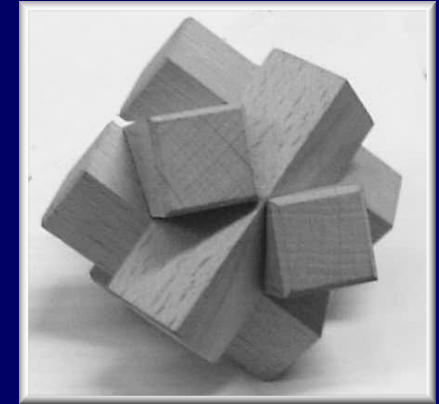




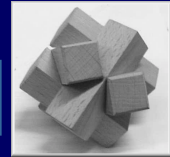
COMBINE



COMponent-Based Interoperable Enterprise System Development



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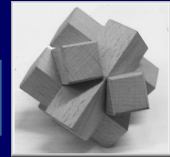


Objectives of the COMBINE Project:

- provide holistic approach to component-based development, integration and evolution of Enterprise systems

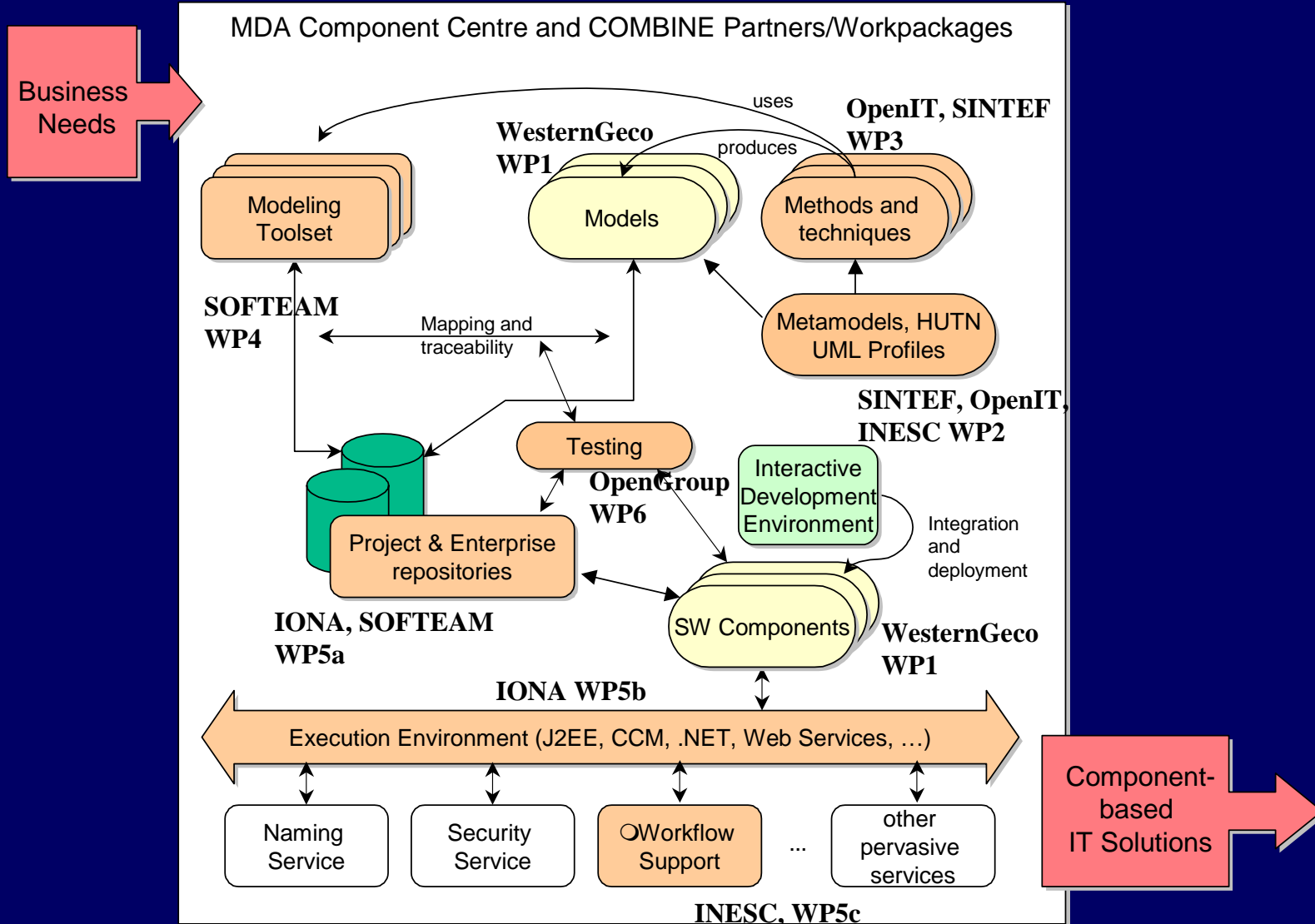
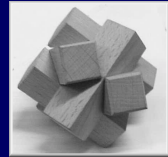
By

- “COMBINING” business and system modelling
- developing and proving a facility (a ***Component Centre***) for the rapid and efficient deployment of components
- exploiting the concepts of the OMG’s Model Driven Architecture™ (MDA)



COMBINE participants and Work Packages

- **WesternGeco (Norway):** Pilot implementation (WP1)
- **SINTEF (Norway):** Metamodels and Architectures (WP2);
Technical direction
- **OPEN-IT (UK):** Development Process (WP3)
- **Softeam (France):** Development environment -
Objecteering (WP4)
- **IONA (Italy):** Execution Environment & Repository (WP5)
- **The Open Group (UK):** Project co-ordination; Testing (WP6)
- **INESC (Portugal):** Business Process Modelling; Work
Flow





WP3 – Development Process

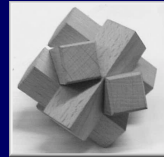
- Objective
 - Develop a model-driven process for analysis, design, implementation, and deployment of COMBINE components and systems.
 - to integrate tool, repository, development and runtime environment support
- Constraint
 - Suitable for automation in a ***Component Centre*** (CC)
- Approach
 - Build on proven work (BOM from OBOE project)
 - Adopt/adapt new ideas (e.g. RM-ODP, Lightweight methods, SPEM, UML for EDOC)
 - Model the CC itself - using CC modelling techniques
 - Incremental approach – build a little, test a little, field a little



Basis of the WP development

- Starting Point is Business Object Method from the OBOE Project
- Based on Unified Process, has 4 “phases”:
 - Inception
 - Elaboration
 - Construction
 - Transition

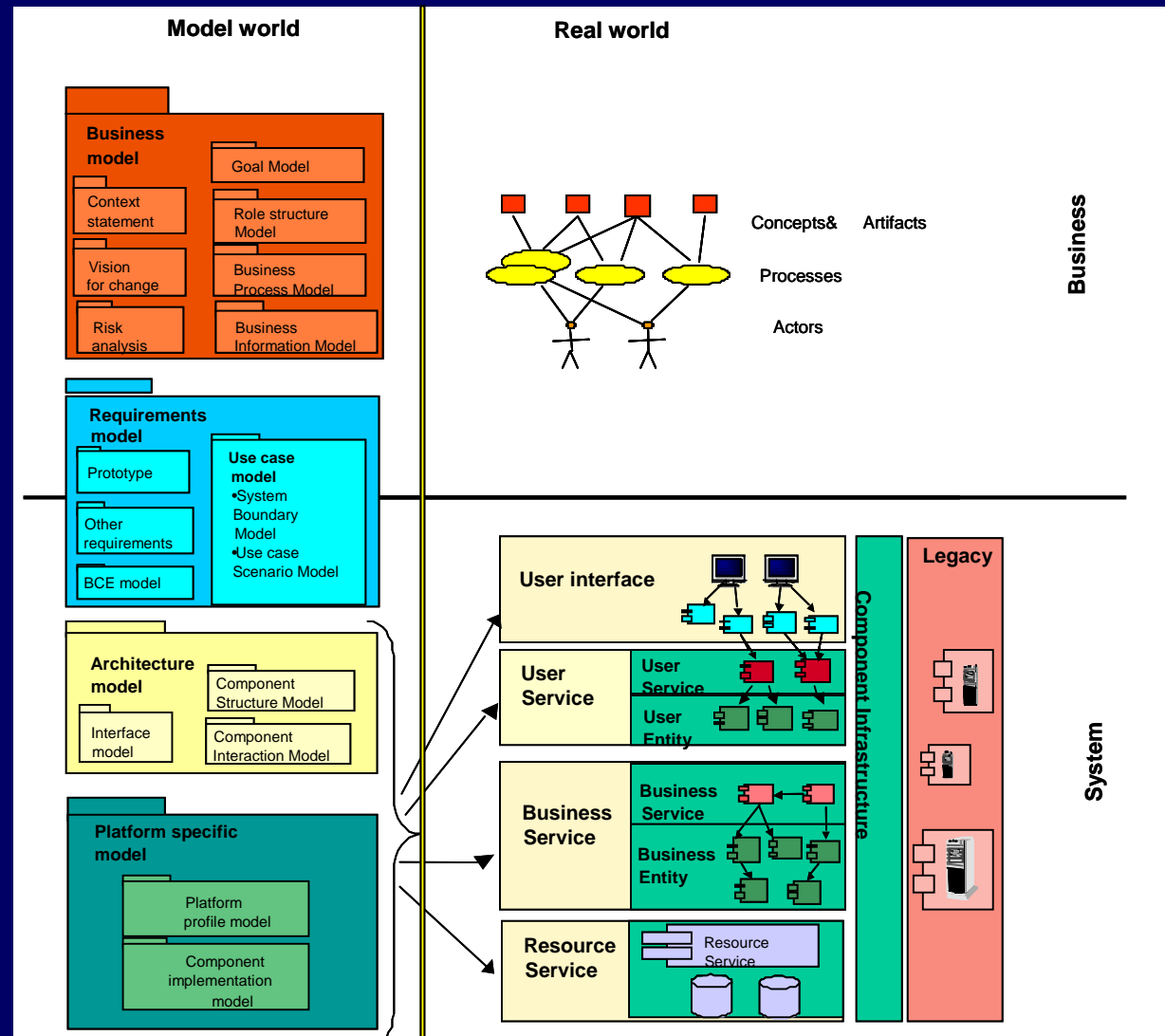
with iterations within and between them

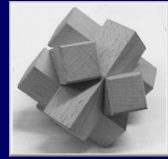


Development Process - Model usage

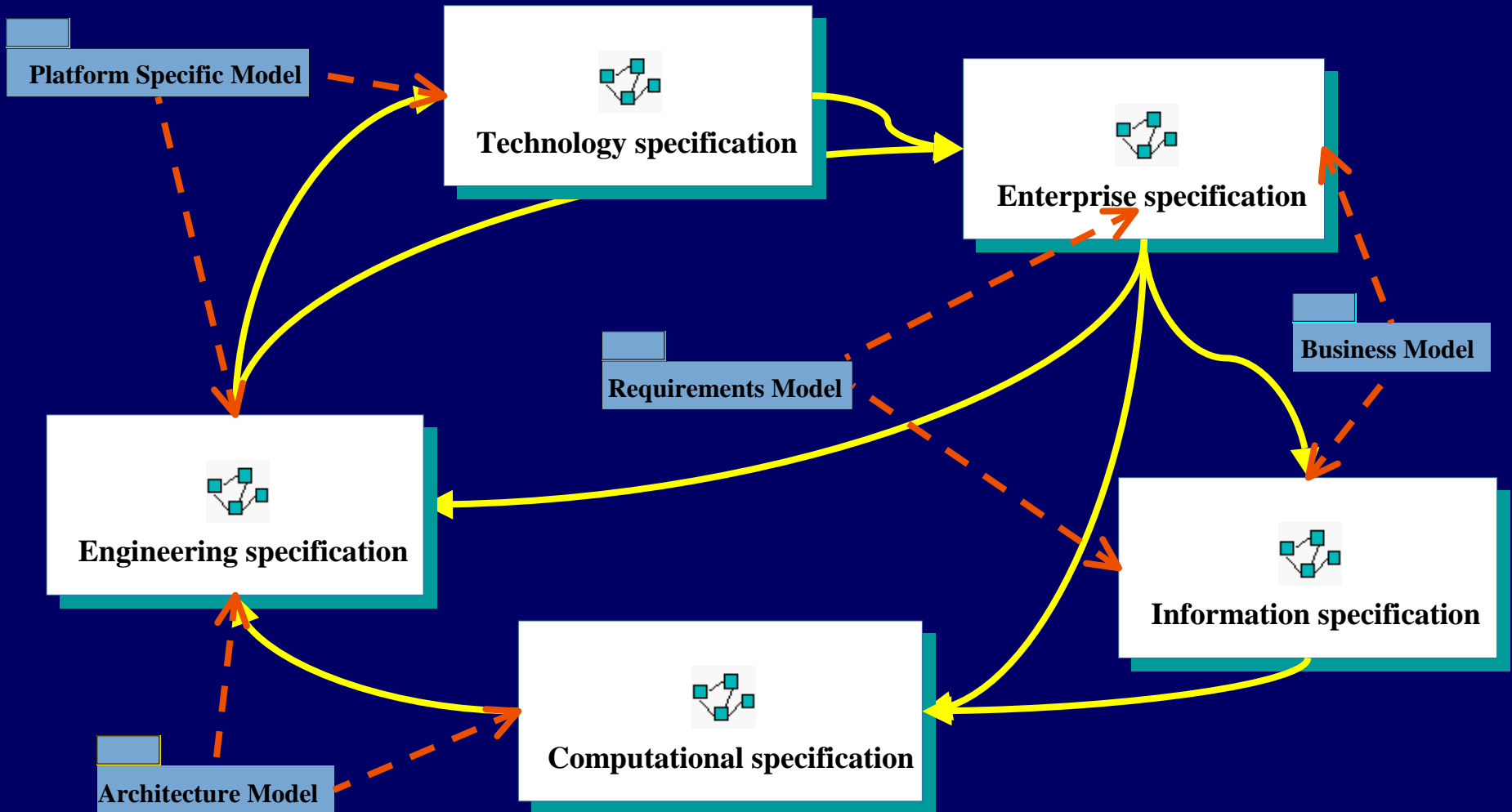
Needs a coherent framework:

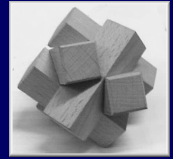
- RM-ODP
- UML for EDOC





An ODP based development process





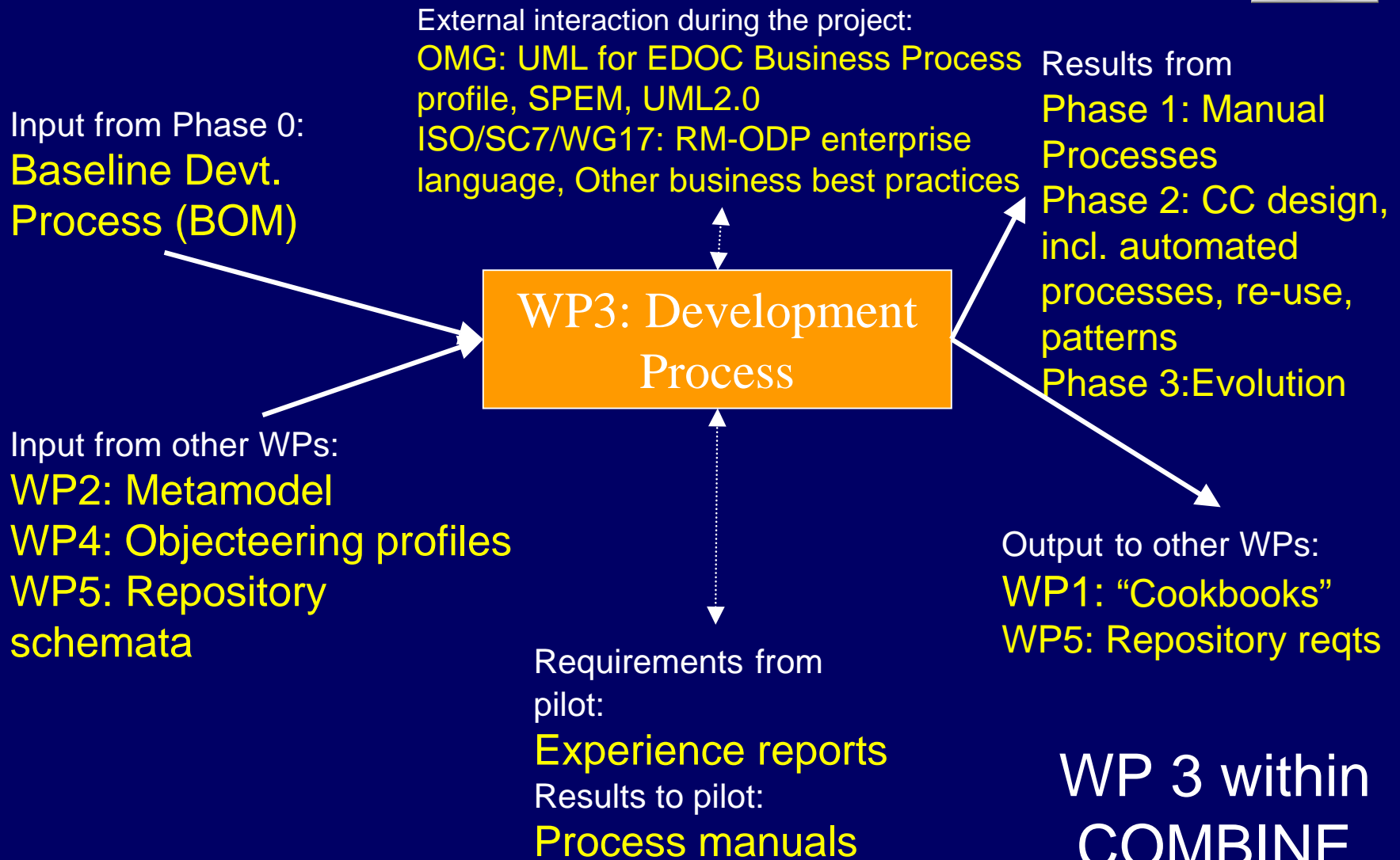
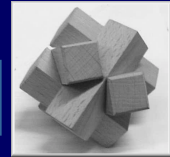
Summary of progress to date

- Established the Development Process - Version 1
 - Developed “User Manual” for Development Process
 - Developed initial Business Model for the Component Centre
 - Goal model
 - Process model
 - Structure/configuration model (roles)
 - Information model - concepts and structure for:
 - Business Model
 - Requirements Model
 - Architecture Model
 - Platform Specific Model
- for system under development



Future plans

- Complete the development of the Component Centre model
 - as a UML model in the Objecteering Tool
- Extend Development Process to cover re-use, patterns and system evolution
- Identify and develop areas of automation
- Complete the “User Manual” and provide in Web-based form.
- Integrate QoS into the “package”





Benefits from COMBINE

- Opportunity to integrate development technologies (UML, EDOC Profile, MDA, components...) in trial use
- Opportunity to gain experience of use of development technologies on significant scale across diverse organisations
- Opportunity to evolve development technologies on the basis of experience



Risks & challenges

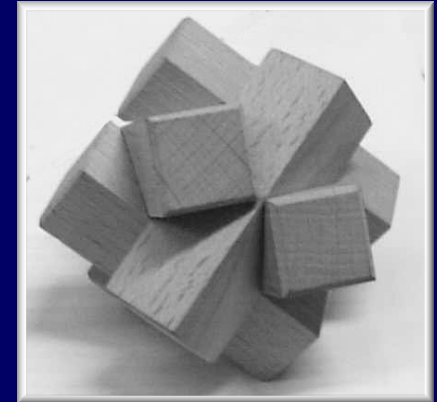
- X-Border/ X-Company communications
- Combining and consolidating experience from diverse backgrounds - time-consuming but essential
- Planning and monitoring
- Agreement/ adoption of underlying principles



Exploitation (by Open-IT)

- Exploitation of all (and parts) of the COMBINE 'package'
 - Client Consulting Services
 - Core Business – COMBINE provides new (proven) tools and methods
 - Research
 - Basis for further R&D activity
 - Training & Seminars
 - OMG Exploitation
 - Standards
- Expected value to company...
 - A new and proven tool providing the link between business modelling and system modelling
 - Vital to maintain Company profile and skills
 - Potential to double turnover within two years

COMBINE



Questions?

