

## **Experience with Knowledge Management at GRS – Part 1: Document and Information Management**

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**Workshop on Managing Nuclear Knowledge**

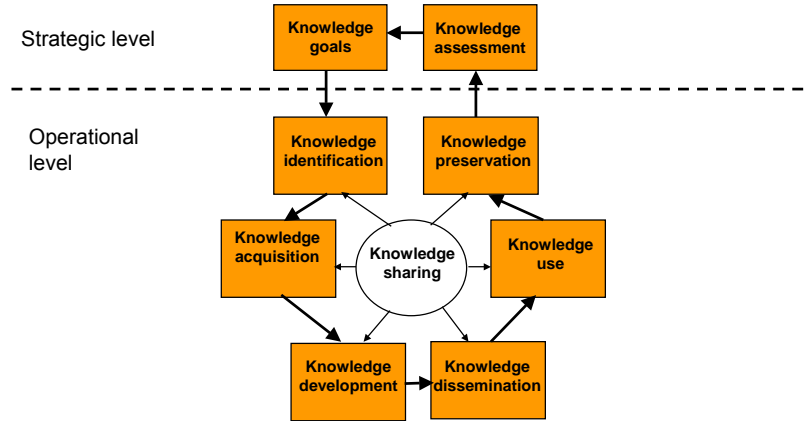
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### **General**

- GRS-Activities on Knowledge Management since 2002
    - Starting point: Loss of knowledge in expert's organizations and authorities
    - Pre-Project (BMU-sponsored): Inter-organisational knowledge management → Implementation first at GRS
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## Methodology (Probst et al.)



## Portal

The screenshot shows the GRS Intranet-Home portal with the following content:

- Themen:**
  - Vollen Page
  - Qualitätsmanagement
  - Aus- und Weiterbildung
  - Organisationshandbuch
  - Informationssysteme
  - GR3-A-Berichte
  - Foto- und Filmarchiv
  - Zwischenfälle
  - Schulung, Support, Hilfe
  - Unternehmens
  - Wissensmanagement
  - Ökonomie
- aktuelle Nachrichten:**
  - Infobrief
  - Bericht über die 72. Aufsichtsratsitzung
  - Safety Assessment Guide - Erster Vortrag in Garching
  - Führungskräfte-Konferenz zur Personalentwicklung in der GRS
  - Falschdokumentation: Sommerfest Garching 2005
  - Wissensbasis Komponententestprüfung mit Software C-Tag gefallert
  - Falschdokumentation: Herr Dr. Wack beverte seinen Ausspruch
- GRS-Pressenach:**
  - Besoldungsliste
  - Standarddokumente
  - QR-Arbeitsgruppen
  - GR3-System
  - Infobrief
  - Foto- und Filmarchiv
  - DB: Generische Sicherheit GRS
  - Delta Cell
  - Serviceplan-Bilder
  - GR3-Koordinator
  - Alles GR3-Portal
  - Portal Forum
  - Sekretariat/Intranet-Portal
  - GR3-Entwurf
  - Neuen Hyperlink hinzufügen
- ALLENKUNDE LINKS:**
  - Kerntechnische Organisationen (5)
  - Wikipedia: Wissens (3)
  - Wissenschaftliche Suche (2)
  - Wörterbücher (5)
  - Neuen Hyperlink hinzufügen

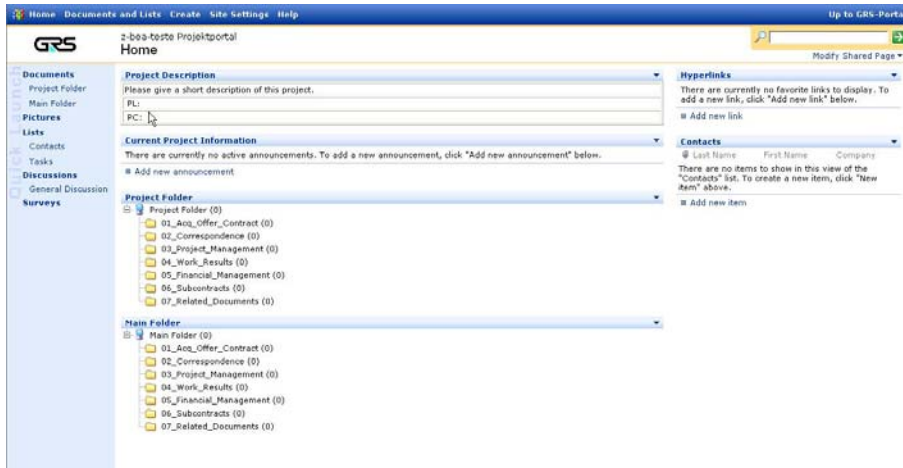
- Central access point to all documents and information
    - Realized with MS Sharepoint Portal Version 2
    - Integrated Document Management
    - Collaboration in Team Sites
  - Document Management System (DMS)
    - DMS "Light"
      - Ease of use
      - DMS Features:
        - CheckIn/CheckOut
        - Versioning
        - Metadata (document profile data)
        - Mail export
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- Crawling and indexing of external sources
    - File Shares (CD's, ...)
    - Notes Databases
  - Very good integration with MS Office 2003
  - Portal Sites:
    - News (different sources such as existing databases, external sources ...)
    - GRS Portal News
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- Themes - horizontal
    - Yellow Pages
    - Quality Management
    - Education and Training
    - Organisation Handbook
    - Information Systems
    - GRS-Reports
    - Photo- and Overhead Archive
    - Support and Help (portal and non-portal content)
    - International Activities
    - Knowledge Management
    - Sitemap
  - Organisation Units – vertical
    - Presentation of Management, Divisions
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- Collaboration
    - Open Team Sites for
      - Departments
      - Projects
      - Particular Areas
        - Emergency Response Team
        - Strategical Programme Groups
        - ...
    - Closed Team Sites
      - Often short-term collaboration on restricted fields
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- Project Server: (since 2005)



- Each project has its own project team site (German or English)
- Project Planning with MS Project (option for each project)
- All project documents incl. mail electronically held
- Preset project metadata
- Default structure:
  - Quality assured documents (allows limited access by sponsor)
  - Work documents
  - Particular rights to project members, project leader, controller

- Search
    - Sharepoint default had to be improved by a third party tool (Boolean, Metadata, Wildcard search)
      - Search over all portal and non-portal content
  - Integration of tools for knowledge representation
    - Concept Maps
    - Ontologies
  - Alerts
    - For every list (document library, announcements, news ...)
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### **What should the portal achieve:**

- Transition from e-mail based communication to Team communication
  - Improvement of internal communication
    - Information on all GRS-activities of common interest, GRS-Strategies
    - Team Cooperation
  - Build a Corporate Memory
  - Integrate DMS (particularly w.r.t. projects) in everyday work
  - Help along the notion of Knowledge Sharing
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## Experience gained in implementation of document and information management:

- Acceptance
    - ⊕ General Manager strongly supports all KM activities
    - ⊖ Middle Management often indifferent (seldom negative)
    - ⊖ Change from Sharepoint Version 1 to Version 2
    - ⊖ Interactive training and help documents not much used
  - Yellow Pages
    - ⊕ Public information consistent with personnel file information
    - ⊕ All other information voluntary
    - ⊖ Only about 30% of the staff have offered unsolicited information
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- Document Management
    - ⊕⊕ Project Management: Strict guidelines w.r.t. to library structure and documents
    - ⊕ Number of information and documents accessible from the portal strongly increasing
    - ⊖ Even in the "light" version, users have difficulties with collaboration on documents
    - ⊖ Sparse input of metadata, maintenance difficult
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- Retrieval

- ⊕ Full-text search on all contents
- ⊕ Restricted search by sources, metadata
- ⊖ Still too many hits
- ⊖ Ranking unsatisfactory
- ⊕ First efforts in structuring and categorizing knowledge domains

- Collaboration

- ⊕ Number of Team Sites (open and closed ones) increasing
  - ⊖ Mail still most important communication medium
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## Conclusions

- Information on the portal has to be better conveyed
    - Support from management to be improved
    - Collect key-persons in a Knowledge Management Community
    - Intensification of training, in particular demonstration of examples
  - Rapidly increasing quantity of information poses problems
    - Navigation and retrieval to be improved
    - Quality requires efforts (e.g. structures, metadata, ranking ...)!
      - Presentation on knowledge capturing and preservation
    - Fresh look at (semi)automatic categorizers
      - First results show significant improvements
    - Attempt at construction of GRS-taxonomies
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### **Future plan:**

- Enlarge the GRS information management to a (inter)national centre for nuclear safety information (GRS as “information broker”)
    - Interest by authorities, expert organizations, utilities ...
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