Global Knowledge Management

An Introduction

Jan M. Pawlowski
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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/
Where I am from...
Global Information Systems, University of Jyväskylä (JYU)

- **Focus area**
  - Global Information Systems (GLIS)
  - Knowledge Management & E-Learning
  - Internationalization / Globalization; support of globally distributed groups
  - Cultural aspects for learning and knowledge management
  - Support through Information and Communication Technologies
  - Standardization, Quality Management and Assurance for E-Learning
  - Adaptive Systems

- **Projects**
  - OpenScout: Management education in Europe and North Africa as application field for open content
  - COSMOS / Open Science Resources: Exchange of Scientific Content
  - ASPECT: Open Content and standards for schools
  - iCOPER: New standards for educational technologies
  - Nordlet: Nordic - Baltic community of Open Educational Resources Exchange
  - LaProf: Language Learning Open Educational Resources for Agriculture
Global Information Systems

- Main Research Area: Open Knowledge / Educational Resources
- Main Research Area: Global software development / Globally distributed groups
- Main Research Area: Knowledge management and E-Learning

- Support for globally distributed groups
- Cultural Influence Factors
- Adaptation and Recommender Systems
- Quality management
- Standards and interoperability

- Reference / Process Modeling

- Designed through
- Supported by

- Require
- Use
The team

Kati Clements

Jan M. Pawlowski

Philipp Holtkamp

Denis Kozlov

Henri Pirkkalainen
What can you expect?

- Understand the different concepts of knowledge, knowledge management and knowledge sharing
- Analyze global influence factors to knowledge management
- Design and develop knowledge management systems, processes and instruments in a systematic way
- Assess and optimize knowledge management systems
Course Organization

- 29.10.2013  Introduction
- 04.11.2013  Conceptual Foundation
  The context of KM: Understanding the starting situation (context and strategies)
- 04.11.2013  Case Study introduction
- 11.11.2013  KM Frameworks: The components of KM
  KM & Culture
- 18.11.2013  Process Management: Integration of Knowledge, Learning and Business Processes
- 25.11.2013  Assessment of KM Success
  KM Instruments and Tools
- 09.12.2013  Global Social Knowledge Management
- 16.12.2013  Final presentations
Approach

Course outline
- Lecture
- Guiding Questions
- Discussion
- Assignment / Case Study & Presentation
- Examination

Interaction & Discussion
- Preparation: Slides, readings & recent papers
- Preparation (2): Questions on Papers
- Questions: E-Mail, Forum, Skype (jan_m_pawlowski)
Important notes

- Register for one group in Korppi
- If you decide not to do the course, unregister until 10.11.2013
- Exam: 50%, Case Study 50%
  – Both have to be passed
Your expectations?

- Why did you choose this course?
- Which experiences do you have in the field?
- Which issues would you like to discuss?
A first question

What is common knowledge?
Sauna: German instructions

Ziehen Sie sich aus und besuchen Sie die Toilette.

Bitte benutzen Sie die Duschen und Ihre mitgebrachten Hygiene Artikel und trocknen Sie sich anschließend ab.

Im Saunabereich wird dann üblicherweise keine Badebekleidung getragen. Hier können Sie sich ohne Bekleidung bewegen ggf. werden Bademäntel und Handtücher benutzt.

Verstauen Sie Ihre Sachen in den dafür vorgesehenen Fächern und los gehts. 8-12 Minuten
(Drehen Sie zu Beginn eine Uhr in der Sauna)

„Aufheizen” 8 – 12 Min.
Bitte achten Sie darauf das Sie in der Sauna immer ein ausreichend großes und saugfähiges Handtuch unterlegen, sodaß kein Schweiß auf das Holz gelangt.
Zu Beginn sollten Sie dann hoch liegen oder entspannt sitzen. Tiefere Sitzplätze sind etwas kühler als die weiter oben.

Im übrigen ist die Sauna ein Ort der Entspannung und Besinnlichkeit. Ruhe oder eine leise Unterhaltung sind erlaubt.

Hinweis: Die Temperaturen in der Sauna können variieren, manche Saunen haben höhere Temperaturen. Beachten Sie immer die Anweisungen der Saunabetreuer.

Hinweis: Bitte nicht in der Sauna essen oder trinken. Es ist auch nicht empfehlenswert, direkten Kontakt des Saunabads mit den Augen oder dem Nasenrende zu haben.
Sauna: American instructions

CAUTION
REDUCE THE RISK OF FIRE
Do Not Place Combustible Material On Heater At Any Time

WARNING
REDUCE THE RISK OF OVERHEATING
1. Exit immediately if uncomfortable, dizzy, or sleepy. Staying too long in a sauna is capable of causing overheating.
2. Supervise children at all times.
3. Check with a doctor before use if pregnant, in poor health, or under medical care.
4. Breathing heater air in conjunction with consumption of alcohol, drugs, or medication is capable of causing unconsciousness.
Sauna: Finnish instructions
A first question

Why is Knowledge a Global Success Factor?
Just a simple product?
Some random questions…

Decision questions
- Where to produce?
- How to build partnerships (joint ventures, contractors, …)
- Which systems to exchange knowledge?

Operational questions
- How to process wood?
- When will the next shipment arrive?
- How to market the product in Japan?
- How to explain the concept and advantages of Finnish saunas?
- How to find the main problems of customers?
- Which are import and safety regulations?
This means…

- Knowledge is a key to global success
- Global KM managers need to understand the value chain and knowledge requirements
- Global KM managers need to understand knowledge processes and culture
- Global KM managers are the main hubs for smooth operations in production and service enterprises
Contents

- Introduction
- Knowledge Management Foundations
  - Conceptual foundation
  - Theoretical Frameworks
  - Practical Frameworks
- Global KM
  - Influence factors
  - Cultural Barriers
- Solutions
  - Strategies
  - Processes
  - Tools
Types and Classes of Knowledge

- Knowledge
  - "high flyer"
  - interpretation/cross-Linking
- Information
  - stock price: 81,60 €
  - context
- Data
  - 81,60
  - syntax
- Characters
  - “1“, “6“, “8“ and “,”
  - character set

“high flyer”
Related Concepts (modified, North, 1998)

- Symbol
  - Syntax
- Data
  - Meaning
- Information
  - Context
- Knowledge
  - Use
- Skill
  - Applying to new settings
- Competence
  - Uniqueness
- Competitiveness
Myths of Knowledge Management

- **Myth 1:**
  KM technologies can deliver the right information to the right person at the right time

- **Myth 2:**
  KM technologies can “store“ human knowledge, intelligence or experience

- **Myth 3:**
  KM technologies can distribute or multiply human intelligence

- **Myth 4:**
  Organizations are not able to learn, only individuals learn
Video

Ford Learning Network
Introduction: What is Knowledge Management?

Knowledge Management in Practice

<table>
<thead>
<tr>
<th>Ford Learning Network</th>
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<tbody>
<tr>
<td>What is (in your opinion) the message of this case?</td>
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<tr>
<td>How important is the so called “Virtual Librarian” for the FLN solution?</td>
</tr>
<tr>
<td>What does impress and what does irritate you about the KM solution mostly?</td>
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</tbody>
</table>
Some issues…

- How do you organize the development process?
- How to find components which need to be changed, how to develop different versions?
- How qualified are the development partners? How good are their language and communication skills? Will they understand your codes?
- How to keep track of the changes and versioning?
- How to change the development environment (e.g. new release) in a coordinated way?
- How to find out country-/market-specific needs?
- How to coordinate prototype validations?
- What are communication standards?
- How are problems communicated?
- How is the development process and specific aspects documented?
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
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
- …
So, what is the problem…?

- What is common and crucial knowledge in different communities?
- How can we organize knowledge sharing across borders?
- Which technologies can we use?
- Which problems might occur?

Potential solutions
- Theories and frameworks
- Practical methods and instruments
Culture
• Barrier 1: Understanding of Common Knowledge
• Barrier 2: Lack of understanding of partner organization / country

Knowledge / problems
• Common knowledge on the organization
• Communication patterns
• Process knowledge

Intervention 1-3
• Create Reflection Process
• Visualize communication paths
• Create culture wiki / allocate task

Results
Metric 1: #interrupted communication processes
Metric 2: #shared visualizations
Metric 3: avg. wiki usage / employee
Metric 4: staff satisfaction

Framework as tool box for barrier identification, intervention selection, metrics, process design

Recommendation of possible solutions
Summary

- Knowledge as a critical success factor
- Knowledge management to support businesses
- Global aspects
  - Understanding the context
  - Process design
  - Systems and tool support
  - Cultural aspects
References (required readings)


References (practical issues, good practices)

References (theory and background)


References (theory and background)


More references given on request and during the lecture
Global Knowledge Management

Case Study

Jan M. Pawlowski
2013
Evaluation / Credits

(Final) Evaluation

– 50 % Final examination
– 25% case study presentation
  • “active” presentation (in case related sessions)
– 25% final assignment
  • -10 pages (Times New Roman 12pt, single spacing, “common margin”)
  • finally revised presentations
  • ppt/pdf + doc/pdf
  • provide the full names and email of all group members
Global Knowledge Management

>> Case – Part I <<
Please form groups of four to five

Read the case study carefully.
   – The Pragmatic Development And Use Of Know-How: Knowledge Management Light At Securitech LTD

Answer the first four questions, making some notes
   – Basic Questions 1-4

This Group Work is the basis for the next parts of this case and thereby crucial for the final assignment.
1.) Why do you think it was these five measures Furrer proposed? (Discuss with reference to the details given in the case study.) Please allocate Furrer’s measures to the problems illustrated in the case study wherever possible.

2.) Which measures do you consider to be appropriate solutions to the illustrated problems? Which measures do you view with concern, and why?

3.) What are the central findings (in the sense of success factors) with regard to the process of introducing knowledge management which can be deduced from Furrer’s actions?

4.) Which of Furrer’s ideas did you consider to be the best? Could this idea have emerged and been implemented even without any involvement of knowledge management?
Integrated Knowledge Management

>> Case – Part II <<
Case – Part II
Group Work (1/2)

Please stick to your group

Re-Read the case study carefully.
- The Pragmatic Development And Use Of Know-How:
  Knowledge Management Light At Securitech LTD

Answer the following questions, preparing a presentation (.ppt, etc.)
- See questions next slide

This Group Work is the basis for Part III of this case
## Knowledge Management Light At Securitech LTD.

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<table>
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<tr>
<td>5.) Which next steps would you propose to Mr. Furrer for the coming six months? How can he ensure the continued success of the undertaken measures, and achieve the continuation of knowledge management in the approaching business management meeting?</td>
<td></td>
</tr>
<tr>
<td>6.) With regard to this mornings session, what do you think about the knowledge cockpit? What about the criteria / indicators? Are these sufficient and tailored to the companies needs?</td>
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<td>7.) Discuss the difficulties of measuring Knowledge Management success or impacts in general and more specifically concerning Knowledge Management Light At Securitech LTD.</td>
<td></td>
</tr>
<tr>
<td>8.) Which aspects of the given context should Furrer pay more attention to in his next steps? Which factors has he given too little consideration until now?</td>
<td></td>
</tr>
</tbody>
</table>
Case – Part III
Group Work

Next ≈ 4 weeks

- Please stick to your group
- Discuss the extension of the case study – which changes to the previous situation can you identify
- Answer the questions of the case extension, we support the case work
- Prepare a presentation of the overall solution until 15.12.2013
Contact Information

Prof. Dr. Jan M. Pawlowski

- jan.pawlowski@jyu.fi
- Skype: jan_m_pawlowski

- Office: Room 514.2
- Telephone +358 14 260 2596
- http://users.jyu.fi/~japawlow