HOPEX IT Business Management

User Guide

MEGA
a Bizzdesign company

HOPEX Aquila 6.2

CONTENTS

DEFINING THE STRATEGY

PROJECT PORTFOLIO MANAGEMENT

Contents

INTRODUCTION TO HOPEX IT BUSINESS MANAGEMENT

HOPEX IT Business Management is an Enterprise Architecture solution that helps enterprise architects:

- ✓ manage application portfolios
- ✓ design IT solutions aligned with business needs
- ✓ plan changes to information systems.

HOPEX IT Business Management complements the application inventory and management functions of **HOPEX IT Portfolio Management**, which it integrates by default, with strategic planning functions.

The purpose of this guide is therefore to present how to make best use of these functionalities for the successful evolution of your information system.

PRESENTATION OF HOPEX IT BUSINESS MANAGEMENT

HOPEX IT Business Management provides the methodology and the tools you need to plan your business transformation.

Positioning of the HOPEX IT Business Management solution

HOPEX IT Business Management offers a formalism of reflection on the company's value streams and business capabilities. This solution makes it possible to define a business transformation strategy divided into phases with clearly identified objectives and means. At each of these phases, standard reports are proposed to simplify analysis of the subject and assist in decision-making.

HOPEX IT Portfolio Management

The **HOPEX IT Business Management** solution includes **HOPEX IT Portfolio Management** product that offers the following possibilities:

- Aligning the application assets with business requirements;
- Reducing IS operating costs by removing applications no longer used;
- Managing technologies relating to applications;
- Identifying the business services covered by applications or application versions;
- Deciding on investments for maximum profits.

HOPEX Customer Journey

HOPEX IT Business Management includes **HOPEX Customer Journey** to represent the acquisition process of a product or a service by a specific customer. Mapping a customer journey provides an overview of customer expectations, painpoints encountered, and the resources used at each step of the journey. Last but not least, touchpoints, which are the points of interaction between the customer and the company, are used to measure and improve overall customer satisfaction.

📖 *A customer journey is used to describe and organize all service interactions between the enterprise and a persona for a given result.*

Representing a customer journey will allow you to easily identify these critical points. **HOPEX Customer Journey** is used to describe solutions for improvement and to assess them at different dates.

☛ *For more details on product, see "The customer journey" chapter in the **HOPEX Business Process Analysis** guide.*

HOPEX Business Process Analysis

HOPEX Business Process Analysis provides **HOPEX IT Business Management** with:

- The description of organizations that implement the business functions and/or the business capabilities identified in **HOPEX IT Business Management**;
- The description of organizational processes that implements the value streams identified in **HOPEX IT Business Management**.

HOPEX IT Architecture

HOPEX IT Architecture provides **HOPEX IT Business Management** with the possibilities to model the information system architecture according to a number of analysis perspectives:

- Description of application architecture offers a detailed view of information exchanges between applications, services, databases and organizational.
- Description of information system technical infrastructure enables monitoring of applications deployment on the different enterprise.
- Description of complex systems involving different types of IT and non IT resources.

HOPEX IT Business Management provides **HOPEX IT Architecture** with the possibilities to support the description, analysis and transformation projects of the IT system.

HOPEX for the ArchiMate® Framework

HOPEX for the ArchiMate® Framework module complements **HOPEX IT Business Management** by describing the environment of certain Enterprise Architecture building blocks in the ArchiMate® formalism.

CONNECTING TO HOPEX IT BUSINESS MANAGEMENT

The menus and commands available in **HOPEX IT Business Management** depend on the profile with which you are connected.

Connecting to the solution

To connect to **HOPEX IT Business Management**, see HOPEX Common Features, "HOPEX Desktop", "Accessing HOPEX (Web Front-End)".

HOPEX IT Business Management Profiles

The rights of different users on objects depend on their assigned profiles. For more information on creation of users and assignment of profiles, see the chapter "Managing Users" in the **HOPEX Power Supervisor** guide.

In **HOPEX IT Business Management**, there are default user profiles with which specific rights and accesses are associated. These profiles are:

- Enterprise architect
- EA functional administrator
- EA Contributor
- EA Viewer

Profile	Tasks
Enterprise architect	The enterprise architect manages the structure of an organization to ensure that IT systems are aligned with current business strategies and capabilities.
EA functional administrator	The EA functional administrator has rights on all objects and workflows. He/she prepares the working environment and manages reference data used in the solution.
EA Contributor	The EA contributor is responsible for validating the design of the objects assigned to him/her.
EA Viewer	The EA viewer has read-only rights on objects in the repository.

THE HOPEX IT BUSINESS MANAGEMENT DESKTOP

The menus available in **HOPEX IT Business Management** depend on the profile with which you are connected.

For a detailed description of the HOPEX interface, see PLATFORM - Common Features > HOPEX Desktop > Interface Presentation.

ITBM Home Page

The ITBM solution home page consists of the following sections.

- The header presents some information of general interest.

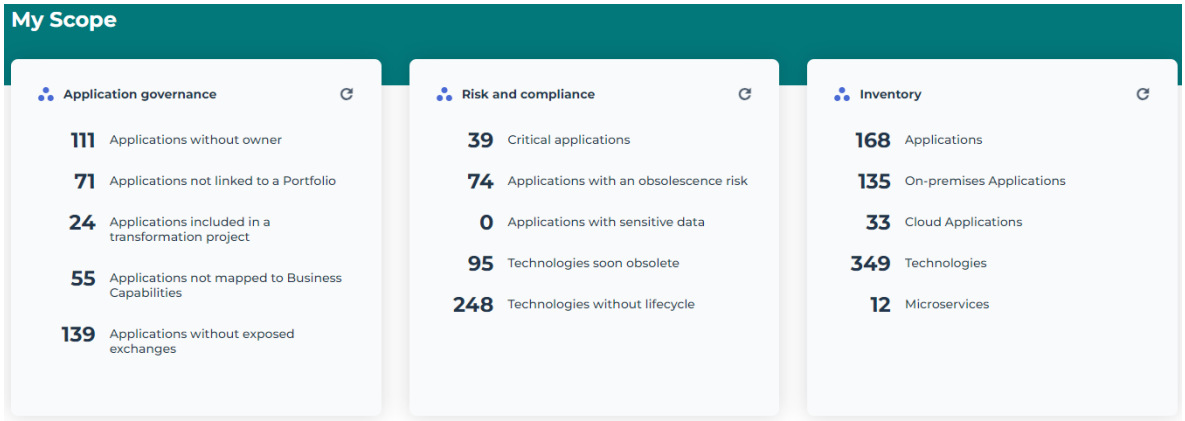
  ☛ *These can be defined in the Administrator' **Administration**> **Methodological Domain** menu.*

  - **My priorities**: indicates the main strategic themes of interest to solution users.
  - **Help**: points to user documentation and the user community.
- The **My Scope** provides useful indicators of the repository content. See Scope Indicators below.
- The **Quick Access** provides useful shortcuts:
  - **Recently viewed**: last objects and diagrams accessed by the user
  - **Favorites**: user favorites and shared favorites
  - **Actions**: quick access to the creation of architecture elements.
- **My favorite report**: displays the user-defined or administrator-predefined report, which can be used as an entry point into the repository.

Scope Indicators

The **My Scope** section provides useful indicators on application assets. Clicking the indicator takes you to all the corresponding objects. There are three groups of indicators:

- Application governance
- Risk and compliance
- Inventory



Application governance

This tile lists the following objects:

- Applications without owners: displays a list of applications to which you can assign managers.
  - ☛ *See also Designate People Responsible for Applications.*
- Applications lot linked to a portfolio: displays a list of applications to which you can link portfolios.
- Applications without exposed exchanges: displays applications that neither receive nor send flows.
  - ☛ *See Specifying Data Exchanged With Other Applications.*
- Applications included in a transformation project: these are the applications that are part of the deliverables of a transformation project.
  - ☛ *See Defining the Business Case of a Project.*
- Applications not mapped to business capabilities: displays a list of applications to which you can link business capabilities.
  - ☛ *See Defining Application Functional Scope.*

Risk and compliance

This tile lists the following objects:

- Critical applications: all applications that cover a strategic business capability, in other words, whose **Business Value** is "Significant".
  - ☛ *This is the business value defined during the last business capability assessment. For more details on assessing a business*

capability, see Using Assessment for Business Capabilities and their Implementation.

- Applications with an obsolescence risk: applications whose risk of obsolescence is between "Medium" and "Very high".

  ☛ *The risk of application obsolescence corresponds to the highest risk of the technologies linked to it. See the obsolescence risk in the Overview of a technology.*

- Applications with sensitive data: applications linked to data stores containing data (classes, MD entities, data views) or Concepts in the "Sensitive data" category.

  ☛ *See also: Defining the Data Used by an Application.*

- Technologies soon obsolete
- Technologies without lifecycle

Inventory

The **Inventory** tile displays the number of following objects:

- Applications
- On-premises Applications

  ☛ *This is the type of application installation. See Application identification> Cloud Computing.*

- Cloud Applications

  ☛ *This is the type of application installation. See Application identification> Cloud Computing.*

- Technologies
- Microservices

Enterprise Architect Desktop

The **HOPEX IT Business Management** navigation menus are:

Business function

The **Business** menu is dedicated to strategic transformation.

See Introduction to strategic transformation.

Applications

The **Applications** menu shows all the applications in the repository, as well as the application portfolios.

See Drawing up an Application Inventory.

Technologies

The **Technologies** menu lets you manage application-related technologies.

See Drawing up a Technology Inventory.

Data

The **Data** menu allows you to make an inventory of the conceptual and logical data exchanged within the application assets.

See Managing the Data Used in the Application Assets.

Tools

The **Tools** menu gives access to the following submenus:

- **SMART Analysis** to analyze the business value of portfolio applications and their migration to the Cloud.

  ☛ *See SMART Analyses.*

- **IT-Pedia** to import and standardize technologies in HOPEX.

  ☛ *See Importing Technologies from IT-Pedia.*

- **AI-Driven APM**, to distinguish technologies from business applications.

  ☛ *See Distinguishing Applications from Technologies.*

- **Assessment** and data call.

  ☛ *See Collecting Data for a Set of Applications.*

Reports

The **Reports** menu provides a search tool for all report templates and saved reports.

☛ *For more details on reports, see PLATFORM - Common Features > Documentation > Generating Documentation > Generating Reports.*

☛ *For more information on **HOPEX IT Business Management** reports, see Portfolio Analysis Reports and List of Analysis Reports Available on Applications and Application Systems.*

Projects

The **Projects** menu is dedicated to transformation project management.

See Introduction to Project Portfolio Management.

Inventories

The **Inventories** menu gives access to the following subjects, divided into several themes.

- **Business Architecture theme, giving access to the following elements:**
  - **business architecture environment**

    📖 *A business architecture environment represents the relationships of a business functional area with its partners.*

  - **Business Functions**

    📖 *A business function is a conceptual unit of the division of responsibilities in an enterprise. It is used to structure the management of information processing, energy, and equipment produced or used.*

Business functions define the skills and the functionalities necessary to the enterprise to fulfill its mission.

- **Business Partners**

  A business partner designates a third-party who is in relation with the enterprise within the framework of a given business architecture environment. Examples: private sector client, regulatory organization, supplier.

- **Capabilities** theme, giving access to the following elements:
  - **Functionalities**
  - **Technology Capabilities**
  - **Hardware capabilities**

    For more information on technology and hardware capabilities, see Describing a Technology Capability Map with HOPEX IT Architecture.

- **Software** theme, giving access to the following elements:
  - **IT Services**

    An IT service is a software component of an application, that can't be deployed alone and that realizes a sub-set of the functionalities of this application either for end users of this application or inside the application (or another application). This includes batch programs.

    For more details on applications services, see Describing an IT Service with HOPEX IT Architecture.

  - **Microservices**

    A microservice is a software component that can be deployed autonomously, but which does not directly provide an end user service. It can interact with other application services, applications or application systems. This is a deployable software component that uses software technologies. For example: an authentication service, a PDF file printing service.

    For more details on microservices, see Describing a microservice with HOPEX IT Architecture.

  - **System process**

    A system process is the executable representation of a process. the events of the workflow, the tasks to be carried out during the processing, the algorithmic elements used to specify the way in which

the tasks follow each other, the information flows exchanged with the participants.

☛ *For more details on system processes, see Describing System Processes.*

- **Application Hierarchy**, to view applications associated with the following object types: business line, process category, business capability, etc.
- **Logical software architecture**, to describe the elements contained in the information system logical architecture.

☛ *For more details on logical architecture, see Describing Logical Application Architecture.*

- **Technologies** theme, giving access to the following elements:
  - **Technologies Hierarchy**, to view technologies associated with the following object types: technology capability, technology type, vendor, etc.
  - **Technology Stacks**, which are groups of technologies.

☛ *See Defining a Technology Stack.*

- **Installations** theme, to describe application deployment elements.

A facility is a model of site of interest for the enterprise. Examples: Data Center, Factory or Outlet

☛ *For more details on facilities, see Describing a Facility.*

- **Services Catalogs** theme, giving access to the following elements:
  - **Cloud services**

☛ *See Using Cloud Services.*

  - **Technical Services**, to list the technical services covered by applications.
  - Business Services, to list the business services covered by applications.
  - **Hardware Service Catalogs**

☛ *For more details on service catalogs, see the"Using Service Catalogs" chapter from the **HOPEX IT Architecture** guide.*

- **Infrastructure** theme, giving access to the following themes:
  - **IT Infrastructure**
  - **Resource Architecture**
  - **Resource Configuration**

Governance

In the **Governance** menu you can define the regulations to which application architecture objects are subject.

☛ *In the properties of an application, the **Governance** page defines the regulations to which application is subject. By default, this page is hidden, you can display it using the **Show/Hide** button of the application properties.*

Environment

The **Environment** menu gives access to the following submenus:

- **Containers**, to access the features of library and environment management.

  ☛ *For more details on **Containers** and **Organization**, see Preparing the Work Environment HOPEX IT Business Management.*

- **Organization**, to access the main objects processed with the **HOPEX IT Business Management** solution.
  - **Business lines**

    A business line is a high level classification of main enterprise activities. It corresponds for example to major product segments or to distribution channels. It enables classification of enterprise processes, organizational units or applications that serve a specific product and/or specific market.

  - **Process categories**

    A process category defines a group of processes. It is linked to a Process Map or higher level Process Category. It regroups several processes and/or other categorized elements (e.g. Value Streams, Applications). It serves as an intermediate categorization level in the process hierarchy, so as to provide a guided and progressive access to finer grained processes.

  - **Processes**

    A process is a set of operations performed by org-units within a company or organization, to produce a result. It is depicted as a sequence of operations, controlled by events and conditions. In the BPMN notation, the process represents a sub-process from the organizational point of view.

  - **Sites**

    A site is a geographical location of an enterprise. Examples: Boston subsidiary, Seattle plant, and more generally the headquarters, subsidiaries, plants, warehouses, etc.

  - **Org-Units**

    An org-unit represents a person or a group of persons that intervenes in the enterprise business processes or information system. An org-unit can be internal or external to the enterprise. An internal org-unit is an organizational element of enterprise structure such as a management, department, or job function. It is defined at a level depending on the degree of detail to be provided on the organization (see org-unit type). Example: financial management, sales management, marketing department, account manager. An external

org-unit is an external entity that exchanges flows with the enterprise. Example: customer, supplier, government office.

☛ *For more details on the use of **Org-units**, see Defining Enterprise Org-Units.*

- **Report DataSets**

  📖 *A Report DataSet is a set of data extracted from the HOPEX repository and used as a data source in reports.*

  ☛ *For more information, see Platform - Common Features > Documentation > Generating Documentation > Managing Report DataSets.*

- **All Sketches**, to access all the skectches of your repository.

  📖 *A sketching diagram is a drawing that enables you to exchange with your coworkers without an issue of methodology or formalism.*

  ☛ *For more details on the use of sketches with **HOPEX IT Architecture**, see Creating a Sketching diagram with HOPEX IT Architecture.*

- **Tags**

  📖 *A tag is a classifying description used to characterize objects.*

  ☛ *For more details on the use of tags, see Platform - Common Features > Collaboration Tools > Communicating in HOPEX.*

PREPARING THE WORK ENVIRONMENT HOPEX IT BUSINESS MANAGEMENT

Inventory and evaluation of the application assets are based on description of business elements - in order to map business requirements with the application architectures that serve as their support - as well as organizational elements such as org-units and deployment sites.

The following points indicate how to create elements that constitute your working environment. This step is executed by the Functional Administrator.

Defining Enterprise Org-Units

HOPEX IT Business Management is used to describe the *org-units* of your enterprise.

> *An org-unit represents a person or a group of persons that intervenes in the enterprise business processes or information system. An org-unit can be internal or external to the enterprise. An internal org-unit is an organizational element of enterprise structure such as a management, department, or job function. It is defined at a level depending on the degree of detail to be provided on the organization (see org-unit type). Example: financial management, sales management, marketing department, account manager. An external org-unit is an external entity that exchanges flows with the enterprise. Example: customer, supplier, government office.*

Creating an org-unit

To create an org-unit:

1. Click the **Environment** > **Organization** navigation menu.
2. In the edit area, click the **Org-Units** folder then **New** > **Org-Unit**.
3. Enter the name of the org-unit.
4. Click **OK**.

Specifying org-unit properties

To specify the properties of an org-unit:

1. Click the org-unit to open its **Properties** window.

2. In the **Characteristics** page, in the **Org-Unit Type** field, select the org-unit.
   There are several types of org-units:
   - An "Accountable" org-unit (for example, Sales Manager).
   - A "Generic" org-unit corresponds to a role to be played during a project (for example, Writer, Requester).
   - A "Structure" org-unit (for example, Sales Management).
   - A "Function" org-unit (for example, Sales Engineer).

   ☛ *You can also specify its details (company name, e-mail address, telephone number, etc.).*

Defining Categorization Schemas

Several categorization schemas can be proposed:

- Data categories,
- Measure Schemes Categorization.

Data categories

HOPEX IT Business Management Solution enables data classification using *data categories*.

☛ *For more information on Data Categories see the **HOPEX Data Governance** guide.*

To access the list of *data categories* from the **Administration** navigation menu:

❱ Select **Categorization Schemas** and unfold the **Data Categories**.
The list of the repository data categories appears.

To create a *data category* from the **Administration** navigation menu:

1. Select **Categorization Schemas**.
2. Select the **Data Categories** folder and click **New > Data Category**.
3. Enter the **Name** of your data category well as its **Owner** and click **OK**.
   The new data category appears in the list.

To connect a data to a **data category** :

1. Open the **Entities** property page.
2. Select the tab that corresponds to the data you want to classify.
3. Click the **Connect** button ans select the data that interests you.

Measure Schemes Categorization

The *Measurement Schemes* allow you to define measurement systems specific to the area you want to deal with.

For example: the "Retail bank" schema or the "investment bank" schema.

The *Measurement Schemes* are principally based on:

- *Flow Measures* provide a way to define parameters of the flows described in the flow scenario using les *Measurement Types*,
- The *Qualifying Values* and *Measurable Properties* are used to define performance constraints that must be complied with by the enterprise plan.

Flow Measure and Measurement Type

Flow Measures provide a way to define parameters of the that are used described in the scenario of flows.

> 🕮 *An application flow represents the use of a flow between two agents (e.g., applications) in a usage context (represented by a scenario of flows). An application flow is based on a flow, which represents the reference flow in context.*
>
> ☛ *For more information message flow scenarios, see chapter "Using a Scenario of Application Flows diagram" chapter in the* ***HOPEX IT Architecture*** *guide.*

A *Flow Measure* is characterized by *Flow Measure Type*.

A *Measurement Type* is defined by several item types:

- *Measurement types*,
- *Flow Measure types*, which are defined by a set of *Flow measures*.
- *Technical flow measure types*, which are defined by a set of *Technical flow measures*.

Measurable Properties and Set of Constraining Properties

The nature of a *Qualifying Value* is defined by a *Measurable Property*.

> 🕮 *A measurable property expresses the nature of indicators (duration, mass, cost, etc.) and defines the unit used to measure them (minutes, kilograms, euros, etc.). Measurable properties are used to define indicators, they can be elementary or composite. Elementary measurable properties are described by measurement units: kg, Liter, Gallon, Hour, Minute.*

A *Set of Constraining Properties* is a set of *Measurement Types* used to define the performance constraints that must be complied with by the building blocks making up the enterprise, at the forefront of which are the business capabilities and the exhibited business capabilities in a transformation stage.

For example: "Security" or "Performances" measurement types

A *Set of Constraining Properties* is defined by different component types:

- *Sets of Constraining Properties*,
- *Measurable Properties*,
- *Flow Measure types*, which are defined by a set of *Flow measures*.
- *Technical flow measure types*, which are defined by a set of *Technical flow measures*.

> ☛ *For more details on Sets of Constraining Properties, see Using performance indicators.*

Defining the Process Categories

APQC proposes standard repositories of process categories specific to each major activity sector.

> 🕮 *A process category defines a group of processes. It is linked to a Process Map or higher level Process Category. It regroups several processes and/or other categorized elements (e.g. Value Streams, Applications). It serves as an intermediate categorization level in the process hierarchy, so as to provide a guided and progressive access to finer grained processes.*

A set of standard process categories repositories from APQC is supplied with **HOPEX IT Business Management**.

If you want to use APQC process categories for the different activity sectors, you can also import the corresponding libraries.

To import the APQC libraries, see the chapter "Prerequisites to using APQC libraries" of the **HOPEX Business Process Analysis** guide.

To access process categories of your enterprise:

1. Click the **Environment > Organization** navigation menu.
2. Expand the **Process Categories** folder.

USING ARCHIMATE DIAGRAMS IN AN ENTERPRISE ARCHITECTURE SOLUTION

HOPEX for the ArchiMate® Frameworkproduct provides facilities to use the set of concepts defined by the Open Group for ArchiMate® 3.1. ArchiMate® concepts are mapped with **HOPEX** Enterprise Architecture building blocks so as to manage compatibility and continuity with other models.

> ☛ *For more details on **HOPEX for the ArchiMate® Framework** implementation, see The HOPEX MetaModel for ArchiMate.*

Depending on the licenses you have, you can use the ArchiMate® formalism to build sketchs that represent the models of your enterprise architectures. These sketches can then be used by associating their elements with objects in your repository.

Note that the ArchiMate® diagrams thus constructed are linked to models and views in accordance with ArchiMate® standards.

> ☛ *For more details on the relationship between the elements of ArchiMate diagrams and the elements of used in **HOPEX** solution, see Synchronizing an ArchiMate model Elements.*

Prerequisites to use of ArchiMate diagrams

ArchiMate Diagrams can be accessed from an Enterprise Architecture Building Block if you are authorized to:

- Use an Enterprise Architecture such as: **HOPEX IT Architecture**, or **HOPEX IT Portfolio Management** or **HOPEX IT Business Management**.
- **HOPEX for the ArchiMate® Framework** module access.

To use **HOPEX for the ArchiMate® Framework**, you must import the **ArchiMate** module in your environment and the **PPM** module in each **HOPEX** repository of the environment.

To import a module in **HOPEX**, see **Modules > Importing a Module into HOPEX** documentation.

> **You must import the ArchiMate module only once even if you have several repositories.**

Using ArchiMate Diagrams in an Enterprise Architecture solution

To simplify use of ArchiMate® formalism in an **HOPEX** Enterprise Architecture solution, the following facilities are offered to you when creating an ArchiMate diagram from an EA Buiding Block:

- Modeling an object in the ArchiMate® formalism, see Creating an ArchiMate Diagram from an EA Building Block.
- Management of the ArchiMate® model associated with the described object, see Management of the ArchiMate model in an Enterprise Architecture solution.
- Management of the ArchiMate® view associated with the described object, see Managing of the ArchiMate views in an Enterprise Architecture solution.
- For more details on the relationship setting of an ArchiMate diagram items with the repository building blocks, see Synchronizing an ArchiMate Diagram Elements.

The Architecture Building Blocks (EA building blocks) from which you can create an ArchiMate diagram are:

- Enterprise,
- Processes
- Application System
- Application
- Microservice,
- Software Installation,
- IT infrastructure,
- Facility,
- Project.

Creating an ArchiMate Diagram from an EA Building Block

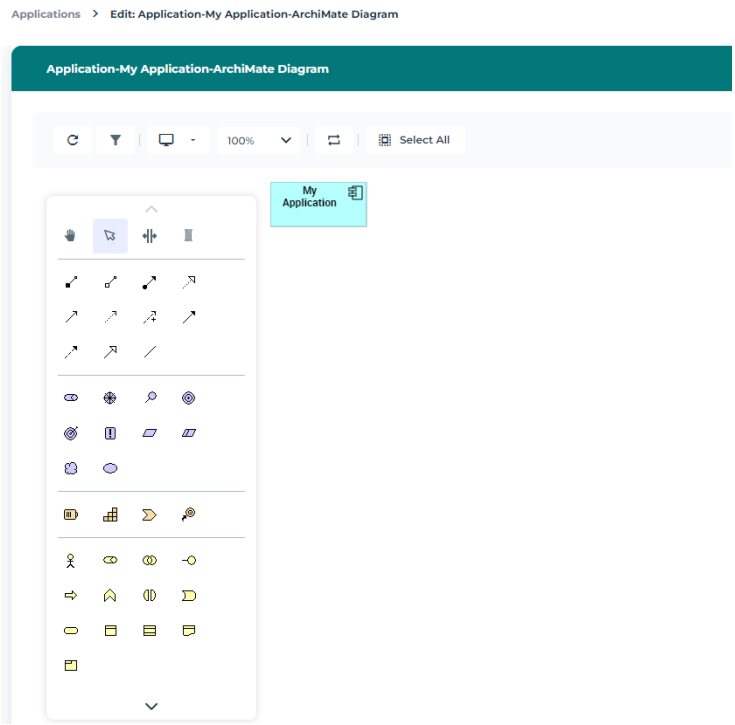
With ArchiMate® framework, a diagram is created in the context of a Model and a View. When an ArchiMate diagram is created from an EA building block, the following actions are done:

- If no model has been defined for the user, an ArchiMate Model is automatically created. For more details, see Management of the ArchiMate model in an Enterprise Architecture solution,
- An ArchiMate® View is automatically created and connected to the described object. For more details, see Managing of the ArchiMate views in an Enterprise Architecture solution.
- If the type of the described object correspond to an ArchiMate type, an ArchiMate® element is automatically created with the same type. The new ArchiMate® element is associated to the described object. For more details, see Synchronizing an ArchiMate Diagram Elements.

For example, to create an *ArchiMate Diagram* from an application:

1. From the **Applications** navigation menu, select the application of interest to you and click **Create a diagram**.

2. In the selection window, click **ArchiMate Diagram**.
The diagram opens in the edit area. The ArchiMate component associated to the application is created and inserted in the diagram.



☛ *The created ArchiMate component is connected to the ArchiMate Model, see Management of the ArchiMate model in an Enterprise Architecture solution.*

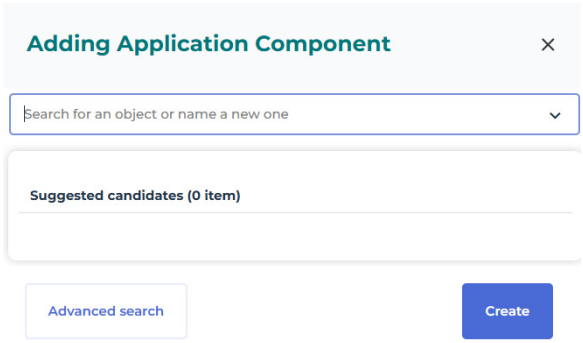
☛ *The created ArchiMate diagram is connected to the ArchiMate View, see Managing of the ArchiMate views in an Enterprise Architecture solution.*

Creating an Object in the ArchiMate diagram of an EA Building Block

To create an **Application component**, for example:

1. In the diagram insert toolbar, click the **Application component** button.
2. Click in the diagram.
The adding window opens.

3. Enter the name of the new element.
   A message confirms that no objects match this name.



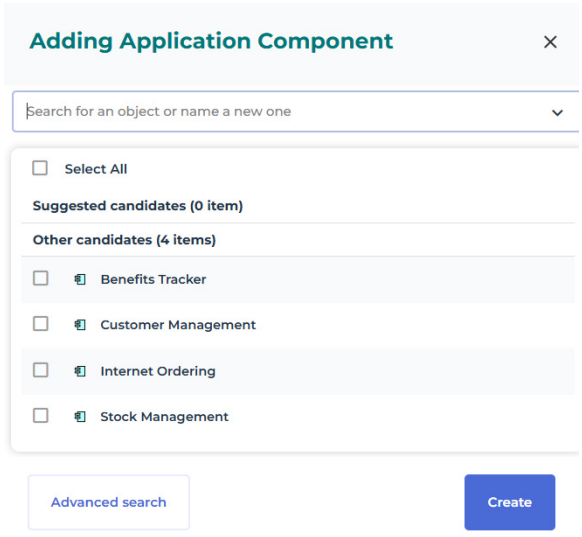
4. Click **Create**.
   The Application component appears in the diagram with the specified name.

Adding an existing object in the ArchiMate diagram of an EA Building Block

To add an existing object to an ArchiMate diagram, you can drag and drop the object from a hierarchical view or from the insert toolbar of the diagram.

To add an **Application component**, for example, using the insert toolbar of an ArchiMate diagram:

1. In the diagram insert toolbar, click the **Application component** button.
2. Click in the diagram.
   The adding window opens.
3. In the object name box, click the down arrow.
   The list of the model **Application components** is displayed.



4. Enter the name of the element you wish to create.
   The application component appears in the diagram with the specified name.

   ☛ *You can select several components. Each one will be added to the diagram.*

Creating a relationship in an ArchiMate Diagram

In an ArchiMate diagram a link corresponds to an ArchiMate@ Relationship.

A Relationship can be created with the **Link** button of the the diagram insert toolbar. When you select the link button, a dialog box opens to display the available relationship types.

☛ *For more information on ArchiMate@ Relationship types, see ArchiMate Relationships.*

ArchiMate element properties in an EA solution

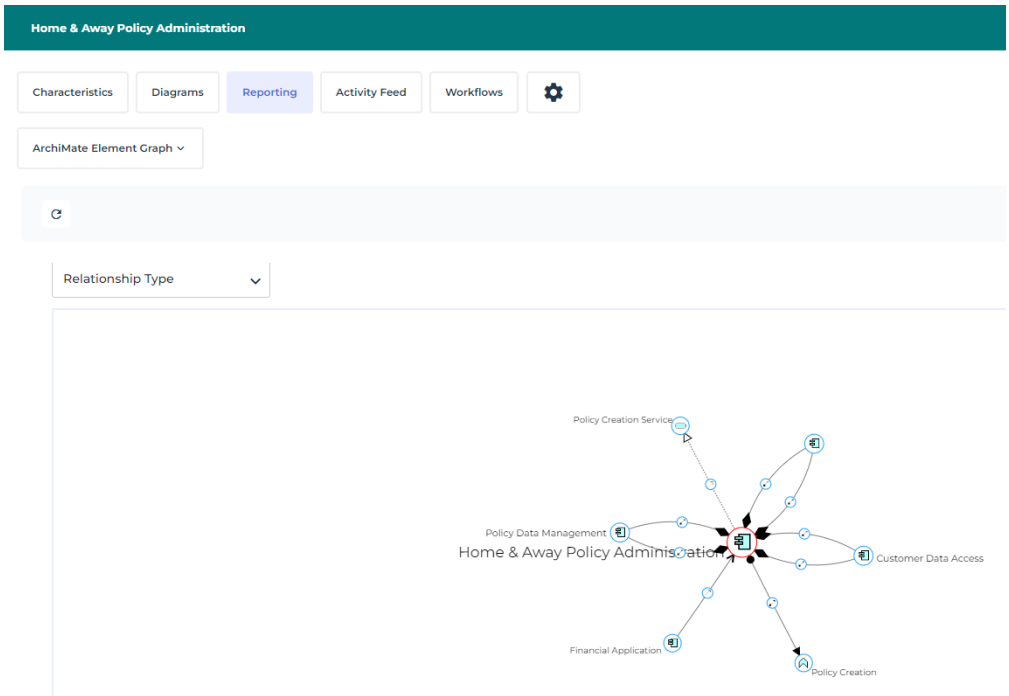
The **Characteristics** properties of an ArchiMate element provides access to several sections.

- The **Identification** section provides access to the following information:
  - the **Name**
  - its **Owner**, by default, the Model associated to the current diagram.
  - The **EA building block** is the repository building block connected to the ArchiMate element.
  - the text of its **Description**.

    ☛ *For more details on links between the repository building blocks and the ArchiMate elements, see Synchronizing an ArchiMate Diagram Elements.*
- The **ArchiMate Views** section provides the list of views describing the object.

The **Diagram** properties of an ArchiMate element provides access to the diagrams containing the element and can be used to create a new one.

The **Reporting** properties of an ArchiMate element provides access to the ArchiMate Element Graph representing the relationships between the current element and the model elements.



Management of the ArchiMate model in an Enterprise Architecture solution

The ArchiMate model is the ArchiMate elements root; a model provides access to the folder describing views anf elements.

☛ *For more details, see Using HOPEX for the ArchiMate Framework Folders.*

Accessing ArchiMate Models list in an Enterprise Architecture solution

To access the list of ArchiMate models:

- From the **Environment** navigation menu, select **ArchiMate Models**. The list of models is displayed as an object tree.

The functionalities proposed from the navigation menu **Environment** > **ArchiMate Models** are the functionalities proposed in the **HOPEX** product.

> ☛ *For more details on how to use **HOPEX for the ArchiMate® Framework** solution, see Starting with HOPEX for the ArchiMate Framework.*

ArchiMate Models properties

The **Characteristics** properties of an ArchiMate model provides access to several sections.

- The **Identification** section provides access to the following information:
  - the **Name**
  - the **Owner**. by default the current library.
  - the text of its **Description**.
- the **Persons** sections provides the list of persons (System) using this model as the default one. See Defining the default ArchiMate Model for a user.
- The **EA Elements** section providing the list of EA Elements owned by the model. See The Characteristics properties of ArchiMate® EA Elements enable the mapping of shared inventory objects..
- The **Standalone Elements** section providing the list of standalone Element owned by the model. See The Characteristics properties of ArchiMate® EA Elements enable the mapping of shared inventory objects..
- The **Views** section providing the list of Views owned by the model. See Managing of the ArchiMate views in an Enterprise Architecture solution.
- The **Sub-Folders** section providing the list of Sub-Folders owned by the model. See Managing of the ArchiMate views in an Enterprise Architecture solution.

Defining the default ArchiMate Model for a user

When an ArchiMate diagram is created from an EA building block, an ArchiMate model is automatically created if no default ArchiMate model is defined for the user.

To assign a default ArchiMate model to a user:

1. From the **Environment** navigation menu, select **ArchiMate Models**. The list of models appears.
2. Open the **Characteristics** properties of the model that interests you and expand the **Persons** section.
3. Connect the user to the model.

> ☛ *If a default model is already connected to a user, the current model will replace the previous one.*

Managing of the ArchiMate views in an Enterprise Architecture solution

In accordance with ArchiMate® standards:

- A ***Viewpoint*** specifies the list of concepts (elements and relationships) mandatory in a specific ***View*** type.
- A new ***View*** is created depending on a specific ***Viewpoint*** in an ArchiMate® model context.

> ☛ *For more details on the types of the elements associated to a Viewpoint, see The properties of a viewpoint.*

When an ArchiMate diagram is created from an EA building block, the corresponding view is automatically created from "Layered" viewpoint.

> ☛ *To access the list of views associated the an EA Building block: open the **ArchiMate Views** properties of the object.*

Accessing ArchiMate Views list

To access the list of ***Views*** associated to an ArchiMate model:

1. From the **Environment** navigation menu, select **ArchiMate Models**.
2. Expand the folder of the model that interests you.
3. Expand the **Views** folder.
   The list of ***Views*** appears.

ArchiMate Views properties

In the **Characteristics** properties of an ArchiMate ***View***, the **Identification** section provides access to the following information:

- the **Name**
- its **Owner**, by default the ArchiMate model associated to the View.
- the text of its **Description**.
- the **Viewpoint**,
- its **Status**.

Synchronizing an ArchiMate Diagram Elements

ArchiMate® concepts are mapped with **HOPEX** EA building blocks enabling compatibility and continuity with other models. Thus, an ArchiMate Business Process can reference a Process which can be described in a BPMN diagram, so that the user can navigate from an overview ArchiMate diagram putting a process into its EA context, to a more detailed BPMN description.

> ☛ *For more details on **HOPEX for the ArchiMate® Framework** implementation, see The HOPEX MetaModel for ArchiMate.*

The synchronization consists in mapping an ArchiMate element created in the context of an ArchiMate diagram with an EA building block.

Two possibilities are provided to synchronize an ArchiMate element:

- In a unitary manner by opening the **Characteristics** properties of an ArchiMate Element, see Synchronizing an ArchiMate model Elements.
- Generally using the **Synchronize** button of an ArchiMate diagram, see Synchronizing Elements from an ArchiMate diagram using the synchronization wizard.

Synchronizing an ArchiMate model Elements

> ☛ *For more details on ArchiMate® elements mapping with **HOPEX** MetaClasses, see Concepts mapping.*

The **HOPEX for the ArchiMate® Framework** solution provides two types of element:

- The ***ArchiMate® EA Elements*** which can be associated to a repository object.

  > ☛ *For more details, see Synchronizing an ArchiMate Diagram Elements.*

- The ***Flow*** type ***Relationships*** whose sender and receiver are synchronized with the ITPM "flows" between applications.

  > ☛ *For more details, see ArchiMate Relationships.*

Mapping an ArchiMate® EA Element to an HOPEX object in properties

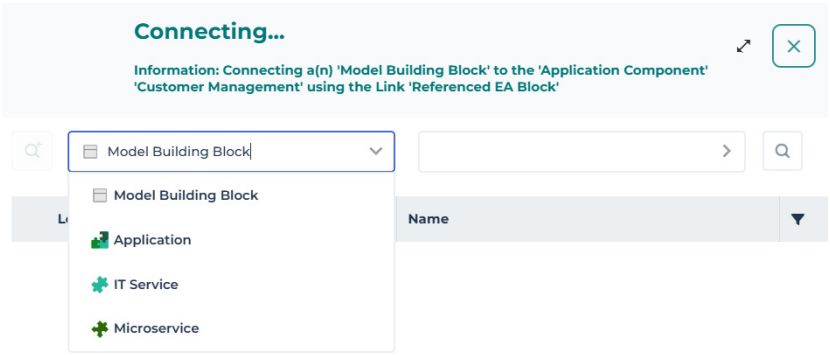
> ☛ *For more details on **HOPEX for the ArchiMate® Framework** EA Elements, see Synchronizing an ArchiMate Diagram Elements.*

To synchronize an **Application component**, for example:

1. Open the **Characteristic** property page the Application Component you are interested in.
2. In the **Identification** section, from the **EA building block** field, click the right arrow and click the **Connect** button.

   > ☛ *The name of the field depends on the type of the selected ArchiMate Element.*

   A connection window opens.



3. Select the type of the EA building bock you want to connect to the Application component.

4. Select the repository instance you want to connect to the Application component.

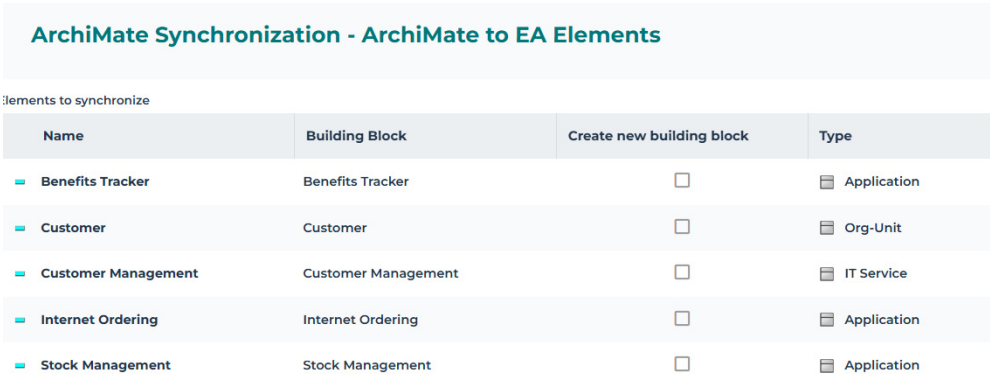
Synchronizing Elements from an ArchiMate diagram using the synchronization wizard

From an ArchiMate diagram, you can synchronize all the elements of the diagram which have a possible mapping to **HOPEX** objects, or create new corresponding HOPEX objects of the relevant type.

This enables to reference existing Building Blocks in HOPEX inventories used by other solutions (e.g., Processes from HOPEX Business Process Analysis or Applications form HOPEX IT Business Management).

To synchronize a **Device**, for example:

1. Open the diagram in edit mode.
2. Click the **Synchronize** button.
   A window opens and shows a table of all the elements of the diagrame. The **Building Block** column allows the synchronization of the diagram elements.



3. Click the **Building Block** box of the element that interests you.

   ☛ *In a case of a "multiple" mapping, you may choose the type of the associated repository object. For more details, see Mapping an ArchiMate® EA Element to an HOPEX object in properties.*

   - If the item is already mapped or synchronized, "Mapping already exists" or "Element synchronized" message appears in the **Synchronization status** cell.
   - If no item of the default type with the element name is found, then "No match" is displayed in the **Synchronization status** cell.
   - If one item of the default type with the element name is found, then then "one match" is displayed in the **Synchronization status** cell.
   - If many items are found, click on the **Building Block** cell to select the appropriate one (the context is given by the owner / long name).
   - When you want to create a new building block of a different type than the default one, check the **Create new building block** box and select the desired type in the **Type** cell.
4. Click **Next**.

5. The list of ***Flow*** type ***Relationships*** with synchronized sender and receiver is displayed.
6. An EA flow is created between the repository EA objects if the box in the **ArchiMate Relationships Synchronization** column is checked.
7. Click **OK**.

Once ***ArchiMate® EA Elements*** are mapped to **HOPEX** Building Blocks, the navigation to these objects is possible via the ***ArchiMate® EA Elements*** properties.

Reaching these objects describing diagrams can be achieved:

- through the **Diagrams** properties of the referenced objects,
- Using **Diagrams containing objects** feature from:
  - the ***ArchiMate® EA Element* Diagrams** properties
  - using the object pie menu in a diagram preview.

About This Guide

This guide explains how to make best use of **HOPEX IT Business Management** to ensure efficient management of your Business Architecture projects.

Guide Structure

The guide **HOPEX IT Business Management** is divided into two parts consisting of the following chapters:

- concerning the strategy part
  - Business capability maps and value streams; explains how **HOPEX IT Business Management** helps you in analyzing the business capabilities of your enterprise to check their suitability with your business functions and your skills.
  - Identifying Strategic Transformation Elements; describes how the list of drivers specified to assess them in order to refine the list of transformation strategic goals of the enterprise.
  - Drawing the Transformation Roadmap; explains how to identify and plan the transformation stages necessary to acquire the business capabilities used to reach the enterprise goals.
- Concerning the portfolio management
  - Drawing up an Application Inventory: presents functionalities proposed by **HOPEX IT Portfolio Management** to identify and characterize application assets.
  - Evaluating Application Assets: introduces the portfolio concept available in **HOPEX IT Portfolio Management** and explains how to evaluate applications during the inventory phase. This chapter also describes the project concept on which the transformation phase of the application assets relies.

Additional Resources

This guide is supplemented by:

- the **HOPEX Common Features** guide describes the Web interface and tools specific to **HOPEX** solutions.

  ☛ *It can be useful to consult this guide for a general presentation of the interface.*
- The **HOPEX Business Process Analysis** guide, which describes the functionalities proposed to manage processes;
- The **HOPEX IT Architecture** guide, which describes the functionalities proposed IT systems;
- The **HOPEX Project Portfolio Management** guide describes the functionalities proposed to manage your portfolio projects;
- The **HOPEX Digital Transformation Desktop** guide, which describes how to use the Enterprise Architecture **HOPEX** solutions in a dedicated working environment;
- The **HOPEX Assessment** guide, which describes functions proposed by **HOPEX** to use and customize assessment;
- the **HOPEX Power Supervisor** administration guide.

Conventions used in the guide

☛ *Remark on the preceding points.*

📖 *Definition of terms used.*

☺ *A tip that may simplify things.*

Compatibility with previous versions.

Things you must not do.

Very important remark to avoid errors during an operation.

Commands are presented as seen here: **File > Open**.

Names of products and technical modules are presented in bold as seen here: **HOPEX**.

Defining the Strategy

INTRODUCTION TO STRATEGIC TRANSFORMATION

HOPEX IT Business Managementprovides the tools to transform IT architecture, based on the analysis of business capabilities.

Business Architecture helps managers define the operating architecture to remain in compliance with their Business Model and adapt to changes in their economic and regulatory environment. **HOPEX IT Business Management** is thus a key tool for enterprise transformation.

The method offered by **HOPEX IT Business Management** is used to take into account the enterprise strategy: from driver analysis to the definition of objectives and action resources. **HOPEX IT Business Management** also constitutes an analysis solution for enterprise business capabilities to ensure the services it plans to provide.

Last but not least, **HOPEX IT Business Management** is combined with other **HOPEX** solutions dedicated to the enterprise architecture used to define organizational, application or infrastructure building blocks.

The following points are covered here:

- ✓ The HOPEX IT Business Management method
- ✓ Before starting with the strategic transformation

THE HOPEX IT BUSINESS MANAGEMENT METHOD

The method described in this guide is represented in the steps below.

Identifying Strategic Transformation Elements

This step consists in defining the enterprise transformation goals and identifying the associated means (Strategies and tactics) to be implemented. The means are specified in the enterprise transformation stages.

> ☛ *For more details about exhibited business capabilities, see Identifying Exhibited Business Capabilities.*

Value Streams and Business Capabilities description

This step consists in drawing up the elements that provide value to the enterprise (using value streams) and how the enterprise can deliver those elements (using business capabilities). For a business capability, you can identify the associated functionalities and the components that implement them.

> ☛ *For more details on this step, see Describing the Enterprise Capabilty for Creating value.*

Each transformation stage highlights *Exhibited Business Capabilities*.

> 🕮 *An exhibited business capability is exhibited by an Enterprise Stage with quantified measure (KPI) and potential geopolitical scope (Site) for a defined market segment (Business Partner).*

For an exhibited business capability, you can identify the measurable properties of interest for the capability which are used to assess business value and performance (e.g.: for a delivery capability, we are interested in the "delivery time" expressed in minutes). The components that implement the exhibited capability are thus identified and are concerned by the transformation.

> ☛ *For more details about exhibited business capabilities, see Identifying Exhibited Business Capabilities.*

Defining the enterprise architectures

This work, performed during the transformation stages, can be done using **HOPEX IT Business Management** with other Enterprise Architecture solutions. This consists of identifying and describing the solution building blocks that contribute to the exhibited business capabilities implementation. The additional solutions of the **HOPEX** platform are used to describe in more detail your models (organizational, application and technological solution building blocks).

> ☛ *For more details on solution architectures, see Describing the Enterprise Architecture.*

Consulting the transformation roadmap

Reports are provided to help you to analyze and reviewing the transformation stages of your enterprise.

☛ *For more details on the road map, see Consulting the Transformation Roadmap.*

Defining the Transformation Strategy

After having described the current state and analyzing the suitability between the business capabilities of the enterprise and value architecture elements, this step consists in drawing up the list of needs for change (or driver) identified at the various levels by the stakeholders (or interested parties), and assessing them in order to establish the list of *enterprise goals*.

📖 *A goal tends to be longer term, and defined qualitatively rather than quantitatively. It should be narrow-focused enough that goals can be defined for it.*

Defining the enterprise and its evolution in time

An *enterprise* is described by the following elements:

- a business capability map,
- value streams,
- goals and strategies of the transformation,
- *Transformation stages* which define the concrete implementation of the transformation.

📖 *A Business Transformation Stage is a kind of Enterprise Transformation Stage aiming at the alignment of the enterprise business operating model to its business strategy and corresponding exhibited business capabilities (business model).*

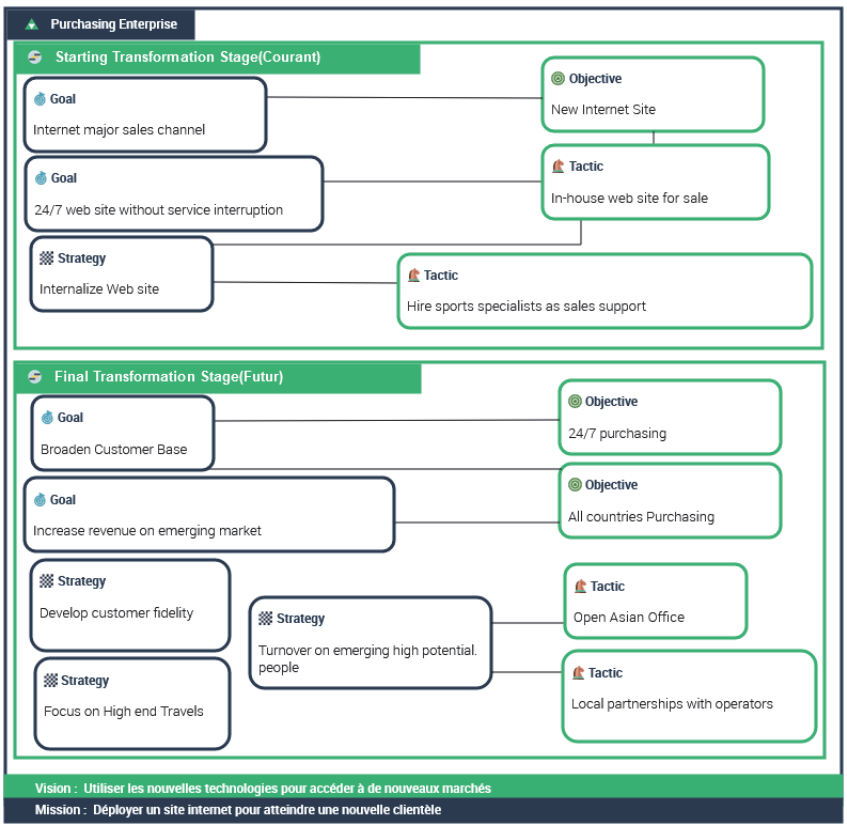
☛ *For more details, see Creating an Enterprise.*

Identifying transformation strategic elements

This step consists of identifying the strategic elements that meets the transformation drivers.

☛ *For more details, see Defining Enterprise Strategic Elements.*

An enterprise diagram is used to describe the links between the strategic elements (goals, strategies, tactics and transformation stages).



☛ *For more information on this diagram, see Building an Enterprise Diagram.*

Describing the Enterprise Capabilty for Creating value

Describing the Architecture of Business Capabilities

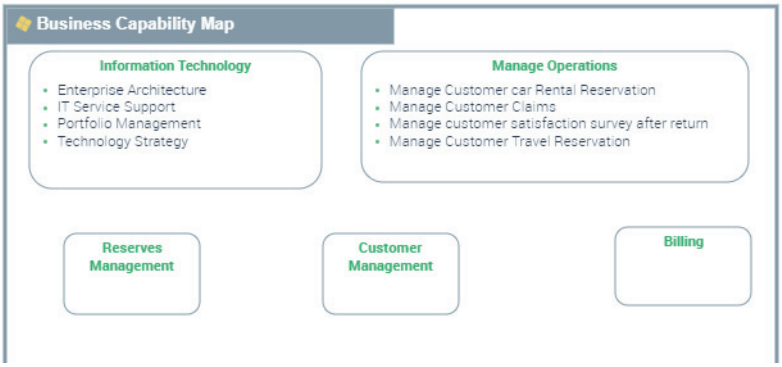
Building the business capability map

A business capability map describes what the enterprise is capable of producing for its internal needs or for meeting the needs of its clients.

📖 *A business capability map is a set of business capabilities with their dependencies which define a framework for an enterprise stage.*

📖 *A business capability represents a specific ability that an organization possesses or needs to develop to deliver a particular business outcome.*

The business capability map thus presents the business capabilities of the highest level for one of the transformation stages.



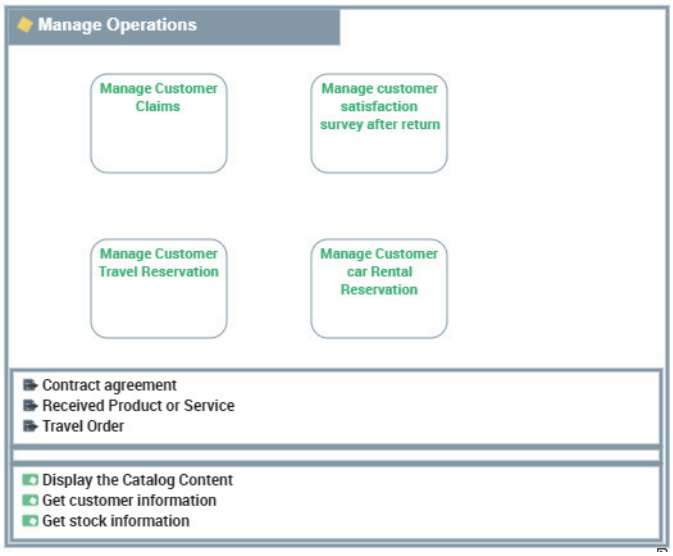
☛ *For more details on business capability map diagrams, see Creating a capability structure diagram.*

Describing the business capability breakdown

Business capabilities are then described more precisely to identify:

- a more detailed granularity capability breakdown;
- the expected effects of the capability;
- the business skills or functionalities required for each of them;
- the dependencies between capabilities (expected effect of one dependent from the result of the other).

For example, the business capability that consists of managing operations is broken down into a number of business capabilities: "Handle customer complaints", "Manage reservations".



Defining the business skills and functionalities associated with business capabilities

To be able to then check that each business capability is correctly implemented by suitable solution building block, you must define the required business skills and functionalities.

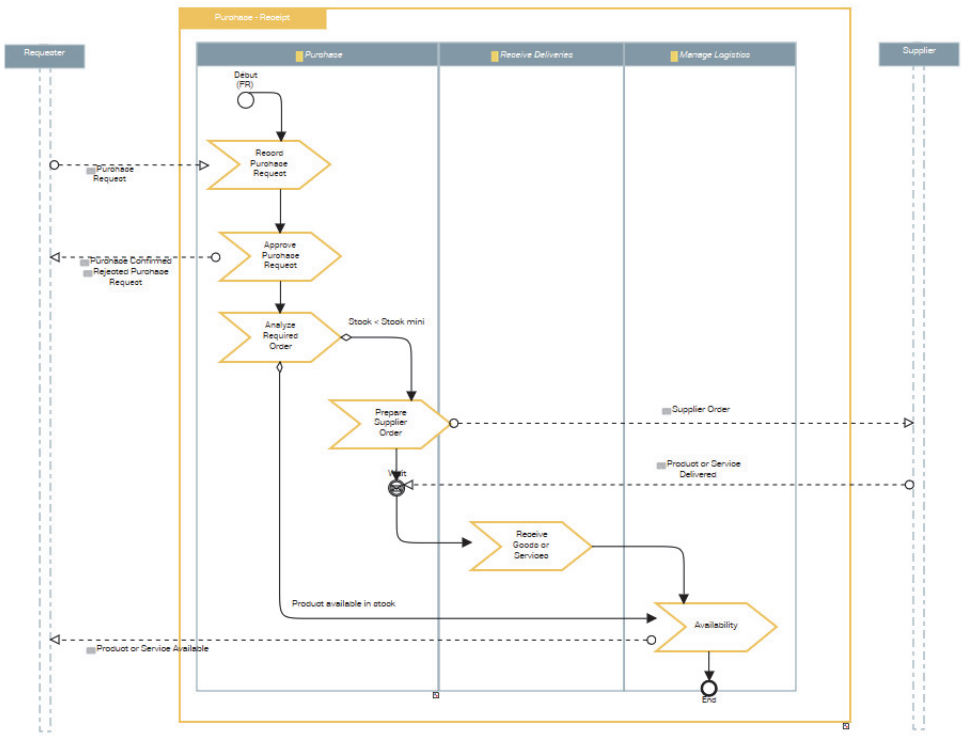
> 🕮 *A technology capability is the ability to deliver a technology service which is required by a technology artifact or an application.*
>
> ☛ *For more details on skills and the business capability functionalities, see Defining business skills and functionalities associated with capabilities.*

Describing value streams

A *value stream* is represented by a sequencing of *value creation steps* managed by the business functions of the architecture.

> 🕮 *A value stream is an end-to-end collection of Value Stages that creates an outcome for a customer, who may be the ultimate customer or an internal end-user of the value stream.*
>
> 🕮 *A value stage is a distinct, identifiable phase or step within a value stream that has a unique entrance criteria, exit criteria, and identifiable participating business function or business functional area.*

The following diagram presents an example of a value stream:



> ☛ *For more details on value streams, see Describing Value Streams.*

Describing business capability implementation by the business functions

This involves connecting the *business capability*, which corresponds to what we know how to do or what we want to do and which represents the *goal* to be achieved, to a way of achieving what is represented by a *business function* or a *business functional area* at a conceptual level, that is, upstream of organizational and technical choices.

> 🕮 *A Business functional area is a set of business functions and their associated value streams on the conjunction of two main criteria: their need in accomplishing one or more business capabilities and the common skills and functionalities required to accomplish these business capabilities.*

This business functional area will itself carry the value processes whose steps will require its business function components.

Construction of the *business capability map* on the one hand and the *business architecture environment* on the other hand is used to check that the business capabilities are implemented by the business functions.

> ☛ *For more details on the businesses associated with business capabilities, see Creating Fulfillment of a Business Capability.*

HOPEX IT Business Management provides a report that presents the result of the implementation of business capabilities by business functions.

> ☛ *For more details on the breakdown of business capabilities, see Creating Fulfillment of a Business Capability.*

Identifying Exhibited Business Capabilities

> 🕮 *An exhibited business capability is exhibited by an Enterprise Stage with quantified measure (KPI) and potential geopolitical scope (Site) for a defined market segment (Business Partner).*

From a transformation stage, it is possible to create exhibited business capabilities that can connect the transformation strategic elements to the technical or organizational elements that assure their implementation.

> ☛ *For more details on exhibited business capabilities creation, see Managing Exhibited Business Capabilities.*

The exhibited business capabilities are assessed with respect to different criteria or measurable properties.

> For example, the competitiveness of a delivery capability is measured according to the 'delivery time at target cost' measurable property.

These measurable properties give rise, for a given transformation stage, to key performance indicators.

> For example, a delivery capability can have a target of 'delivery time in less than 48 hours for a cost price less than 10% of the sales price' within the framework of a given transformation stage.

> 🕮 *A set of constraint values defines the grouping of elementary Qualifying values that should be examined together in order to appreciate the actual performance of a KPIed item. E.g.: a delivery must take place in less than 20 minutes and cost less than 5 euros.*

> ☛ *For more details, see Using performance indicators.*

Describing the Enterprise Architecture

Business capabilities are implemented by components of the enterprise architecture. Technical and functional architectures may be described using different formalisms:

- by a business function architecture environment, which contains the elements that define the enterprise model (operating model) for the current stage.
  - the definition of the ecosystem of the enterprise (interactions with partners),
  - the business function architectures,
  - the business functions.
- By the solution building block environments that depend on product licenses used, for example, with **HOPEX IT Architecture** : the environment for Logical Application Systems, the environment for Application Systems, the environment for Resource Architectures, etc.

☛ *For more details, see Describing an Enterprise Architecture.*

Describing the business architecture environment

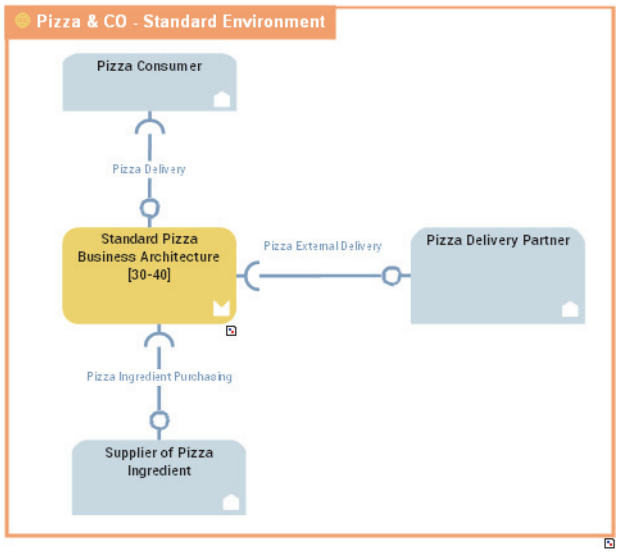
📖 *A business architecture environment represents the relationships of a business functional area with its partners.*

In this example, the business function architecture environment of company is made up of the historical business function architecture and its interactions with external partners: clients and suppliers. You can see in the diagram that delivery is outsourced to a third party deliver partner.

📖 *An application deployment architecture describes one possible deployment configuration of an application. It contains the deployment architectures to be hosted, recommends hosting architectures and identifies required communication techniques (communication protocols and port numbers) they use to communicate with each other. . An application may have several deployment architectures (E.g.: autonomous installation, horizontal or vertical deployment, etc.)*

📖 *A business partner designates a third-party who is in relation with the enterprise within the framework of a given business architecture*

environment. Examples: private sector client, regulatory organization, supplier.



Communications between the objects are represented by interactions service.

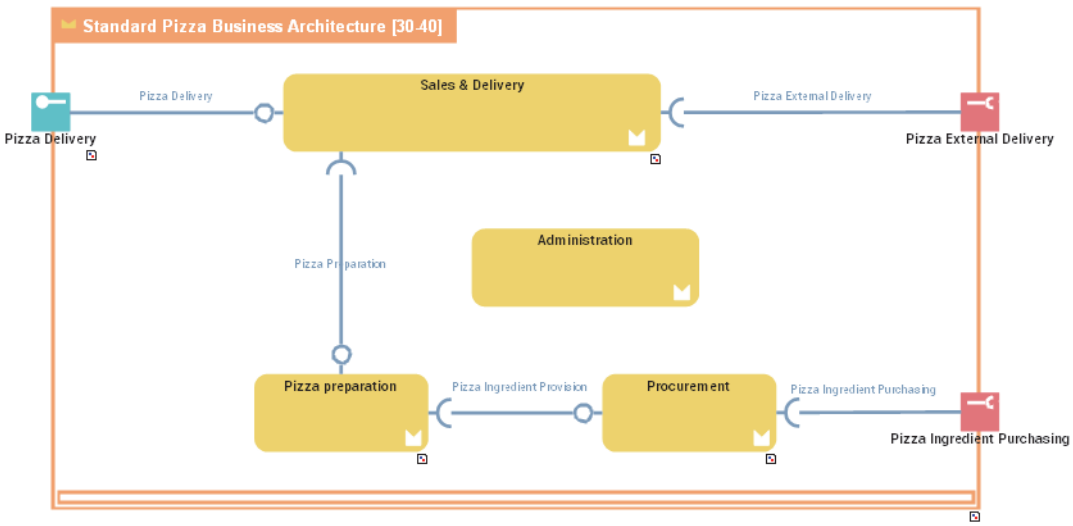
A Service Interaction represents an interaction for service purpose between entities in a specific context inside or outside a company. These entities can be enterprise org-units, applications, activities or processes, as well as external org-units. The content of this interaction is described in a service interface.

Describing a business functional area

An application deployment architecture describes one possible deployment configuration of an application. It contains the deployment architectures to be hosted, recommends hosting architectures and identifies required communication techniques (communication protocols and port numbers) they use to communicate with each other. . An

application may have several deployment architectures (E.g.: autonomous installation, horizontal or vertical deployment, etc.)

In this example, the history functional area is based on the business functional areas for selling, delivering and command.



Defining the business skills and functionalities associated with business functions

To be able to subsequently check that each business capability is implemented by a suitable business function, you must define the required business skills and functionalities, for each business function.

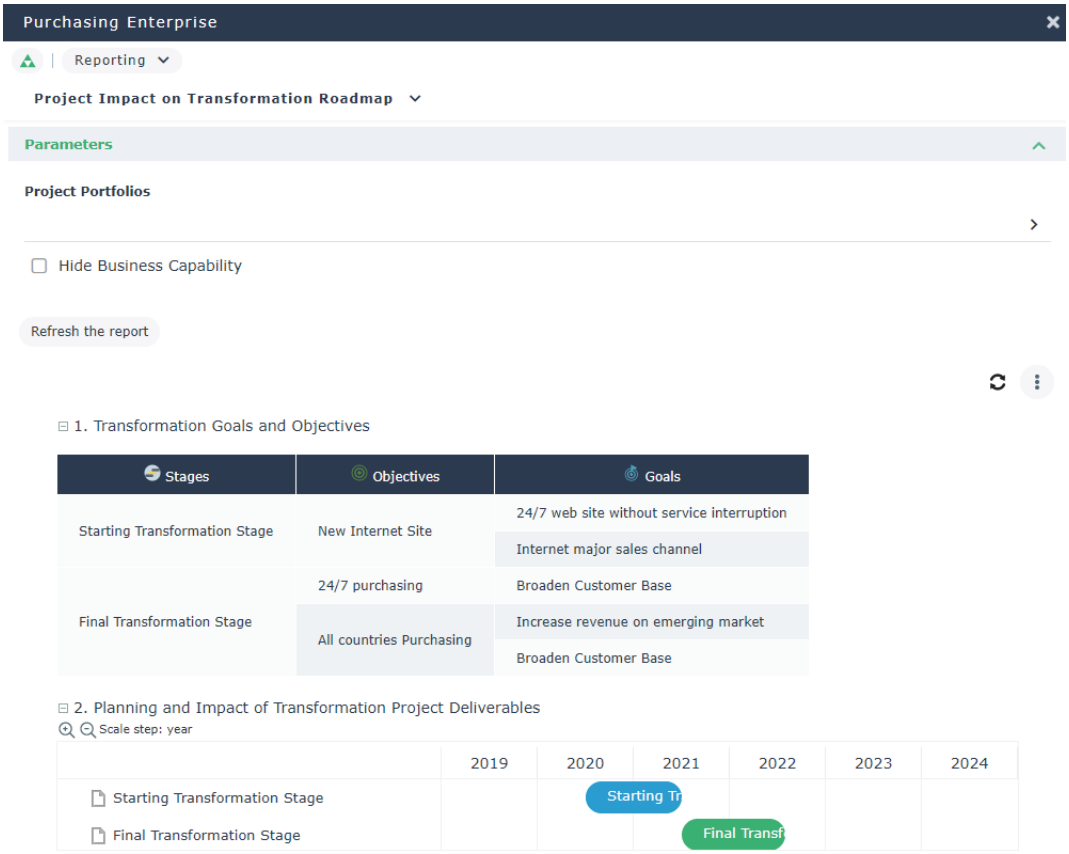
📖 *A technology capability is the ability to deliver a technology service which is required by a technology artifact or an application.*

☛ *For more details on skills and the business capability functionalities, see Defining business skills and functionalities associated with capabilities.*

Consulting the Transformation Roadmap

The transformation roadmap is presented in the form of a report that can be accessed from the Enterprise property page.

☛ *For more details on transformation plans, see Drawing the Transformation Roadmap.*



BEFORE STARTING WITH THE STRATEGIC TRANSFORMATION

Defining a Work Context

☛ *For more details on managing your work context, see the "Enterprises and Libraries" chapter in the **HOPEX Common Features** guide.*

A *library* and an *enterprise* are used to represent a unique work context.

In the context of the **HOPEX IT Business Management** solution, a *library* can hold all the elements of your project: processes and org-units, for example.

🕮 *Libraries are collections of objects used to split repository content into several independent parts. They allow creation of virtual partitions of the repository. In particular, two objects owned by different libraries can have the same name.*

An *Enterprise* is used to represent the work context of a transformation project.

🕮 *An Enterprise is a purposeful undertaking, conducted by one or more organizations, aiming at delivering goods and services, in accordance with the enterprise mission in its changing environment. During its development over time, an enterprise has to adapt to its environment and sets up transformation goals and objectives along with course of action to achieve these objectives. The design and realization of the resulting transformation stages may transcend organizational boundaries and consequently require an integrated team working under the direction of a governing body to involve stakeholders in transformation initiatives. This requires the implementation of an integrated team, under the responsibility of a governing body, to involve the stakeholders in the transformation.*

Accessing the list of libraries with HOPEX IT Business Management

To access the list of libraries from the **Environment** navigation menu:

- Select **Containers > Libraries**.
  The library tree appears.

☛ *For more details on libraries, see "Using libraries" chapter in the **HOPEX Common Features** guide .*

Using Properties Pages

HOPEX IT Business Management provides properties pages available for several solutions.

☛ *Using the facilities described in the **HOPEX Power Studio** guide, you can customizing the properties pages of your solution.*

The pages below are common to main **HOPEX IT Business Management** objects.

- the **Measurable Property** is used to access to:
  - the **Measurable Property** section which provides the list of measurable properties associated to the described object.
  - the **Set of Constraining Properties** section which provides the list of Sets of constraining properties associated to the described object.

    ☛ *For more details, see Using performance indicators.*
- The **Implementation** page provides access to the list of Enterprise Architecture solution building blocks that implement the described object.

  ☛ *For more details on implementation of business capabilities, see Describing Component Fulfillment.*
- The **Reporting** page provides access to the reports available for the described object.

Importing an Existing Breakdown of Business capabilities

HOPEX IT Business Management Use Excel data exchange wizards to export import and breakdowns of business capabilities. The Excel Template is **Business Capabilities Template.xlsx**.

☛ *For more details on Excel data exchange wizards, see the "Exchanging Data with Excel" chapter in the **HOPEX Common Features** guide.*

Structure of the import/export Excel template of HOPEX IT Business Management

The **Business Capabilities Template.xlsx** Excel template of **HOPEX IT Business Management** allows you to import a breakdown of business capacities and a breakdown of functionalities.

- At the level of business capabilities, the elements are as follows:
  - *Business Capabilities*

    A business capability represents a specific ability that an organization possesses or needs to develop to deliver a particular business outcome.
  - *Business capability maps*

    A business capability map is a set of business capabilities with their dependencies which define a framework for an enterprise stage.
  - *Business capability components*, which define the link between a business capability and the business capability map (or business capability) in which it is referenced.
  - *Business Capability fulfillments*, which define the link between a business capability and the application that implements it.
- At the level of functionalities, the elements are as follows:
  - *Functionalities*

    A technology capability is the ability to deliver a technology service which is required by a technology artifact or an application.
  - *Functionality maps*

    A technology capability map is a set of technology capabilities and their dependencies that, together, defines the scope of a hardware or software architecture.
  - *Sub-functionalities*, which define the link between a functionality and the functionality map (or the functionality) in which it is referenced.
  - *Functionality fulfillments*, which define the link between a functionality and the application that implements it.
- *Applications*, which here represent the supports for implementing business capabilities or functionalities.

  An application is a software component that can be deployed and provides users with a set of functionalities.

The information contained in the Excel template delivered with **HOPEX IT Business Management** is presented as follows:

- One page per element type: *Business capability*, *Business capability map*, *Functionality*, *Functionality map*, *Application*, ...
- For each element of *Business capability*, *Business capability map*, *Functionality*, *Functionality map* or *Application* type:
  - **Short Name** : name of the object concerned.
- For each element of *Business capability component* (or *Sub-functionality*) type:
  - **Business Capability Building Block** (or **Owner Functionality Building Block**): name of the composite object (business capability map, for example).
  - **Business Capability Used** (or **Sub-functionality**): Name of the component object.
- For each element of *Business Capability fulfillment* (or *Functionality fulfillment*) type:
  - **Fulfilled Business Capability** (or **Fulfilled Functionality**): name of the implemented business capability (or functionality).
  - **Realizer Agent** (or **Fulfilling Enterprise Articfact**): name of the application that implements the capability or the functionality.
  - **Short Name** : name of the object associated with the implementation.

Importing the breakdown of business capabilities into an enterprise

Several steps must be followed in order for the Excel import of a business capability breakdown to be performed correctly:

1. Advanced Options and Settings of Excel Wizards,
2. Specifying the current library,
3. Exporting data from your repository with HOPEX IT Business Management,
4. Exporting data from your repository with HOPEX IT Business Management,
5. Importing the new import Excel file in your repository.

> ☛ *For more details on Excel Import wizards, see the "Importing Data with Excel" chapter in the **HOPEX Common Features** guide.*

Specifying the current library

A *library* and an *enterprise* are used to represent a unique work context.

> 🕮 *Libraries are collections of objects used to split repository content into several independent parts. They allow creation of virtual partitions of the repository. In particular, two objects owned by different libraries can have the same name.*

In order for the data you import with Excel to be linked to a specific *library*, you must specify the current library.

To set the current library:

1. Click the **Environment** navigation menu then **Containers > Libraries**.
2. Expand the **Libraries** tree.

3. Right-click the library that interests you to open its pop-up menu and select **Set As Default**.
   The selected library becomes the current library.

Exporting data from your repository with HOPEX IT Business Management

If you want to export business capability maps or functionality maps that exist in another repository than your current one, for example, you can use the Excel template of **HOPEX IT Business Management**.

> ☛ *For more details on Excel Export, see the "Exporting Data with Excel" chapter in the **HOPEX Common Features** guide.*

When the Excel file is filled with the names of the objects you want to import, you must complete the necessary information for import into **HOPEX IT Business Management**.

> ☛ *For more details, see Structure of the import/export Excel template of HOPEX IT Business Management.*

IDENTIFYING STRATEGIC TRANSFORMATION ELEMENTS

This stage consists of drawing up a list of strategic elements for the enterprise's transformation.

You can access all the strategic elements of your enterprise and its transformation stages from the **Business > Strategic Planning** navigation menu. The enterprise and its transformation stages appear in the form of a tree.

The following points are covered here :

- ✓ Enterprise Strategic Elements,
- ✓ The strategic elements of a transformation phase,
- ✓ Using performance indicators.

ENTERPRISE STRATEGIC ELEMENTS

An Enterprise is a purposeful undertaking, conducted by one or more organizations, aiming at delivering goods and services, in accordance with the enterprise mission in its changing environment. During its development over time, an enterprise has to adapt to its environment and sets up transformation goals and objectives along with course of action to achieve these objectives. The design and realization of the resulting transformation stages may transcend organizational boundaries and consequently require an integrated team working under the direction of a governing body to involve stakeholders in transformation initiatives. This requires the implementation of an integrated team, under the responsibility of a governing body, to involve the stakeholders in the transformation.

The strategic elements of an enterprise can be accessed from:

- Its properties pages, see Defining Enterprise Strategic Elements,
- Its enterprise diagram, see Creating an Enterprise Diagram,
- Click the **Business > Strategic Planning** navigation menu.

Creating an Enterprise

*For more details Enterprises, see "Enterprises and Libraries" chapter in the **HOPEX Common Features** guide .*

Accessing the list of enterprises with HOPEX IT Business Management

To access the list of Enterprises:

- Click the **Business** navigation menu then **Strategic Planning**.
  The enterprise tree appears.

Creating an enterprise with HOPEX IT Business Management

To create an enterprise from the **Business** navigation menu:

1. Click **Strategic Planning**.
   The enterprise tree appears.
2. Click the **New** button.
   The new enterprise is added to the list of Enterprises.

Enterprise characteristics

The **Characteristics** properties page of an enterprise provides access to:

- its **Name**,
- its **Owner**, by default the current library.
- The **Strategic Theme** table enables to define the enterprise strategic themes.

> 🕮 *A strategic theme is used to classify the enterprise goals.*

Connecting the capability map to an enterprise

The *business capabilities* valid for the given enterprise are contained in a *business capability map*.

> 🕮 *A business capability map is a set of business capabilities with their dependencies which define a framework for an enterprise stage.*

The business capability map is used to identify the exhibited business capabilities that meet the enterprise goals for the transformation.

> ☛ *For more details on the business capability maps management, see Building the Business Capability Map.*

To connect a business capability map to an enterprise:

1. Select **Characteristics** property page of the enterprise that interests you.
2. In the **Capability Architecture** section, click the right arrow of the **Business Capability Map** field and select **Connect...**.
   A selection window opens.
3. Select the business capability that interests you and click **Connect**.
   The business capability map is associated to the enterprise and its transformation stages.

Connecting the value stream to an enterprise

> 🕮 *A value stream is an end-to-end collection of Value Stages that creates an outcome for a customer, who may be the ultimate customer or an internal end-user of the value stream.*

> ☛ *For more details on the list of business capabilities, see Describing Value Streams.*

The *value creation steps* are connected to *Business Capabilities* valid for the enterprise.

> 🕮 *A value stage is a distinct, identifiable phase or step within a value stream that has a unique entrance criteria, exit criteria, and identifiable participating business function or business functional area.*

To connect a value stream to an enterprise:

1. Select **Characteristics** property page of the enterprise that interests you.
2. In the **Value Stream** section, click **Connect**.
   A selection window opens.

3. Select the Value streams that interests you and click **Connect**.
   The value streams are connected to all the enterprise transformation stages.

Defining Enterprise Strategic Elements

Strategic elements of an enterprise are classified in the following categories:

- Ends, see: Identifying enterprise ends,
- Means, see: Defining Means.
- The transformation stages, see Defining Transformation Stages.

Identifying enterprise ends

Describing the Enterprise Vision

> 🕮 *A vision is the ultimate, possibly unattainable, state the enterprise would like to achieve. A vision is often compound, rather than focused toward one particular aspect of the business problem. A vision is supported or made operative by missions. It is amplified by goals.*

To describe an *enterprise vision*:

1. Open the **Strategy** properties page of an enterprise.
2. In the **End** section, select the **Vision** field.

Identifying enterprise goals

The *enterprise goals* are determining elements in your enterprise model since they interconnect the ends of the enterprise transformation with the objectives of the transformation stages.

> 🕮 *A goal tends to be longer term, and defined qualitatively rather than quantitatively. It should be narrow-focused enough that goals can be defined for it.*

To create an *enterprise goal*:

1. In the **Strategy** property page of an enterprise, open **End** section.
2. In the **Goals** section, click **New**.
   The **Creation of an Enterprise Goal** dialog box opens.
3. Specify the goal name and click **OK**.
   The goal appears in the list.

The **Characteristics** page of the property pages of an enterprise goal is used to access:

- its **Name**,
- its **Owner**, by default the current enterprise.
- the **Comment** text.
- the **Strategic Theme Category** section, which specifies the **Strategic Themes** connected to the enterprise goal.

Defining Means

To ensure that the *strategies* and tactics implemented in the enterprise correspond to the enterprise goals, you can use **HOPEX IT Business Management** to align the objects representing the ends of the strategy with the means to be implemented.

> 🕮 *A strategy is a component of a mission. It represents a means of action essential to achievement of ends of the enterprise, and more practically its goals. A strategy channels enterprise efforts towards these goals. A strategy is the approach considered by the enterprise as being the best suited to achieving its goals, taking account of constraints imposed by the environment and by risks.*

To check the consistency of the transformation plan, each *strategy* is connected to an *enterprise goal*.

Describing a Mission

> 🕮 *The mission describes what the business is or will be doing on a day-to-day basis. A mission makes a vision operative; that is, it indicates the ongoing activity that makes the vision a reality. A mission is planned using strategies.*

To describe an *enterprise Mission* :

1. Open the **Strategy** property page of the enterprise.
2. In the **Means** section, select the **Mission** field.

Defining Strategies

> 🕮 *A strategy is a component of a mission. It represents a means of action essential to achievement of ends of the enterprise, and more practically its goals. A strategy channels enterprise efforts towards these goals. A strategy is the approach considered by the enterprise as being the best suited to achieving its goals, taking account of constraints imposed by the environment and by risks.*

To create a *strategy*:

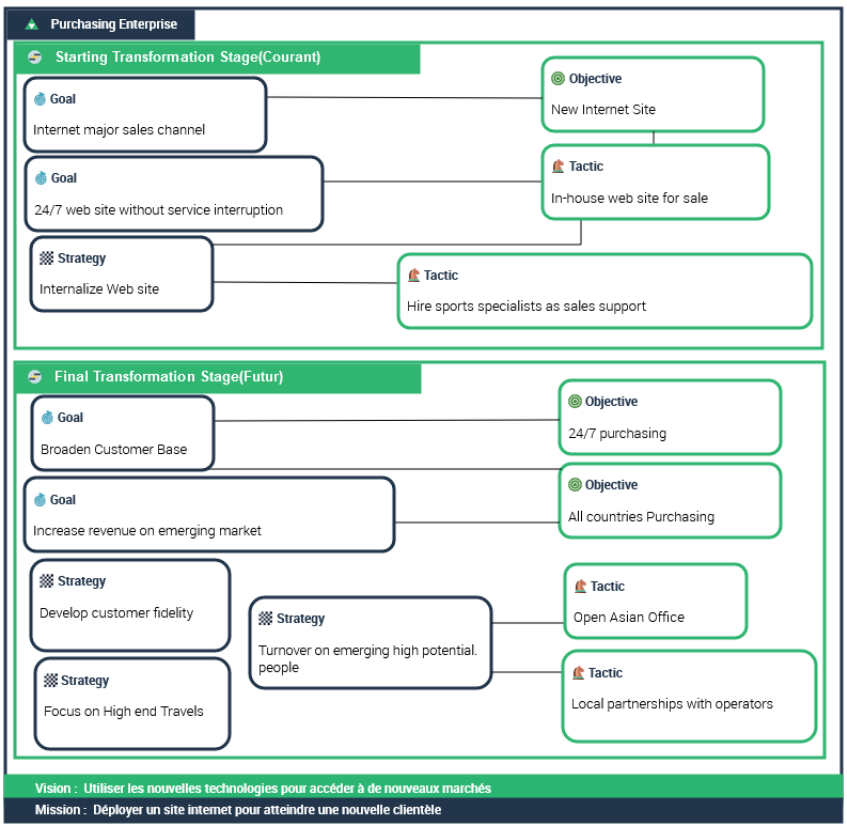
1. Open the **Strategy** properties page of an enterprise.
2. In the **Mean** section and the **Strategy** Sub-section.
3. Click **New**.
   The **Creation of a strategy** dialog box opens.
4. Specify the strategy and click the **OK** button.
   The new strategy appears in the list.

The **Characteristics** properties page of the strategy provides access to:

- its **Name**,
- Its **Enterprise**,
- the **Comment** text.
- the list of **Supported Goals**.

Building an Enterprise Diagram

An enterprise diagram is used to describe the links between goals, strategies, tactics and transformation stages.



Creating an Enterprise Diagram

To create an Enterprise Diagram:

1. Select the enterprise concerned and click **New > Diagram**.
2. Select **Enterprise Diagram**.
   The diagram opens in the edit area. The frame of the described enterprise appears in the diagram.

Describing the strategic elements

The components represented in an enterprise diagram are the strategic elements connected to the enterprise and to its *Transformation stages*.

A Business Transformation Stage is a kind of Enterprise Transformation Stage aiming at the alignment of the enterprise

business operating model to its business strategy and corresponding exhibited business capabilities (business model).

☛ *For further details, see The strategic elements of a transformation phase.*

The components represented in an enterprise diagram are :

- The enterprise ends, described by the *enterprise goals* and the *enterprise objectives* (that are described at the *transformation stages*)).

  📖 *A goal tends to be longer term, and defined qualitatively rather than quantitatively. It should be narrow-focused enough that goals can be defined for it.*

  📖 *An Enterprise Objective is a quantifiable end that a company/ organization wants to achieve for a given Enterprise Stage. An Enterprise Objective may support an Enterprise Goal; it may be refined into sub-objectives. An Enterprise Objective may concern a defined Exhibited Capability and be addressed by a defined Tactic.*

- The enterprise means that are described by *strategies* at the enterprise level and by *tactics* at the transformation stage level.

  📖 *A strategy is a component of a mission. It represents a means of action essential to achievement of ends of the enterprise, and more practically its goals. A strategy channels enterprise efforts towards these goals. A strategy is the approach considered by the enterprise as being the best suited to achieving its goals, taking account of constraints imposed by the environment and by risks.*

  📖 *A tactic is a course of action that implements part of a strategy. Tactics generally channel efforts towards objectives.*

THE STRATEGIC ELEMENTS OF A TRANSFORMATION PHASE

The implementation of an *enterprise* is described by the *enterprise stages* that correspond to its state at a given time.

> 🕮 *An Enterprise is a purposeful undertaking, conducted by one or more organizations, aiming at delivering goods and services, in accordance with the enterprise mission in its changing environment. During its development over time, an enterprise has to adapt to its environment and sets up transformation goals and objectives along with course of action to achieve these objectives. The design and realization of the resulting transformation stages may transcend organizational boundaries and consequently require an integrated team working under the direction of a governing body to involve stakeholders in transformation initiatives. This requires the implementation of an integrated team, under the responsibility of a governing body, to involve the stakeholders in the transformation.*
>
> 🕮 *A Business Transformation Stage is a kind of Enterprise Transformation Stage aiming at the alignment of the enterprise business operating model to its business strategy and corresponding exhibited business capabilities (business model).*

Thus, when an enterprise is created, the following two *enterprise stages* can also been created:

- The current ('As-Is') stage that concerns existing elements;
- The target 'To-Be' phase that contains the target elements determined by the review of the transformation strategic goals.

The *business capability map* is associated to the enterprise and its transformation stages.

> 🕮 *A business capability map is a set of business capabilities with their dependencies which define a framework for an enterprise stage.*

The strategic elements of a transformation phase Users that follow:

- The enterprise objectives and the corresponding tactics, see Transformation stage characteristics,
- the business Capability assessments, see Using performance indicators,
- the exhibited business capabilities, see: Managing Exhibited Business Capabilities.

Defining Transformation Stages

From an enterprise, you can create transformation stages.

Each transformation stage is scheduled in the enterprise project depending on real or estimated dates. The scheduling is used to build the enterprise transformation roadmap.

Creating a Transformation Stage

To create a *transformation stage* from an enterprise:

1. Click the **Business > Strategic Planning** navigation menu.
   The list of current Enterprises appears.
2. Open the **Strategy** properties page of the enterprise that interests you.
3. In the **Stages** section, click **New**.
   An IT transformation stage creation dialog box opens.
4. Specify the **Name** of the transformation stage.
5. Specify the **Period** of the transformation stage: As Is, Future or Passed.
6. Specify the **Begin Date** and the **End Date**.
7. Click **OK**.

Transformation stage properties

With **HOPEX IT Business Management** , a transformation stage is described by:

- the **Characteristics** page,

  ☛ *For more details on transformation stages, see Transformation stage characteristics.*

- the **Assessment** property page that provides access to the assessment business capabilities of an enterprise stage.

  ☛ *For more details on assessing capability maps, see Using performance indicators.*

- the **exhibited capabilities** page that is used to access to the business capabilities involved in the transformation stage.

  ☛ *For more details on strategic elements, see Managing Exhibited Business Capabilities.*

- The **Architecture Description** page that is used to access to the architecture elements involved in the transformation stage.

  ☛ *For more details on architecture elements, see Describing an Enterprise Architecture.*

Transformation stage characteristics

The **Characteristics** property page of an enterprise stage provides access to the following information:

- **Name**,
- **Owner** the current enterprise,
- **Period**, As Is, Future or Passed. This attribute can be used if the dates are not specified.
- **Begin Date** of the phase,
- **End Date** of the phase,
- the **Description** text.
- the **objectives** section, to define the transformation stage objectives as well as associated tactics.

  ☛ *For more details on objectives and tactics, see Defining the Strategic Characteristics of a Transformation Stage.*

Defining the Strategic Characteristics of a Transformation Stage

The enterprise strategic elements are aligned with strategic element of the transformation stage: enterprise goals and objectives, strategies and tactics.

☛ *For more details on enterprise strategic elements, see Defining Enterprise Strategic Elements.*

Defining an enterprise objective

🕮 *An Enterprise Objective is a quantifiable end that a company/ organization wants to achieve for a given Enterprise Stage. An Enterprise Objective may support an Enterprise Goal; it may be refined into sub-objectives. An Enterprise Objective may concern a defined Exhibited Capability and be addressed by a defined Tactic.*

Creating an Enterprise Objective

To create an *Enterprise Objective*:

1. Open the **Characteristics** properties page of a transformation stage.
2. In the **Objectives** section, click **New**.
   The **Creation of an enterprise objective** dialog box opens.
3. Specify the objective name and click **OK**.
   The new enterprise objective appears in the list.
4. In the **Enterprise goals** column of the table of enterprise objectives, select the *enterprise goals* covered by the objective.

   🕮 *A goal tends to be longer term, and defined qualitatively rather than quantitatively. It should be narrow-focused enough that goals can be defined for it.*

   ☛ *For more details on enterprise goals, see Identifying enterprise ends*

Enterprise Objective properties

The **Characteristics** property page of an enterprise objective is used to access:

- its **Name**,
- its **Owner**, by default the current transformation stage.
- the **Comment** text.
- the list of **Enterprise goals** the objective aims to satisfy.

Defining Tactics

🕮 *A tactic is a course of action that implements part of a strategy. Tactics generally channel efforts towards objectives.*

Creating tactics

A *tactic* is a way to achieve an *enterprise objective*. So a *tactic* is created from an *enterprise objective*.

To create a *tactic*:

1. Open the **Characteristics** properties page of a transformation stage.
2. In the **Objectives** section, select the objective that interests you.

3. In the **Contributing Tactic** section, click **New**.
   The new tactic appears in the list.
4. Specify the name of the tactic.
5. In the **Strategy** column of the tactic table of the transformation stage, select the *strategy* corresponding to the tactic.

Tactic properties

The **Characteristics** property page of the tactic provides access to:

- its **Owner**, by default the current enterprise.
- its **Name**,
- the **Comment** text.
- the list of **Supported enterprise objectives**.

  ☛ *For further details, see Creating an Enterprise Objective.*
- the list of **Strategies** that it implements.

  ☛ *For further details, see Defining Strategies.*

USING PERFORMANCE INDICATORS

Qualifying Values and *Measurable Properties* are used to define the performance constraints that must be complied with by the building blocks making up the enterprise, at the forefront of which are the business capabilities and the exhibited business capabilities in a transformation stage.

The nature of a *Qualifying Value* is defined by a *Measurable Property*.

> 🕮 *A measurable property expresses the nature of indicators (duration, mass, cost, etc.) and defines the unit used to measure them (minutes, kilograms, euros, etc.). Measurable properties are used to define indicators, they can be elementary or composite. Elementary measurable properties are described by measurement units: kg, Liter, Gallon, Hour, Minute.*
>
> 🕮 *A Qualifying value (key indicator) defines how much of something can be quantified, either as a singular value or as range of values, according to a Measurable Property. Key indicators are valued. Example: Response Time < 20 seconds.*

Measurable Properties can be connected to the some objects such as:

- business capabilities,
- value streams,
- Business Skill,
- application environment

> `A Measurable Property for the "Command management" business capability is "Delivery time".`

Qualifying Values can be connected to exhibited business capabilities; that is, a capability highlighted within the context of a transformation stage. A *Qualifying Value* is attached to a *Measurable Property*.

> `For example, the Qualifying Values of the "Command management" exhibition of the exhibited business capability) in a given transformation stage (existing or future) can be "Deliver a pizza in less than 20mn" or "Take the order in less than 3mn".`

Finally, *Qualifying Values* or *Measurable Properties* can be grouped to define *Sets of Constraint Values* and *Sets of Constraining Properties*.

> 🕮 *A set of constraint values defines the grouping of elementary Qualifying values that should be examined together in order to appreciate the actual performance of a KPIed item. E.g.: a delivery must take place in less than 20 minutes and cost less than 5 euros.*

A *Set of Constraint Values* is defined by different component types:

- A *set of constraint values*,
- A *Qualifying Value*,
- A *Flow Measure* or a *Technical Flow Measure*,
- application environment.

> ☛ *For more details on Flow Measure Types, see Defining Categorization Schemas.*

A *Set of Constraining Properties* is defined by different component types:

> 🕮 *A set of constraining properties defines the grouping of elementary Measurable properties that should be examined together in order to appreciate the actual performance of a KPIed item. E.g: a delivery must take place within a target timeframe AND at target cost*

- *Sets of Constraining Properties*,
- *Measurable Properties*,
- *Flow Measure types*, which are defined by a set of *Flow measures*.
- *Technical flow measure types*, which are defined by a set of *Technical flow measures*.

> ☛ *For more details on Flow Measure Types, see Defining Categorization Schemas.*

Describing a Measurable Property

> 🕮 *A measurable property expresses the nature of indicators (duration, mass, cost, etc.) and defines the unit used to measure them (minutes, kilograms, euros, etc.). Measurable properties are used to define indicators, they can be elementary or composite. Elementary measurable properties are described by measurement units: kg, Liter, Gallon, Hour, Minute.*

Accessing the list of Measurable Properties of a Library

To access the list of *Measurable Properties*:

1. Expand the **Environment > Containers** navigation menu.
2. Select the library that interests you and expand its folder.
   The list of measurable properties appears in the **Measures & Categories > Measurable Properties** folder.

Creating a measurable property from a business capability

To create a *Measurable Property* from a business capability, for example:

1. Open the **Measurable Property** page of the business capability that interests you.
2. In the **Measurable Property** section, click **New**.
   A Measurable Property creation dialog box opens.
3. Specify:
   - its **Name**,
   - the text that describes its **Unit**,
   - the text of its **Description**.
4. Click **OK**.
   The new Measurable Property appears in the section. It's connected to the current library.

The properties of a Measurable Property

The **Characteristics** property page of a Measurable Property provides access to:

- its **Name**,
- the text that describes its **Unit**,
- the text of its **Description**.

The **Usage** property page of a Measurable Property provides access to:

- the **Qualifying Value** section provides the list of Qualifying Values that are based on this Measurable Property.

  ☛ *For further details, see Connecting a Measurable Property to a Qualifying Value.*

- the **Set of Constraining Properties** section which provides the list of *sets of constraining properties* associated to the Measurable Property.

  ☛ *For further details, see Creating a Set of Constraining Properties from an object of an enterprise.*

Describing a Qualifying Value

📖 *A Qualifying value (key indicator) defines how much of something can be quantified, either as a singular value or as range of values, according to a Measurable Property. Key indicators are valued. Example: Response Time < 20 seconds.*

Accessing the list of Qualifying Values

To access the list of Qualifying Values of a library:

1. Expand the **Environment > Containers** navigation menu.
2. Select the library that interests you and expand its folder.
   The list of Qualifying Values appears in the **Measures & Categories > Qualifying Value** folder.

Creating a Qualifying Value from an exhibited business capability

A Qualifying Value can be used by an exhibited business capability. It appears in the **Qualifying Value** property page of the exhibited business capability.

📖 *An exhibited business capability is exhibited by an Enterprise Stage with quantified measure (KPI) and potential geopolitical scope (Site) for a defined market segment (Business Partner).*

☛ *For more details on exhibited business capabilities, see Managing Exhibited Business Capabilities.*

☛ *You create a Qualifying Value from the Qualifying Value property page of all the objects that can be connected to simple or composite performance indicators*

To create a *Qualifying Value* from an exhibited business capability:

1. Open the **Qualifying Value** page of the exhibited business capability that interests you.
2. In the **Qualifying Value** section, click **New**.
   The Qualifying Value creation dialog box opens.

3. Select the **Measurable Property** that you would like to use.

   For example, "Delivery time"

4. Select the **operator** that you want to use (less than, greater than or equal to).

   For example, "Less than"

5. Specify the **Value**.

   For example "48 hours"

6. Click **OK**.
   The Qualifying Value is created with a **Name** calculated from its characteristics.

   In the example, the name is "Delivery time < 48 hours"

The properties of a Qualifying Value

The **Characteristics** property page of a Measurable Property provides access to:

- its **Name**, which is calculated automatically on creation,
- Its **Measurable Property** which defines its nature,
- its **Unit**, which is that of the Measurable Property and which cannot be modified,
- its **Operator** which positions it with respect to its value,
- its **Value**,
- the text of its **Description**.

The **Usage** property page of a Qualifying Value provides access to:

- the **Set of Constraint Values** section: provides the list of Qualifying Values that use the Qualifying Value described.

  ☛ *For further details, see Creating a Set of Constraint Values from an exhibited business capability.*

- the **Exhibited Capabilities** section: provides the list of exhibited capabilities connected to the Qualifying Value.

  ☛ *For further details, see Creating a Qualifying Value from an exhibited business capability.*

Connecting a Measurable Property to a Qualifying Value

The Measurable Property is mandatory for the creation of a Qualifying Value; it is used in calculating the name of value: ***Measurable Property name*** + ***logical operator*** + ***Measurable Property unit***.

The Measurable Property is given in the Qualifying Value property page.

To connect a Measurable Property to a Qualifying Value:

1. Open the **Characteristics** property page of the Qualifying Value that interests you.
2. In the **Measurable Property** field, select the Measurable Property you are interested in.

Using sets of indicators

Creating a Set of Constraining Properties from an object of an enterprise

> 🕮 *A set of constraining properties defines the grouping of elementary Measurable properties that should be examined together in order to appreciate the actual performance of a KPIed item. E.g: a delivery must take place within a target timeframe AND at target cost*

A *Set of Constraining Properties* uses either a Measurable Property, or a Set of Constraining Properties.

A Measurable Property or a Set of Constraining Properties can be used by several Sets of Constraining Properties. During creation of a Set of Constraining Properties, you can thus reuse a Measurable Property or a Set of Constraining Properties that already exists.

To create, for example, a *Set of Constraining Properties* from a business capability:

1. Open the **Measurable Property** page of the business capability that interests you.
2. In the **Set of Constraining Properties** section, click **New**.
   A *Set of Constraining Properties* creation window opens.
3. Enter the **Name**.
4. In the **Owned property Component** section, click **New**.
   An Add window appears:
5. Select the **Object Type**: **Set of Constraining Properties** or **Measurable Property**.
6. Select the object that interests you and click **Next**.
   The new component appears in the list.
7. Click **Add** and proceed the same way to connect other Measurable Properties or Set of Constraining Properties.

Creating a Set of Constraint Values from an exhibited business capability

> 🕮 *A set of constraint values defines the grouping of elementary Qualifying values that should be examined together in order to appreciate the actual performance of a KPIed item. E.g.: a delivery must take place in less than 20 minutes and cost less than 5 euros.*

A *Set of Constraint Values* uses either a Qualifying Value, or a Set of Constraint Values.

A Qualifying Value or a Set of Constraint Values can be used by several Qualifying Values. During creation of a Set of Constraint Values, you can thus reuse a Qualifying Value, or a Set of Constraint Values that already exists.

A Set of Constraint Values can be used by an exhibited business capability. It appears in the **Qualifying Value** property page of the exhibited business capability.

> 🕮 *An exhibited business capability is exhibited by an Enterprise Stage with quantified measure (KPI) and potential geopolitical scope (Site) for a defined market segment (Business Partner).*
>
> ☛ *For more details on exhibited business capabilities, see Managing Exhibited Business Capabilities.*

To create a *Set of Constraint Values* from an exhibited business capability:

1. Open the **Qualifying Value** page of the exhibited business capability that interests you.
2. In the **Set of Constraint Values** section, click **New**.
   A *Set of Constraint Values* creation window opens.
3. Select a **Set of Constraining Properties**.
4. In the **Set of Values Component** section, click **New**.
   An adding sub-indicator window opens.
5. Select the **Object Type**: **Set of Constraint Values** or **Qualifying Value**.
6. Select the object that interests you and click **Next**.
   The new component appears in the list.
7. Click **New** and proceed the same way to connect other key indicators

BUSINESS CAPABILITY MAPS AND VALUE STREAMS

To manage your business transformation initiatives, **HOPEX IT Business Management** offers a methodological framework established from international standards (BIZBOK and other architectural frameworks of NAF/DoDAF and TOGAF type), as well as our experience in this area.

The first step of this method consists in analyzing the value streams of your enterprise and connecting them to business capabilities you have identified.

Then you can check the suitability of your business capabilities with your business functions and your skills. This work leads to a better understanding of the current state of your organization ('As-Is').

The following points are covered in this chapter:

- ✓ Describing a Business Capability Map
- ✓ Describing Value Streams
- ✓ Describing Functional Coverage
- ✓ Describing Component Fulfillment
- ✓ Describing the data of a Business Capability

DESCRIBING A BUSINESS CAPABILITY MAP

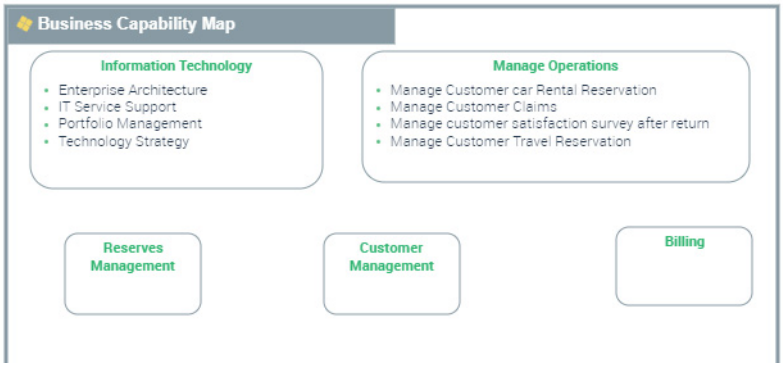
A business capability defines an expected skill.

> 🕮 *A business capability represents a specific ability that an organization possesses or needs to develop to deliver a particular business outcome.*

For example, to meet a customer satisfaction objective, the organization must be able to provide services conforming to contractual commitments.

A capability map describes what the enterprise is capable of producing for its internal needs or to meet the needs of its clients. It is based on the main business capabilities of its activity at a given moment.

> 🕮 *A business capability map is a set of business capabilities with their dependencies which define a framework for an enterprise stage.*



Building the Business Capability Map

A business capability map is used to represent the main business capabilities that interact with an enterprise.

Creating a business capability map

To create a *business capability map*:

1. In the **Business** navigation menu, click **Capabilities**.
   The business capability map tree appears.
2. Click **New.**
3. Specify the **Name** and click **OK**.
4. Specify an **Owner** (library, enterprise, etc.).
   The new business capability map appears in the list.

Creating a business capability decomposition tree

A Business Capability Decomposition Tree is a diagram that describes the tree structure of a business capability or a business capability map. Focusing on a particular business capability, this type of diagram enables summary representation of business capability breakdown into sub-business capabilities.

To create a business capability map diagram:

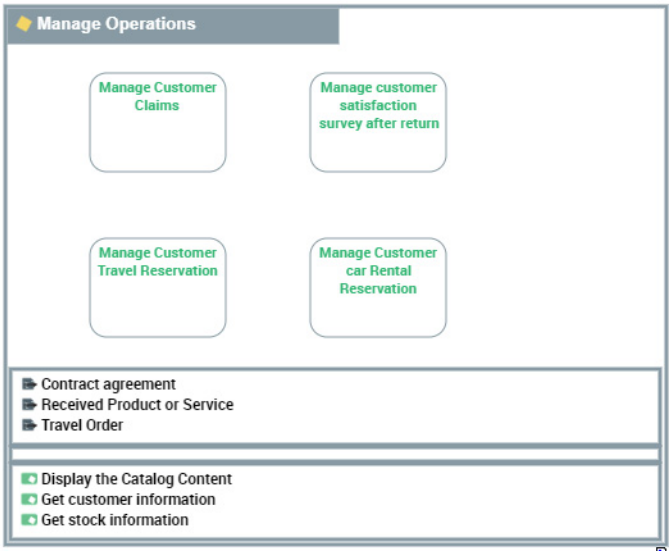
1. Click the business capability map to open its properties.
2. From the **Diagrams** page, click **Create a diagram**.
3. Hover the mouse over **Capability decomposition** and click **Create this diagram**.
   The frame of the business capability map described appears in the diagram.
   You can build a hierarchical view of the business capabilities that interest you.

Creating a capability structure diagram

A capability structure diagram is a capability map diagram which represents:

- the main business capabilities interacting within the enterprise
- dependency links between business capabilities.

For example, the business capability that consists of managing operations is broken down into a number of business capabilities such as: "Handle customer complaints", "Manage travel reservations".



To create a capability structure diagram:

1. Click the business capability map to open its properties.
2. In the **Diagrams** page, click **Create a diagram**.

3. Hover the mouse over **Capability structure** and click **Create this diagram**.
   The frame of the business capability map described appears in the diagram.
   You can construct this diagram in tabular entry mode.

   ☛

   ☛ *For more information on using tabular entry, see the "Diagrams in Tabular Entry Mode" in the **HOPEX Common Features** guide.*

Defining capabilities in a capability diagram

To add a business capability to a business capability map diagram:

1. In the diagram Insert toolbar, click **Capability**.
2. Click in the frame of the business capability map.
3. In th add dialog box, select or search for a capability and click **Create**.
   The capability appears in the diagram.

   ☛ *If the business capability is associated with functionalities, they also appear. For more details on the capabilities and functionalities associated with business capabilities, see Defining business skills and functionalities associated with capabilities.*

Defining business capability dependencies

A dependency link between a capability and another is used to specify the elements on which this dependency is based.

☛ *A single capability can have more than one dependency within a single diagram.*

To create dependency links between two business capabilities:

1. In the Insert toolbar, click **Business Capability Dependency**.
2. Click the user capability, and keeping the left mouse button pressed, move the cursor to the capability used.
3. Release the mouse button.
   The business capability appears in the diagram.

Describing a Business Capability

Creating a business capability from a business capability map diagram

You can create a business capability from a business capability map diagram:

1. In the **Business** navigation menu, click **Capabilities**.
   The business capability map list appears.
2. Move the mouse over the relevant business capability map and click the **New > Business Capability** button.
3. Name the business capability and click **OK**.
   The new business capability appears under the map.

Defining the properties of a business capability

To display properties of a business capability:

❱ In the navigation tree, select the business capability of interest.

The **Characteristics** property page of the business capability map provides access to:

- its **Owner**. By default, when a business capability is created, it is the current enterprise.
- the text of its **Description**
- its **Sub-capabilities**
- its **Supporting Assets**

Other pages can be used to complete the description of a business capability. The **Dependencies** page lists dependent business capabilities and required business capabilities.

☛ *Note that some of the pages can be hidden by default.*

Defining business skills and functionalities associated with capabilities

Each business capability is associated with business skills and functionalities.

To associate a *skill* with a business capability:

1. Open the **Expected Capabilities** properties window of the business capability.

   ☛ *This page is not necessarily displayed by default.*
2. In the **Expected Business Skill** section, click **New**.
3. In the add dialog box, select or search for a business skill and click **Create**.
   The business skill appears in the list of skills associated with the business capability.

   ☛ *For more information on enterprise skills, see Describing Business Functions.*

To associate a *functionality* with a business capability:

1. Open the property pages of the business capability concerned and select the **Expected Capabilities** page.
2. In the **Expected Functionality** section, click **New**.
3. Select a functionality and click **Add**.
   The functionality appears in the list of functionalities associated with the business capability.

   ☛ *For more information on enterprise functionalities, see Describing functionalities.*

In diagrams, business skills and functionalities appear at the bottom of the frame of the capability described.

A report is available to check the suitability between the business capability map and the operational environment. For more details, see Describing Component Fulfillment.

Business Capabilities Reports

Dynamic reports enable you to analyze the business capabilities of your repository according to different perspectives.

☛ *For detailed information on reports, see Generating Reports.*

Business Capability Map Breakdown Report

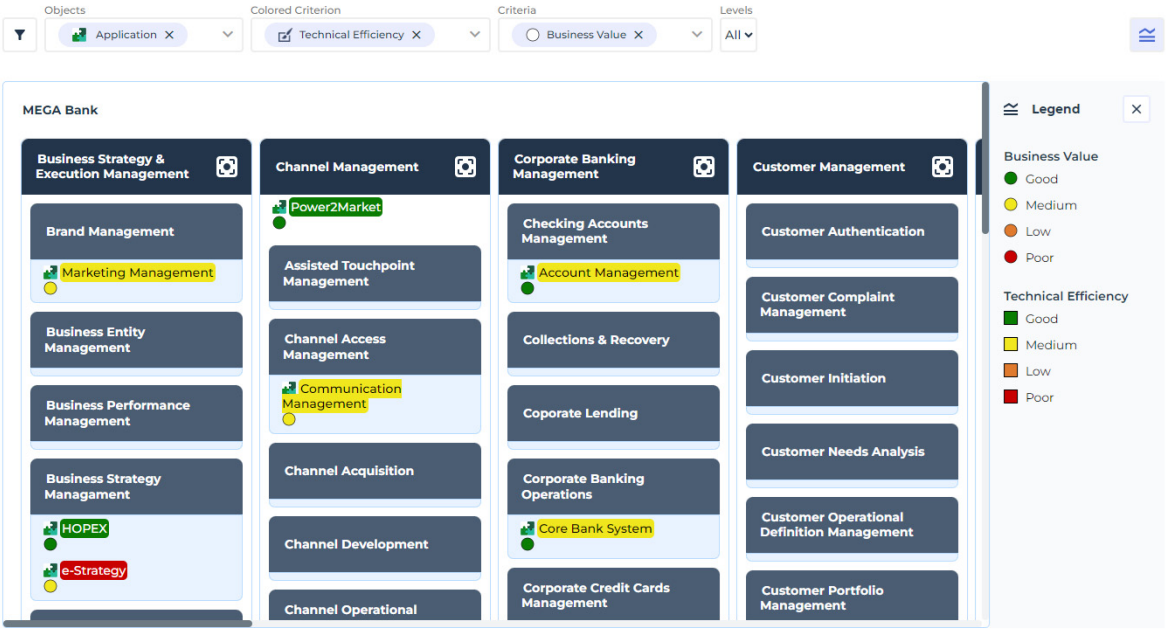
You can use a breakdown report to visualize the objects that make up a business capability map and the realization of capabilities by EA equipment.

This report is available in the Business Capabilities Properties **Reports** page.

Example

The example below shows the coverage of the business capability map by applications, with the "Technical

efficiency" and "Business value" criteria available on the applications.



☛

☛ *For more details on use of a breakdown report, see the, chapter "Handling a Breakdown Report" in the* ***HOPEX Common Features*** *guide.*

Business Capability Coverage over Time

This report provides a temporal representation of the elements that make up a business capability map and the applications or application systems that cover them.

Applications are analyzed according to various possible criteria. A timeline shows their evolution over several years.

The criteria selected applies to both views of the report:

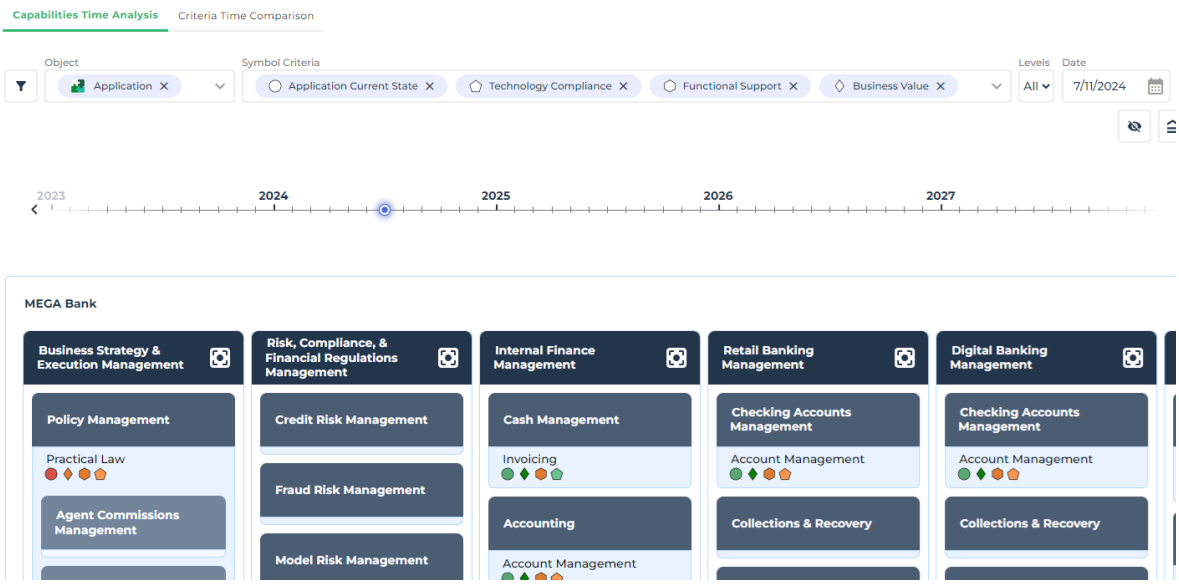
- **Capabilities Time analysis**: a treemap displays the various business capabilities and the applications that cover them.
- **Criteria Time Analysis**: a table displays the values of the selected indicators according to the dates indicated.

Example

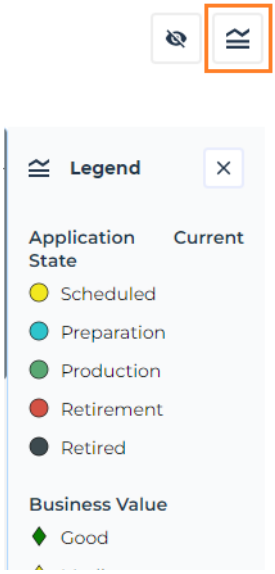
Below is the coverage report for the "MEGA Bank" capability map.

The report displays the list of associated applications and the criteria selected (Current state, Technology compliance, Functional support, Business value).

A point on the timeline indicates the date of the values displayed in the report. You can move this point to view the evolution of indicator values over time.



A **Legend** button shows the meaning of the indicators and their colors.

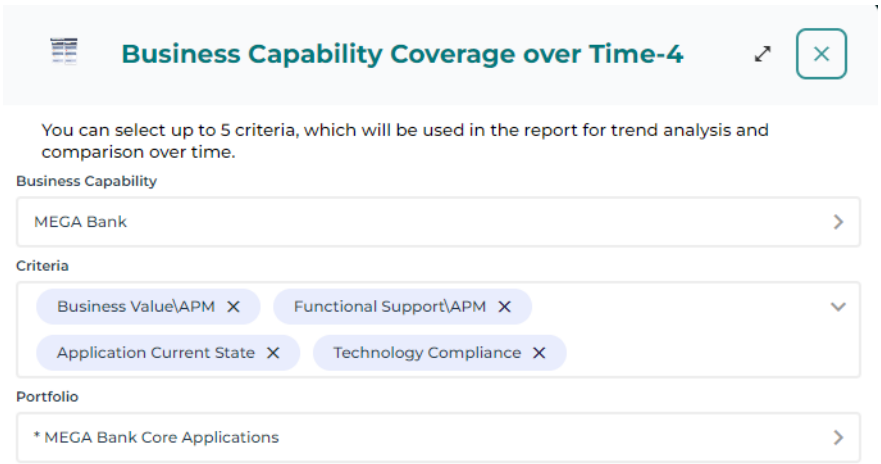


Launch the report

To generate a Business Capability Coverage over Time report:

1. Click the **Reports** menu.
2. To the right of the edit area, click the **Create a report** button.

3. Find the "Business Capability Coverage over Time" report template.
4. Select the report type and click **Create a report**.
   The report creation wizard opens.
5. Select:
   - the business capability map
   - the analysis criteria
   - if required, the portfolio of applications to be evaluated.



6. Click **Preview** then **Continue**.
7. Give the report a name and a description.
8. Click **Save and open**.

Business Capabilities Tree Map

This report breaks down a capability tree in the form of a treemap according to one of three possible criteria:

- Number of components: the surface area is proportional to the number of sub-capabilities in the tree.
- Application ratio: the surface area is proportional to the realization percentage of the current capability by applications.
- Cost of applications: the surface area is proportional to the cost of applications realizing current and descendant capabilities in the tree.

Take note that:

- Since an application can realize several capabilities, the "Cost Contribution Key" ratio is applied to the criteria "Application ratio" and "Cost of Applications".
- An application realizing an "intermediate" capability (i.e. not a leaf of the tree) is considered to realize all its sub-capabilities in a uniform way (strict pro rata between all sub-capabilities).

To generate the business capability map breakdown from an application portfolio:

1. Open the properties of the portfolio in question.
2. Click **Reporting > Business Capability Tree Map**.

3. Select a capability map.
4. Refresh the report.

☛

☛ *For more details on use of a Treemap, see the chapter "Handling a Treemap" in the **HOPEX Common Features** guide.*

DESCRIBING VALUE STREAMS

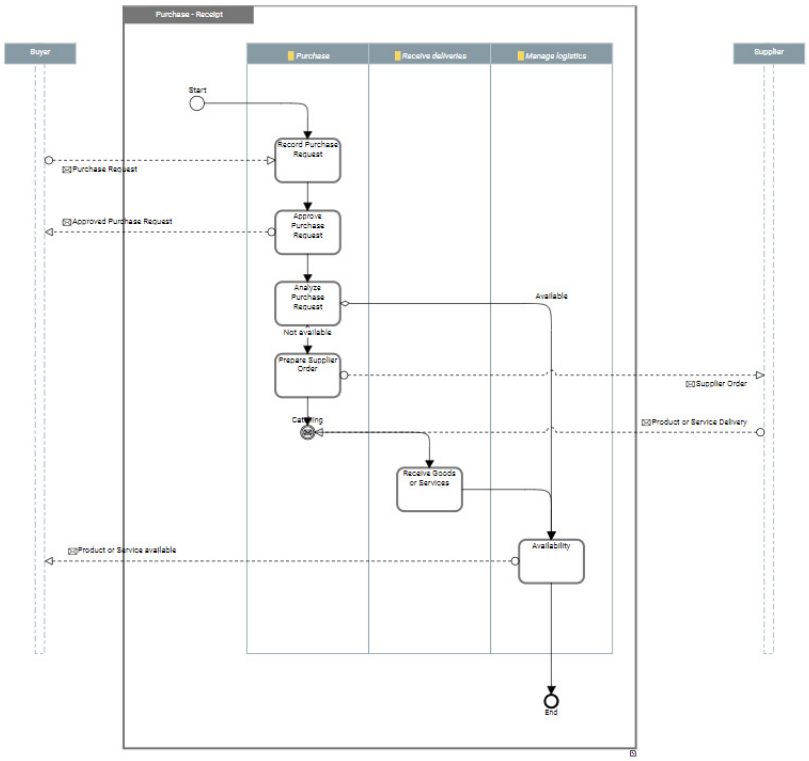
A value stream is an end-to-end collection of Value Stages that creates an outcome for a customer, who may be the ultimate customer or an internal end-user of the value stream.

*To display the **Value streams**, open the **Options** window and check that **HOPEX Solutions > Business Process Analysis > Value Stream Modeling** is activated.*

Value Stream Example

In this value stream diagram, the *Business Function* or the *Business Functional Area* that create the value streams are linked to the participants represented in columns.

The following diagram presents an example of a value stream:



"Purchase reception" value stream

The purchase request is recorded and must then be approved. The requester is informed of the approval or rejection of

the request. If the request is validated, an analysis of the required order is carried out.

If stock is lower than a given threshold, an order is prepared and sent to the supplier for resupply.

If the product is available, or as soon as it is received from the supplier, it is made available to the requester.

In this example, the *business functions* concerned are represented in columns.

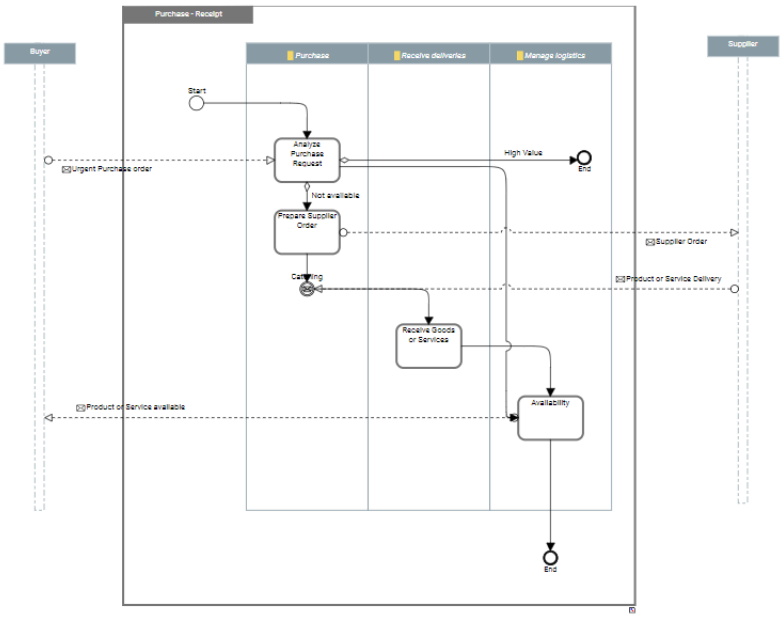
> 🕮 *A business function is a conceptual unit of the division of responsibilities in an enterprise. It is used to structure the management of information processing, energy, and equipment produced or used. Business functions define the skills and the functionalities necessary to the enterprise to fulfill its mission.*

In the organization previously presented, three org-units: purchasing assistant, purchasing manager and buyer, systematically participate to execute the first four steps: record and approve the request, analyze and send the order.

Optimization of the organized process "Process Purchase Requests" has saved one step: when the amount of the order is not significant, the purchasing assistant can himself approve or refuse the purchase request.

In case of urgent orders, you can again save steps by authorizing the purchasing assistant to send the order when the amount is not significant.

We obtain the following value stream for processing of urgent orders:



"Purchase reception" value stream

The first step consists in analyzing the purchase request. If the total amount is large, normal processing is carried out.

Otherwise, the availability request and a restock request are sent, if necessary. Continuation of this value stream is identical to the previous one: when the order has been received, it is made available to the requester.

Value Stream representation principles

Highlighting organizational choices

Each enterprise has activities related to its business that must be performed whatever the organization in place. These activities can be purchasing, sales, sales administration, manufacturing, etc.

Defining their organization consists in assigning these activities to the org-units that will perform them.

We can distinguish between:

- Processes relating to the business of the enterprise: these are difficult to change unless the enterprise decides to totally review its business.
- Processing depending on organizational choices.

Number of steps

Certain steps in a process are exclusively linked to the chosen organization. In such cases, it is useful to check whether these steps provide any real added value to clients or only concern the way things are done.

Delivery times can also be reduced by restructuring the order of these steps.

To highlight possible improvements, you can represent a value streams by flows exchanged between enterprise *value stage*.

> 🕮 *A value stage is a distinct, identifiable phase or step within a value stream that has a unique entrance criteria, exit criteria, and identifiable participating business function or business functional area.*

Using Value Streams

> 🕮 *A value stream is an end-to-end collection of Value Stages that creates an outcome for a customer, who may be the ultimate customer or an internal end-user of the value stream.*

Accessing value streams

To access the list of *Value Streams*:

- From the **Business** navigation menu, click **Business Values**.
  The list of value streams appears.

Creating a value stream

To create a *Value stream*:

1. See Accessing value streams.
2. Click **New > Value streams**.

Creating a value stream diagram

To create a value stream diagram:

1. Select the value stream of interest and click **Create Diagram**.
   A window opens and prompts you to choose the Diagram Type that you wish to use:
2. Select the diagram type you want to create.

- a value stream diagram, see The value stream diagram;
- a value stream to capability diagram, see The value stream to capability diagram;

The value stream diagram

> 🕮 *This diagram is used to describe a value stream with the BPMN notation. It presents the sequence of the value creation steps performed, the events that occur and the conditions under which they are sequenced. It also makes it possible to assign the participants who carry out these value-creation steps to the business skills needed to implement them. This representation of a value stream helps to answer*

the following question: "What are the skills needed to implement the value stream?".

☛ *This type of diagram makes it possible to describe precisely the enterprise value streams.*

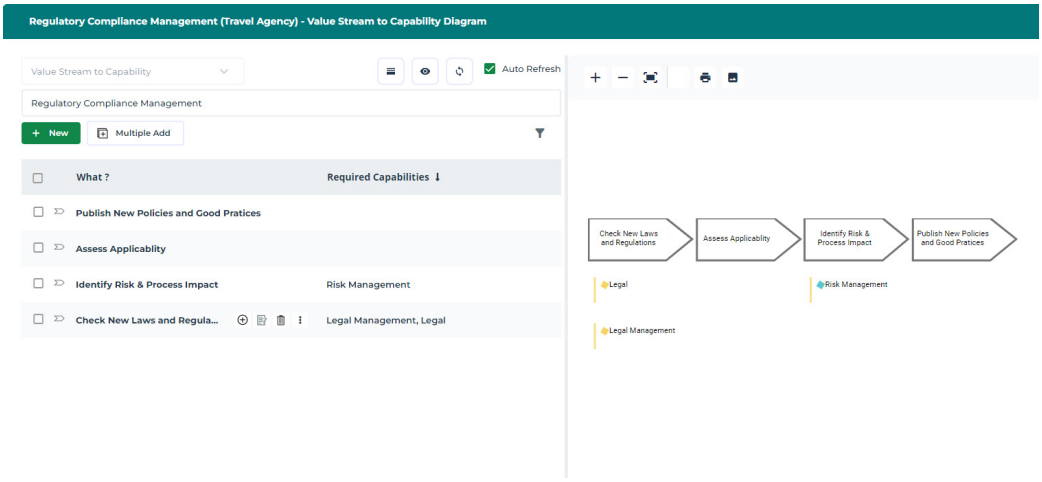
The value stream to capability diagram

The value stream to capability diagram can only be used in tabular input mode.

☛

☛ *For more information on using tabular entry, see the "Diagrams in Tabular Entry Mode" in the **HOPEX Common Features** guide.*

This diagram makes it easy to initiate a value stream diagram by creating the value stream steps and the links they have with the different business capabilities.



☛ *For more information on business capabilities, see Business Capability Maps.*

Representing the Value Stream Implementation

You can represent the fulfillment of a value stream by a process.

To access the list of *Processes* from the **Environment** navigation menu:

1. Click the **Organization > Processes** menu.
2. Open the **Characteristics** property page of the process that interests you.
3. In the **Fulfillments** section, click the **New** button.
4. In the Add dialog box, select **Value Stream Fulfillments** and select the concerned value stream.

DESCRIBING FUNCTIONAL COVERAGE

Describing the Functionality Map

A technology capability map is a set of technology capabilities and their dependencies that, together, defines the scope of a hardware or software architecture.

Accessing the list of functionality maps

To access the list of Functionality maps:

1. In the **Inventories** navigation menu, click **Capabilities > Functionalities**.
   The tree of functionality maps appears.

Properties of a functionality map

The **Characteristics** properties page of a functionality map provides access to:

- its **Owner**.
- its **Name**
- the text of its **Description**
- the **Owned Functionalities** section

For more information on the functionality components, see:

- *Creating a functionality component in a functionality map diagram*
- *Defining Functionality dependencies*.

With **HOPEX IT Business Management** , a functionality map is described in the **Reporting** property page.

Creating a functionality map diagram

To create a functionality map diagram:

1. Right-click the functionality map of interest and select **New > Diagram**.
2. Select **Functionality Structure** and click **Create this diagram**.
   The diagram opens in the edit area. The frame of the functionality map described appears in the diagram.

Creating a functionality component in a functionality map diagram

The components represented in a functionality map are **Functionality components**.

To add a functionality component in the functionality map diagram:

1. In the diagram Insert toolbar, click **Sub-functionality**.
2. Click the functionality map frame.
   An add functionality dialog box appears.

3. Search for an existing functionality and click **Create**.
   The sub-functionality appears in the diagram.

Defining Functionality dependencies

A dependency link between one functionality and another is used to specify the elements on which this dependency is based.

To create dependency links between two functionalities in a functionality map diagram:

1. In the insert toolbar, click **Functionality Dependency**.
2. Click the functionality component, and keeping the left mouse button pressed, move the cursor to the functionality component used.
3. Release the mouse button.
   The link appears in the diagram.

> ☛ *A single sub-functionality can have more than one dependency within a single diagram.*

Describing functionalities

To access the list of functionalities:

- In the **Inventories** navigation menu, click **Capabilities > Functionalities**.
  The list of functionalities appears in the edit area.

To create a functionality:

1. Hover the mouse over the desired functionality map and click **New > Functionality**.
2. Specify the name and click **OK**.

The **Characteristics** property page of the functionality provides access to:

- its **Owner**, by default during creation of the functionality, the current enterprise.
- its **Name**
- the text of its **Description**
- **Owned functionalities** (through the section of the same name)

> ☛ *Dependencies between owned functionalities are displayed in the **Dependencies** page (in which it is possible to view dependent and required capabilities).*

> ☛ *For more details on dependencies devices, see Creating a Functionality Diagram.*

The **Capability Usage** section provides access to the following information:

- the **Business Capability** section provides access to the business capabilities that require the described functionality.

  ☛ *For more details on the functionalities associated with business capabilities, see Defining business skills and functionalities associated with capabilities.*

- the **Business Function** section provides access to the business functions that require the described functionality.

  ☛ *For more details on businesses, see Business properties.*

- the **Capability Exhibition** section provides access to the exposed business capabilities that require the described functionality.

  🕮 *An exhibited business capability is exhibited by an Enterprise Stage with quantified measure (KPI) and potential geopolitical scope (Site) for a defined market segment (Business Partner).*

Creating a Functionality Diagram

To create a functionality diagram:

1. Hover the mouse over the functionality of your choice and click **Create a diagram**.
2. Select **Functionality Structure** then **Create this diagram**.
   The diagram opens in the edit area. The frame of the functionality described appears in the diagram.

To create a functionality from a functionality diagram, see Creating a functionality component in a functionality map diagram.

To define the dependencies of sub-functionalities, see Defining Functionality dependencies.

Describing the Technology Capability Map

🕮 *A technology capability map is a set of technology capabilities and their dependencies that, together, defines the scope of a hardware or software architecture.*

Accessing the list of technology capability maps

To access the list of technology capability maps:

❱ In the **Inventories** navigation menu, click **Technology Capabilities**.
The technology capability map tree appears.

Using the technology capabilities

The use of technology capabilities is identical to the use of functionalities.

For more details, see Describing the Functionality Map.

DESCRIBING COMPONENT FULFILLMENT

To represent the implementation of a component such as a business capability or functionality you must create a **Fulfillment** of the component.

Creating Fulfillment of a Business Capability

A business capability can be realized different object types:

- a business function
- business functional area
- a process
- an application

To associate a process to a business capability, you must create a business capability fulfillment.

To specify that a business capability is fulfilled by a process:

1. In the **Characteristics** business capability property page, expand the **Supporting Assets** section.
2. Click **New.**
3. In the drop-down list of the Add dialog box, select the **Process** object type.
4. Select the desired process and click **OK**.
   The business capability realization appears in the list with the name and the type of the selected object.

Reports can be used to visualize the coverage of business capability elements by operational elements such as business functions, and according to different perspectives: Organizational, Business/Data, Logical/Physical Application, etc.

☛ *For more details on fulfillment reports for enterprise capabilities, see Business Capabilities Reports.*

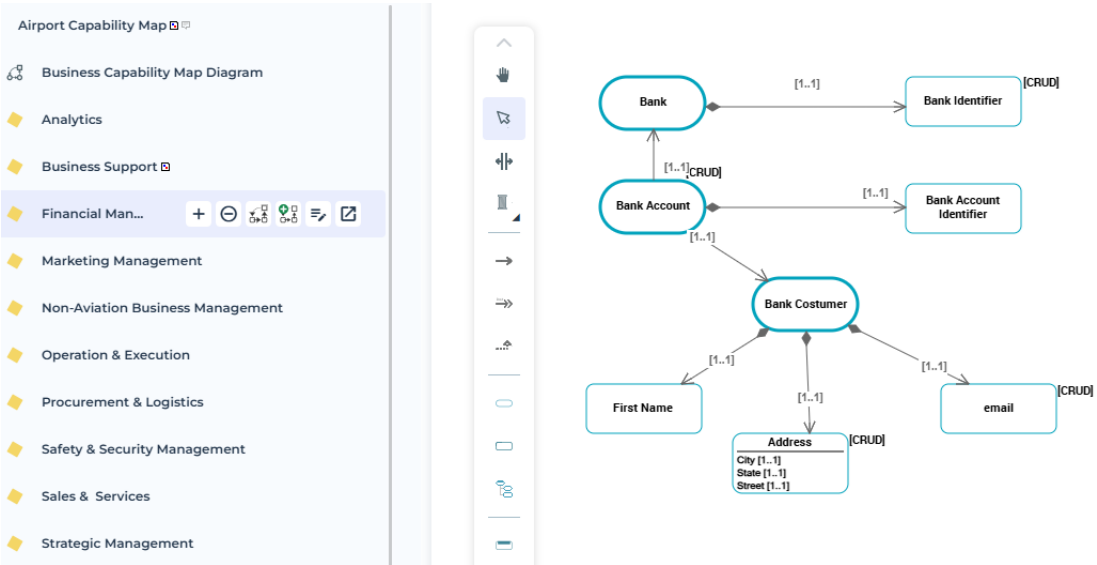
Describing the data of a Business Capability

Combined with **HOPEX Data Architecture** or **HOPEX Data Governance**, the **HOPEX IT Business Management** solution can be used to define the data used at the business capability level.

Creating a Concept Domain Diagram on the Business Capability

Describing the data used in a business capability involves creating a concept domain diagram. You can create this diagram from the business capability concerned.

The concept domain diagram presents business data, their properties and their relationships.



To create the concept domain diagram for a business capability:

1. Open the properties dialog box of the business capability.
2. Click the **Diagrams** page.
3. Click **Create a diagram**.
4. Select the "Concept Domain" diagram type.
   The diagram is displayed in edit mode.

Diagram Data

A concept domain includes or references a set of business data.

The data described in the diagram and defined as "components" of the concept domain is visible in the business capability properties, in the **Characteristics** page, in the **Business data** section.

> ☛ *The Business Data section can be hidden by default. To display it, click the **Manage sections** button and select **Business data**.*

To connect an element of the diagram to the list of components for a concept domain:

1. Right-click the object to open its pop-up menu.
2. Select **Add to "Current concept domain (name"**).

For more information on creating diagram elements, see:

- "Define Business Information > Concept Domain > Building a Concept Diagram" in the **HOPEX Data Governance** documentation.
-

DRAWING THE TRANSFORMATION ROADMAP

Drawing up the roadmap consists of identifying the enterprise *transformation stages* that define the timeframe of the transformation goals.

> 🕮 *A Business Transformation Stage is a kind of Enterprise Transformation Stage aiming at the alignment of the enterprise business operating model to its business strategy and corresponding exhibited business capabilities (business model).*

The roadmap is used to plan the business capabilities that the enterprise must acquire to reach its strategic objectives. The changes in these business capabilities over time takes place through *exhibited business capabilities*.

> 🕮 *An exhibited business capability is exhibited by an Enterprise Stage with quantified measure (KPI) and potential geopolitical scope (Site) for a defined market segment (Business Partner).*

The *exhibited business capabilities* are connected, through the implementations, to the technical or business components of the enterprise. The enterprise transformation takes place through the architecture components transformation.

This chapter describes the procedures to be followed to:

- ✓ Identifying Exhibited Business Capabilities,
- ✓ Describing a Business Architecture Environment,
- ✓ Describing an Enterprise Architecture,
- ✓ Drawing up the Roadmap.

IDENTIFYING EXHIBITED BUSINESS CAPABILITIES

Managing Exhibited Business Capabilities

📖 *An exhibited business capability is exhibited by an Enterprise Stage with quantified measure (KPI) and potential geopolitical scope (Site) for a defined market segment (Business Partner).*

Accessing the list of exhibited business capabilities

To access the list of exhibited capabilities of a transformation phase:

1. Click the **Business > Strategic Planning** navigation menu.
2. Select the enterprise that interests you and unfold the tree of strategic components.
3. Expand the **Transformation stages** folder.
4. Expand the tree corresponding to the strategic components of the transformation stage of interest.
5. Expand the **Exhibited Business Capabilities** folder.
   The exhibited business capabilities list is displayed.

Creating an exhibited business capability

To create an *exhibited business capability* from a transformation stage:

1. Open the **Exhibited Capabilities** properties page of the transformation stage.
   A page presents the tree of the business capabilities of the enterprise business capability map.
2. Select the business capabilities that interests you and click **Add**.
   The exhibited business capability is created and appears in the **Exhibited business capability** column.
3. Select the exhibited business capability.
   The **Exhibited business capability** property page opens on the right.
4. In the **Enterprise objectives** column, click the arrow to display the transformation stage objectives.
5. Select the objectives concerning the exhibited capability.
6. In the **Business Capability Realization** column, click the arrow to display the realizations of the current business capability in transformation stage context.

   ☛ *For more details on implementation of business capabilities, see Creating Fulfillment of a Business Capability.*
7. Select the realizations concerning the exhibited capability.

   ☛ *The details of elements connected to an exhibited business capability are displayed in a transformation stage report, see Stages Capabilities Synthesis report.*

The properties of an exhibited business capability

The **Characteristics** property page of the exhibited business capability provides access to:

- its **Name**,
- its **Owner**, by default the current transformation stage,
- **Desired Capability Effect**, provides access to the exhibited business capability outcomes.

An exhibited business capability is described by the following pages:

- the **Structure** page specifies:
  - the list of business capability components that constitute the exhibited business capability
  - the dependencies between these components,

    ☛ *For more details on business capabilities components, see:*

    - *Defining capabilities in a capability diagram*
    - *Defining business capability dependencies.*
- the **Fulfillments** page provides access to the list of Components that implement the business capability.

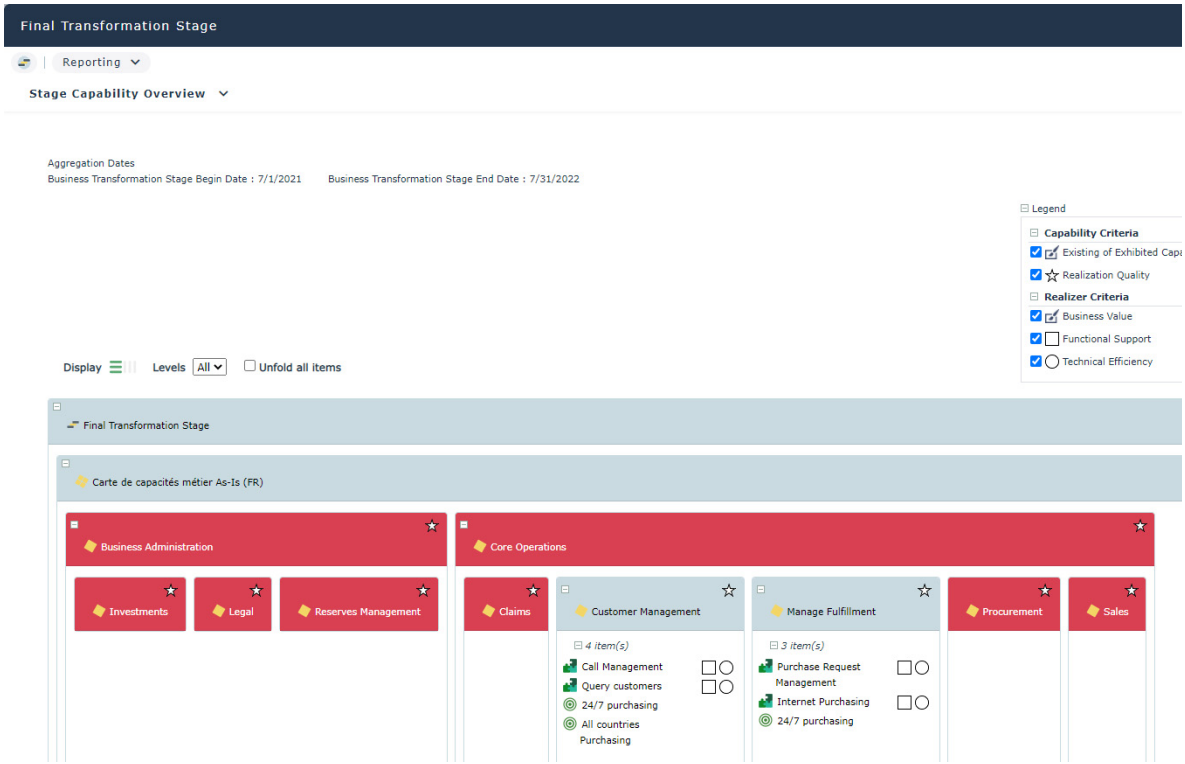
  ☛ *For more details on implementation of business capabilities, see Creating Fulfillment of a Business Capability.*
- The **Qualified Value** and **Measurable Property** pages provide access to the list of indicators associated with the exhibited business capability.

  ☛ *For more details, see Using performance indicators.*
- the **Assessment** page provides access to the assessment results of the business capabilities realization.

  ☛ *For more details on the assessments of business capabilities, see Creating a business capability assessment.*
- the **Transformation** page provides access to transformation stages connected to the exhibited business capability.

Stages Capabilities Synthesis report

This report is available on a dedicated **Report** properties page of the transformation stage. It presents a view of the enterprise business capabilities highlighting the exhibited business capabilities.



Using Assessment for Business Capabilities and their Implementation

The assessment are based on a business capability map and are accessible using the enterprise stages to which the map is connected. These assessments are therefore valid in the context of a transformation stage and at a given date.

Creating a business capability assessment

The assessment of business capabilities deals with the following characteristics:

- the **Business Value**: characterizes the value that the business capability brings to the company. It can be used to position a business capability on a strategic scale (very strategic or very non-strategic).
- the **Capability Effectiveness**: characterizes the quality of what the business capability produces, regardless of the resources used. Allows you to assess the conformity of the result with expectations.
- the **Capability Efficiency**: characterizes the resources used to produce the expected result of the business capability. Shared resources can be more efficient than dedicated ones.
- the **Financial Impact**: characterizes the impact of the result generated by the business capacity on the company's finances. Allows you to assess the impact of a non-compliant result on the company's finances.

From a transformation stage, you can create a new assessment with a view to assessing some business capabilities connected to the enterprise business capability map.

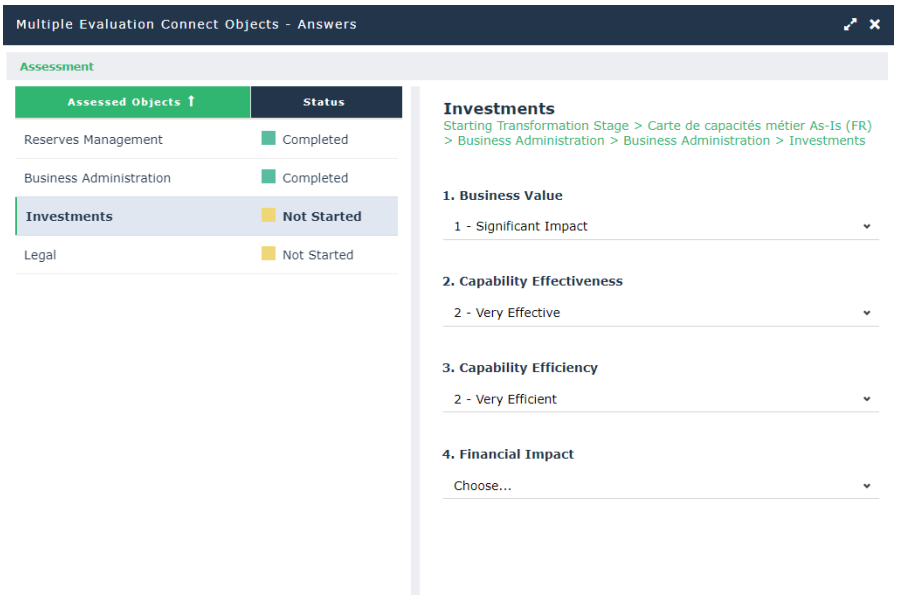
To create a business capability assessment for a transformation phase:

1. Open the **Assessment> Capability Assessment** properties page for the transformation stage that interests you.

   ☛ *The transformation stage is connected to business capability map associated to the enterprise, see* *Connecting the capability map to an enterprise.*

2. Click the **New Assessment** button.
   A selection window presents the tree of the business capabilities of the enterprise business capability map.
3. Select the business capability that you want to assess and click **OK**.
   The selected capabilities appear in the edition area.

4. Click the capabilities to enter the evaluation criteria.
   - the business value,
   - capability effectiveness,
   - capability efficiency,
   - financial impact.



5. Click **OK** to finish assessment.
   The assessment results are displayed in the property page.

6. Click the **Validate Assessment** button.
   A validation window opens.
7. Define the Evaluation date and click **OK**.

Creating an assessment of business capability implementation

The assessment of business capabilities realization deals with the quality of the capability realization. The possible values are between very low and very high.

From a transformation stage, you can create a new assessment of business capability realizations.

To create an assessment of business capability implementation in a transformation stage:

1. Open the **Assessment > Capability Realization Assessment** properties page for the transformation stage that interests you.

   ☛ *The transformation stage is connected to the business capability map associated to the enterprise, see Connecting the capability map to an enterprise.*

2. Click the **New Assessment** button.
   A selection window presents the tree of the business capabilities of the enterprise business capability map as well as those capabilities realizations.
3. Select the business capability realization that you want to assess and click **OK**.
   The selected capability realizations appear in the property page.
4. For each realization, complete the **Capability Realization Quality** criteria.
5. Repeat the same procedure for Business Capabilities: **Validating Assessment** by entering the assessment date.

DESCRIBING A BUSINESS ARCHITECTURE ENVIRONMENT

One of the most important phases in describing a business architecture environment is defining and understanding of the enterprise functional architecture.

The functional architecture enables the organization to understand, independently of its physical structure, which capabilities and skills it includes, those it needs, and how these contribute to its processes.

The description of the functional architecture also enables identification of areas of the organization where skills and processes are duplicated and where synergies exist. These areas are not necessarily visible from the organizational structure.

The following points are covered here:

- Managing a Business Architecture Environment;
- Describing a Business Functional Area;
- Describing Business Functions;
- Describing Business Partners;
- Drawing up the Roadmap.

Managing a Business Architecture Environment

> 🕮 *A business architecture environment represents the relationships of a business functional area with its partners.*

A business architecture environment diagram describes the service interactions between the main internal components of the environment described and the external components. It thus describes:

- the internal and external business functional areas,

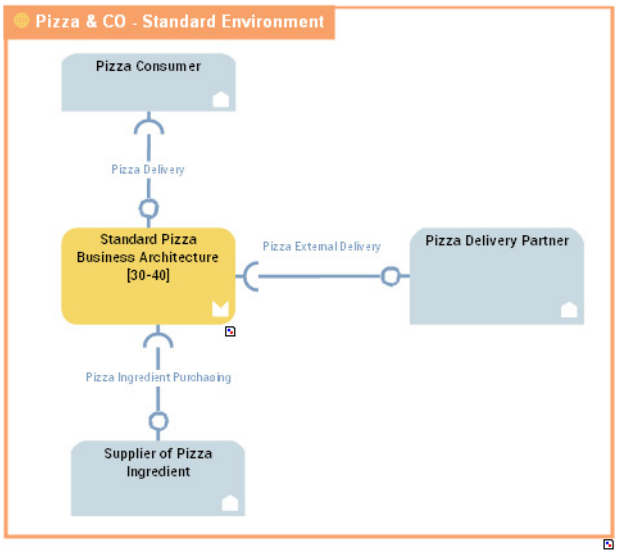
  > 🕮 *A Business functional area is a set of business functions and their associated value streams on the conjunction of two main criteria: their need in accomplishing one or more business capabilities and the common skills and functionalities required to accomplish these business capabilities.*

- the business partners,

  > 🕮 *A business partner designates a third-party who is in relation with the enterprise within the framework of a given business architecture environment. Examples: private sector client, regulatory organization, supplier.*

In this example, the business function architecture environment of company is made up of the historical business function architecture and its interactions with external partners: clients and suppliers. You can see in the diagram

```
that delivery is outsourced  to a third party deliver
partner.
```



Communications between the objects are represented by service interactions that represent requests and service provision.

> *A Service Interaction represents an interaction for service purpose between entities in a specific context inside or outside a company. These entities can be enterprise org-units, applications, activities or processes, as well as external org-units. The content of this interaction is described in a service interface.*
>
> *For more details on service interactions between components, see Managing Service Interactions.*

Accessing the list of Business Architecture Environments

To access the list of *Business Architecture environments*:

1. In the **Inventories** navigation menu, click **Business Architecture > Environments**.
   The list of Enterprises appears.
2. Expand the business enterprise folder that interests you, as well as its **Architecture Environment** folder.
3. Expand the **Reference Operating Model** folder.
   A list of the different environments linked to the Enterprise appears.

Creating a business architecture environment

To create a *business architecture environment*:

1. In the **Inventories** navigation menu, click **Business Architecture > Environments**.
   The list of Enterprises appears.
2. Expand the business enterprise folder that interests you, as well as its **Architecture Environment** folder.

3. From the **Reference Operating Model** folder, click **New > Business Architecture Environment**.
4. Enter its **Name**.
   The new business architecture environment appears in the list.

The properties of a business architecture environment

The **Characteristics** properties page of the business architecture environment provides access to:

- its **Name**,
- its **Owner**,
- the text of its **Description**.
- its **Owned Realizations**

> ☛ *For more details on the realization of business capabilities, see Creating Fulfillment of a Business Capability.*

With **HOPEX IT Business Management** , a business architecture environment is described by the following property pages:

- the **Structure** page which provides access to the list of components of the business architecture environment.

  > ☛ *For more details on the components of the business architecture environment, see Creating a business architecture environment diagram.*

- the **Implementation** page, which provides access to the list of resource architecture environments, applications, application system or logical application system that implement the business architecture environment.

Creating a business architecture environment diagram

To create a business architecture environment diagram:

1. From the list of business architecture environments, select the one you are interested in and click **Create diagram**.
2. Select **Business Architecture Environment Diagram**.
   The diagram opens in the edit area.
   You can construct this diagram in tabular input mode.

   > ☛ *Tabular input is available with this diagram. For more information on using tabular input, see the "Entering a diagram in tabular mode" in the **HOPEX Common Features** guide.*

Creating an internal or external business functional architecture area

To define that a functional area is used in the context of a business architecture environment, you can:

1. Create a *Business functional Area Use* component that is part of the architecture environment described or a *Partner Business functional Area Use* type component if it is a business functional area that belongs to another environment.

2. Associating the Business functional Area fulfilled to the *Business functional Area Use* created.

   In our example, the history business function is an internal environment element.

   ☛ *For more details on business partners, see Describing a Business Functional Area.*

To create a **Business Functional Area Use**:

1. In the insert toolbar for the business architecture environment diagram, click **Business Functional Area Use**.
2. Click in the business architecture environment frame described.
   A creation dialog box prompts you to **Connect Business Functional Area**.
3. Select the business functional area that interests you and/or create a new one.

   Create, for example, the "Manufacturing" business functional area.
4. Click **OK**.
   The business functional area appears in the diagram.

   ☛ *Proceed in the same way to create an **External Partner Business Functional Area Use**:*

Creating a business partner component

To describe a business architecture environment that uses participants internal or external to the environment described, you must:

1. Create a *Business Partner Component*.
2. Associate the person (or the person group) to the *Business Partner Component* created.

   In the example of the business architecture environment of the manufacturing company, the business partners used are the clients and the service provider who ensures the delivery.

   ☛ *For more details on business partners, see Describing Business Partners.*

To create a **Business Partner Component**:

1. In the insert toolbar for the business architecture environment diagram, click **Business Partner Component** and click in the frame of the diagram.
   A creation window prompts you to choose the existing **Business Partner** or create a new one.

   Create for example the "Clients" business partner.
2. Click **OK**.
   The business partner use appears in the diagram.

Describing a Business Functional Area

📖 *A Business functional area is a set of business functions and their associated value streams on the conjunction of two main criteria: their*

need in accomplishing one or more business capabilities and the common skills and functionalities required to accomplish these business capabilities.

Accessing the business functional area list

To access the business functional area list:

1. In the **Inventories** navigation menu, click **Business Architecture > Business Functions**.
   The tree of business functional areas appears.

The properties of a business functional area

The **Characteristics** properties page of a functional area provides access to:

- its **Name**,
- its **Owner**, by default on creation of the business functional area, the current enterprise.
- the text of its **Description**.
- its **Owned Realizations**

> ☛ *For more details on creating a business capability, see Creating Fulfillment of a Business Capability.*

With **HOPEX IT Business Management** , a business functional area is described in the following pages:

- the **Structure** page, which provides access to the list of components of the business functional area.

  > ☛ *For more information on the components of a business functional area, see Describing a business functional area diagram.*

- the **Performed Process** page, which provides access to the value streams executed in the context of the business functional area.

Describing a business functional area diagram

A business functional area diagram describes the service interactions between the main internal components of the architecture described. It thus describes:

- the *uses of the business functional area*,

  > 🕮 *A Business functional area is a set of business functions and their associated value streams on the conjunction of two main criteria: their need in accomplishing one or more business capabilities and the common skills and functionalities required to accomplish these business capabilities.*

  `In this example, the history functional area is based on the business functional areas for selling, delivering and command.`

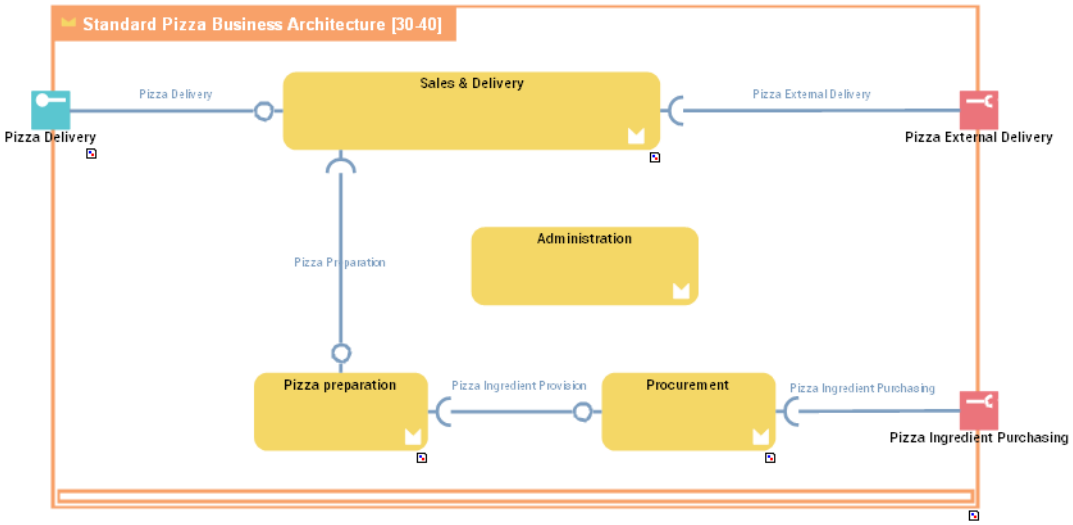
  > ☛ *For more information on the use of a business functional area, see Creating an internal or external business functional architecture area.*

- the *business components*.

  > 🕮 *A business function is a conceptual unit of the division of responsibilities in an enterprise. It is used to structure the management of information processing, energy, and equipment produced or used.*

Business functions define the skills and the functionalities necessary to the enterprise to fulfill its mission.

☛ *For more details on business functions, see Describing Business Functions.*



With **HOPEX IT Business Management** , communications are based on:

- access points: *service points* and *request points*.

  A service point is a point of exchange by which an agent offers a service to potential customers.

  A request point is a point of exchange by which an agent requests a service from potential suppliers.

  ☛ *For more details on service interactions between components, see Managing service points and request points.*

- *service interactions*

  A Service Interaction represents an interaction for service purpose between entities in a specific context inside or outside a company. These entities can be enterprise org-units, applications, activities or processes, as well as external org-units. The content of this interaction is described in a service interface.

  ☛ *For more details on service interactions between components, see Managing Service Interactions.*

Managing service points and request points

A business business functional area is created to ensure one or more services. These services are represented by *service points*. The service is requested according to precise terms defined by an *service interface* assigned to the service point.

A service point is a point of exchange by which an agent offers a service to potential customers.

A Service Interface is a template of a contract between entities (organizational, IT …). The contract is described by available operations which can be triggered trough messages exchanged by roles (vendor, buyer..).

A *request point* is used to represent the use of an external service.

> 🕮 *A request point is a point of exchange by which an agent requests a service from potential suppliers.*

The service is requested according to specific terms that are defined by a *service interface* assigned to the request point.

Components that issue a request are linked to the request point by a service interaction.

```
In the example, the request point that represents the
"External delivery" is linked to the "Sales and deliveries"
business functional area by a service interaction.
```

Creating a service point or a request point

The process for creating a *service point* or *request point* is identical.

To create a service point:

1. In the diagram insert toolbar, click **Service Point**.
2. Position the object at the edge of the architecture frame.
   A creation dialog box opens.
3. Click the arrow to the right of the **Service Interface** field to define the service interface enabling activation of this service point, and select, for example, **Connect Service interface**.
   A query window opens.
4. Select the service interface associated with this service point.
5. Click **Next**.
   A dialog box opens proposing a list of the service interface roles that can be associated with the service point.

   > ☛ *This second dialog box is not proposed if there is only one candidate role that can be associated with the service point.*
6. Select the role that interests you and click **OK**.
   The service point appears in the diagram.

To change the service point name:

1. Click the name of the service point and press key F2.
2. Enter the new name used when specifying service interaction points.

Managing Service Interactions

A *Service Interaction* represents the exchange of information between architecture components.

> 🕮 *A Service Interaction represents an interaction for service purpose between entities in a specific context inside or outside a company. These entities can be enterprise org-units, applications, activities or processes, as well as external org-units. The content of this interaction is described in a service interface.*

The content of a service interaction is described by an *service interface*.

> 🕮 *A Service Interface is a template of a contract between entities (organizational, IT …). The contract is described by available operations which can be triggered trough messages exchanged by roles (vendor, buyer..).*

Creating a Service interaction

To create a service interaction:

1. In the objects toolbar of the diagram, click **Service interaction.**
2. Draw a link between the two communication entities.
3. In the Add service interaction window, specify the service interface you wish to use.

   ☛ *You can also create a new service interface, see Creating a service interface from a service interaction.*
4. Click **OK**.

Creating a service interface from a service interaction

You can create a service interface:

- from a library,
- from a service interaction in a diagram.

To create a service interface, in a diagram, from a service interaction:

1. In the objects toolbar of the diagram, click **Service interaction.**
2. Draw a link between the two communication entities.
3. In the Add service interaction window, click the arrow at the right of the field **Service interface** and select **New**.
   The creation window appears.
4. Enter the service interface name in the **Name** field.
5. Click **OK**.
   The service interaction and the service interface are created.

Describing Business Functions

🕮 *A business function is a conceptual unit of the division of responsibilities in an enterprise. It is used to structure the management of information processing, energy, and equipment produced or used. Business functions define the skills and the functionalities necessary to the enterprise to fulfill its mission.*

Accessing the list of business functions

To access the list of Business Functions from the **Inventories** navigation menu:

1. Select **Business Architecture > Business Functions**.
   The tree of business functional areas appears.
2. Expand the folder of the business functional area that interests you.
   The list of business functions connected to the concerned business functional area appears.

Business properties

The **Characteristics** properties page of a business function provides access to:

- its **Owner**, by default on creation of the business function, the current enterprise.
- its **Name**,
- the text of its **Description**.
- its **Owned Realizations**

> ☛ *For more details on creating a business capability, see Creating Fulfillment of a Business Capability.*

With **HOPEX IT Business Management** , a business function is described by the following pages:

- the **Required Abilities** page is used to specify a list of skills and functionalities required by the business.

> ☛ *For further details, see .For further details, see Describing functionalities.*

- the **Performed Process** page, which provides access to the value streams executed.

Describing Business Partners

> 🕮 *A business partner designates a third-party who is in relation with the enterprise within the framework of a given business architecture environment. Examples: private sector client, regulatory organization, supplier.*

Accessing the business partners list

To access the list of Business Partners from the **Inventories** navigation menu:

1. Select **Business Architecture > Business Partners**.
   The list of business partners appears in the edit area.

The properties of a business partner

The **Characteristics** properties page of the business partner provides access to:

- its **Owner**, by default on creation of the business partner, the current enterprise.
- its **Name**,
- Its **business partner group**, see Drawing up the Roadmap,
- the text of its **Description**.

With **HOPEX IT Business Management** , a business partner is described by:

- the **Service and Request Points** page, which specifies the services expected or delivered by a business partner.

  ☛ *For more information on these service points and request points, see Managing service points and request points.*

- The **Usage** page provides access to the business function architecture environments that use the described object, see Describing a Business Architecture Environment.

DESCRIBING AN ENTERPRISE ARCHITECTURE

The enterprise architecture is described through the architecture description of each transformation stage that represent the architecture evolution over the time.

A transformation stage is defined by a number of components that represent its architecture. This consists of:

- The lists of exhibited business capabilities;

  📖 *An exhibited business capability is exhibited by an Enterprise Stage with quantified measure (KPI) and potential geopolitical scope (Site) for a defined market segment (Business Partner).*

  ☛ *For more details on how to associate an exhibited business capability with a transformation stage, see Creating an exhibited business capability.*

- the business architecture environment;

  📖 *A business architecture environment represents the relationships of a business functional area with its partners.*

  ☛ *For further details, see .For further details, see Describing a Business Architecture Environment.*

- the solution building block environments.

  ☛ *For more details on how to access this information from an enterprise or a transformation stage, see Describing physical solutions.*

Describing the operating architecture

The business architecture environment contains the elements that define the enterprise model (operational model) for the current stage.

☛ *For more details on the managing the business architecture environment, see Managing a Business Architecture Environment.*

The elements constituting the enterprise operational model are:

- the enterprise ecosystem defined by the service interactions with the partners,
- the business function architectures,
- the business functions.

To describe the business architecture environment for a transformation stage:

1. Open the **Architecture Description** property page of the transformation stage.
2. In the **Functional Architecture** section, click the right arrow of the **Operational Model** field.
3. Click **Connect a business architecture environment**.
   A selection window opens.
4. Select the business environment architecture that interests you and click **Connect**.
   The business architecture environment is connected to the transformation stage.

Describing physical solutions

The possibilities to describe physical solution depend on the product licenses that you have, for example:

For example, with **HOPEX IT Architecture**, you have access to:

- **Logical Application System Environments**
- **Application System Environments**
- **Resource Architecture Environments**.

To connect technical or application architecture building blocks to an transformation stage:

1. Open the **Architecture Description** property page of the transformation stage.
2. In the **Functional Architecture** section, click **Connect**.
   A selection window opens.
3. Select the environment type concerned and click **Find**.

   A business architecture environment represents the relationships of a business functional area with its partners.

   A resource architecture is the combination of physical and organizational assets configured to supply a capability.

   An application system environment allows presenting the other application systems, applications or microservices with which this application system can interact.

   A logical application system environment presents a logical application system use context. It describes the service interactions between the logical application system and its external partners, which allows it to fulfill its mission and ensure the expected functionalities.
4. Select the environment that interests you and click **Connect**.
   The environment is connected to the transformation stage as well as to all the building blocks that it comprises.

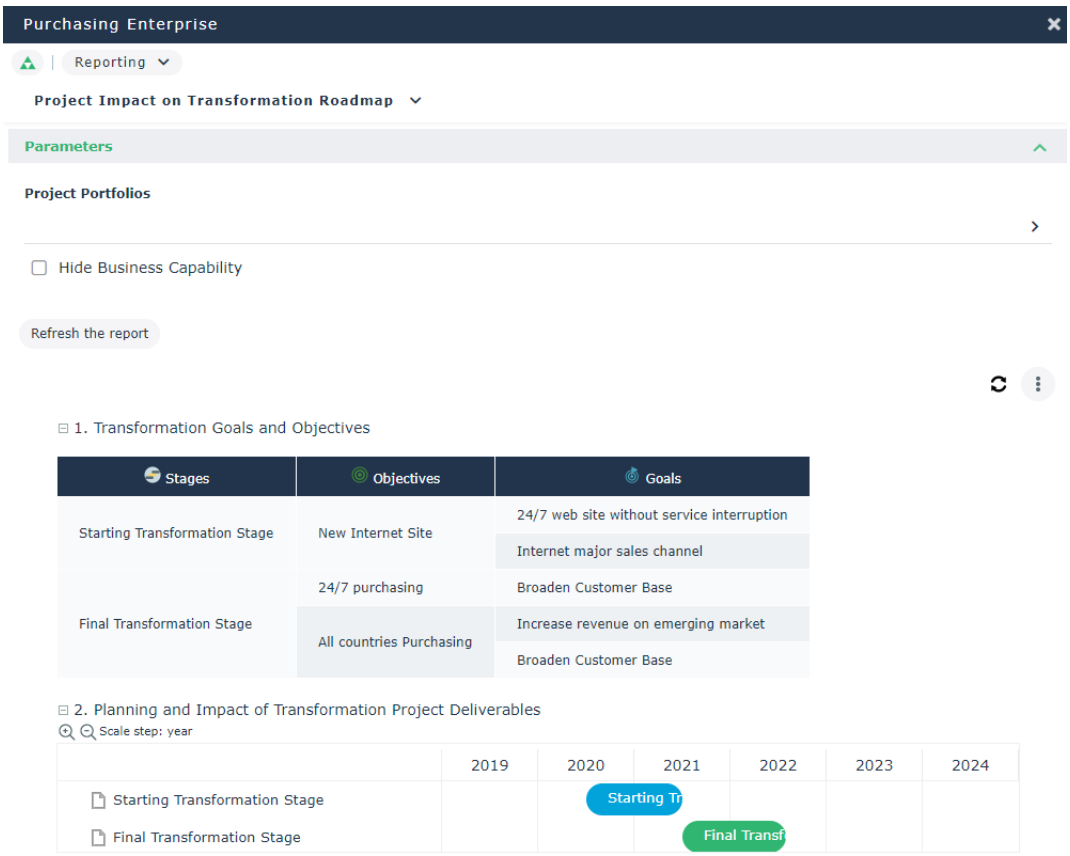
DRAWING UP THE ROADMAP

A number of functionalities are available to display and analyze an enterprise's transformation strategy and the stages of its deployment.

Each transformation stage is positioned in the enterprise according to their period, in order to define the transformation roadmap for the enterprise underway.

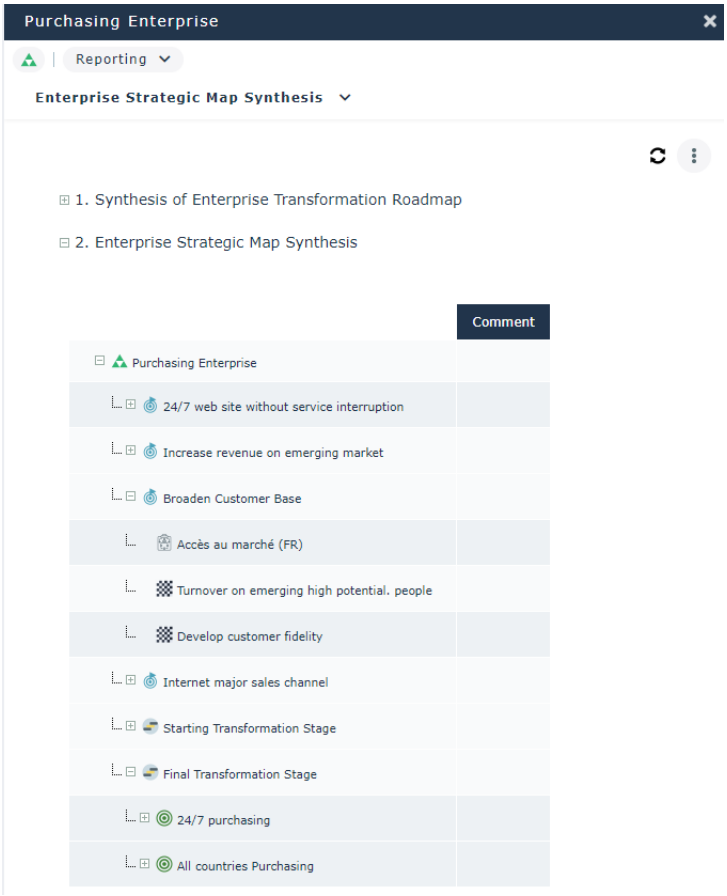
> ☛ *For more details on transformation stages, see Defining Transformation Stages.*

The transformation stages dates are presented in the colons of the dedicated report of the enterprise.



The strategic components of the enterprise and its transformation stages are displayed in another enterprise report.

> *For more details on strategic elements, see Identifying Strategic Transformation Elements.*



MANAGING IT ASSETS

HOPEX IT Business Management integrates the application inventory and evaluation functions of **HOPEX IT Portfolio Management** (ITPM).

Drawing up an Application Inventory

HOPEX IT Business Management offers the possibility to describe simple applications or more complex applications via the use of application systems.

The application inventory phase consists of collecting information from different viewpoints: descriptive, functional, financial, technical, etc.

See Drawing up an Application Inventory in the ITPM documentation.

Drawing up a Technology Inventory

Similarly to applications, **HOPEX IT Business Management** enables to draw up an inventory of available technologies and to collect information according to different criteria.

See Drawing up a Technology Inventory in the ITPM documentation.

Managing the Data Used in the Application Assets

You can inventory data and link them to the applications that use them.

See Managing the Data Used in the Application Assets in the ITPM documentation.

Evaluating Application Assets

Each application manager can evaluate applications for which he/she is responsible based on three criteria: business, functional and technological. See Evaluating Application Criticality.

The Portfolio Manager can evaluate the application assets he/she supervises by creating an application portfolio and associating with it additional evaluation criteria.

See Evaluating Application Assets in the ITPM documentation.

IMPORTING OBJECTS IN HOPEX IT BUSINESS MANAGEMENT

HOPEX IT Business Management provides an Excel file template for bulk importing objects into the repository.

Downloading the Excel Import Template

The Excel import template is available in the HOPEX Store.

To download the file:

1. Connect to the HOPEX Store.
2. Click **Modules**.
3. Search for the **ITBM Excel Import Template**.
4. Select the template and click **Download**.

Template description

The file enables bulk import of the following object types:

- Strategy objects: enterprises, goals, strategies.
- Transformation objects: stages, objectives, tactics, exhibited business capabilities.
- Business architecture objects: value streams, value stages, business function areas, business functions, business partners.

The different types of objects concerned are presented in dedicated sheets.

The _README sheet details the object import:

This HOPEX template provides means to bulk import ITBM data		
Strategy	Enterprises	allows import of Enterprises : creating Enterprises with their properties (including link with **existing** reference Business Capability Map)
	Goals	allows import of Enterprise Goals : creating Enterprise Goals and their Strategic Themes
	Strategies	allows import of Enterprise Strategies : creating Enterprise Strategies and links to Enterprise Goals (created in "Enterprise Goals" tab)
Transformation Stages	Stages	allows import of Stages : creating Stages with their properties
	Objectives	allows import of Stage Objectives : creating Stage Objectives and links to Enterprise Goals (created in "Enterprise Goals" tab)
	Tactics	allows import of Stage Tactics : creating Stage Tactics and links to Enterprise Strategies (created in "Enterprise Strategies" tab) and Enterprise Objectives (created in "Enterprise Objectives" tab)
Exhibited Business Capabilities by Stage	Exhibited Business Capabilities	allows import of Exhibited Business Capabilities : creating Exhibited Business Capabilities with links to **existing** Business Capabilities and Stages, Stage Objectives (created in "Stage Objectives" tab) and creating fulfillments by **existing** Applications or Application Systems. Note : this means Business Capabilities, Application and/or Application Systems have been previously captured in repository or imported with the ITPM import tool.
Business Architecture	Value Streams	allows import of Value Streams : creating Value Streams and their sub-Value Streams
	Value Stages	allows import of Value Stages : creating Value Stages and links to their owning **existing** Value Stream and required **existing** Business Capabilities
	Business Function Areas	allows import of Business Function Areas : creating Business Function Areas and their sub-Business Function Areas
	Business Functions	allows import of Business Functions : creating Business Functions and links to their owning **existing** Business Function Area, required **existing** Functionalities and required Business Skills
	Business Partners	allows import of Business Partners : creating Business Partners
Date Format	Date Format should be:YYYY/MM/DD	
Empty cells by mistake	Cells with missing data (for consistency) will be highlighted like this	

Project Portfolio Management

INTRODUCTION TO PROJECT PORTFOLIO MANAGEMENT

Project Portfolio Management (PPM) is an approach used by an organization to analyze the potential return of a set of projects. Its primary aims are to:

- Control the suitability of projects with respect to the strategic objectives of the organization.
- Ensure consistency between the projects and the organization's capability.

This approach examines the risks, the available funds, the probable duration of a project and the expected results. A group of decision-makers assesses the benefits and the priority to be given to each project to determine the best way to invest the capital and the human resources of the organization.

In **HOPEX IT Business Management** and **HOPEX IT Portfolio Management** solutions, the **HOPEX Project Portfolio Management** option offers a set of features to:

- Submit and assess the project demands and candidate projects.
- Validate the candidate projects: the project demand goes through a validation process that results in a project creation.
- Select and define the project priority: a limited list of projects is drawn up according to selection criteria (strategic, financial, etc.)
- Analyze and arbitrate the projects.
- Follow project progress.

☛ *For more details on **HOPEX** features, see the **HOPEX Common Features** guide which presents features common to all **HOPEX** products.*

THE SCOPE COVERED BY PPM

The **HOPEX Project Portfolio Management** option covers the following concepts:

- The management of project demands and candidate projects
- Project portfolio management

Prerequisites for Creating Projects

Importing the PPM module

To be able to use functionalities of **HOPEX Project Portfolio Management**, you must first import the **PPM** module.

To import a module in **HOPEX**, see "Importing a module in **HOPEX**" chapter of the **HOPEX Administration** guide.

It contains:

- The following portfolio types:
  - project demand portfolios
  - candidate project portfolios and projects in progress
- The states of the project:
  - Project demand
  - Candidate project
  - Ongoing project
- The two criteria weighting models:
  - PPM value & risk weighting model
  - PPM flat weighting model

Defining project domains

Each project belongs to a project domain.

Before creating a project, you must create the corresponding domain.

See Defining Project Domains.

Managing Project Demands and Candidate Projects

Identifying and documenting demands

The demand manager can create a project demand or research a project demand created from an idea.

☛ *For idea creation, see Submitting and evaluating ideas.*

The demand manager can document the project charter and its business case. He/she can in particular:

- Define the scope of the project in terms of deliverables or impact on the capabilities of the enterprise,
- Define a forecast budget,
- Identify the project risks,
- etc.

Assessing demands

The demand manager can assess a project demand:

- According to qualitative and quantitative criteria defined in the project demand portfolio.
- Through the qualitative assessment (business value level, strategic alignment, cost, global risk level), which is used to calculate a global score for the project and compare the projects between each other.

Validating demands

The demand manager can submit a project demand to the demand approver.

The approver can validate or reject the project demand.

A validated demand leads to the creation of a candidate project, submitted for assessment to project portfolio managers.

Assessing candidate projects

In the same way as demands are assessed, candidate projects can be assessed:

- According to qualitative and quantitative criteria defined in the project demand portfolio.
- Through the qualitative assessment (business value level, strategic alignment, cost, global risk level), which is used to calculate a global score for the project and compare the projects between each other.

Validating candidate projects

The approver can validate or reject the candidate project.

When a candidate project is validated, it takes on the status of a project in progress.

Following-up ongoing projects

The project portfolio manager assigns a manager to the project, responsible for follow-up of the progress of the project. You can view the calendar and the progress of a project in a report.

Project Portfolio Management

Selecting the projects and defining priorities

Portfolio managers and administrators define the project domains that determine the strategic perspectives of the organization in which the projects are classified (for example: "Business projects", "IT projects").

Arbitration portfolios are automatically associated with the domains of the projects created. They group the projects in the domain, classifying them according to their type (project demands, candidate projects and ongoing projects).

In an arbitration portfolio, the project portfolio manager and approver can create analysis portfolios; they represent a sub-set of projects in the arbitration portfolio and can be assigned to a specific project portfolio manager.

In an arbitration portfolio or an analysis portfolio, the project portfolio manager can:

- Browse, in read-only, the criteria assessed at the project level (for example, the strategic alignment level, the risk level, the cost level and other attributes specific to the project).
- Assess the criteria specific to the portfolio (other than the project criteria).
- Generate project comparison reports (for example, bubble charts) based on these criteria.

Using an arbitration portfolio or an analysis portfolio, the project portfolio manager can create scenarios.

In a scenario, the project portfolio manager can choose to select or not a given portfolio line (which is different from the project validation), and note the impact of this choice in dedicated reports.

Analyze and arbitrate portfolio projects

Using a portfolio, the project portfolio manager can generate analysis and comparison reports to compare, for example, the accumulated risks or costs of a given scenario.

The project portfolio manager can keep one scenario or a set of scenarios.

ROLES IN HOPEX PROJECT PORTFOLIO MANAGEMENT

HOPEX Project Portfolio Management includes by default business roles with specific rights and tasks.

They are part of the workflow associated with objects.

Demand Submitter

The demand submitter is the person who creates the demand (role created automatically on demand creation).

Demand Approver

The demand approver is responsible for validating the demand. The approvers can be defined globally for a project domain or a portfolio, or on a project-by-project basis.

Project Portfolio Approver

The project portfolio approver is responsible for validating the demand. The approvers can be defined globally for a project domain or a portfolio, or on a project-by-project basis.

Project Leader

The project leader is responsible for project completion and follow-up.

Project Portfolio Manager

The portfolio manager is responsible for examining candidate projects in their entirety and approving or rejecting the candidate projects submitted by the demand managers. He/she is responsible for assessing the risk level, the strategic alignment and the costs/benefits of the project in the project portfolio, and to thus define the relative benefits of the candidate projects and projects in progress.

Project Stakeholder

Project stakeholder is the role of an individual, team, or organization that represents their interests in the project outcomes.

DEFINING ENTERPRISE PROJECTS

According to the PMI® standard PMBOK, a project is a "temporary enterprise chosen with the aim of creating a product, a service or a unique result".

A project has a purpose in terms of an acquired, improved/extended or abandoned capability. A project generates project deliverables.

With **HOPEX Project Portfolio Management** option, you can:

- Submit project demands
- Define project content
- Assess project demands and candidate projects.
- Follow project progress

The points covered here are:

DEFINING PROJECT DOMAINS

A project can be defined in a given project domain.

The project domain defines the sector and the application scope of the project (for example: business function, IT, search and development). It is the container of a set of projects on which an arbitration can be conducted.

Two arbitration portfolios are automatically associated with a project domain:

- demand portfolios
- candidate project portfolios and projects in progress

For more details on arbitration portfolios, see Grouping Projects by Portfolio.

Creating a Project Domain

To create a project domain:

1. Click the **Projects** > **Project Domains** navigation menu.
2. In the edit window, click **New**.
   The create a project domain window appears.
3. Enter the name of the domain.
4. Click **OK**.

When you create a domain, the two types of portfolios that correspond to the different project statuses (project demands, candidate projects and projects in progress), are also created. They are visible in the **Project Portfolios**.

Assigning a Domain to Persons

It is possible to define particular roles for users on a domain; these roles are then valid for all the projects in the domain.

To assign a person to a domain:

1. Display the domain properties.
2. Click the **Assignment** page.
3. Click **New**.
4. In the window that opens, select the person or person group.
5. Select their role. You can define the following roles:
   - Demand Approver
   - Project Portfolio Approver
   - Project Portfolio Manager
6. Click **OK**.

MANAGING PROJECT DEMANDS

The demand creators and the demand managers can create new project demands and view the project demands that were generated using ideas.

Demand managers can document the project charter as well as the business case. They can in particular define the scope of the project in terms of deliverables and the risks associated with the project.

Demand Management Process

The project demand process is broken down into three parts:

- Creating the demand
- Evaluating the demand
- Approving or rejecting the demand

Creating a Project Demand

To be able to create projects, you must import the PPM module. See Prerequisites for Creating Projects.

You must also have created a project domain. See Defining Project Domains.

To create a project demand:

1. Click the **Projects** > **Projects** navigation menu.
2. In the edit area, click the **Projects** tab.
3. Display "All projects".
4. Click **New**.
   The project creation window appears.
5. Select the "Demand" project type and click **Next**.
6. Specify:
   - The project name
   - the owner project domain
   - the project code (optional)
   - the planned start date
   - the planned end date
7. Click **OK**.

Defining the Project Charter

To define the charter for a project:

1. Click the **Projects** > **Projects** navigation menu.
2. In the edit area, click the **Projects** tab.

3. Display "All projects".
4. Click the project concerned to open its properties.
5. In the project properties window, click the **Project Charter** page.

The definition of the project charter includes:

- The **identification**:
  - project name
  - project owner domain
  - project code (optional)
  - project manager
  - state (life cycle status) Defined automatically.
  - status (workflow step). Defined automatically.
  - description (comment)
- The project **category or categories**.
- The **initiating ideas**: ideas that have inspired the project.

Defining the Business Case of a Project

To define the business case for a project:

1. Click the **Projects** > **Projects** navigation menu.
2. In the edit area, click the **Projects** tab.
3. Display "All projects".
4. Click the project concerned to open its properties.
5. In the project properties window, click the **Business Case** page.

Transformation objective

A project has an objective with respect to the capabilities of the enterprise (as defined in a capability map); it can:

- deliver the means to acquire a new capability (innovation)
- extend the coverage of a capability already held (improvement)
- restrict or abandon the coverage of an existing capability (rationalization).

To add a transformation objective to the project:

1. In the **Transformation Objective** section, click **New**.
   The creation dialog box for a transformation objective opens.
2. Specify:
   - its name
   - the transformation type (Innovation, Improvement, Rationalization)
   - the capability transformed
3. Click **OK**.

Project deliverables

A project deliverable defines the result of a project and its impact on or its contribution to the architectural solution landscape of the enterprise.

It is defined by a solution block (example: an organization, an application, an infrastructure element) delivered by the project in the target architectural landscape. Within the framework of a project deliverable, a block can be:

- New: the project delivers a new block to the target architectural landscape.
- Updated: the project modifies an existing block in the current landscape, for example by extending its lifecycle, and delivers the updated version to the target architectural landscape.
- Deleted: the project deletes an existing target architectural block, which will therefore not be part of the target landscape.

To add a deliverable to the project:

1. In the **Deliverables** section, click **New**.
   The window for creating a deliverable appears.
2. Specify if you want to:
   - create a new block
   - update an existing block
   - decommission an existing block
3. Click **Next**.
4. Specify:
   - the deliverable name
   - the deliverable type
   - the deliverable production dates
5. Click **OK**.

Deliverable production dates

To model component change scenarios for elements in your portfolio without impacting the life of components in place, you will associate an *object life* with the deliverables.

> 🕮 *The object life is a set of time periods representing the updated calendar of object life cycle states.*

When the project is terminated (via the corresponding workflow command), the life cycle of deliverables is automatically transferred to the objects concerned.

To define the life of a project deliverable:

1. In the **Deliverables** section, select the deliverable in question.
2. Click **Properties**.
   The properties window of the deliverable appears.
3. Click the drop-down list then **Object Life**.
4. Click **New**.
   The creation of object life dialog box appears.
5. Specify the following characteristics:
   - the **life cycle** that defines the list of possible object states.

     > ☛ *For more information on proposed life cycles, see Defining Life Cycles.*

   - a **Begin Date** and an **End Date** which enable positioning of the object life in time.
6. Click **OK**.
   A Gantt char is used to view the steps of the life cycle of a deliverable.

On the project, the **Gantt char for the lifecycle of the project deliverables** details the lifecycle of the project deliverable.

Project dependencies

A project can depend on other projects:

- In a "positive" sense: a project can have another project as a prerequisite, of which one of the deliverables is necessary to build a deliverable of the dependent project (this is the equivalent of an AND logic: both projects must be conducted jointly to reach the final result).
- In a "negative" sense: two projects can be concurrent and mutually exclusive (this is the equivalent of the OR logic: only one of the projects must be managed, not both).

To associate a dependency with the project:

1. In the **Project Dependencies** section, click **New**.
2. Specify:
   - The name of the dependency
   - The project required
   - The type of dependency: "Exclusive" or "Prerequisite".
3. Click **OK**.

Project costs

The specification of the costs of a project take place through the cost lines.

One or more cost lines can be associated with a project.

 *A cost line enables identification of cost kind and type.*

A cost line is characterized by:

- a type: operating or capital;
- a nature: infrastructure (for a deployment), license (for an application), service, manpower;
- state of the cost line .

Associated with a cost line can be:

- a periodic expense
- one or several fixed expenses

Creating a cost line

To create a cost line for a project:

1. Expand the **Costs** section.
2. Under **Cost Line**, click **New**.
   The **Creation of a cost line** box opens.
3. To create a single cost line, select option **Create only one cost line**.
4. Click **Next**.
5. Specify the **Name** of the cost line.
6. Select the **Cost Type**.
7. Select the **Cost Nature**.

8. Select the **state** of the cost line.

   ☛ *The states proposed in the drop-down list are the states of the life cycle associated with the object life.*

9. Click **Next**.
10. Define the periodic expense.

    ☛ *Fixed expenses, which can be multiple, are defined separately. For more details on fixed expense creation, see Adding a fixed expense.*

11. Click **OK**.
    The new cost line appears in the **Cost Line**.

Adding a fixed expense

To associate a fixed expense with a cost line:

1. In the **Cost Line** section, select the cost line that interests you.
2. In the **Cost Line Expenses**section, click **New**.
   The **Creation of Expense** dialog box opens.
3. Specify:
   - the **Name** of the expense
   - the **Date** of the expense,
   - the **Amount** of the expense.
4. Click **OK**.
   The new expense appears in the **Fixed Expenses** section.

Project benefits

You can specify:

- the **Qualitative Benefits**: to be entered as a comment.
- the **Financial Value** of the project: in currency = project NPV (net present value), calculated outside the tool according to the standards of the enterprise.
- the **Return on Investment**: calculated attribute, as a %
  (Financial value - Budget) / budget
- the **Forecast Return on Investment**: calculated attribute, as a %
  (Financial value - Estimated total cost) / Estimated total cost
- the **Actual Return on Investment**: calculated attribute, as a %
  (Financial value - Real total cost) / Real total cost

Project risks

With **HOPEX IT Portfolio Management**, you can identify the risks linked to a project. Each risk is associated with a single project.

To create a project risk:

1. Expand the **Risk** section.
2. Click **New**.
   The risk creation dialog box appears.
3. Enter the name of the risk and the type of risk (cost, deadline, quality).
4. Click **OK**.

To assess risks, see Assessing the Risks of a Project.

Assigning a Project to Persons

The persons who can be assigned to a project are those who perform one of the following business roles:

- Demand Approver
- Requester
- Project Manager
- Project Holder
- Project Portfolio Approver
- Project Portfolio Manager
- Project Stakeholder

The author of the idea and the innovation manager can assign persons to a project.

To assign a person or a person group to a project.

1. Click the **Projects** > **Projects** navigation menu.
2. In the edit area, click the **Projects** tab.
3. Display "All projects".
4. Click the project concerned to open its properties.
5. In the project properties window, click the **Assignment** page.
6. Click **New**.
7. In the dialog box that appears, select a **Person** or a **Person Group**, as well as their **Business Role**.
8. Click **OK**.

Repeat this procedure to assign other persons to the project.

Validating or Rejecting a Project Demand

After assessment, the demand manager can submit the project demand to a demand approver.

☛ *For more details on assessment, see Assessing a Project.*

The approver approves or rejects the demand.

Validating a project demand

A validated project demand becomes a candidate project; the state of its life cycle is automatically modified and it is transferred to the portfolios of the candidate projects in the domain to which it belongs.

Rejecting a project demand

A rejected project demand remains in the list of projects, with the "Demand rejected" status. It can be archived.

MANAGING CANDIDATE PROJECTS

Candidate Project Management Process

The management process of a candidate project is broken down into three parts:

- Creating the Project
- Assessing the project
- Defining the scenarios
- Approving or rejecting the project

Creating a Candidate Project

A project demand validation leads to a candidate project.

The project portfolio manager can create a candidate project directly without going through the demand management phase, or an ongoing project (in other words validated) if needed.

To be able to create projects, you must import the PPM module. See Prerequisites for Creating Projects.

You must also have created a project domain. See Defining Project Domains.

To create a project candidate:

1. Click the **Projects** > **Projects** navigation menu.
2. In the edit area, click the **Projects** tab.
   Use the drop-down list to display:
   - all projects
   - projects by status (candidate projects, ongoing projects)
   - the projects assigned to you
3. Display all projects.
4. In the demands for the edit area, click **New**.
   The window for creating a project appears.
5. Enter the name of the project.
6. Select the "Candidate" project type.
7. Click **Next**.
8. Specify:
   - the owner project domain
   - the project code (optional)
   - the planned start date
   - the planned end date
   - the project leader
9. Click **OK**.

See also: Creating a Project Demand.

Completing the Candidate Project Definition

Once the project is created, you can complete its properties in the same way as for a project demand.

See:

- Defining the Project Charter
- Defining the Business Case of a Project
- Assigning a Project to Persons

See also:

- Assessing a Project

Validating or Rejecting a Candidate Project

After assessment, the demand manager can submit the candidate project to the project portfolio approver.

This presupposes that an approver has been previously linked to the project, portfolio or project domain in question.

☛ *To assign a project to a person, see Assigning a Project to Persons.*

☛ *For more details on assessment, see Assessing a Project.*

The project portfolio approver approves or rejects the project.

Validating a candidate project

A validated candidate project becomes an ongoing project; its lifecycle status is automatically changed.

Rejecting a candidate project

A rejected candidate project remains in the list of projects, with the "Project rejected" status. It can be archived.

ASSESSING A PROJECT

A first assessment of a project takes place with the definition of the business case of the project; you can specify the deliverables, the dependencies with other ideas or risks, the costs, the benefits, the risks.

The business case elements can be defined on project demand, and subsequently completed. For more details, see Defining the Business Case of a Project.

Once the project characteristics are defined, an evaluation tool facilitates the selection of projects and helps define priorities.

The demand managers can assess the projects:

- At the level of the project, via:
  - the qualitative review of the project (business value, level of strategic alignment, etc.)
  - the assessment of the project risks
- according to qualitative and quantitative criteria defined in the project portfolio. See Assessing Portfolio Projects.

Assessing a Project

An assessment can concern a project demand or a candidate project.

To assess a project:

1. Click the **Projects** > **Projects** navigation menu.
2. In the edit area, click the **Projects** tab.
3. Display all the projects.
4. Click the project in question to open its properties.
5. In the properties window, click the **Project Assessment** page.
6. In the **Assessment** section, click **New Assessment**.
   An assessment line appears.
7. In each corresponding column, specify:
   - the business value level
   - the strategic alignment level
   - the cost level
   - the global risk level

To validate the assessment, select the assessment line and click **Validate Assessment**.

☛ *The **Project Note** attribute visible on a portfolio is calculated automatically based on these values.*

Assessing the Risks of a Project

Assessing the risks of a project can start on project demand. This can take place globally on the project (in the **Project Assessment**) or for each risk associated with the project (in **Risk Assessment)**.

To assess the risks of a project:

1. Click the **Projects** > **Projects** navigation menu.
2. In the edit area, click the **Projects** tab.
3. Display all the projects.
4. Click the project in question to open its properties.
5. In the properties window, click the **Risk Assessment** page.
6. Click **New Assessment**.
7. In the window that appears, select the risks to be assessed.
   - Some
   - All
8. Click **OK**.
   The assessment appears in the properties window.
   You can define:
   - The**Impact**: characterizes the impact of the risk when it occurs.
   - The **Likelihood**: characterizes the probability that the risk will occur.
   - The **Inherent Risk Level**: The inherent (or gross) risk indicates the risk to which the organization is exposed in the absence of measures taken to modify the likelihood of occurrence or impact of this risk. This is the result of multiplying the impact value and the likelihood value before taking account of risk prevention or reduction measures.
     In summary, an inherent risk = impact x likelihood
     It is calculated automatically.
   - The **Control Level**: The Control level characterizes the efficiency level of control elements deployed (controls) to assess the risk.
   - The **Net Risk Level**: the residual (or net) risk indicates the risk to which the organization remains exposed after management has processed the risk. This is the difference between the Inherent Risk and the Control Level. It is calculated automatically.

See also Assessing the Risks of a Project.

FOLLOW-UP OF ONGOING PROJECTS

Process for Follow-up of Ongoing Projects

Ongoing projects result from the validated candidate projects.

☛ *A project portfolio manager can also directly create an ongoing project.*

The project portfolio manager assigns a manager to the project, responsible for follow-up of the progress of the project.

Project follow-up consists of the following steps:

- Starting the project
- Specifying the project milestones
- Updating the project progress
- Terminating the project

Starting a project

The project portfolio manager and project managers can start a project.

To start a project:

1. Click the **Projects** > **Projects** navigation menu.
2. In the edit area, click the **Projects** tab.
3. In the drop down list, select the list of ongoing projects.
4. Click the icon of the project concerned and select **Project Workflow (Project to Start) > Start the Project.**
   A dialog box appears:
5. Enter a comment if required and click **OK**.
6. Specify the effective start date of the project and click **OK**.
   The project workflow status switches from "To be started" to "Ongoing Project".

Specifying the Project Milestones

Between the scheduled start and end dates, intermediate milestones can be defined and associated with deliverables.

🕮 *A project milestone defines an intermediate delivery step in the life cycle of the project life. A project deliverable can be associated with a project milestone if it is delivered during the project and on the project date.*

☛ *Associating a project deliverable with a milestone does not affect automatic initialization of its life cycle; it can be subject to a manual modification if appropriate.*

Within the framework of project progress follow-up, you can define the level of progress for each milestone.

To add a milestone to a project:

1. Click the **Projects** > **Projects** navigation menu.
2. In the edit area, click the **Projects** tab.
3. Display all the projects.
4. Click the project in question to open its properties.
5. In the project properties window, click the **Project Milestones** page.
6. In the **Milestones** section, click **New**.
   The window for creating a milestone appears.
7. Specify:
   - The local name
   - The scheduled date of the milestone
   - A comment if required
8. Click **OK**.

Assessing the Progress State of a Project

You can indicate the progression of a project in progress and the different milestones defined on a project.

```
Example

My project is 25% complete at this time.

I have reached the first milestone, so I can put it at 100%
this same day.
```

Updating the project progress

To update the progression of a project in progress:

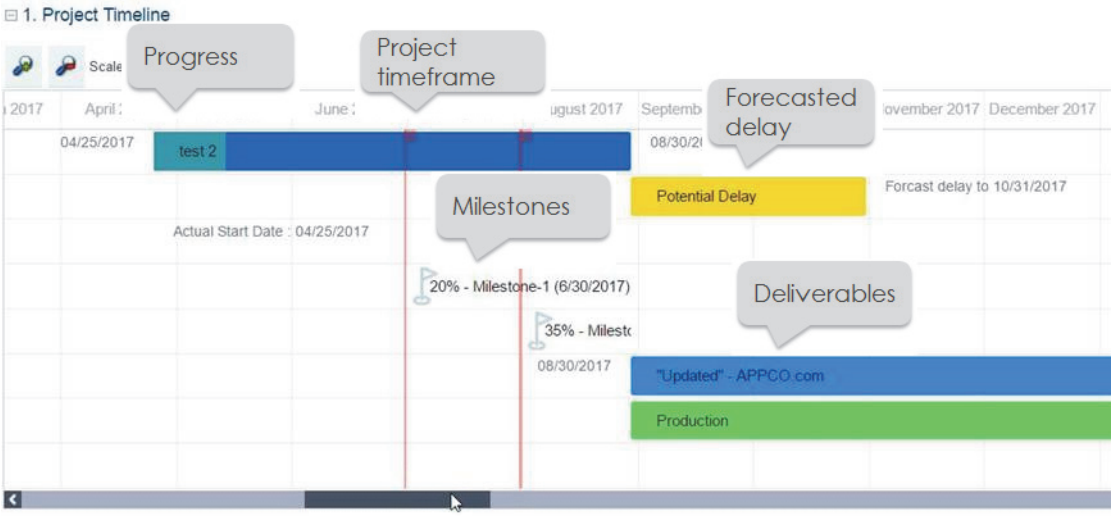
1. Click the **Projects** > **Projects** navigation menu.
2. In the edit area, click the **Projects** tab.
3. Display all the projects.
4. Click the project in question to open its properties.
5. In the properties window, click the **Execution Monitoring** page.
6. In the **History of Project Progression Updates** section, click **New**.
   The progress rate creation window appears.
7. In the **Progress Rate** section, specify:
   - the progress rate percentage
   - the progress rate date
   - the assessment of the progress rate (On time or Late)
   - the forecast end date
   - the amount spent
   - the remaining forecast amount
8. Click **OK**.

Viewing the timeline of a project

A report enables you to view the timeline of the project.

To access the Reports tab:

1. In the project properties, select the **Reports** page.
2. Select the "Lifecycle Gantt Chart for Project Deliverables" report.
   The project calendar appears.



Putting a Project on Stand-by/Canceling a Project

For a project in progress, you can:

- Cancel the project: the project remains visible but cannot be recovered
  Update the project on stand-by: the status changes from "Project in progress" to "Project on stand-by". Subsequently, you can:
  - Recover the project on stand-by
  - Cancel the project on stand-by

Terminating a Project

Terminating a project updates the lifecycle of the objects attached to the project.

To terminate a project in progress:

1. Click the icon of the project then **Project Workflow (Ongoing Project)** > **Terminate the Project**.
   A message prompts you to confirm the changes to the lifecycle of the architecture building blocks concerned.
2. Click **OK** to confirm.

PROJECT ANALYSIS REPORTS

Dynamic reports are provided by default for projects; they are used to analyze project content from different angles as well as their impact on the business capabilities and architecture building blocks.

Reports on the Project Content

Embedded reports on a project are visible in the **Reports** page of the project properties window.

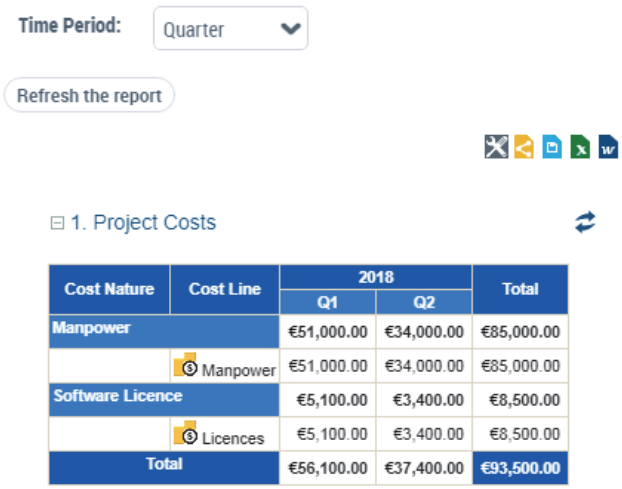
Project Costs

This report details the project costs for a given period and by cost type (labor, infrastructure, etc).

Its input data concerns the costs defined in the project properties (on the **Business case** page).

☛ *To define the costs of a project, see Project costs.*

It is possible to configure the cost consolidation period via the **Time Period** parameter; for example a sub-total of project costs is possible per quarter.



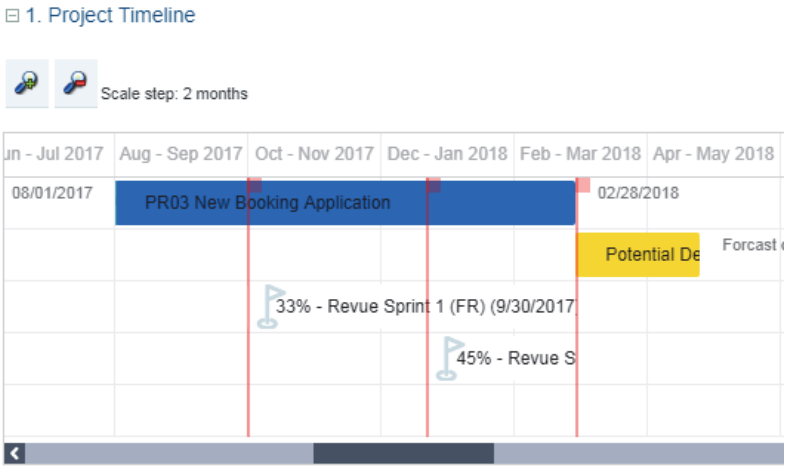
Cost Nature	Cost Line	2018		Total
		Q1	Q2	
Manpower		€51,000.00	€34,000.00	€85,000.00
	Manpower	€51,000.00	€34,000.00	€85,000.00
Software Licence		€5,100.00	€3,400.00	€8,500.00
	Licences	€5,100.00	€3,400.00	€8,500.00
Total		€56,100.00	€37,400.00	€93,500.00

Project and Deliverable Timeline Gantt Chart

This report presents the lifecycle of deliverables in the project schedule.

Its input data concerns the production dates of the deliverables as well as the milestones defined for the project.

The progress of the project and the projected deadlines declared during the follow-up of the execution of the project are also reported on the graph.



See also:

- Project deliverables
- Specifying the Project Milestones
- Assessing the Progress State of a Project
- Analyzing the Road Map for Portfolio Projects.

Project KPIs

This report analyses the key indicators of the project. It collects the following data:

- The progress and any delays in the project (defined on the **Execution Follow-up** page for projects in progress)
- The budget and the costs defined on the project properties (on the **Business case** page).
- The Return on Investment (calculated)
- Cost variance (calculated)
- The project risks

Progression and delays

Project progression and delays are defined using the last update performed on the project.

☛ *For more details, see Assessing the Progress State of a Project.*

Budget and costs

A bar chart presents the following data:

- The planned budget, input manually.
- The total forecast cost, calculated according to the last update of the project (amount spent + remaining to be spent)
- The effective cost, input manually at the end of the project.

> ☛ *The "Total cost" displayed in the Costs section is calculated based on cost lines; it is for information purposes and is not used in the report calculations.*

For information on project cost input, see Project costs.

Return on investment

A bar chart presents the following data:

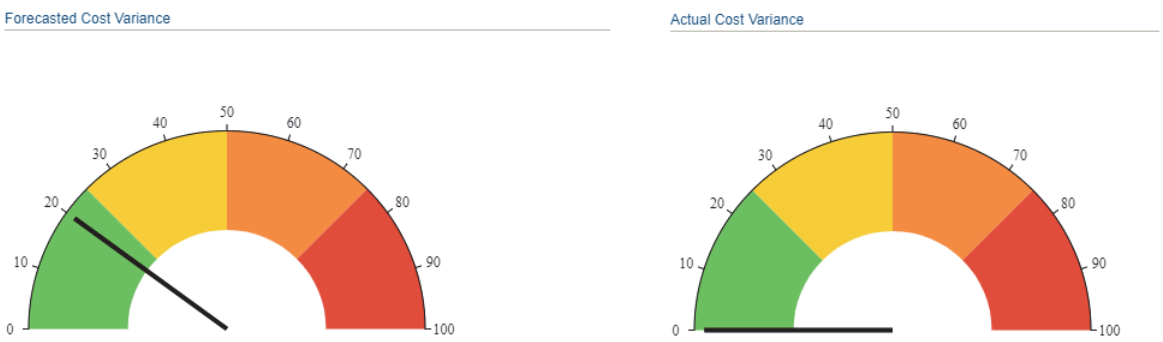
- Forecast ROI (as a percentage)
- Effective ROI (as a percentage)

Calculation of the ROI = (profit - budget) / budget.

Forecast variance and effective variance

A gauge displays the following data:

- Forecast variance = (total forecast cost - budget) / budget, as a percentage.
- Effective variance = (effective cost - budget) / budget, as a percentage.



Risks

A bar chart displays the risks per risk level (low, high, etc.)

Project summary

This report offers a summary of the characteristics of the project, that is:

- The project charter
- The persons responsible
- The Business case
- The execution follow-up
- The key project indicators.

Impact Reports for Projects

The Project Portfolio Manager can use a report to analyze the impact of transformation projects on business capabilities.

This report aims to identify, for the business capability map of a given Enterprise phase, the relevant transformation projects and their impact on capabilities, according to the objective of the transformation projects.

To generate the impact report of transformation projects:

1. Click the **Reports** navigation menu.
2. In the edit area, click **Create a report**.
3. Search for report type "Projects Impact on Capability Map".
4. Create a report of this type.

Report parameters

The report takes as input:

- A capability map. The list of capability maps included in an enterprise phase is proposed by default.
- A project portfolio.

Filters allow you to customize the display of objects in the report:

- **Enable Purpose Type Criterion**: you can display or hide the purpose type of the projects. This option is enabled by default, with the form "Fill color": a color highlights the capabilities and projects in the report according to the type of purpose of the projects.
- **Capability Filter**: you can only display capabilities that are covered by solution building blocks. Criteria also allow you to represent the functionalities associated with capabilities in a specific shape (circle, triangle, etc.).
- **Project Filter**: you can display only on-going projects. Criteria also allow you to display the assessment levels defined on the projects (business value, cost, etc.).

> ☛ *Other filters can be added in customization (by specific queries connected to the type).*

Report Results

The report presents two chapters:

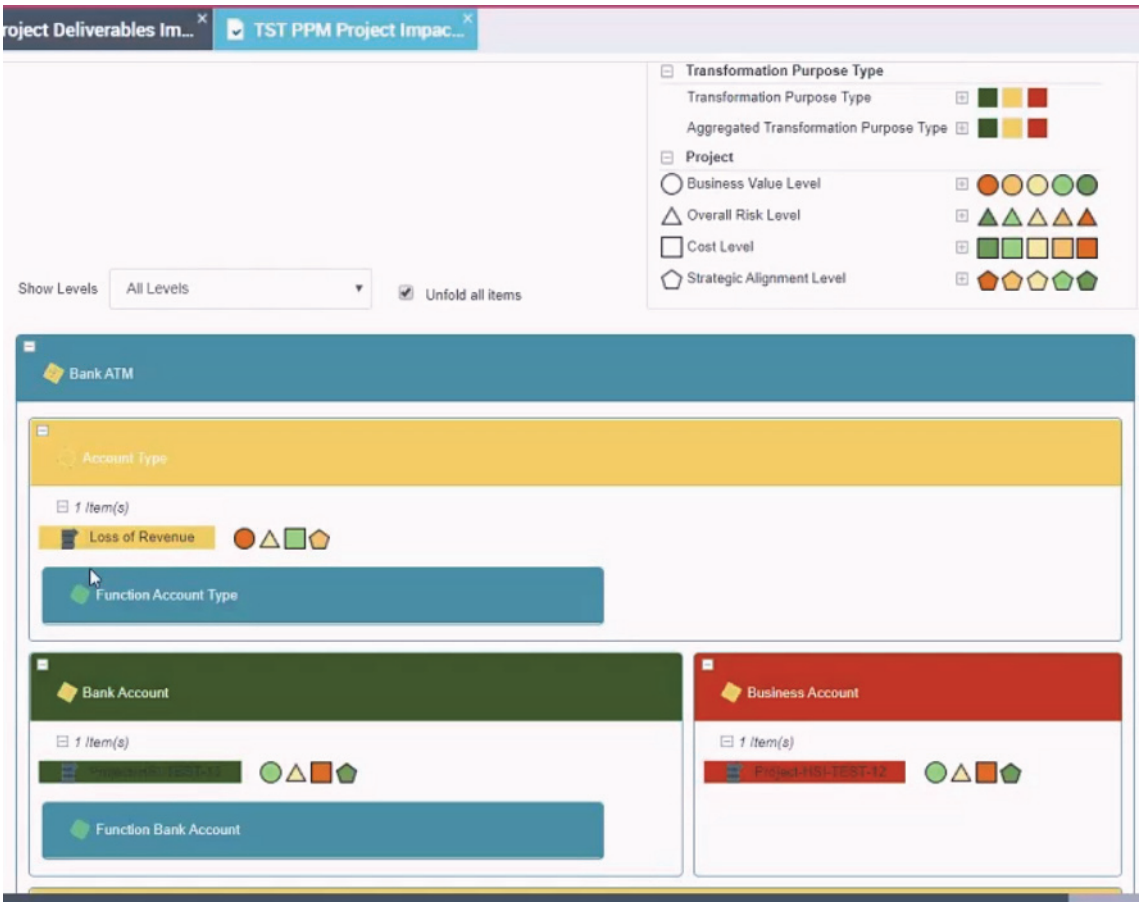
Transformation Projects Impact on Capability Map

By default, projects are displayed in the relevant capability boxes and highlighted in a color that depends on the type of transformation purpose.

- Innovate -> green
- Improve -> yellow
- Rationalize -> red

Capabilities are highlighted in a color depending on the associated transformation purposes.

- Majority of innovation -> green
- Majority of improvement -> yellow
- Majority of rationalization -> red



Enterprise Stage and Transformation Projects

This chapter displays in a table the projects that are not mapped in the capability map selected at report entry.

They correspond to the following elements:

- projects that produce new capabilities in the "target" capability map
- projects that do not achieve any capability
- projects that achieve capability but are not declared in the enterprise phase.

PROJECT PORTFOLIO MANAGEMENT

Whereas project management aims to focus on scheduling and executing an individual project, project portfolio management analyzes all projects in progress or potential projects and their viability in reaching the objectives of the enterprise.

The portfolio management process can be represented in three sub-steps:

- Project selection: a restricted list of projects is drawn up according to selection criteria (strategic, financial etc.). The projects are classified according to the strategic perspectives (the domains) used in the organization.
- Analysis and arbitration: the best project combination is defined to maximize the objectives and the restrictions of the portfolio.
- Follow-up: the portfolio's performance indicators ensure the alignment of the portfolio with the strategy of the organization.

The points covered here are:

GROUPING PROJECTS BY PORTFOLIO

Grouping projects by portfolio summarizes the information relating to different projects to facilitate decision-making.

Portfolio Types

There are two types of project portfolios:

- Arbitration portfolios, created automatically, which are divided into two groups:
  - project demand portfolios
  - candidate project and ongoing project portfolios, used to compare candidate projects with ongoing projects
- Analysis portfolios you can create later and which make up sub-sets within the arbitration portfolios.

Arbitration portfolio

Project arbitration portfolios group all the projects created according to their domain.

When you create a project domain, two types of arbitration portfolios are created by default and associated with this domain:

- Domain name - demand arbitration portfolio
- Domain name - arbitration portfolio of candidate projects and ongoing projects

Each new project appears in the dedicated portfolio.

In an arbitration portfolio, the projects can be assessed and compared according to a number of criteria:

- project criteria: these come from information on the projects (for example, the costs) or the qualitative evaluation of the project (for example, the level of strategic alignment).
- portfolio criteria: criteria that can be defined at the portfolio level, above the project criteria.

See also: Defining Project Domains.

Analysis portfolio

You can create an analysis portfolio in an arbitration portfolio; it groups a sub-set of parent arbitration portfolio projects. It can be defined to assign certain projects to a specific portfolio manager.

Portfolio Lines

For each project added to a portfolio, a portfolio line is created.

A project portfolio line is used to assess the project in the context of a portfolio. It is linked to assessment criteria and provides the global note of the project in the context of the portfolio.

See also Assessing Portfolio Projects.

Assigning a Portfolio to Persons

The persons who can be assigned to a project portfolio are:

- the demand approver
- the portfolio manager
- the portfolio approver

For more information on profiles, see Roles in HOPEX Project Portfolio Management.

ASSESSING PORTFOLIO PROJECTS

You can compare projects defined in a portfolio based on common criteria.

You can also add specific assessment criteria to the portfolio.

Defining Portfolio Assessment Criteria

You can compare the projects defined in a portfolio based on common *criteria* associated with the portfolio. This is used in particular to define the priorities for each project within the portfolio.

Some criteria are provided by default. You can create new criteria.

To create a criterion on a project portfolio:

1. Display the portfolio properties.
2. Click the **Projects** page.
   The criteria appear in the **Portfolio Criteria** section.
3. Click **New**.
   The dialog box for creating a criterion opens.
4. Specify:
   - its name
   - its type
   - its length
   - its format
5. Click **OK**.

Criteria weighting model

A criteria weighting model defines, for a set of criteria, the weight relative to each of the criterion in the calculation of a weighted scoring criterion, used to automatically calculate the rank of a project in the context of this portfolio with respect to its score on these criteria.

Creating a Project Assessment

To create an assessment for the projects of a portfolio:

1. Display the portfolio properties.
2. Click the **Project Assessment** page.
3. Click **New Assessment**.
4. In the window that appears, select the projects to be assessed.
   - Some
   - All

5. Click **OK**.
   An assessment line is created for each portfolio project with the different criteria in a column.
6. To define the value of a criterion for a project, select the line of the project concerned and click in the criterion column.

Assessing common criteria

The criteria common to all projects are calculated automatically on the basis of assessments performed specifically on the projects.

> ☛ *For the qualitative evaluation of a project to appear in the portfolio properties, the assessment must have been validated at the project level.*

Assessing criteria specific to the portfolio

For criteria created specifically for the portfolio, and are therefore not displayed in the project properties, you can define them directly on the project assessment line (drop-down list for a list or direct entry for a number/a text).

Analyzing and Arbitrating Portfolio Projects

In a portfolio, a number of projects can concern a single object to represent different hypotheses, exclusive of each other, for the change in this object.

Scenarios can then be created by selecting a set of projects to be produced. The different scenarios can be compared by means of specific reports:

Using a project portfolio, the project portfolio manager can generate scenario analysis and comparison reports to decide which scenarios to keep or reject.

In an arbitration portfolio, if several scenarios have been selected for different analysis portfolios, the project portfolio approver has access to an analysis tool which provides an overview. This is used, for example, to determine whether contradictory choices exist for a single project in the different scenarios selected.

Creating a Scenario

Using an arbitration portfolio or an analysis portfolio, the project portfolio manager can create a number of scenarios.

A scenario defines, in a portfolio, a set of projects that can be implemented. It is used to generate analysis reports to assess the impact of this set of projects.

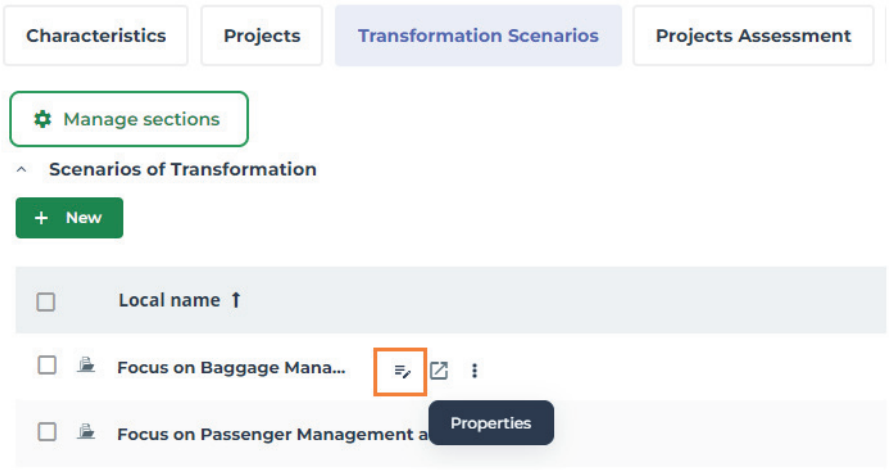
To create a scenario:

1. Open the project portfolio properties.
2. Click the **Transformation Scenarios** page.
3. In the **Transformation Scenarios** section, click **New**.
   The dialog box for creating a scenario opens.
4. Enter the name of the scenario and click **OK**.

Defining the properties of the scenario

To define the properties of the scenario:

1. In the portfolio properties, in the **Transformation Scenario** page, move the mouse over the scenario in question and click the associated **Properties** button.



2. In the scenario properties, select the **Characteristics** page.
   Note that for each project held in the portfolio, a scenario line is created.

Scenario lines

For each project held in the portfolio, a scenario line is created.

A scenario line corresponds to a project line in the source portfolio. It uses the values of the criteria and lifecycle defined on the project line of the portfolio. It is used to record the potential decision with respect to the project (validated, rejected) within the framework of the scenario analysis.

In a scenario, the project portfolio manager can decide to select or not select a given portfolio line in a simulated scenario (which is different from validation of the project).

Accepting or Rejecting the Project Lines of a Scenario

A project line must be accepted in order to be taken into account in a given scenario. Conversely, a project line must be rejected if you want the scenario to ignore it.

To accept or reject a project lines in a scenario:

1. Open the properties pages of the scenario.
2. Select the **Characteristics** page.
3. In the **Scenario Lines** section, select the project line you want.

4. In the **Decision** column, select one of the following values:
   - **Accepted**: the project line is integrated in the scenario.
   - **In progress**: the project line is under review; it is integrated in the scenario
   - **Rejected**: the project line is not taken into account in the scenario

Analyzing and Comparing Scenarios

With embedded reports, you can analyze and compare the scenarios created in a project portfolio.

To view these reports:

1. Display the portfolio properties.
2. Select the **Reports** page.
3. Select the report concerned.

Comparing scenario costs

This report compares the costs of the selected scenarios.

It relates to the project costs, it does not take into account the impact of the scenario on the operating cost of the applications.

Project deliverables by scenario

This report details the deliverables included in a scenario; they are classified by status and whether the projects within the scenario are validated or rejected.

☛ *See Accepting or Rejecting the Project Lines of a Scenario.*

In the example below, two deliverables are part of the projects that were accepted in the scenario; a new CRM application and a server update.

The solution building blocks will thus be created/updated in the scenario.

⊟ 1. Projects Deliverables

Project Impact Type	Validated Projects	Rejected Projects
New	New CRM Application	
Updated	Media Library Web Server	
Deleted		

Analyzing the Road Map for Portfolio Projects

The "Project RoadMap" report displays the Gantt chart for projects and the road maps for project deliverables.

To see this report:

1. Display the portfolio properties.
2. Click the **Reports** page.
3. Select the "Project RoadMap" report.

Project Gantt chart

The Gantt chart presents one row per project. The following information is provided for each project:

- Start and end dates
- Progress
- Dependencies
- Declared delays

> ☛ *See also*
> *- Follow-up of Ongoing Projects*
> *- Project dependencies.*

Roadmap of portfolio project deliverables

The following information is displayed for each portfolio:

- The projects included
- The dependencies
- The status of projects
- The project progress
- The dates defined for the project

> ☛ *See also Follow-up of Ongoing Projects.*

Analyzing the Project Risks of a Portfolio

An embedded report for the project portfolio is used to display, in the form of a heatmap, the risks inherent to the portfolio projects.

To view this report:

1. Display the properties concerned.
2. Click the **Reports** page.
3. Select the "Project Portfolio Risk Roadmap".

The heatmap displays the number of risks per risk level (low, high, etc.)

See also: Assessing the Risks of a Project.

Dashboard for Portfolio Projects

This report analyzes the projects included in a portfolio using different graphics.

To launch this report:

1. Display the properties concerned.

2. In the properties window, click the drop-down list and select the **Reports** page.
3. Select the "Project Dashboard" report.

Project bubble chart

The bubble chart is used to connect the different key indicators of the portfolio projects.

To define the project indicators to be displayed in the graph:

1. In the **X-axis** field, select the first indicator, for example, the profit.

   ☛ *The profit indicator refers to the financial value. See Project benefits.*
2. In the **Y-axis** field, select the second indicator, for example, the total cost.
3. In the **Bubble size** field, select the third indicator, for example, the ROI.
4. Click **Refresh the Report** to take the selected data into account.

Project matrix by criteria

For this graph, the parameters selected for report input must be of "enumeration" type (e.g. Risk level, Business Value Level).

It allows to consult evaluations of a larger number of projects than the bubble graph (several hundred projects vs. a few dozen).

When you modify the input parameters, you must click on **Refresh the Report** to take into account the input data, then click the refresh button of the chapter to update it.

Summary table for project assessments

This table presents the latest assessment of the key indicators of the portfolio project.

3. Projects Assessment Summary Table

	Strategic Alignment Level	Business Value Level	Risk Level	Cost Level	Budget	Benefits	Return on Investment	Project Score
PR01 Billing Automation	6 - Medium	4 - Low	1 - Very Low	10 - Very High	€500,000.00	€1,000,000.00	100%	3.94
PR02 Definition of the Billing Business Capacity	5 - Medium	4 - Low	6 - Medium	6 - Medium	€40,000.00	€40,000.00	0%	4.73
PR03 New Booking Application	9 - Very High	1 - Very Low	10 - Very High	5 - Medium	€1,000,000.00	€1,500,000.00	50%	2.71
PR04 New Online sales administration capacity	2 - Very Low	6 - Medium	6 - Medium	6 - Medium	€600,000.00	€700,000.00	17%	4.16
PR06 Web interface design	3 - Low	6 - Medium	6 -	9 - Very	€50,000.00	€60,000.00	20%	3.66

See also Assessing a Project.

Analyzing the Impact of Portfolio Projects on the Architecture

See Impact Reports for Projects.

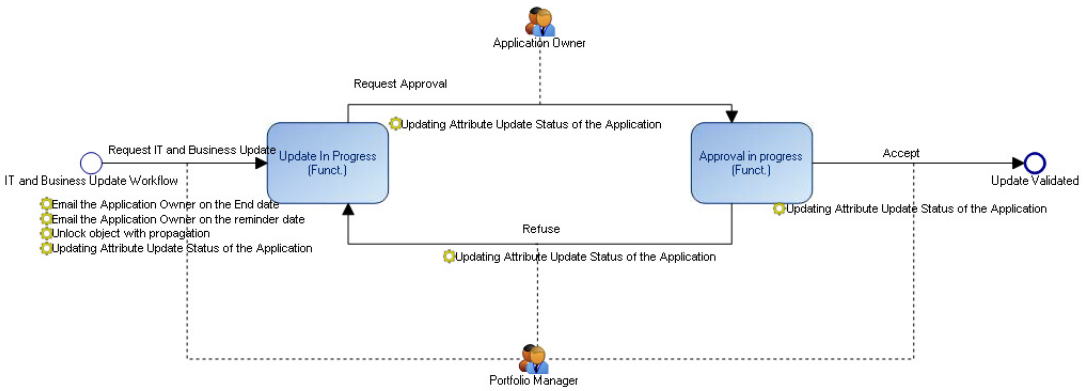
HOPEX IT Portfolio Management Workflows

This chapter presents **HOPEX IT Portfolio Management** workflow diagrams.

APPLICATION UPDATE WORKFLOW

Using workflows, Application Portfolio Managers can launch campaigns to update technical and business information for one or more applications in their portfolios. These workflows can also be run for all portfolios.

Note that the Application Owners must be correctly specified in the applications for the workflow to run correctly.



When the campaign is launched, an e-mail is sent to the owners of the application. It includes the following information:

- List of applications to be updated
- End date of the update campaign (which is set at the end of the month following the date of the request. For example: if the request is made on September 21, 2023, the end date of the campaign will be October 31, 2023).

Applications to be updated appear in the list of application to be updated. A reminder is automatically sent by email fifteen days before the campaign end date.

Once the application information is updated, the Application Owner submits the changes to the Portfolio Manager for approval.

TECHNOLOGY VALIDATION WORKFLOW

Functional Administrator and Enterprise Architect profiles can initiate the validation workflow on a technology.

When a vendor is prohibited, all the vendor's technologies automatically change to "Prohibited" status.

A user holding the role of "Local Correspondent" on a technology can evaluate it and define it as "Validated", "Accepted" or "Approved". This correspondent must first be defined in the technology's properties.