Enterprise Visualization and Transformations using Labnaf

SPARX SYSTEMS

EA Global Summit 2020

June 1st to 5th | Connect with World's Prolific Sparx EA Practitioners

Enterprise Visualization and Transformation using Labnaf

Labnaf is an innovative and highly automated solution for enterprise visualization and transformation. It seamlessly unifies numerous standards and best practices

Alain De Preter

Founder, Labnaf

2nd June

PDT 06.00
CET 15.00
AEST 23.00

60 Min

eaglobalsummit.com

ENTERPRISE ARCHITECT

Pro Cloud Server

Prolaborate

Presenters

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Labnaf Founder

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Sparx Services Central Europe

https://www.linkedin.com/in/orsolya-nemeth-04b68514a/

~~Integrated~~

Merged Standards & Best Practices

IT4IT™

TOGAF®

SAFe®

Gartner
EA Stage Planning

ISO/IEC/IEEE 42010

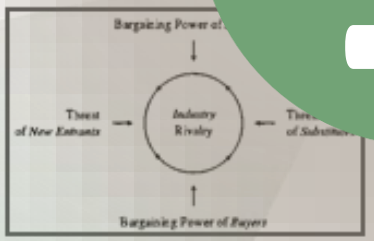
ARCHIMATE®

BPMN™

Systems Semantics

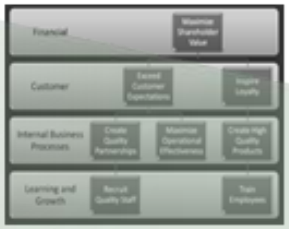
1

PEST(EL)



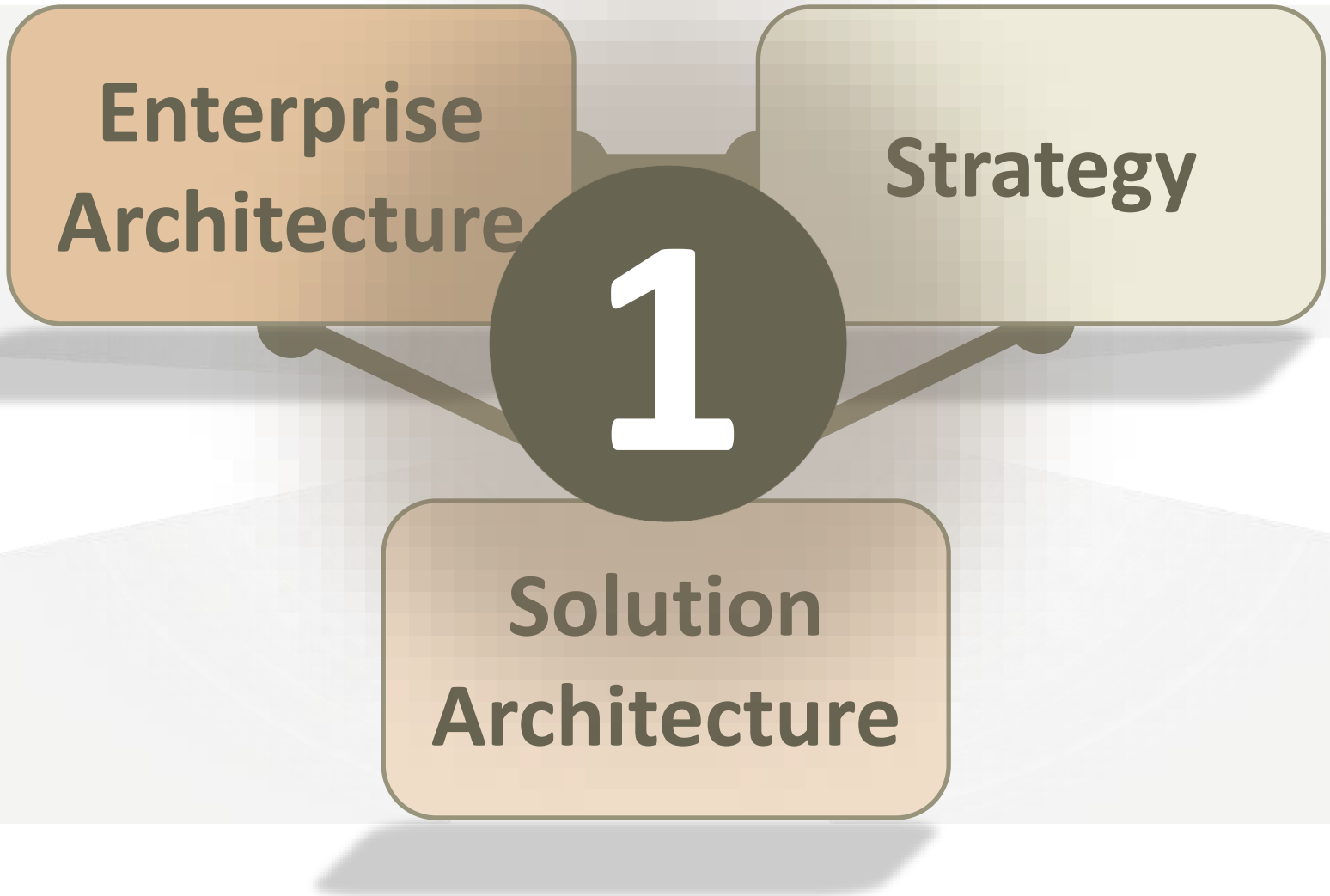
Porter's Five Forces Analysis

Business Model Generation

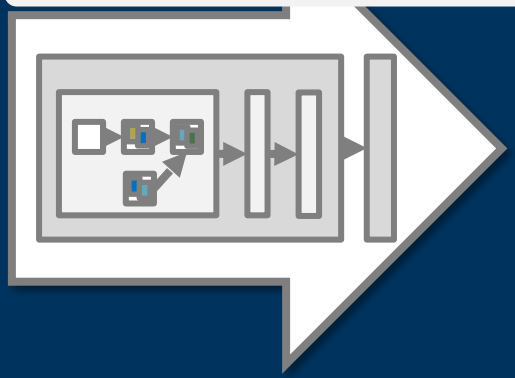


Strategy Map & Balanced Scorecard

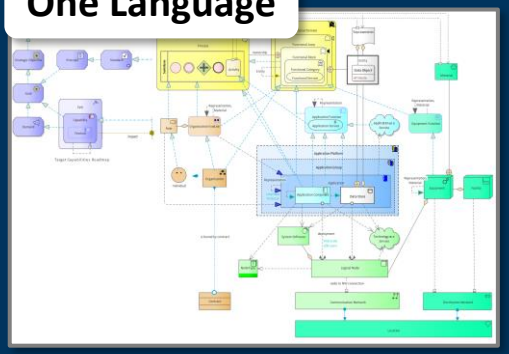
Unified Disciplines



One Transformation Process



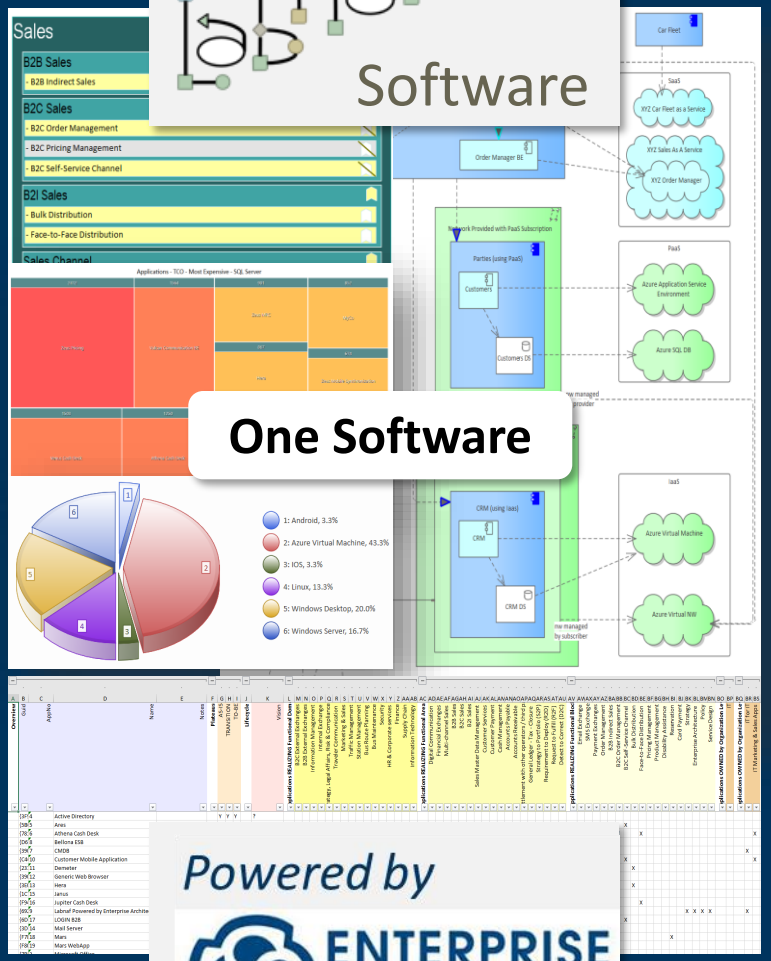
One Language



One Shared Database

labnaf Software

One Software



Powered by ENTERPRISE ARCHITECT SPARX SYSTEMS

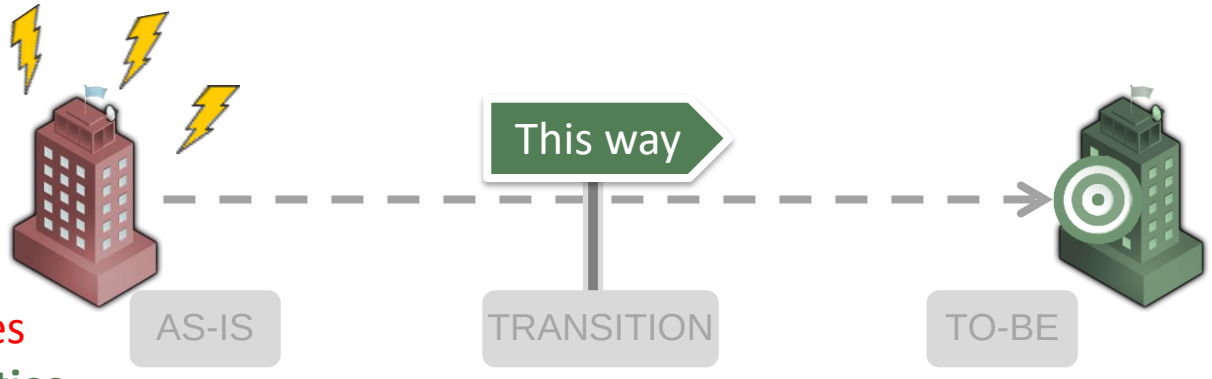
Agenda

1. Transformation Challenges
2. Framework Overview
3. Tools

Identify and drive the required changes to the organization's business and IT

Where are we today?

Where do we want to be in the future?



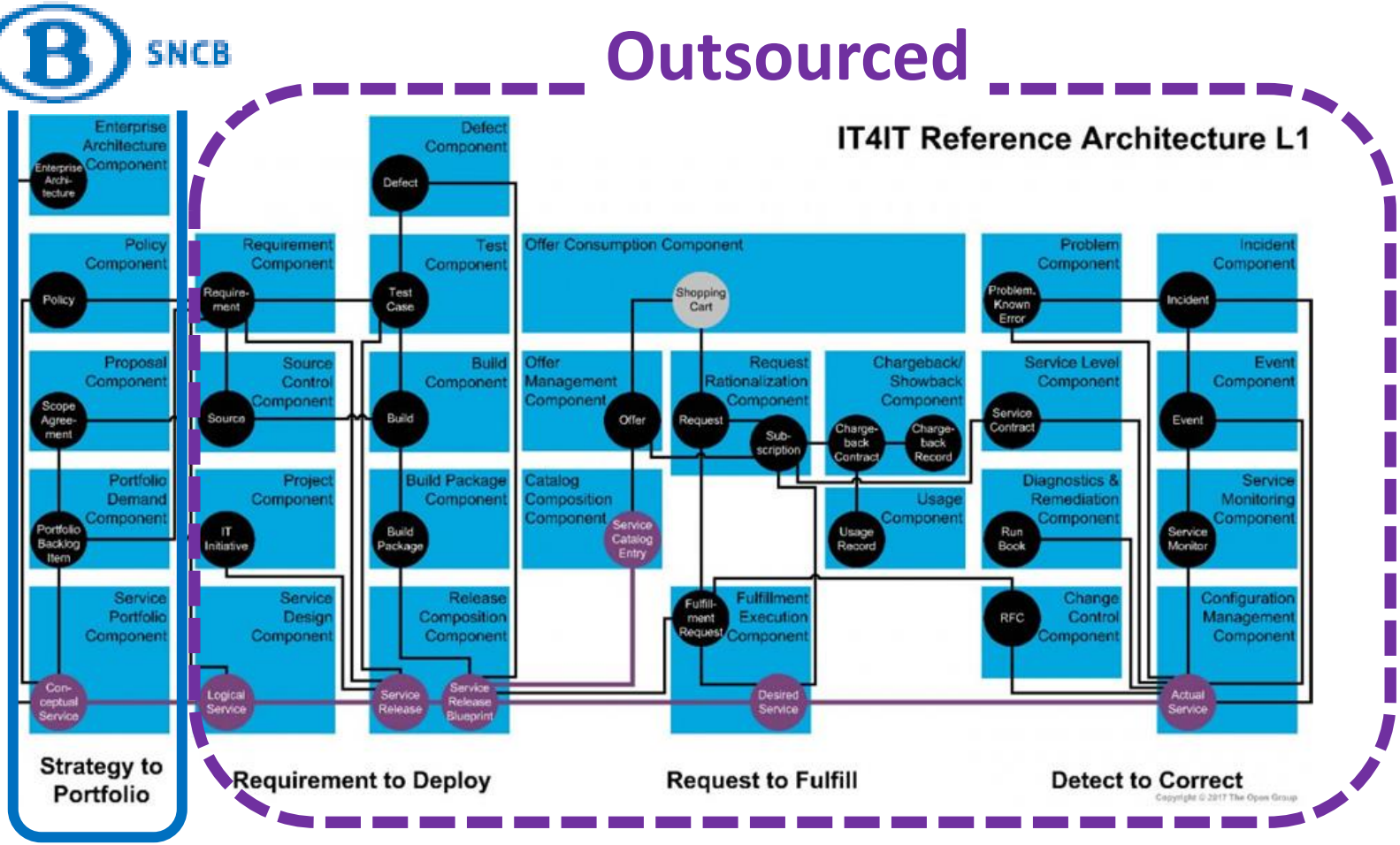
Strengths
Weaknesses
Opportunities
Threats

How shall we get there?

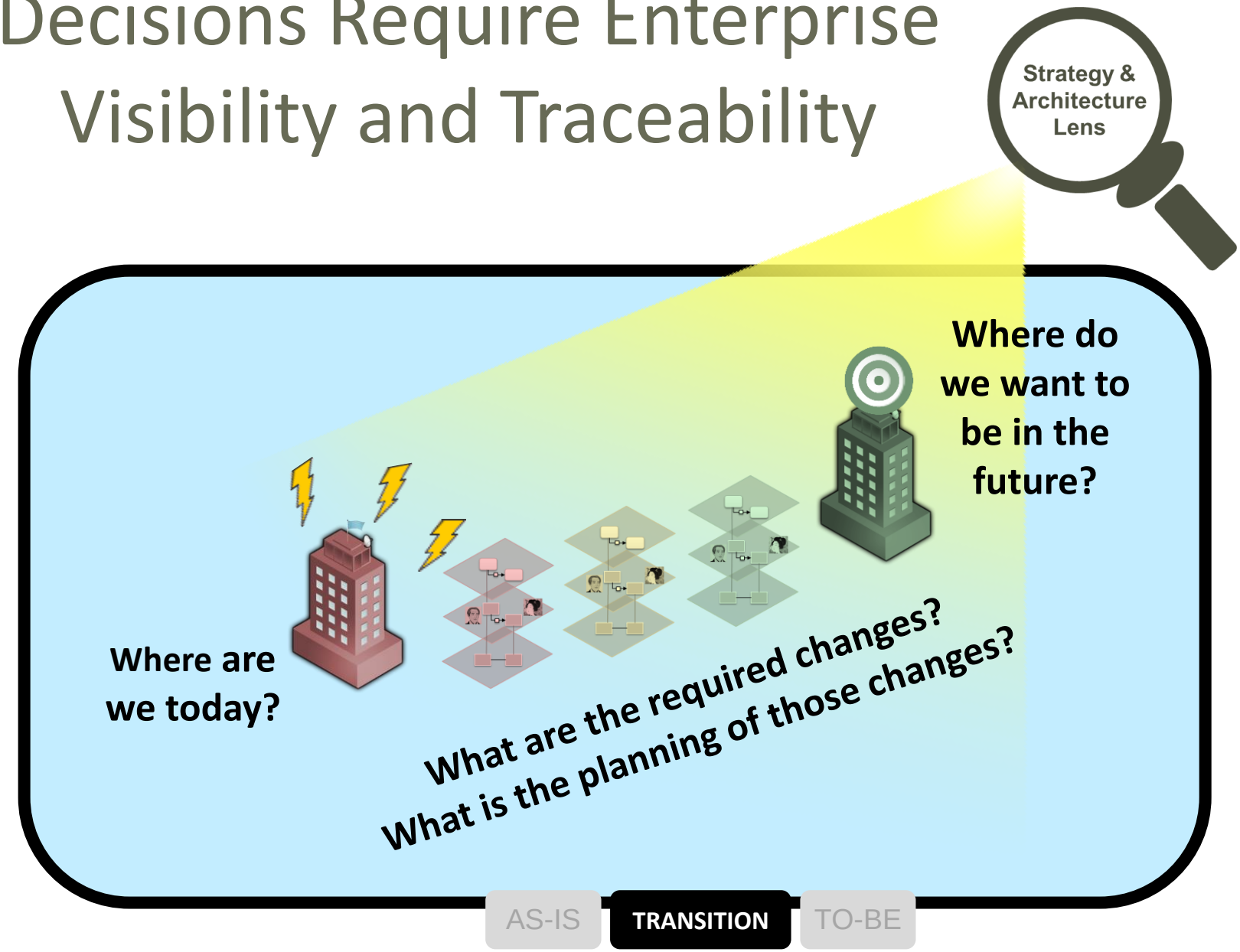
Specific Challenges at the Belgian Railways

1) Supporting outsourcing decisions + 2) Migrating Applications + 3) Delivering Solutions

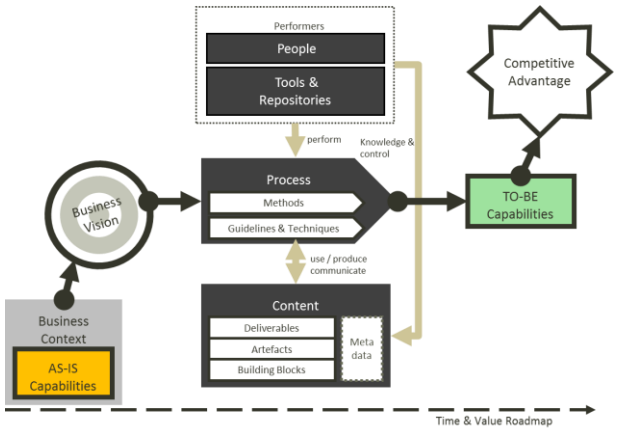
SNCB

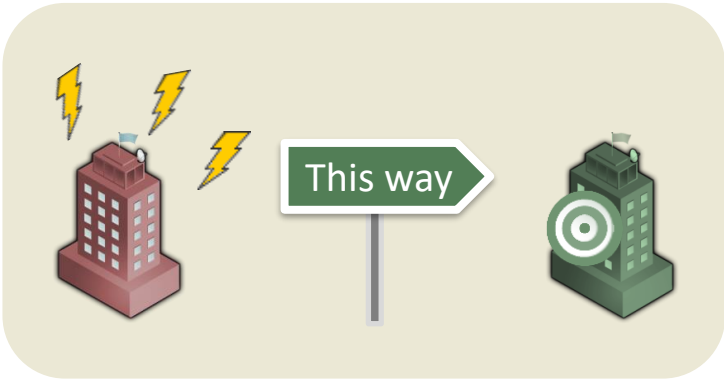


Decisions Require Enterprise Visibility and Traceability



We need a **Framework** as a vehicle to Effectively **Drive Transformations**

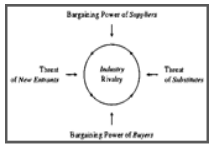




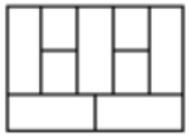
A Framework for Driving Transformations

Why don't we use existing **frameworks**?

I mean Strategy & Architecture **Standards**?



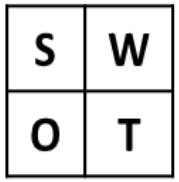
Porter's Five Forces Analysis



Business Model Generation

Balanced Scorecard

PEST(EL)



Strategy Map

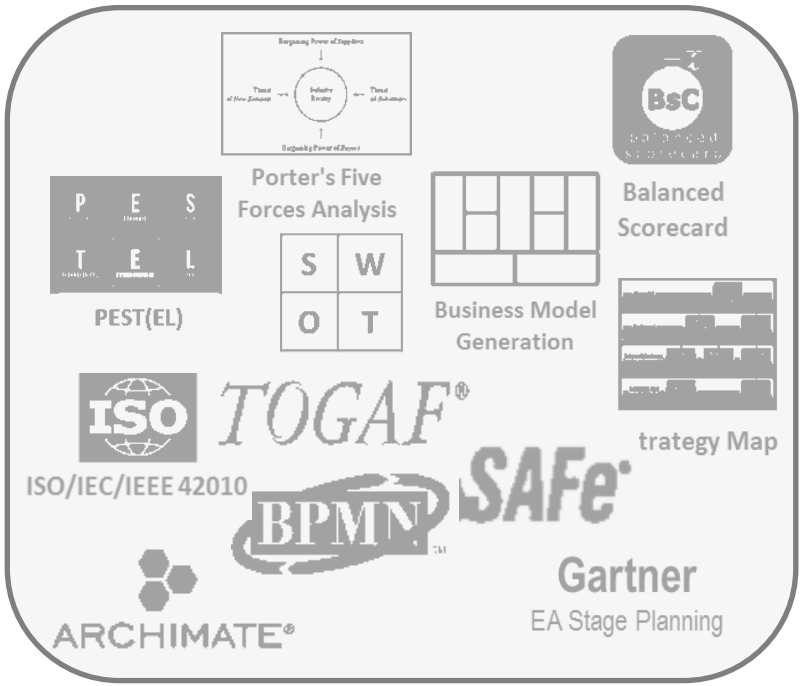
ISO/IEC/IEEE 42010

Gartner
EA Stage Planning

Strategy & Architecture Standards?

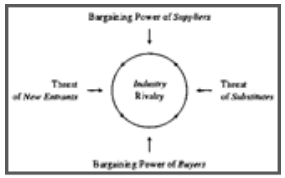
OK, but how can we use these standards?

together?

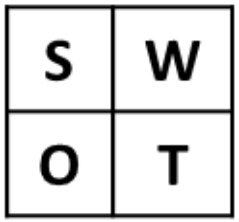


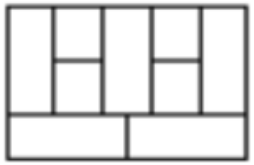
Common ? Process

PEST(EL)



Porter's Five Forces Analysis





Business Model Generation

Common Meaning

Strategy Map

Balanced Scorecard

Precision

TOGAF

Precision

SAFe

Gartner
EA Stage Planning

Common Terminology

ARCHIMATE®

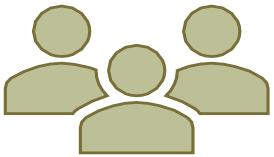
Precision

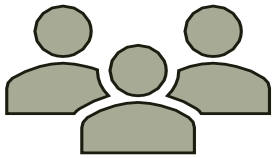
BPMN™

Cross-discipline collaboration is not easy !







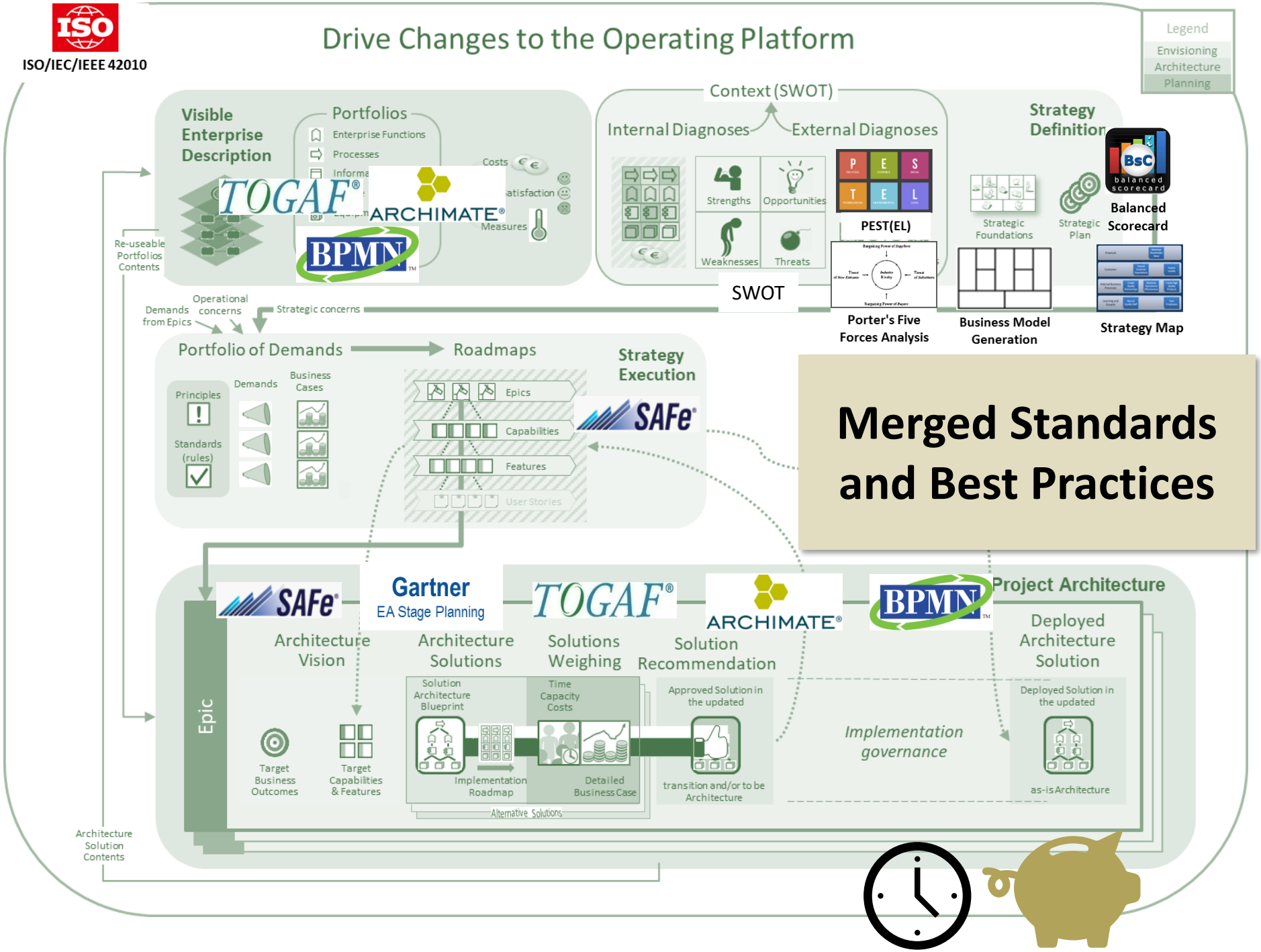


Agenda

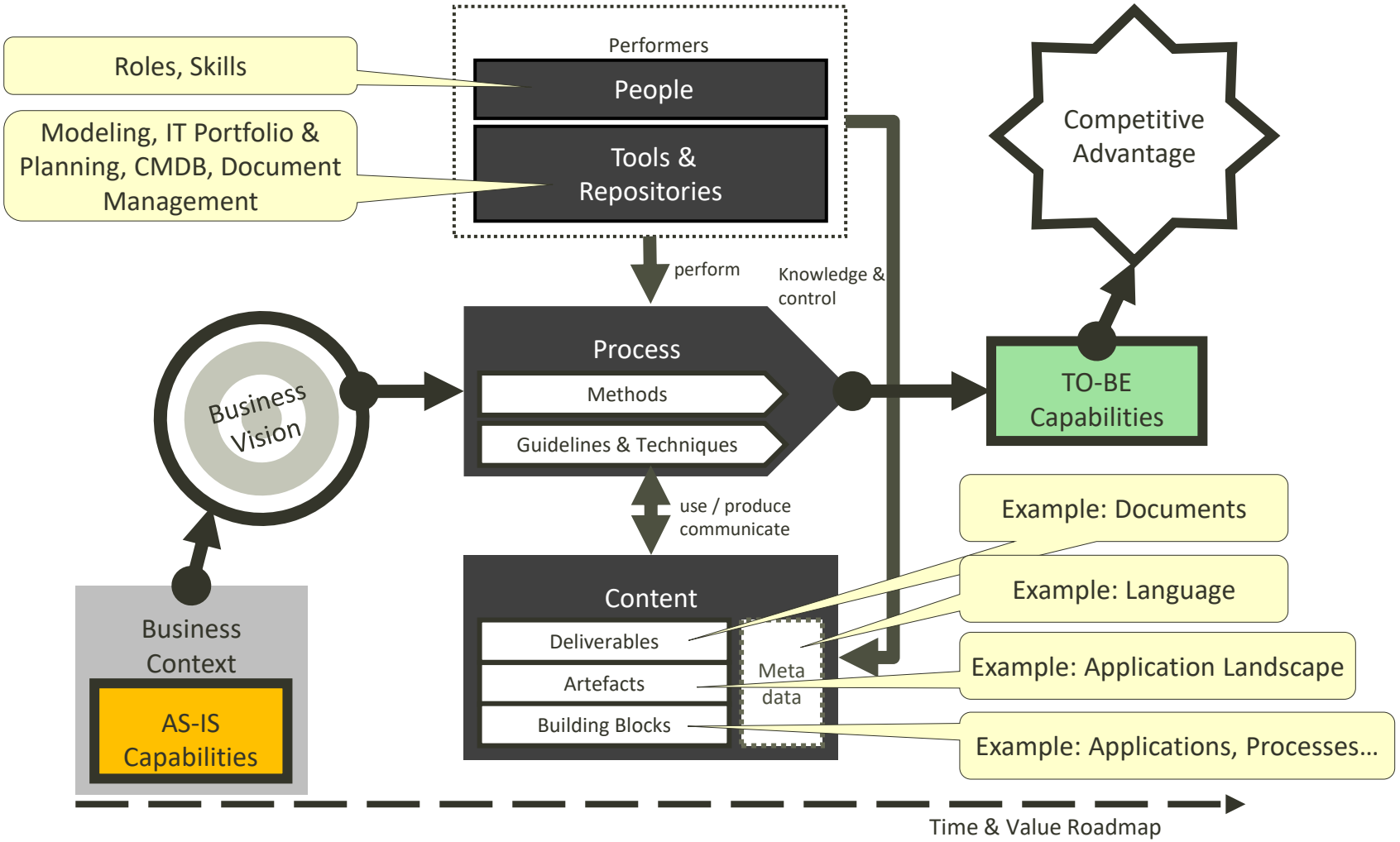
1. Transformation Challenges
2. Framework Overview
3. Tools

ISO/IEC/IEEE 42010

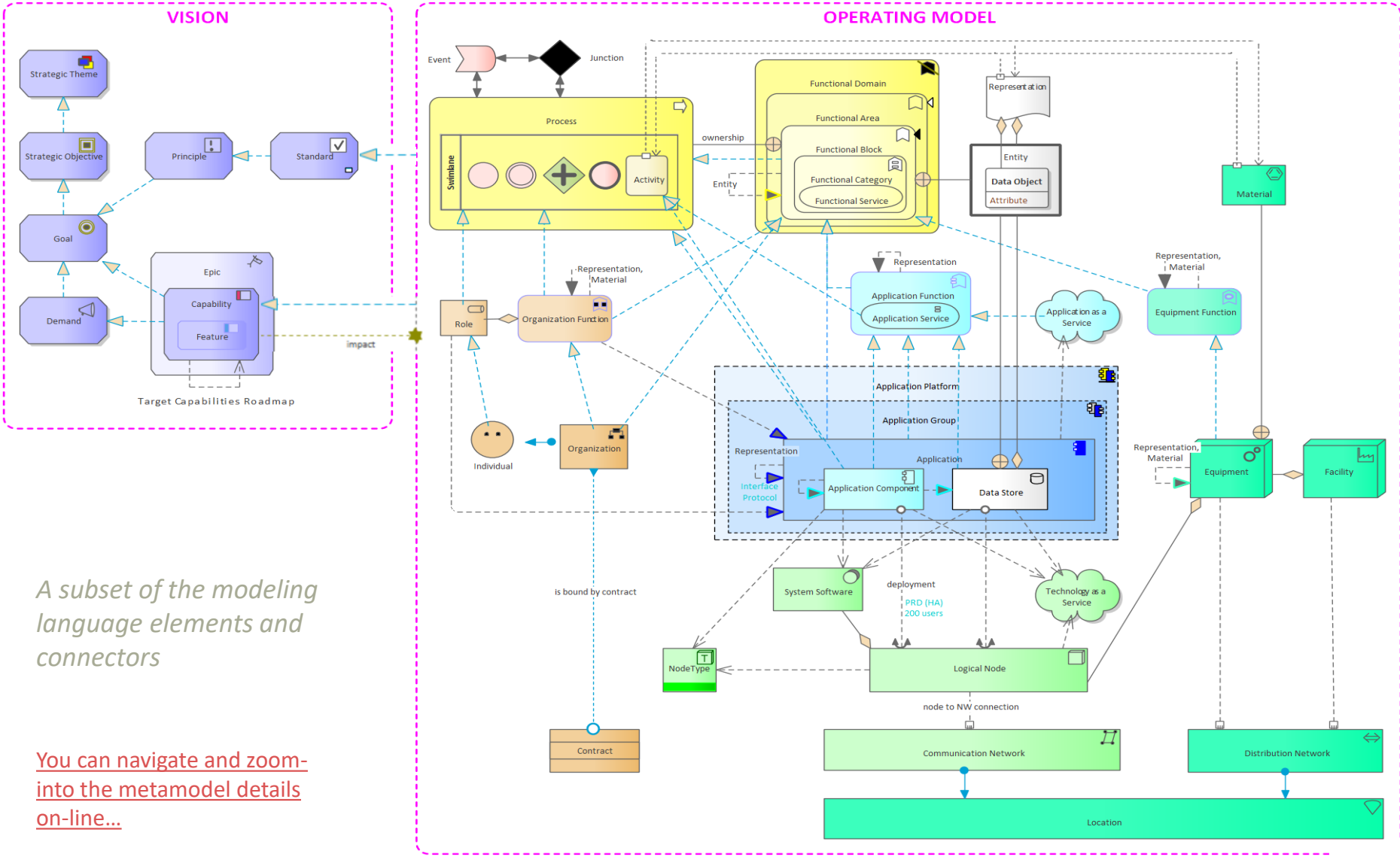
Drive Changes to the Operating Platform



All In One Architecture Framework



One Common Language Eases Collaboration Between Many Different Roles



A subset of the modeling language elements and connectors

You can navigate and zoom-into the metamodel details on-line…

The model repository is organized into 3 main sections…

Vision

Changes to the enterprise are envisioned

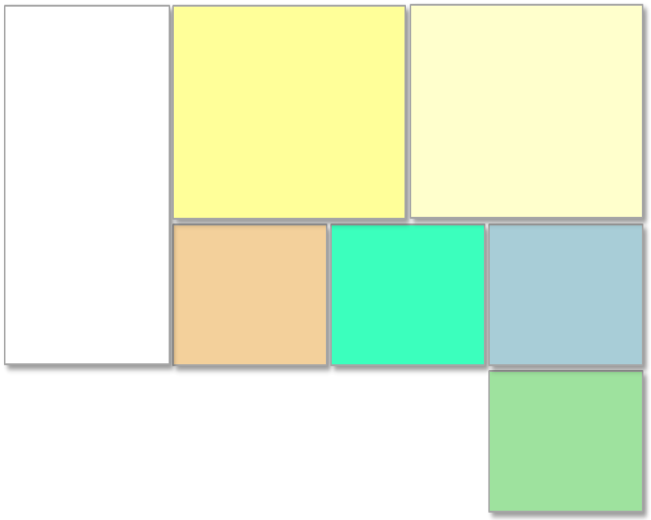
Projects/epics realize vision

Projects

Projects/Epics change the enterprise following vision

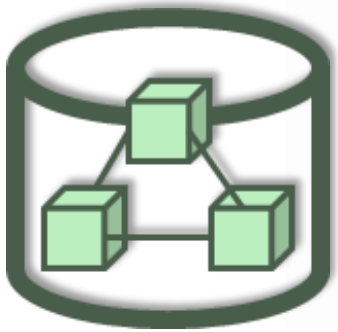
Visible Enterprise

Provides visibility and traceability on the enterprise‘s operating model across several perspectives



Repository structure

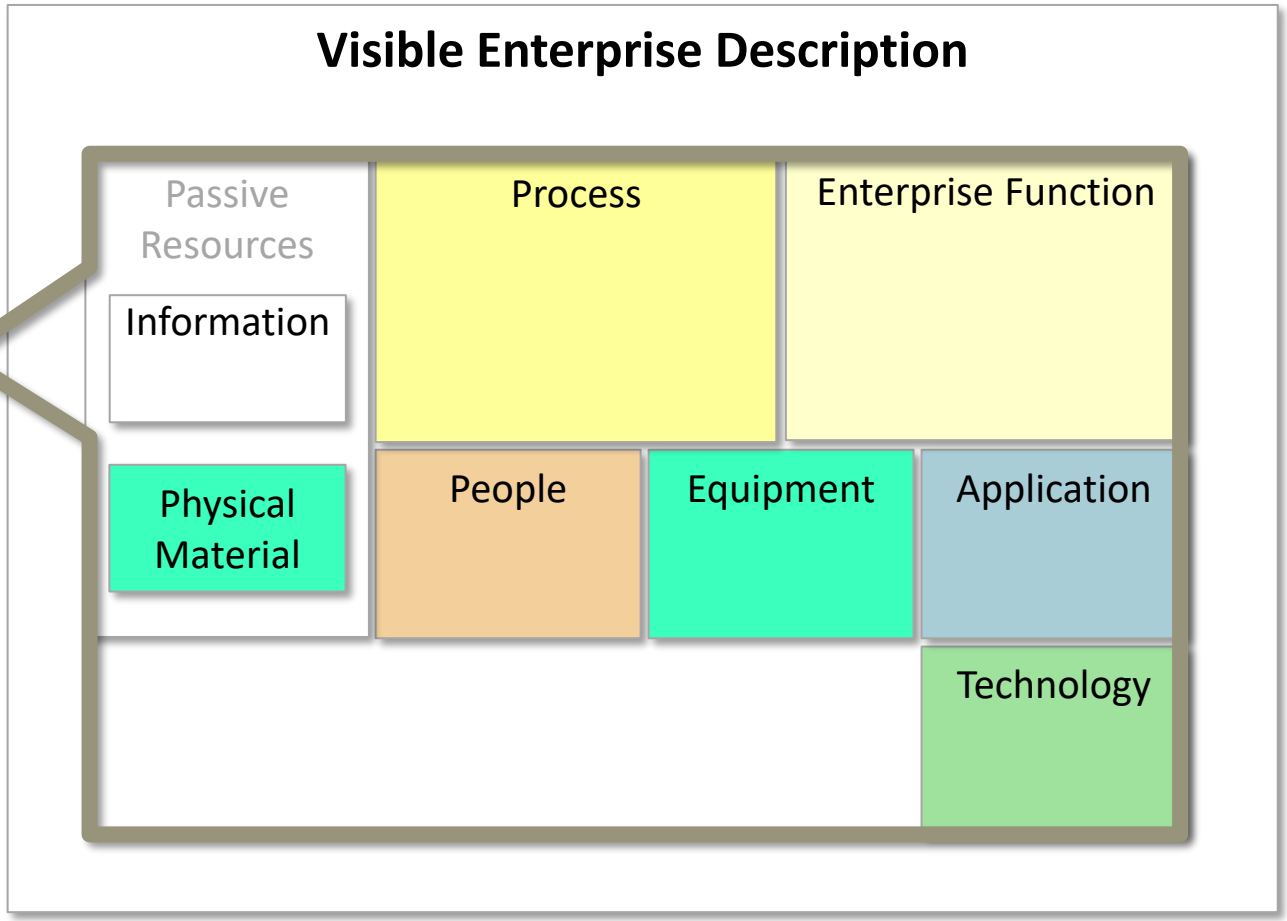
Already prepared for you



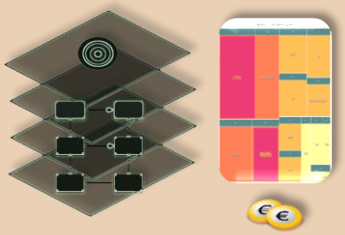
- Vision
- Visible Enterprise
  - Information
  - Physical Material
  - Process
  - Enterprise Function
  - People
  - Application
    - Application
    - Application Functions
    - Applications as a Service
    - Applications
      - External
      - My Company
        - Application Platform1
          - APL - Application Platform1
          - Application Group1
            - AIA - Application Group1
            - APL - Application Group1
            - Application1
              - OBO - Application1
              - APL - Application1
              - AID - Application1
              - IST - Application1
              - APD - Application1
              - IND - Application1
              - Application Deployment Set1
              - Instance Deployment Set1
              - Logical Node1
              - Logical Node2
              - Application Component1
              - Application Component2
              - Data Store1
            - Application2
            - Application3
            - Application4
            - Shared Application Component2
            - Shared Data Store2
          - Application Group2
          - Shared Application Component1
          - Shared Data Store1
      - Shared Data Stores
  - Technology
  - Equipment
  - Detailed Application Specifications
- Projects
- Architecture Management

The **Visible Enterprise Portfolios** folders represent **architecture perspectives**

Architecture Perspectives

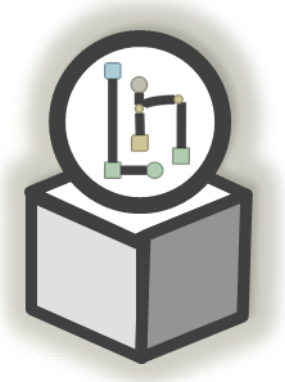


Enterprise Visualization

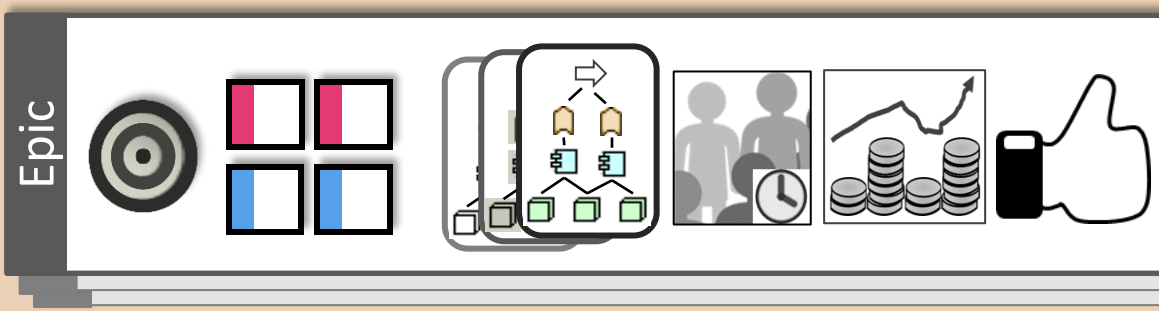


Strategy Definition

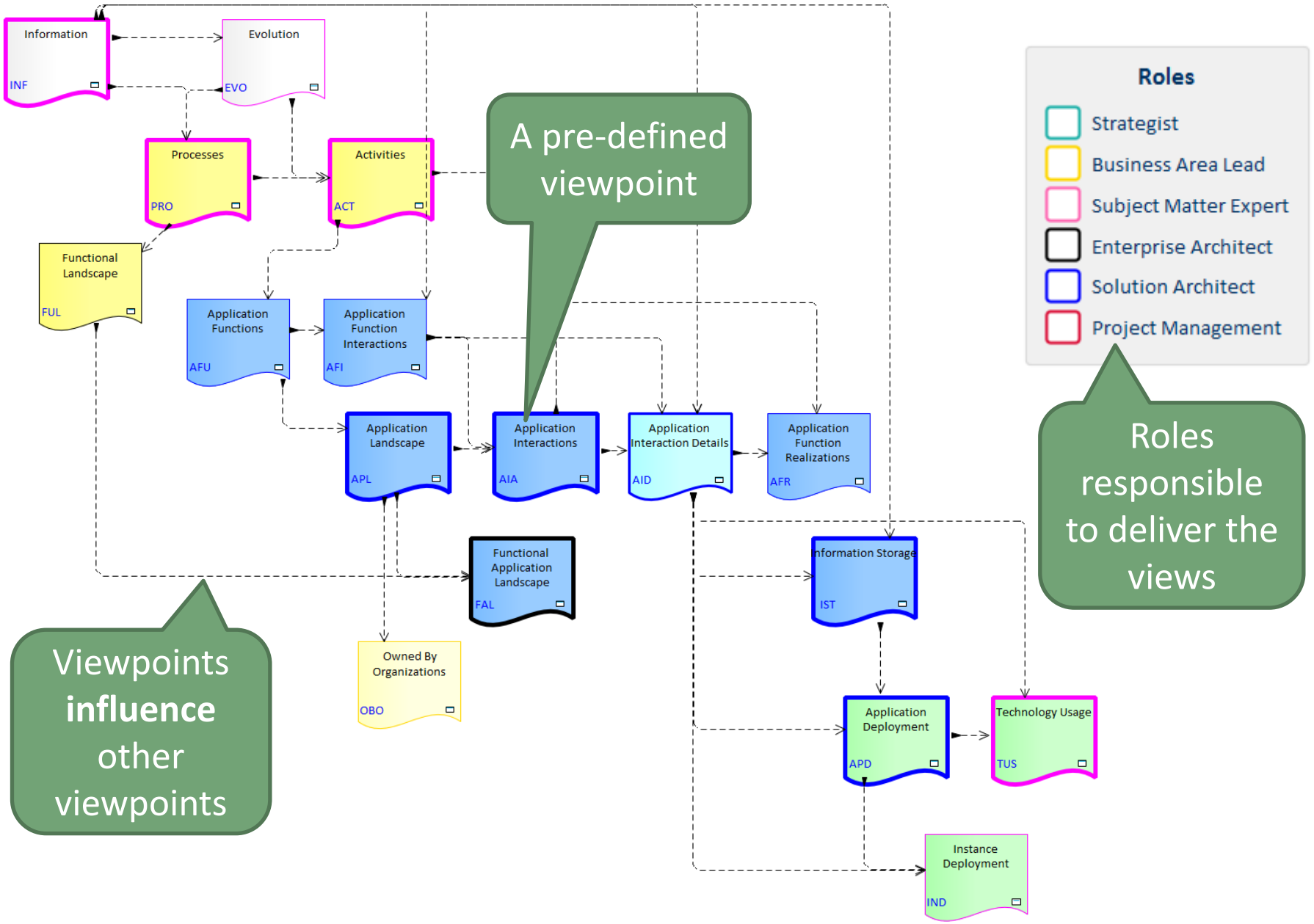
Strategy Execution



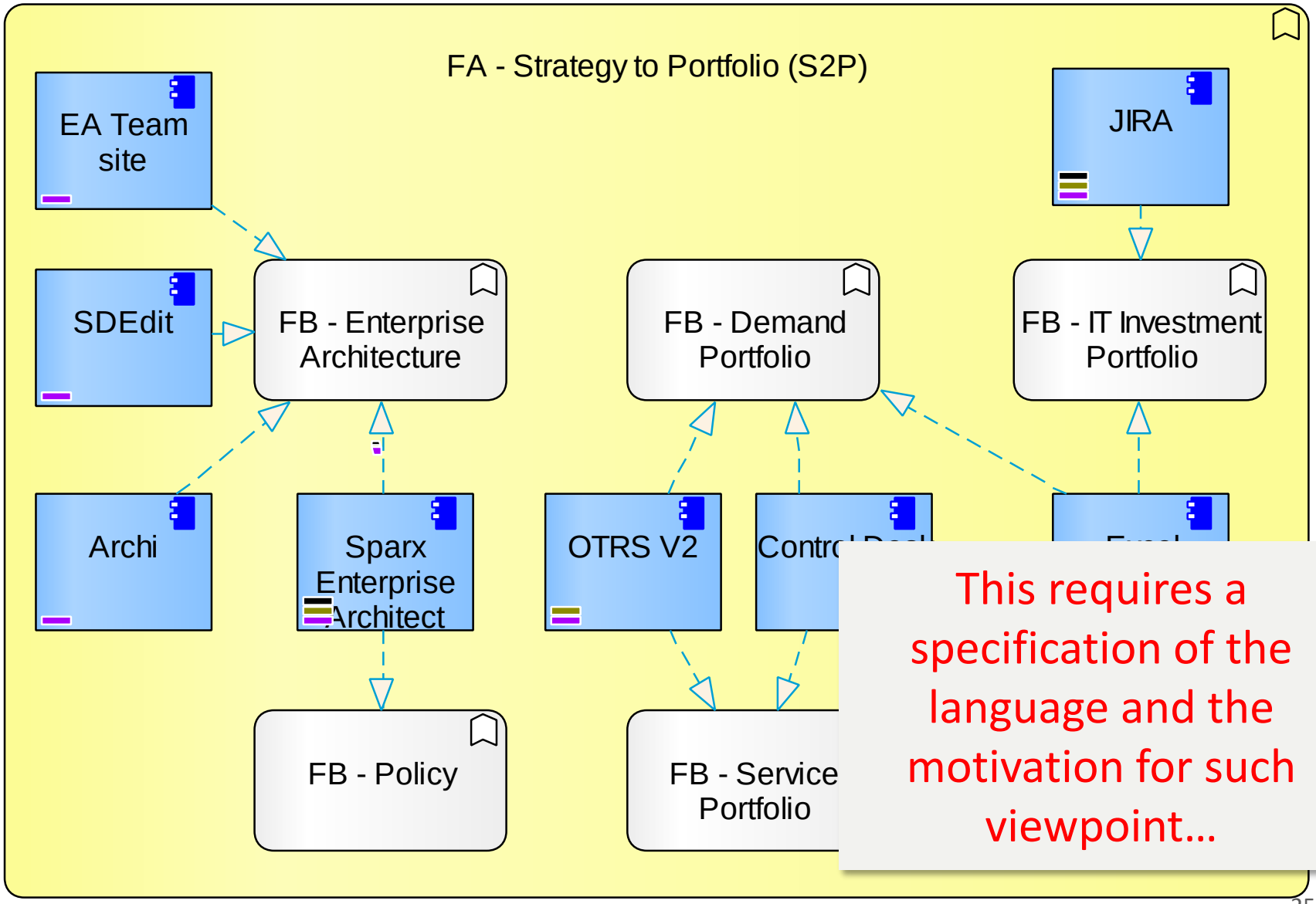
Project Architecture



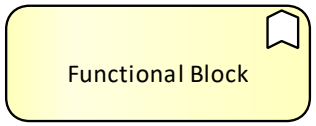
Focus on IT Solution Architecture Viewpoints



Sample “Functional Application Landscape” View



Prescriptive language for "Functional Application Landscape" views



A Functional Block is a level 3 business function that belongs to some functional area.
The granularity and scope of a Functional Block is defined by identifying

- some homogenous set of information that the Functional Block is mastering
- a group of activities that fulfill the purpose of the functional block, that belong to some processes of same nature and that produce and use the information mastered by that Functional Block

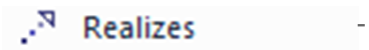
A business function is a behavior element that groups behavior based on a chosen set of criteria e.g. required business resources and/or skills, competencies, knowledge, etc.

Inspired by Archimate

An application

- Is a self-contained unit of functionality as perceived by end-users
- Can be clearly mapped to some functional blocks
- Has its own specific set of application attribute values
- Is used by and billable to one or several Organizations
- Is owned by a single Organization
- Can be part of an Application Platform or an Application Group
- Encapsulates Applications Components and Application Interfaces
- Can exist at one or many specific points in time called "plateaus". Possible plateaus are AS-IS, TRANSITION and TO-BE.

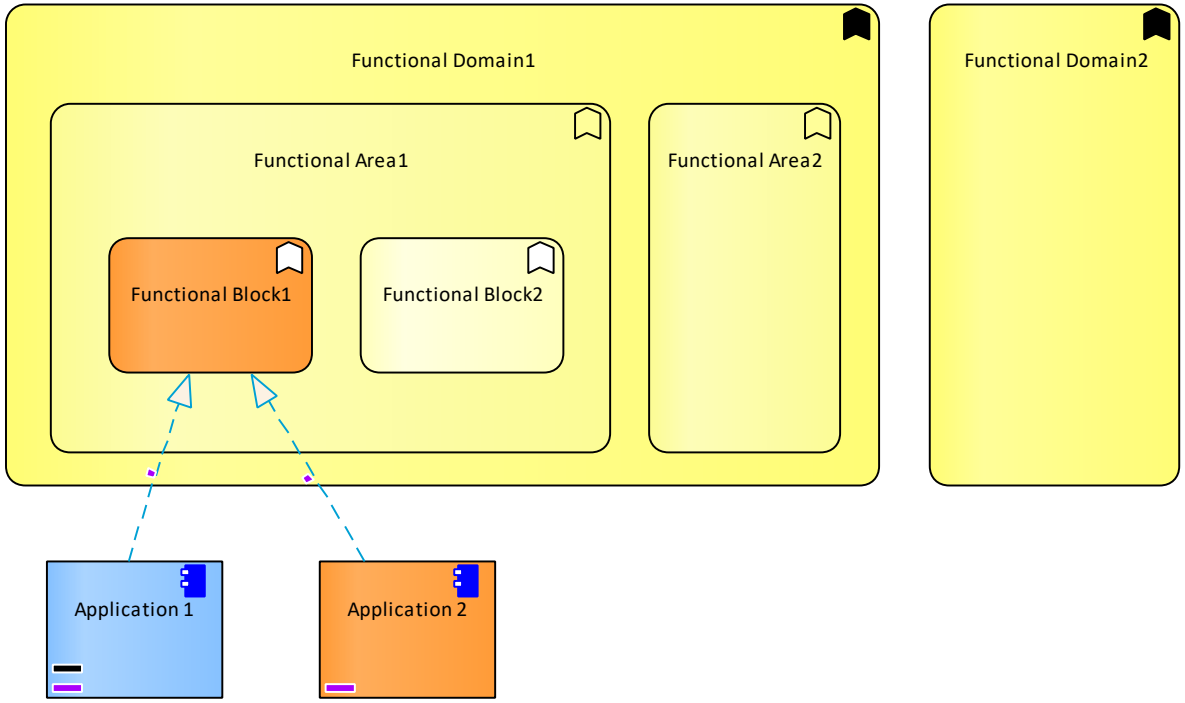
The name of an application component should preferably be a noun.



A **Realization** relationship indicates which concrete entities ("how") realize which abstract entities ("what"). The realization relationship is used in a business operational sense (e.g., a role realizes a swim-lane of activities), but also in an IT context (e.g., an application realizes a functional block).

Inspired by UML & Archimate

Motivation for creating "Functional Application Landscape" views



This answers the following questions

When used as part of the **Visible Enterprise Description**

- Which **applications** support which **functional blocks**?

When used as part of a **Project Architecture**

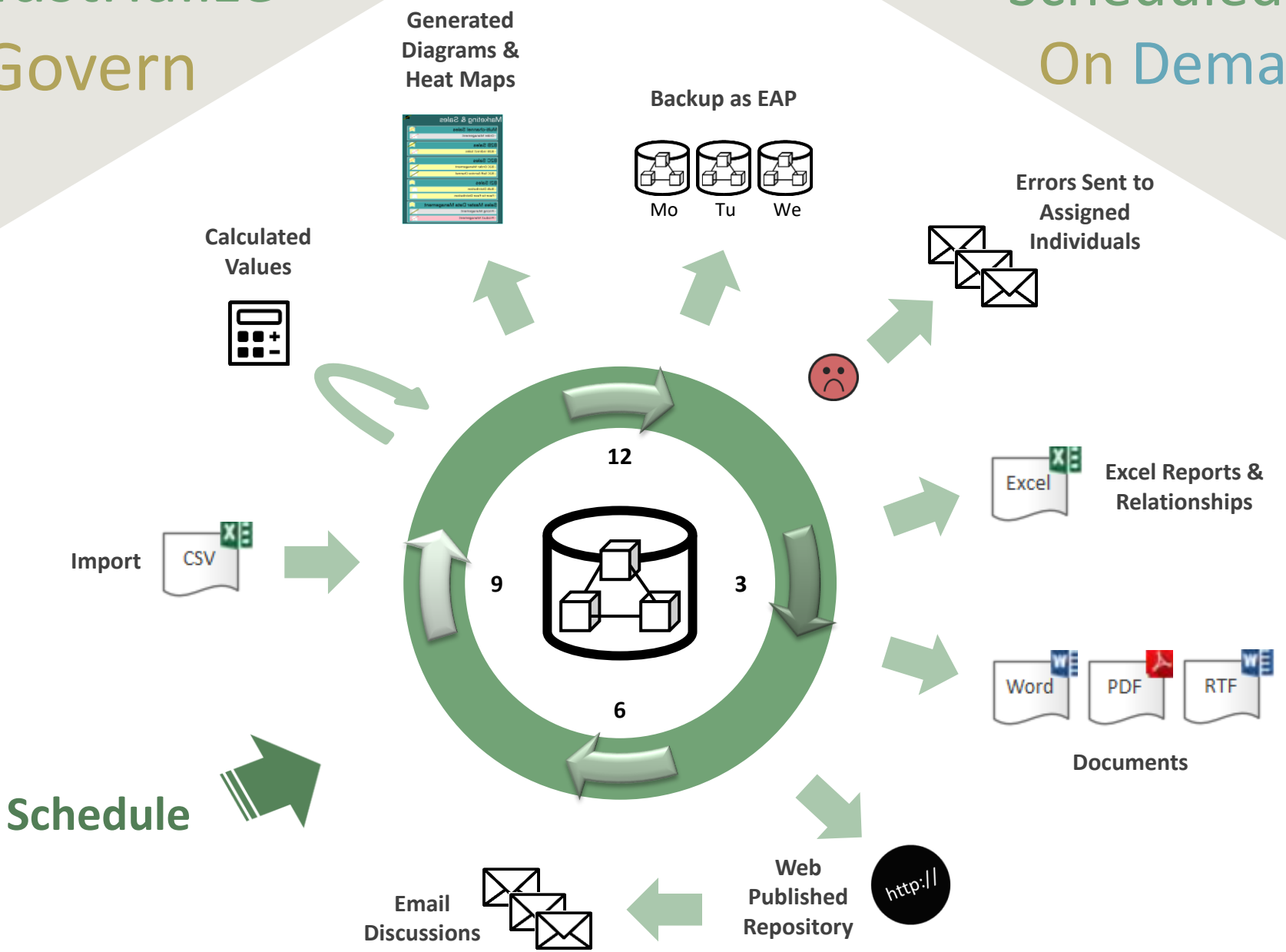
- Which **applications** are/will automate the **functional blocks** inside the scope of this project?

Agenda

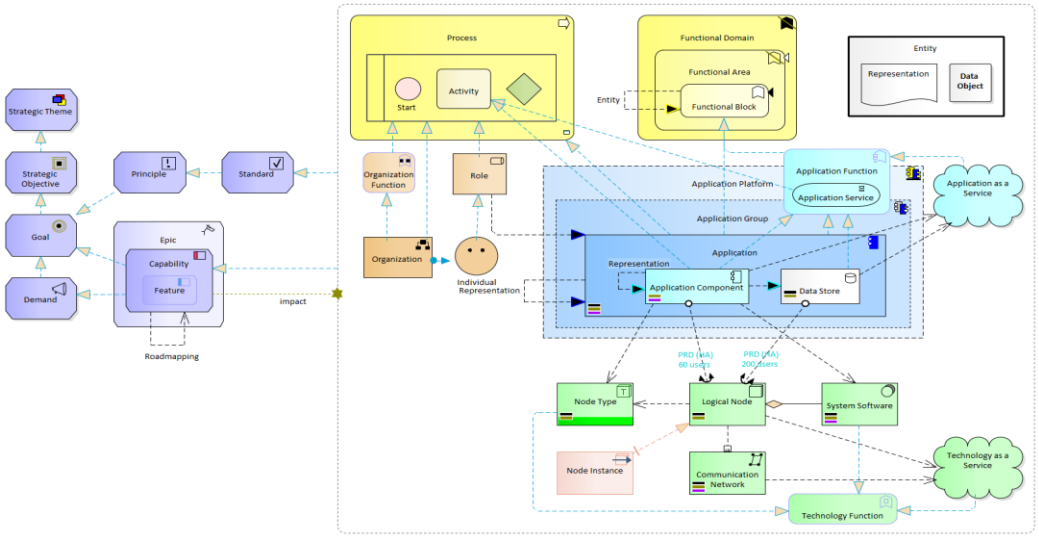
1. Transformation Challenges
2. Framework Overview
3. Tools

Industrialize & Govern

Scheduled or On Demand



The Language Metamodel is used both for documentation & automatic model validation



While Modeling

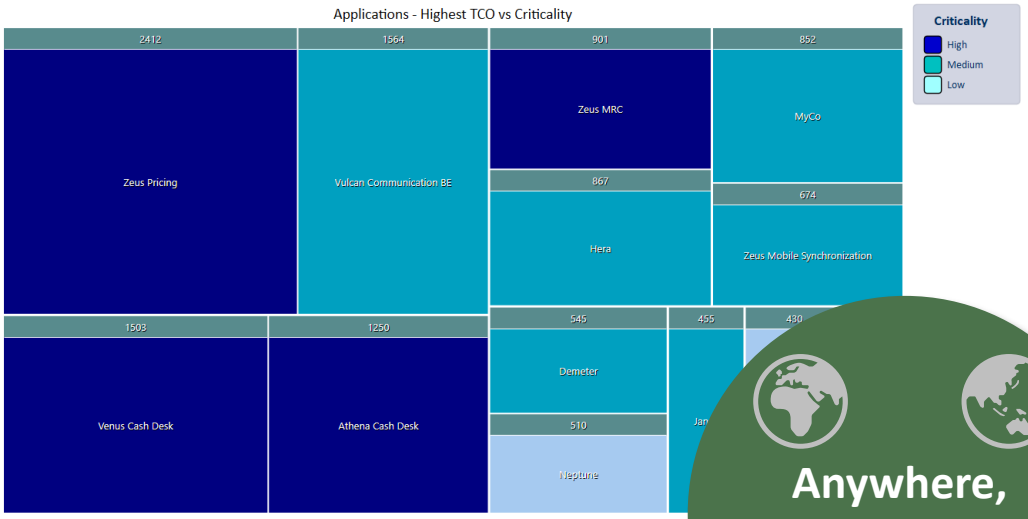
Existing Invalid Connectors

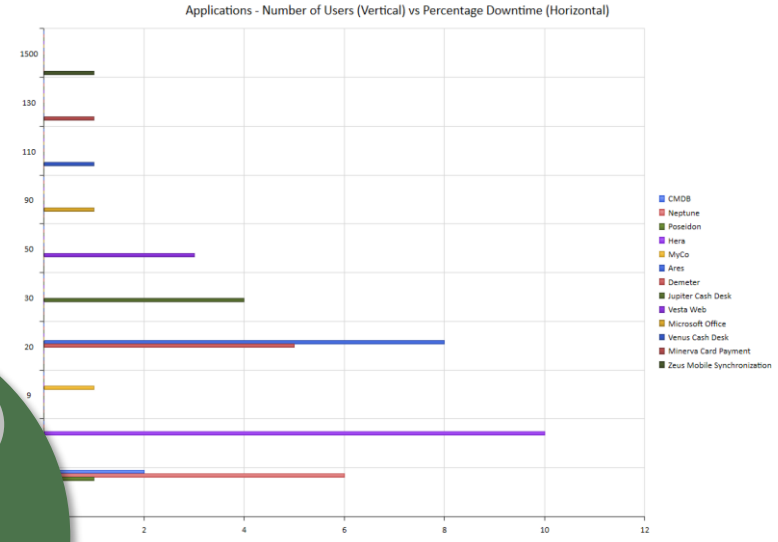
Prevent creation of invalid connectors

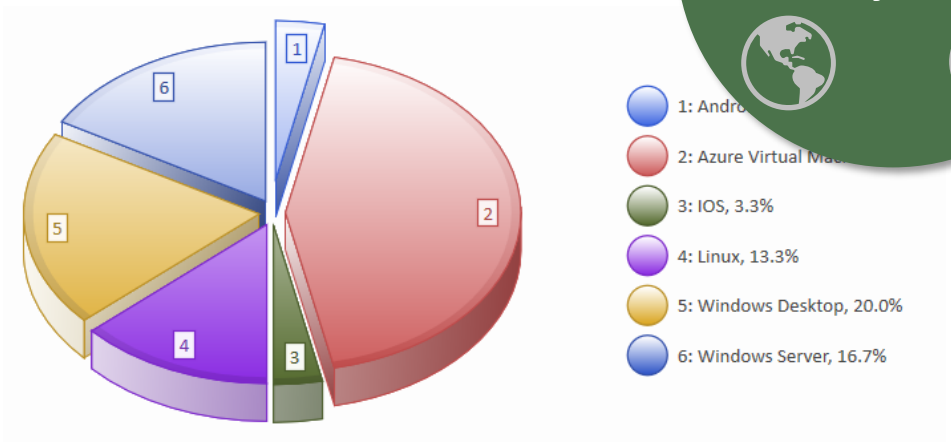
Labnaf PowerShell

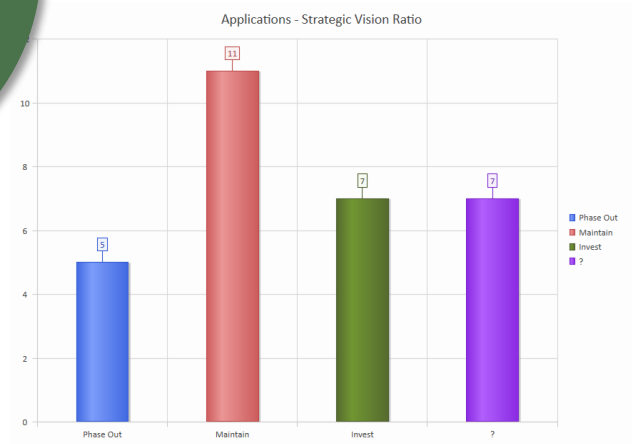
Send Error Emails to Relevant Recipients

Check Out your Real-time Dashboards and Take Decisions

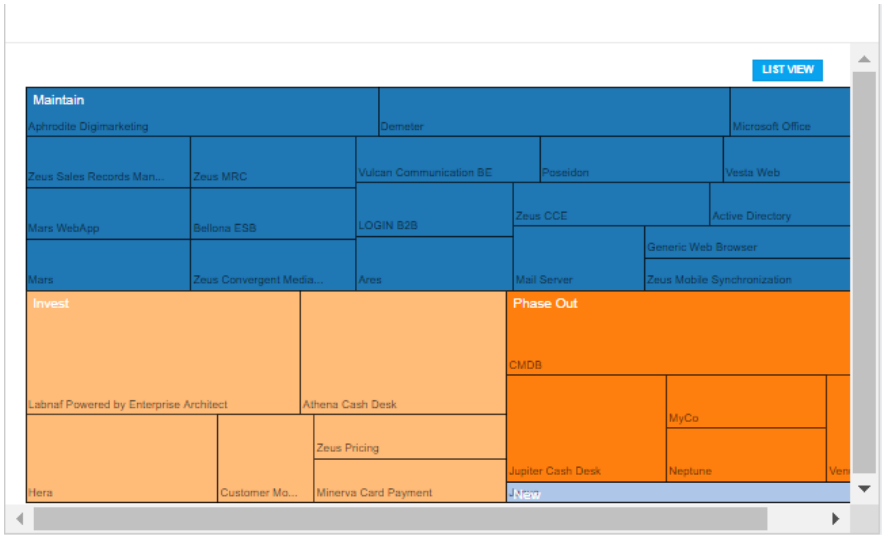


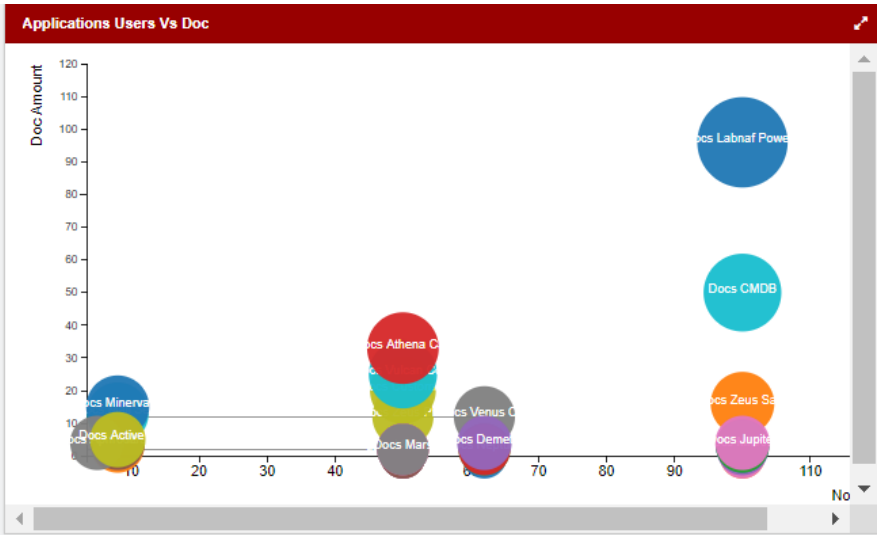


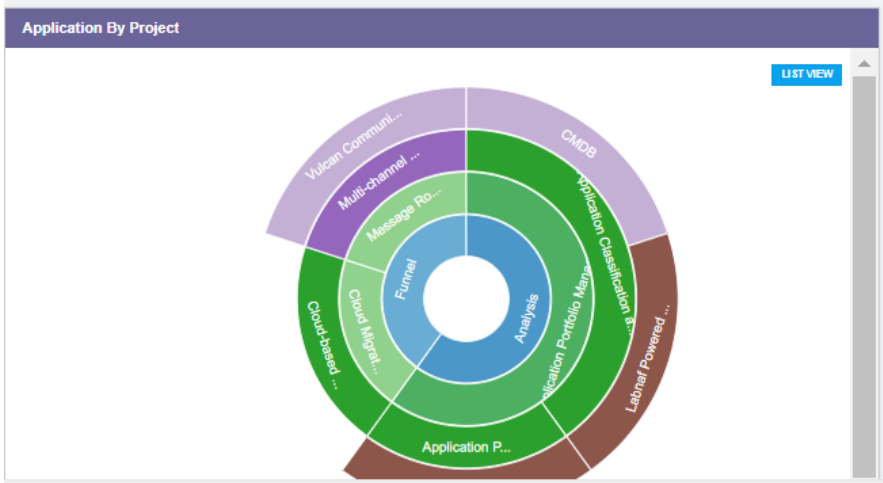


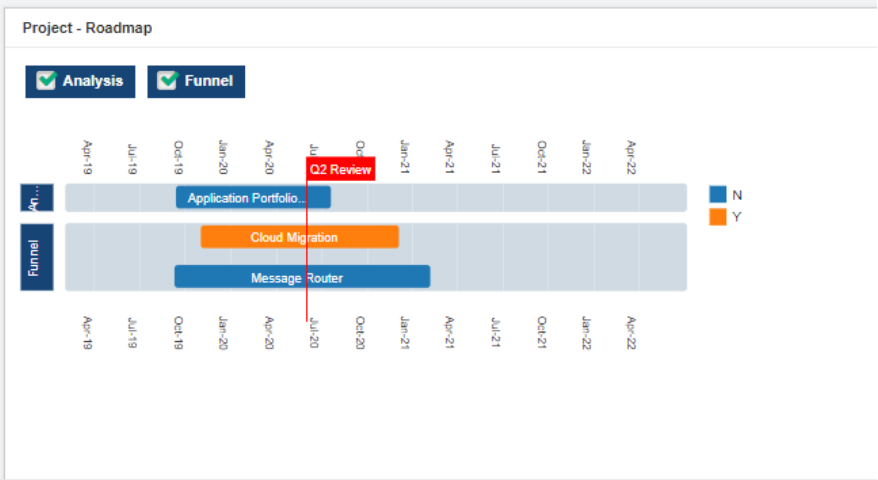


Prolaborate Option: C-Level Enterprise Visualization and Navigation





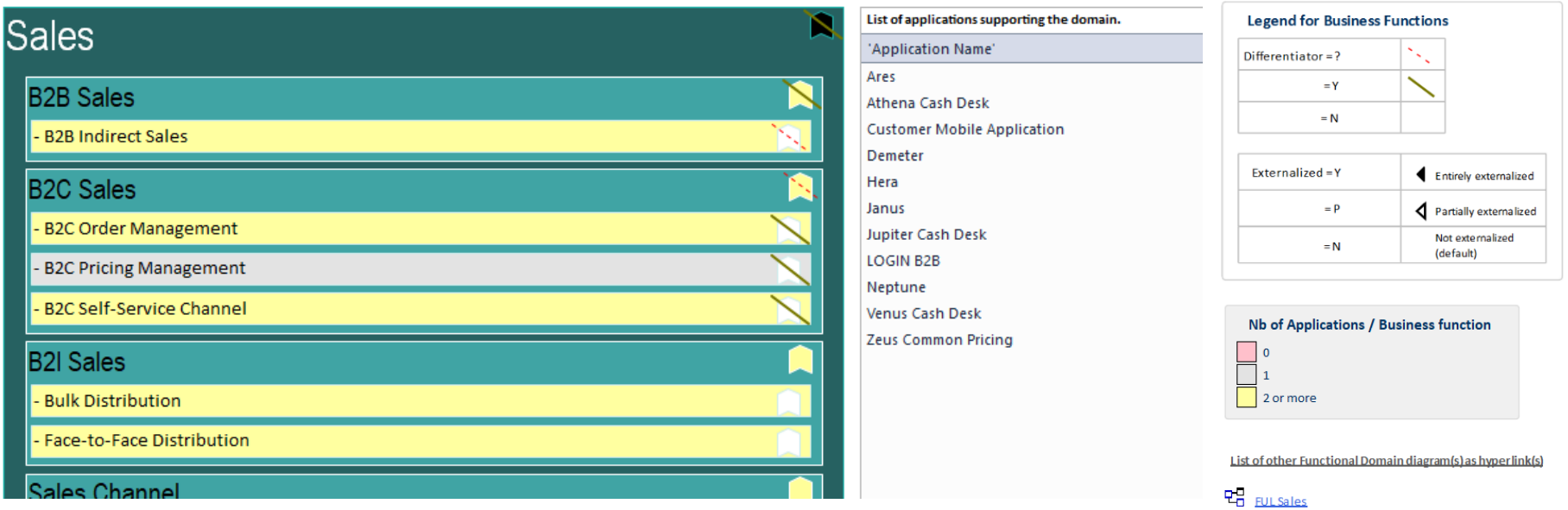




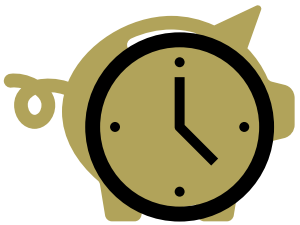
Generate diagrams

Scheduled or On demand

Real navigable model elements
(automatically resized following context)



- Time Savings
- Cost savings
- Diagram completeness
- Consistent diagram layout



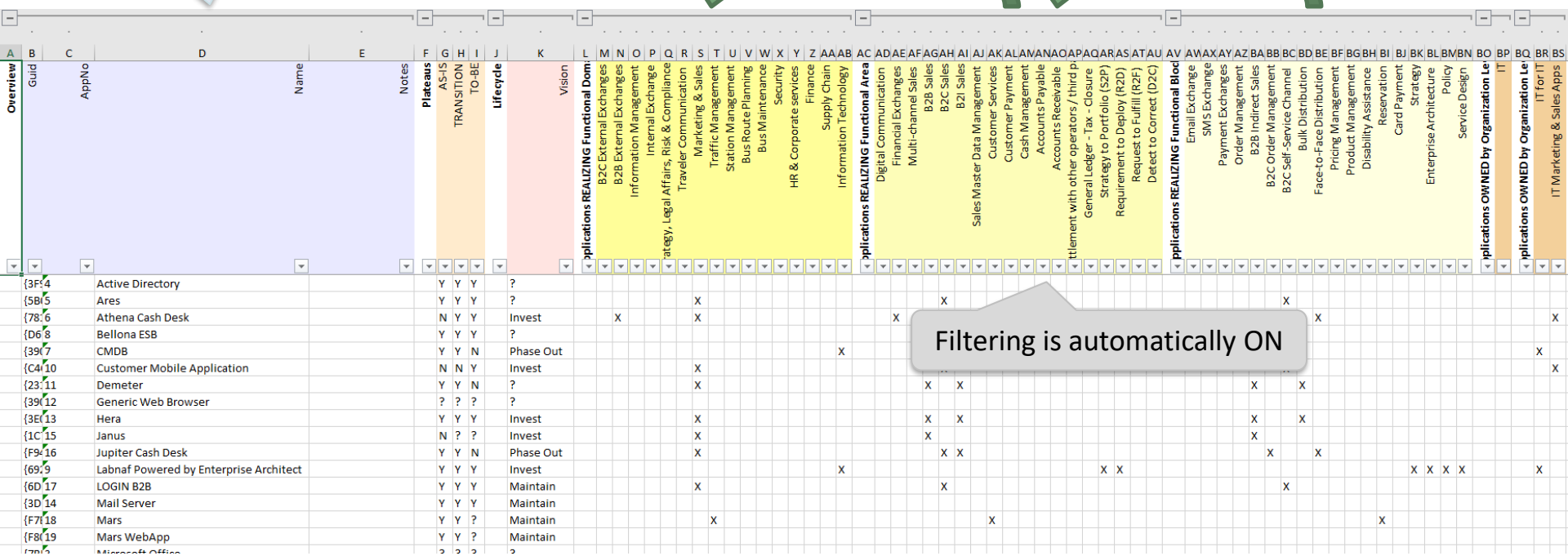
Generate Tabular Reports (Excel/CSV)

Scheduled or On demand

Reported collection of elements (e.g. applications) and relationships selected following any kind of rule

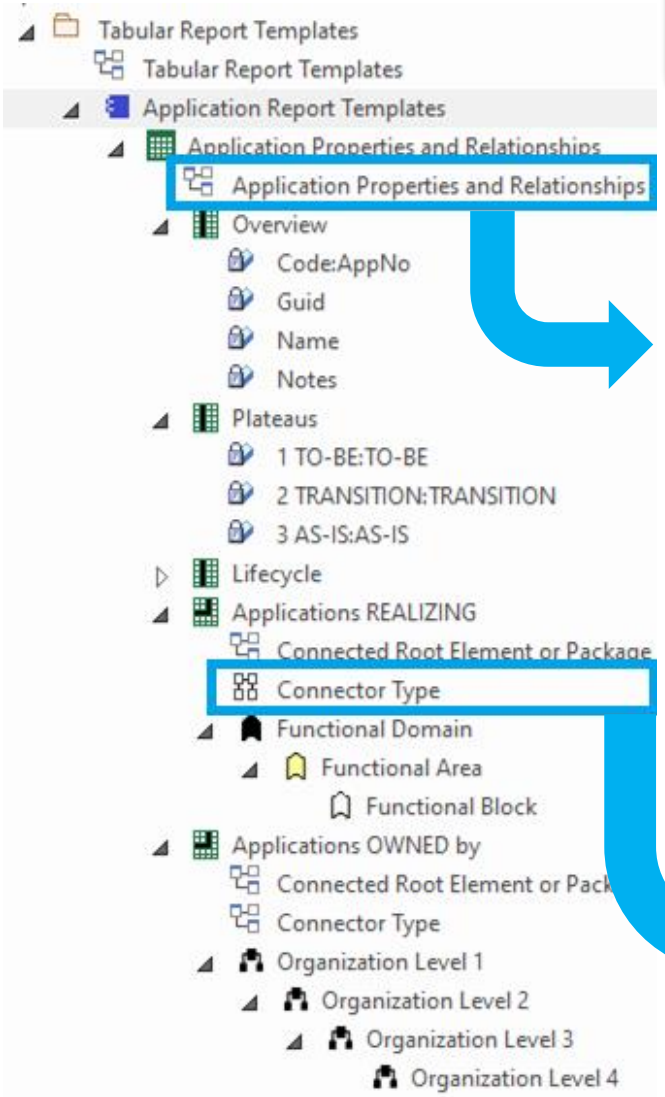
Element properties and/or tagged values with optional renaming and colored groupings

Specific connections in specific direction to specific types of elements.
Automatic connection **consolidation** into parent element relationships.



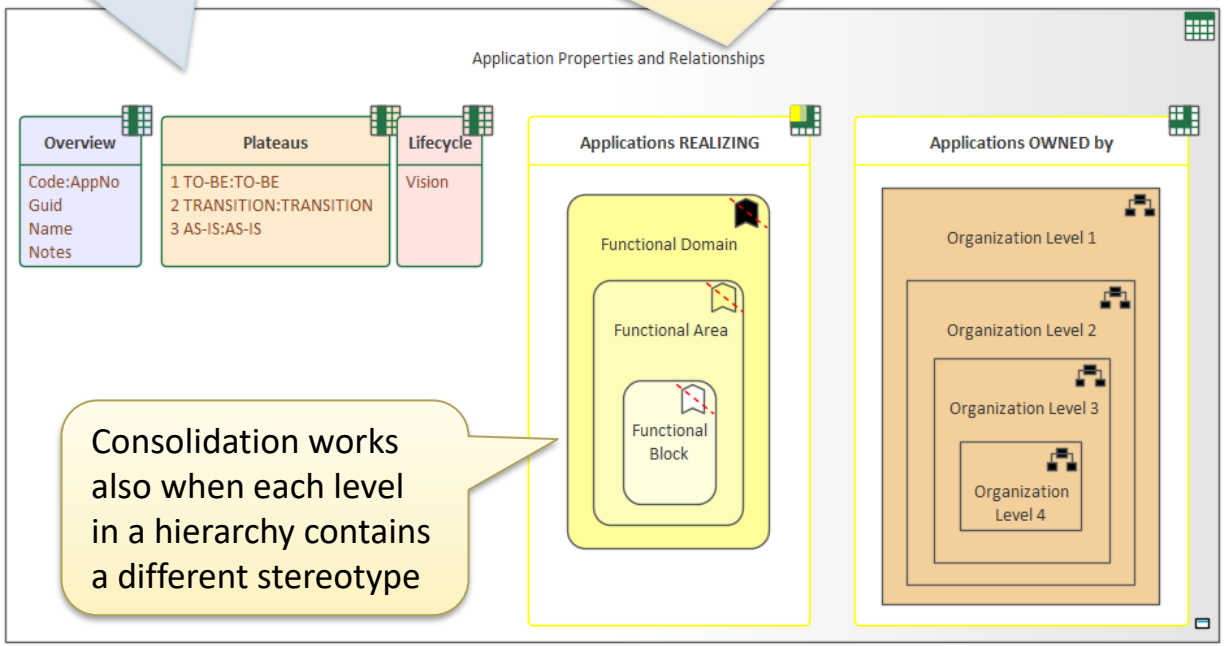
Generate Tabular Report (cont.)

Model your tabular report

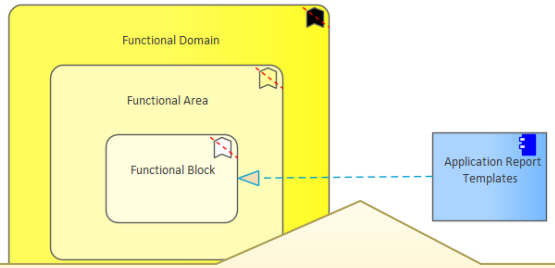


Model element properties and/or tagged values with optional renaming and colored groupings

Model specific connections in specific direction to specific types of elements. Model automatic connection **consolidation** into parent element relationships



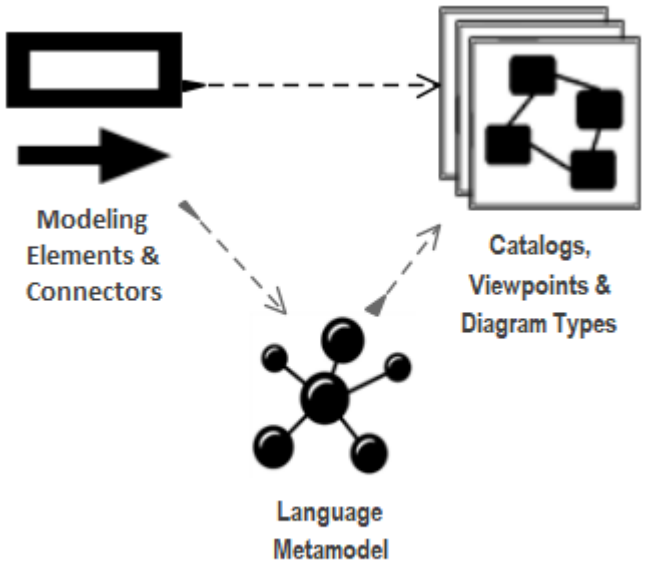
Consolidation works also when each level in a hierarchy contains a different stereotype



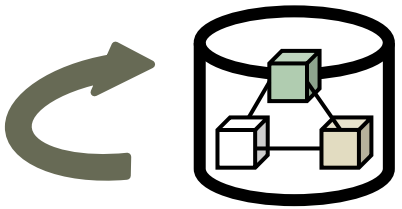
Model leaf element **connector** to be reported and consolidated

Labnaf Customization Steps

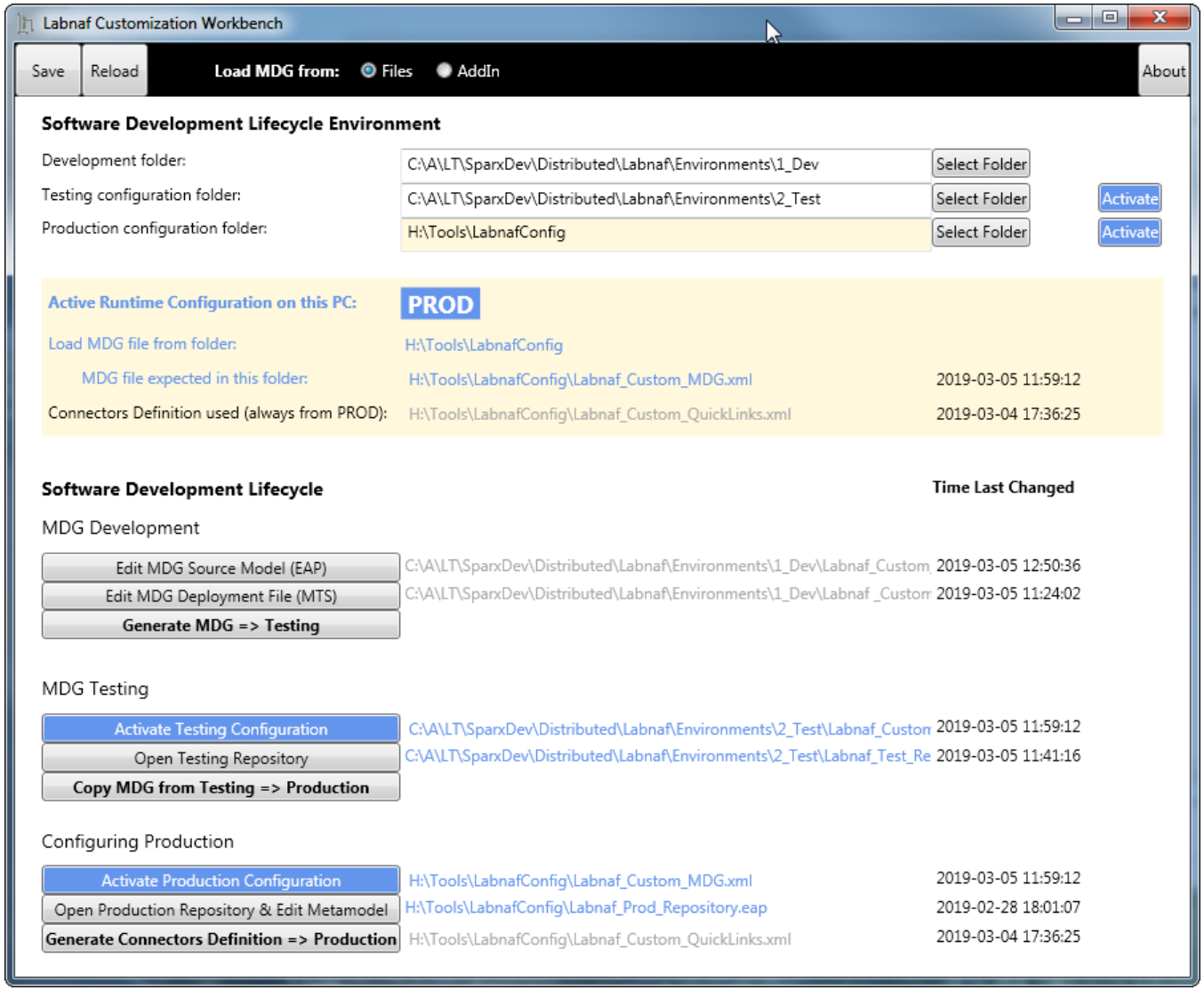
1. Customize the language following your organization requirements



2. Adapt existing repository content



The Customization Workbench guides you throughout the **Language customization** lifecycle



Straight through collaboration with a single language from idea to software in production

We play many different roles, but…

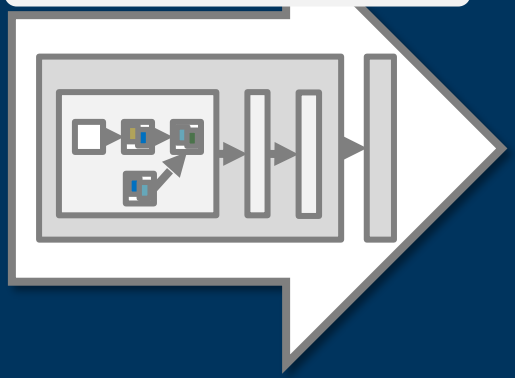
We speak the same language

We share the same information in the same repository

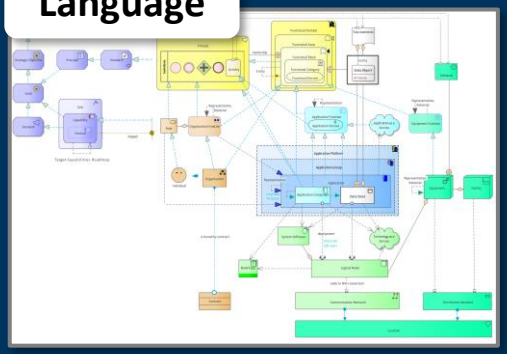
We follow the same process and we use the same tool

We collaborate effectively

Transformation Process



Language



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Thank you!