Ontology Integration

- To What Extent Can the Use of Ontology or Related Technologies be Integrated into the Client’s IT Systems?
- What are the Risks Associated with the Use of Ontology?
- How much does the Cost of Ontology Integration Affect the Value Proposition?

Note: this is a more textual than diagrammatic slide set
Ontology Integration in the Business World

- Most of this Segment is based on Experience
  - Christian Fillies is Managing Director and Head of Development of Semtation GmbH in Europe. Semtation's modeling software SemTalk provides modeling solutions based on common diagramming and content management tools used by customers such as Bayer, Siemens, Vattenfall & consulting firms
  - SemTalk is the combination of business process modeling with ontological capabilities
  - Experience: Customers still not committed to invest in developing ontologies, beyond common glossaries needed in process modeling scenarios

- Is it a Viable Strategy to Integrate Ontology Capabilities thru Common Business Terms & Glossaries?
Ontology Integration Methods

- Business Process Modeling for Semantic Engineering in Workflow Mgt
Ontology Integration Value & Risk

 Christian:
  □ The value for the customer is mainly reduced implementation time. From an ontological point of view the main issue is to align the customers speaking/wording/language to those terms used in the ERP software. [One Value: Many Costs]
  □ The problem is actually how to match the ERP vendors best practices with the customer’s real world situation. Globally distributed companies often have the problem to align their business process and terminology with their international subsidiaries. A reference process model for how to build, setup and run a solar plant in Europe, China, Africa and the US must be established [sic] reflecting the cultural specialities.

 Rex:
  □ Every Department will want its interests addressed, but only the top management has decision-making authority. Trying to satisfy everyone is not only impossible, it can actually convince top management an ontology project is not feasible [if top mgt concerns don’t dominate].
Ontology Integration in Process Portal

Process Portal in Sharepoint
More Risks in Ontology Integration

Christian:

- Among the risks associated with the Use of Ontology are exaggerated expectations and end users which are not prepared to learn about the values of the concepts behind the technologies of ontologies especially to OWL. Since the effort for education must always be considered we are using a very familiar approach based on a comfortable Portal UI to maintain glossaries and taxonomies. The Value Proposition must be clearly constrained.

- Clients need to be informed clearly what to expect. Metrics should be specific, but there is still a lack of real world data which compares the benefit on an ontology based approach to more familiar approaches.
Two Integration Areas

- **Business Process Modeling**
  - Typically Associated with ERP
    - International Corporations can experience Multiple Costs for a Single Value
  - Also apply to Workflow Management, External Dependencies, CRM, etc.

- **Enterprise Portal**
  - Allows for more clearly connected Internal Process Flows
    - Somewhat reverses the Single Value Multiple Cost syndrome for larger enterprises
  - Allows for multi-modal Collaborations
One Conclusion to Integration Questions

Note, We only looked superficially at Two Integration Areas

◆ Christian:
  - We still have the problem of how to convince new customers to make an investment in ontologies. They prefer to start with plain process models. After some timeframe (usually a year) they have learned that they could save a reasonable amount of effort with spending more attention on terminological work. But this is really hard to measure of quantify.

◆ Rex:
  - Agreed: It is a Viable Strategy to Integrate Ontology Capabilities thru Common Business Terms & Glossaries