

Wissensstrategie – Wissensbilanz – Maßnahmen: Wie führt der Weg zur erfolgreichen Umsetzung?

Wissensbilanz – Made in Germany. Wissen als Chance für den Mittelstand
10. November 2005, BITKOM e.V., Frankfurt am Main

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Agenda

- Wissensstrategie – Wissensbilanz – Wissensmanagement:
Relevante Beispiele zum Stand in der Siemens AG
- Der allgemeine Gesamtprozess: Definition und Umsetzung einer Wissensstrategie / Strategie für das Intellektuelle Vermögen
- Die inhaltliche Wissensdimension im strategischen Vorgehen:
Beispiel *Wissensstrategieprozess*
- Vergleich *Wissensstrategieprozess* und Wissensbilanz-Methode:
Alternative oder Ergänzung?



Siemens Business Areas

- Communications
- Automation & Control
- Power
- Transportation
- Medical
- Lightning
- Financing & Real Estate

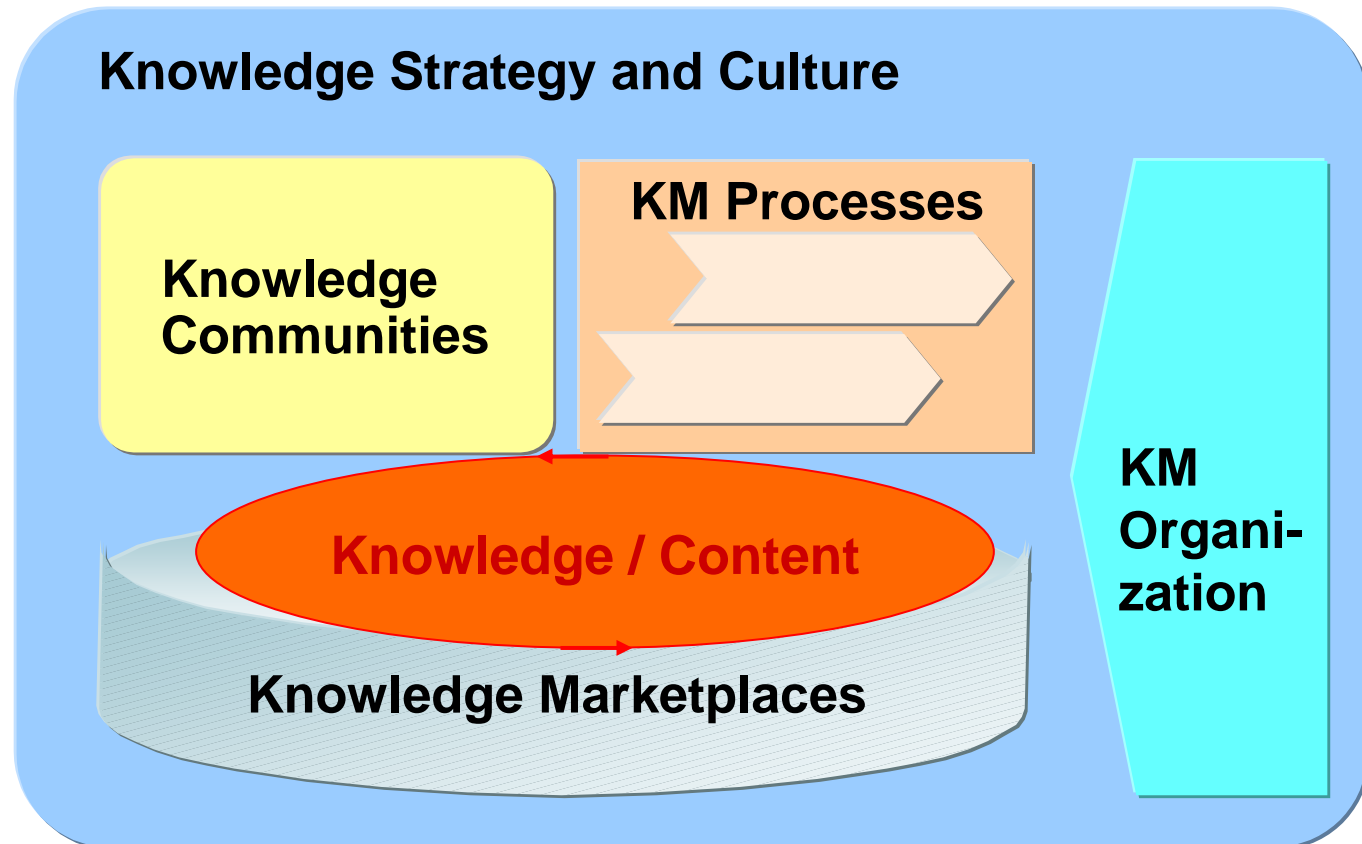
- no explicit Intellectual Capital Statement yet
- piloting the “Knowledge / Intellectual Capital Strategy Process”

...a very large knowledge network
Knowledge Management (KM)

- Community of Practice since 1997, 15/30/300 members
- Initiatives in Siemens Groups & corporate harmonization
- Benchmarking winner
- MAKE Survey - Most Admired K. Enterprise: top rankings since '99

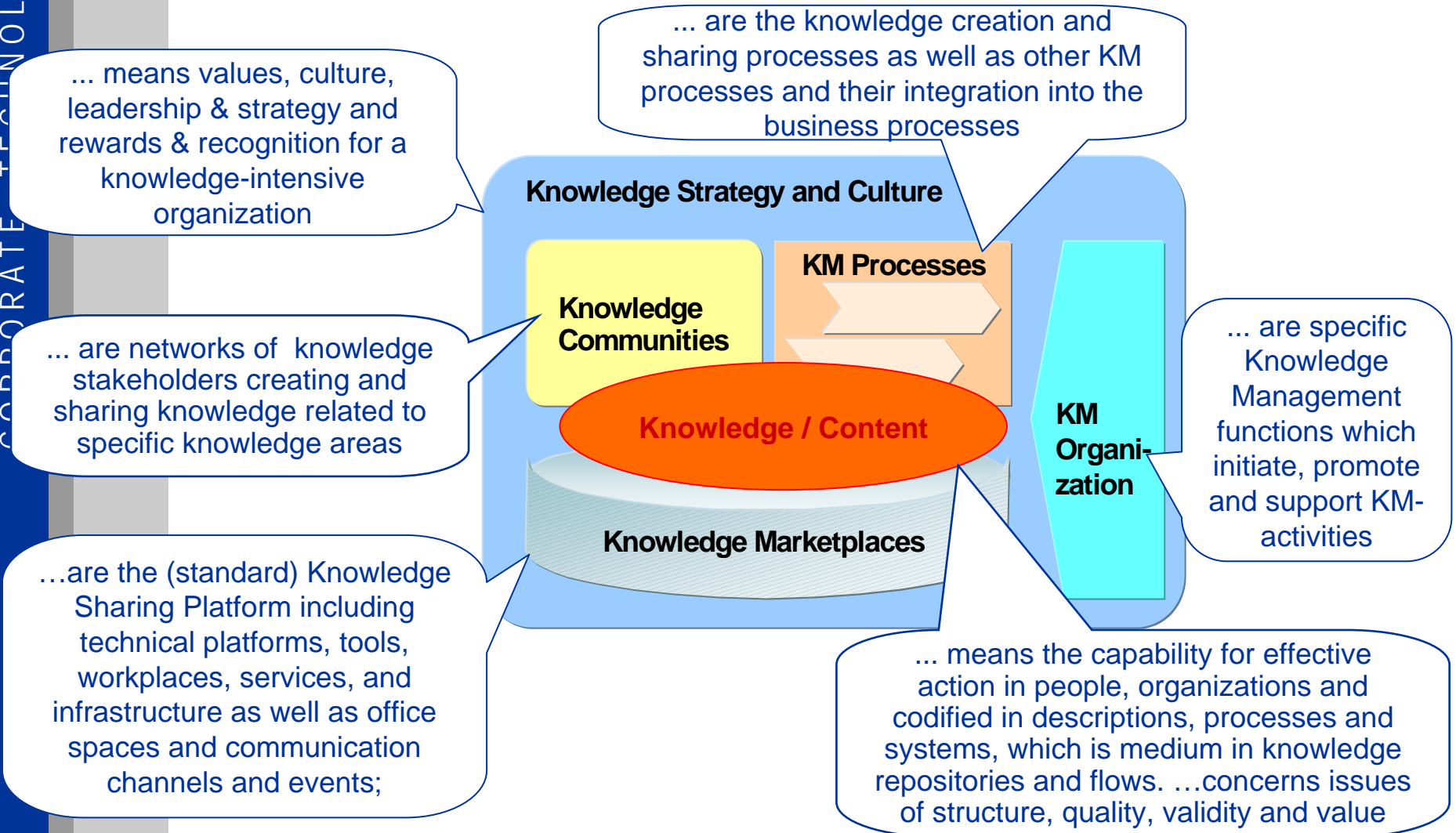
KM Systems: Socio-technical System Architecture

The six major perspectives of successful KM solutions



Socio-technical KM solution System Architecture in detail

CORPORATE TECHNOLOGY



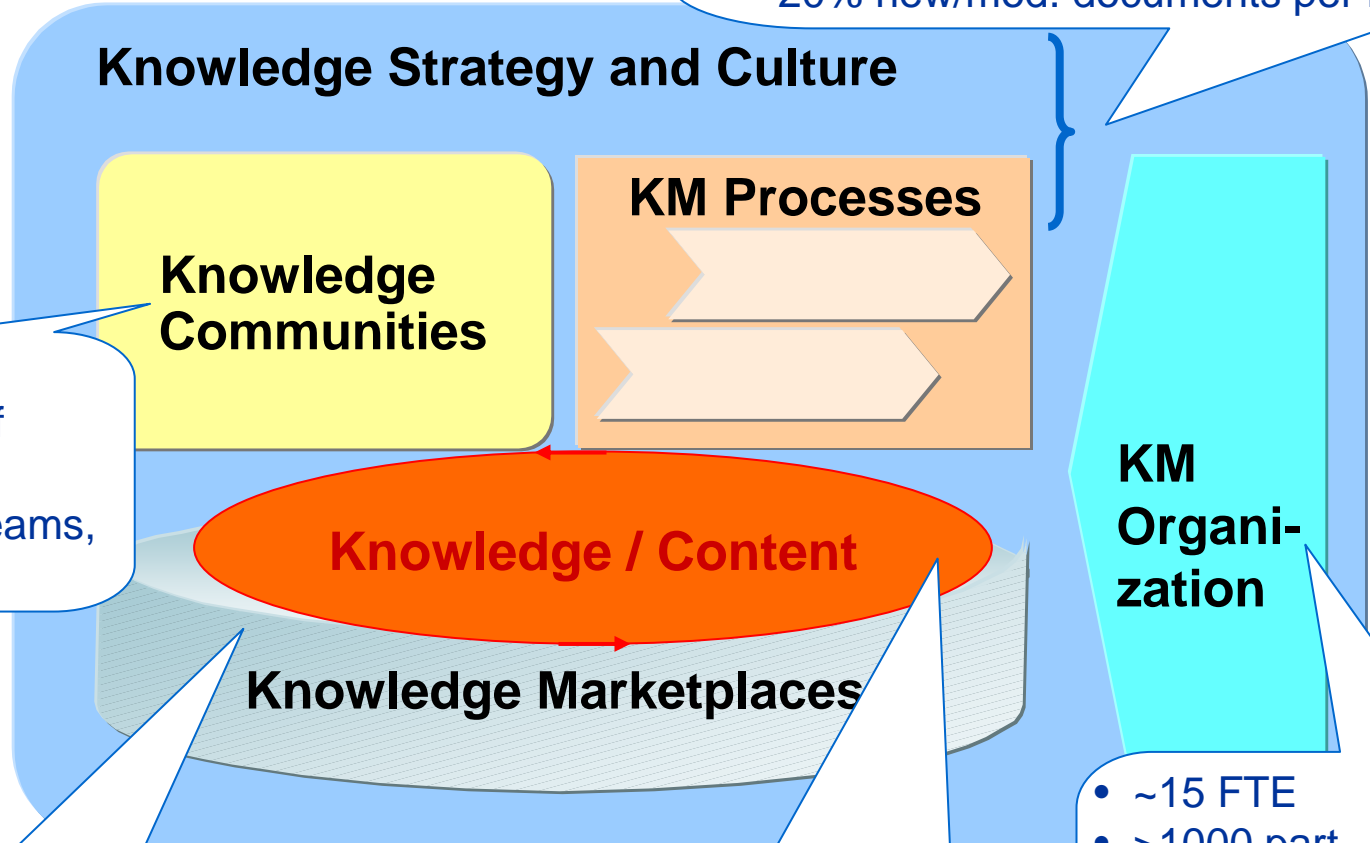
KM systems

Average usage indicators

Estimation from KM key player group reports
Summer 2005 (2-6 groups)

- ~80% of Urgent Requests responded in less than 2 days in many CoP's
- ~30% document fetches & downloads per month
- ~20% new/mod. documents per month

DATE TECHNOLOGY



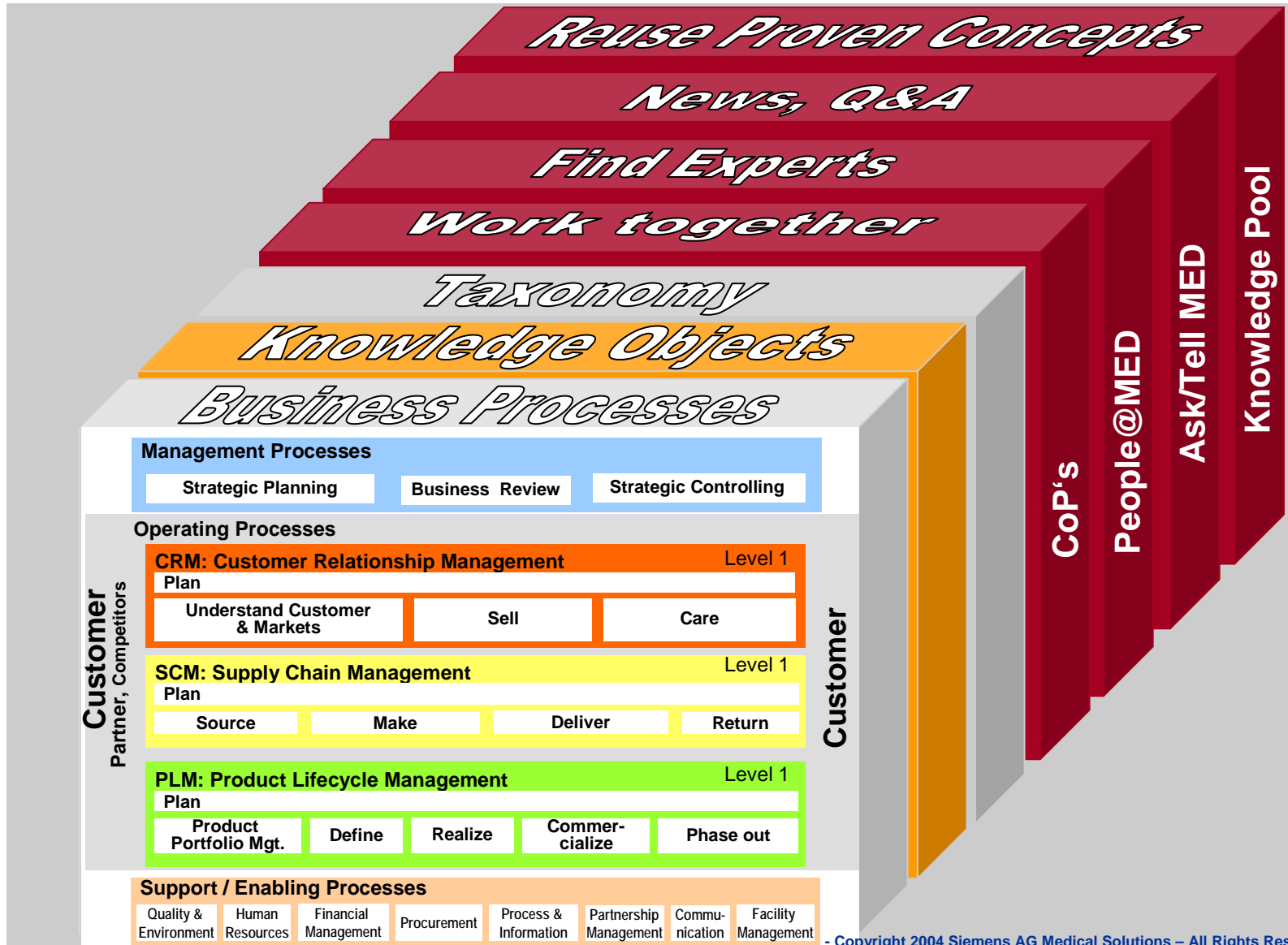
- >2200 active Communities of Practice (CoP)
- not to count: teams, org. units, ...

- >85,000 platform users (Opentext Livelink)
- >3500 other platforms

- individual and organizational proficiencies ...
- millions of documents of codified knowledge (>1500 GB)

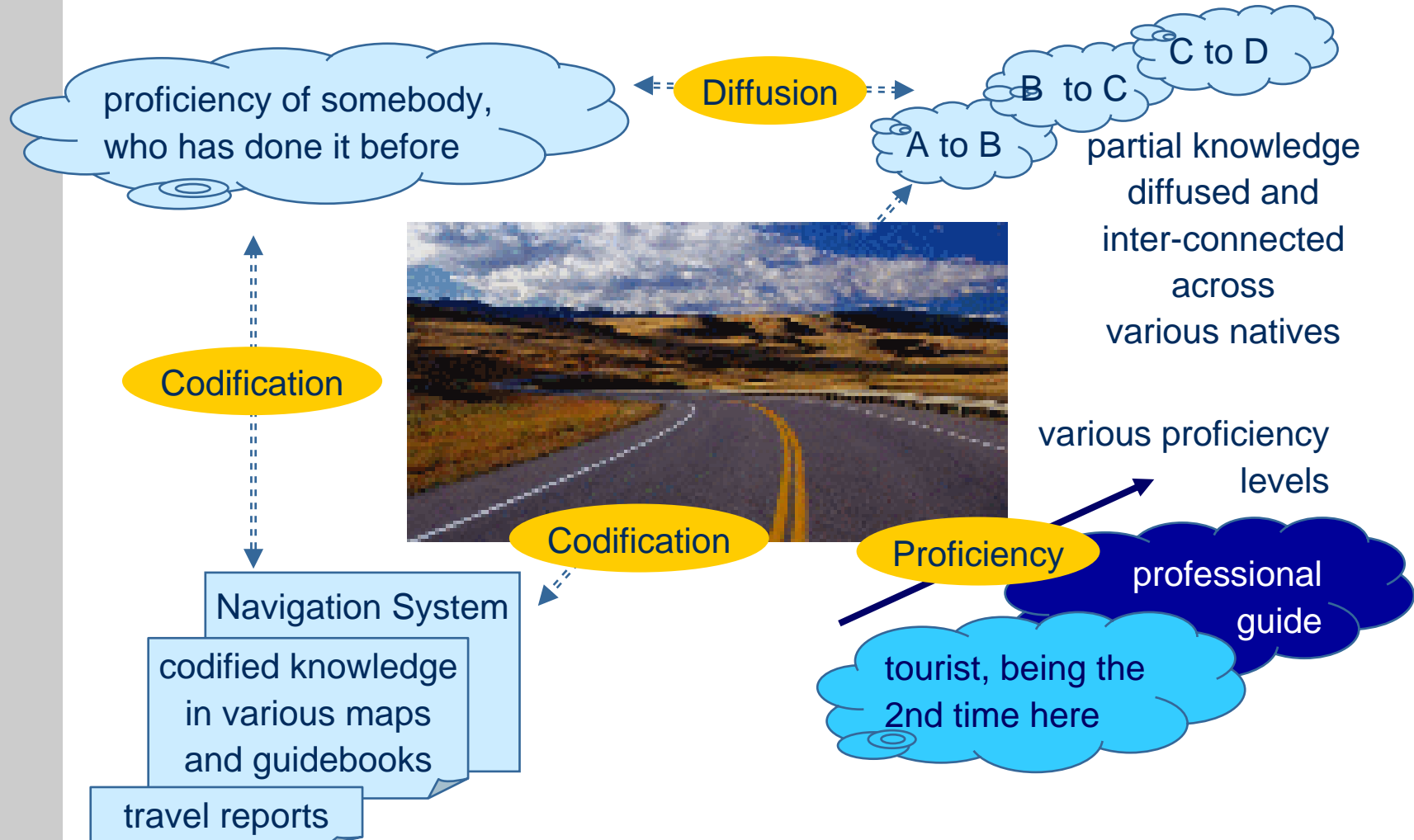
- ~15 FTE
- >1000 part-time KM drivers
- ~20 KM consultants
- CoP KM and CoP InnoM

Example: Siemens MED Knowledge Backbone



Knowledge has several dimensions

Example - Knowledge to find your way from A to D is in the world in various qualities



Knowledge Definition: Capability for effective Action

- **in humans**
 - education
 - experience
 - personal capabilities
- **in organizations**
 - collective knowledge
 - inter-connected knowledge
- **in information (described knowledge)**
 - in documents
 - in information systems
 - in artefacts

Object and its model/description:

Tangibles,
e.g. tree versus
picture of a tree

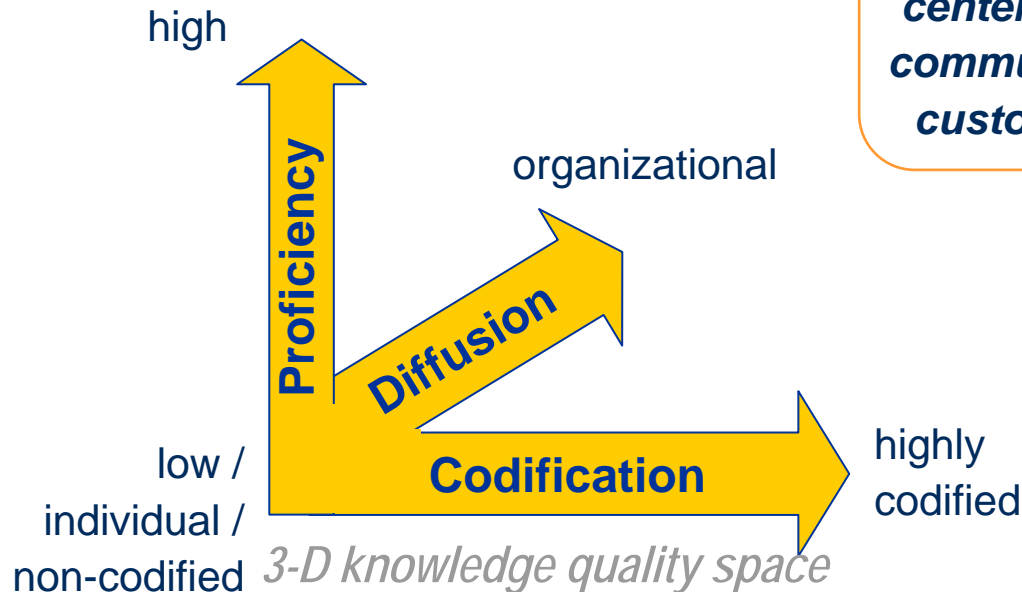
Intangibles,
e.g. knowledge ~ model for
effective action
versus knowledge
model/description

Knowledge Definition: Capability for effective Action

Knowledge Quality and Knowledge Carriers

individuals ...

*... knowledge networks,
e.g. process teams,
centers of competence,
communities of practice,
customer/user groups*



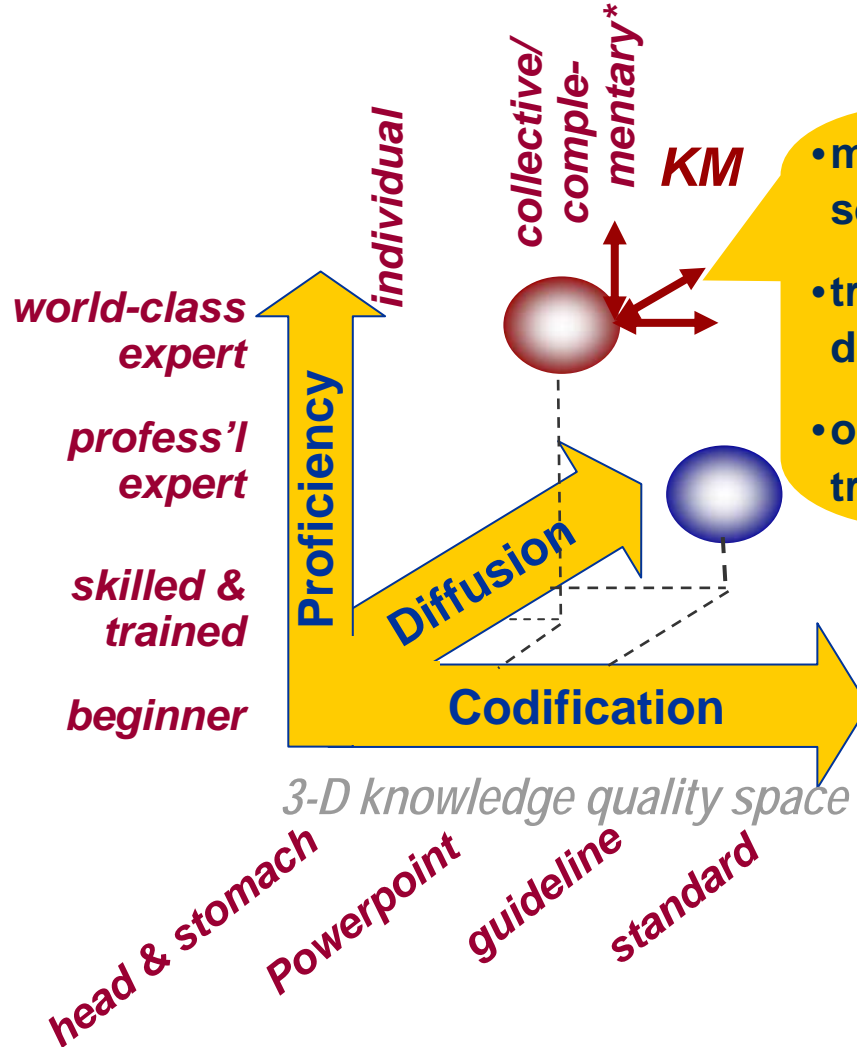
*... information,
e.g. in documents,
workflows,
systems, artefacts*

Sources: Max Boisot, CIBIT, Siemens

*

The value-add from KM

Orchestrated Knowledge Quality alignment/improvement for knowledge assets in three dimensions (with simplified metrics)

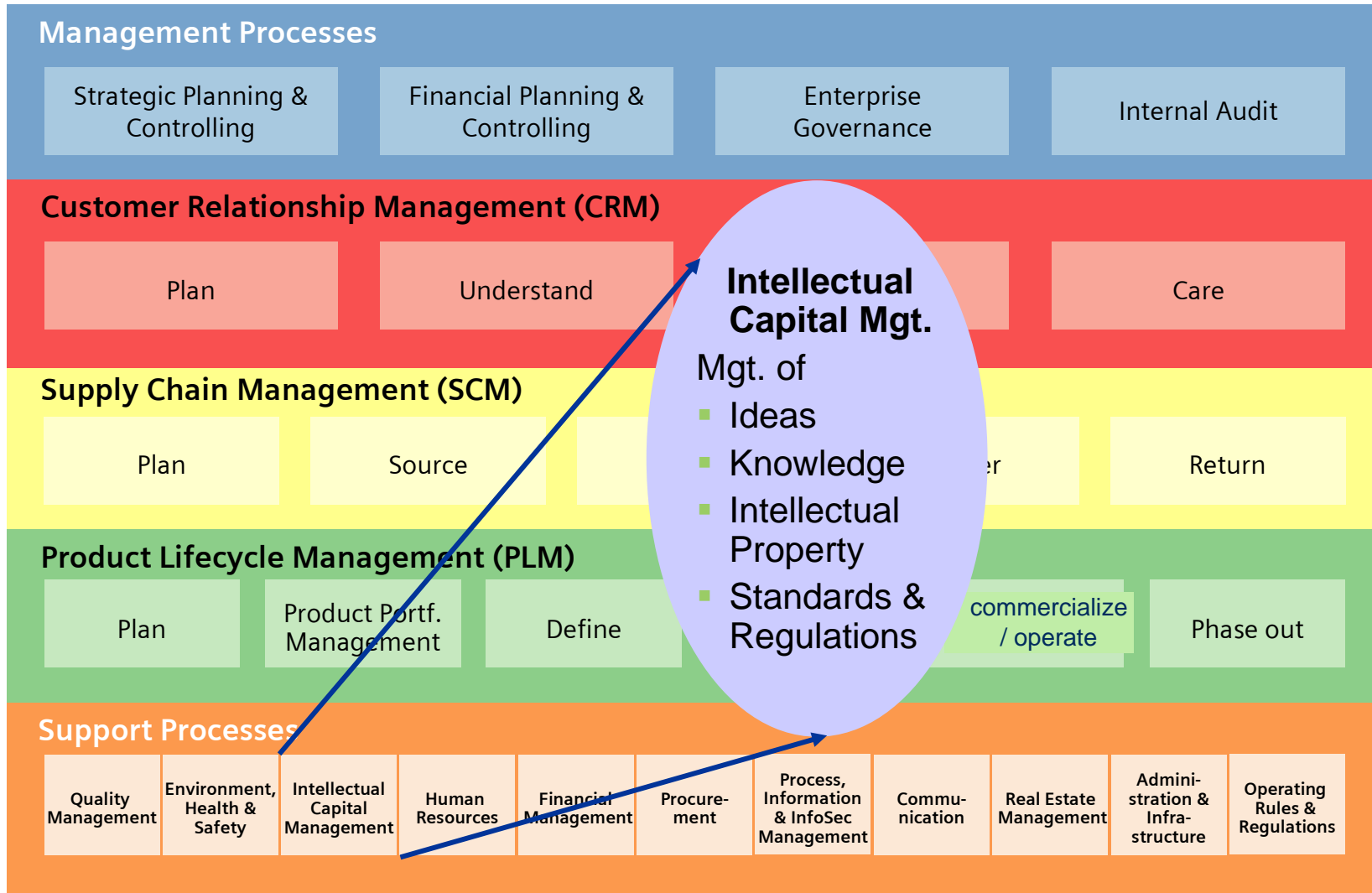


- multi-dimensional powerful KM solutions leveraging synergies
- trade-off options optimizing in all dimensions
- orchestrated proceeding based on a trans-disciplinary approach

**but highly connected and networking*

Sources: Max Boisot, CIBIT, Siemens

Siemens Reference Process House V 3.0 and the support process Intellectual Capital Management (ICapM)



Intellectual Capital Mgt. : Core Processes

ICapM core processes act on the organization's knowledge assets*

input:

"raw material" for Knowledge Assets

Knowledge Assets

Knowledge Assets

Knowledge Assets



output:

new K. Assets

K. Assets improved/aligned in Knowledge Quality

K. Assets protected by IPR & strategically positioned

K. Assets based on cross-company S&R

Additional processes for "ICapM Sytem" (people, organization & infrastructure):
provide/operate systems, instruments and services, manage environments and partners

as-is „ICapM System“



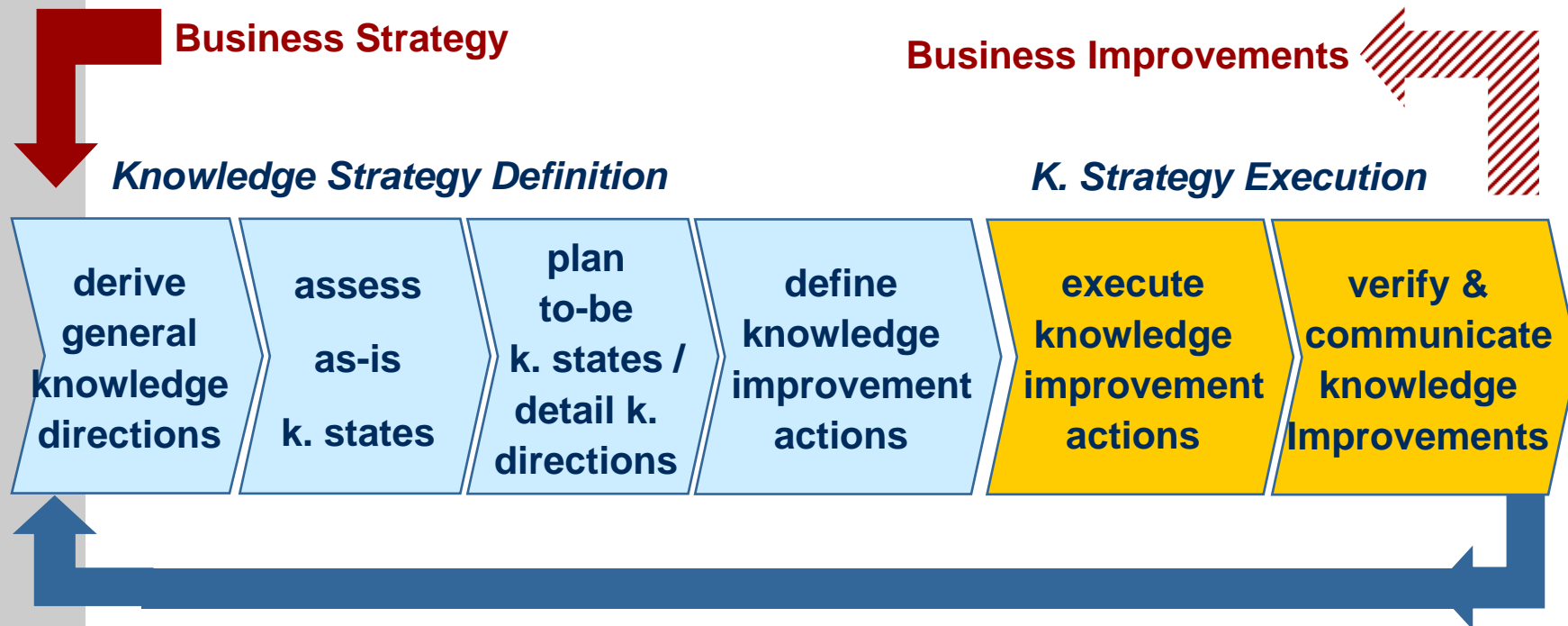
improved/aligned „ICapM System“ in operation

* Knowledge Assets are proficiencies of people and organizations as well as information for effective action

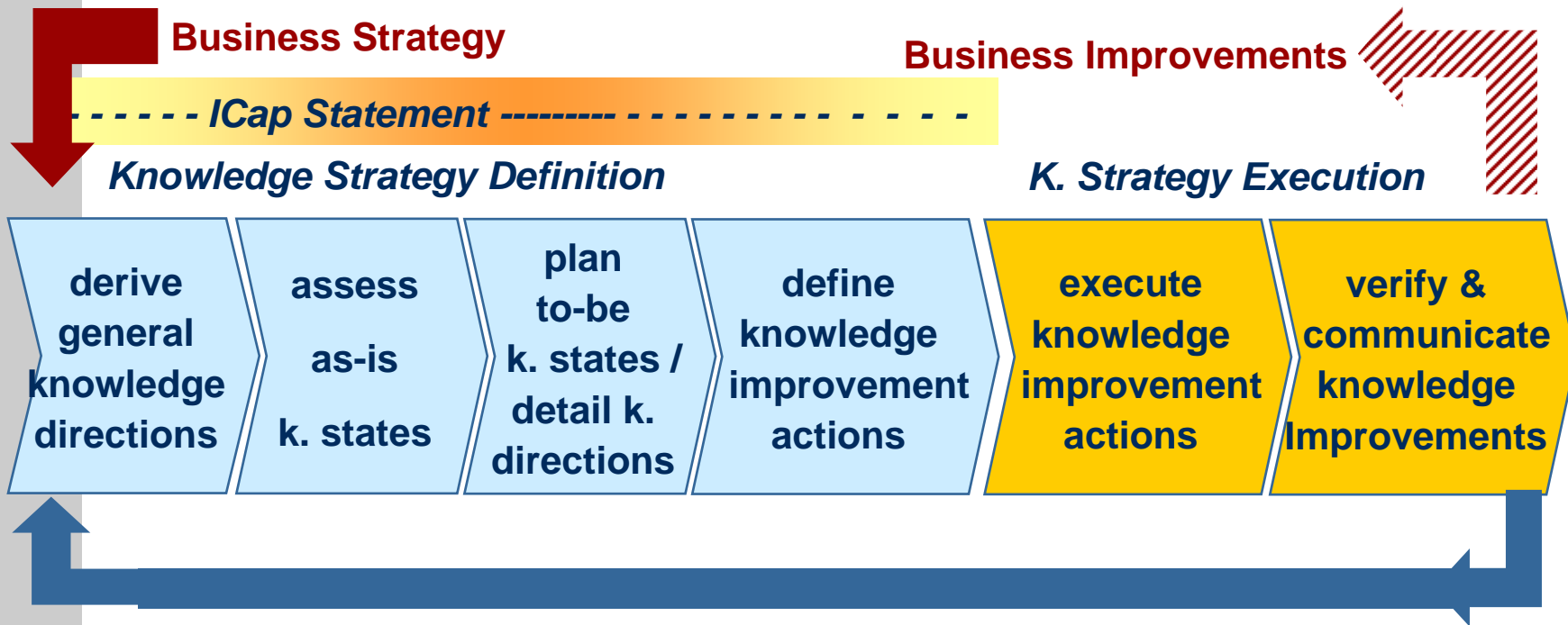
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Alternative oder Ergänzung?

Knowledge Strategy Definition and Execution



Knowledge Strategy Definition and Execution Position of Intellectual Capital Statement

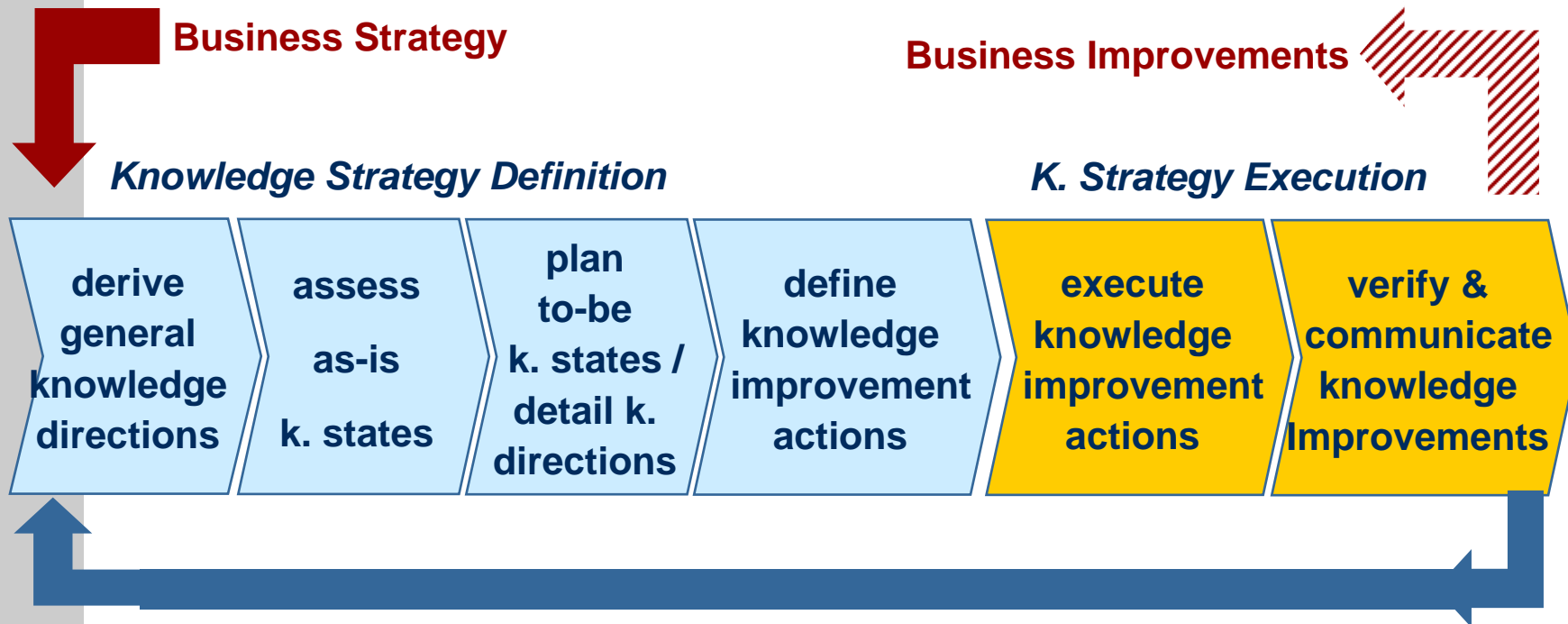


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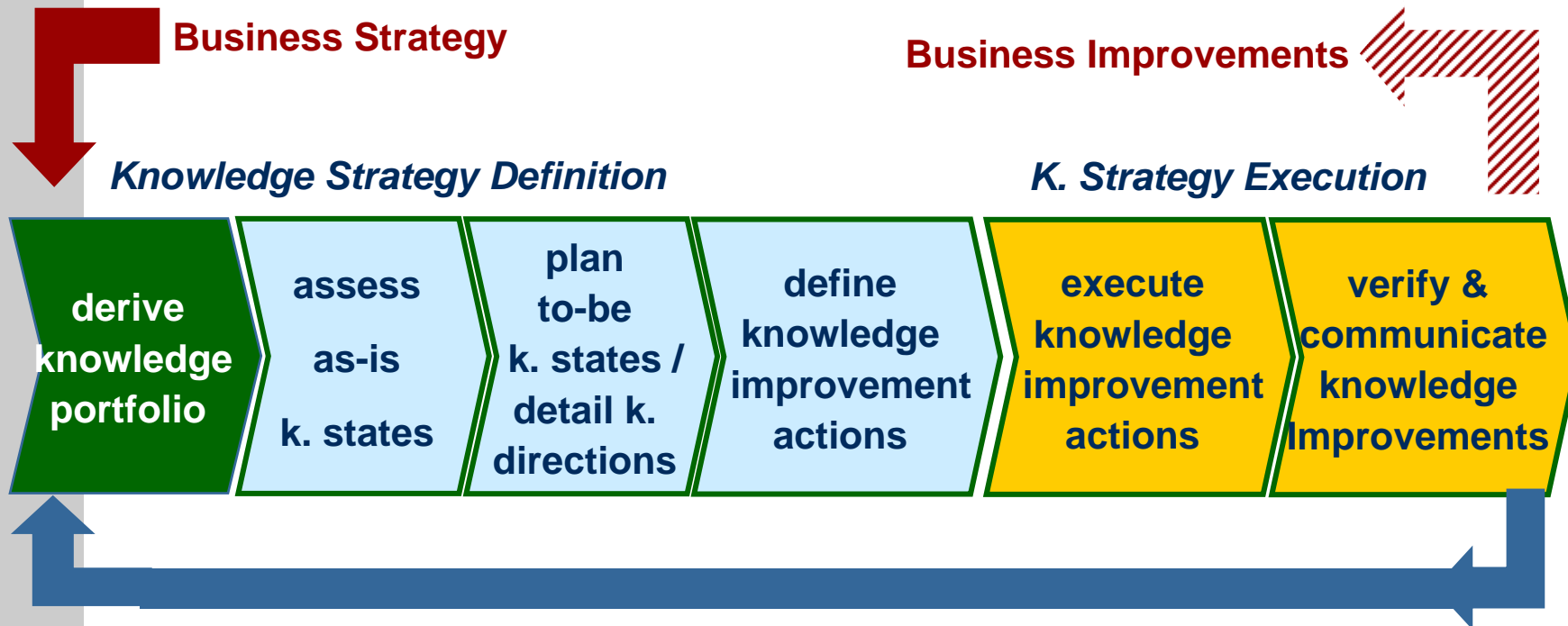
Knowledge Strategy Definition and Execution

Knowledge Area- / Content- specific approach



Knowledge Strategy Definition and Execution

Knowledge Area- / Content- specific approach



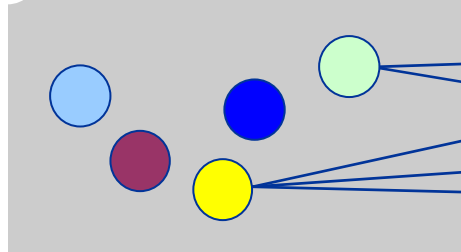
Focusing & coordinating knowledge improvements

The top-down Knowledge Strategy Process (KSP),

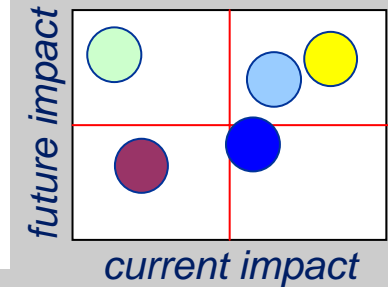
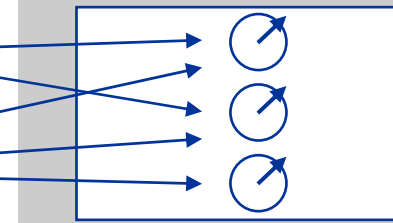
[optionally extended to all Intellectual Capital categories (ICapSP)]

1 Business Transformation (focus specific topic like Process, Org., Product ...)

2 Knowledge Areas

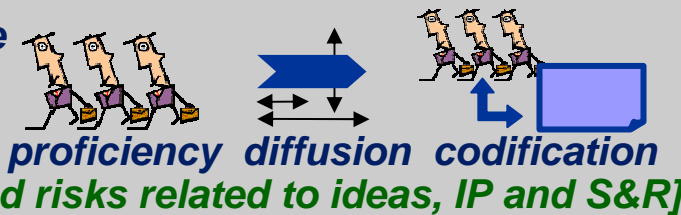


3 Key Performance Indicators

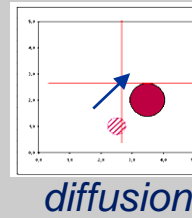


4 Knowledge Portfolio

5 Knowledge Cockpit



codification



Proficiency	as-is	to be
Int. Stakeholder		
s1	3	3
s2	0	0
s3	3	3
s4	0	0
s5	2	4
s6	0	0
s7	0	0
s8	0	0
Ext. Stakeholder		
s9	3	3
s10	2	4

Proficiencies and K Stakeholders

6 Knowledge Improvement Action Plan
K Area Coaches & Roadmaps, KM Program
[Directions for Idea/Innov., IP and S&R Mgt.*]

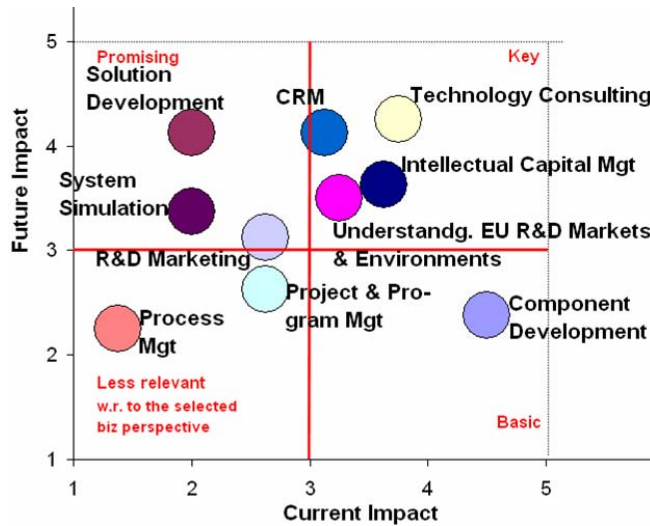
Roadmaps/Actions/Program
Execution and Controlling

This approach has originally been developed by



* Innov. = Innovation, IP = Intellectual Property, S&R = Standards & Regulation

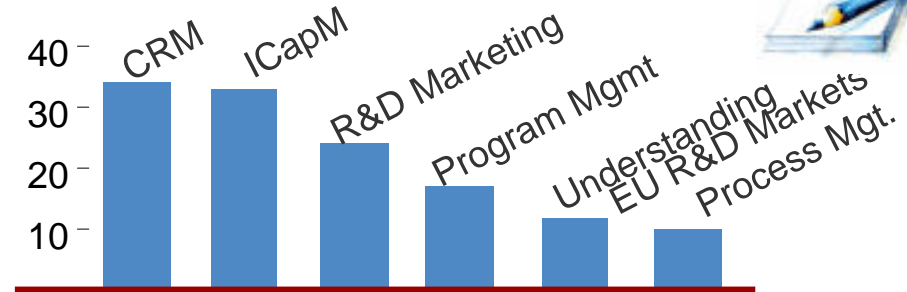
Example: Strategic Knowledge Directions from Knowledge Portfolio to strategic decisions



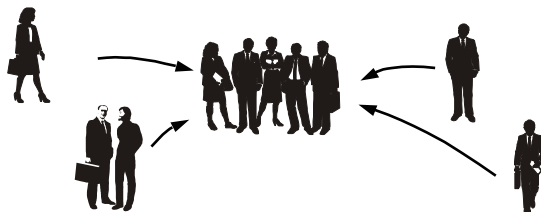
Portfolio of business-relevant Knowledge Areas and impact on business (a result of a Knowledge Strategy Process)

Knowledge Risks / Debriefing needs
Strategic codification needs

Strategic training needs



Strategic Communities of Practice



Business-driven orchestrated KM / ICapM Program

K. Cockpit to set knowledge objectives and plan improvements

Example: Analysis and objectives for Knowledge Area “Solution Development”

		Proficiency		
Int. Stakeholder	Intra-Group Diffusion	as-is	to-be	Objective
Lab. A	„Learners“	2	3	raise
Lab. B		3	2	decrease
Lab. F		2	4	raise strongly
Devlopmt. Center		3	3	consolidate
Marketing & Sales		2	2	consolidate
	„Sources“			
Ext. Stakeholder	Intra-Group Diffusion	as-is	expected	
Corp. R&D		3		
Customer C		3		
Consultancy B		4		

		Codification		
		as-is	to-be	Objective
Codification Dec.		2	3	raise

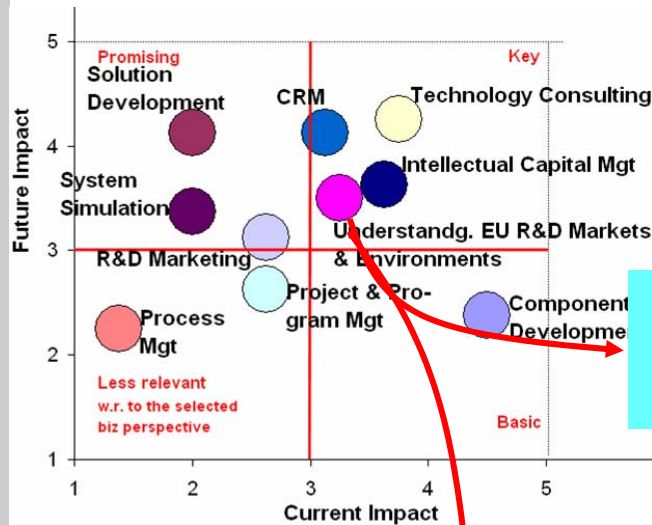
K. Improvement Planning: typical action results

Define – install – operate – create - promote ...

- Proficiency Building**
 - Subject Matter Expert for ... / Business Alliance in ...
 - Role and Career for Project Managers
 - „Half-time experts“ program to move to emerging technologies ...
- Diffusion**
 - Knowledge Transfer Workshops with internal/external Knowledge Stakeholders for ...
 - Competence Network / Community of Practice for ...
 - Learning processes from projects with clients in ...
- Codification**
 - Cookbook / Framework / Training module for ...
 - Taxonomy ... Content structure in ...
- combined**
 - Regular project / leaving expert debriefings in ...
 - Training courses / e-learning system for ..
- ... org changes**
 - Sustaining Experience/Lessons Learnt/Best Practice Sharing in ...
 - Process model and implementation for ...

Executing the K-Strategy for a Knowledge Area

Organizational approach involving all KM key players



Knowledge Area Coach from Management Team

KM Program for the Business

for all business-critical K. Areas

KM Systems & Instruments Roadmap

business requirements

K. Area Roadmap & projects

State-of-the-art KM, KM Program & coordination of support functions

KA expertise & requirements

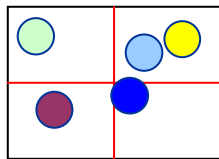
Subject Matter Experts / Communities of Practice

inter-disciplinary KM Team

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General and area-specific K. Improvement Actions Knowledge Portfolio based approach

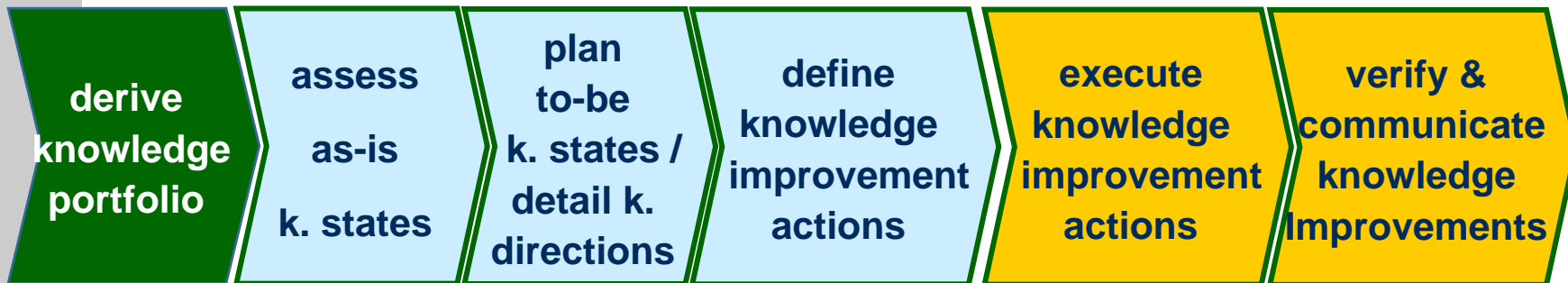


business-critical, area – specific knowledge improvement actions

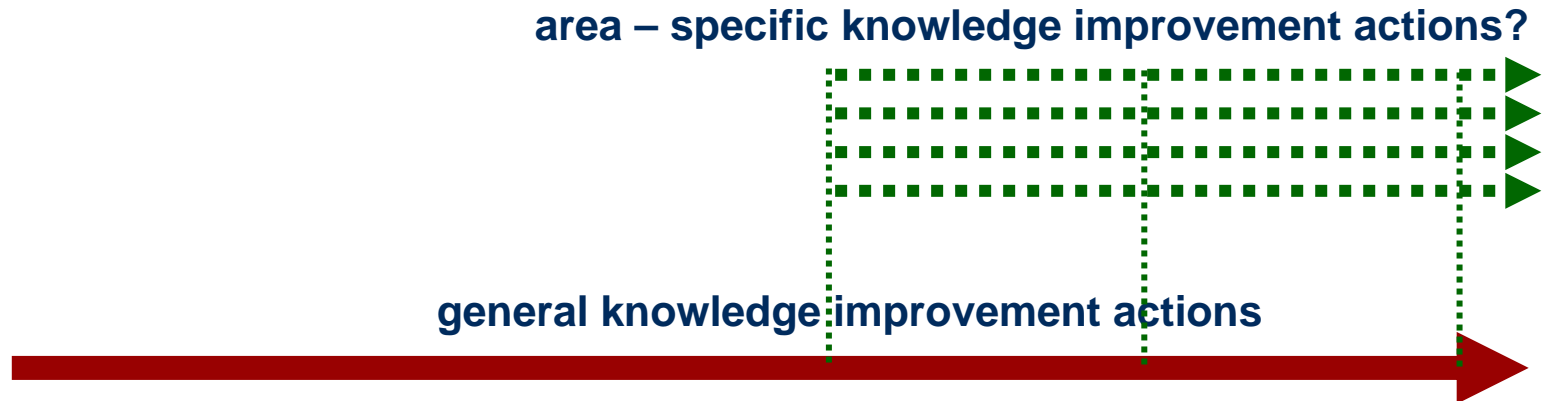


**Business-driven
K-Area Focus**

general knowledge
improvement actions



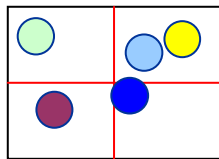
General and area-specific K. Improvement Actions Intellectual Capital Statement based approach



----- *ICap Statement* -----



Selection of Knowledge Improvement Options: Knowledge Portfolio based approach



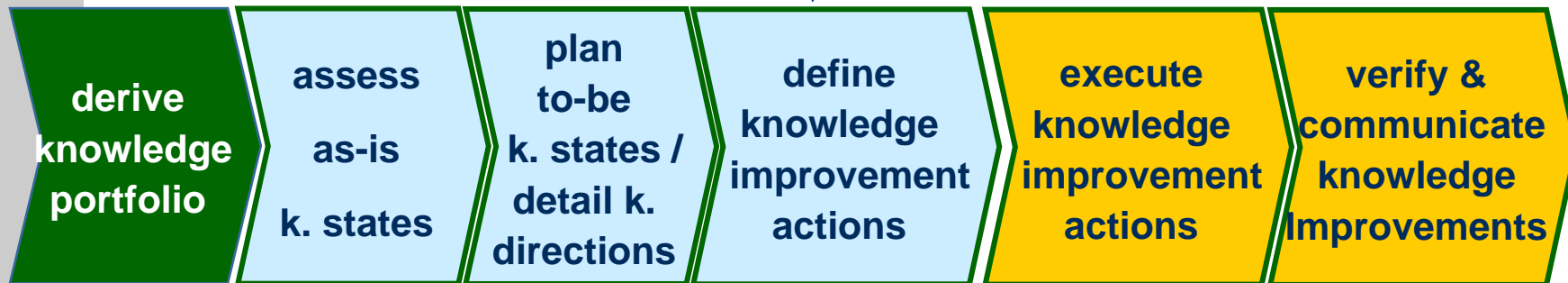
business-critical area – specific knowledge improvement actions



KM instruments catalogue +
business experience + consulting



general knowledge
improvement actions

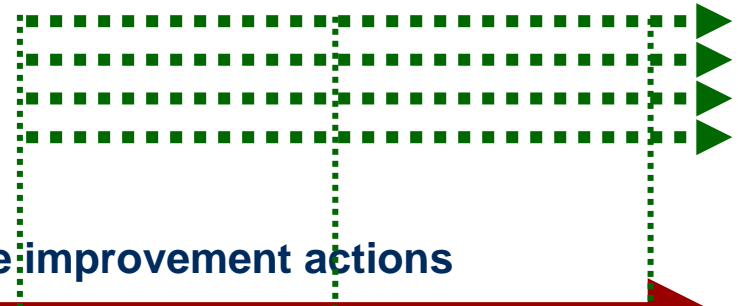


Selection of Knowledge Improvement Options: Intellectual Capital Statement based approach

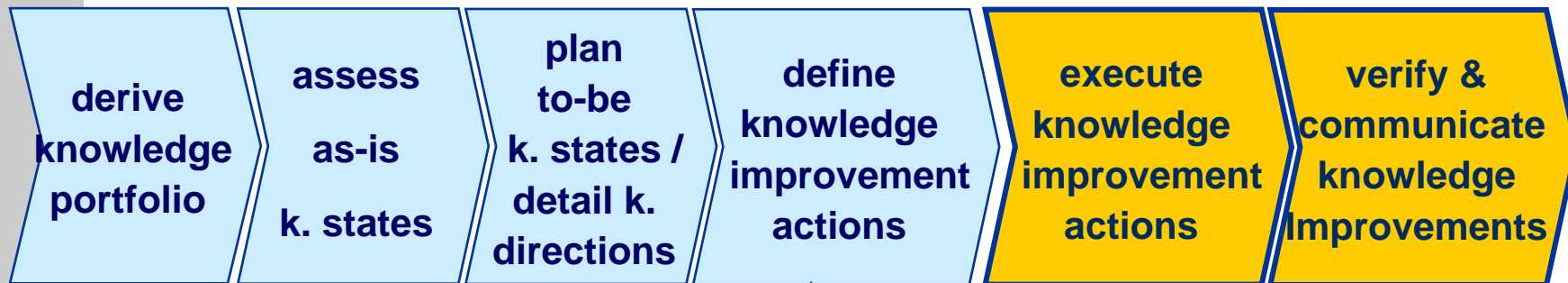
**B.-driven Indicator and
Impact Factor Focus**

area – specific knowledge improvement actions?

K Balance Indicators Catalogue +
business experience + consulting



general knowledge improvement actions



Impact Factor Analysis
KM / ICapM?

Integration of both approaches

- **There seem to be considerable advantages on both sides**
- **Investigation needed: How to integrate and still keep it feasible?**

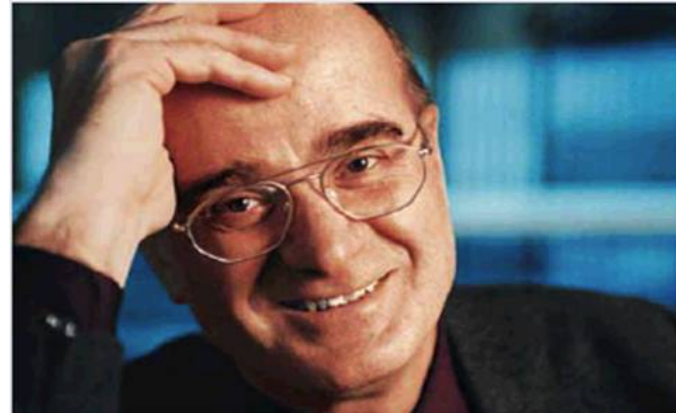
Contact

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Further Readings on Siemens KM and other KM sources

Current Siemens KM books and publications:

- T. Davenport, G. Probst (eds): Siemens KM Case Book, 2nd edition, Wiley/Publicis, 2002
- M. Bellmann, et al (Hrsg): Praxishandbuch Wissensmanagement, Symposion, 2002
- C. W. Holsapple (ed.): Handbook on KM, Springer, 2002, pp. 443-466.
- Deking, I, Management des Intellectual Capital, Gabler Verlag, under print: expected release April 2003.
- Hofer-Alfeis, J.: Effective Integration of Knowledge Management into the Business Starts with a Top-down Knowledge Strategy. Journal of Universal Computer Science, vol. 9, no. 7 (2003), 719-728
- Interview/Report of Computerwoche, November 2004 (in German).
<http://www.computerwoche.de/index.cfm?pageid=259&artid=69264&type=detail&category=343>

Recommendation for more information on KM:

- www.knowledgebusiness.com
- www.wimip.de
- www.knowledgeboard.com
- www.APQC.org
- www.eknowledgecenter.com