



***IAEA International Conference on Human Resource Development  
for Nuclear Power Programs: Building and Sustaining Capacity,  
12-16 May 2014***

# **Knowledge Management for Business Process Management**

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# Process Oriented Knowledge Management



***Mission, Mandate***

Legitimation of Organisation

***Business Processes  
Implement Mandate***

***Knowledge Products  
Business Process Support***

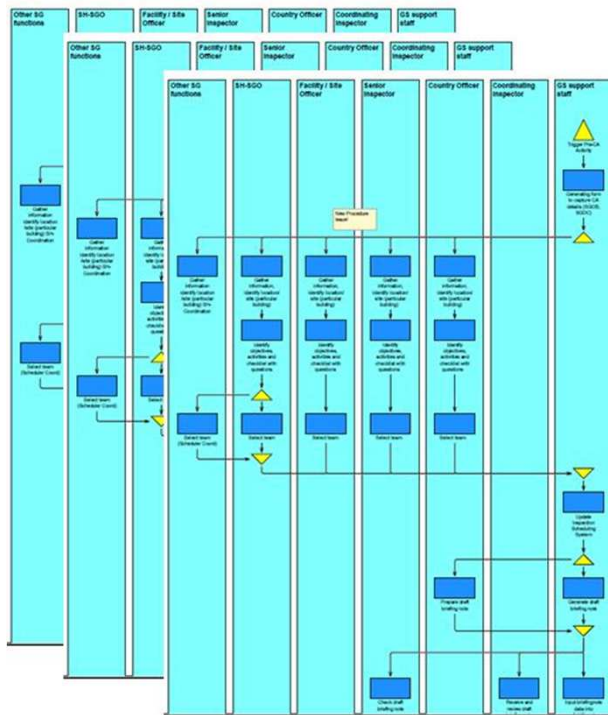
**How to support Business  
Processes with Knowledge  
Management?**



Business Processes in  
Real World

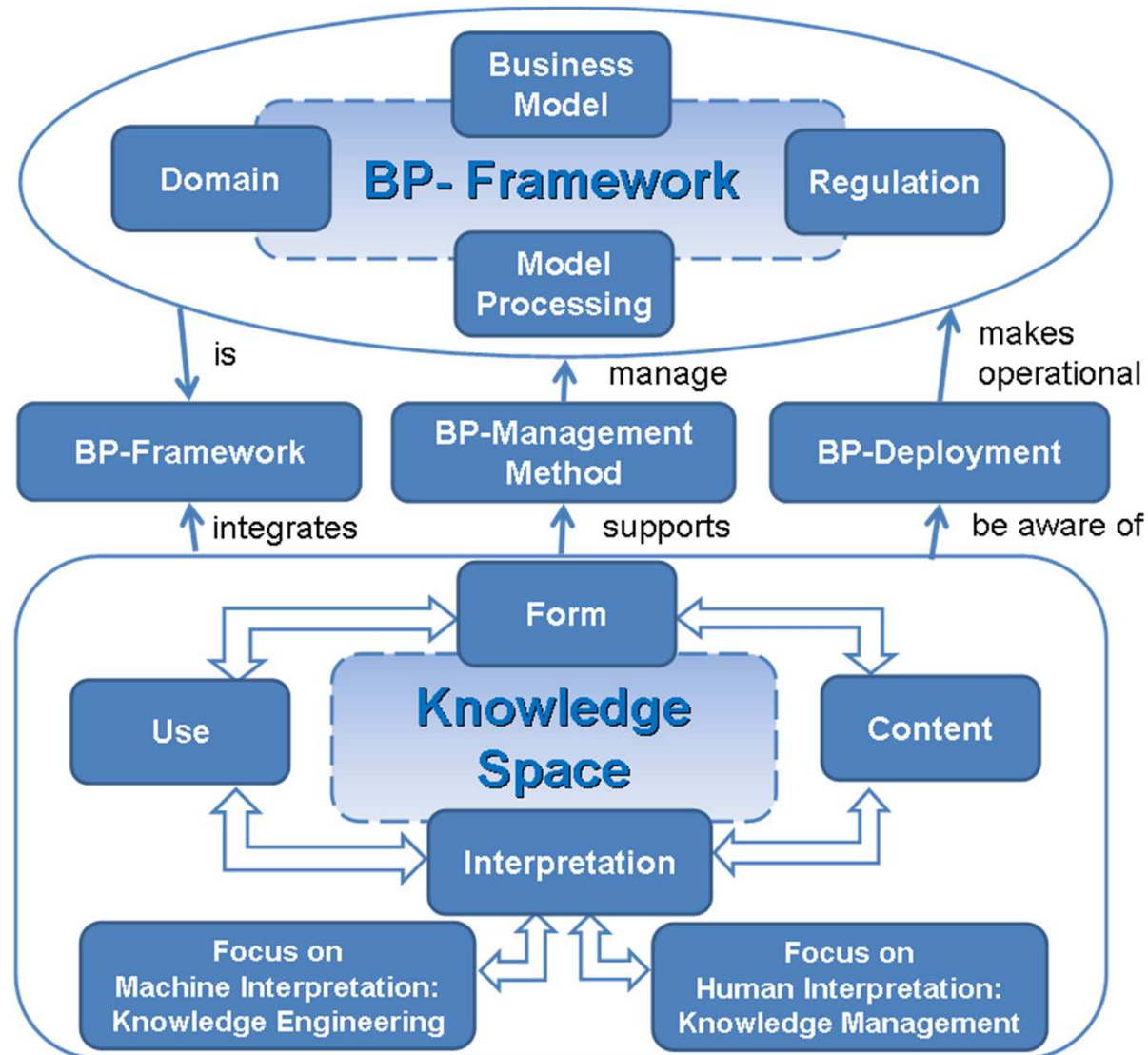
**promote**

## ***Print-Out of the Process***

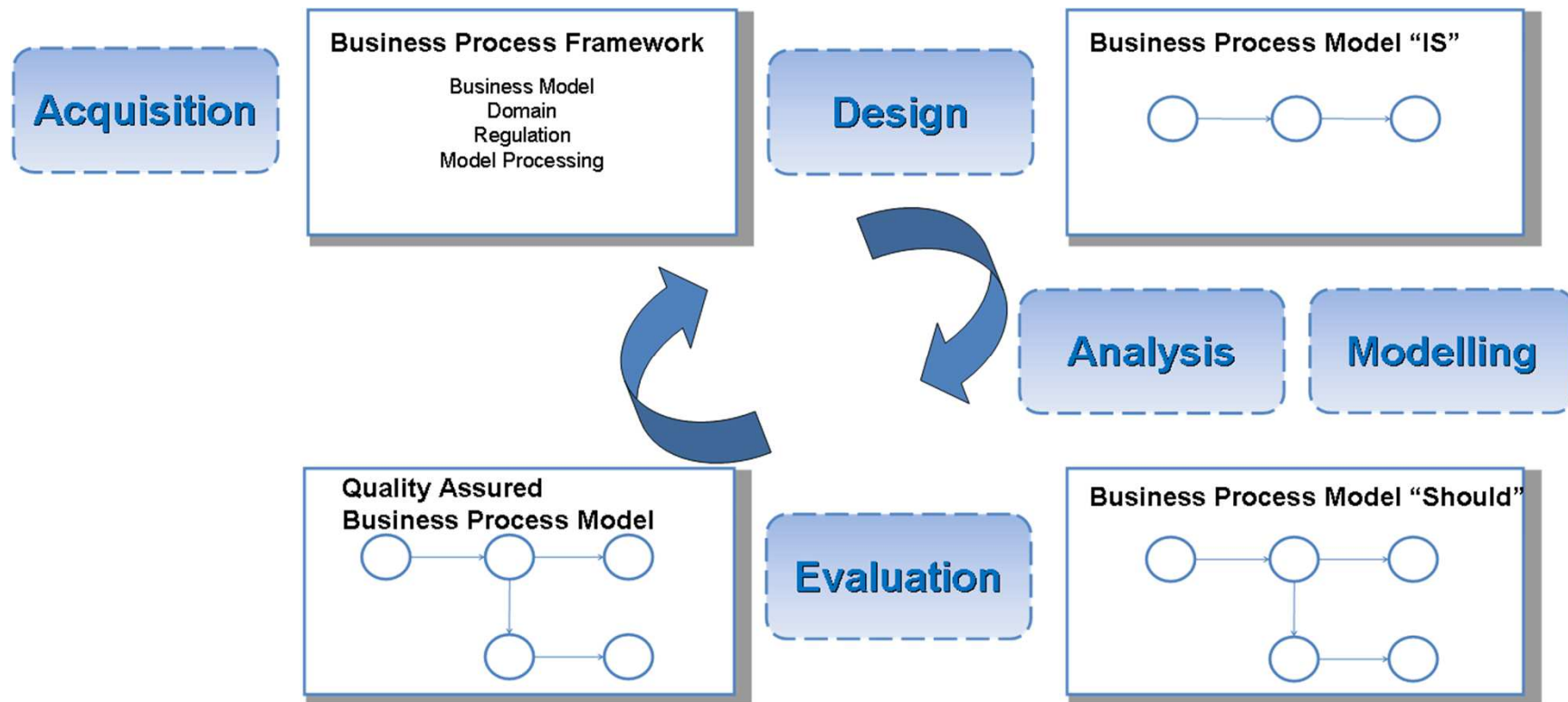
[illegible]

The practical use in daily work was aimed to be improved.

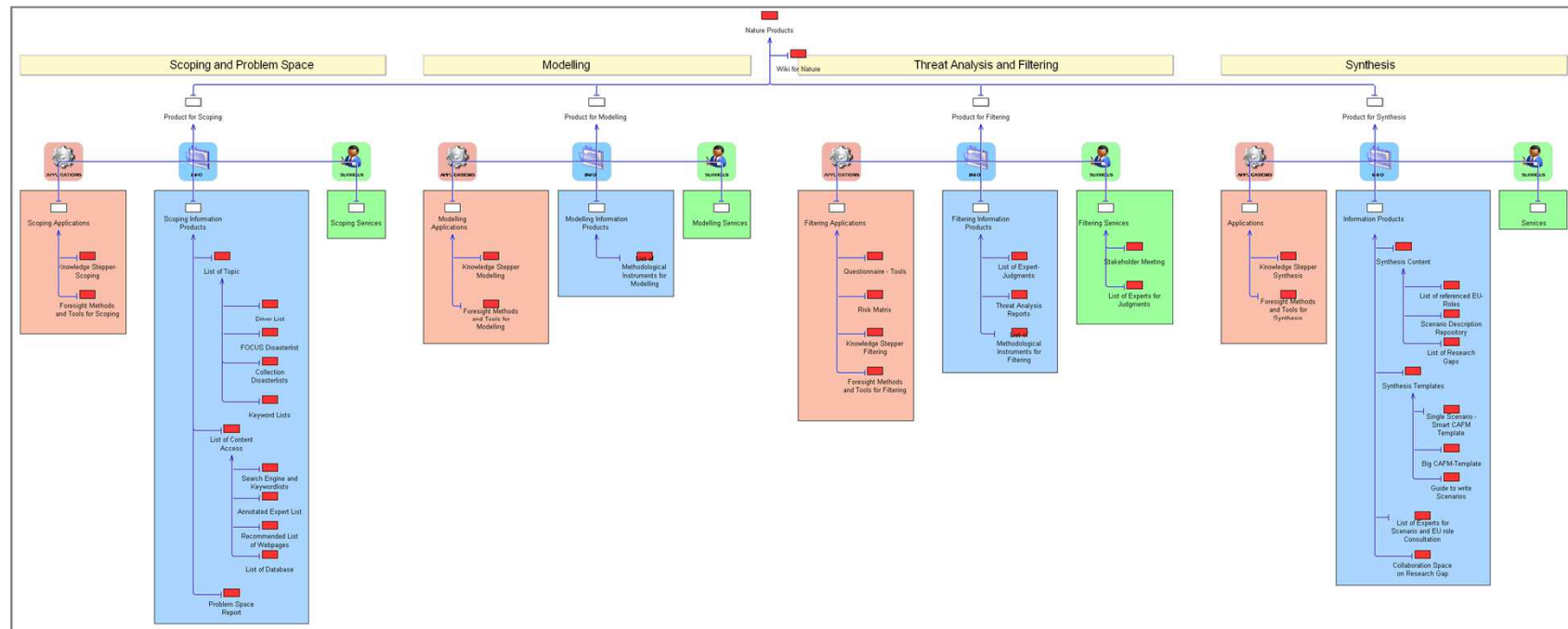
# Knowledge Management supporting Business Processes



# Key Elements so support Business Process Management



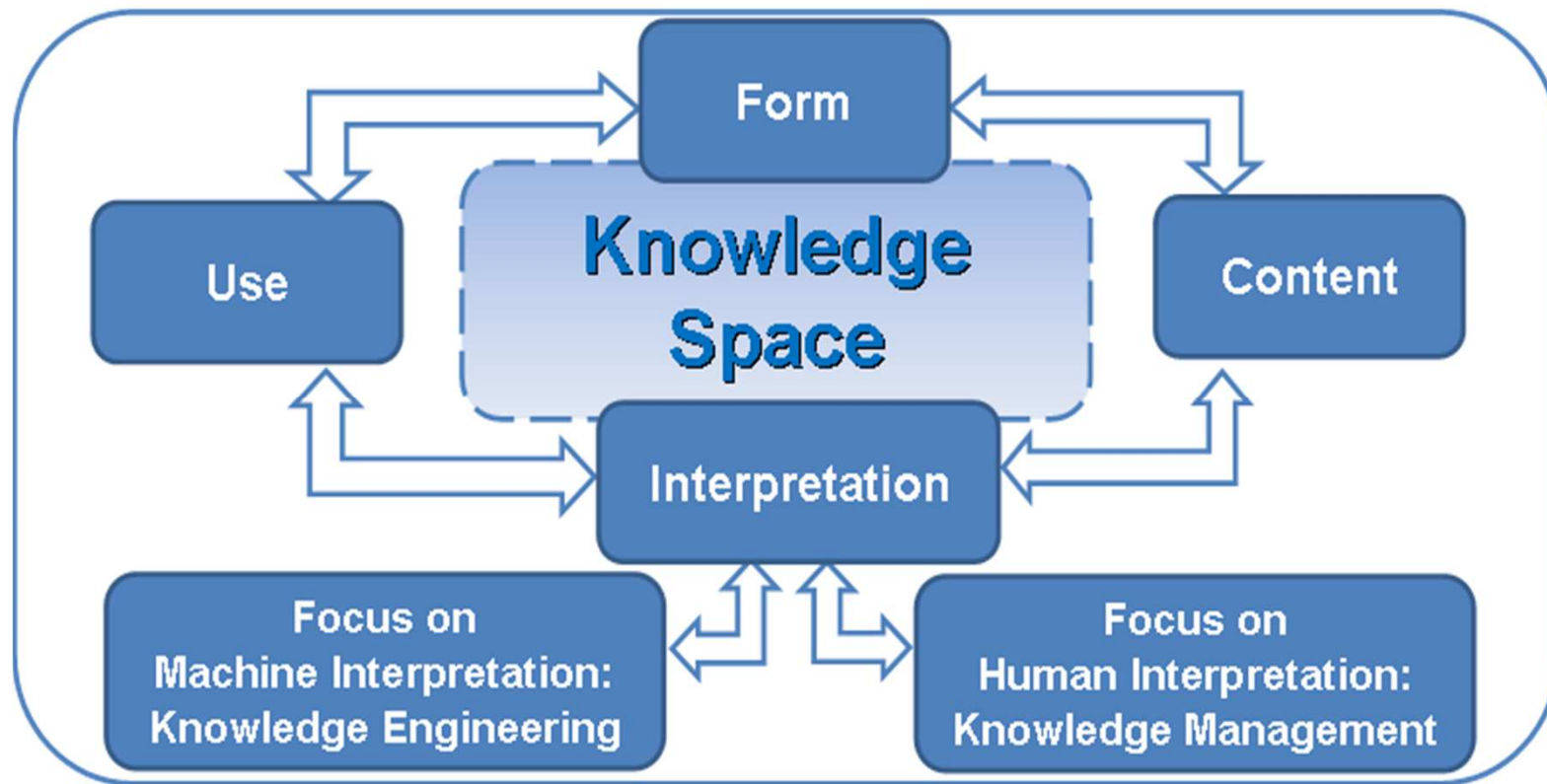
# Knowledge Products as Enabler for Knowledge Support



Modelling knowledge products  
using workshops.



# Knowledge Management



# The PROMOTE® Modelling Language



## *Knowledge Map*

***Business Process  
Model***

***Working  
Environment  
Model***

***Knowledge Product Model***

***Process Map***

***Knowledge  
Management  
Process Model***

***Team Map***

***Skill Environment  
Model***

***Knowledge Structure Model***

***Knowledge  
Tool Model***

***Knowledge  
Resource Model***

## **Overview Models:**

- Knowledge Map
- Process Map
- Team Map

## **Business Process related Models:**

- Business Process Model
- Working Environment Model

## **Knowledge Management related Models:**

- Knowledge Product Model
- Knowledge Management Process
- Skill Environment Model
- Knowledge Structure Model

## **Knowledge Resource related Models:**

- Knowledge Tool Model
- Knowledge Resource Model



# Outlook: Process-Oriented Knowledge Platform



IT-based Knowledge Platform - Natural Disasters and Global Environmental Change :: Mozilla Firefox

www.focusproject.eu/knowledgeplatform/workbench/controller.do?action=navigation&id=Natural Disasters and Global Environmental Change

- **Entrypoint I.** Stepping through the processes
- **Entrypoint II.** Consuming the provided knowledge in form of information, services or applications
- **Entrypoint III.** Access directly knowledge tools

### I. Walk through Knowledge Path

To walk through the FOCUS scenario foresight knowledge path, select one of the phases to access the according process stepper. Each process stepper supports you by guiding you through its knowledge steps and offers you additional supporting information for performing scenario foresight based on the [FOCUS Method](#).

### II. Use consumable Knowledge

Consumable knowledge from FOCUS foresight can be directly accessed via the links below that provide entry point for further navigation through related FOCUS content and results.

Scoping	Modelling	Threat Analysis & Filtering	Synthesis
<b>Information</b> <ul style="list-style-type: none"> <li>List of Topic: <ul style="list-style-type: none"> <li>Driver List</li> <li>Disasterlist</li> <li>Collection Disasterlists</li> <li>Keyword Lists</li> </ul> </li> <li>List of Content Access: <ul style="list-style-type: none"> <li>Search Engine and Keywordlists</li> <li>Annotated Expert Lists</li> <li>Recommended List of Webpages</li> <li>List of Databases</li> </ul> </li> <li>Problem Space Report</li> </ul> <b>Service</b> <ul style="list-style-type: none"> <li></li> </ul> <b>Application</b> <ul style="list-style-type: none"> <li></li> </ul>	<b>Information</b> <ul style="list-style-type: none"> <li>List of Methodological Instruments for Modelling: <ul style="list-style-type: none"> <li>Case study methodology</li> <li>Extreme value theory</li> <li>CAT models</li> <li>Dynamic modelling</li> <li>Agent-based modelling</li> <li>Complexity studies</li> <li>Relevance tree</li> <li>Morphological analysis</li> </ul> </li> </ul> <b>Service</b> <ul style="list-style-type: none"> <li></li> </ul> <b>Application</b> <ul style="list-style-type: none"> <li>Foresight Methods and Tools for Modelling: <ul style="list-style-type: none"> <li>Extreme Value Theory: Compilation of software for Extreme Value Analysis</li> </ul> </li> </ul>	<b>Information</b> <ul style="list-style-type: none"> <li>List of Expert Judgments</li> <li>List of Methodological Instruments for Filtering: <ul style="list-style-type: none"> <li>SWOT</li> <li>Bayesian networks</li> <li>Multi-attribute utility theory</li> <li>Analytic hierarchy process (AHP)</li> </ul> </li> <li>Threat Analysis Reports</li> </ul> <b>Service</b> <ul style="list-style-type: none"> <li>Stakeholder Meeting</li> <li>List of Experts for Judgments</li> </ul> <b>Application</b> <ul style="list-style-type: none"> <li>Questionnaire - Tools</li> <li>Risk Matrix</li> </ul>	<b>Information</b> <ul style="list-style-type: none"> <li>Synthesis Content: <ul style="list-style-type: none"> <li>List of referenced EU-Roles</li> <li>Scenario Description Repository</li> <li>List of Research Gaps</li> </ul> </li> <li>Synthesis Templates: <ul style="list-style-type: none"> <li>Single Scenario - Smart CAFM Template</li> <li>Big CAFM-Template</li> <li>Guide to write Scenarios</li> </ul> </li> <li>List of Experts for Scenario and EU Role Consultation</li> <li>Collaboration Space on Research Gap</li> </ul> <b>Service</b> <ul style="list-style-type: none"> <li></li> </ul> <b>Application</b> <ul style="list-style-type: none"> <li></li> </ul>

### III. Access Knowledge Tools Directly

The following FOCUS scenario foresight knowledge tools can be accessed directly:

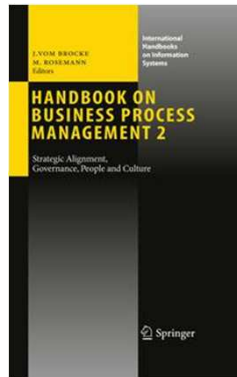
Website

Wiki

Document Pool

SVN (restricted access)

IT-based questionnaire



**Chapter on “Knowledge Engineering for  
Business Process Management”**  
**Karagiannis, Woitsch**  
**In Brooke, Rosemann, Handbook of Business  
Process Management, Springer 2010**  
**Update in 2014**



**Bayer, Kühn**  
**Prozessmanagmenet für  
Experten, Springer 2013**



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