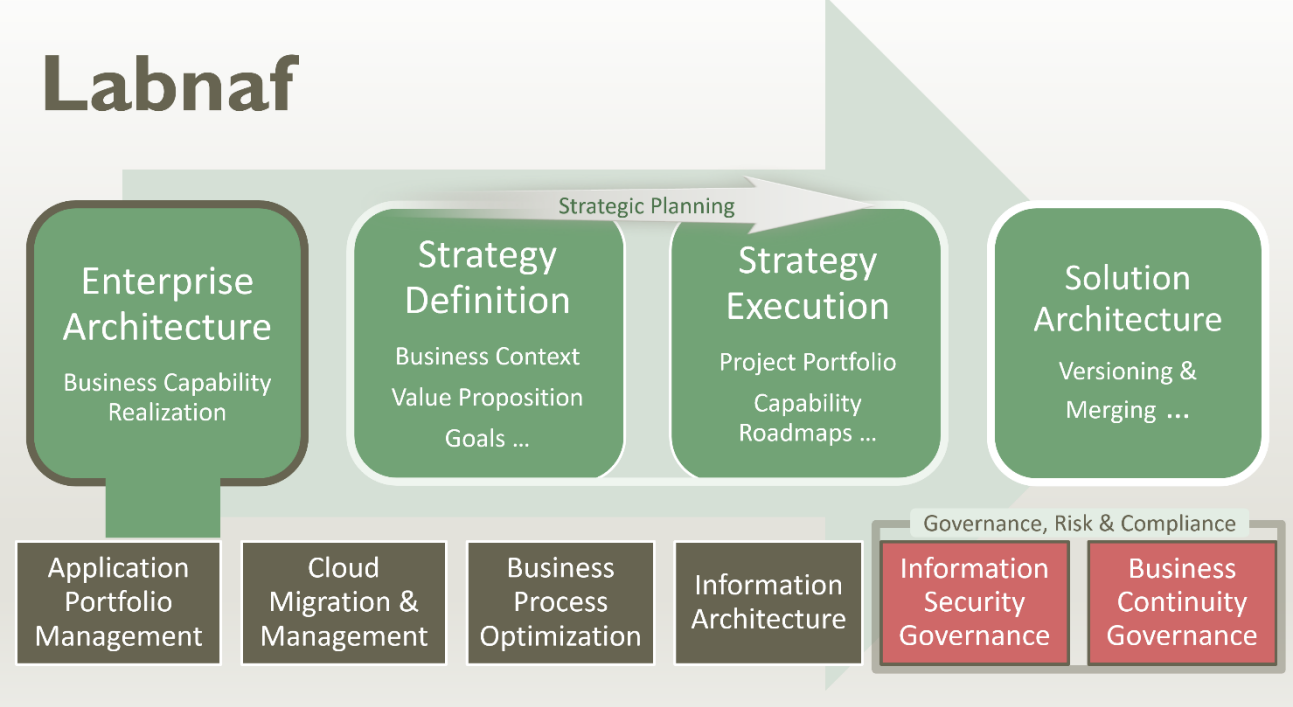
LABNAF

UNIFIED SOLUTION FOR DRIVING TRANSFORMATION

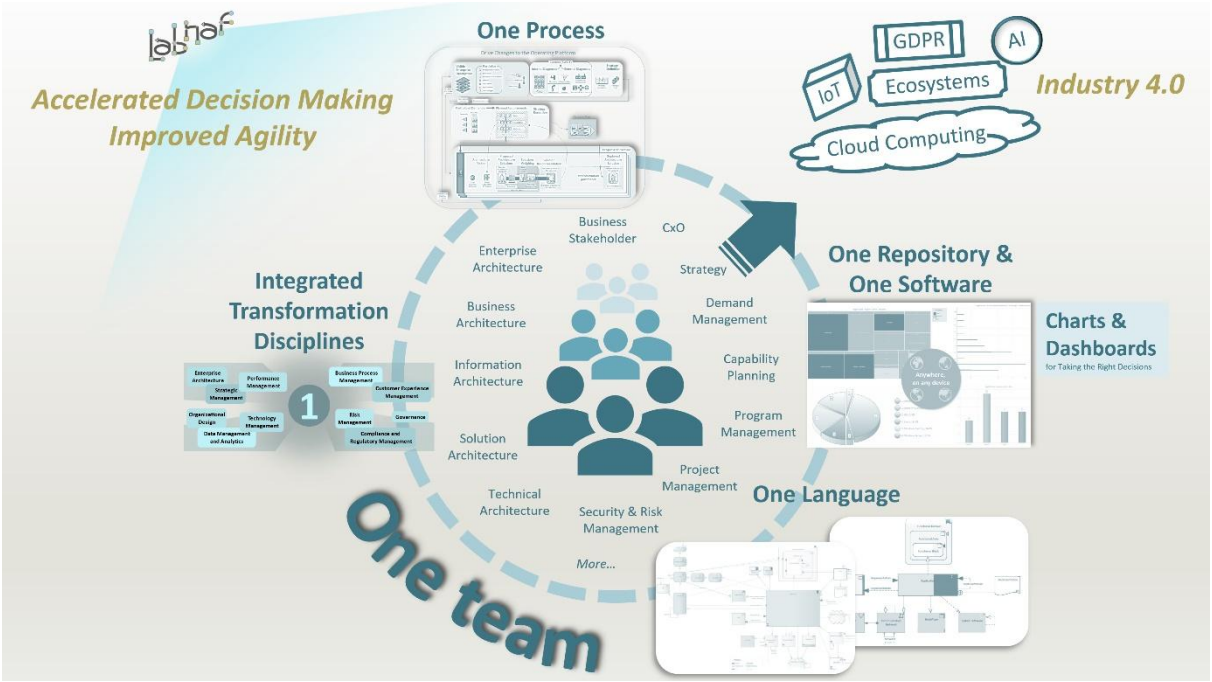
UNIFIED DISCIPLINES

CONTENTS



[Labnaf](#) is a unified framework and unparalleled software for visualizing your enterprise, driving transformations, managing various integrated portfolios, and managing risks across diverse industries. It has gained recognition and adoption by prestigious organizations, including large-scale enterprises with stringent security demands.

Labnaf brings seamless cross-discipline collaboration among various architecture, strategy, risk management, project management, and C-level roles.

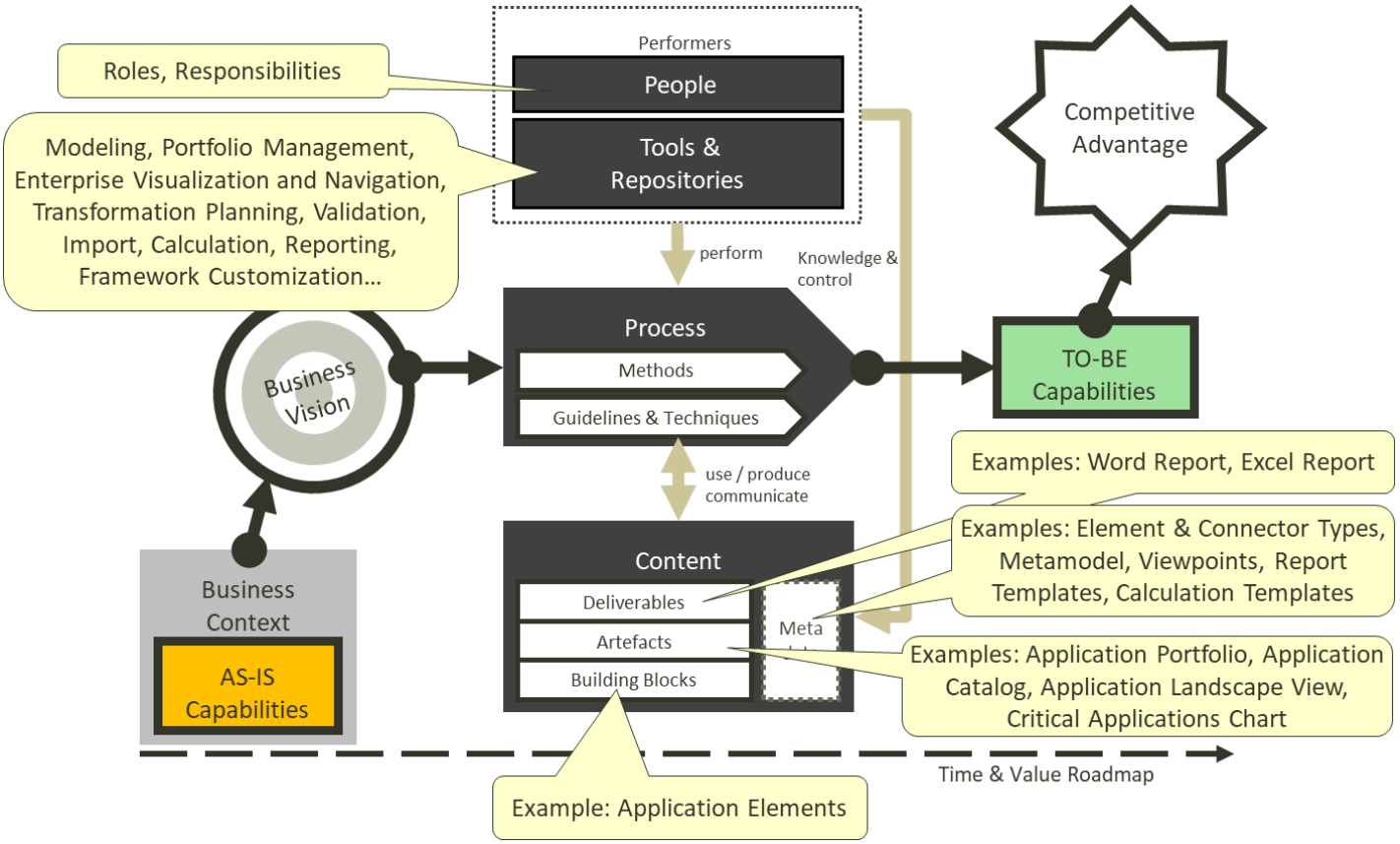


Its powerful, feature-rich, robust and instantly customizable software supports all aspects of the framework and significantly boosts productivity.

What is a digital transformation framework made of and for what purpose?

A transformation framework is made of performers, processes, and architecture content. People are supported by tools and repositories.

Together they perform processes which use, produce, and communicate strategy and architecture content driving the organization from existing capabilities to target capabilities in order to reach some competitive advantage and following a defined business vision.



LABNAF SOFTWARE OVERVIEW

With Labnaf software, users comprehend and continuously optimize their enterprise operating model, analyze sensitive data usages, govern and secure business continuity, identify risks, envision the future, plan transformations, and describe architecture solutions using multi-dimensional viewpoints, portfolios, models, dashboards, reports, a predefined repository structure, and unparalleled productivity tools.

Software features include on-demand or scheduled import/export, cascaded calculations, report/chart/diagram generation, dashboards, implicit data generation, versioning and merging, validation, language transformation, and instant customization.

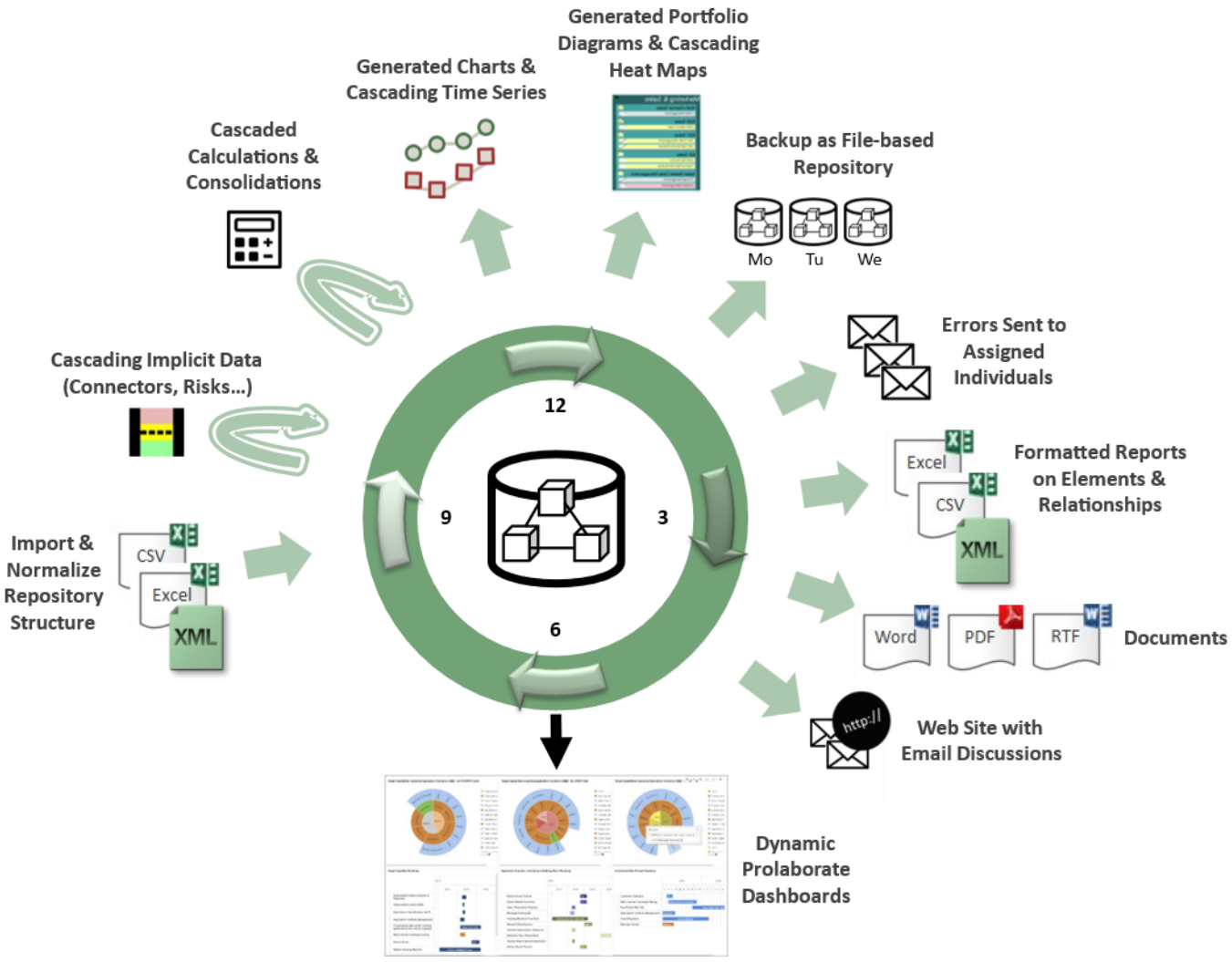
Labnaf software provides its users with a host of features that can streamline their workflow:

- Integrated architecture modeling (all architecture disciplines), strategy, project portfolios, sensitive data classification

- Customizable dashboards
  - Navigable Business Capability Heat Maps using cascaded consolidations
  - Portfolios Management (information, enterprise functions/business capabilities, processes, applications, equipment)
  - Application Lifecycle Management
  - Business Continuity Governance and Evolutions
  - Incident and Unavailability Governance
  - Sensible Data Usage, Dynamic Risk Identification and Consolidation
  - Strategic plans, strategic directives, and high-level requirement roadmaps
  - Architecture Management

Productivity, data enrichment and distribution tools

- Cascaded value calculation including consolidation of time series
- Cascaded chart generation
- Cascaded portfolio diagram generation following templates
- Cascaded chart generation following templates
- Import/Export (Excel, CSV, XML) with automatic mappings and format normalization
- Create elements and connectors with or without diagrams
- Merging different versions of elements and connectors
- Model validation
- Instant reuse of auto-coloring legends
- Word document publication
- Web publication and email discussions
- Backup generation
- Task scheduling
- Many other repository content management and normalization features provided by the Labnaf PowerShell
- Modeling language and architecture content transformation
- Instant metadata and metamodel management
- Advanced customization using the customization workbench
- Navigable user guidance
- Supports deployment on cloud SaaS like Prolaborate SaaS



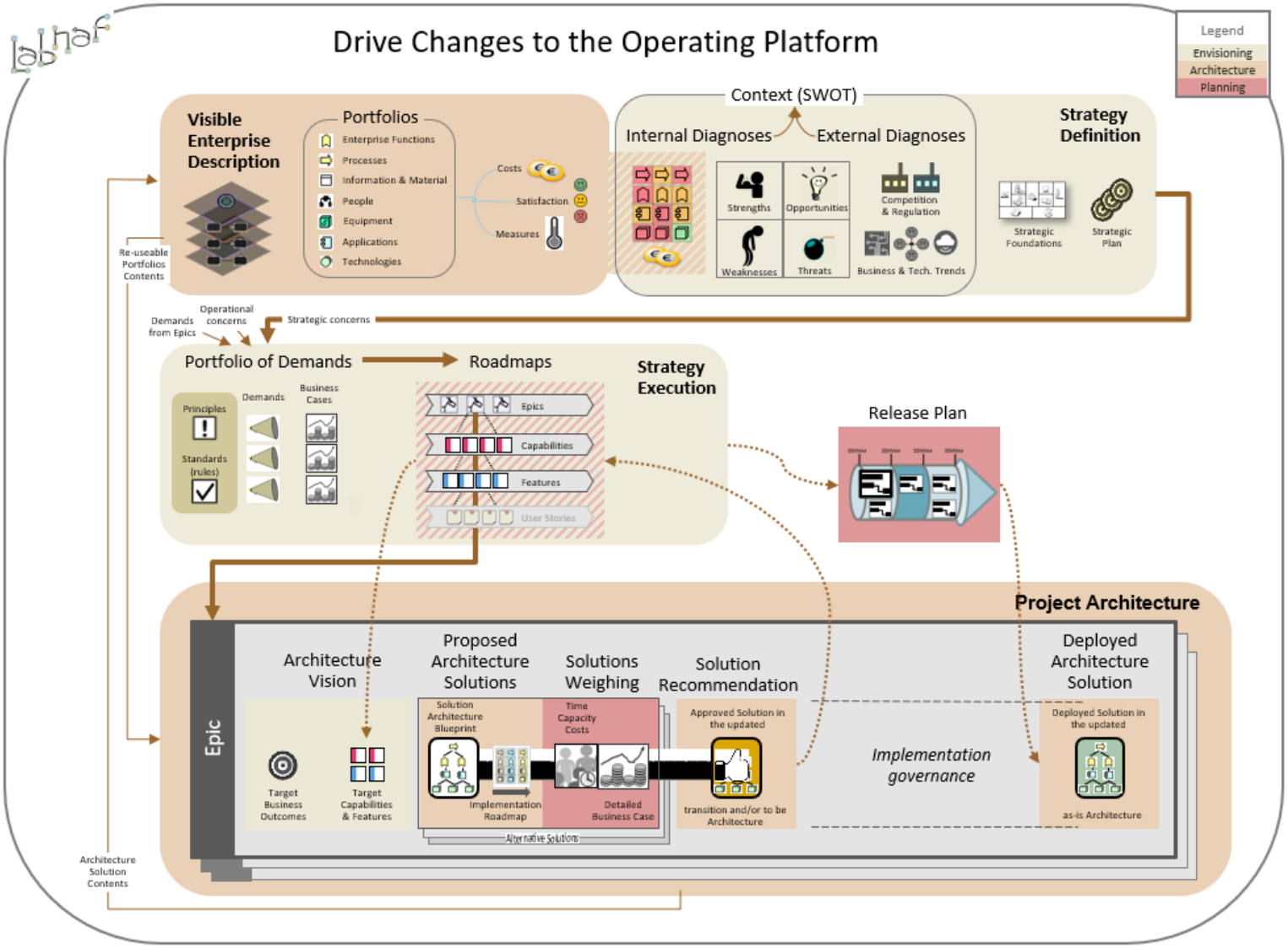
- Fully fledged Labnaf startup and sample repositories
- Portfolios management supports very large and complex organizations with sub-organizations, and in a secure fashion (Read / Read-Write).
- Instant Metamodel Manager and Instant Metadata Manager supporting simple and quick framework customizations including on Enterprise Architect SaaS (Cloud Platform ready to go)
- Customization Workbench for advanced customizations of the Labnaf modeling language and tools.
- On-line <=> Off-line access to customized languages, even when creating new repositories

- Excel and CSV import (create, update, identifying elements following multiple criteria). Use internal and/or external primary keys. Easily adapting to your systems-specific character set/code page and column separators. Quick, user-friendly, and flexible
- Dynamic model validation
- Merge Versions of Elements & Connectors (merge redundant items)
- Implicit data generation including connectors, sensitive information requirements, scope of data processing (applying ISO 27000, NISDUC and GDPR). Provides 360° view on information usage.
- Cascaded value calculations from very simple to very complex functions combining properties, connections, and time series

- Application Portfolio diagram generation following templates defined in the Labnaf model repository
- Rich Excel and CSV report generation including connections, consolidated/indirect connections, color grading, grouping, filters. Generation based on templates stored in the repository or custom reports. Quick, user-friendly, and flexible
- Quick update of a same property for a selected list of elements or packages
- Predefined charts and dashboards (for both Sparx EA and Prolaborate)

- Sample templates for value calculations, chart generation, Excel generation and CSV generation
- Generic and specific document templates for Word, PDF, RTF generation (SAD, principles, standards, etc.)
- Scope of Labnaf processing: Generate Excel and CSV reports, calculate values or generate charts for a selection of elements of your choice
    - for elements or packages selected in the project browser,
    - or for elements or packages selected in the active diagram,
    - of for elements and packages present in a “scope” diagram that belongs to each template,
    - or based on a specific SQL select defined in each template,
    - or for the entire catalog (default).
- Labnaf template for HTML generation
- Quickly add (auto diagram-coloring) legends to one or multiple diagrams in a row using the legend library management features
- Labnaf Language Transformer to transform any modeling language into any other one

The process of driving transformations, i.e. driving changes to the operating model, starts with the



description of the enterprise, followed by the strategy definition, the strategy execution and the project architecture which produces solution architecture deliverables.

In practical terms, the strategy and architecture process consists in the following steps:

Build and Maintain the Visible Enterprise Description

Describe the visible enterprise i.e. make the enterprise operating model visible and traceable for business and IT. In order to manage complexity, the visible enterprise description is organized as a set of interrelated portfolios:

- Process Portfolio
- Enterprise Function Portfolio
- Information Portfolio
- Organization Portfolio
- Application Portfolio
- Technology Portfolio
- Equipment Portfolio

- Physical Material Portfolio

Each portfolio includes a set of reports which are consumed by various stakeholders for recurrent analysis and management tasks. The portfolio of business functions is a key architecture asset as it is used for classifying organizations and applications, and also for scoping, organizing and managing work.

Define Strategies

a) Determine the key internal and external factors that might influence business success. Internal analysis and diagnoses are used for identifying, measuring and communicating the organization's strength and weaknesses. Such diagnoses are based, notably but not solely, on the analysis and consolidation of architecture portfolio reports (dashboards, charts, lists and matrices). External analysis and diagnoses are used for identifying, measuring and communicating arising threats and opportunities. Internal and external diagnoses are, in turn, consolidated into SWOT diagrams summarizing the strengths, weaknesses, risks and opportunities for customers and internal stakeholders' benefits.

b) Following critical changes to the enterprise context, adapt the vision statement. If really necessary, also adapt the values, business model and mission statement (think carefully about the impact of such changes on the enterprise identity as this could confuse internal and external stakeholders and customers).

c) Define the corporate objectives and cascade into domain specific and measurable goals.

Execute Strategies

a) Define principles, standards and compile business and/or IT demands for changes.

b) Collect high-level requirements (target capabilities and features) realizing goals and demands. Identify requirements dependencies and impacts on the architecture landscape. Create roadmaps for the realization of capabilities and features. Group capabilities and/or features into architecture epics (solution architecture initiatives).

Architecture a change to the operating platform

Answer some demand for changing the architecture of the enterprise operating model. For example, create/optimize some business process along with the people, applications, and equipment that support the process. Or provide a new cloud infrastructure for existing application(s).

a) Define architecture work and then create, recommend and approve a solution architecture
   - Review related goal(s), demand(s), target capability(ies) and feature(s) and high-level requirements roadmap(s).
   - Collect additional requirements as needed.
   - Select adequate architecture viewpoints needed for architecturing solution(s).

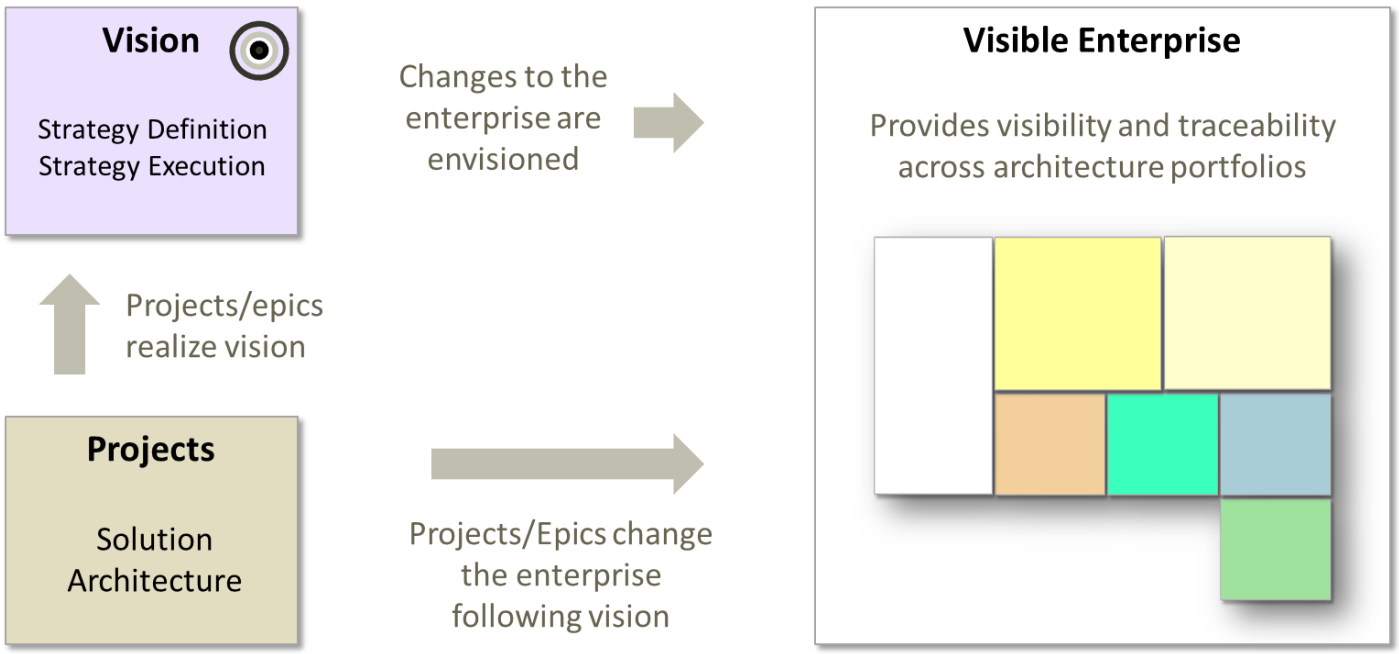
- Create alternative architecture solutions following the selected viewpoints.
- Define (alternative) implementation roadmap(s) for each alternative architecture solution.
- Select preferred architecture solution and implementation roadmap from an architecture perspective.
- Provide solution architecture recommendation for approval.
- For the approved architecture solution, detail the solution architecture.

b) Update the TRANSITION and/or TO-BE architecture
   - Update the visible enterprise description including the TRANSITION and/or TO-BE architecture plateaus.

c) Govern the Solution architecture Implementation
   - Each approved architecture epic leads to one or several projects that will implement the architecture solution. Project are often grouped into programs.
   - Govern the implementation of the solution. Ensure alignment with the approved solution architecture.

   - Update the AS-IS architecture
   - As soon as the solution is running in production, update the visible enterprise description to reflect the new situation. The visible enterprise description needs to reflect that the new solution architecture is now part of the AS-IS situation.

The content is organized into 3 key sections:



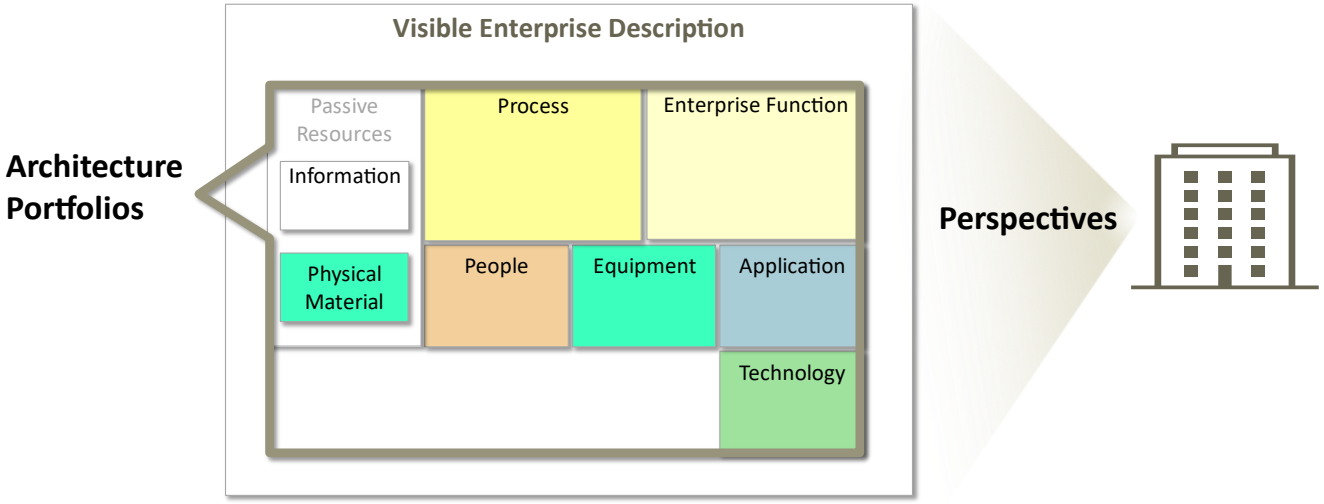
The visible enterprise describes the architecture of the enterprise from different perspectives, for example, processes and applications.

The vision is used for envisioning changes to the enterprise.

Projects realize the vision and change the enterprise.

This structure corresponds to the stages in the process of driving transformations.

The description of the enterprise operating model is organized into a set of portfolios. Each architecture portfolio provides a perspective on the Visible Enterprise Description.

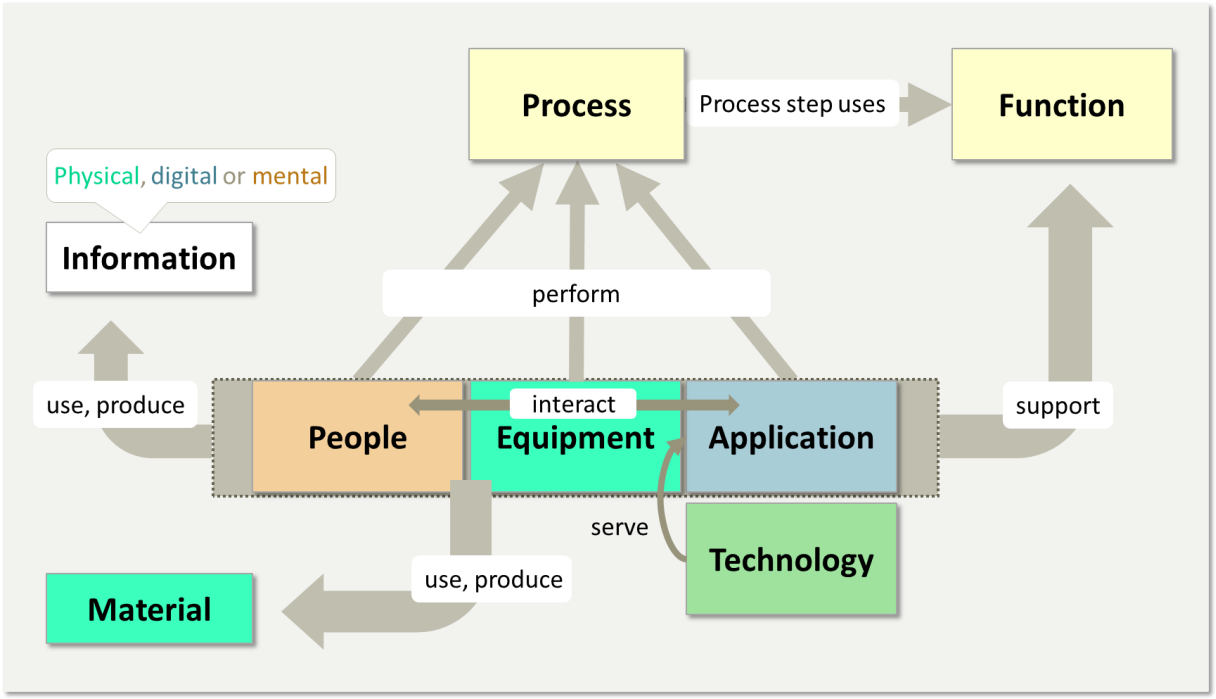


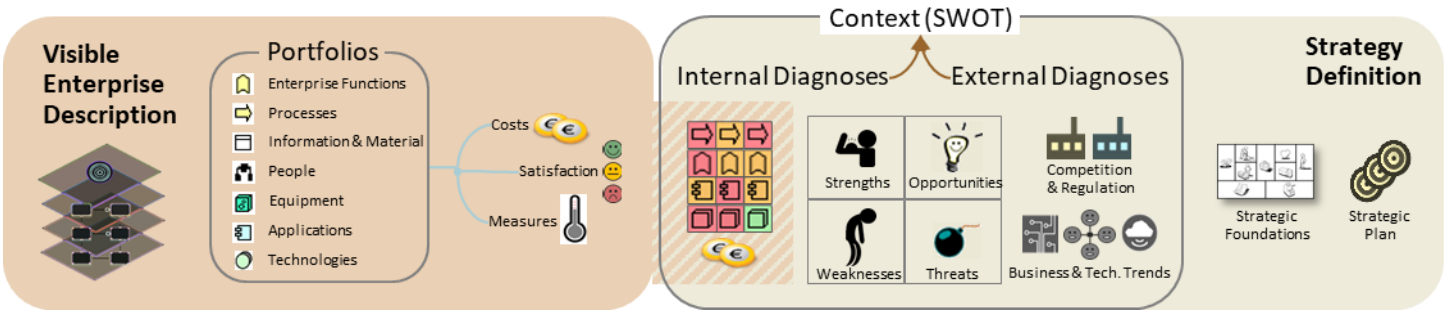
People, equipment and applications interact. They use and produce information.

Information can be physical for example on paper. Or information can be digital, in our computers, in our phones. Information can be also mental in our brain.

People and equipment use and produce physical material. Technology is here to support applications.

Processes are performed by people, by applications and by equipment.





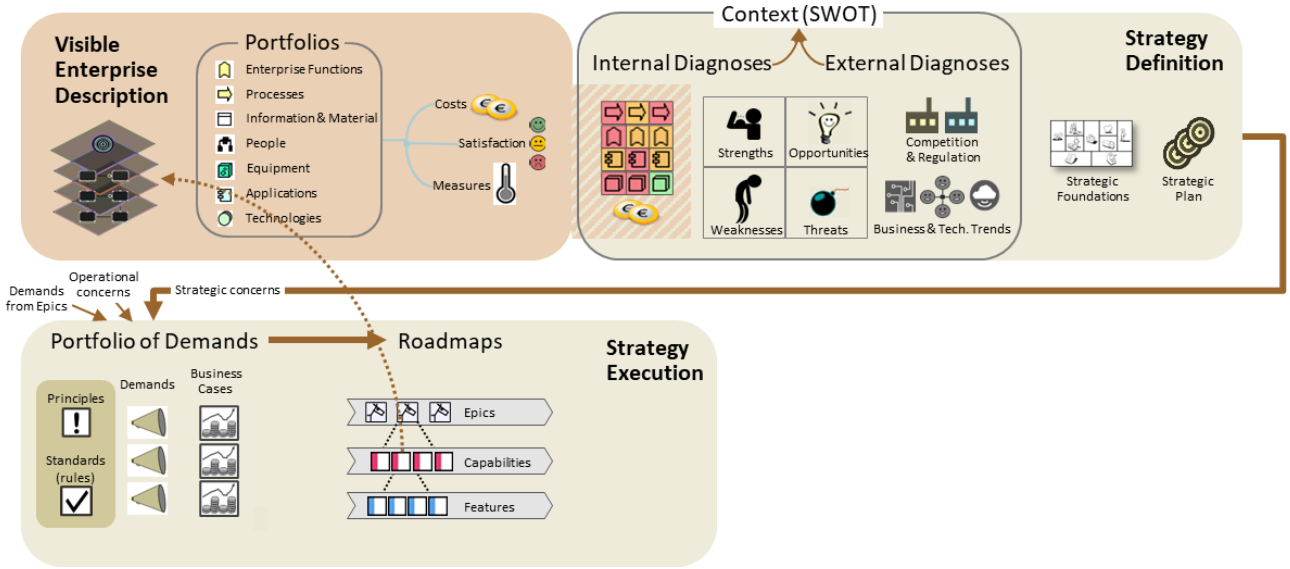
Strategy Definition – What for?

Review our goals based on the context

1. **Current context**
   - Internal & external factors influence success or failure

2. **Corporate strategic foundations**
   - The organization's identity (mission, vision, values, value proposition, business model)

3. **Strategy plans**
   - Corporate strategic objectives
   - SMART goals (cascaded into domain-specific goals)



Strategy Execution – What for?

Define and communicate how the strategy will be executed in terms of

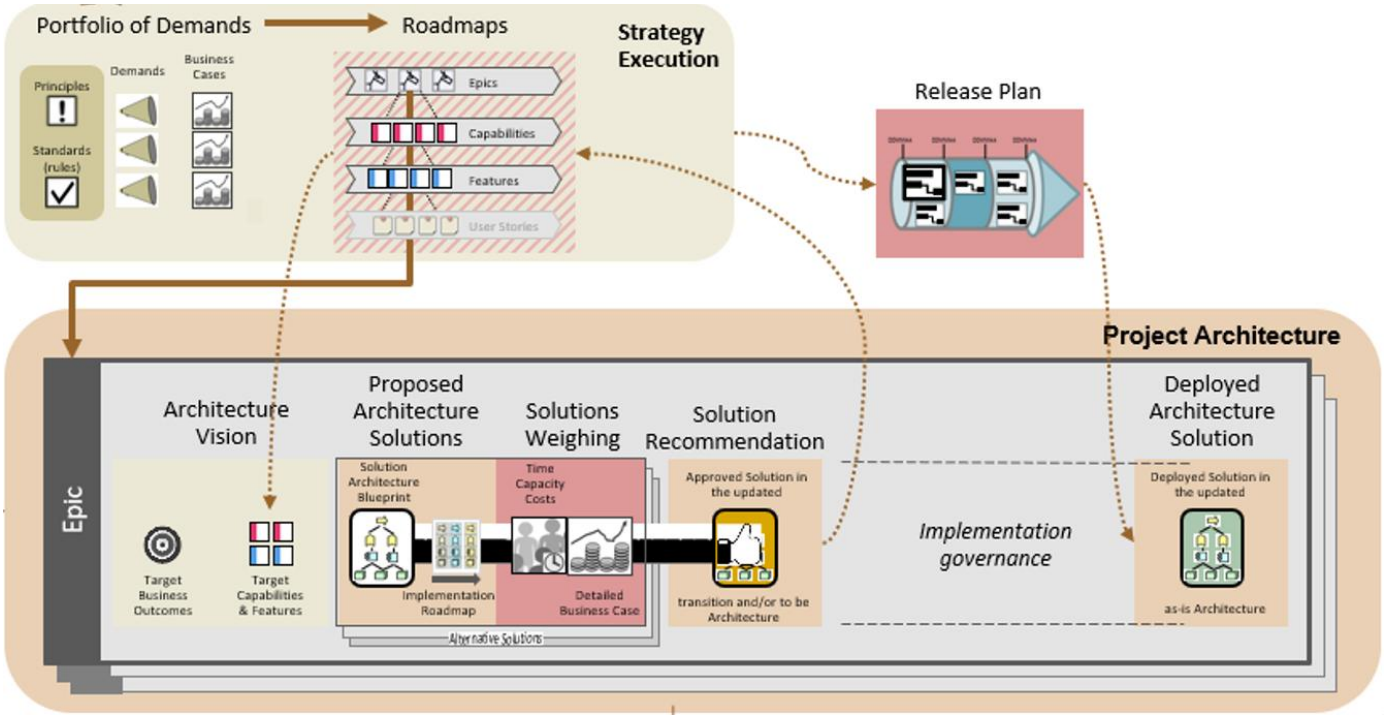
- Principles
- Standards as rules
- Demands
- Target capability roadmaps
- Architecture epics roadmaps

Project architecture is the enactment of the planned (architecture) epics.

An epic is an endeavor that delivers a solution realizing some target capabilities.

The solution includes some architectural descriptions of the required changes to the enterprise and/or to the enterprise-wide architecture content, and a description of the costs, time and other resources needed to perform these changes.

The architectural description of these changes is called a **solution architecture.**



The approval of a recommend solution typically leads to one or several implementation projects.

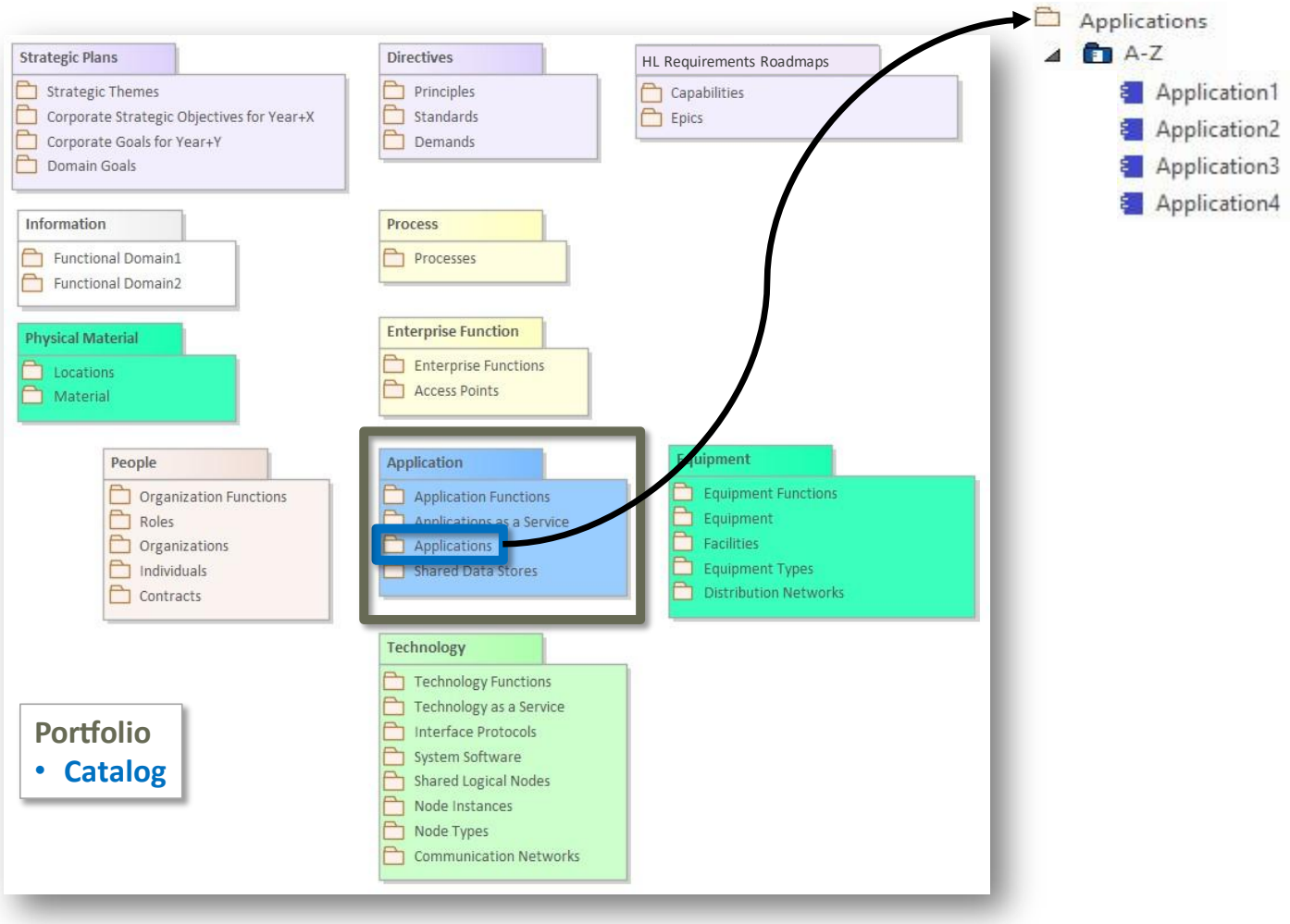
Each project will implement some part of the solution architecture.

Related projects can be grouped into programs.

PORTFOLIOS CONTAIN CATALOGS

And catalogs contain elements.

Labnaf manages many interconnected catalogs.



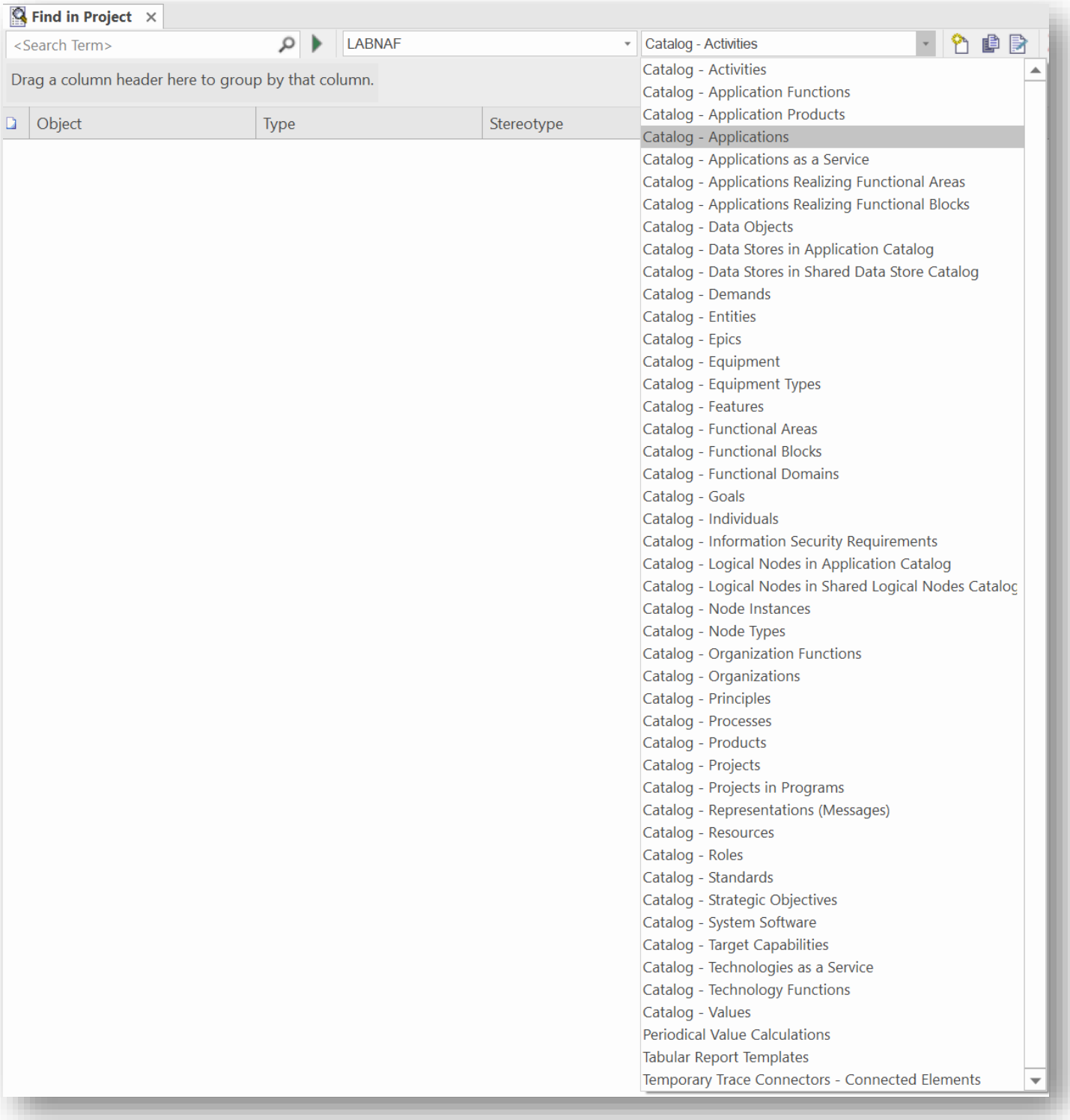
Purple portfolios and catalogs contain elements that belong to the strategy definition and execution.

The other ones belong to the “visible enterprise description”.

CATALOG SEARCHES

Each catalog search returns all elements and properties that belong to a specific Labnaf 'virtual' catalog.

These elements can be distributed in any number of Labnaf 'catalog packages' throughout the repository.

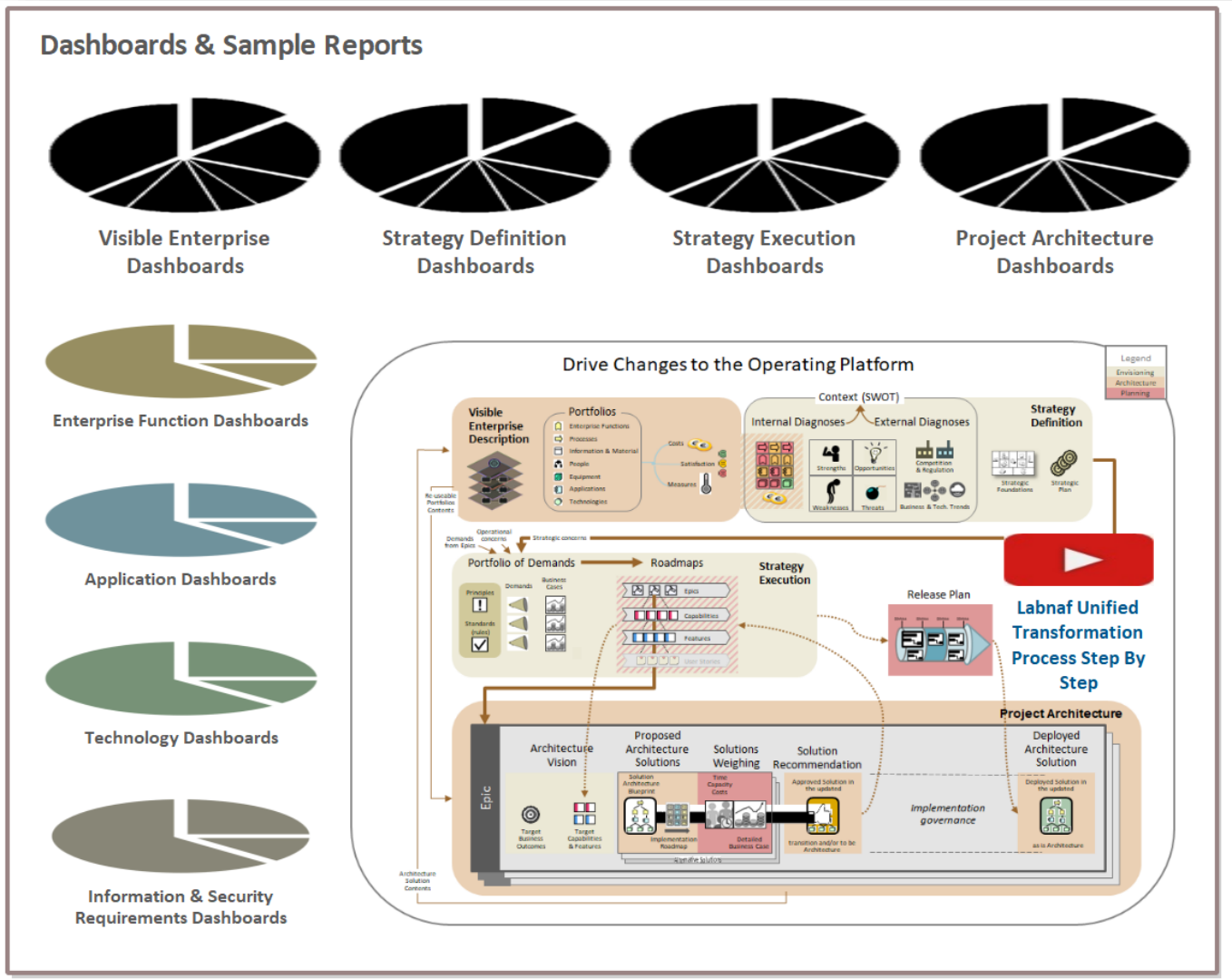


PORTFOLIO DASHBOARDS AND REPORTS

Labnaf features predefined charts and dashboards in Prolaborate and also in the Sparx Enterprise Architect user interface.

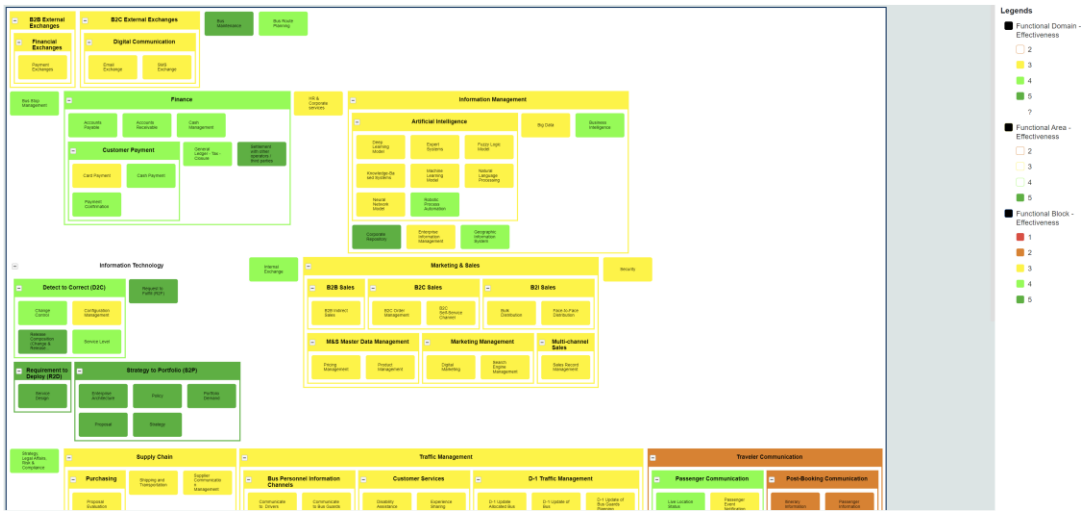
Prolaborate dashboards include dynamic Prolaborate charts and reports. You can also include diagrams and charts created in the Sparx EA modeling tool.

The organization of dashboards reflects the sequential stages of the transformation process.

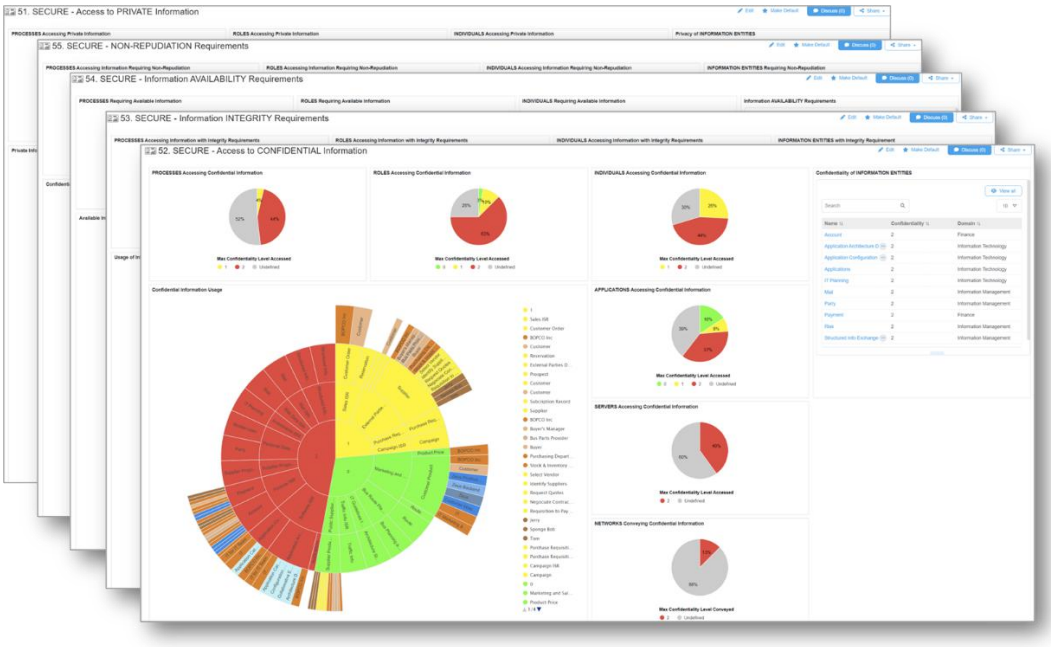


Sample Dashboards

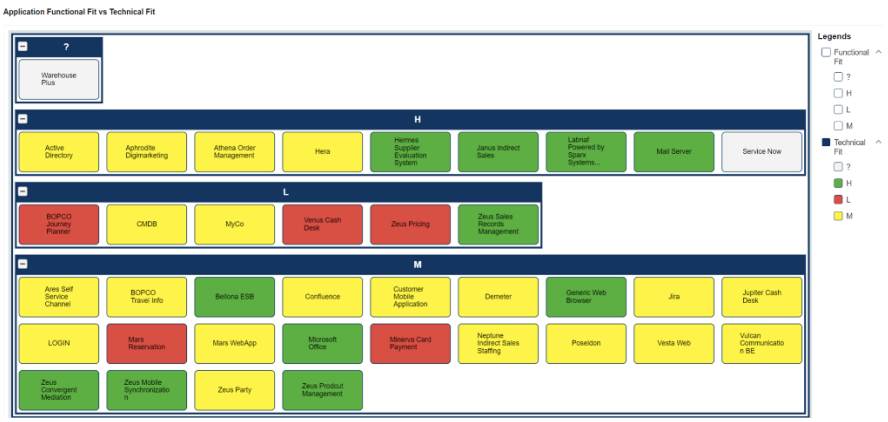
Enterprise Functions / Business Capabilities



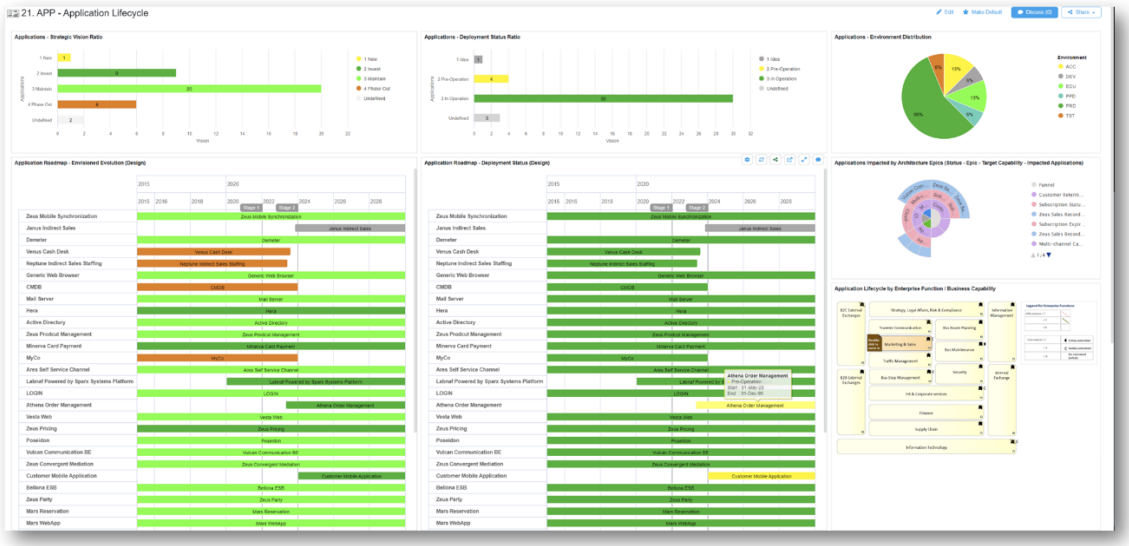
360° View on Sensible Data Usage & Risks



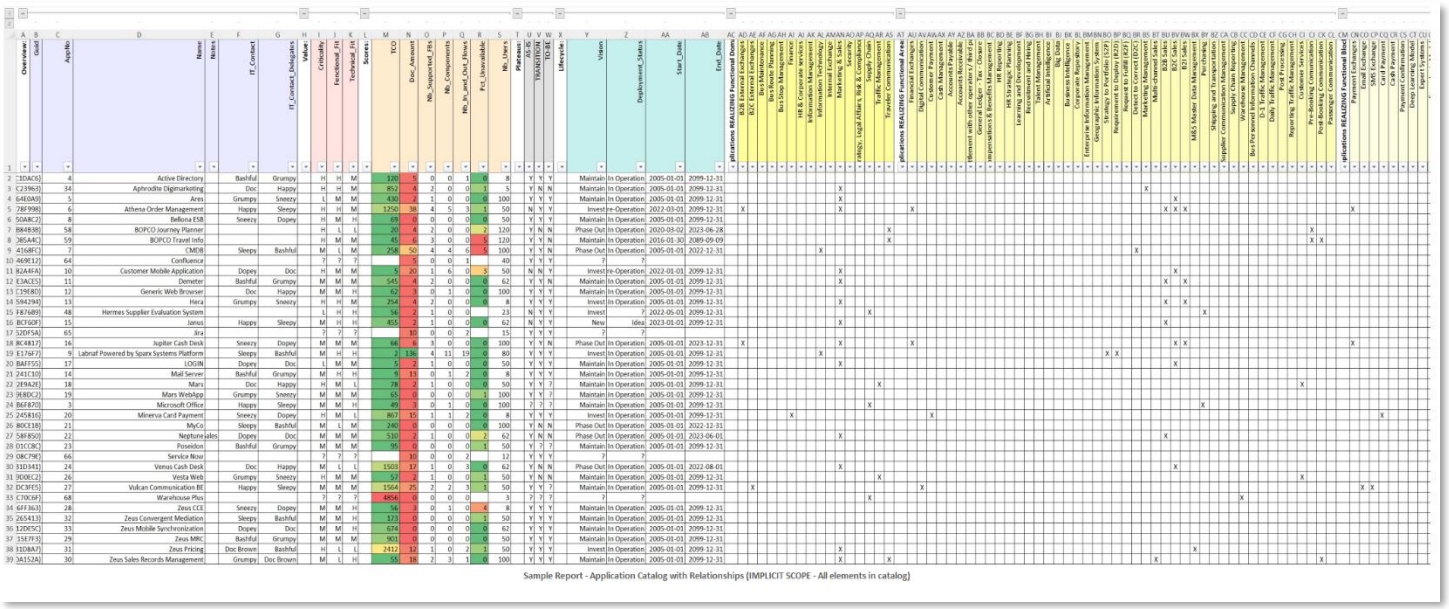
Application Value



Application Lifecycle



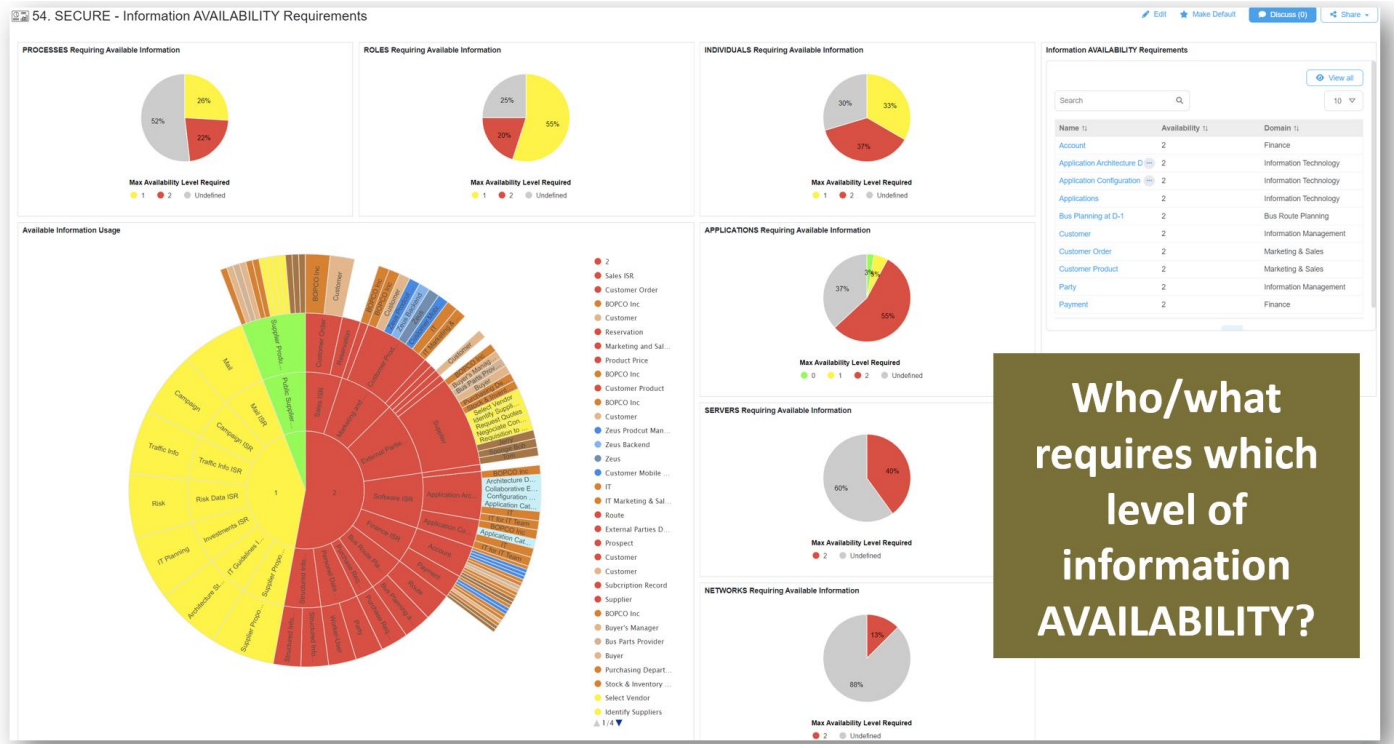
Applications mapped to enterprise functions with automatic grouping, filtering coloring and mapping consolidations across levels of detail:



Many other sample dashboards are available [here](#).

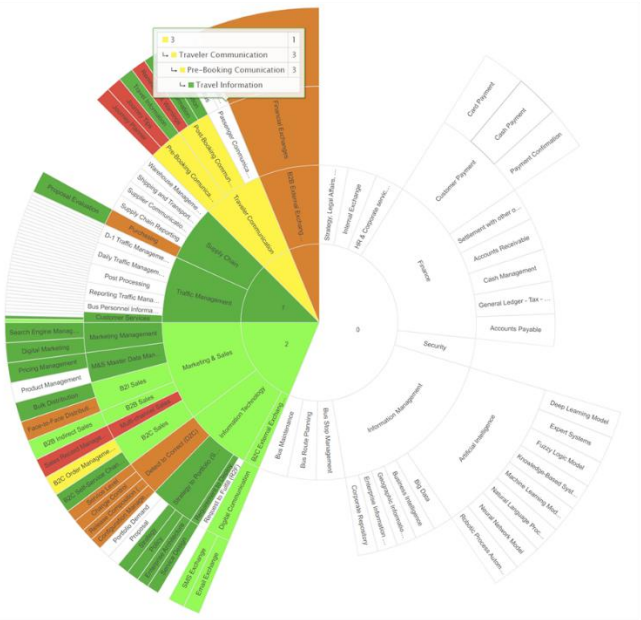
Incidents and system unavailability information is automatically imported, consolidated using calculations, including the evolution of data over time (time series).

Availability Requirements

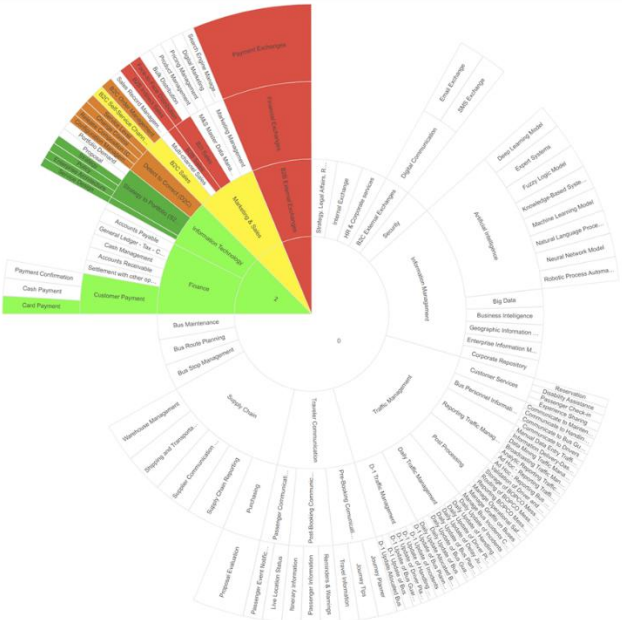


Application Availability

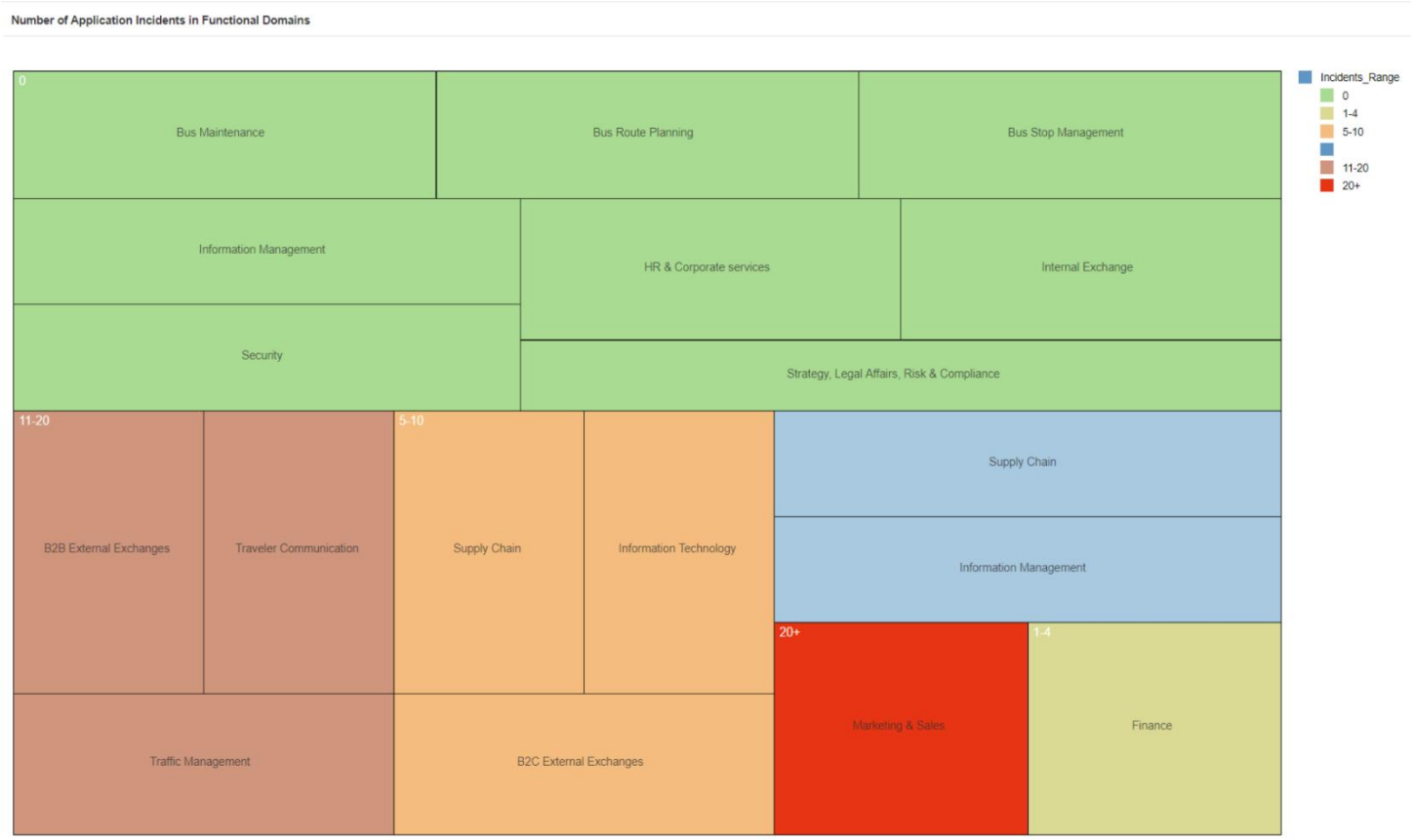
Magnitude of the Number of Users impacted by unavailability



Magnitude of Critical Data impacted by unavailability



The following heat maps summarize, for each functional domain (aka business capability level 1), the consolidated number of application incidents.



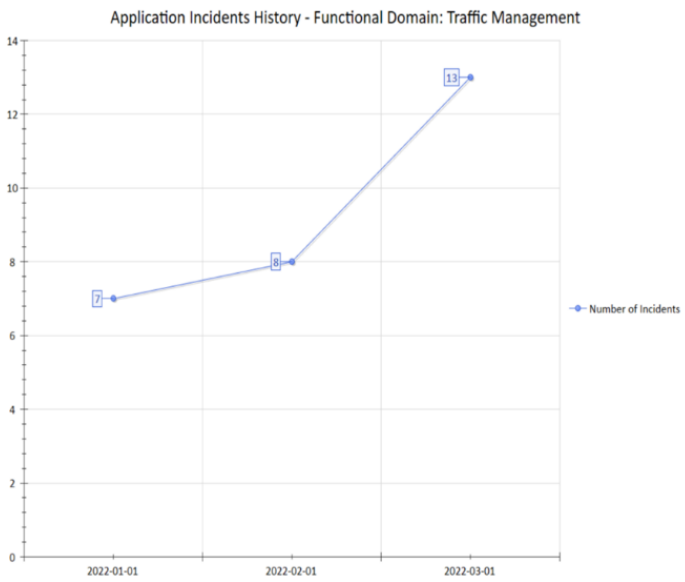
Highest number of application Incidents

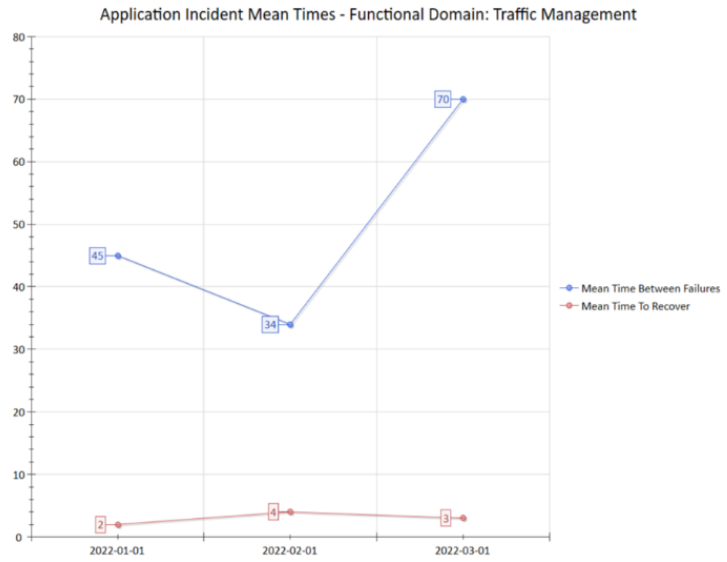
Table View

Functional_Domain	Functional_Area	Functional_Block	Nb_Incidents	Subreport
Marketing & Sales	B2B Sales	B2B Indirect Sales	19	View
Marketing & Sales	B2C Sales	B2C Order Management	19	View
B2B External Exchanges	Financial Exchanges	Payment Exchanges	14	View
Marketing & Sales	B2I Sales	Face-to-Face Distribution	14	View
Marketing & Sales	B2C Sales	B2C Self-Service Channel	11	View
Traveler Communication	Pre-Booking Comunication	Journey Planner	10	View
Traveler Communication	Pre-Booking Comunication	Journey Tips	10	View
Marketing & Sales	Multi-channel Sales	Sales Record Management	9	View
Traveler Communication	Post-Booking Communication	Reminders & Warnings	9	View
Traffic Management	Customer Services	Disability Assistance	7	View

Functional_domain	Functional_area	Functional_block	Application	Nb_incidents
Marketing & Sales	B2B Sales	B2B Indirect Sales	Athena Order Management	7
Marketing & Sales	B2B Sales	B2B Indirect Sales	Janus	6
Marketing & Sales	B2B Sales	B2B Indirect Sales	Demeter	4
Marketing & Sales	B2B Sales	B2B Indirect Sales	Neptune	1
Marketing & Sales	B2B Sales	B2B Indirect Sales	Hera	1

Evolution of Incidents (generated graphs; scheduled or on demand)





SENSIBLE DATA USAGE IDENTIFICATION AND CONSOLIDATION

Because the number of assets at risk can be huge, **auditors typically define the scope of their audit by selecting some arbitrary items**. The selection is usually based on known critical assets, sometimes without understanding their dependencies, on the history of incidents, and on discussions with various stakeholders.

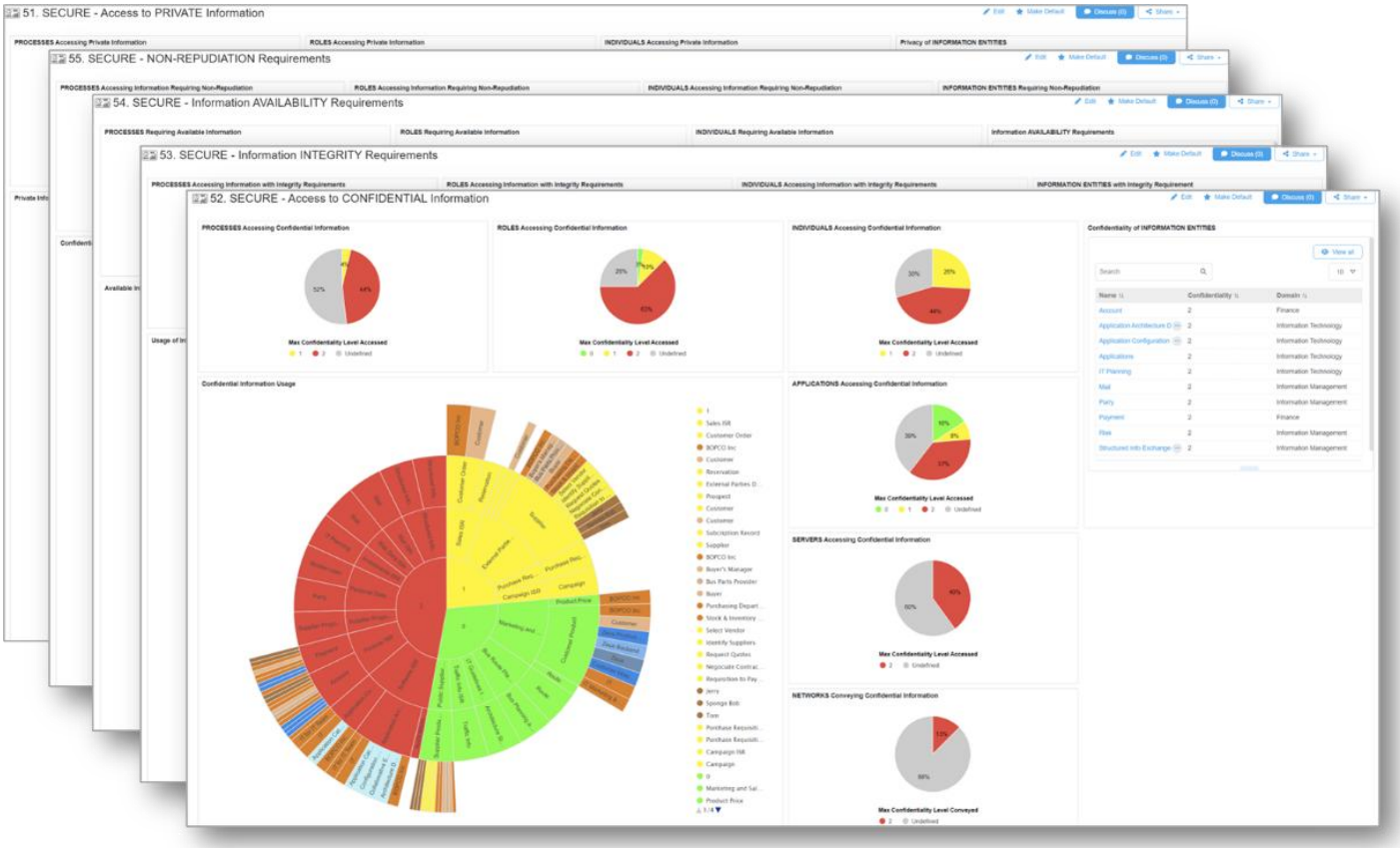
Hopefully, Labnaf automatically discovers, consolidates, charts and reports where the security requirements apply throughout the architecture.

It also calculates, consolidates, charts and reports the history of incidents.

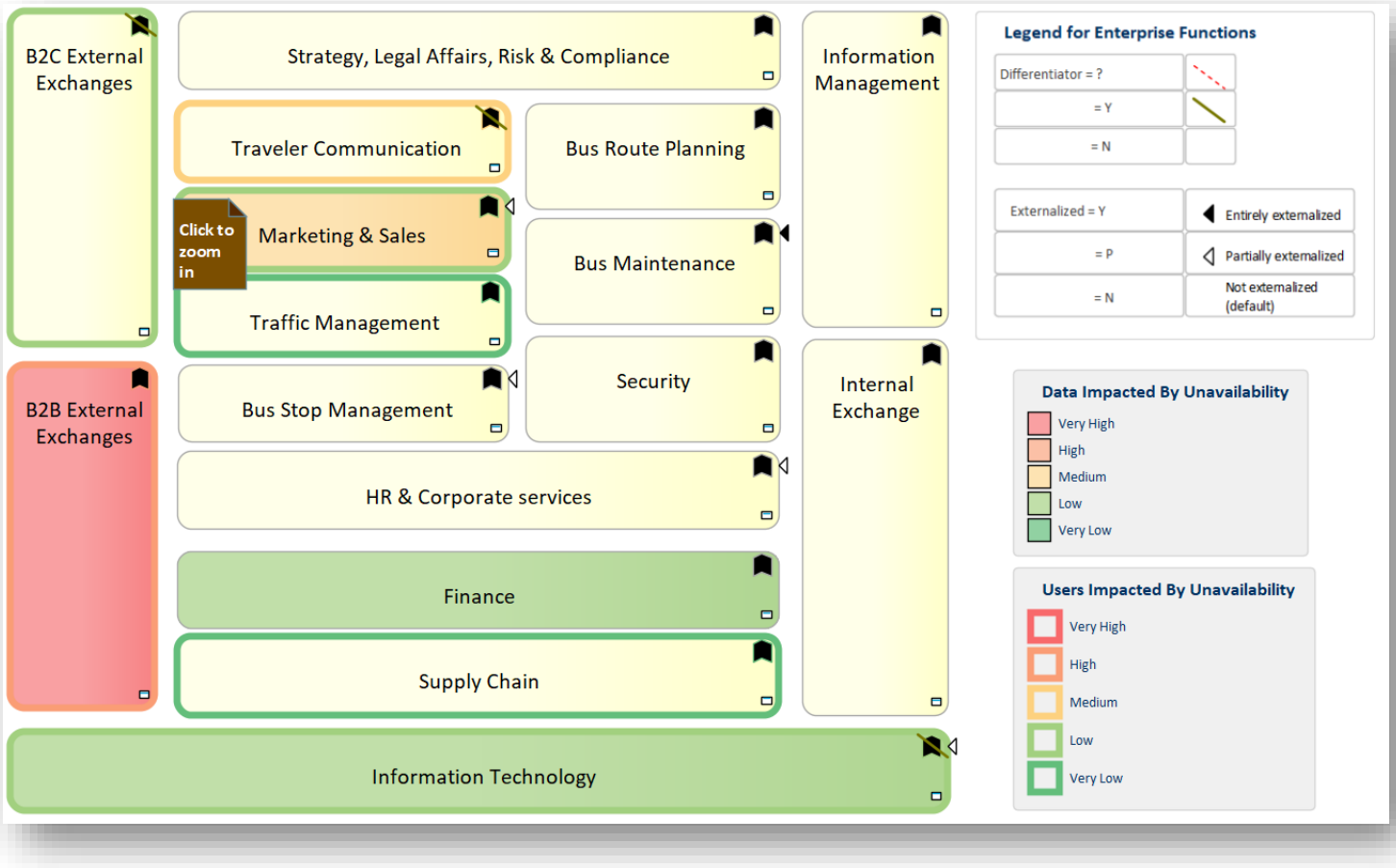
And finally, it cross-analyses consolidated incident data and availability requirements to produce consolidated heat maps and reports on the impact of unavailability on data access and on users at several levels of detail.

It generates summary data and views, including the evolution over time.

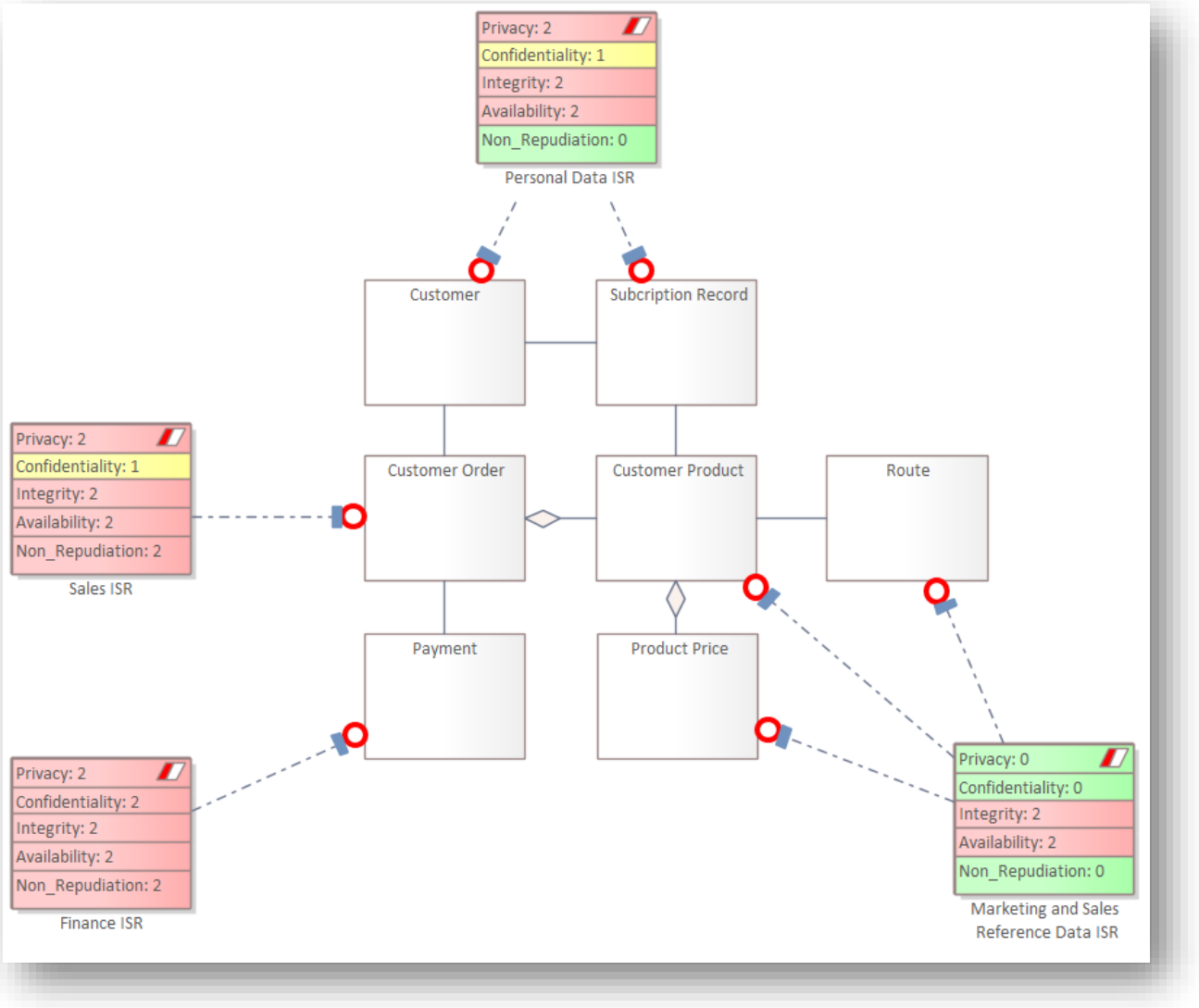
360° View on Sensible Data Usage & Risks



The following heat maps summarize, for each functional domain (aka business capability level 1), the impact of systems unavailability on users and on data. The impacts are calculated based on the consolidated numbers of users, and on data classification and consolidated usage throughout the operating model.



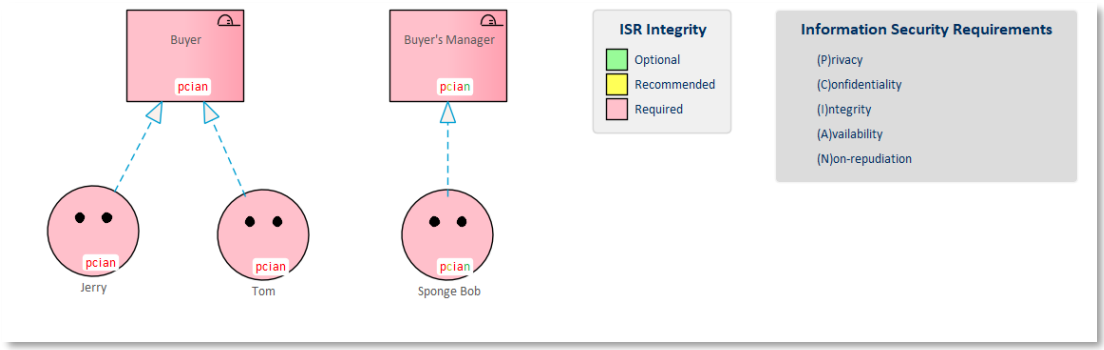
Information is classified following their security requirements.



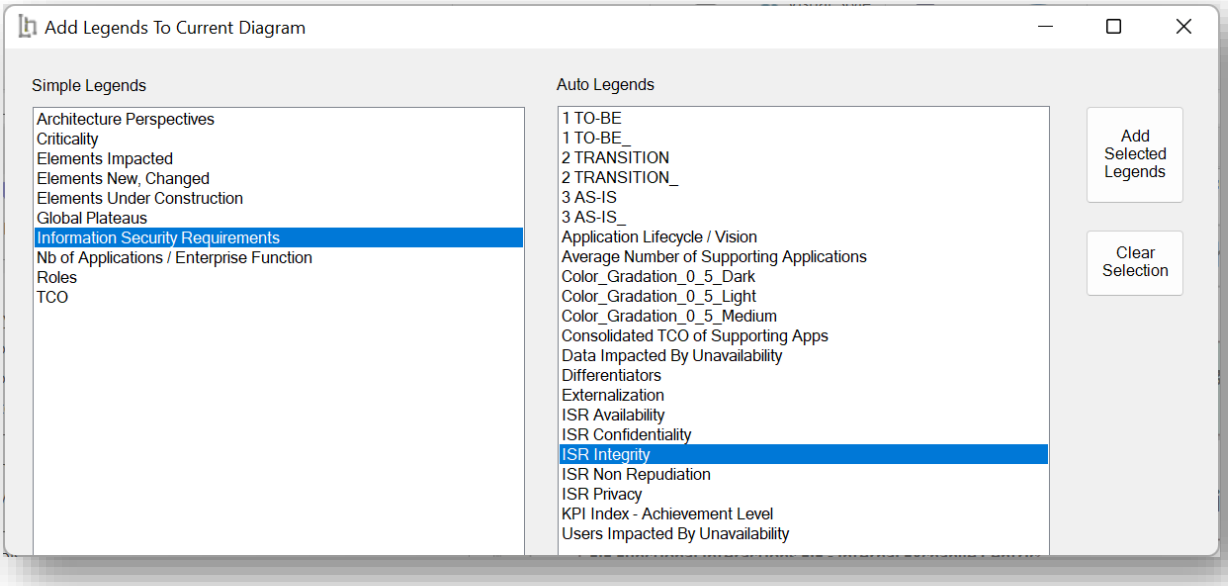
Labnaf automatically detects and reports who and what has access to sensitive information, and for which specific security requirements.

The automatic detection is based on generic systems semantics, cascaded calculations and implicit data generation.

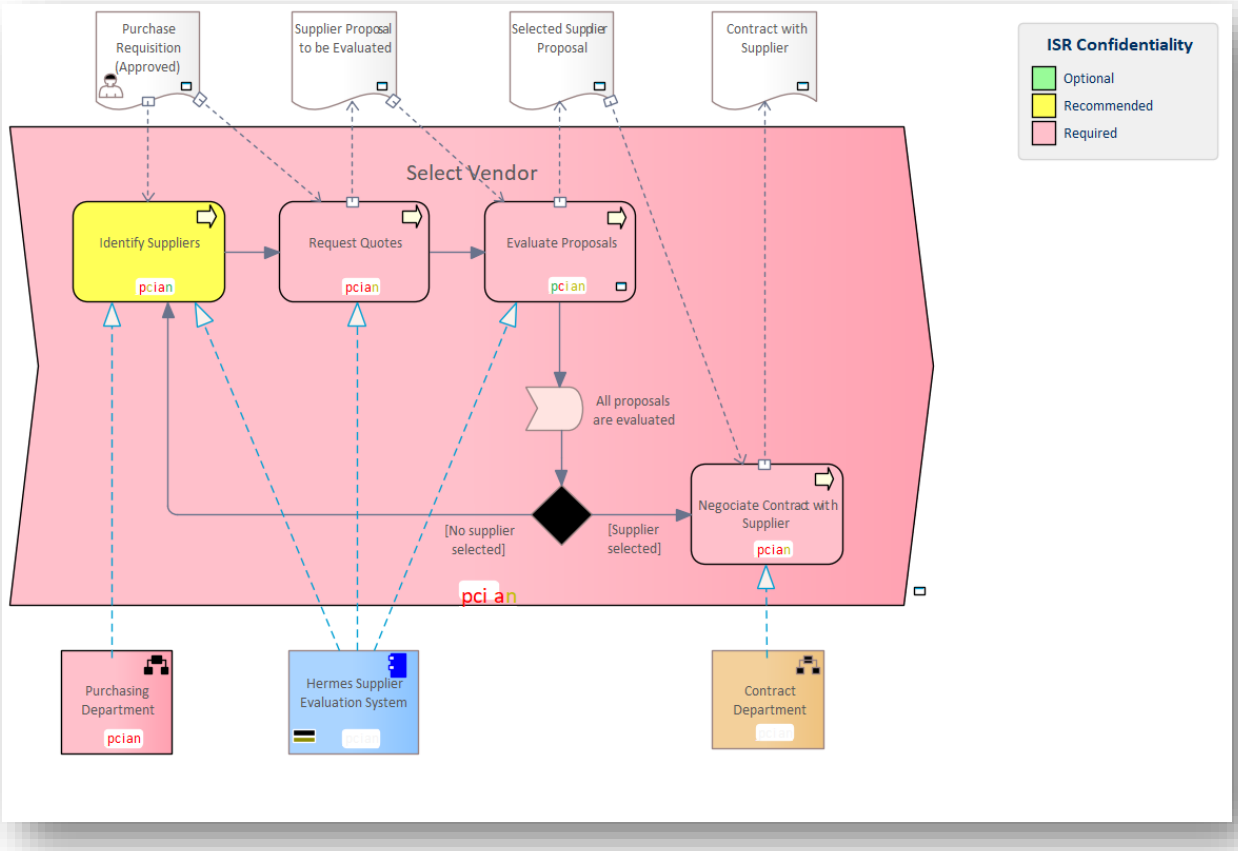
Presentation is based on libraries of legends, charts, and rich report templates.



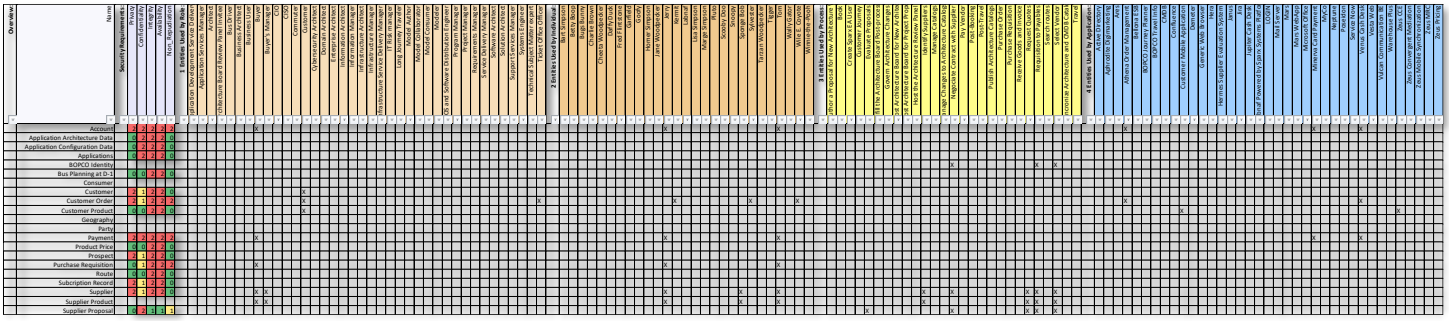
Select your auto coloring legends to focus on specific aspects...



Items are automatically colored following their information security requirements:



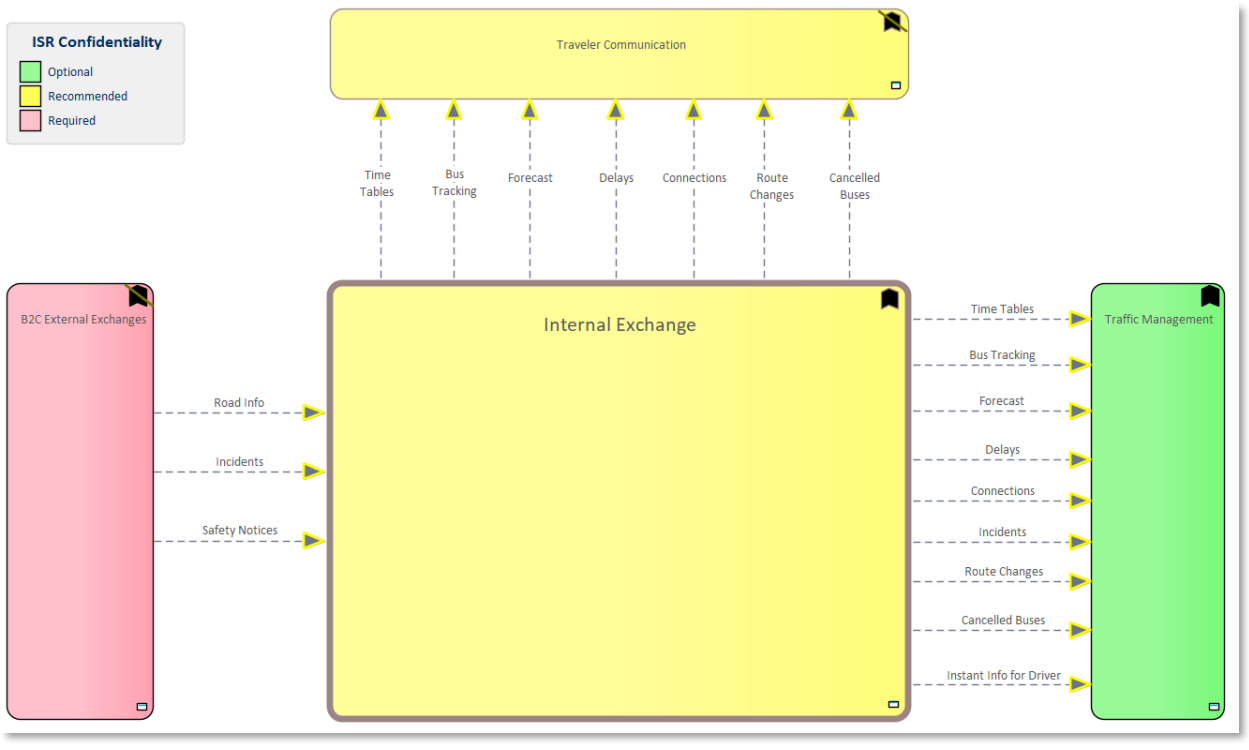
Generate sensitive data usage reports based on template



Zooming in:

Name	Security Requirements:	Privacy	Confidentiality	Integrity	Availability	Non_Repudiation
Account		2	2	2	2	2
Application Architecture Data		0	2	2	2	0
Application Configuration Data		0	2	2	2	0
Applications		0	2	2	2	0
BOPCO Identity						
Bus Planning at D-1		0	0	2	2	0
Consumer						
Customer		2	1	2	2	0
Customer Order		2	1	2	2	2
Customer Product		0	0	2	2	0
Geography						
Party						
Payment		2	2	2	2	2
Product Price		0	0	2	2	0
Prospect		2	1	2	2	0
Purchase Requisition		0	1	2	2	2
Route		0	0	2	2	0
Subcription Record		2	1	2	2	0
Supplier		2	1	2	2	0
Supplier Product						
Supplier Proposal		0	2	1	1	1

Sensitive data usage is automatically consolidated in all directions and dimensions up to the top-level functional flows and down to the servers and networks.



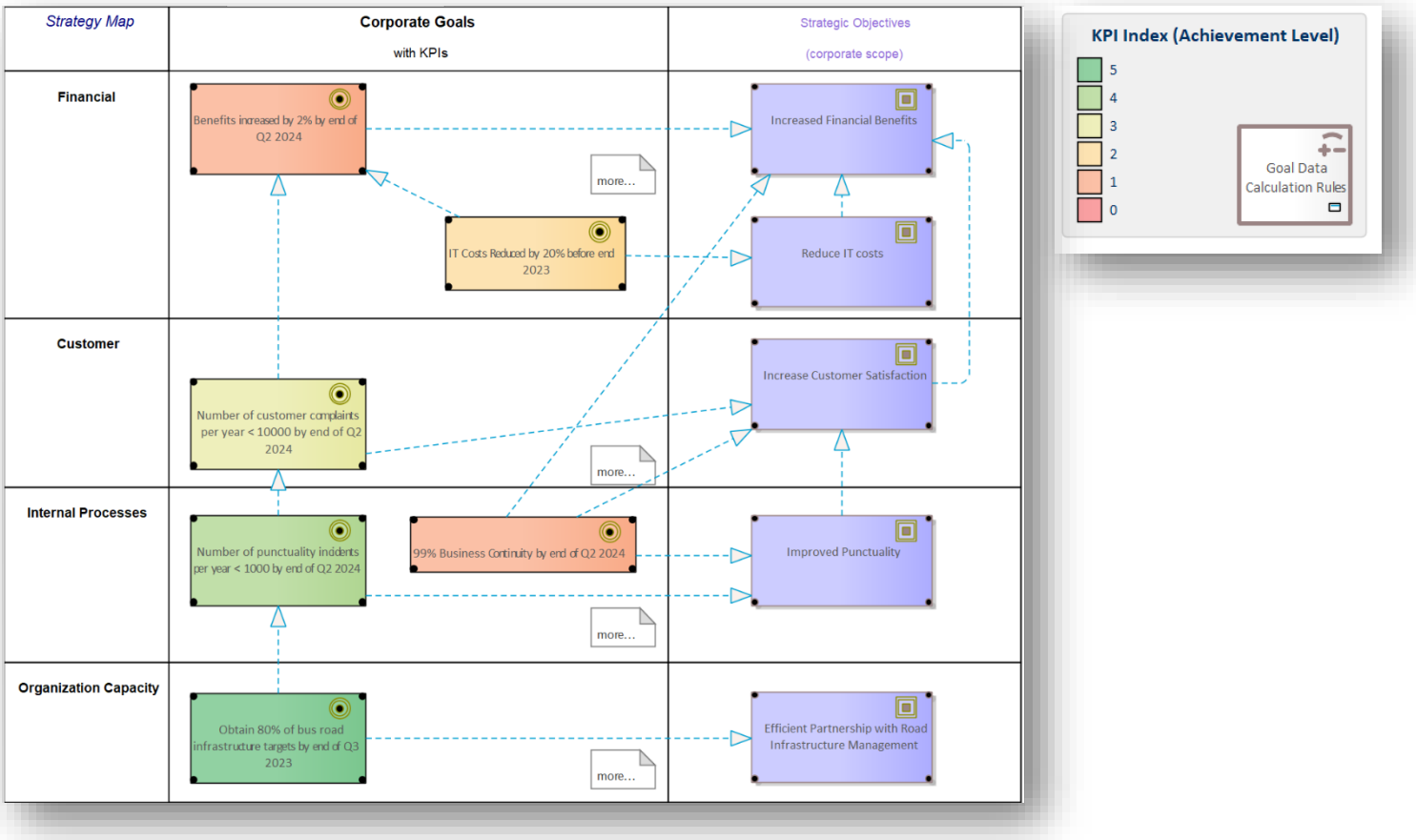
SMART GOALS AND NORMALIZED KPI INDEXES (ACHIEVEMENT LEVELS)

KPI values are automatically normalized into a standard KPI index with a common range of values from 0 to 5.

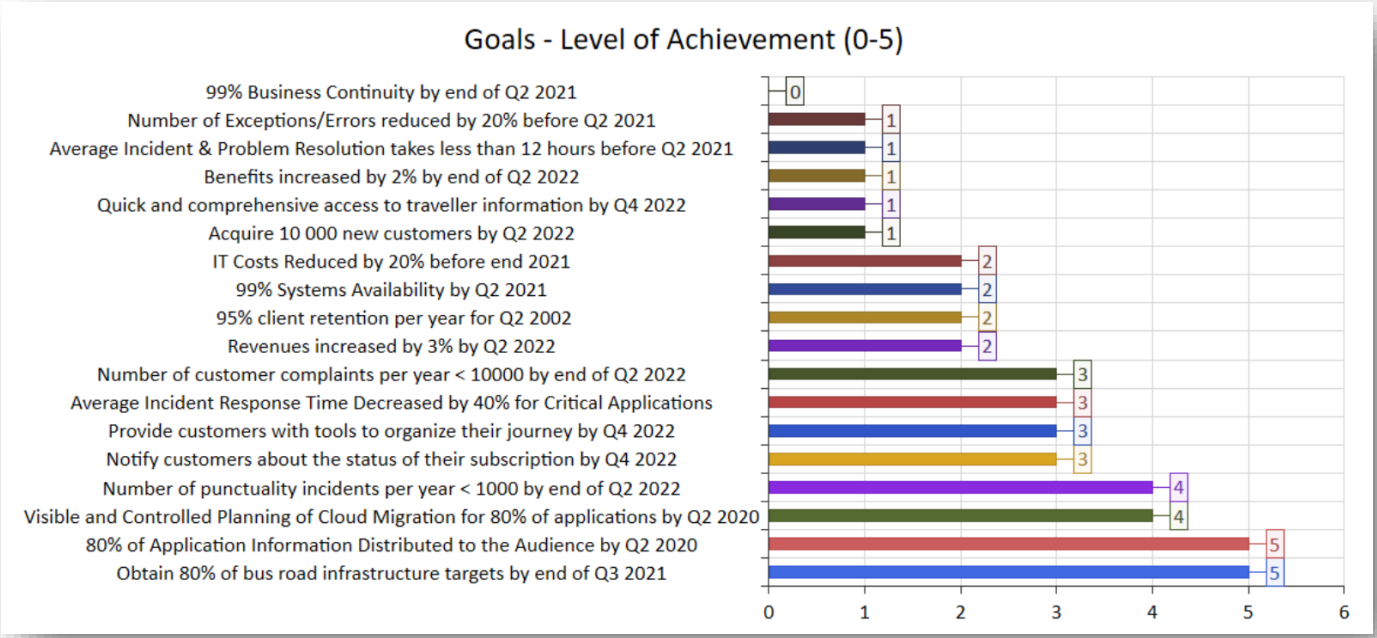
The calculation can be configured as you wish.

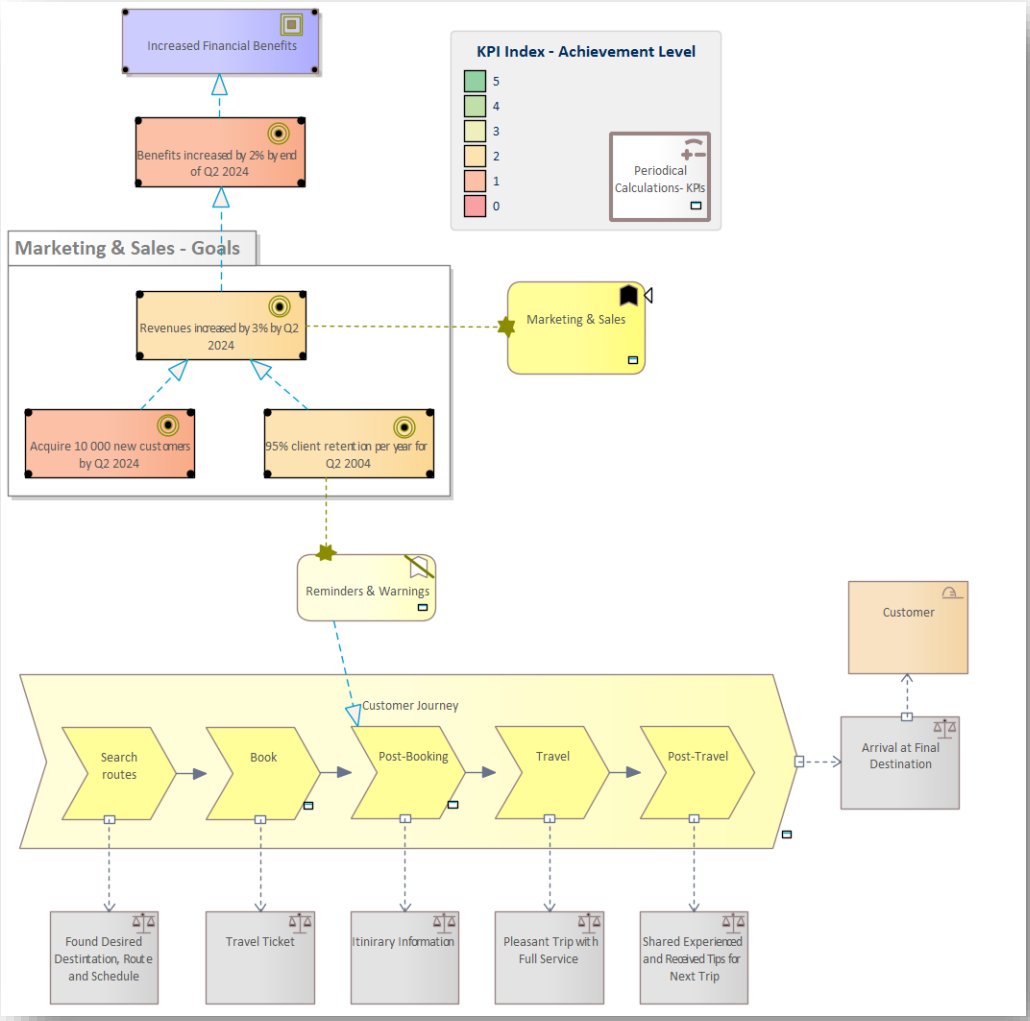
	Sample Values
KPI_Target	80
KPI_Current	**70**
KPI_Base	5

	Current Index Calculation
KPI_Index_Target	5
KPI_Index_Current	**4**
KPI_Index_Base	0



Normalized KPI indexes (goal achievement levels) can be easily compared and charted, as illustrated below.





ARCHITECTURE MODELING LANGUAGE

The language is used notably to model the following items:

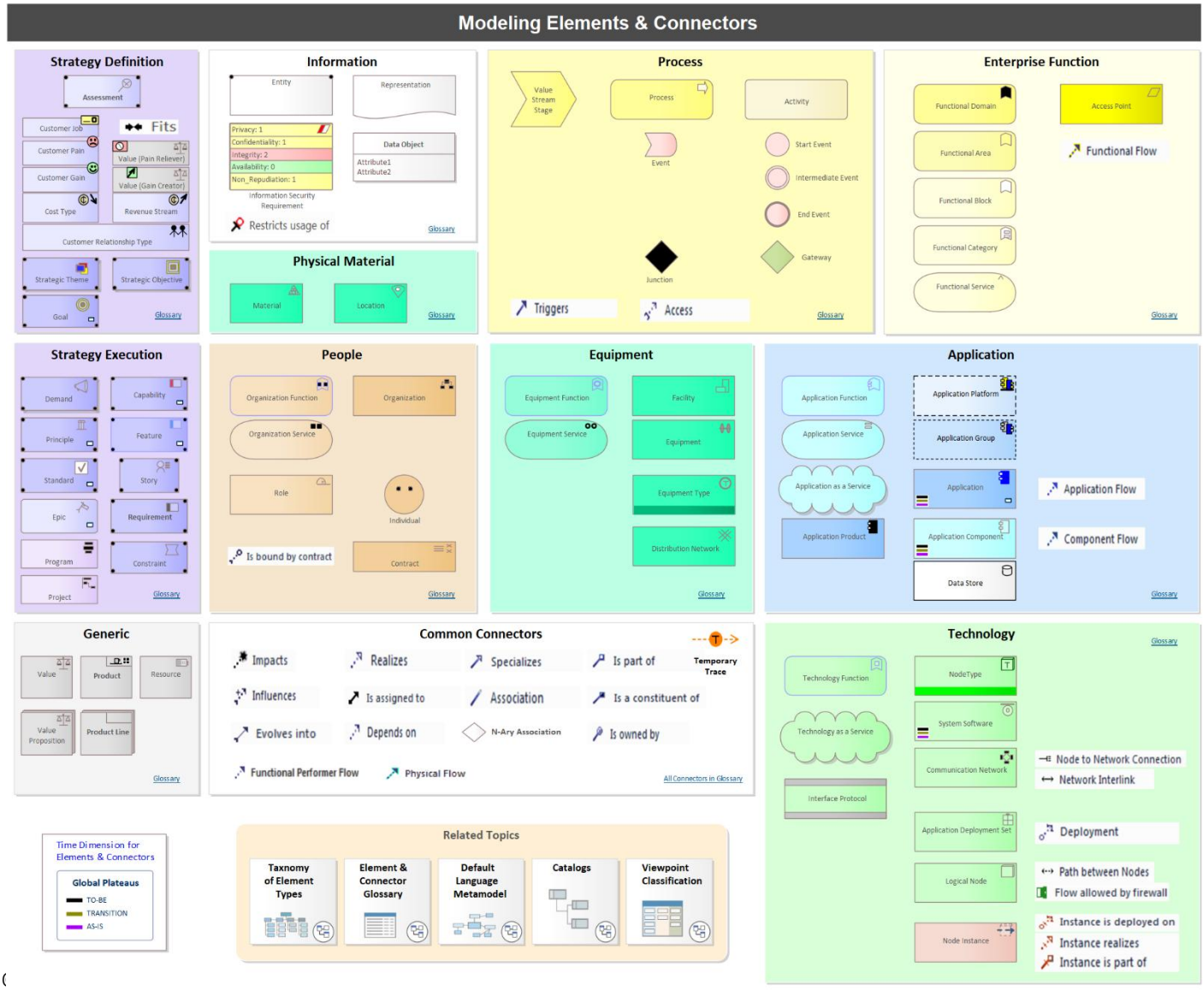
- Strategy definition and execution
- Architecture of functions, information, processes, people, equipment, applications, and technology.
- Architecture solutions
- Architecture variants and evolution (as-is, transition, to-be)
- Viewpoints
- The architecture guidance itself

The language is highly configurable and extensible to match any organization's specific needs.

MODELING ELEMENTS AND CONNECTORS

As an example, here is an **overview** (subset) **of the modeling language elements and connectors.** The language metamodel is used for preventive and/or post-modeling model validation.

One single modeling language and terminology



(

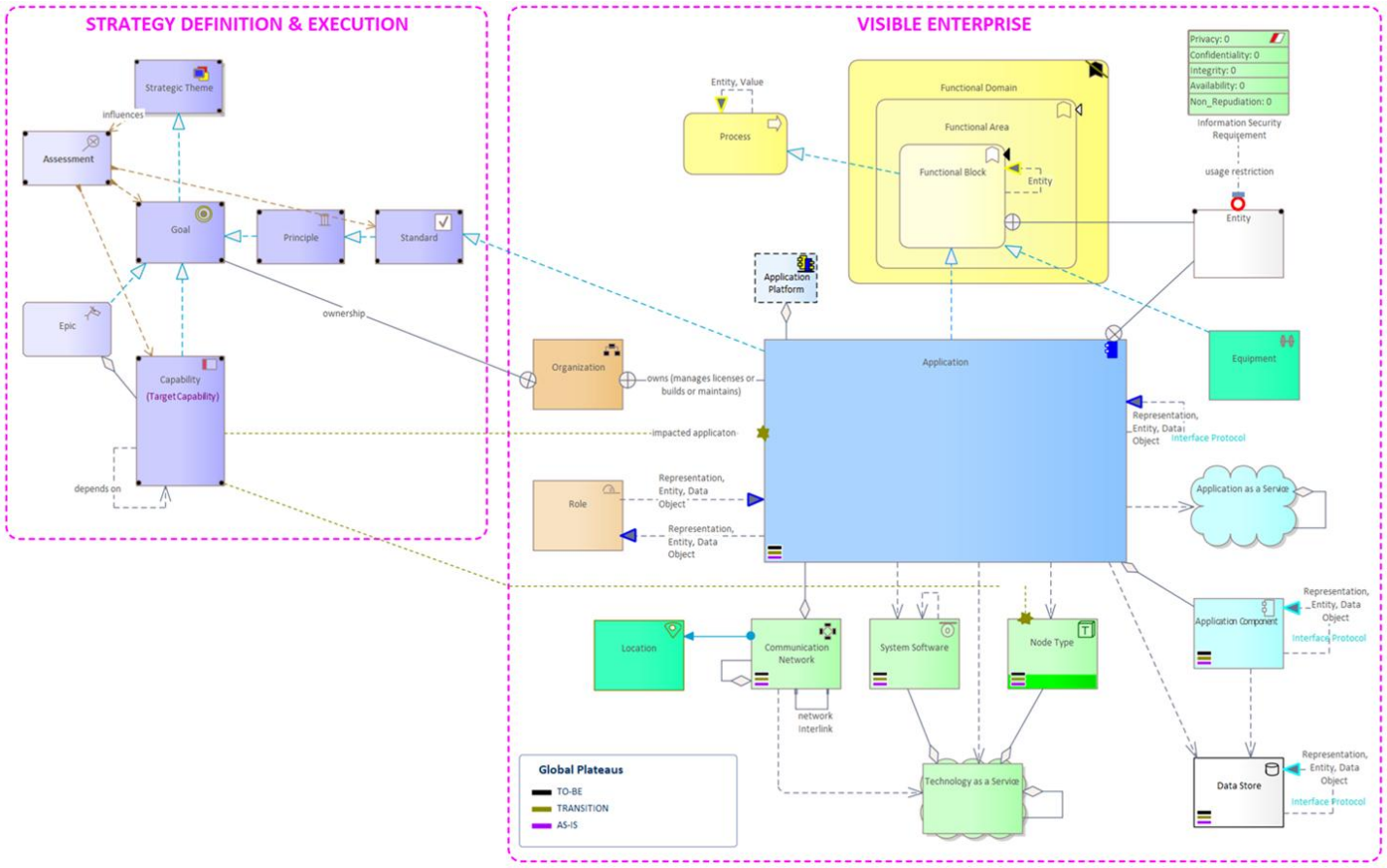
Labnaf comes with a standard metamodel that spans the entire process of driving transformations. There is also a user-defined metamodel that you can populate and activate.

You can easily switch between standard metamodel, customized metamodel, and user-defined metamodel in two clicks.

The configurable metamodels are expressed in the end user Labnaf language itself. So, the human-readable metamodel specification and the documentation are one and the same thing.

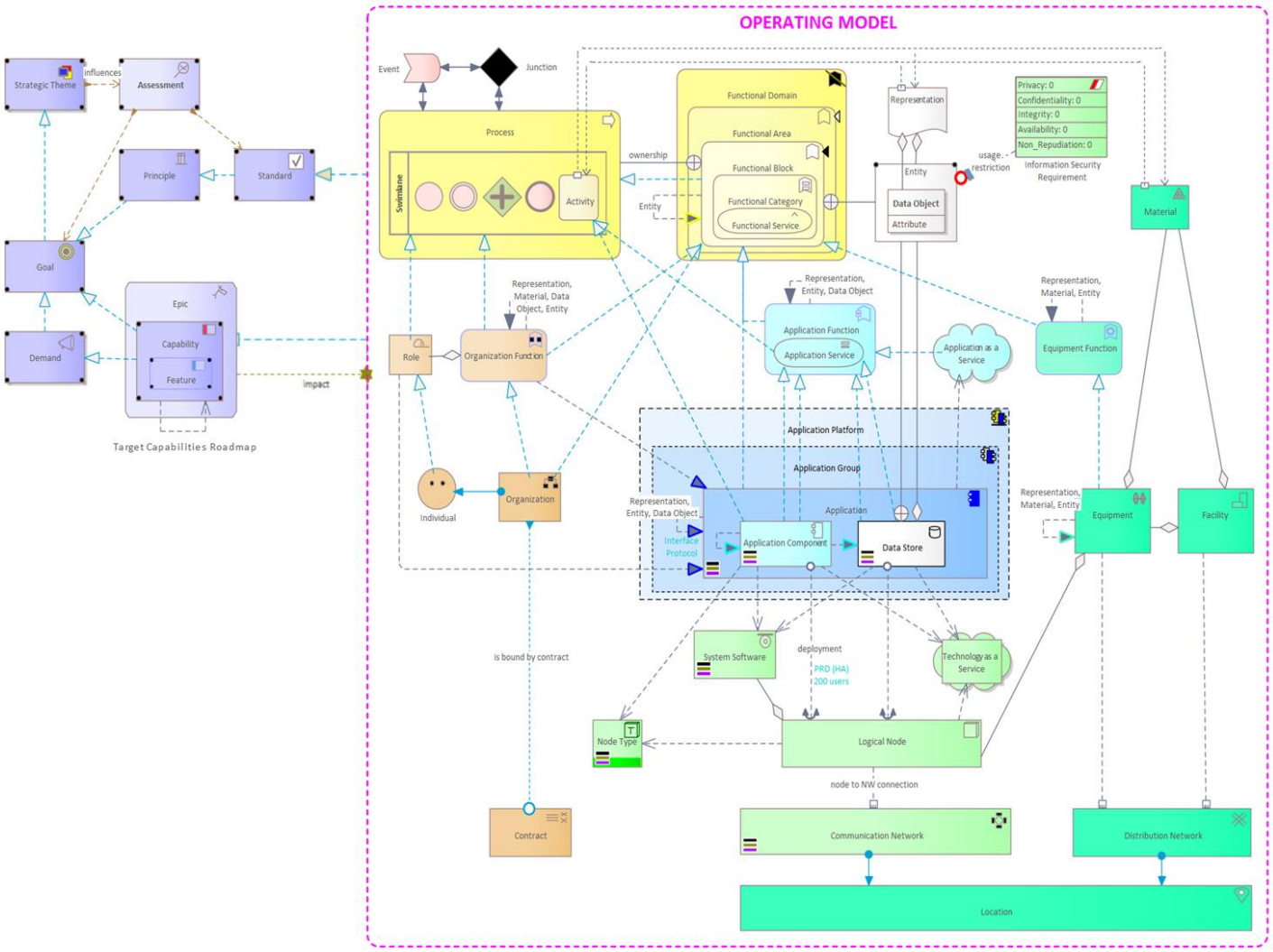
They can be instantly and dynamically updated using the Instant Metamodel Manager.

A Subset of the Default Metamodel including Strategy & Enterprise Architecture:

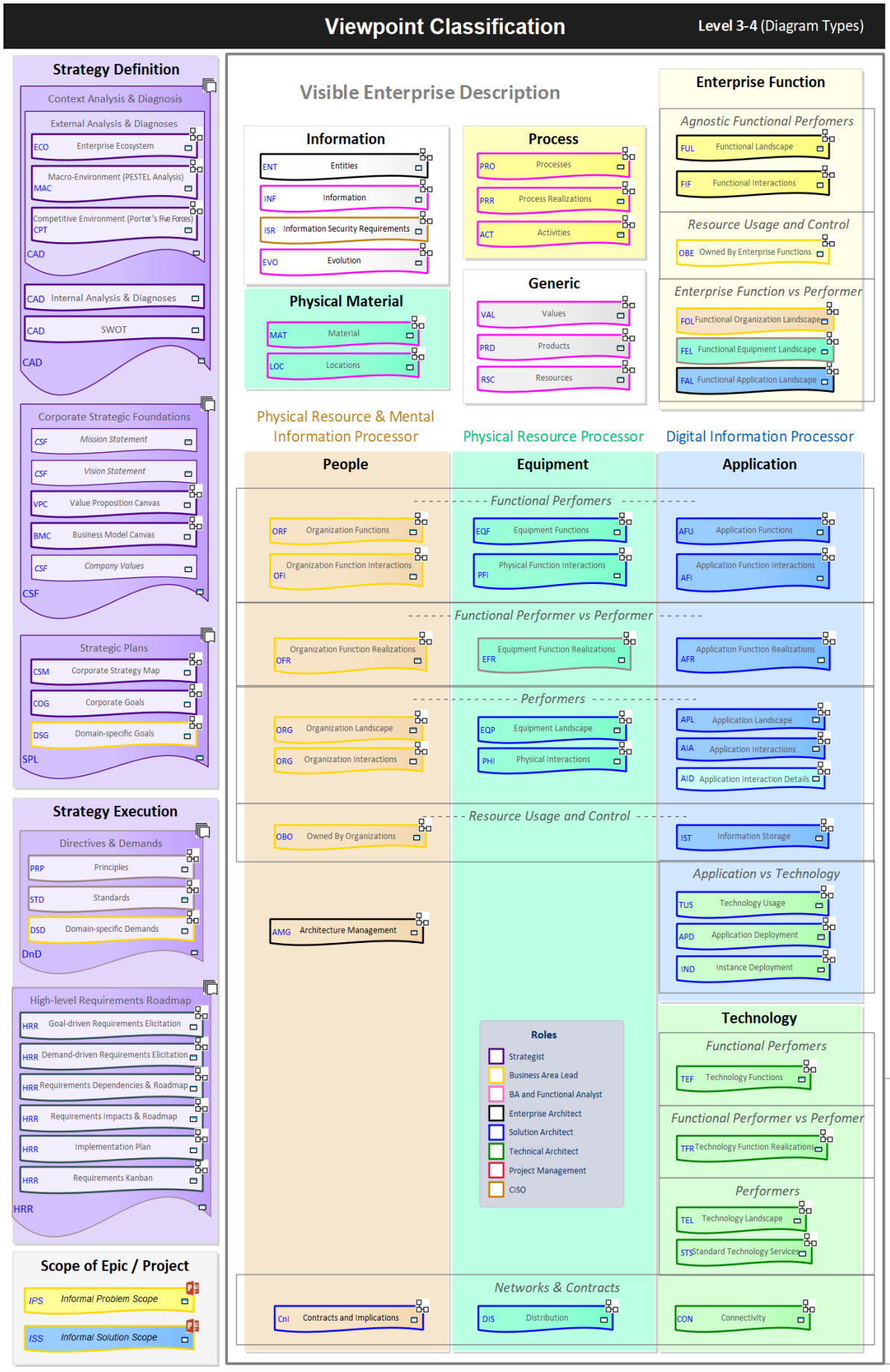


A Subset of the Default Metamodel including Strategy & Solution Architecture:

The Solution Architecture metamodel is a superset of the Enterprise Architecture metamodel



Level 3 viewpoints (Diagram Types):



See also...

[Viewpoint Classification All Levels]

Viewpoint Relationships

L1 L2 L3

Strategy and Enterprise Architecture

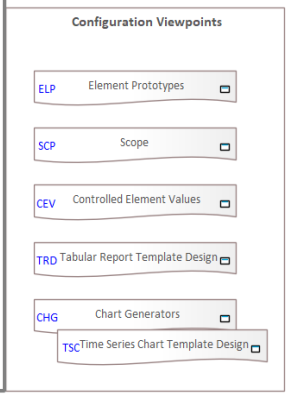
Diagram Stereotypes

Used for changing the layout of Labnaf items on diagrams

Compact View, Undecorated View, Dates Visible etc.

Related Topics

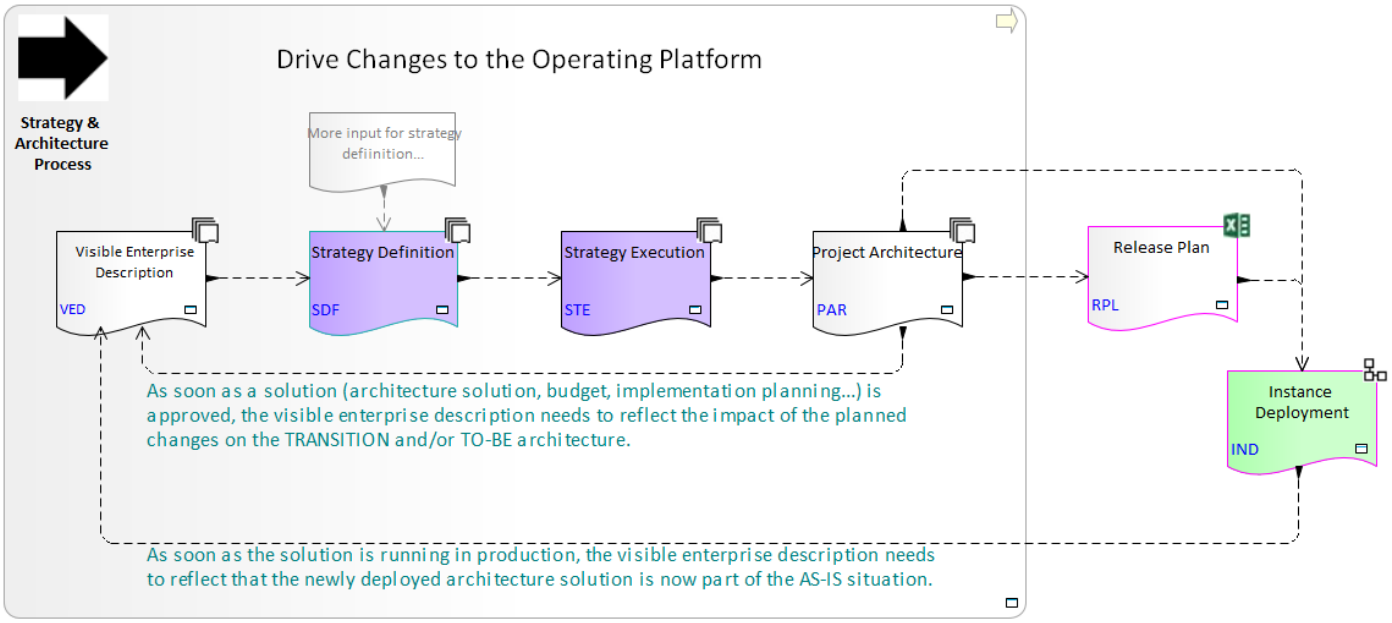
- Modeling Elements & Connectors
- Element & Connector Glossary
- Default Language Metamodel
- Catalogs



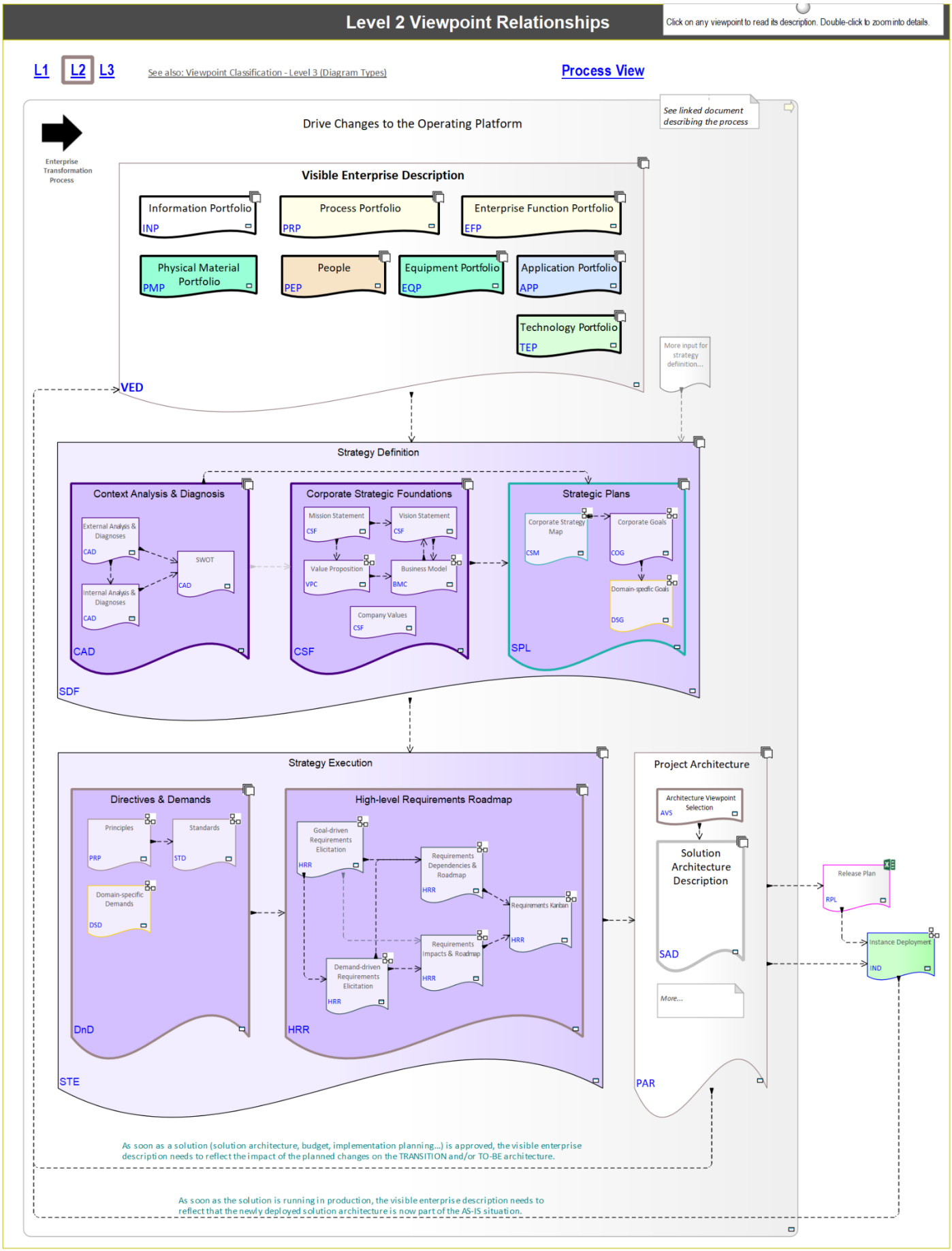
The process of driving transformations is also expressed as flows of viewpoints i.e. the types of views to be delivered step by step.

The flows of viewpoints are organized following three levels of detail.

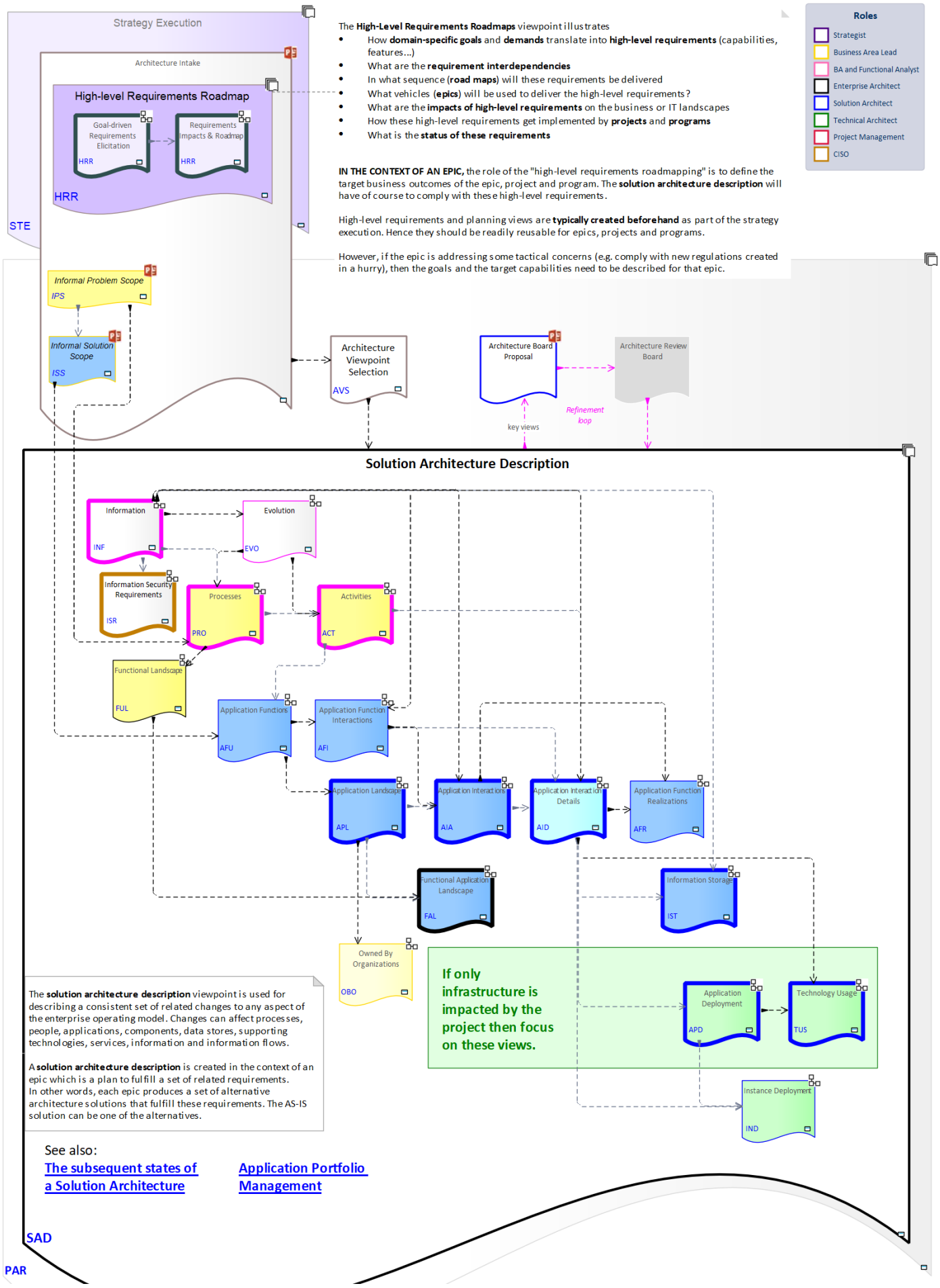
Level 1 viewpoint relationships:



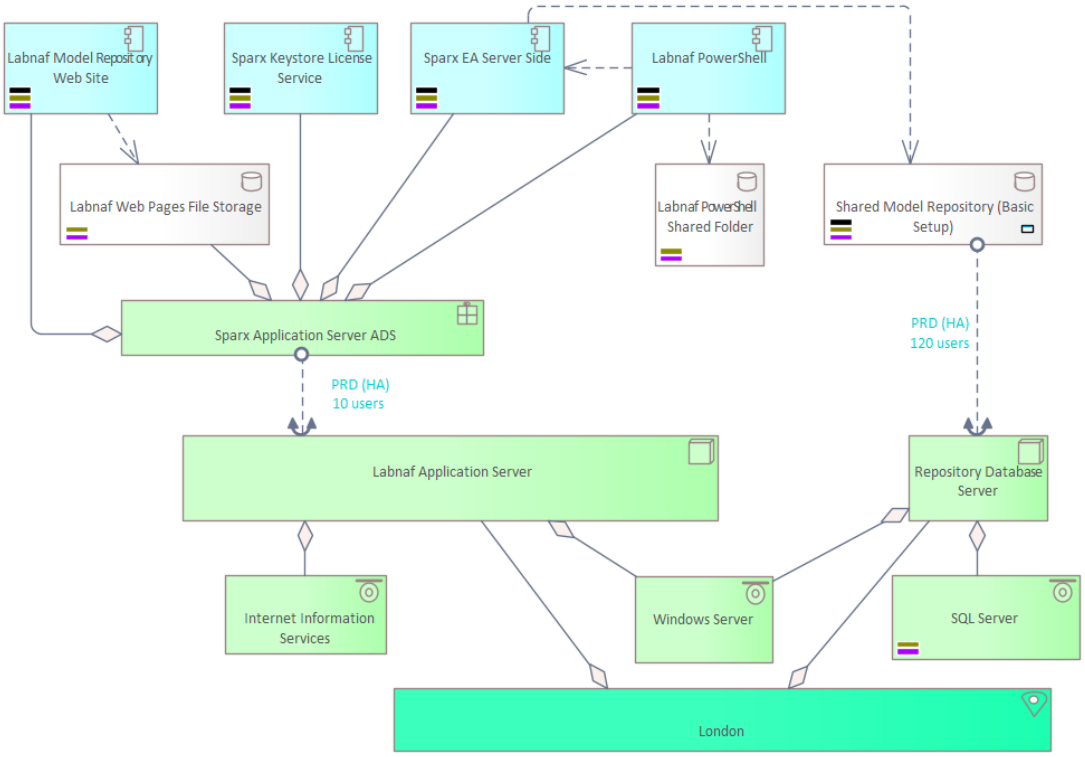
Level 2 viewpoint relationships:



Level 3 viewpoint relationships focusing on IT Solution Architecture Description:

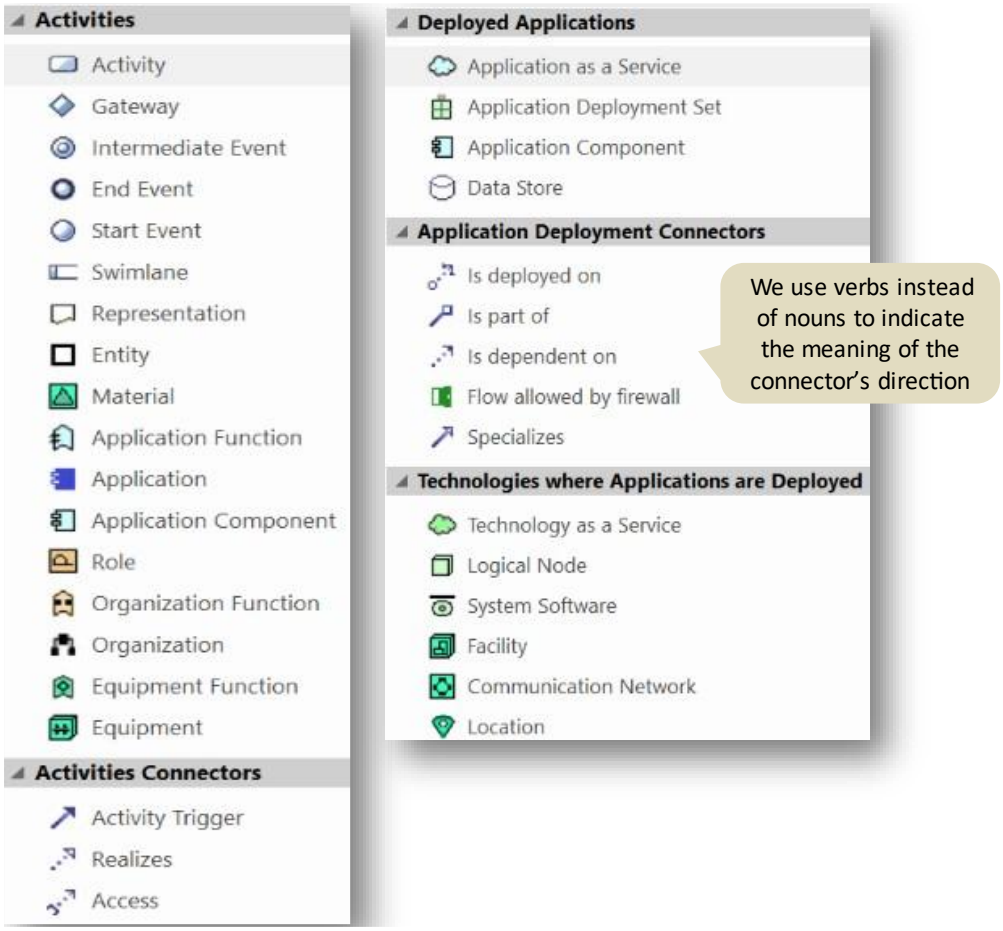


Here is a sample “application deployment” view (and instance of and “application deployment” viewpoint):



TOOLBOXES

And here are some sample toolboxes displaying the elements and connectors needed to build “Activities” and “Application Deployment” views:

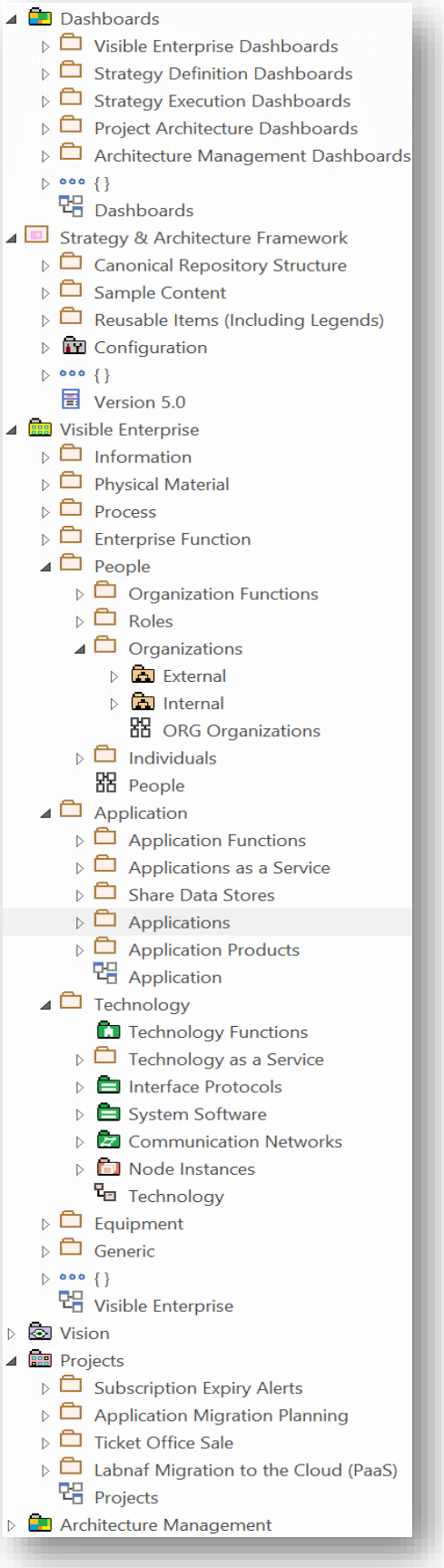


REPOSITORY

Labnaf comes with a startup repository and a sample repository.

The startup repository includes:

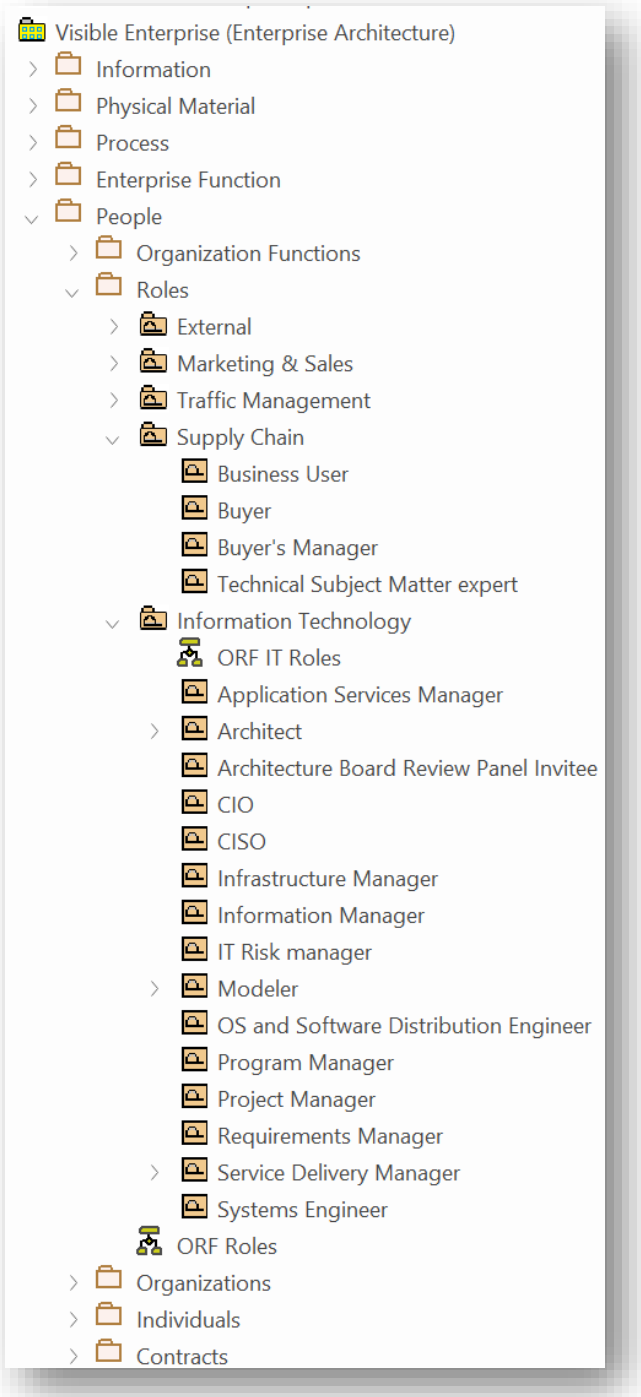
- Configurable repository structure of portfolios, catalogs, sample elements, and sample views
- Model templates for configuring value calculations Configurable templates for charts and diagram generation
- Model templates for tabular reports (generated Excel documents)
- Customizable default metamodel including navigable documentation
- A configurable language metamodel with dynamic alignment of the model validation rules
- Sample steps for you Enterprise Architecture metamodel evolution
- Placeholder and initial content for you own metamodel (if you want to replace the default metamodel)
- Model templates for configuring value initialization
- Document templates for solution architecture, principles, standards and other document types. Generated format: Word, PDF, RTF.
- Configurable element and connector type documentation
- Configurable viewpoint documentation
- Configurable flows of viewpoints
- Configurable sets of mandatory viewpoints following different scenarios (e.g. project types). Used also for crating dynamic project dashboards showing existing and missing mandatory viewpoints.
- Re-usable auto-coloring legends accessible via a dedicated menu

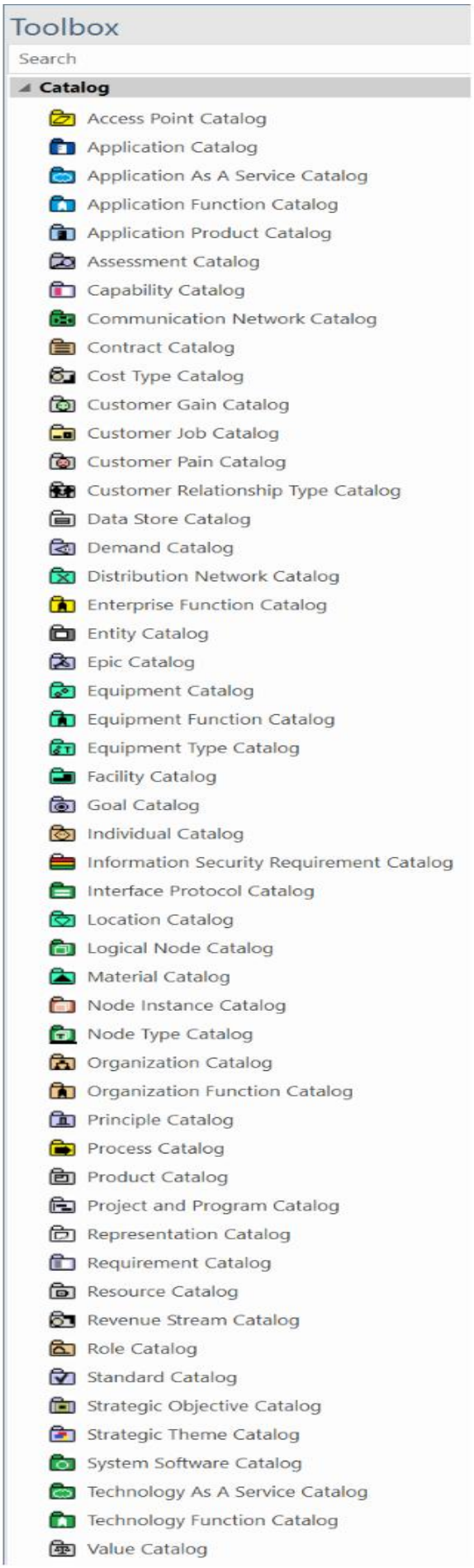


In the repository, each portfolio contains a collection of typed catalogs.

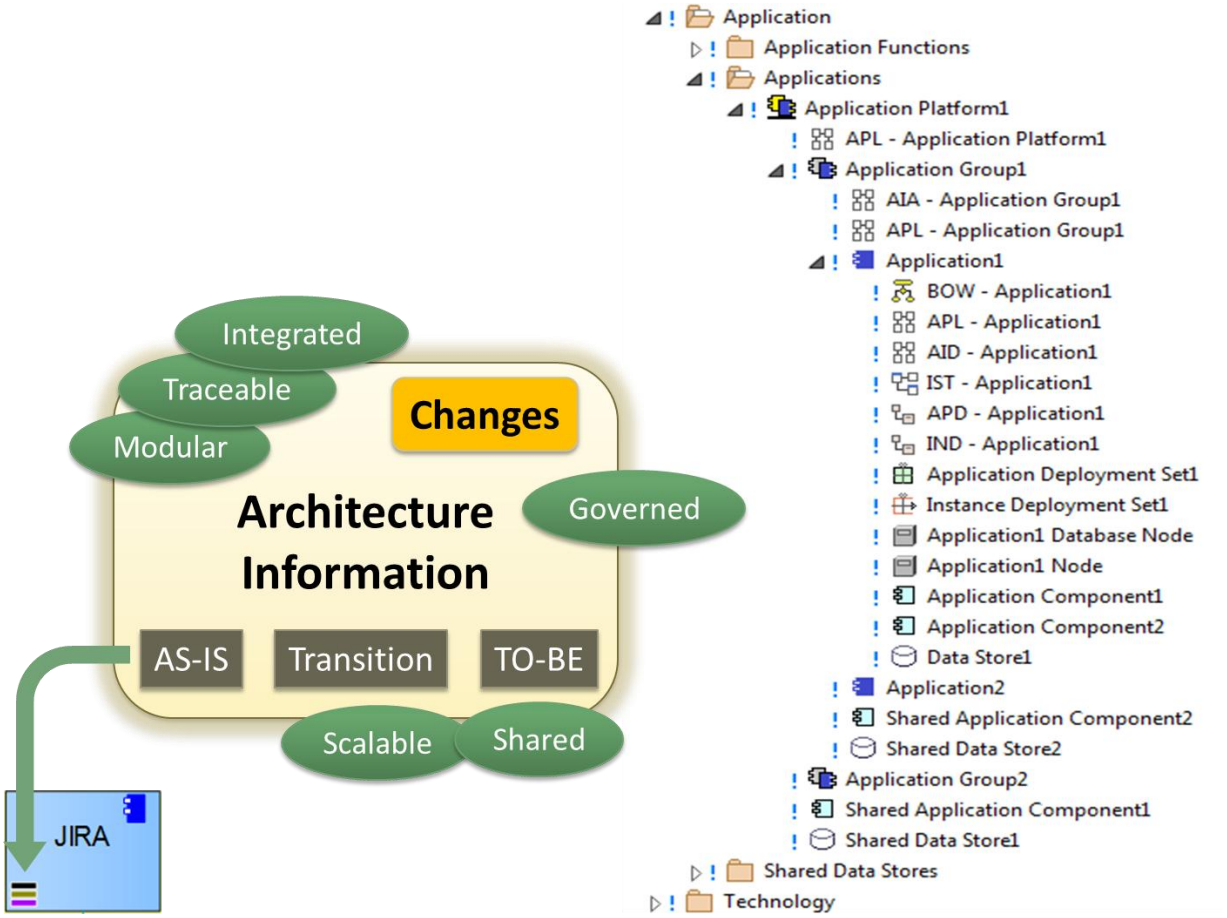
- A catalog is a set of typed folders (aka packages) that contains specific types of elements and diagrams.
- The screenshot on the right shows the toolbox for adding catalogs in the repository structure.

- The screenshot below illustrates the **portfolio of People** that contains **catalogs of organization functions, roles, organizations, individuals, and contracts** connecting organizations.



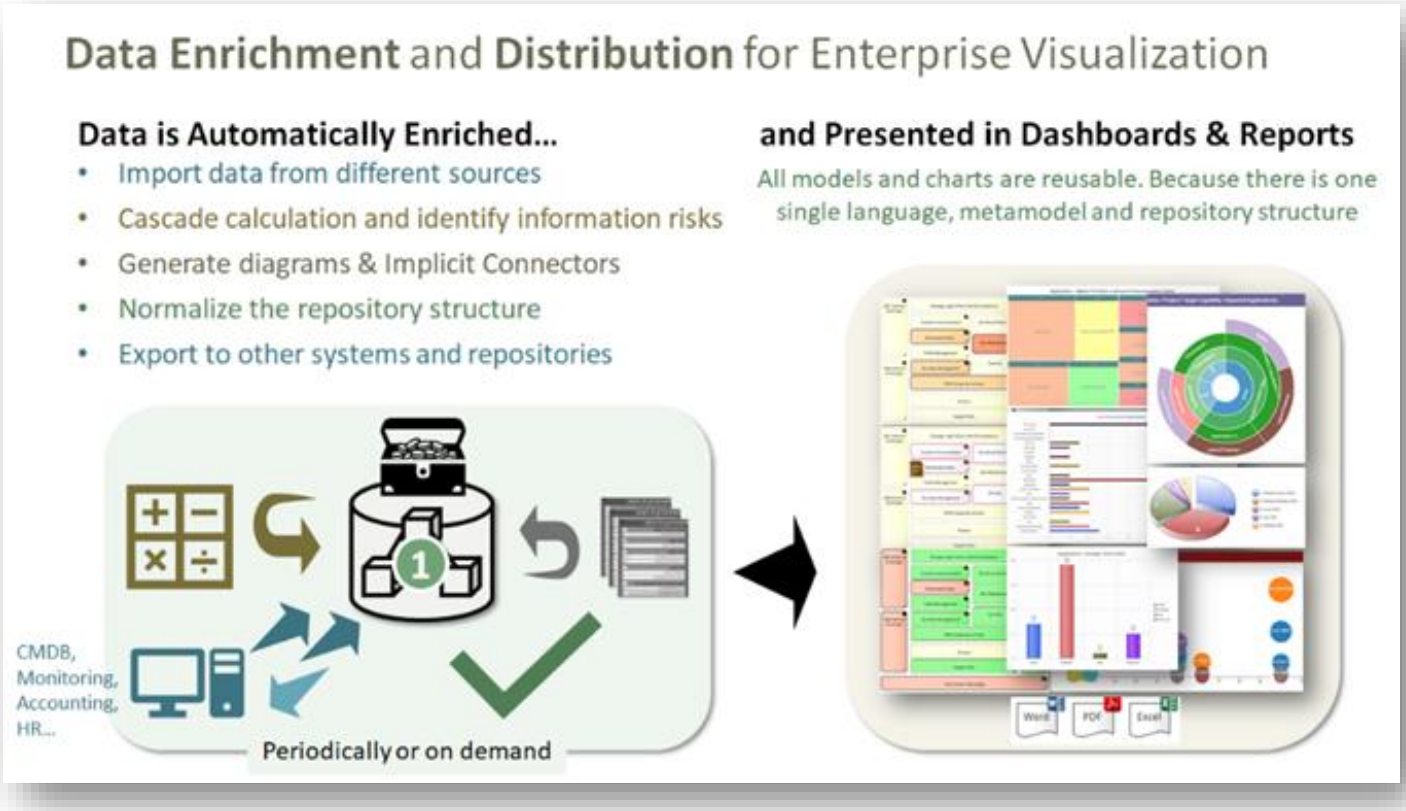


The repository structure and the language have been together designed to manage complexity following architecture perspectives and levels of detail.



PRODUCTIVITY TOOLS

The Labnaf modeling language, the productivity tools, the presentation tools, and the customization tools are implemented using the Sparx Systems' Software Development Kits for the Enterprise Architect and Prolaborate platforms.



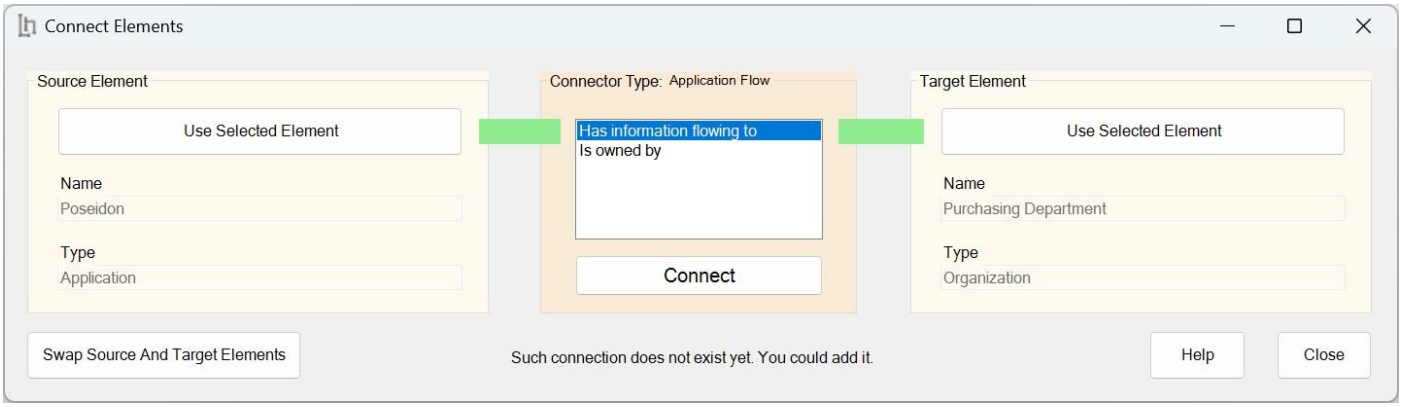
STRATEGY & ARCHITECTURE MODELING

The strategy modeling, architecture modeling and portfolio management tool is used for the following purposes:

- Create portfolio models, charts and dashboards, describe the business and IT contexts, and describe the strategy definition and the strategy execution.
- Describe and navigate the operating model along with the ongoing changes i.e. architecture epics and implementation projects.
- Perform impact analyses, leveraging the end-to-end traceability path.
- Govern the architecture content.
- Share and access architecture, strategy, risk, incidents, and unavailability descriptions using multi-channel communication systems.

Productivity tools help you create elements, connectors, and properties by using diagrams, forms, matrices, imports, implicit data generation, and cascaded calculations.

You can interactively model without creating diagrams. That includes the creation of connectors following the currently active metamodel.



Features are available on demand (using the UI) or using scripts which can be scheduled.

MERGE VERSIONS OF ELEMENTS AND CONNECTORS

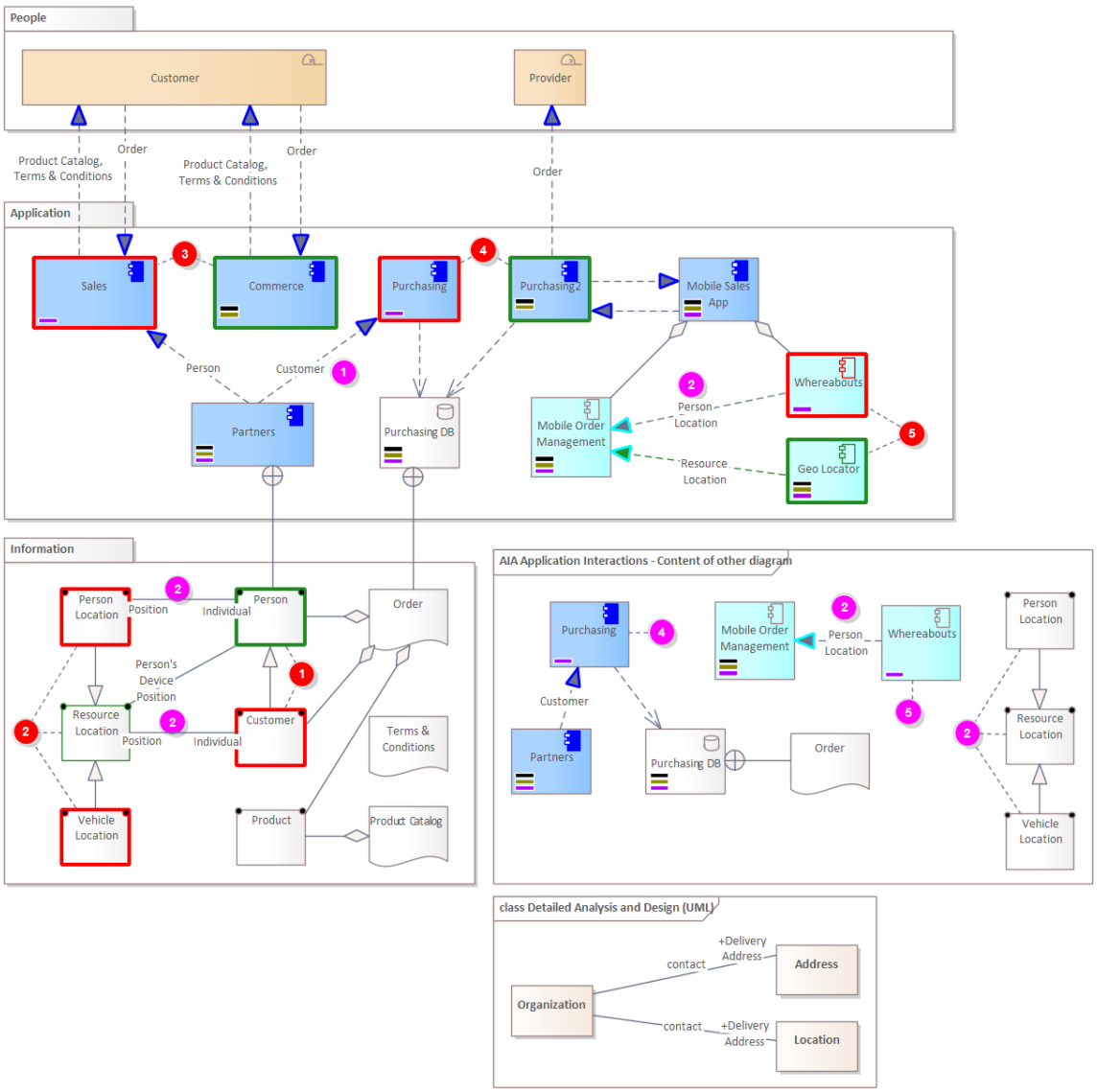
As a modeler, you often meet situations where you need to create new copies/versions of elements and connectors, and later on, you need to merge these different versions into the chosen elements and connectors to be preserved.

Labnaf can merge any number of duplicate elements into one element to be preserved. It also merges duplicate connectors to/from these merged elements.

- During that element merge process, Labnaf also
- collects impacted connectors and merges them if applicable,
- updates conveyed object on impacted information flows,
- moves child elements and diagrams from duplicate elements to preserved element, and
- updates all impacted diagrams.

The following sample diagram shows

- a sequence of numbered element merge actions, and
- the redundant elements to be merged into one element to be preserved
- the side effect of each merge action.



MODEL VALIDATION

Model validation is based on a dynamic metamodel that can be instantly changed and that is expressed in the end user language itself.

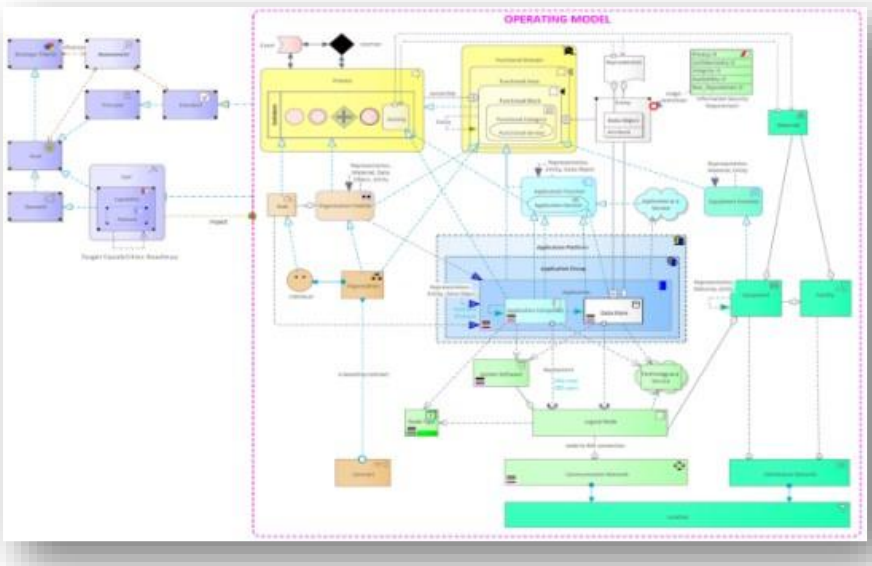
The model validation configuration defines, what needs to be (not) validated, when the validation needs to occur and for whom the validation applies.

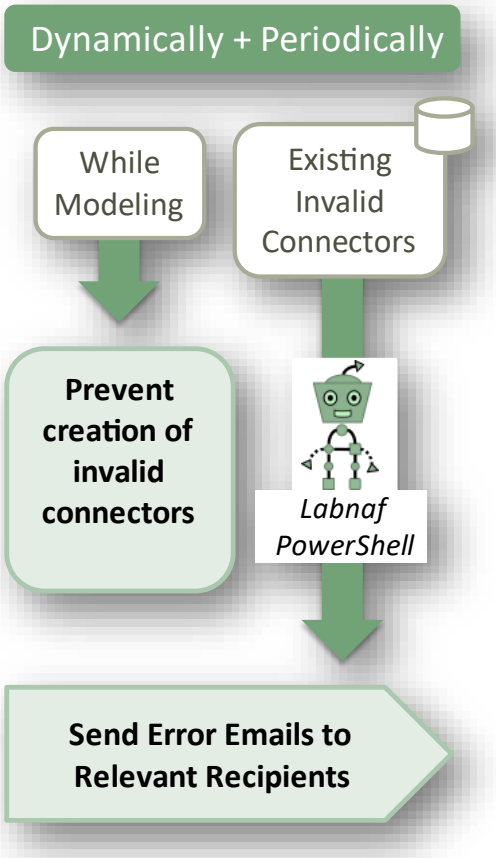
To configure the model validation, the repository administrator defines:

- Which specific parts of the model repository need to be validated?
- Do we want validation during the creation of models? For example, do we want users to be prevented from creating invalid connectors?
- Do we want validation after the creation of models? Do we want validation to run every night? Who needs to receive the error notifications?

Model validation rules are based on the content of a language metamodel which is also used for end-user documentation.

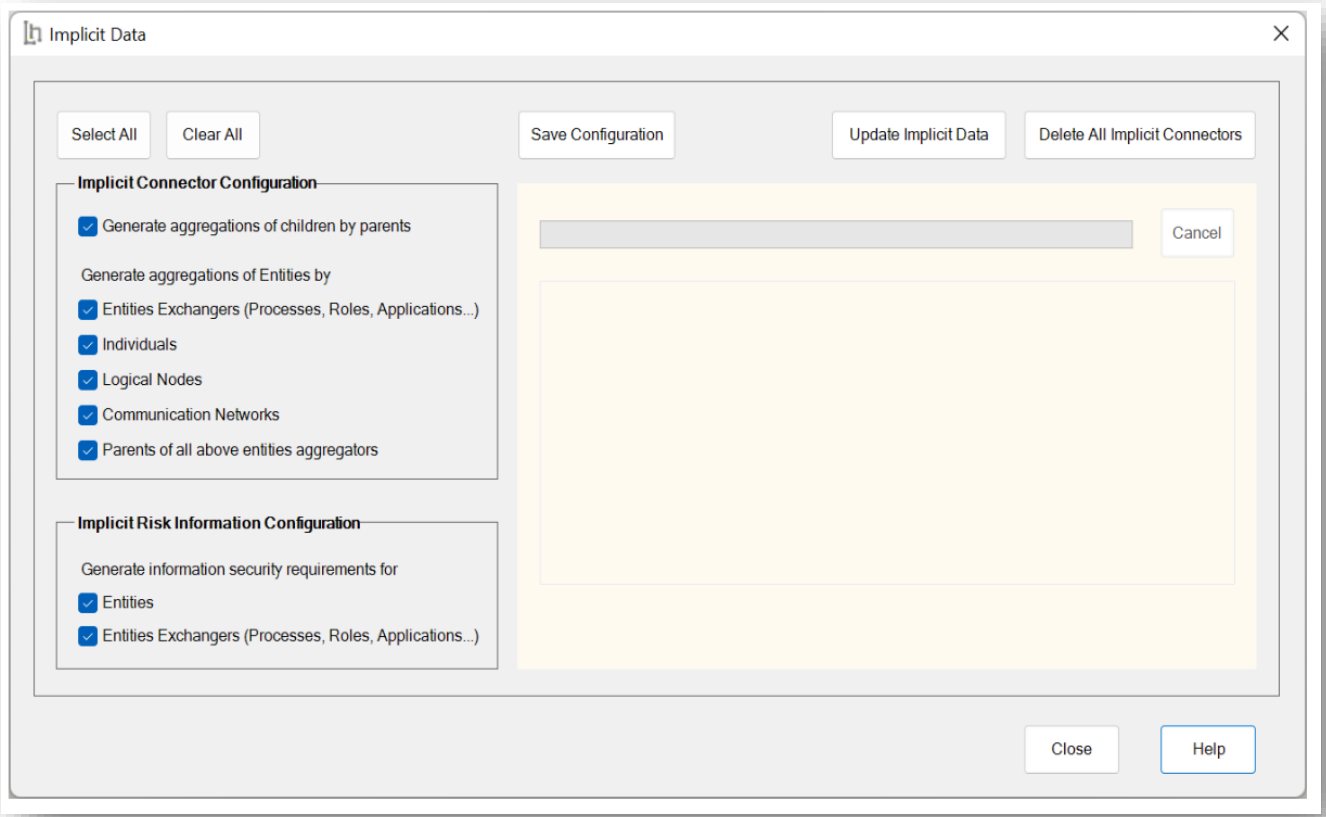
Error notification routing rules are defined in some architecture management model where specific areas of the repository or specific functional domains are assigned to specific individuals.





90% of architecture and security modeling efforts can be automated. These are avoidable delays, costs, and human errors.

Implicit data enable architects to only model what is semantically significant. Labnaf generates the missing content that you need.



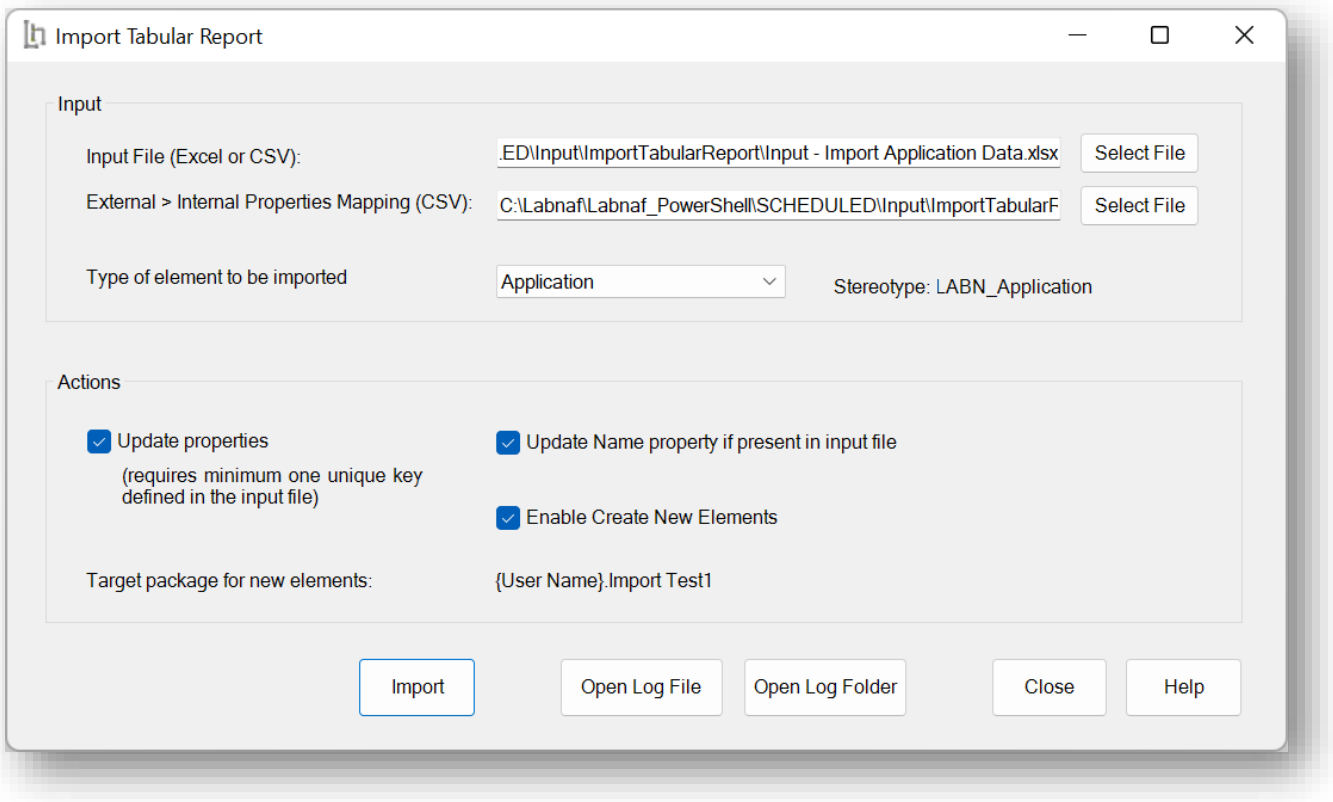
IMPORT

Elements and connectors can be imported periodically or on demand (create, update, identifying elements following multiple criteria).

Inbound data can be Excel, CSV and XML files.

Labnaf automatically adapts the format of inbound/outbound CSV file content following your systems integration requirements and constraints. The CSV file format that you can adapt includes any combination of the following items:

- Character encoding
- CSV column delimiters
- Column name mappings



CASCADED VALUE CALCULATIONS

Property values are automatically calculated following some configuration defined in the Labnaf model repository.

Calculations can address a wide range of very simple and very complex calculations.

A simple value calculation can be for example an arithmetical operation on other values of the same element (like a + b / c = value).

A complex value calculation can involve any other elements of the same or different type, any element relationships, any attribute value and numerous arithmetic operators. As an example, the calculated complexity of each application in the application portfolio can be based on the number of input and output information flows, the number of components and the number of data stores. And each complexity criteria can have its specific weight.

Calculations can also consolidate time series properties. Each time series property consists in a list of dates and related values.

The scope of the elements to be addressed by the value calculation can be also calculated. As an example, you might want to limit the application complexity calculation to only the applications that are managed by departments inside your organization and/or to the applications that are in operation.

Calculated values are typically set as read only. Only the calculation engine can change these values.

INITIAL VALUE CALCULATION

When a new element is created, the same value calculation engine can automatically assign initial attribute values. This can be used, for example, to automatically assign a unique identifier to a new principle, standard or application.

Creating and laying out hundreds of diagrams manually and in a consistent fashion is a very tedious and expensive task. In addition, diagrams which are created manually get quickly out of date. There are often undesired connectors appearing on diagrams as the model gets enriched. And there might be some missing elements and connectors.

Hopefully, the tool can generate diagrams and heat maps either periodically or on demand. These generated diagrams can include different types of elements which can be automatically embedded following their relationships. They can also include any kind of diagram decorations including dynamic legends.

Generated portfolio diagram contents and layout (shape, size, lay out, color) is based on diagram templates.

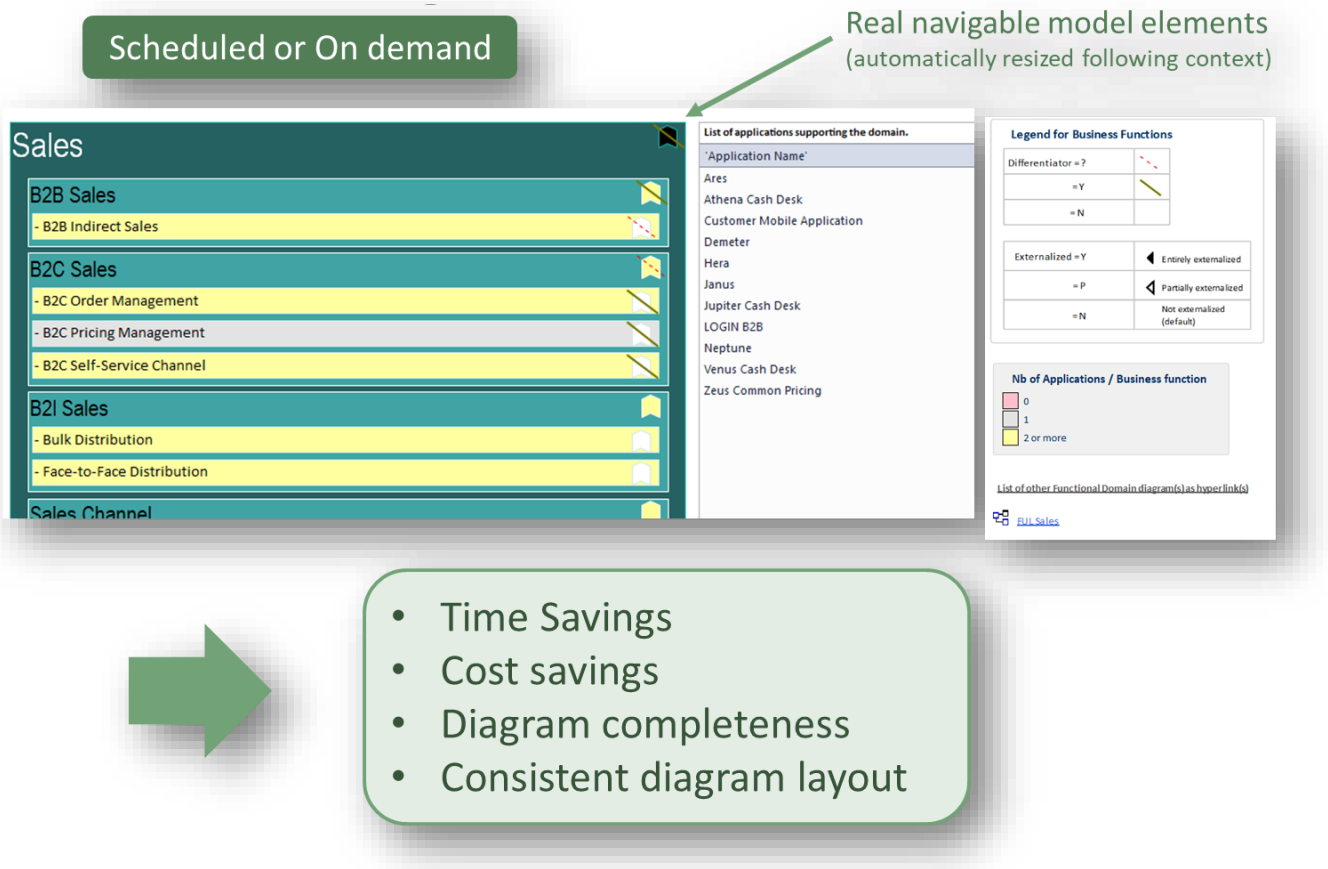
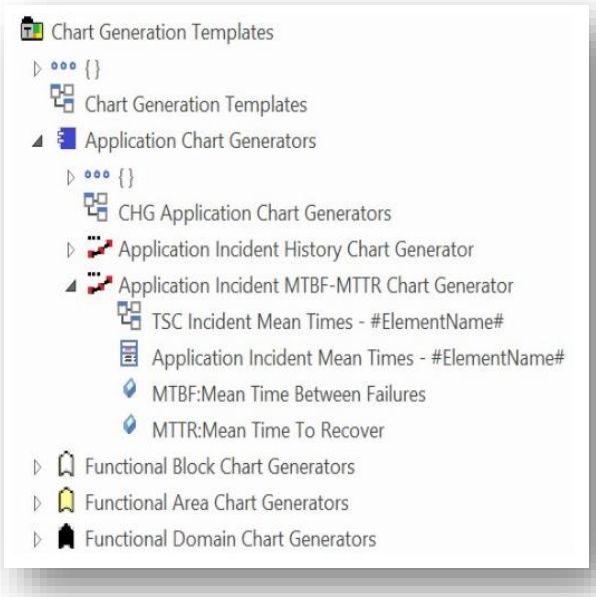
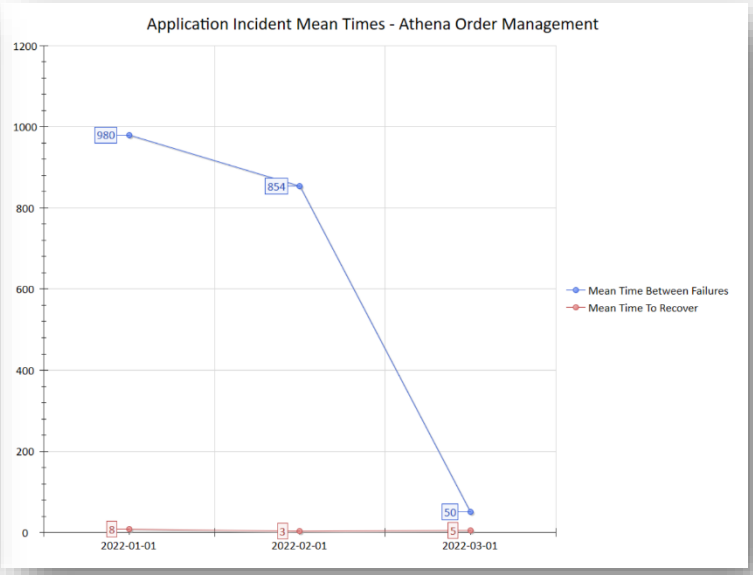


CHART GENERATION

Charts can be generated, periodically or on demand, following chart templates, and for any implicit or explicit collection of elements.





WORD DOCUMENT PUBLICATION

Word documents can be published either periodically or on demand. The content of each document is defined by a document template and by some structure in the model repository.

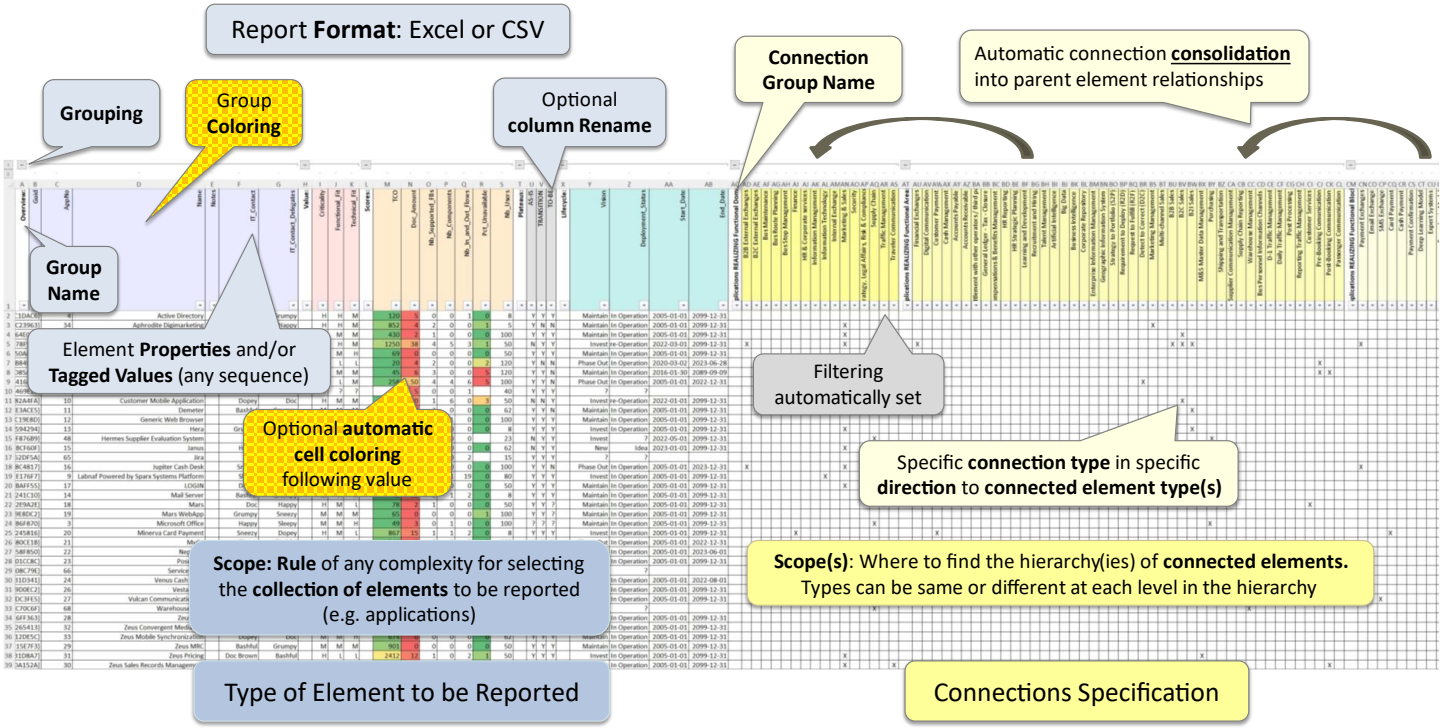
Built-in templates include

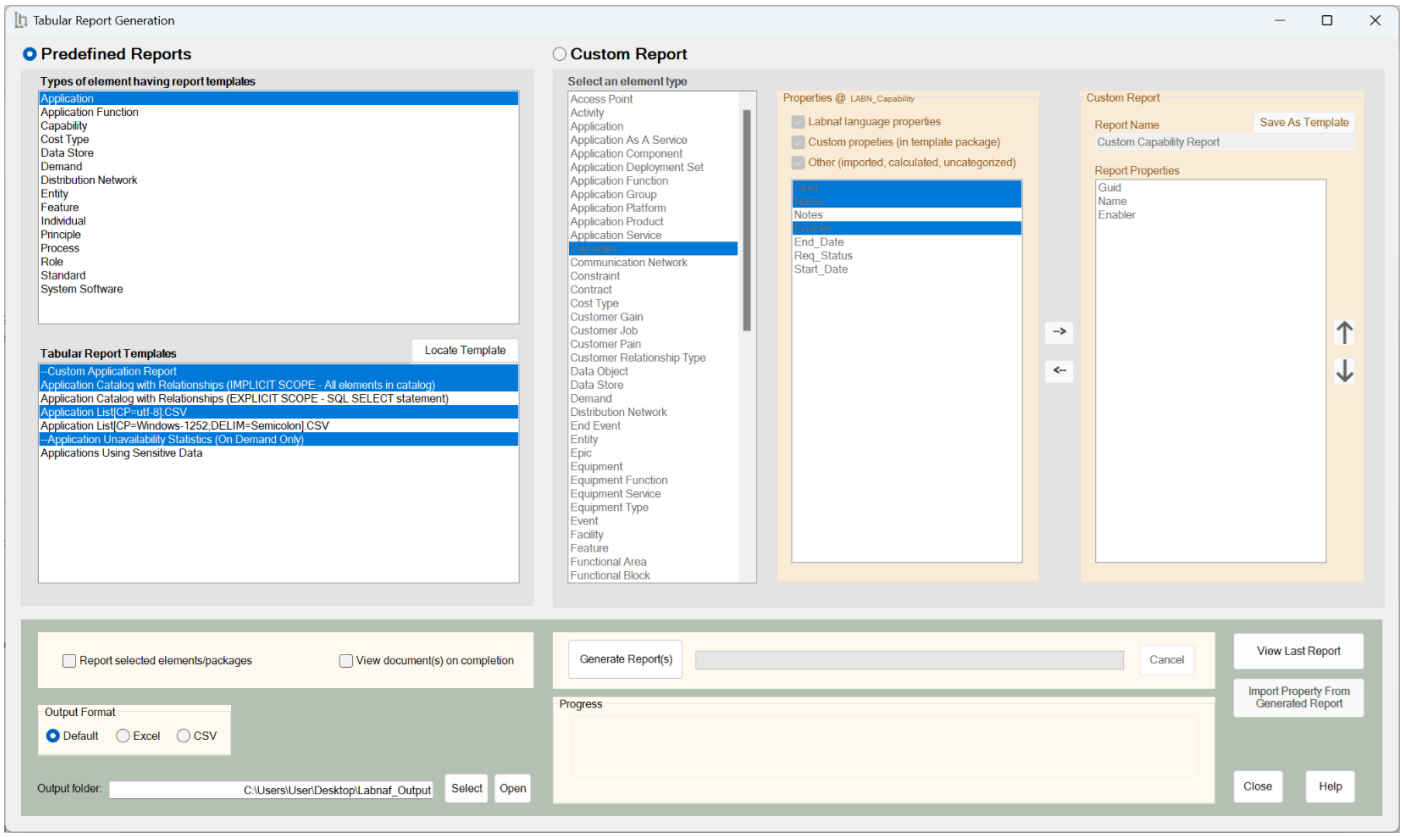
- Solution architecture document
- Architecture standards document
- Architecture principles document

Excel and CSV documents can be published either periodically or on demand.

Each generated Excel document can include model elements, attributes and any number of cross-reference matrices between different element types.

The content of an Excel document is based on a template that is modeled in the repository.





The user interface lets you

- Generate reports using (your) predefined report templates,
- Create and generate custom reports and generating templates,
- Open generated Excel or CSV, edit values, and import the updates values on the fly.

ARCHITECTURE DATA DISTRIBUTION

The architecture data distribution feature imports and exports elements from/to other repositories e.g. a CMDB, either periodically or on demand. The exchanged content and format is configured using template documents.

WEB PUBLICATION AND EMAIL DISCUSSIONS

The web publication engine periodically publishes the model repository content in HTML format either periodically or on demand. Web-published model repository content acts as a read-only version of a model repository snapshot.

Email discussions can be started from a simple click on a published diagram. This generates an email that automatically contains a hyperlink to the current diagram. Generated hyperlinks are stable even though the site is re-generated for example every night and the diagram could be renamed or moved.

MODELING LANGUAGE AND ARCHITECTURE CONTENT TRANSFORMATION

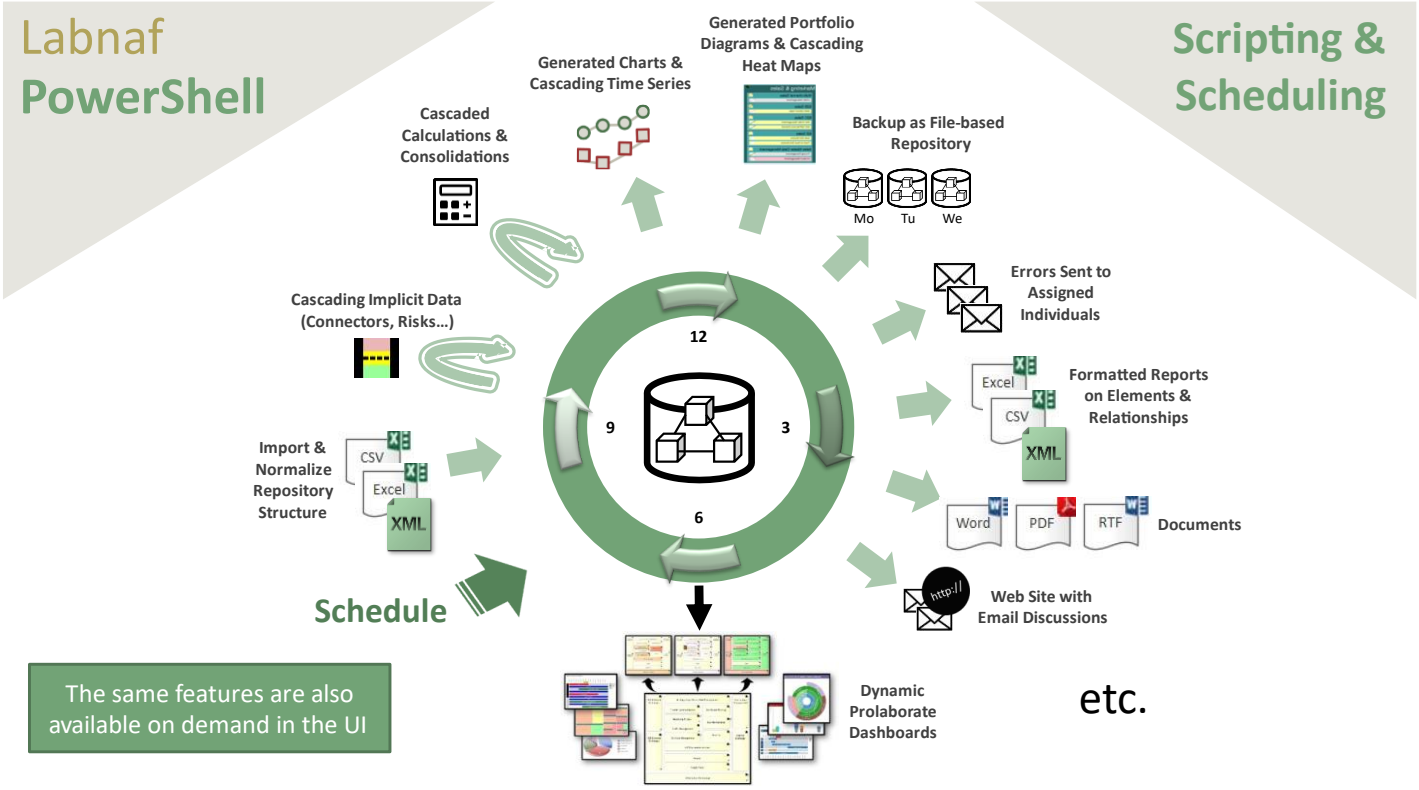
The language transformation engine changes the type, name and value of any element, connector, element property or connector property. It can also delete elements and properties.

BACKUP/BASELINE GENERATION

The backup generation engine creates date-stamped copies of model repositories either periodically or on demand. For example, a backup generation configuration can, every night, create a date-stamped copy of a shared SQL Server repository into an access database. Resulting access databases can then be used as baselines to compare or recover complete or specific model content.

The above tasks can be performed

- either on demand using the Labnaf user interface,
- or periodically using the Labnaf scheduler or your preferred scheduler.



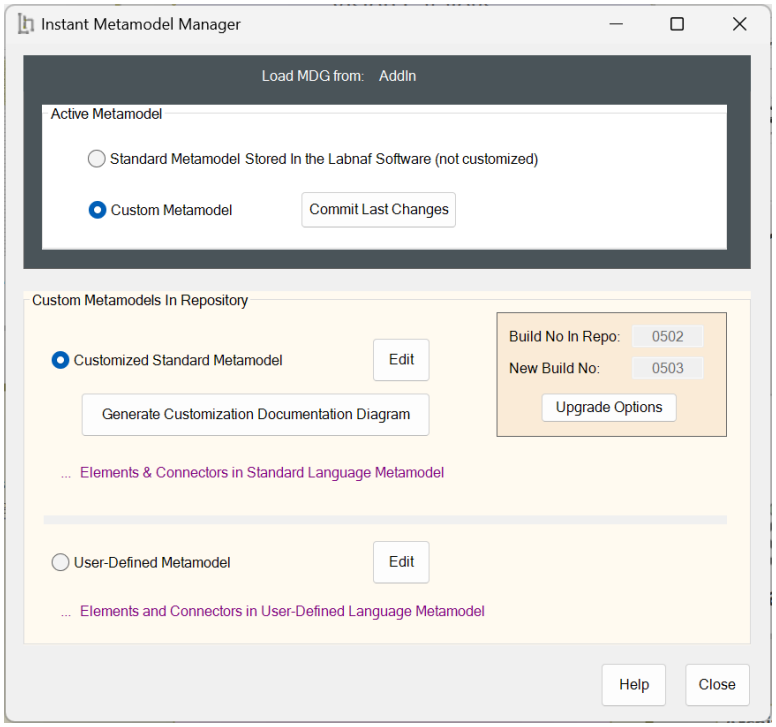
Categories of Customization	Metamodel Manager	Metadata Manager	
Metamodel	*Customizable metamodel expressed using the Labnaf Language and stored in the production database.*		
Select active metamodel (standard, customized standard, or user-defined metamodel)	Y		
Add/Delete connectors to a metamodel	Y		
Customize the types of connector that must be unique between same source and target elements	Y		
Customize quick linker verbs	Y		
Upgrade standard metamodel to a new version of Labnaf, while keeping your own customizations	Y		
Generate documentation/diagram about your metamodel customization	Y		
Element Properties			
Create custom property types		Y	Y
Upgrade properties to a new version of Labnaf and keep/restore your own customizations		Y	
Rename/Delete property types		Y	Y
Synchronize property sets in existing elements		All props	MDG props
Add custom properties to the **Tags** Tab		Y	N
Add Labnaf Properties to the **Element** Tab		N	MDG-defined
Create named property groups		N	MDG-defined
Connector Properties			
Create custom connector properties		N	MDG-defined
Elements and Connectors			
Add/Delete element and connector types		N	MDG-defined
Toolboxes and Diagram Types/Viewpoints			
Add/Update/Delete Toolboxes		N	MDG-defined
Add/Update/Delete Diagram Types/Viewpoints		N	MDG-defined

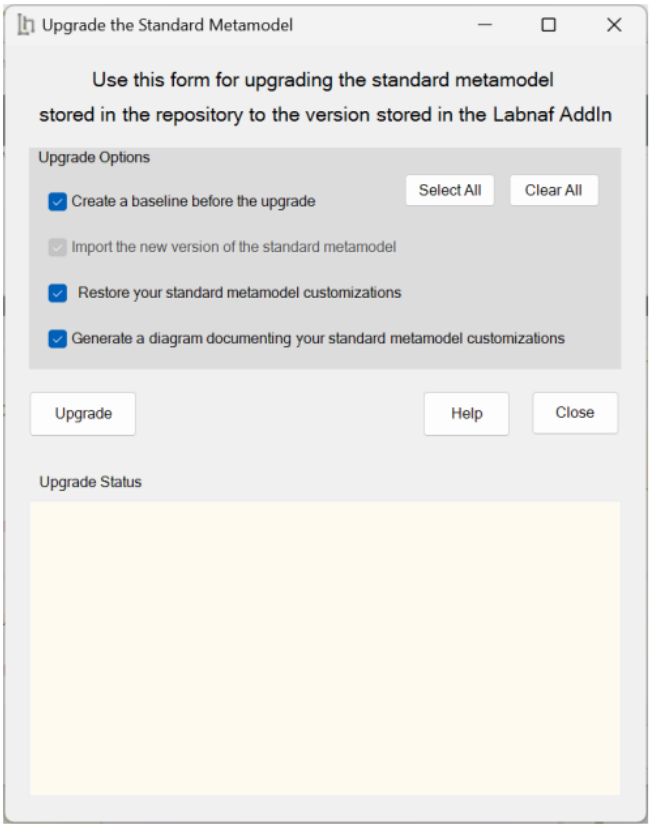
Use the Instant Metamodel Manager to instantly manage custom metamodels.
Custom standard metamodels can be merged or not with future versions of the Labnaf language. So, there is no upgrade issues.

Because the Instant Metamodel Manager is available directly in the modeling environment, you don't need any extra tool. So this the perfect option for modeling in an **Enterprise Architect SaaS environment (cloud)**.

Using the Instant Metamodel Manager, you can...

- Select and customize your preferred metamodel (standard, customized standard or user-defined),
- Upgrade the standard metamodel while keeping your own metamodel customizations,
- Restart an interrupted upgrade,
- Create baselines before the upgrades,
- Generate documentation diagrams on your customization of the standard metamodel on demand and automatically after upgrade,
- Create, upgrade and automatically repair existing metamodel structures (even empty ones) in any repository.
- Manage metamodels using the end user modeling language itself (no metamodeling language needed) and without the need of any MDG models and tools.
- Manage metamodels in an EA SaaS Cloud environment.



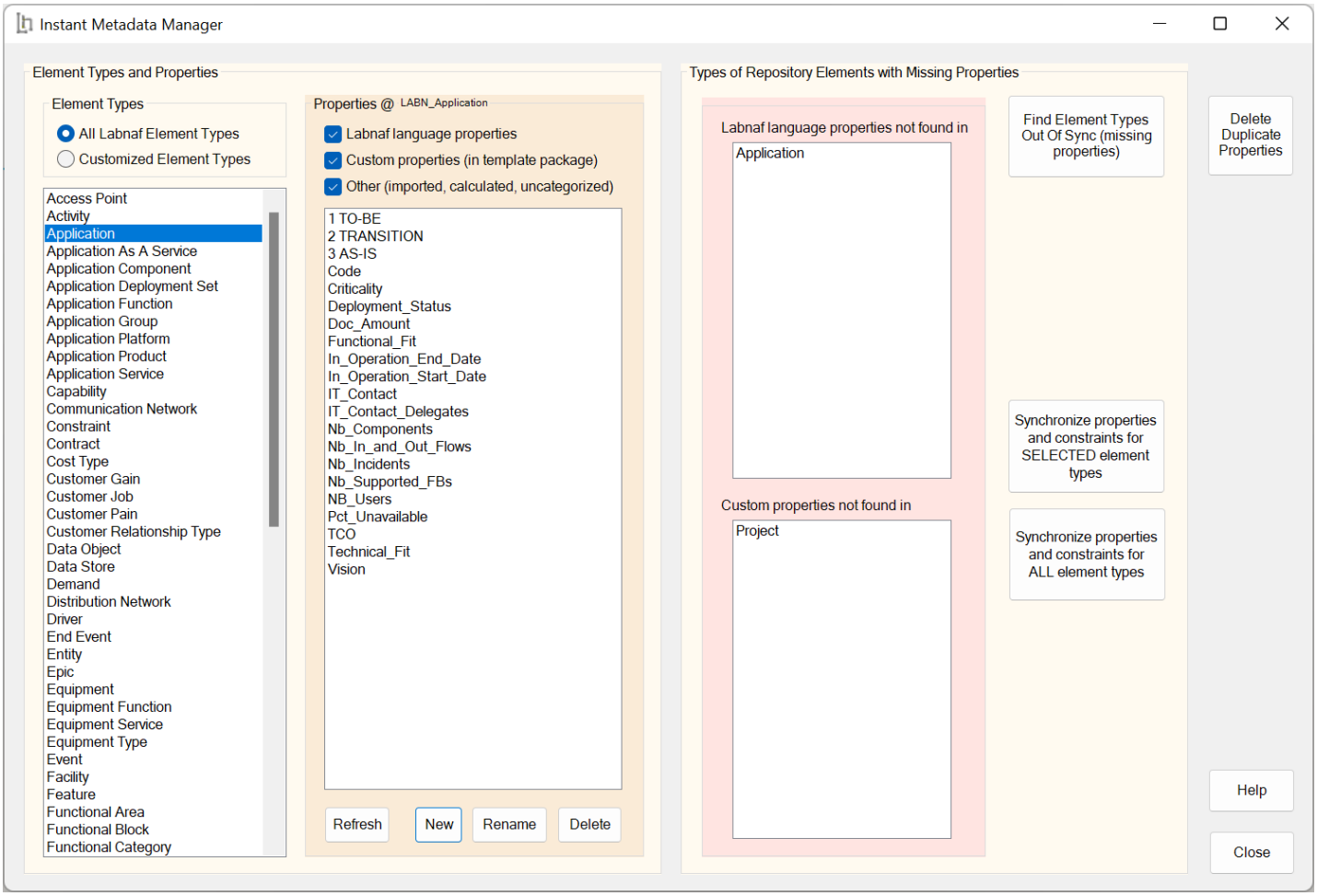


Organizations produce reports and charts by leveraging the properties and connections of their applications, processes, capabilities, information items, projects etc.

Use the Instant Metadata Manager to instantly manage custom properties that live independently of any future version of the Labnaf language. So there is no upgrade issues.

Using the Instant Metadata Manager, you can...

- View the list of existing element types.
- View a filtered list of element properties for the selected element type.
- Add, rename and delete custom element properties instantly, on the spot (no need to learn and to deal with MDG customization lifecycle).
- Add custom properties that reuse your preferred property/tagged value types.
- Shows which types of elements stored in the database are out of sync with the metada definitions.
- Resynchronize elements stored in the database with their metadata definition.
- Delete duplicate properties.
- Manage metadata in an EA SaaS Cloud environment.



The presence of properties could stem from various sources. We classify these properties as follows:

Common Properties

- Some properties, like criticality, TCO, efficiency etc. are quite common.
- Common properties are built in the Labnaf modeling language.

Custom properties

- Each specific organization usually adds custom properties to fulfil their specific catalog management and reporting requirements.
- These custom property requirements evolve over time following the employee turnover and the users' feedback.

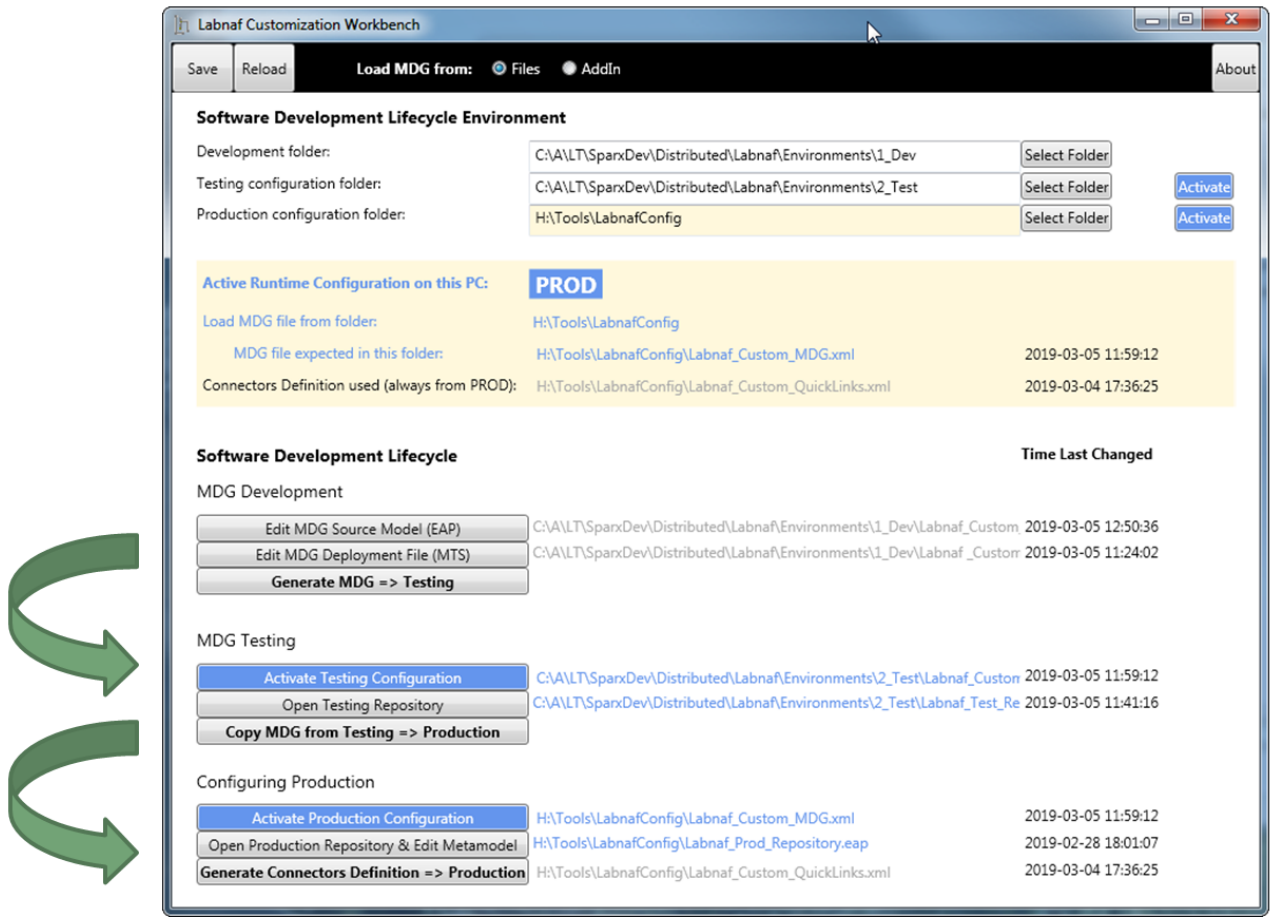
Other properties

- These are properties that have been imported, generated (implicit data), calculated, or created manually for individual elements e.g. for specific processes.

CUSTOMIZATION WORKBENCH (ADVANCED CUSTOMIZATION)

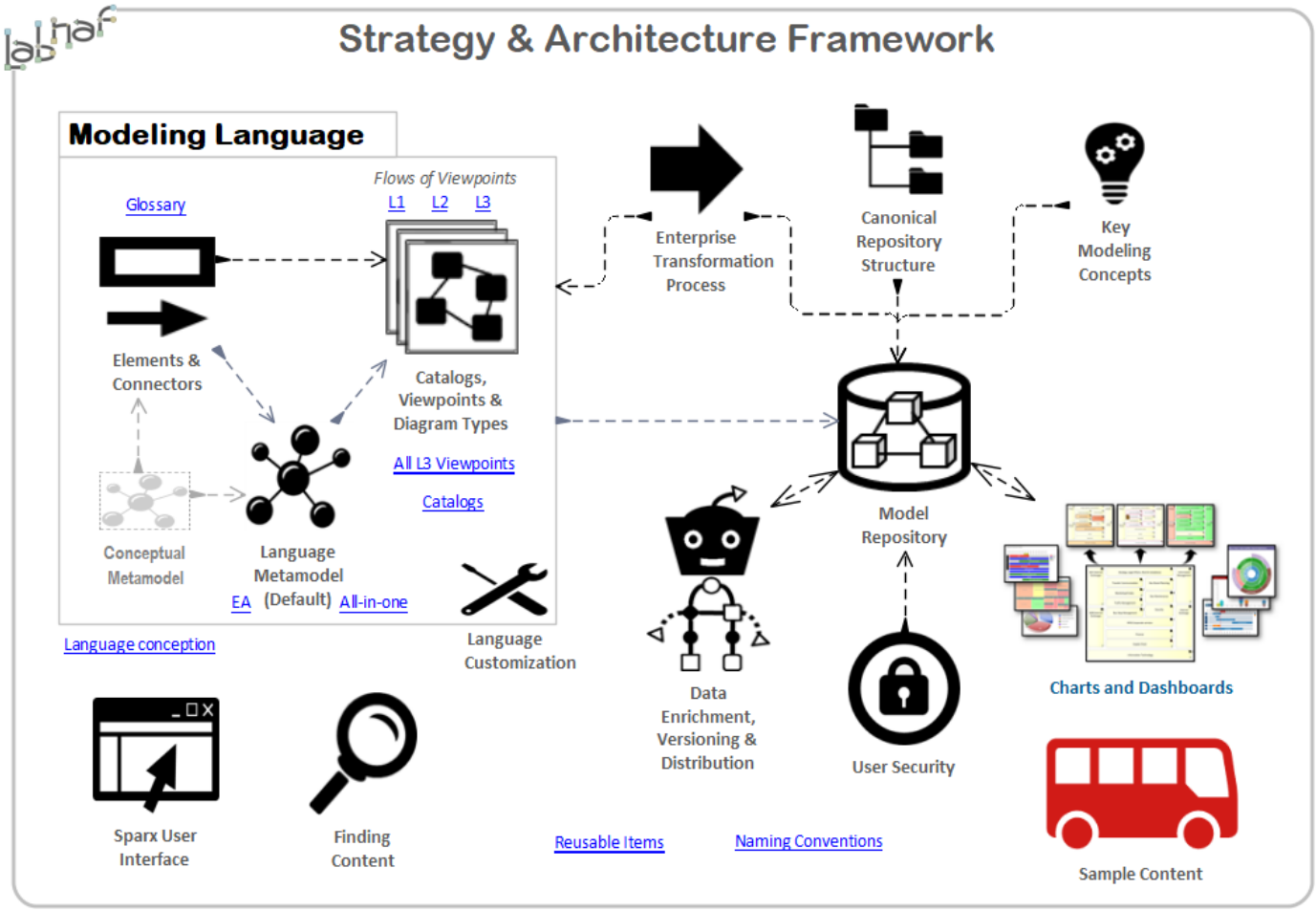
A User Interface orchestrating advanced Labnaf customizations (Development, Testing, Production).

The Customization Workbench is used for customizing the Labnaf MDG including, properties/tagged values, element types, connector types, toolboxes, diagram types, and metamodel (still using the Labnaf end user language itself).



NAVIGABLE GUIDANCE

The navigable guidance is a very structured and intuitive web site provides detailed guidance for using the Labnaf solution. The guidance content is modelled and generated from the model repository.



Click here to open the Navigable User Guidance

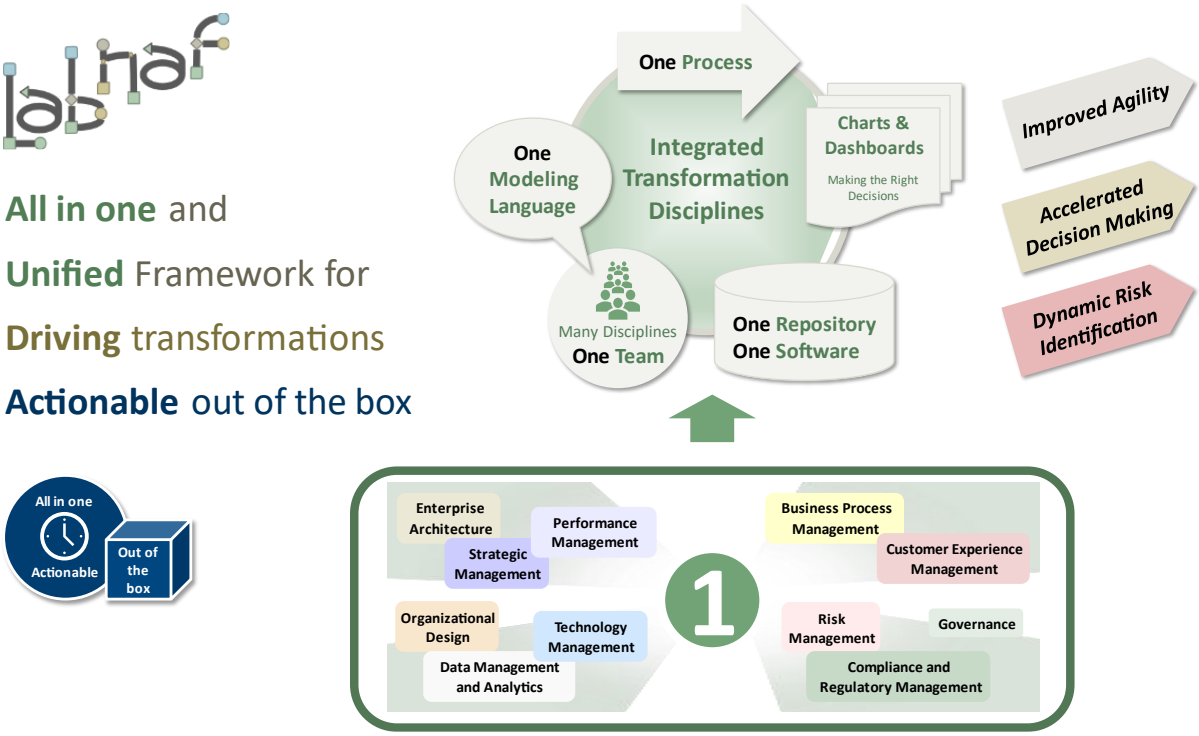
TRANSFORMATION DISCIPLINES MERGED INTO A UNIFIED FRAMEWORK AND SUPPORTING SOFTWARE

Labnaf brings simplicity, productivity, consistency and cross-discipline collaboration by integrating transformation disciplines into one single process, one modeling language, one repository structure, and a well-organized collection of viewpoints and dashboards. It helps you understand your organization, identify risks, govern and secure business continuity, envision the future, plan transformations and describe architecture solutions using multi-dimensional portfolios, models, charts, reports and many other productivity features.

Disciplines were merged using natural and unambiguous systems semantics. This merging allows for seamless collaboration among various roles involved in the transformation process. These roles include Enterprise Architect, Data Architect, Business Architect, Application Architect, Business Process Engineer, Functional Analyst, Cloud Architect, Infrastructure/Technical Architect, IOT Architect, Robotics Architect, Security Architect, Risk Manager, CISO, CIO, Strategist, Program Manager, Project Manager, etc.

Its powerful, feature-rich, and robust software supports all aspects of the framework and significantly boosts productivity. Labnaf software is implemented on top of the Sparx Systems' modeling and visualization platform.

The framework and the software are highly and instantly customizable.



The language is based on natural, precise and unambiguous systems semantics. It is used for architecting and diagnosing portfolios of information, physical material, processes, enterprise functions, organizations, applications, technologies and equipment. It is also used for envisioning, planning and formalizing changes,

for end-to-end solution architecture modeling, for getting a 360° view on sensitive information usage, for architecture, incident, and unavailability governance.

Miscellaneous industry patterns can be naturally addressed including IoT, ecosystems, business continuity governance, cloud and information risk management.

The language is simple, practical and easily configurable, while covering a large spectrum of business transformation concerns. It enables visibility and traceability at several manageable levels of detail.

The software implementation is provided as a robust Sparx System's Enterprise Architect software extension. Sparx is the most common, yet affordable, modeling platform (more than 750 000 licenses worldwide). The scalable architecture repository provides numerous concurrent users with enterprise visibility and traceability across many dimensions.

LABNAF TRAINING CURRICULUM

Develop superior architecture, strategy, modeling, enterprise visualization and transformation skills.

Discover the Labnaf Training Catalog.

Some of these training courses are available on the on-line Udemy platform. They are highly rated and yet almost free.