Technische Universität München

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Scenario-based Analysis of State-of-the-Art Enterprise Architecture Management Tools

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Agenda

1. Motivation
2. Research questions
3. Research Approach
4. Example Findings
5. Time Schedule

1 Motivation

- EAM tool survey 2008: evaluation of state of the art tools: lots of positive feedback from research and industry
- New EAM tool survey 2014
- Identify changes over time
- Increase range of tools to be evaluated (traditional & innovative tools)


Enterprise Architecture Management Tool Survey 2008

Main Sponsors

Co-Sponsors

Related work:

EA Visualization Tool Survey (Fuhrmann, Roth, Zec)

- Focus on visualization forms
- visualization surveys with tool vendors & industry partners

EAM Tool Survey 2014

- Hands-on evaluation
- Scenario simulation
- State of the art

Research Questions

1. How did EAM tools evolve from 2008 to today?
   - Which features were added/dropped?
   - Which major advancements can be identified?
   - What requirements do the tools try to meet?

2. How can EA tools be categorized and what are major differences?

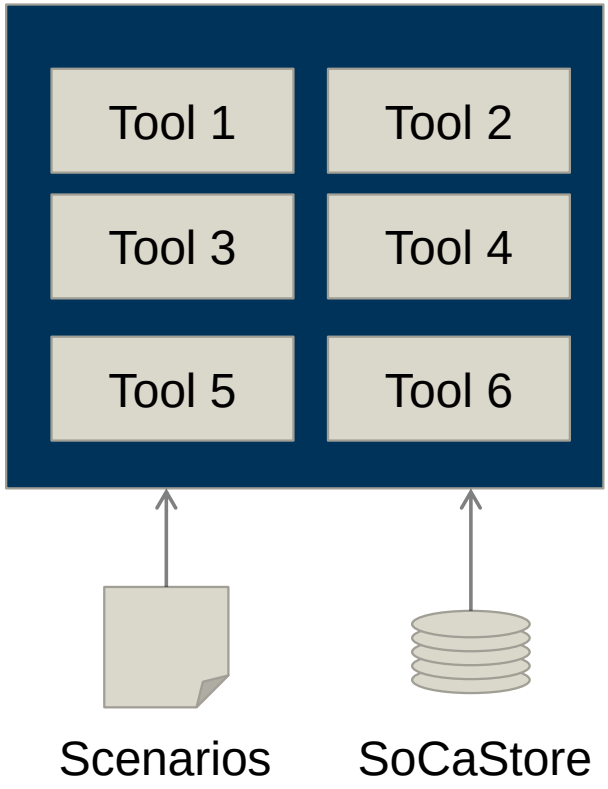
   Potential categories:
   - Flexibility vs. guidance
   - Preconfigured vs. customization
   - Integration vs. single-point-of-truth

3. Which tool suits best into which category?

3 Research Approach

Scenario-based simulation

- SoCaStore: same input data for each tool
- Evaluate each tool by simulating the same scenarios

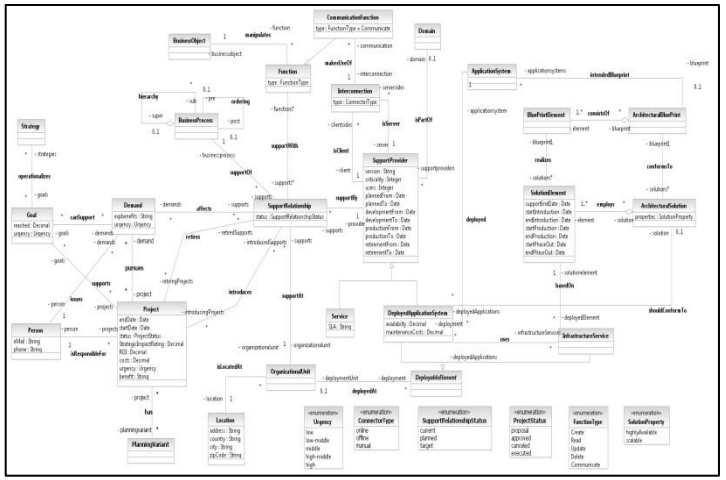


Compare today's tools with each other

Identify changes to previous results (EAMTS 2008)

3 Used Data – SoCaStore Model

- Factious department store
- Underlying information model consists of
  - Business Processes
  - Organisational Units
  - Application Systems
  - Infrastructure
  - Projects
  - Strategies
  - …
- Available in sebis Tricia
- Exported as Excel sheets to be used in tools



3 Scenario Overview

Specific Functionality Scenarios

- Importing, Editing, and Validating
- Creating Visualizations
- Interacting with, Editing of, and Annotating Visualizations
- Communication and Collaboration Support
- Flexibility of the Information Model
- Handling large scale Application Landscapes
- Reporting
- Usability

EA Management Support Scenarios

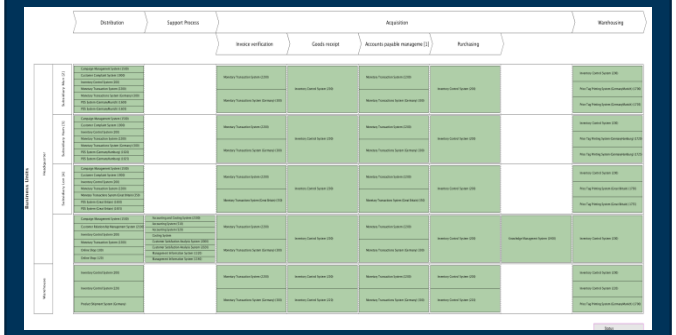
- Landscape Management
- Demand Management
- Project Portfolio Management
- Synchronization Management
- Strategies and Goals Management
- Business Object Management
- SOA Transformation
- IT Architecture Management
- Infrastructure Management

4 Example Findings

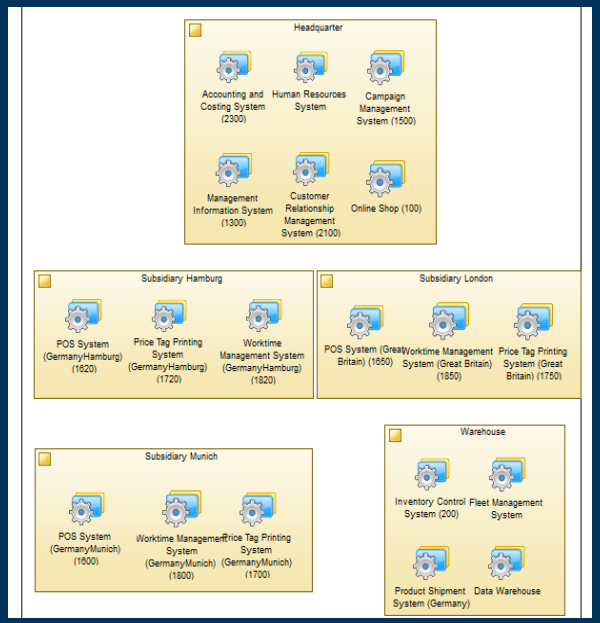
Landscape management in Iteraplan & SAP Powerdesigner Enterprise Architect

Iteraplan

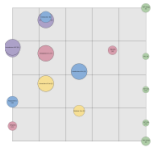
Information System	Status	Begin	End	2013 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
- Business Processes															
Accounting System (500)	Inactive	-	02/01/2013												
Accounting System (510)	Current	02/01/2013	10/01/2013	Productive from / to											
- Support Process		-	-												
Accounting System (520)	Planned	10/01/2013	-										Productive from / to		
- Support Process		-	-												
Accounting System ACC+	Target	-	-	Productive from / to											



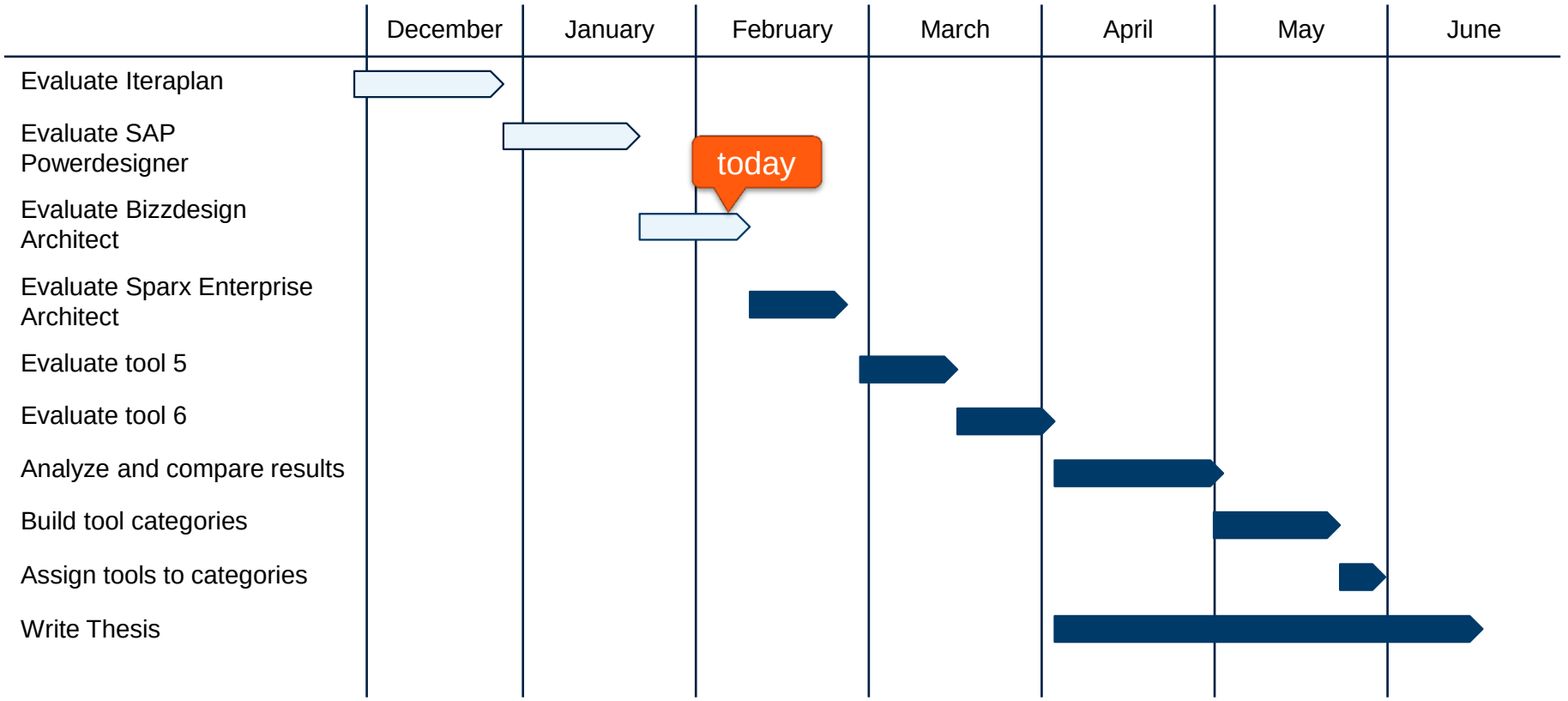
SAP Powerdesigner



4 Example Findings

Scenario	Iteraplan	SAP Powerdesigner
Information Model	Fixed ‚best practice' model	Model constraints only through potential diagrams
Project Portfolio Management	Object type ‚Project' and Portfolio diagram integrated 	Projects not available
Creating visualizations	Set parameters → automated generation	Draw each diagram manually
Reporting	Query language to support individual queries and reports	Abstract HTML report that illustrates previous created diagrams

5 Time Schedule



Thank you for your attention.

Questions?

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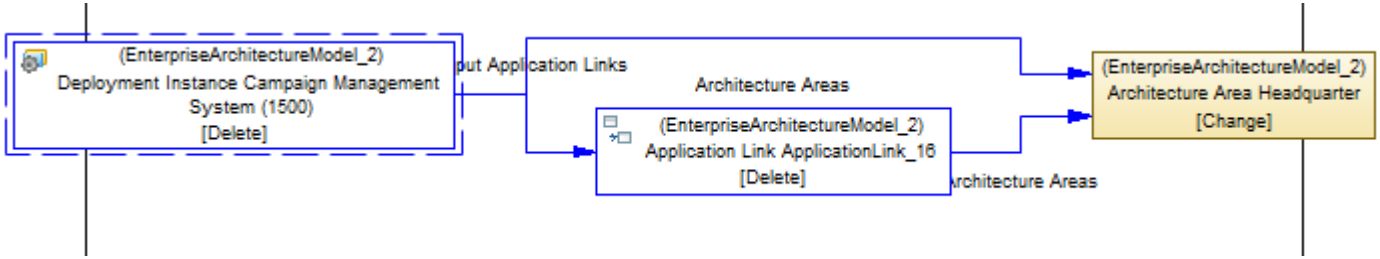
Backup: Additional diagrams

Iteraplan: Infrastructure development over time

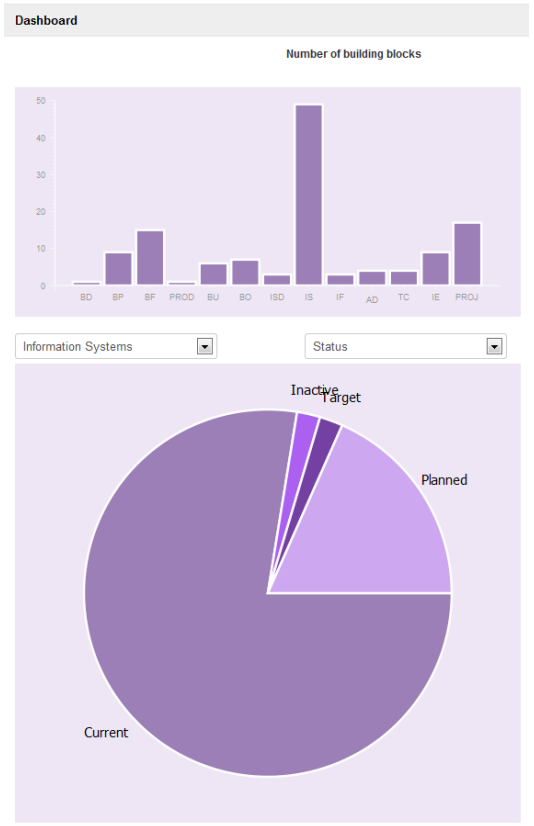
Infrastructure Element	Begin	End	2007		2008									
			Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
DB2 6.0	01/01/2007	08/31/2008	Vendor Support												
MySQL 2.1	04/01/2008	-						Vendor Support							
Oracle 9i	01/08/2008	-			Vendor Support										

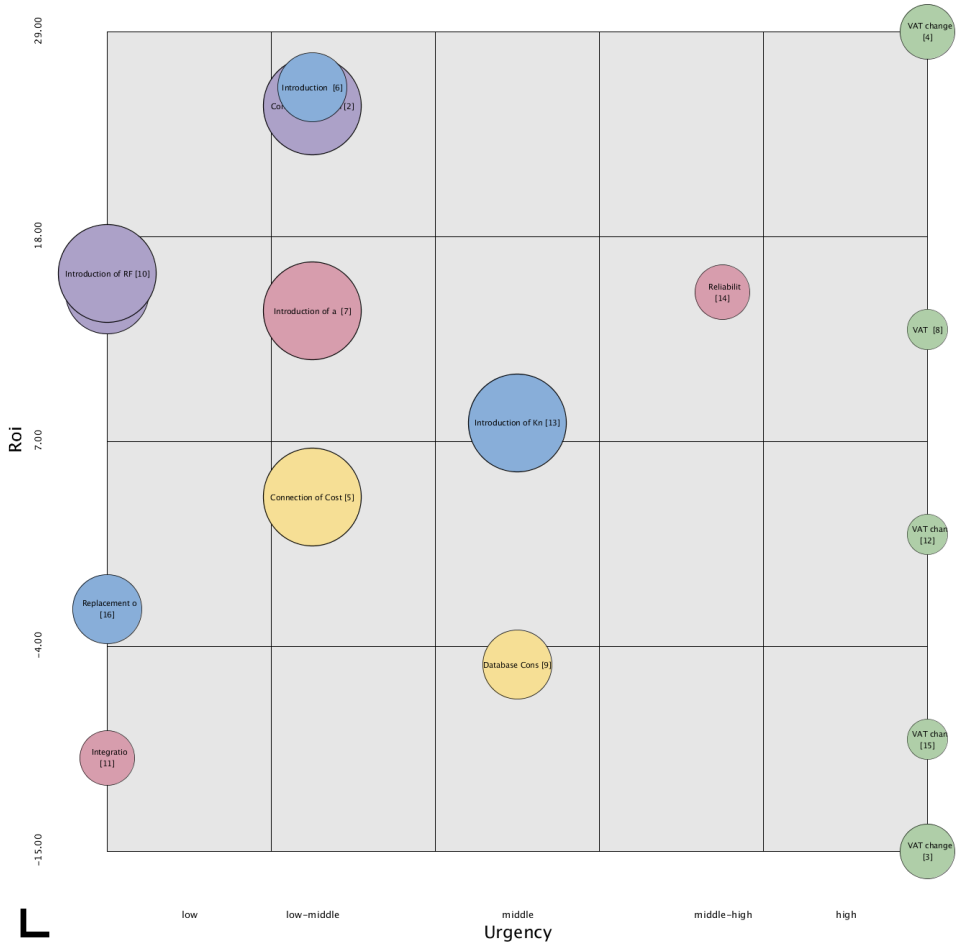
SAP Power Designer: Impact Analysis diagram (removal of one element)



Backup: Additional diagrams

Iteraplan: Dashboard & Portfolio diagram





Backup: Similar Diagrams

Nested cluster diagrams in Iteraplan and SAP Powerdesigner