Global Knowledge Management

Assessment

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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](http://www.escpeurope.de/wi)

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

University of Passau
Web: [http://www.wi.uni-passau.de/](http://www.wi.uni-passau.de/)
What is success?

... reaching a self defined goal!
The Challenge

- How to measure KM success
  - Business Perspective (Quality, Performance, Customers, …)
  - Knowledge Perspective (Organizational, Individual)
- Which are entities to measure
  - Intellectual capital
  - KM resources
  - Career development
  - User / customer satisfaction
  - Project success
  - And many more…
Success in Knowledge Management (North, 2008)

**Success at Business Level**
- Cost reduction
- Quality improvements
- Time saving
- Increasing revenues

**Success at KM Level**
- Knowledge-transfer
- Documentation of „best-practices“
- Reuse of Knowledge
- Internal Transparency
- Internal communication
- User Satisfaction
- Enterprise culture
- Optimizing knowledge intensive processes
- Developing competences / Knowledge capital

Quality of internal KM support processes
- Training
- Information quality
- System use
- System quality
Some studies as a starting point

Starting points

– Barriers
– Success factors
– Assessment of those: Are success factors measurable? Were they measured in the corresponding research work
Definition of Success:
“KM success is a multidimensional concept. It is defined by
• capturing the right knowledge,
• getting the right knowledge to
• the right user,
• and using this knowledge to improve organizational and/or individual performance.

KM success is measured using the dimensions of impact on business processes, strategy, leadership, efficiency and effectiveness of KM processes, efficiency and effectiveness of the KM system, organizational culture, and knowledge content.” (Jennex et al. 2007)

Critics: no validated understanding of KM success
inferences on business performance are not measureable
## Studies on KM Success Factors

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Core barrier/success factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Individual</td>
<td>1. Top management support</td>
</tr>
<tr>
<td></td>
<td>2. Communications</td>
</tr>
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<td></td>
<td>3. Personal development</td>
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<tr>
<td></td>
<td>4. Personality</td>
</tr>
<tr>
<td>B. Organisation</td>
<td>5. Target system</td>
</tr>
<tr>
<td></td>
<td>7. Architecture of the KM processes</td>
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<td></td>
<td>8. KM processes</td>
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<td></td>
<td>9. Delegation and participation</td>
</tr>
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<td></td>
<td>9. Employee motivation</td>
</tr>
<tr>
<td></td>
<td>10. Social networks and relationships</td>
</tr>
<tr>
<td>C. Technology</td>
<td>11. Information and communications technology</td>
</tr>
<tr>
<td></td>
<td>12. Systems quality</td>
</tr>
<tr>
<td></td>
<td>13. Content of KM systems</td>
</tr>
<tr>
<td>D. Culture</td>
<td>14. Enterprise culture conducive to fostering knowledge</td>
</tr>
<tr>
<td>E. Environment of the enterprise</td>
<td>15. External conditions</td>
</tr>
<tr>
<td>F. Institutionalised KM</td>
<td>16. Knowledge base and knowledge collection</td>
</tr>
<tr>
<td></td>
<td>17. Application of knowledge</td>
</tr>
</tbody>
</table>
Merged list of indicators

A  Assessment of KM as an enterprise internal service and interdisciplinary support function
1. Institutionalised KM
2. History of support for KM
3. Sufficient funding for KM activities
4. Communication of KM strategies and targets
5. Linkage/relationships of KM targets to the strategic targets of the enterprise
6. Clarity of accountability for KM at all levels of the organisation
7. Standardised, systemic knowledge processes are defined
8. Employees are engaged in knowledge processes and participate in decisions
9. Suitable and user-friendly KM information technology is present
10. Employees are motivated towards knowledge transfer
11. Knowledge quality is assured through good quality management processes
12. KM activities are regularly benchmarked internally and externally

B  Assessment of the individual working context with regard to the availability of required knowledge and information
13. Free time to engage in KM activities
14. Access to new knowledge, exchange of knowledge in the network is sufficiently possible
15. Sufficient qualifications for interaction with technology of KM activities
16. Sufficient qualifications for interaction with knowledge sharing activities
17. Awareness/understanding of the utility of KM
18. Adequate empowerment for employees to undertake KM activities
19. Integration of knowledge activities into essential work processes
20. Shared vision with the enterprise
21. Motivation for knowledge sharing, e.g. through quickly visible success, suggestion schemes
22. Direct communication and knowledge exchange for collaborative problem solving
23. Lack of acknowledgement of knowledge emanating from lower organisational ranks
24. Tolerance for learning from mistakes
25. Culture of mutual trust and knowledge sharing
How to assess success?

Main goals
- Measuring the success of KM
- Understanding the relation of KM and Business Success
- Understanding and assessing the organization’s KM situation

Methods
- Intellectual capital statement
- Benchmarking
- Metrics and Indicators
- Balanced Score Card approaches
- Quality Assessment
- Self assessment
- …
Knowledge and knowing capability of an organisation, intellectual community, or professional practice

The Measurements
- What is
  - Making resources visible - staff, customers, technology and processes.
- What is done
  - Making qualification activities visible - training, customer development, process and technology improvement.
- What happens
  - Making consequences visible - employee and customer satisfaction and ‘value added’ visible.

The Scenario
- The story of the way firms’ intellectual capital is related to a specific kind of organizational identity and a form of management which enables the firm to be competitive in an uncertain knowledge-based future.
Intellectual Capital (Bukh, Larsen & Mouritsen, 2001)

- Different aspects, mainly intangible assets
- Human vs structural capital
- Again: how to measure it…
  - Some metrics following…
<table>
<thead>
<tr>
<th>Value extraction:</th>
<th>Customer capital:</th>
<th>Structural Capital:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Profits resulting from new business operations</td>
<td>1) Market share</td>
<td>1) Administrative expense/total revenues</td>
</tr>
<tr>
<td>2) Return on net asset value</td>
<td>2) Customer rating</td>
<td>2) Processing time, out-payments</td>
</tr>
<tr>
<td>3) Total assets</td>
<td>3) Satisfied customer index</td>
<td>3) Computers/employee</td>
</tr>
<tr>
<td>4) Revenues resulting from new business operations</td>
<td>4) Number of new customers/new market/leads, etc.</td>
<td>4) Contracts filed without error</td>
</tr>
<tr>
<td>5) Market value</td>
<td>5) Annual sales/customer</td>
<td>5) Corporate quality performance</td>
</tr>
<tr>
<td>6) Patents pending</td>
<td>6) Average customer size</td>
<td>6) Investment in IT</td>
</tr>
<tr>
<td>7) Return on net asset resulting from new business operations</td>
<td>7) Average time from customer contact to sales response</td>
<td></td>
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<td></td>
<td>8) Ratio of sales contacts to sales closed</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value creation:</td>
<td>Human capital:</td>
<td></td>
</tr>
<tr>
<td>1) Training expense/employee</td>
<td>1) Average years of service with the company</td>
<td></td>
</tr>
<tr>
<td>2) Average customer duration with the company (months)</td>
<td>2) Number of employees</td>
<td></td>
</tr>
<tr>
<td>3) R&amp;D invested in basic research</td>
<td>3) Number of managers</td>
<td></td>
</tr>
<tr>
<td>4) R&amp;D invested in product design</td>
<td>4) Revenues/employee</td>
<td></td>
</tr>
<tr>
<td>5) Investment in new product support and training</td>
<td>5) Employee turnover</td>
<td></td>
</tr>
<tr>
<td>6) Satisfied employee index</td>
<td>6) Number of female managers</td>
<td></td>
</tr>
<tr>
<td>7) Relationship investment/customer</td>
<td>7) Profits/employee</td>
<td></td>
</tr>
<tr>
<td>8) Training expense/administrative expense</td>
<td>8) Average age of employees</td>
<td></td>
</tr>
<tr>
<td>9) R&amp;D invested in applications</td>
<td>9) Number of exempt full-time employees</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10) Average age of full-time exempt employees</td>
<td></td>
</tr>
<tr>
<td></td>
<td>11) Percent of company managers with advanced degrees</td>
<td></td>
</tr>
</tbody>
</table>
Human capital (competence, attitude, intellectual agility):
1) Percent of employees with advanced degrees
2) IT literacy
3) Hours of training/employee
4) Average duration of employment
5) Hours spent in debriefing
6) Hours spent by senior staff explaining strategy and actions (overlap expertise)
7) Leadership index
8) Motivation index
9) Savings from implemented employee suggestions
10) New solutions/products/processes suggested
11) Background variety index (individual and group level)
12) Company diversification index

Structural capital (relationships, organization, renewal and development):
1) Percentage of supplier/customer business accounted for
2) Length of relationship
3) Partner satisfaction index
4) Customer retention
5) Administrative expenses/total revenues
6) Revenues from patents/software/data/databases/etc.
7) Processes completed without error
8) Cycle/process times
9) Percentage of business from new products
10) Training efforts – expense/employee, hours/employee
11) Renewal expenses/operating expenses
12) New patents/software/etc. filed
<table>
<thead>
<tr>
<th><strong>Financial focus:</strong></th>
<th><strong>Customer focus:</strong></th>
<th><strong>Process focus:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Total assets</td>
<td>1) Market share</td>
<td>1) Administrative expense/total revenues</td>
</tr>
<tr>
<td>2) Total assets/employee</td>
<td>2) Number of customers</td>
<td>2) Cost for administrative error/management revenues</td>
</tr>
<tr>
<td>3) Revenues/total assets</td>
<td>3) Annual sales/customer</td>
<td>3) Processing time, out-payments</td>
</tr>
<tr>
<td>4) Profits/total assets</td>
<td>4) Customers lost</td>
<td>4) Contracts filed without error</td>
</tr>
<tr>
<td>5) Revenues resulting from new business operations</td>
<td>5) Average duration of customer relationship</td>
<td>5) Function points/employee-month</td>
</tr>
<tr>
<td>6) Revenues/employee</td>
<td>6) Average customer size</td>
<td>6) PCs and laptops/employee</td>
</tr>
<tr>
<td>7) Customer time/employee attendance</td>
<td>7) Customer rating</td>
<td>7) Network capability/employee</td>
</tr>
<tr>
<td>8) Profits/employee</td>
<td>8) Customer visits to the company and the number of hits on the company’s Web site</td>
<td>8) Administrative expense/employee</td>
</tr>
<tr>
<td>9) Lost business revenues compared to market average</td>
<td>9) Days spent visiting customers</td>
<td>9) IT expense/employee</td>
</tr>
<tr>
<td>10) Market value</td>
<td>10) Customers/employees</td>
<td>10) IT expense/administrative expense</td>
</tr>
<tr>
<td>11) Return on net asset resulting from new business operations</td>
<td>11) Revenue generating staff</td>
<td>11) Administrative expense/gross premium</td>
</tr>
<tr>
<td>12) Value added/IT employees</td>
<td>12) Average time from customer contact to sales response</td>
<td>12) IT capacity (CPU and DASD)</td>
</tr>
<tr>
<td>13) Investments in IT</td>
<td>13) Ratio of sales contacts to sales closed</td>
<td>13) Change in IT inventory</td>
</tr>
<tr>
<td>14) Value added/customer</td>
<td>14) Satisfied customer index</td>
<td>14) Corporate quality performance (e.g., ISO 9000)</td>
</tr>
<tr>
<td></td>
<td>15) IT investment/salesperson (and perhaps dollars used in advertisements and their effectiveness)</td>
<td>15) Corporate performance/quality goal</td>
</tr>
<tr>
<td></td>
<td>16) IT investment/service and support employee</td>
<td>16) Discontinued IT inventory/IT inventory</td>
</tr>
<tr>
<td></td>
<td>17) IT literacy of customers</td>
<td>17) Orphan IT inventory/IT inventory</td>
</tr>
<tr>
<td></td>
<td>18) Support expense/customer</td>
<td>18) IT capacity/employee</td>
</tr>
<tr>
<td></td>
<td>19) Service expense/customer/year</td>
<td>19) IT performance/employee</td>
</tr>
<tr>
<td></td>
<td>20) Service expense/customer/contact</td>
<td></td>
</tr>
</tbody>
</table>

#### Renewal and development focus:
1. Competence development expense/employee
2. Satisfied employee index
3. Relationship investment/customer
4. Share of training hours
5. Share of development hours
6. Opportunity share
7. R&D expense/administrative expense
8. Training expense/employee
9. Training expense/administrative expense
10. Business development expense/administrative expense
11. Share of employees under age 40
12. IT development expense/IT expense
13. IT expenses on training/IT expense
14. R&D resources/total resources
15. Customer opportunity base captured
16. Average customer age; education; income
17. Average customer duration with company in months
18. Educational investment/customer
19. Direct communications to customer/year
20. Non-product-related expense/customer/year
21. New markets development investments
22. Structural capital development investment
23. Value of EDI system
24. Upgrades to EDI system
25. Capacity of EDI system
26. Ratio of new products (less than two years) to full company product family
27. R&D invested in basic research
28. R&D invested in product design (e.g., dollars invested in changes of quality, quantity, and variety of products/designs/etc.)
29. R&D invested in applications
30. Investments in new product support and training
31. Average age of company patents
32. Patents pending/software, data, databases developed

#### Human focus:
1. Leadership index
2. Motivation index
3. Empowerment index
4. Number of employees/employee shares of the company (percentage of shares owned by employees, program for employees to buy company shares, etc.)
5. Employee turnover
6. Average years of service with company
7. Number of managers
8. Average age of employees and number with pertinent experience in trade and IT
9. Time in training (days/year)
10. IT literacy of staff
11. Number of directors
12. Number of female directors
13. Number of full-time or permanent employees
14. Average age of full-time or permanent employees
15. Average years with company of full-time or permanent employees
16. Annual turnover of full-time permanent employees
17. Per capita annual cost of training, communication, and support programs for full-time permanent employees
18. Full-time or permanent employees who spend less than 50 percent of work hours at a corporate facility
19. Percentage of full-time permanent employees
20. Per capita annual cost of training, communication, and support programs
21. Number of full-time temporary employees
22. Average years with company of full-time temporary employees
23. Per capita annual costs of training and support programs for full-time temporary employees
24. Number of part-time employees or non-full-time contractors, average duration of contract
25. Company managers with advanced degrees; business, science and engineering, liberal arts
Intellectual Capital: Summary

- A variety of knowledge related aspects discussed
- Not all aspects are related to KM
- Selection and decision process
  - How to choose appropriate metrics?
  - How to embed metrics in a decision process (e.g. balanced score card)?
  - How to relate a KM activity with metrics?
- Many approaches cannot be applied for KM project success
- No understanding / relation of business and KM success
- Lack of global / inter-organizational components
- However: Useful tool for developing individual assessment schemes (project- / context-dependent)
Measuring KM Success – The KnowMetrix Approach (Lehner, 2009)

Success Factors in KM-Projects

- Knowledge-oriented culture
- Support by top management
- Economic benefit or cost influence
- Clear vision and terminology
- Motivational measures
- Technical and organizational infrastructure
- Low rate of change concerning the knowledge structure
- Multiple or redundant channels of information and knowledge exchange

Approach

- Assessment of success factors
- Prioritization: Importance & performance
- Usage to understand status (a priori) and KM success (ex-post)
Difficulties in measuring KM success or impacts

1. Availability of valid and reliable measurement instruments
2. Interpretation problems – what do numbers, figures really mean?
3. Time-lag between interventions and impacts
4. Causal chains not analysed so far
5. What is intended at all? (operationalising success)
KnowMetrix Factors

- Top Management Support
- Communication
- HR Development
- Personality
- Target System
- Organizational Structure
- Delegation / participation
- Motivation
- Social networks
- ICT systems
- KMS Contents
- Organizational culture
- External factors
- Knowledge identification
- Knowledge usage
Measuring KM Success – The KnowMetrix Approach

For each indicator

**Priority / Importance**
- irrelevant
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- very important

**Performance**
- Not sufficient
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- excellent

For KM in total

**Overall success**
- Not sufficient
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- excellent
Measuring KM Success – The KnowMetrix Approach

Procedure

• presentation of the method as well as time schedules
• adaption of the list of indicators to the specific situation
• preparing the questionnaire
• selecting employees
• data collection
• analysing results
• presentation results and measures
Measuring KM Success – The KnowMetrix Approach

Analysing Results

• General / overall assessment of KM performance and employee satisfaction
• Assessment of performance indicators
• Importance of the single factors (coherent view between groups?)
• Comparison of performance and significance
• Comparison of differences between performance and significance
• Calculated success based upon formulas
Example: application of KnowMetrix in a software company

The company was founded in 1997 and develops software-solutions for the management of product information (PIM) as well as the output channels online, print and stationary point of sale (POS). The software company employs altogether about 90 staff members, about 60 of these in Munich. Apart from the head quarters, the company has further branches in the United Kingdom, the Netherlands, Switzerland, Austria, Sweden, Poland and the USA.
Measuring KM Success – The KnowMetrix Approach

Overall satisfaction with KM services
Measuring KM Success – The KnowMetrix Approach

Overall satisfaction with KM services

- Research and Development: 5.25
- Professional Services: 4.50
- Presales: 3.75
- Product management: 5.00
Comparing importance and performance values of the indicators
Contrasting importance and performance values in a matrix
Measuring KM Success – The KnowMetrix Approach

Contrasting importance and performance values in a matrix
Characteristics of the CSF method

• Holistic view of success
• Based on a pre-defined list of indicators
• Flexible, easy to understand (visualisation of results and findings)
• Low effort
• Easy to repeat
• Focused on the specific situation of an organisation
Summary

- Feasible approach for reliable and quick assessment
- Different usage scenarios (KM status, project success)
- Lack of global aspects
- Open questions
  - Which factor acts as a success factor and which as a barrier factor?
  - Which factors known until now, really influence knowledge management on a personnel level?
  - Testing validity and reliability of KnowMetrix
  - Development of a standardised catalogue of indicators and influence factors (resp. success factors)
  - Software tool for automated analysis
Addressing global aspects

- No pre-defined criteria catalogues
- Aspects
  - Project success (e.g. communication breakdowns, interrupted projects)
  - Social capital, interorganizational knowledge exchange
- Methods
  - Metric selection depending on barriers and success factors (e.g. extending Lehner’s KnowMetrix)
  - Mixed approaches of external / internal assessment
Social capital across organizations (Inkpen & Tsang, 2005)

<table>
<thead>
<tr>
<th>Social Capital Dimensions</th>
<th>Intracorporate Network</th>
<th>Strategic Alliance</th>
<th>Industrial District</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structural</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Network ties</td>
<td>Fuzzy distinction</td>
<td>Intermember ties</td>
<td>Social ties as a</td>
</tr>
<tr>
<td></td>
<td>between intramember</td>
<td>determining social</td>
<td>foundation for</td>
</tr>
<tr>
<td></td>
<td>and intermember ties</td>
<td>ties within an</td>
<td>intermember ties</td>
</tr>
<tr>
<td>Network configuration</td>
<td>Hierarchical, easy to</td>
<td>Nonhierarchical,</td>
<td>Nonhierarchical and</td>
</tr>
<tr>
<td></td>
<td>establish connectivity</td>
<td>possibility of</td>
<td>dense networks in a</td>
</tr>
<tr>
<td></td>
<td>between network members</td>
<td>exploiting structural</td>
<td>geographical region</td>
</tr>
<tr>
<td>Network stability</td>
<td>Stable membership</td>
<td>High rate of</td>
<td>Dynamic, with</td>
</tr>
<tr>
<td></td>
<td></td>
<td>instability</td>
<td>members joining and</td>
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<td></td>
<td></td>
<td></td>
<td>leaving the district</td>
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<tr>
<td>Cognitive</td>
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<td></td>
</tr>
<tr>
<td>Shared goals</td>
<td>Members working toward</td>
<td>Compatible goals</td>
<td>Neither shared nor</td>
</tr>
<tr>
<td></td>
<td>a common goal set by</td>
<td>but rarely</td>
<td>compatible goals</td>
</tr>
<tr>
<td></td>
<td>headquarters</td>
<td>common goals</td>
<td></td>
</tr>
<tr>
<td>Shared culture</td>
<td>Overarching corporate</td>
<td>Cultural</td>
<td>Industry recipe</td>
</tr>
<tr>
<td></td>
<td>culture</td>
<td>compromise/conflict</td>
<td></td>
</tr>
<tr>
<td>Relational: Trust</td>
<td>Little risk of</td>
<td>Significant risk</td>
<td>Process-based</td>
</tr>
<tr>
<td></td>
<td>opportunism,</td>
<td>of opportunism,</td>
<td>personal trust</td>
</tr>
<tr>
<td></td>
<td>institutional-based</td>
<td>behavioral-based</td>
<td></td>
</tr>
<tr>
<td></td>
<td>trust</td>
<td>trust</td>
<td></td>
</tr>
</tbody>
</table>
**GKMF Sample Metrics (Pawlowski & Bick, 2011)**

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Measurement of knowledge and core processes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Acceptance of knowledge management systems (KMS)</td>
</tr>
<tr>
<td></td>
<td>• Usability / usefulness of KMS</td>
</tr>
<tr>
<td></td>
<td>• Knowledge assets (number, usefulness, complexity, …)</td>
</tr>
<tr>
<td></td>
<td>• Knowledge sharing (number of knowledge elements, motivation, know</td>
</tr>
<tr>
<td></td>
<td>• Knowledge utilization (usage of knowledge elements, number of users per element, perceived usefulness, …)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>KM Project success</th>
<th>Success of specific KM projects</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Project awareness and commitment</td>
</tr>
<tr>
<td></td>
<td>• Project usefulness</td>
</tr>
<tr>
<td></td>
<td>• KM effectiveness</td>
</tr>
<tr>
<td></td>
<td>• KM process capabilities</td>
</tr>
<tr>
<td></td>
<td>• KM infrastructure capabilities</td>
</tr>
<tr>
<td></td>
<td>• Job performance</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Intellectual capital</th>
<th>General knowledge-related metrics of an organization</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Human capital / knowledge development (no. of employees, employee turnover, profits / employee, motivation, satisfaction, …)</td>
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<tr>
<td></td>
<td>• Customer benefits (rating, sales / customer, satisfaction, length of customer relationship, response time, …)</td>
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<td></td>
<td>• Structural capital (expense / revenues, errors / order, quality performance, …)</td>
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<td></td>
<td>• Financial focus (assets / employee, revenues per new business operation, value added / employee, return on education, …)</td>
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<td>• Process improvement (process timing, knowledge process time / total process time, …)</td>
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<td>• Innovation (number of patents, improvement of product renewal, …)</td>
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<table>
<thead>
<tr>
<th>Global Aspects</th>
<th>International aspects</th>
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<td>• See extra slides</td>
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</tbody>
</table>
Global KM metrics

Derived from sample barriers and success factors (GKMF, Pawlowski & Bick, 2011)

<table>
<thead>
<tr>
<th>Global aspects</th>
<th>Measuring international aspects</th>
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<tbody>
<tr>
<td></td>
<td>• Strategic partnerships / collaborations</td>
</tr>
<tr>
<td></td>
<td>• Communication intensity</td>
</tr>
<tr>
<td></td>
<td>• Coordination activities, coordination breakdowns</td>
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<td>• Escalation procedures</td>
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<td>• Management meetings</td>
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<td>• Improvement of global competences</td>
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<td></td>
<td>• Cultural awareness and sensitivity</td>
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<td></td>
<td>• Team understanding, team awareness</td>
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<tr>
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<td>• Imitations</td>
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<td>• …</td>
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...
Assessment Step by Step

- Starting point: Assessing barriers & success factors (e.g. using KnowMetrics)
- Develop assessment scheme
  - Focus on important aspects (critical processes / knowledge / barriers)!
  - Method (e.g. BSC, survey, self-assessment)
  - Aspects (Barriers, knowledge, project success, intellectual / social capital, global aspects)
  - If applicable: choose & design metrics
  - Develop instrument (e.g. questionnaires, tools, …)
  - For analyzing relations and in-depth understanding of those: qualitative methods, e.g. expert interviews
  - Embed instrument as / with interventions
  - Define schedule
- Perform continuous analysis
- Share results on different aggregation level (e.g. KPI for management, qualitative analysis for managers)
- Evaluate assessment (did we measure what we intended to measure)
Summary

- Variety of methods, measures, metrics
- Levels of assessment, in particular
  - Overall performance
  - Project success
  - Knowledge development
- Focus on important aspects
  - Critical processes
  - Critical knowledge
  - Main barriers
- Careful instrument selection
  - What is the intended use of an instrument?
  - Combine quantitative (e.g. metrics) and qualitative (e.g., interviews) methods
- No one-fits-all instrument, especially for global aspects
- Reflect on the usefulness and efforts of the instruments
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