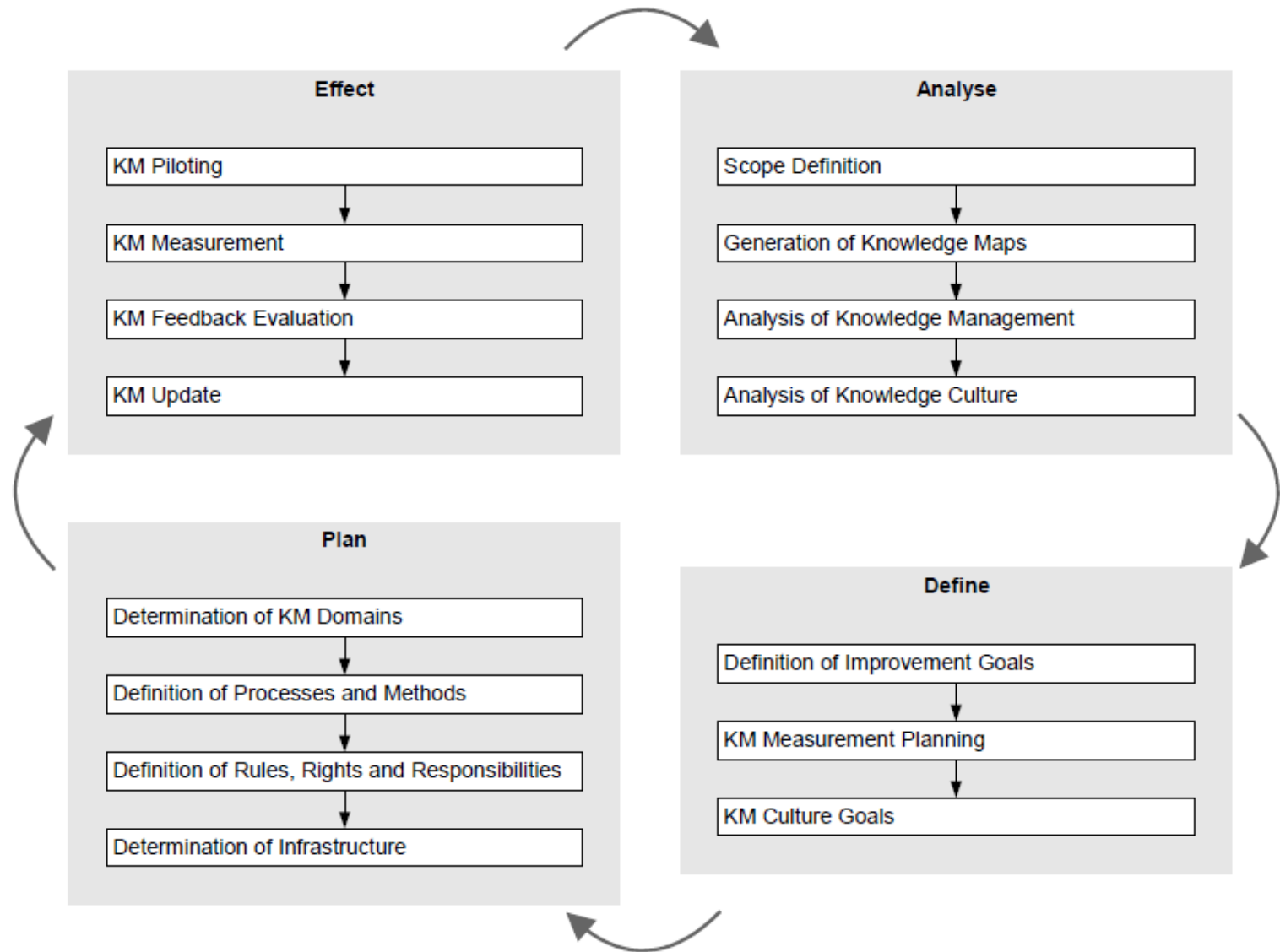
Creating technologies

- What are the needs? Could existing tools be utilized? Any software packages (open source) available? How to integrate to existing systems...
- How to ensure that users are part of the design process?
- Key users, preferences, cultural distance

*Wide variety of aspects /influences to be taken in to account.
Recognizing barriers crucial for the analysis*



Development as a part of planning



Kucza (2001)

Process: Designing technology

ID	Category	Process	Description
	KM process /Determination of infrastructure	Design and development	Developing Social Software for KM support
	Sub-processes / aspects	<ul style="list-style-type: none"> • Needs /requirements analysis • Implementation • Testing • Evaluation 	
	Objective	<ul style="list-style-type: none"> • Developing Social Software for KM support 	
	Constraints	<ul style="list-style-type: none"> • Which designing method to use • How to ensure organizational take up • Barriers: Conceptual, fitness to task, cultural distance, information flows... 	
	Method	<ul style="list-style-type: none"> • Planning sessions • Negotiation talks with staff / managers 	
	Systems	<ul style="list-style-type: none"> • Workflow, task management systems • Social Software 	
	Actors	<ul style="list-style-type: none"> • project leader, manager, employees, IT support 	

Thank You



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