

# **Avoiding Redundancy in the Management of Technical Documentation and Models: Requirements Analysis and Prototypical Implementation for Enterprise Architecture Management**

March 21th

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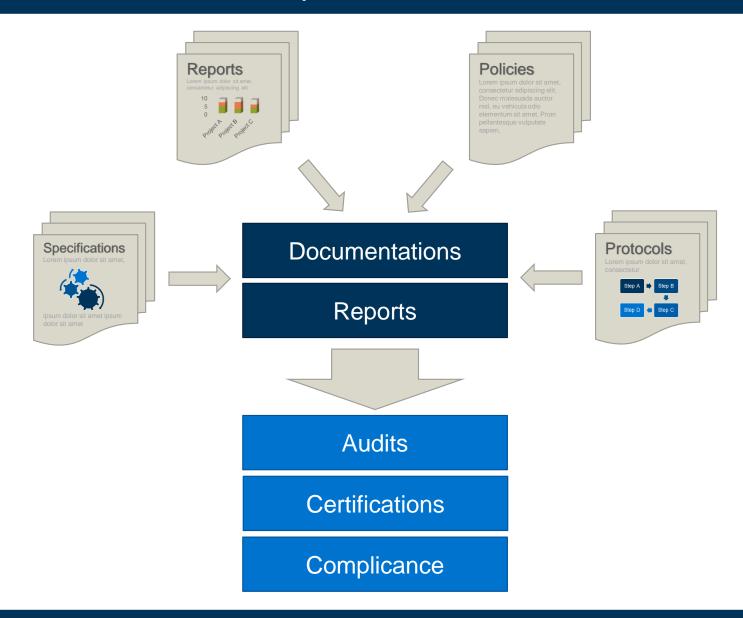
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# Agenda

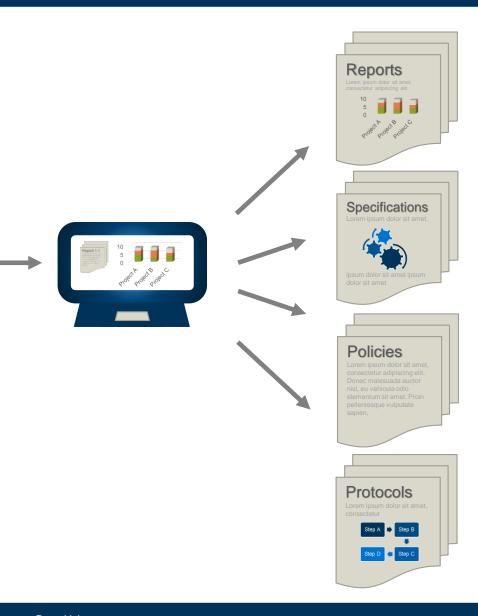


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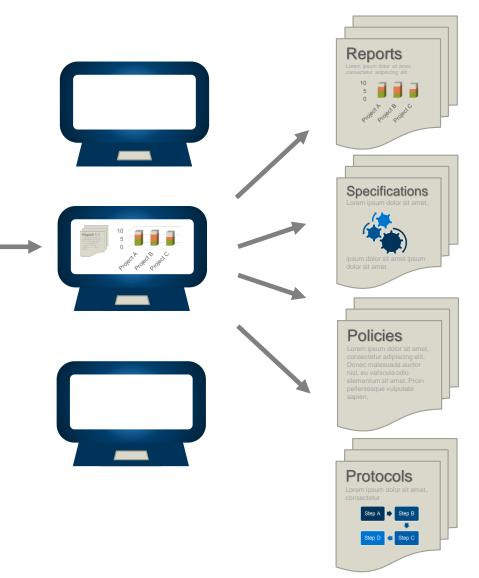




#### **Ideal World**

- Single sources for information
- No redundancy
- Easy to maintain
- Consistent information and reports
- High degree of automatization

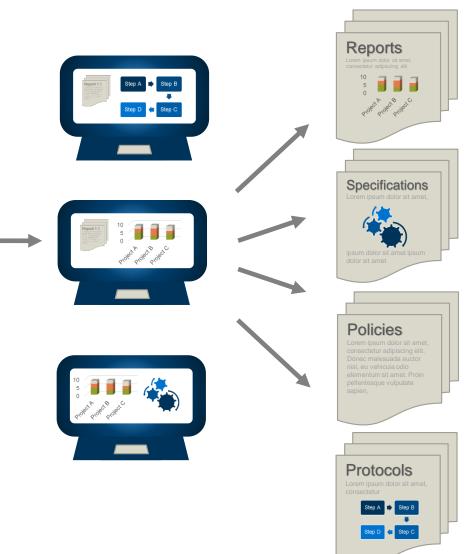




#### Reality

- Multiple sources for information
- No redundancy
- Easy to maintain
- Consistent information and reports
- High degree of automatization

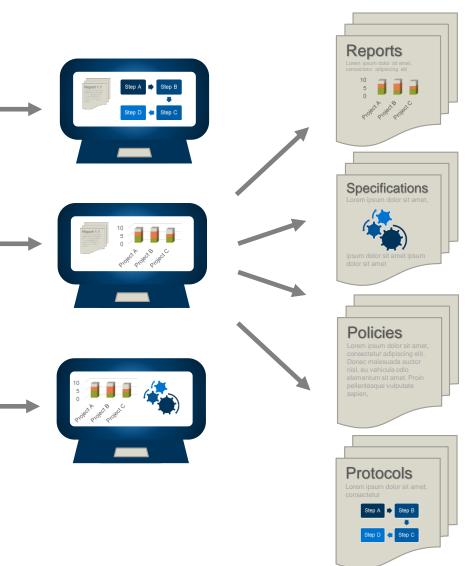




#### Reality

- Multiple sources for information
- Redundancy
- Easy to maintain
- Consistent information and reports
- High degree of automatization

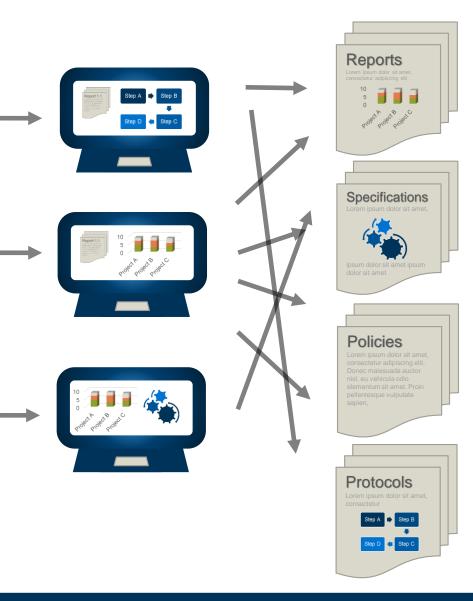




#### Reality

- Multiple sources for information
- Redundancy
- Hard to maintain
- Consistent information and reports
- High degree of automatization

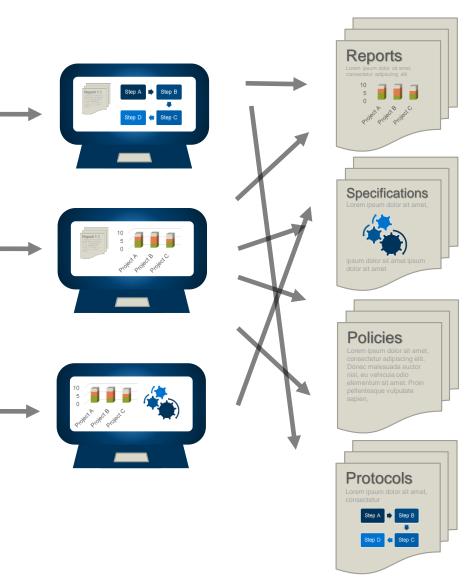




#### Reality

- Multiple sources for information
- Redundancy
- Hard to maintain
- Inconsistency
- High degree of automatization





#### Reality

- Multiple sources for information
- Redundancy
- Hard to maintain
- Inconsistency
- Failures due to manuel processing

## 1. Documentation in Enterprises – Problem Statement



Multiple systems maintain redundant information. Output and input of this information is laborious and error-prone.

Reports often created manually due to lack of technology. (e.g. using Wordtemplates. This is error-prone and has high costs. In addition immutability may be desired.)

Existing solutions lacking in critical functionality, such as a suitable (graphical) output. In these solutions unstructured data are insufficiently linked with structured data.



Demand in Enterprises for consistent and redundancy-free reporting and documentation tools

# 2. Research Objectives



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## 2. Research Objectives



Avoiding Redundancy in the Management of Technical Documentation and Models: Requirements Analysis and Prototypical Implementation for Enterprise Architecture Management

Inquiry and analysis of concrete requirements from industrial partners to a reporting tool

Abstraction of the requirements and conception of a general-purpose solution

Prototypical implementation of the solution approach with subsequent evaluation

# 3. Solution Approach



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## 3. Solution Approach – Requirements Analysis

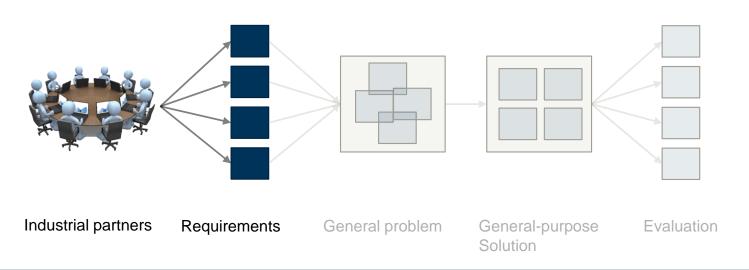


Inquiry and analysis of concrete requirements from industrial partners to a reporting tool

Abstraction of the requirements and conception of a general-purpose solution

Prototypical implementation of the solution approach with subsequent evaluation

- Workshops with industrial partners
- Survey for empirical analysis
- Research of existing problems and solutions



## 3. Solution Approach - Conception

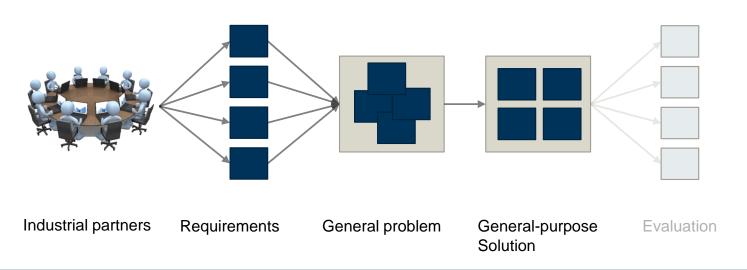


Inquiry and analysis of concrete requirements from industrial partners to a reporting tool

Abstraction of the requirements and conception of a general-purpose solution

Prototypical implementation of the solution approach with subsequent evaluation

- Identify common characteristics of concrete requirements
- Assessment of feasibility and practicality
- Definition of features for implementation



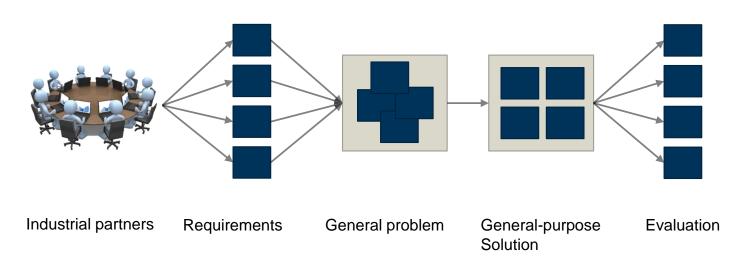
## 3. Solution Approach – Implementation and Evaluation sebis

Inquiry and analysis of concrete requirements from industrial partners to a reporting tool

Abstraction of the requirements and conception of a general-purpose solution

Prototypical implementation of the solution approach with subsequent evaluation

- Implement features within the environment of SocioCortex
- Multiple implementation iterations to get early feedback (iterative design process)
- Final evalution with requirements from industrial partners



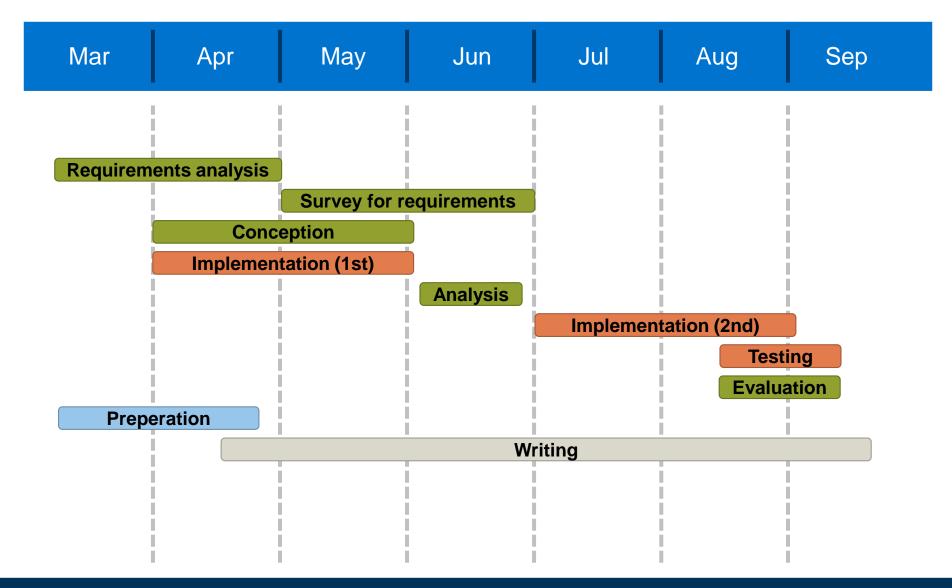
# 4. Project Road Map



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## 4. Project Road Map – Timeline

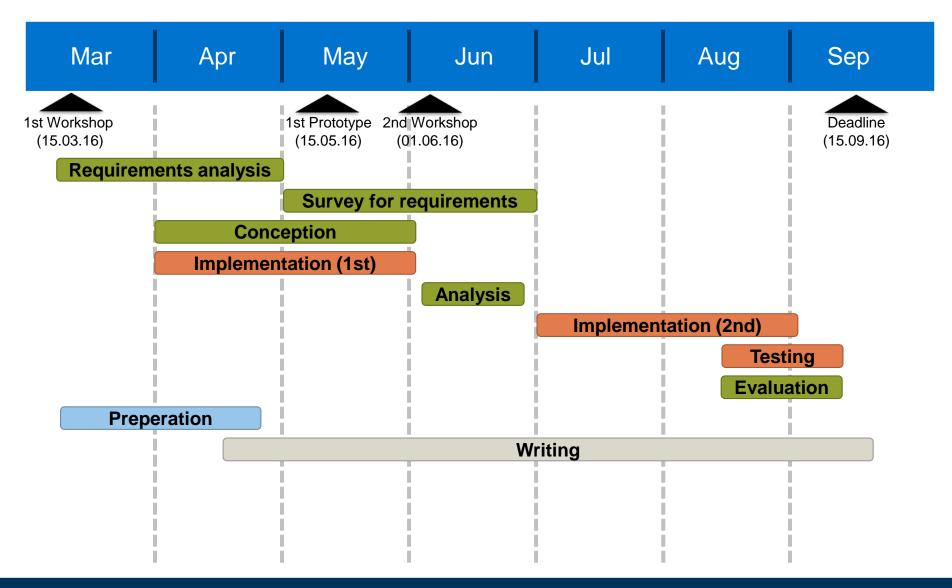




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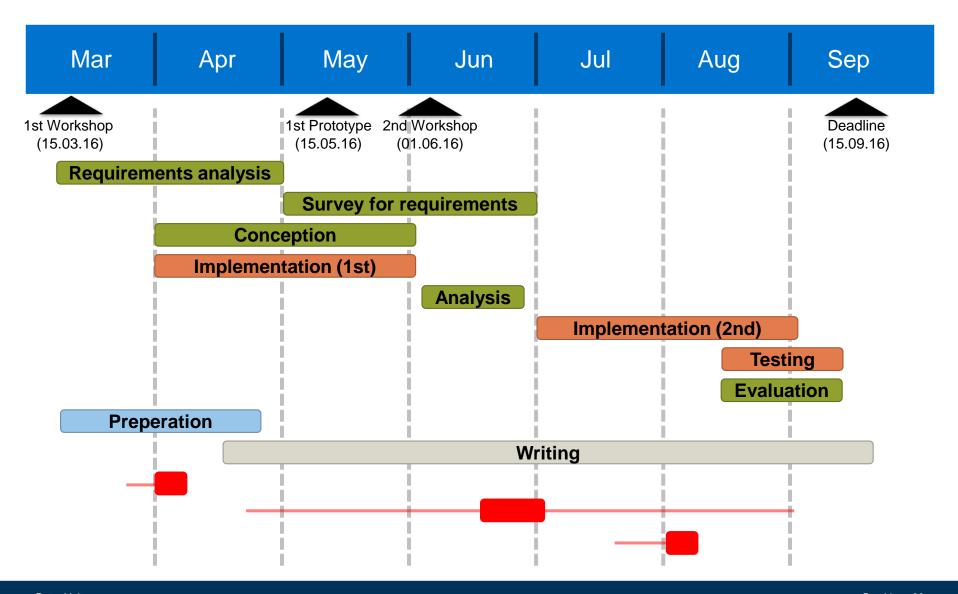
## 4. Project Road Map – Milestones





## 4. Project Road Map – Pending Downtimes







Thank you for your attention!

Do you have any questions or comments?

## Concrete Requirements (up till now)



Link report tool with different sources (e.g. planningIT, Wiki, manual reports)

Assemble different components to complete reports (integrate structured data with unstructured data)

Integrate visualizations and plain text appropriately into reports

Export documents as PDF (PPT could also be interesting)

Integrate light-weighted workflows (e.g. for approval)

