



MAPPER

Model-based Adaptive Product and Process Engineering

Technical Session

Work Package 4, 5, 6

Presented by:

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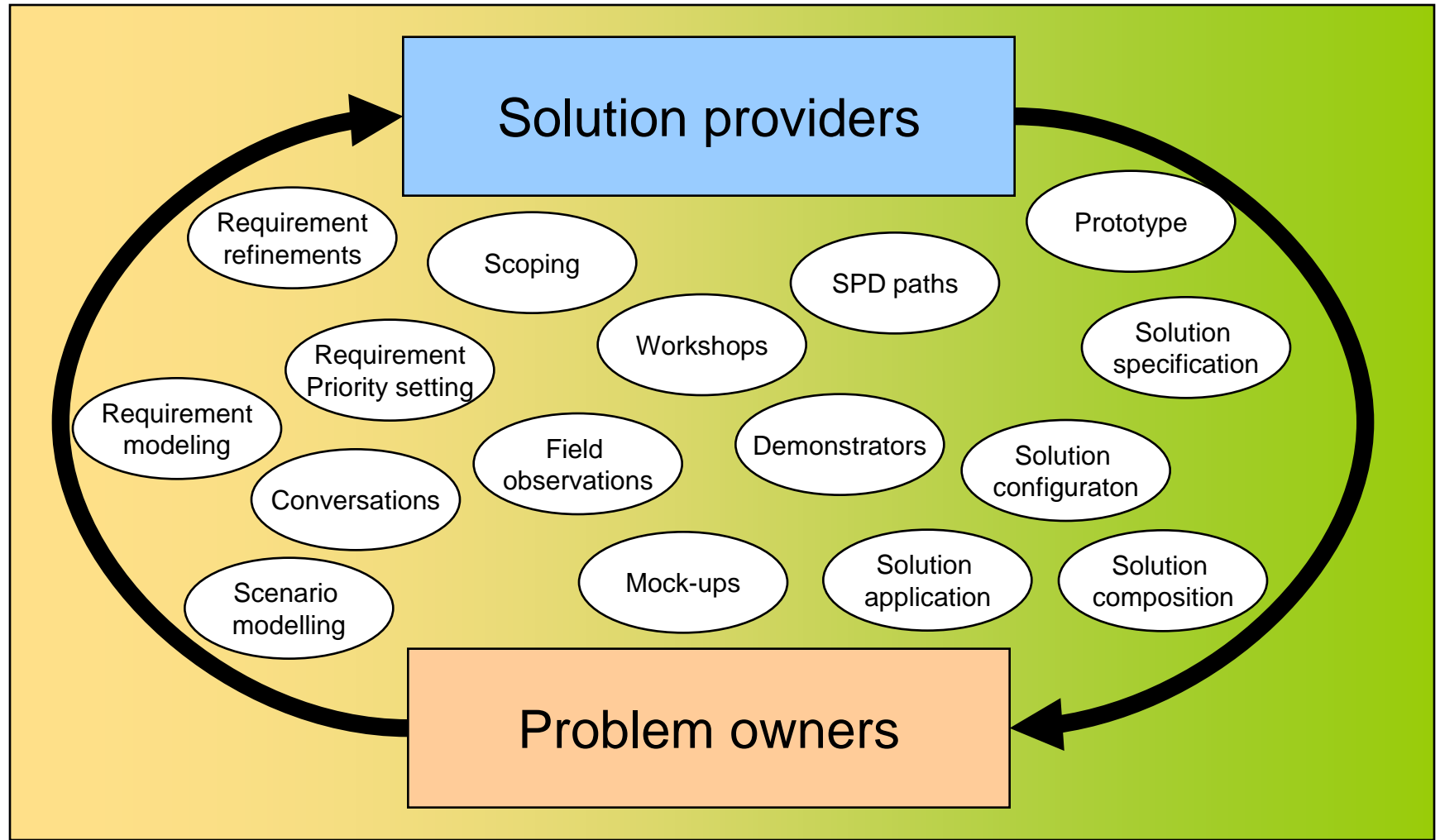
Håvard Jørgensen, AKM

Adam Pawlak, SUT

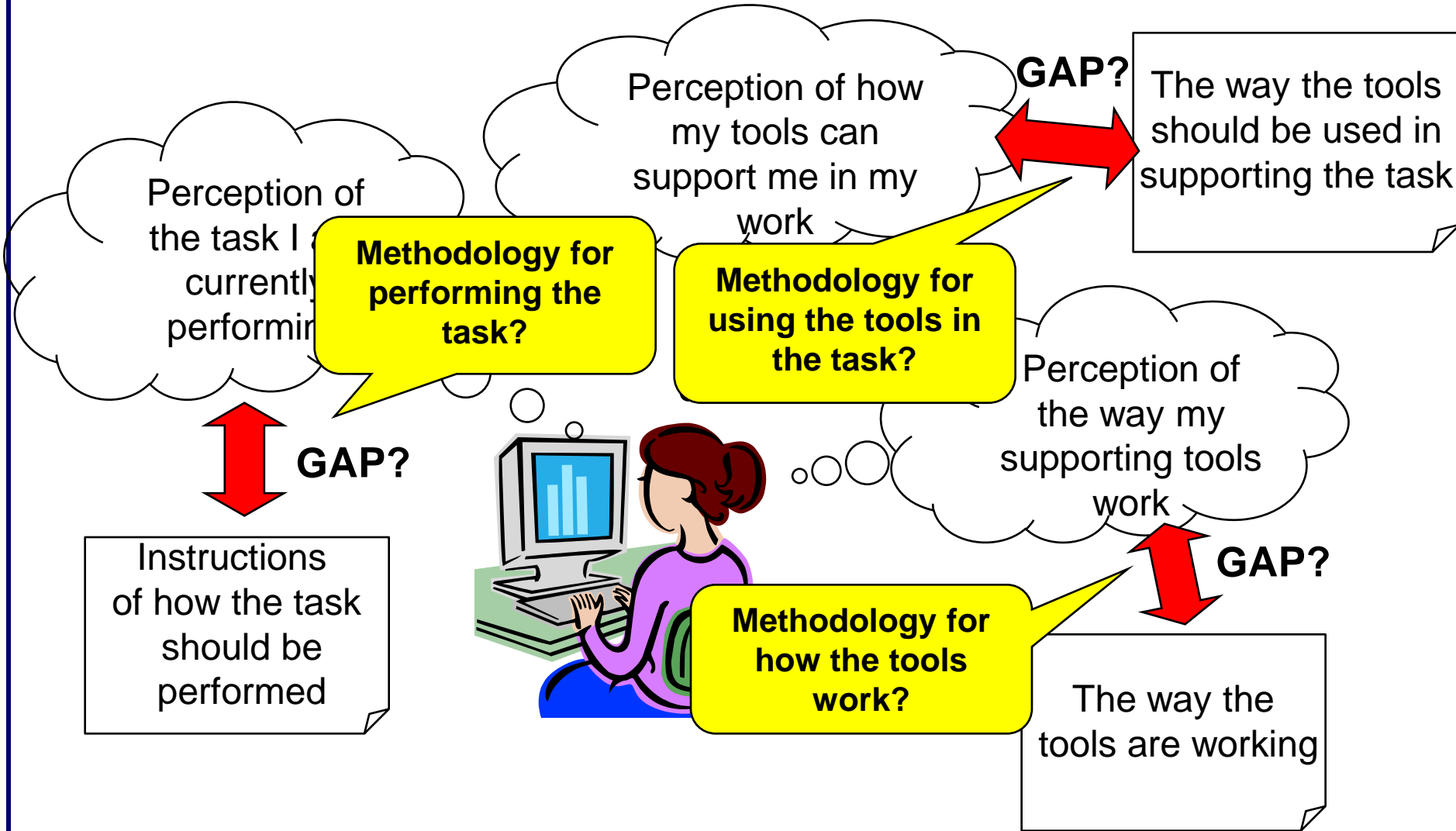
Outline

- Overview of the process from user needs to solutions
- Building on Mapper results
- Major activities and achievement in the last period
- Outlook

From User needs to Solutions



An illustration of methodology purposes





Major activities and achievements in wp4 (1)

Activities:

- Methodology solution specification and development
 - A collaboration process including virtual and physical meetings and workshops
- Inclusion of the ethnographic results
 - Additional user requirements, providing the context of user requirements, low-fidelity mockups,...
- Focusing the scope of methodology support
- Focus on dependency Methodology <--> Services and Infrastructure
- Using the CVW v.2 as an integration platform for the methodology components
- D12 preparation





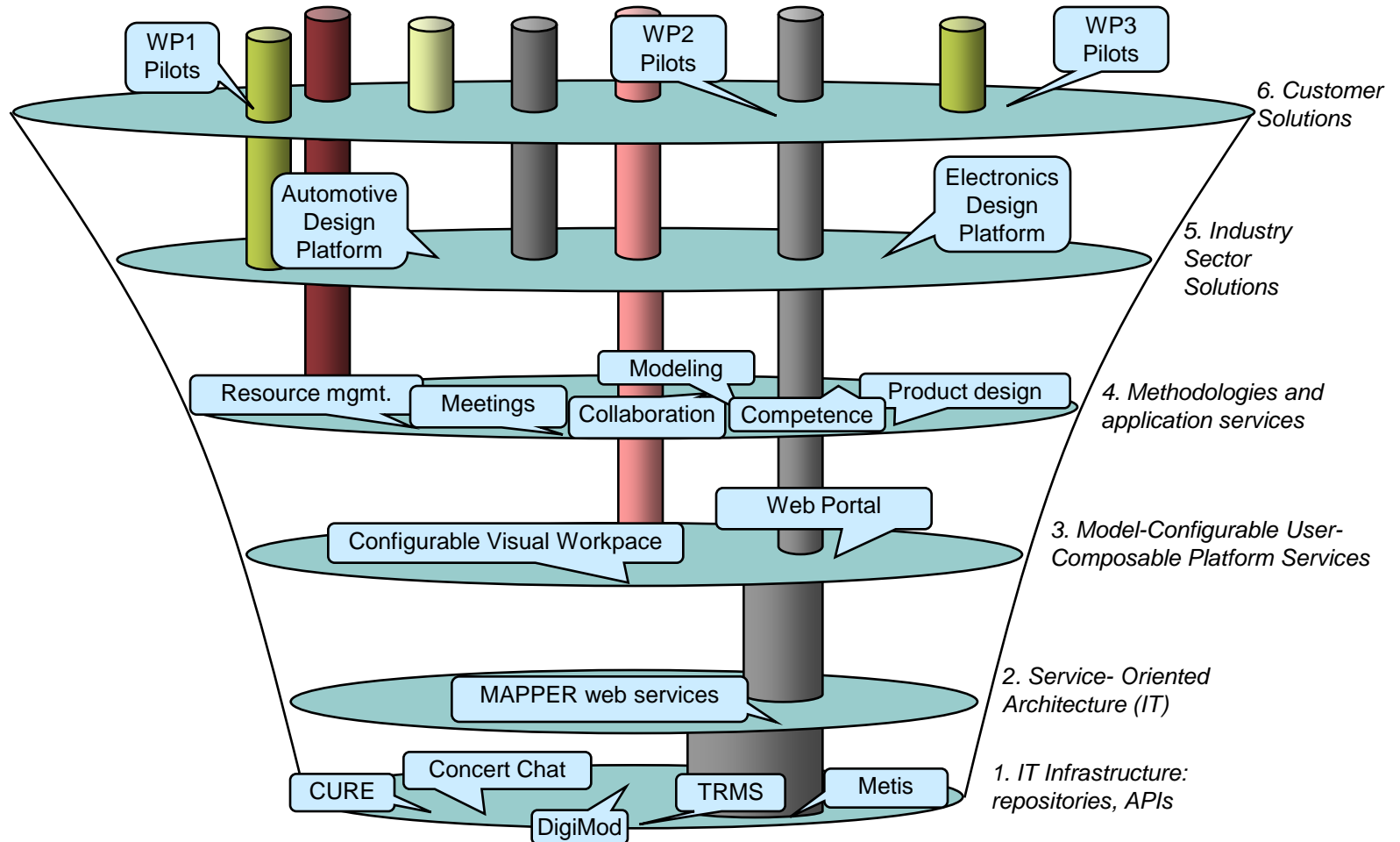
Major activities and achievements in wp4 (2)

Examples of methodology components:

- Pattern language (generic approach for methodology development)
 - Meeting pattern language
- IRTV methodology (used for modeling the components in CVW v.2)
- Ethnographic based SPD solutions
 - How can a smooth path be created from today's way of working to a way of working using MAPPER technology?
- Interoperability support
- Competence and skill modeling support



Building on MAPPER Results

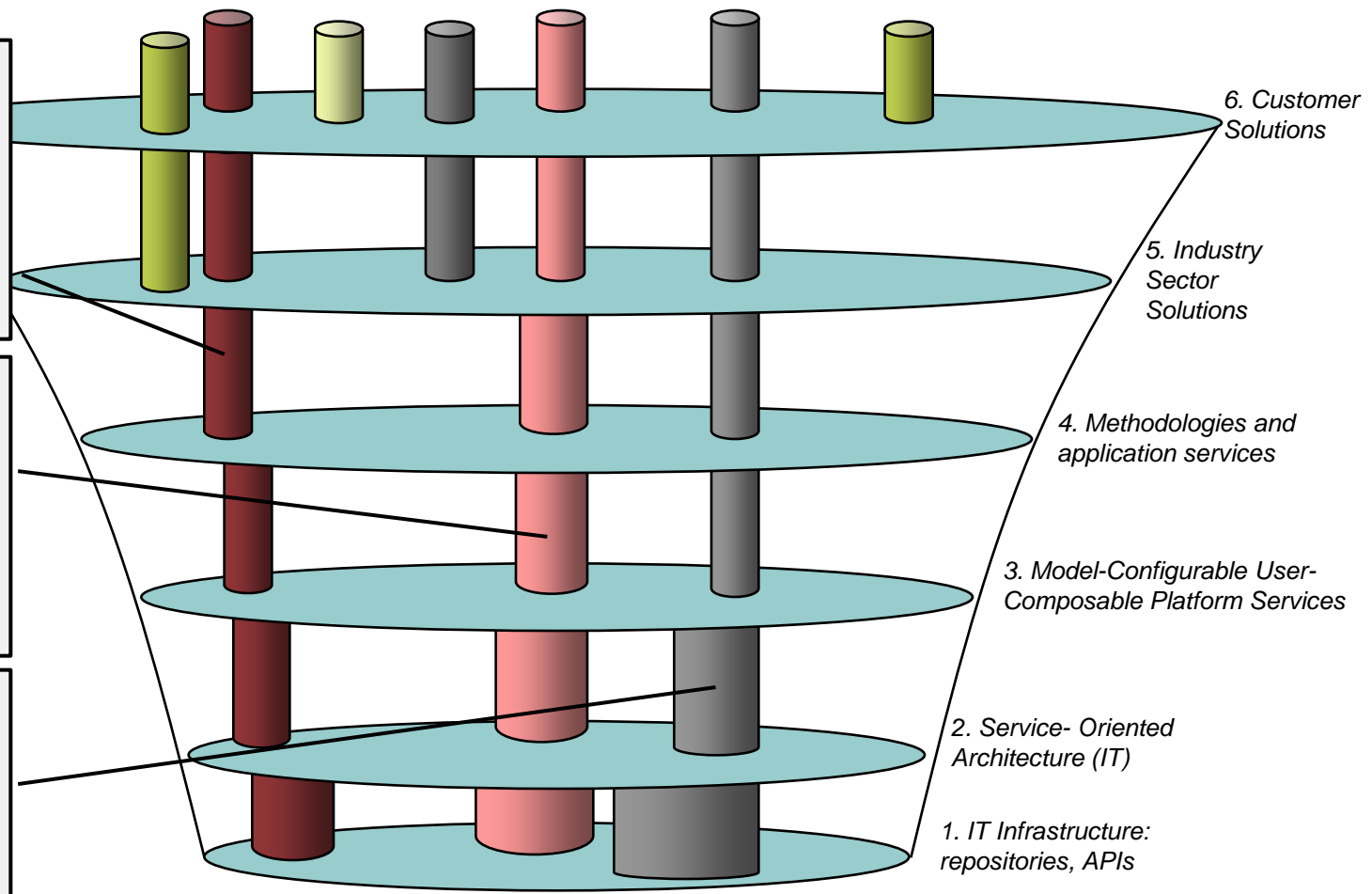


Major Achievements - Examples

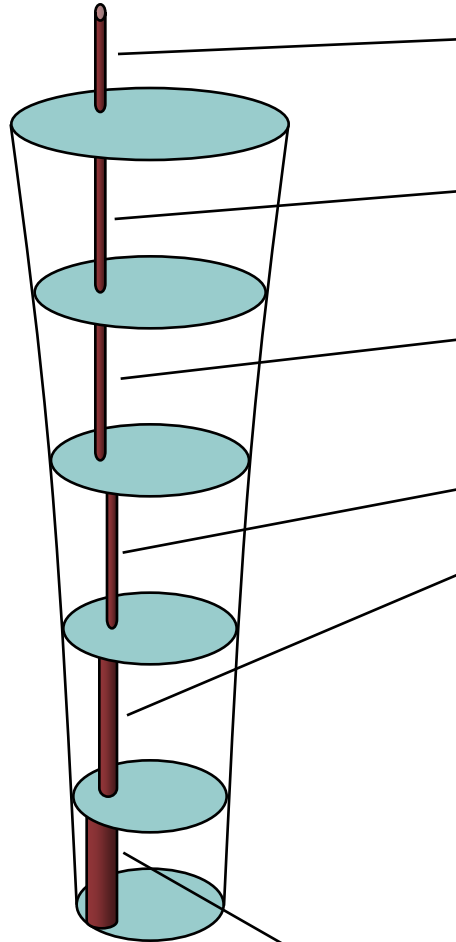
Meeting patterns for WP1

Remote tool invocation for WP2

Visual design for WP3



Meeting Support



Customised WP1 Solution

- Target Setting Process

Meeting Types

- Creativity support, workshop facilitation

General Methodologies

- Meeting Patterns Methodology

Configurable Visual Workplace for meetings

Basic Workplace Services for Meeting Phases

- Create Meeting Space
- Invite Participants
- Co-construct Agenda
- Prepare Agenda Items
- Hold Meeting
- Meeting Follow-up

Metis, CURE, Concert Chat, DigiMod

Meeting Support in CURE

Meeting Support in CURE

Meeting: 4th Review

About this meeting:

- 2007-11-21. 4th Review
- Organizer:  [Marialuisa Sanseverino](#)
- Date: 2007-11-21
- Location: European Commission -- DG Information Societ
- Tools: METIS, Powerpoint

Projector is required

- Minutes: [The Meeting Minutes](#)

Agenda

Overall Goal: Exchange on the current status of the MAPPER p

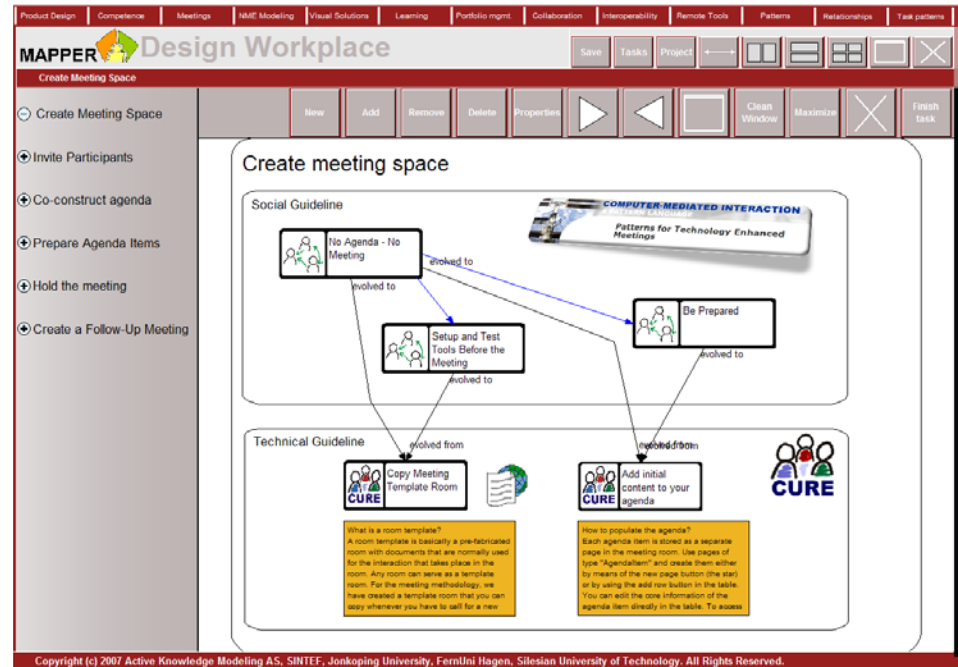
To achieve this goal, we propose the following agenda items:

#	Name
01-1	Meeting opening
01-2	Reviewers internal meeting and feedback
01-3	Overall status
01-4	Response to 3rd review recommendations
02	Coffee break
03-1	Status of use cases / deliverables: WP1
03-2	Status of use cases / deliverables: WP2
03-3	Status of use cases / deliverables: WP3
04	Technical session and demo pilots
05	Lunch
06	WP4-WP5-WP6 Report

- Extended Template Mechanisms
 - Report Generation, Structured Pages
- Improved Usability
 - Inline Editing
 - Instant Notifications
- Improved Integratability
 - Plain Content Views
- Improved Stability and Performance

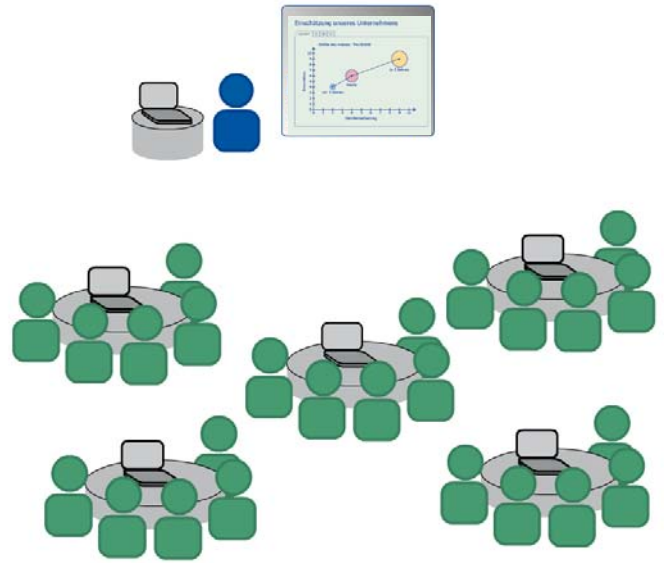
Meeting Support in CVW

- Meeting Phases
- Social Guidance
 - Generic Meeting Patterns
- Technical Guidance
 - Implementation based on Mapper services
 - Tasks in CVW
 - Partially automated



Facilitated Meeting Service with DigiMod

- Facilitation Tools
- Creativity Support
- Also for large groups





Digital Moderation

Wo stehen wir?

	Gesamt	Gäste	Industrie	Wissenschaft
++	8	5	1	
+	8	5	2	1
0				
-	1			
--				

Wie können wir die Ideen umsetzen?

2	Die Kommunikationsnetzwerke zur Industrie sind zwar sehr gut, können aber noch intensiver gestaltet werden!
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Empfehlung

Mehr Social Events

Kommentar/Beschreibung

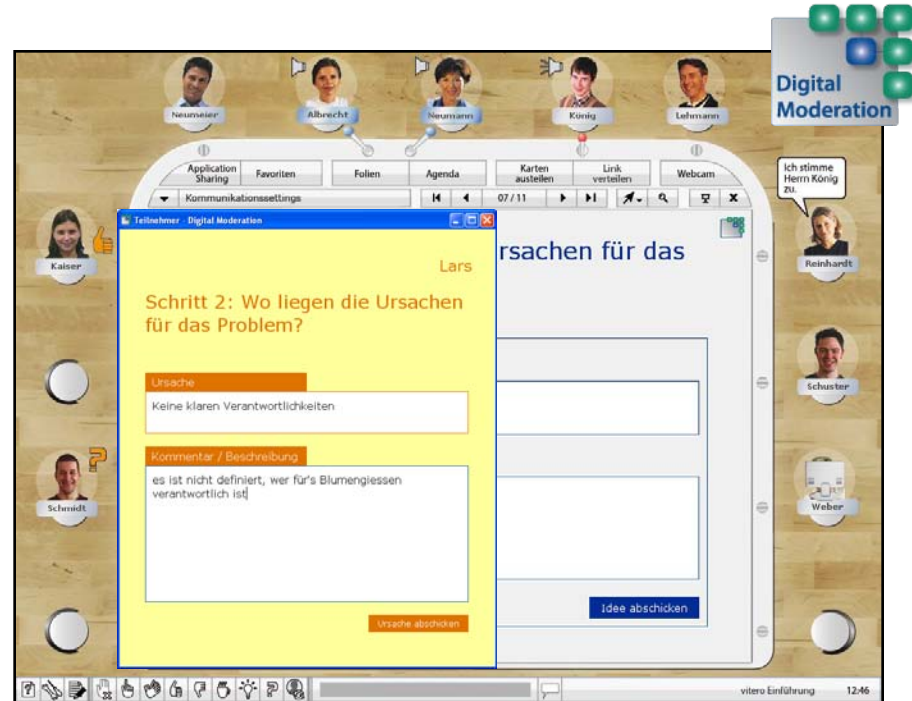
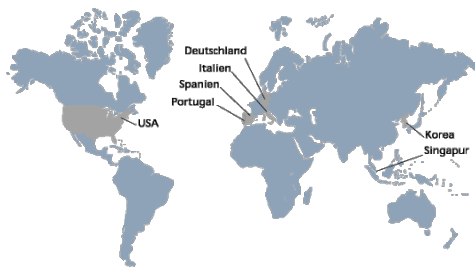
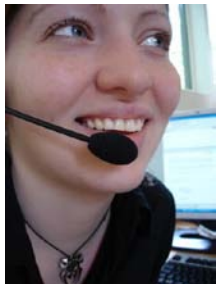
Hier fällt das Knüpfen von neuen Kontakten besonders leicht

[Empfehlung abschicken](#)

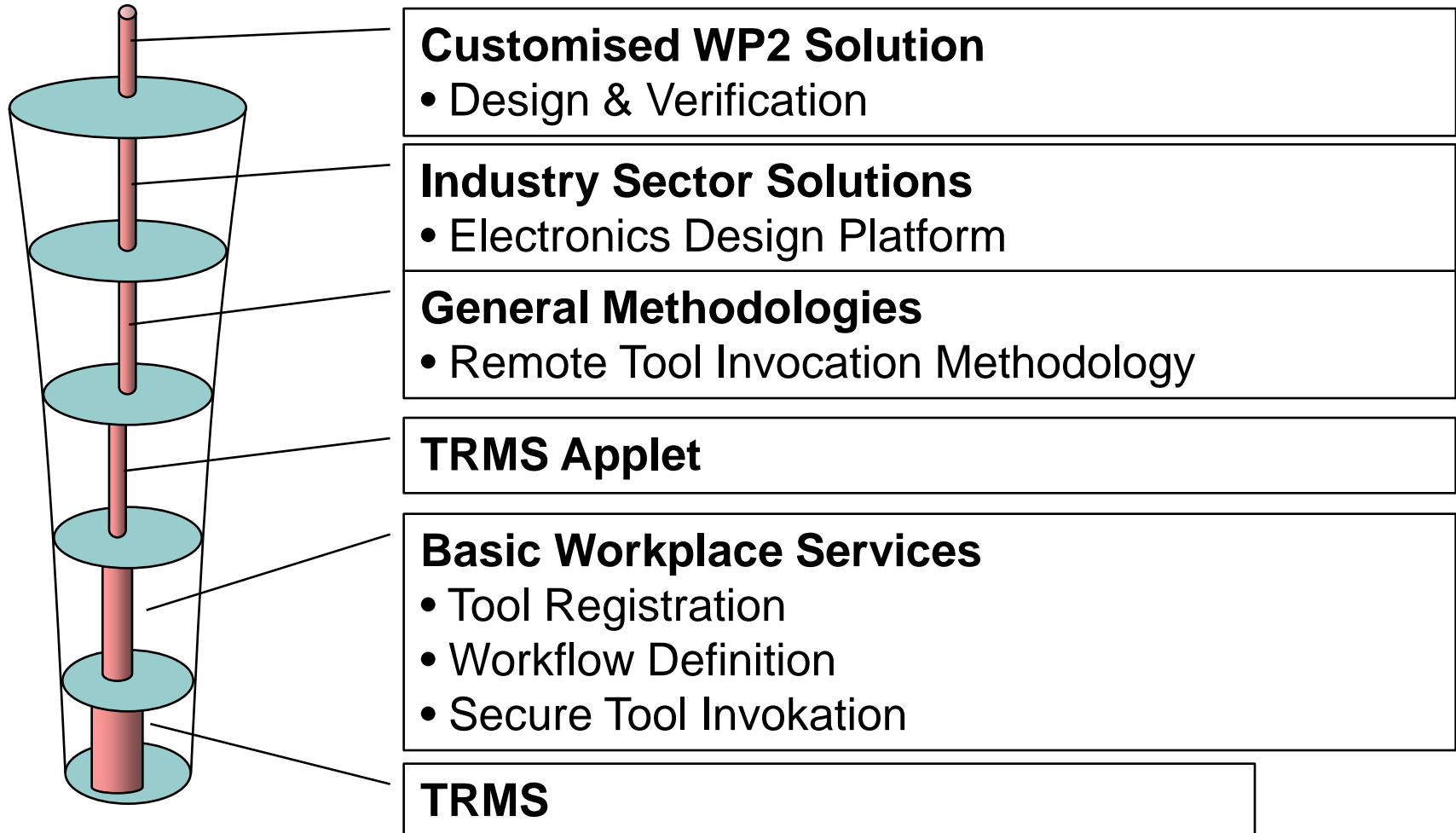


Online Workshops with DigiMod

- Workshops over the internet
- Facilitation tools integrated with web conferencing



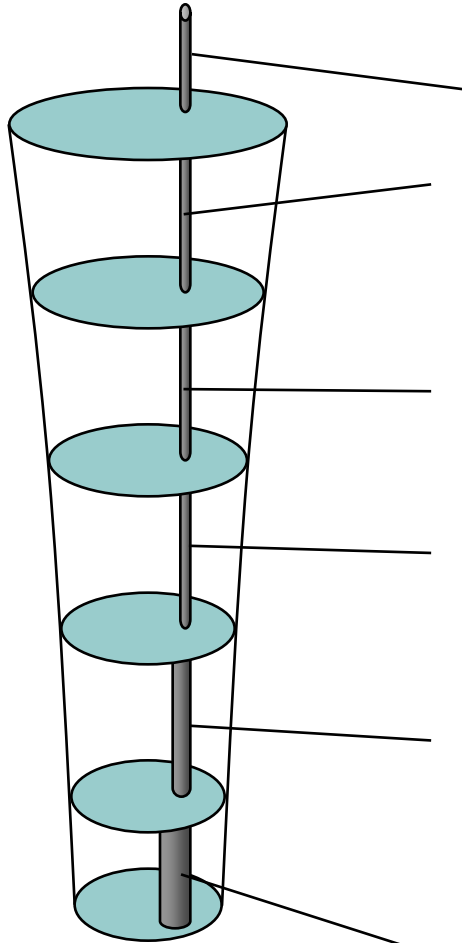
Remote Tools Support



Services-oriented new TRMSv2 architecture

- TRMSv2 under development in MAPPER:
 - New services based architecture of TRMS
 - Full support for web services
 - Secure communication (SSL)
 - Support for protected networks (firewall, NAT)
 - Support for long lasting tasks
 - More robust connections
- Integration with TRMS made easier through implementation of a new data format available as TRMS web service

Collaborative Product and Process Design



Customised WP3 Solution

Industry Sector Solutions

- Rules for calculation and aggregation
- Specific information structures

General Methodologies

- Collaborative product and process design
- Visual solutions development

Configurable Visual Workplaces (CVW v1, v2)

Basic Workplace Services

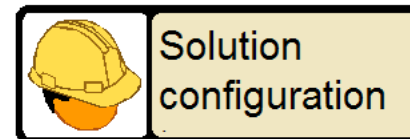
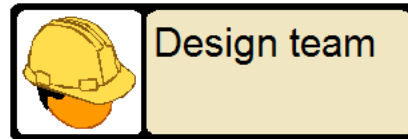
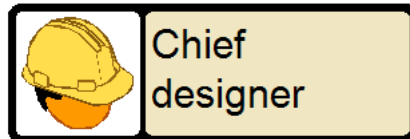
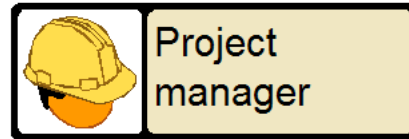
- Information management
- Role management, access control
- Task management, rule execution
- View management

Metis Client

Model-Adaptive Methodology Support

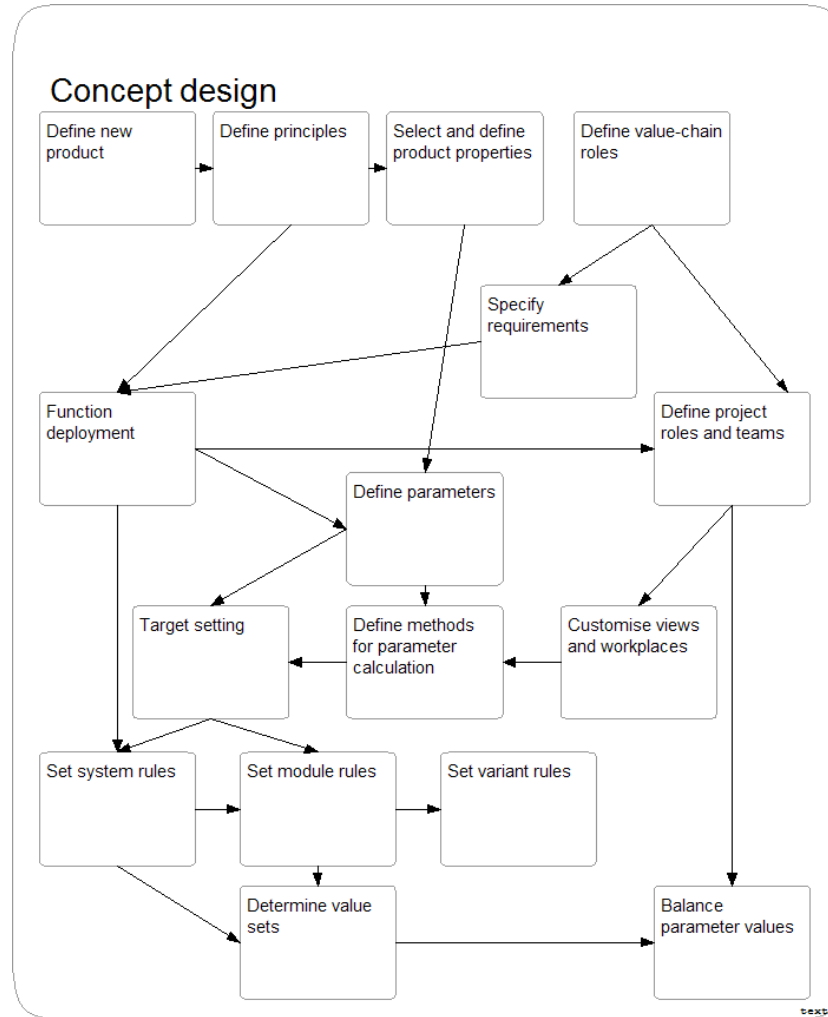
Define the roles participating in the methodology

Roles



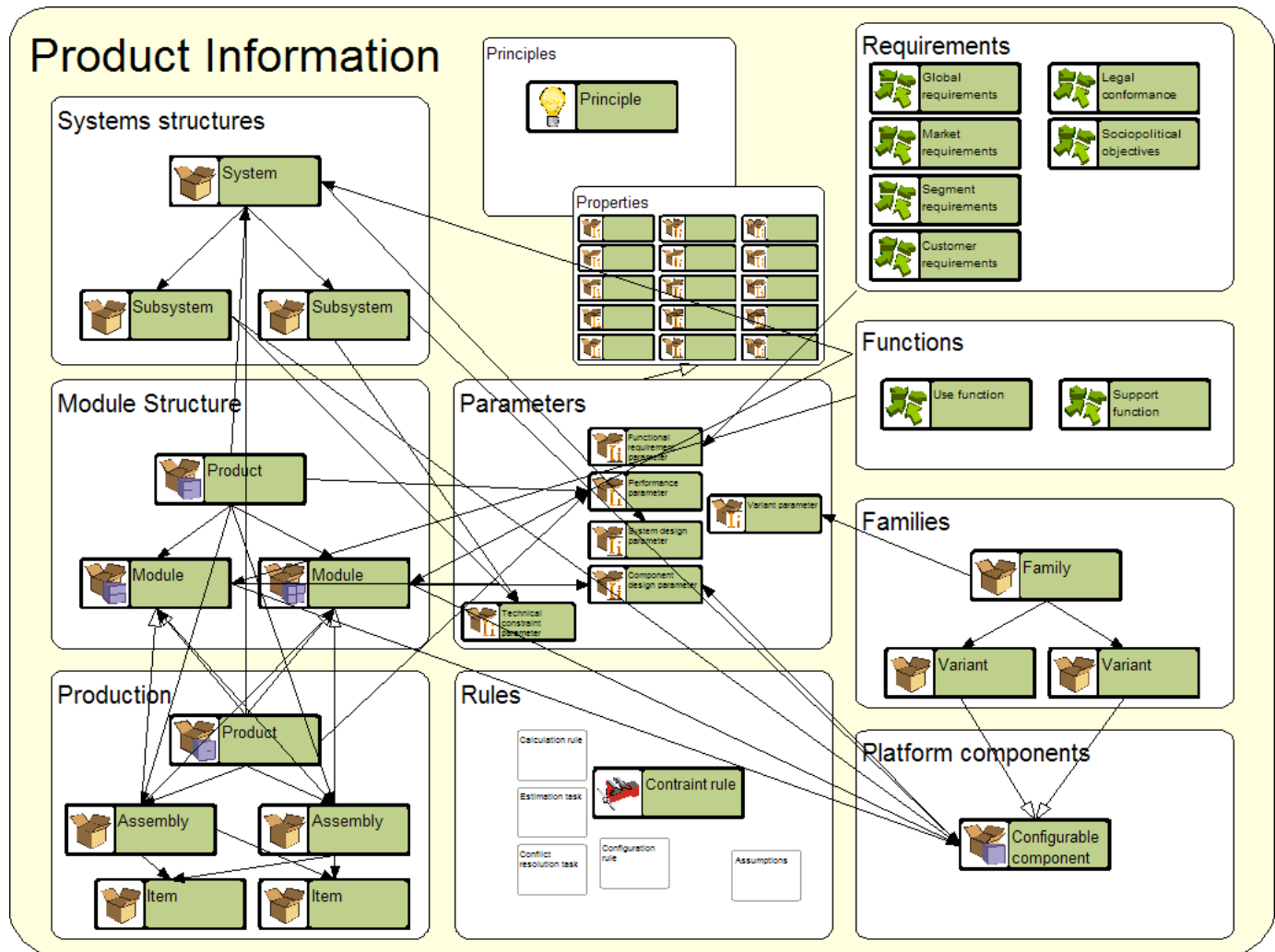
Model-Adaptive Methodology Support

Define the methodology tasks and processes



Model-Adaptive Methodology Support

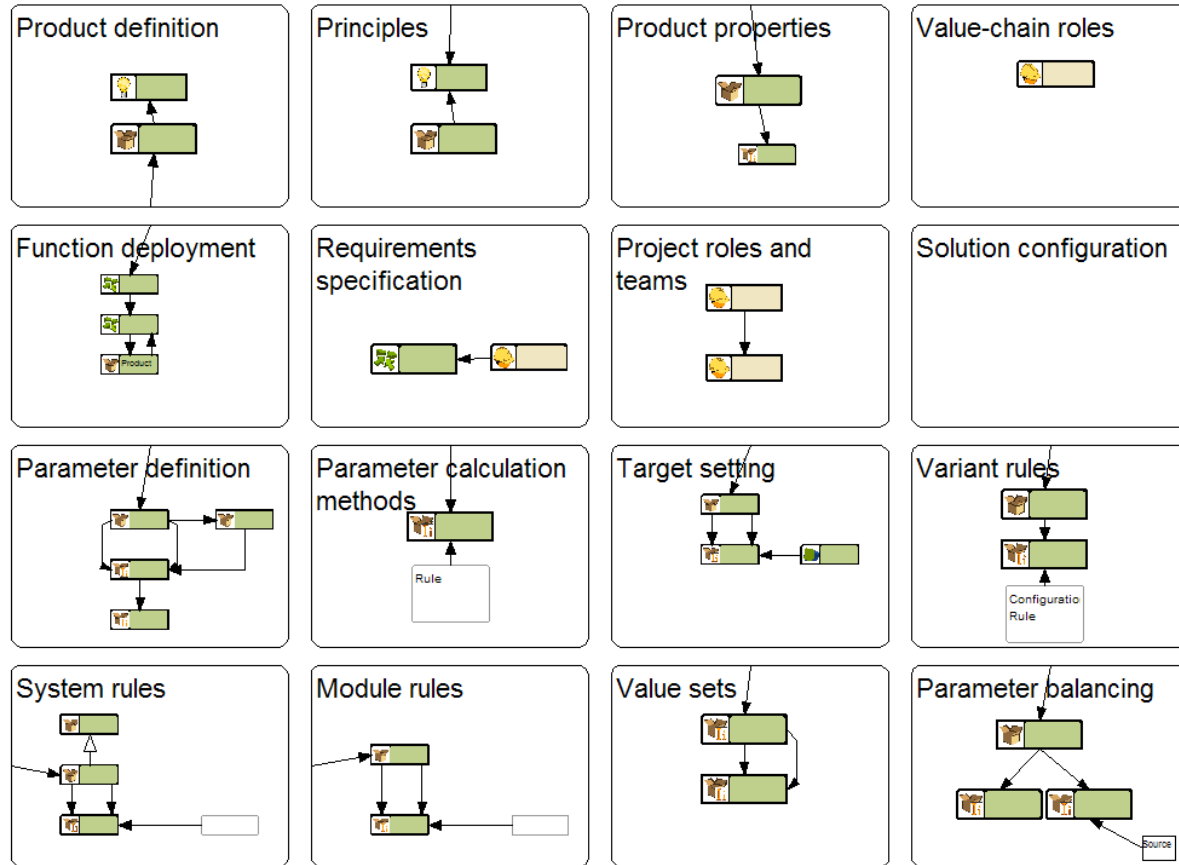
Define the information structures



Model-Adaptive Methodology Support

Define the views on information structures needed for each task

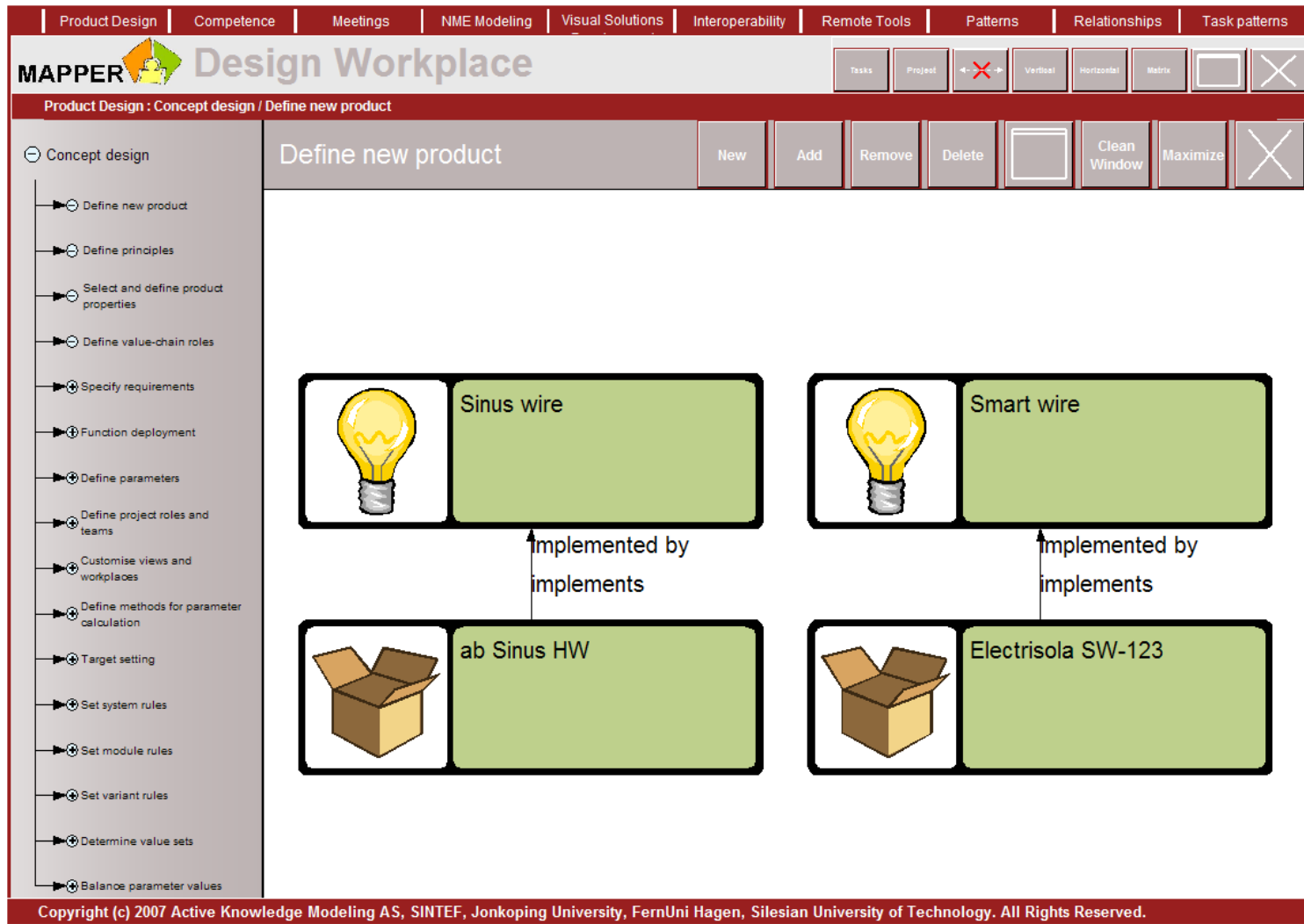
Conceptual design views



Model-Adaptive Methodology Support

Perform the work in role-specific workspaces

Extend, adapt and customise when needed



The screenshot shows the MAPPER Design Workplace interface. At the top, there is a navigation bar with tabs for Product Design, Competence, Meetings, NME Modeling, Visual Solutions, Interoperability, Remote Tools, Patterns, Relationships, and Task patterns. Below this is the MAPPER logo and the text 'Design Workplace'. A secondary bar indicates the current context: 'Product Design : Concept design / Define new product'. On the left, a vertical task list under 'Concept design' includes: Define new product, Define principles, Select and define product properties, Define value-chain roles, Specify requirements, Function deployment, Define parameters, Define project roles and teams, Customise views and workplaces, Define methods for parameter calculation, Target setting, Set system rules, Set module rules, Set variant rules, Determine value sets, and Balance parameter values. The main workspace is titled 'Define new product' and contains a diagram with four green boxes. The top row boxes are 'Sinus wire' (with a lightbulb icon) and 'Smart wire' (with a lightbulb icon). The bottom row boxes are 'ab Sinus HW' (with a cardboard box icon) and 'Electrisola SW-123' (with a cardboard box icon). Arrows labeled 'implemented by' point from the bottom boxes to the top boxes. The interface also features various window management buttons like 'New', 'Add', 'Remove', 'Delete', 'Clean Window', and 'Maximize'.

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Outlook

- Support use cases
 - Further refinement of methodology, services, infrastructure
 - Additional functionality needed to fill gaps in the pilot solutions
- Exploitation
 - Industrial projects by AKM
 - Automotive, Oil & gas, Construction
 - Industrial projects by FhG spin-off
 - DigiMod
 - Collaboration services for AKM
 - Research projects within Method engineering by SINTEF
 - Enterprise SOA and MDA
 - Open source
 - CURE (FUH)
 - Concert Chat (FhG) – commercial customizing
 - Methodology Framework (SINTEF)
 - Visual workplaces (SINTEF)

