



Semantics Utilised for Process Management
within and between Enterprises

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Using Semantics to Aid Scenario-Based Analysis

*Barry Norton
SBPM 2008*



Outline

- Scenario-Based Analysis (SBA)
- Semantic SBA
- Illustration
- Tool
- Conclusions and Future Work



Scenario-Based Analysis

- As-is Analysis, Exception Analysis etc
- Main Steps
 1. Selection of interesting metrics
 2. Configuration of selected metrics
 3. Execution of configured metrics
 4. Evaluation of results (e.g., data filtering and aggregation)
 5. Reporting of results

Manual process!!



Semantic Scenario-Based Analysis

■ Main idea

- Use semantic technologies to augment the degree of automation and flexibility of current Scenario-Based Analysis (SBA)

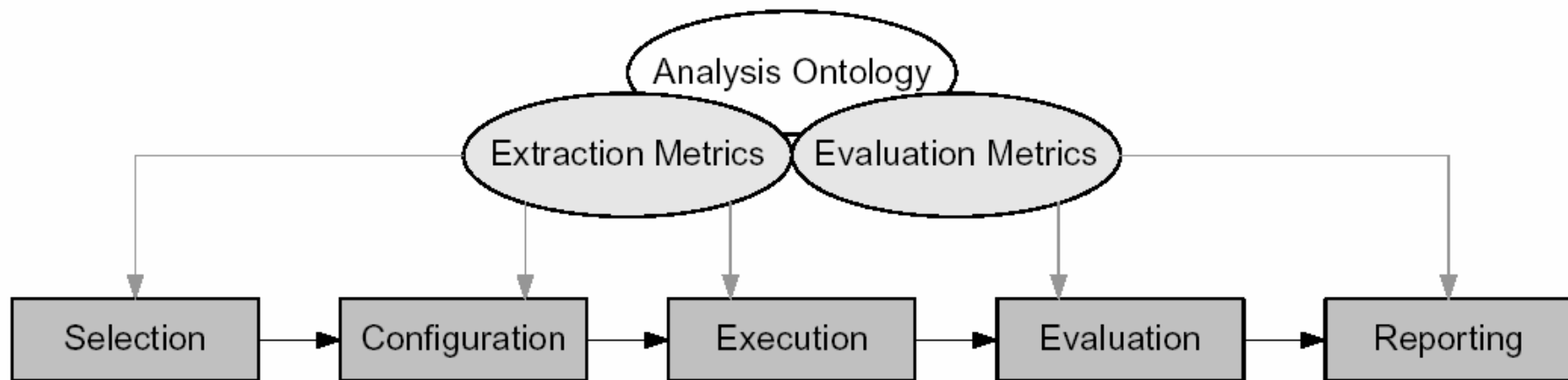
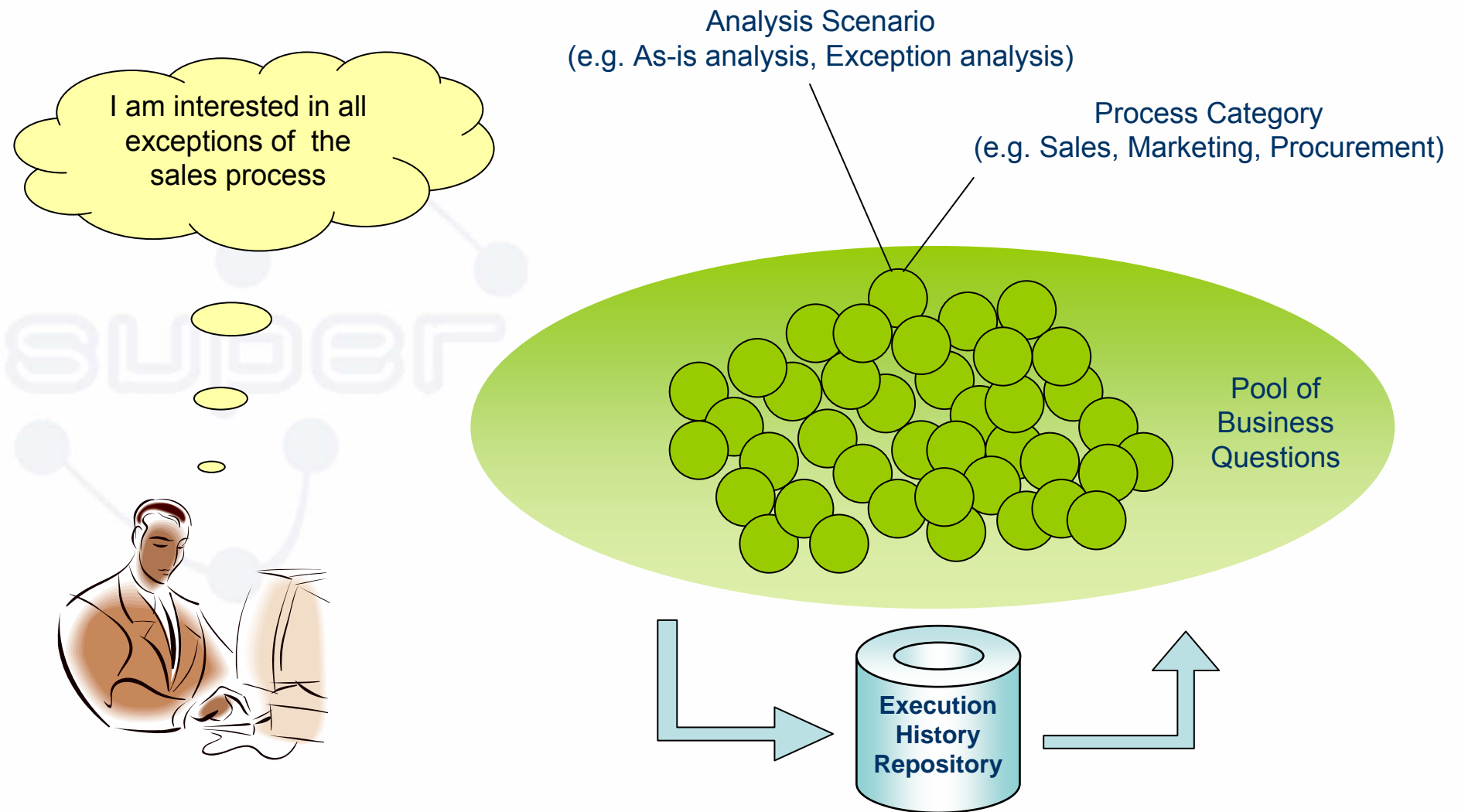




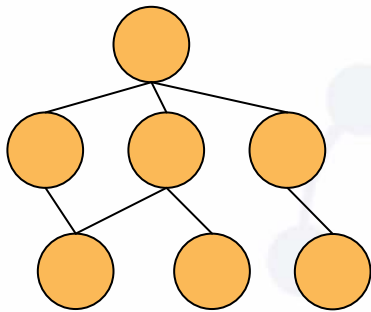
Illustration – Semantic SBA



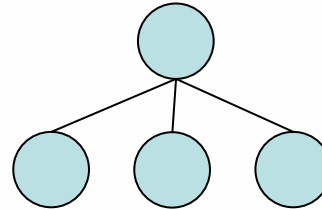


The Business Questions (BQs) within the ontological framework...

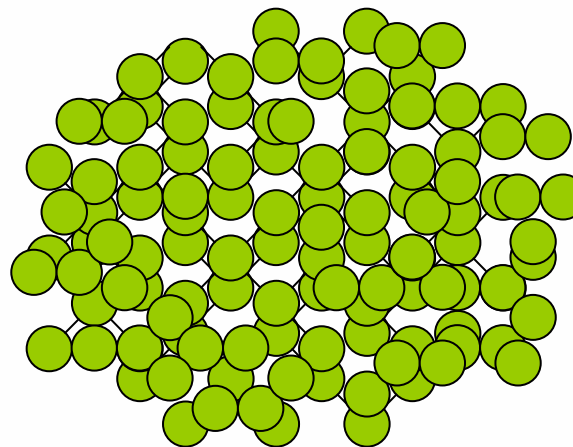
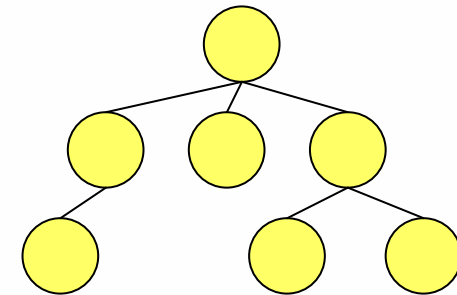
Business Map Ontology



Analysis Scenarios Ontology



Organizational Ontology

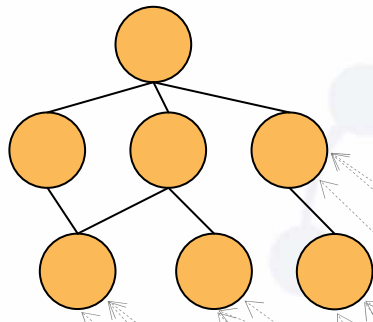


Business Questions

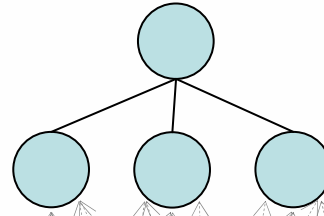


...mapping the BQs onto the other ontologies...

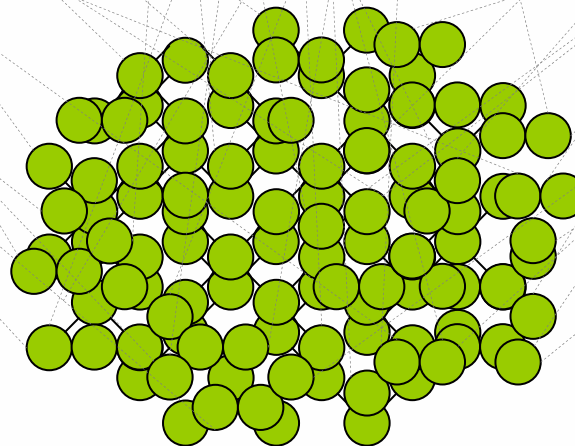
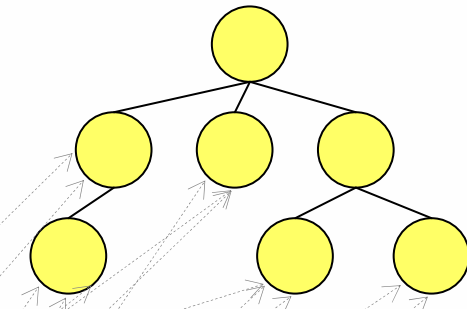
Business Map Ontology



Analysis Scenarios Ontology



Organizational Ontology

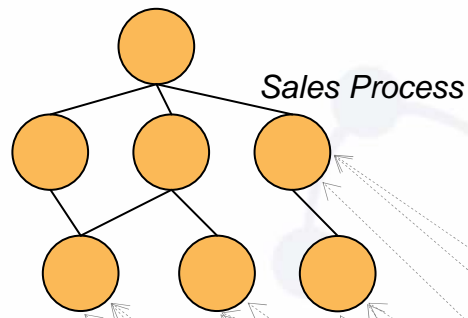


Business Questions

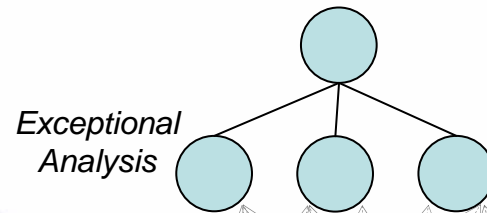


...and selecting the relevant BQs on the basis of user needs

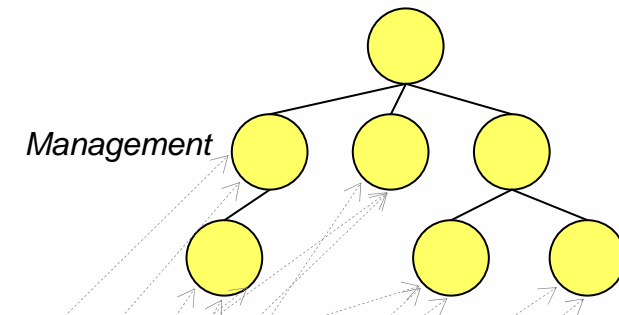
Business Map Ontology



Analysis Scenarios Ontology



Organizational Ontology



Which predefined SLA offers were rejected how often?

Which parameters were the reason for not choosing a bundle?

How many processed requests with up time higher than 97% were not checked by the CEO?

How many SLA offers were rejected by CEO?

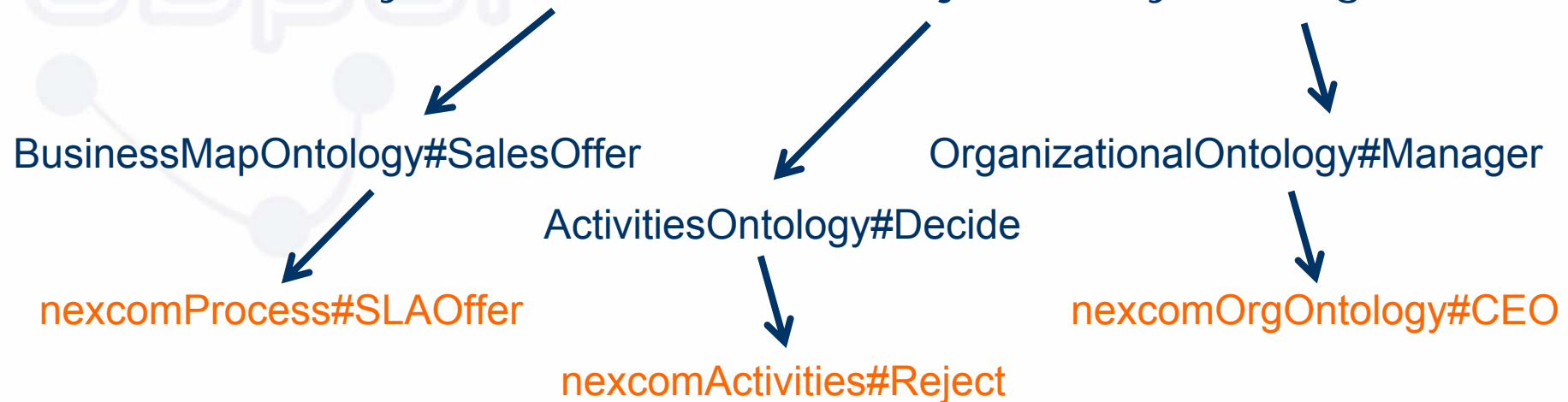
Business Questions



Structure of Business Questions

- We define “templates” of business questions with parameters which are mapped onto the SUPER ontologies...
- ...and also onto the specific domain ontologies

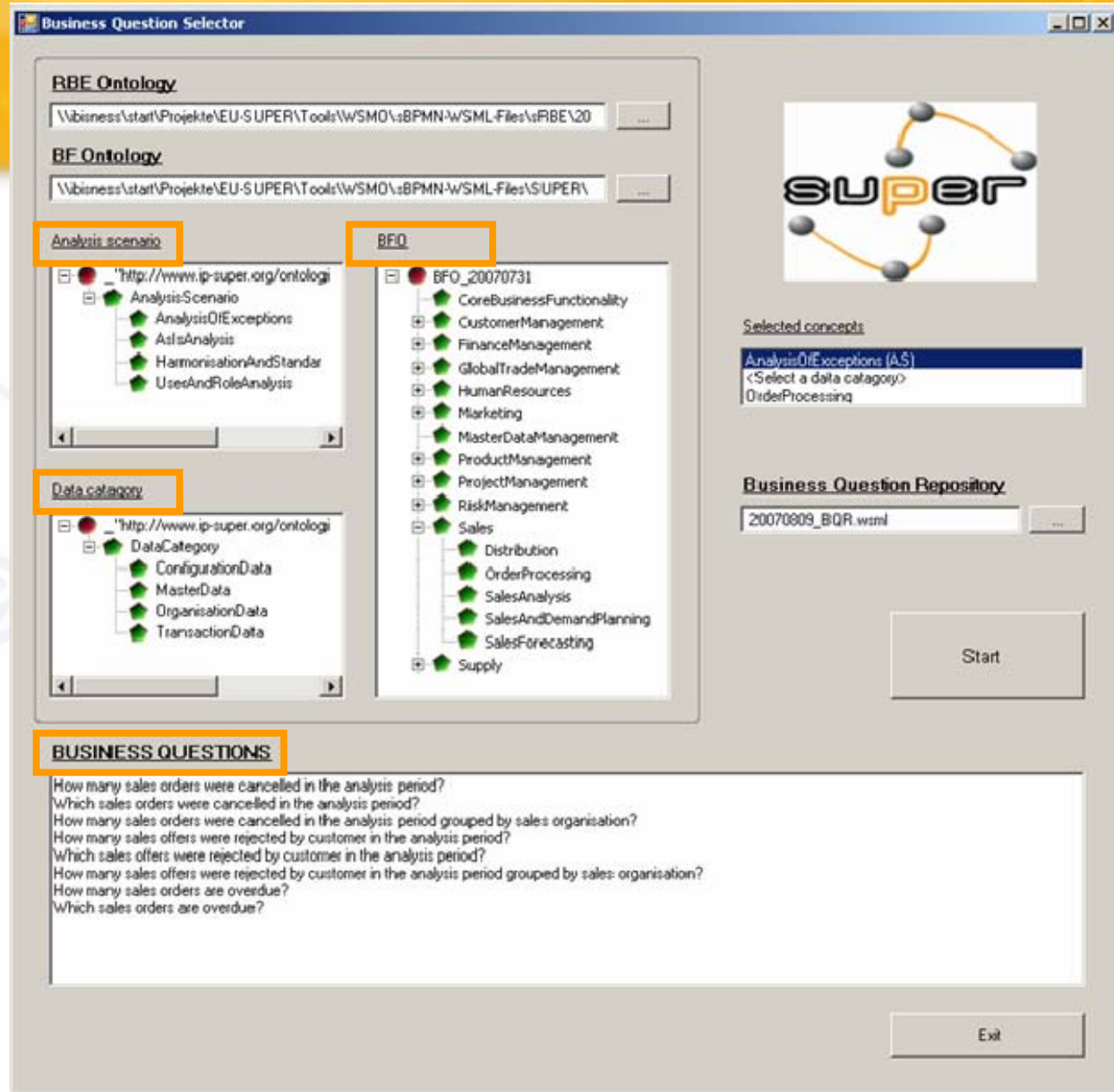
“How many [Sales offers] were [rejected] by [Manager]?”





Tool

Semantic Reverse Business Engineering (RBE)



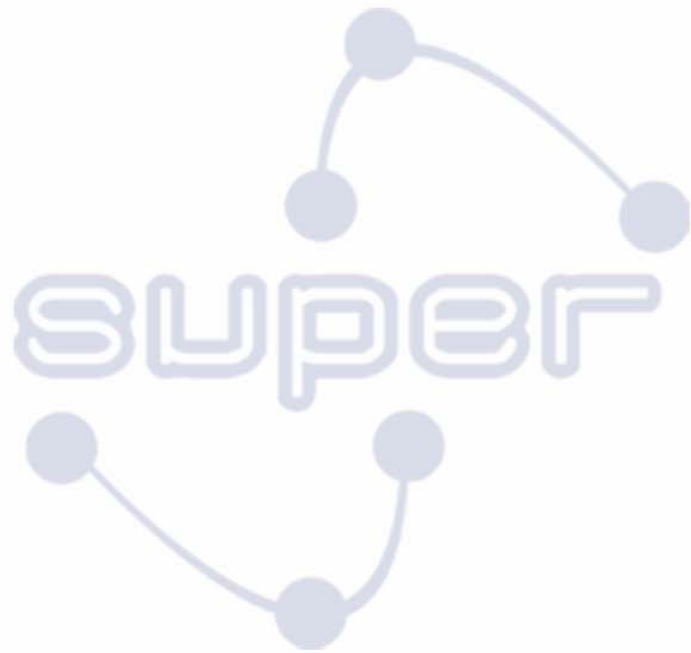


Conclusions and Future Work

- Semantic Scenario-Based Analysis
 - ▶ Support automatic and flexible analysis of business process
 - ▶ Bring the analysis of business processes closer the business analysts
- Future work will focus on improving our develop tool. This work will be conducted within the SUPER European project



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Questions?