



Strategy portfolio									
Strategy portfolio   Strategy with connected items   Hierarchy chart									
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- Strategy hierarchy									
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<input type="checkbox"/>	2	2-1.2.2.2.2.2.2.2.1 Third level strategy element	Third level strategy element		2.1.2.2.2.2.2.2.2.1 Third level strategy element		2.1.2.2.2.2.2.2.2.1 Second level str		
<input type="checkbox"/>	2	2-1.2.2.2.2.2.2.2.2 Third level strategy element	Third level strategy element		2.1.2.2.2.2.2.2.2.2 Third level strategy element		2.1.2.2.2.2.2.2.2.2 Second level str		
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# Thinking Portfolio®

## Strategy Portfolio Whitepaper

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# Thinking Portfolio

## Platform's Background in Strategic Project Portfolio Management

Thinking Portfolio® was originally built to be a practical tool for strategic project portfolio management. The portfolio management model supports business-driven planning and decision-making.

An organization implementing Thinking Portfolio® is well-equipped for fast decision-making, agile change management, enhanced business drivenness, and risk management.

Thinking Portfolio's straightforward visual presentation method and browser-based user interface speed up its adoption. The use of the system requires no special training or manuals.

Thinking Portfolio® has been developed by utilizing the latest Web technology. The browser-based user interface is intuitive and easy to use.

The technical solution facilitates the implementation of various portfolio management applications.

The portfolio application presented here is a strategic level management tool for Risk Management. Other customer implementations of Thinking Portfolio include Service Management, Application Management, Idea Management, Supplier Management, Asset Management, New Product Design and many more.

## Benefits of Thinking Portfolio®



Sector independent

Improves management by  
information  
and decision making

Adapts to each  
organization's own  
operating methods

Over 40+ portfolio  
templates with  
built-in interconnectivity

Independent number of users  
– fixed price for an unlimited  
amount of users

Versatile, visual reporting -  
already over  
800 different report  
templates

Allows multiple  
simultaneous use of  
different language  
versions

Easy-to-use browser interface

Quickly  
to be implemented

# Strategic Portfolio Management

– Ideas, projects and assets

Using portfolios as a management tool is growing in popularity. Its purpose is to bring consistency, efficiency and transparency to management and decision-making.

## Why Portfolio Management?

Enhances decision-making

Boost the efficiency of advance planning

A tool for risk management

The management of wide-ranging and multifaceted organizations is often complicated by the discrepancies between customer demands and expectations, problems with the flow of information, and a shortage of skilled professionals. This results in projects, overlapping and competing for the same resources, whose timing or content has not been optimized in any way; the link between practical execution and the core business strategy is often unclear.

Portfolio management is an operations model that attempts to alleviate the problems associated with fast-paced and multidimensional management. It creates operational prerequisites that at their best boost the efficiency of advance planning, decision-making, and implementation (Figure 1). Portfolio management consists of knowledge, processes and roles.

Portfolios are a specified way to pinpoint the resources and projects that will enable an organization to implement its strategy. There are three main types of management portfolios (Figure 2):

- ▶ **The Development Portfolio** contains descriptions of the development proposals, ideas, and scenarios (for example development programs) aiming at the organization's future.
- ▶ **The Project Portfolio** contains projects and their sub-projects that are planned, underway, or completed.
- ▶ **The Asset or Resource Portfolio** contains, for example, applications, skills or processes that the organization has obtained for its use through development projects and investments.

The portfolios are interconnected; project proposals from the Development Portfolio are imported to the Project Portfolio. The Project Portfolio generates an asset. Diminished property assets or poor performance generate development needs, and so forth.

### The management principle

At its simplest, portfolio management is a question of managing and balancing earnings, investments, and risks. Earnings can be, for example, cost savings, a growth in productivity, the acquisition of new custom, or increased net sales. Investments also include the use of time and money; these include project work, training, start-up and maintenance.

There are many project risks, but also risks related to existing property, for example, the scalability of an ICT application or system in the growth or contraction of business operations.

### Portfolios' connection to strategy and architecture

The portfolios are intermeshed through the organization's strategic criteria and classifications. Senior management defines the strategy's success factors and key results that are then described in the portfolios as separate criteria that are used to evaluate an idea, project, or application strategically.

Within the portfolios, identifying the equivalency between a project or property and its business, information, application and technology architecture is essential. For example, a certain new custom information system could adequately support an organization's strategy, but it might be incompatible with current application and technology architecture.



Figure 1. Project portfolio management principles

## Success factors

The adoption of portfolio management can be a project, but its integration as part of an organization's daily operations requires a focused commitment and examples set by management. Portfolio management must become a part of the organization's leadership, for example, as part of the executive group's work.

An organization's level of maturity has significance if portfolio management is to succeed. If there are substantial deficiencies in leadership skills or project operations, portfolio management will remain without a basis. The portfolios will be worthless if an organization lacks the ability to function according to their requirements.

Portfolio management requires tools for its support. Here as well, the tools are not the solution, but they support changes in ways of thinking.

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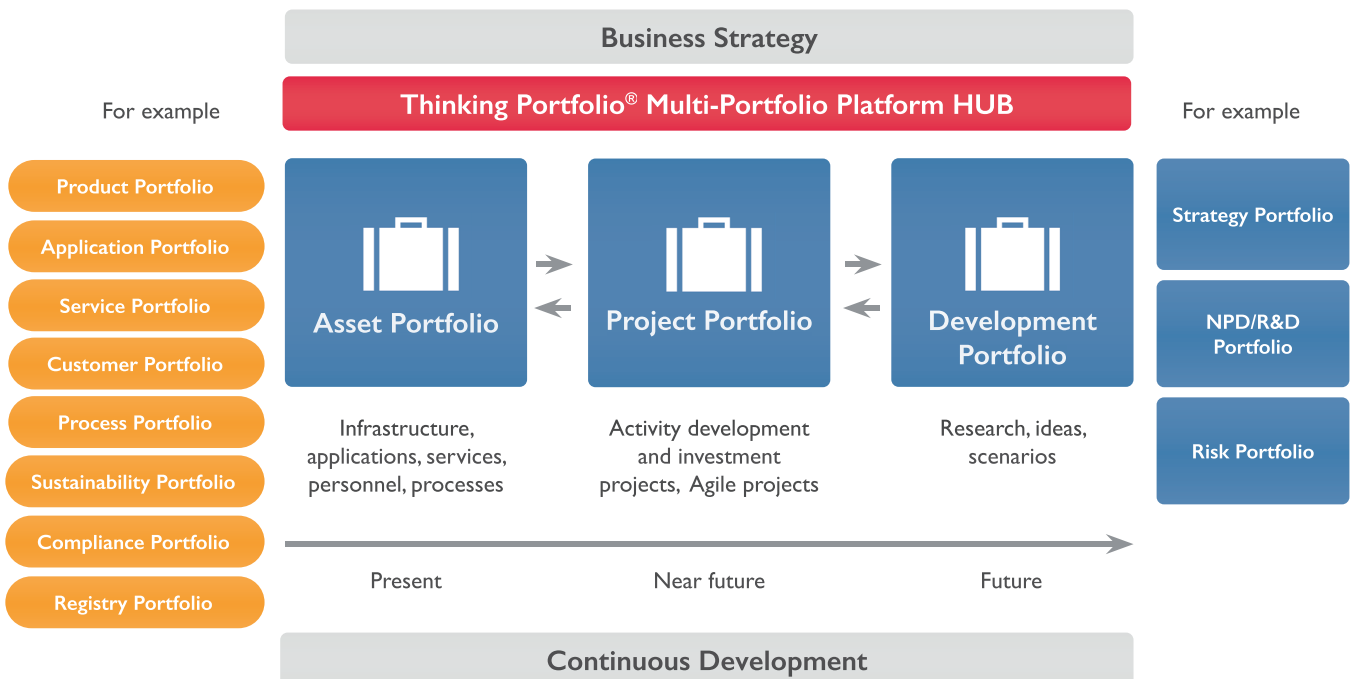
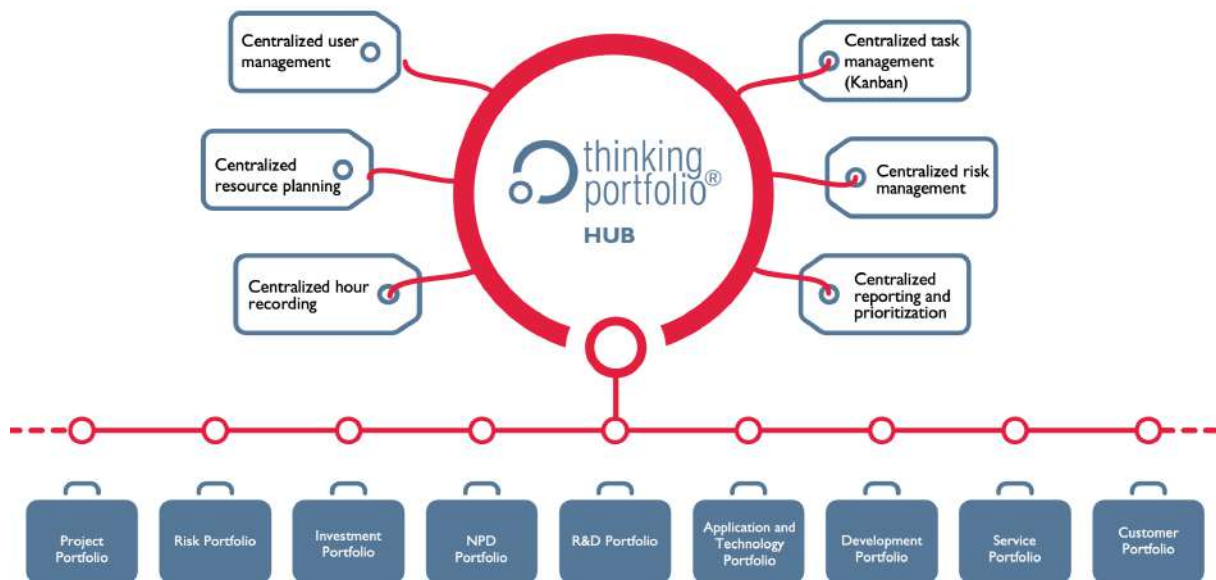


Figure 2. Strategic Portfolios

# Thinking Portfolio® HUB

– centralised resource management, resource planning and task management



## Benefits of Multi-Portfolio Platform HUB

**Makes the implementation of several portfolios more efficient**

- ▶ One database, the connection of the information model of several portfolios to each other
- ▶ Makes use of elements already in use such as user management

**Versatile reporting possibilities**

- ▶ Enables reporting across portfolio boundaries
- ▶ Produces a more in-depth picture of the situation

**More versatile user management**

- ▶ Description of abilities
- ▶ Workload
- ▶ Resourcing
- ▶ Description of competence

**Resource planning, approval of resourcing**

- ▶ Total resourcing for all portfolios
- ▶ Transparency of resourcing
- ▶ Possibility to reserve time for line work
- ▶ Hourly records in one place for all portfolios

**Connected risk management between portfolios**

- ▶ Risk analysis of different portfolios
- ▶ Review of risks across portfolio boundaries

**User management of different portfolios for the main user**

- ▶ Enhances the management of access rights
- ▶ The end user has the opportunity to complete his own information

**Task management brings efficiency to monitoring**

- ▶ Better transparency for the user to defined tasks across portfolio boundaries



## Multi-Portfolio Platform HUB

Thinking Portfolio's new HUB platform allows for even closer interconnection of the data models of multiple portfolios. At the core of Thinking Portfolio's Landscape HUB, implemented with the help of the HRD portfolio, there is centralised user management, which can be parameterised in a considerably more versatile manner than before. The deployment and use of new portfolios will be more efficient as well. Thinking Portfolio Landscape HUB offers the following benefits:

- ▶ Makes the user's competence transparent
- ▶ Centralised and simple user management for multiple different portfolios
- ▶ Centralised and easy visibility to resource management across different portfolios
- ▶ Support for the development discussion process
- ▶ Easier management of list values
- ▶ Overall resourcing for all portfolios (projects, absences, holidays)
- ▶ E.g., a centralised Kanban dashboard, where tasks are placed from different available portfolios
- ▶ Language selection, e.g. Finnish, English, Swedish, German, Dutch

The HUB entity contains then the following functionalities:

- ▶ User management of extended data model
- ▶ Other extensions are implemented as modifications (e.g. ability and competence maps, dashboards, metrics)

## Renewed user management

The new user management is based on the HUB platform. Previously, accessing the portfolio user management required a separate administration interface. For example, user IDs were edited through it. In the new platform, user information is in its own portfolio, where the data is also managed.

## New opportunities

When users are in their own portfolio, a more extensive portfolio model can be introduced. The data model can then be modified flexibly, as needed. For example, competence areas can be defined for users. The views can be fully parameterised, as needed. For example:

- ▶ Competence management: searching for a user based on competence area
- ▶ Detailed contact information
- ▶ Resourcing in one portfolio – other portfolios use the resourcing portfolio data

## Administrator's perspective

- ▶ User management is transferred from the current user management interface to its own portfolio

## User's perspective

- ▶ Hour entries can also be made through one portfolio into other portfolios in the organisation
- ▶ Centralisation of Kanban task management under personal "MyKanban" or "MyDashboard" – the user can easily find all their tasks defined in different portfolios in one place.

ID	Name	Application portfolio address	Home organisation in application portfolio	Role in home organisation	Role in other organisations	Last login
148	Convent Ganes	IT	Administration	Administration		
149	Heidi Oves	IT	Administration	Administration		
154	Courtesy Noelle	IT	Administration	Administration		
157	Subina Lee	IT	Administration	Administration		

**Basic information**

Userid: 24

\*Full name: Laddy Hamilton

\*Owner organization: Futuergen

\*Username: Laddy.Hamilton

Superior: Cross Noelle

\*Email: [empty field]

Is integrated: ☐

Is archived: ☐

Valid until: [empty field]

Avatar: [empty field]

**Actions**

Send username and password to user

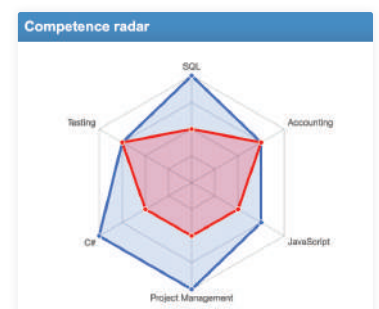
Impersonate

User access report

User in use?

Portfolio	Own organization	Internal role	External role
1 Project portfolio	Thinking Portfolio Demo Area	All rights	All rights
2 Resource portfolio	Thinking Portfolio Demo Area	Main users	Main users
3 Application portfolio	Thinking Portfolio Demo Area	Administrator	Administrator
4 Idea portfolio	Thinking Portfolio Demo Area	Edit	Read

Figure 3. Dashboards of the renewed user management: user list, basic data, functionalities, access rights and competence map.



# Strategy Portfolio

– A platform for the strategic management

Thinking Portfolio® is a practical platform for strategy formalization and execution. Keep your strategic elements in one portfolio to manage strategy execution. Gain an up-to-date view of the current situation – all in one place.

	Vision	Strategic objective	Organization	Owner	Current phase	Overview	
<input type="checkbox"/>	Business Growth Vision	Solar Strategy	Thinking Portfolio Demo Area		Execution		
<input type="checkbox"/>	Duurzame ontwikkelingen	DM - Uitval minimaliseren	Erasmus University		Execution		
<input type="checkbox"/>	Duurzame ontwikkelingen	Duurzaamheid in onderwijs program...	Erasmus University		Initiation		

Figure 1. Strategy Portfolio Main View

A tool for Strategic Management may be needed when:

- ▶ A change in business environment requires continuous strategic analysis.
- ▶ Making informed decisions and prioritisation require up-to-date strategic analysis or strategy execution status information.
- ▶ Numerous strategic initiatives and actions must be recorded and followed from multiple viewpoints.
- ▶ Employees need to be empowered in strategic management or a decentralised execution process needs guidelines and reporting.
- ▶ Performance and indicators must be defined, tracked, and reported.
- ▶ Common procedures and practices in strategic planning and execution are required to gain effectiveness, efficiency, and quality.
- ▶ Competitive advantage and value creation needs to be planned and followed on initiative and portfolio level.
- ▶ Potential risks and uncertainties that could affect your strategy needs to be analysed and mitigated.
- ▶ Governance and paper trail are needed by the stakeholders and officials, e.g. auditors.

Regarding information and access needs there may be different requirements in organizations. For example certain stages and parts of strategy process may be limited access. Thinking Portfolio Strategy Portfolio may be used by whole company personnel with facilitation of dedicated experts of strategic management. It is also possible to limit access with access rights and then grant access gradually depending on the needs of the user organization.

There can be many types of users that may include:

- ▶ All organisation stakeholders who may be included in planning and execution – planning may be even crowd-sourced! The Thinking Portfolio platform does not limit the number of users nor have fees per user. External personnel may also be involved as stakeholders and users in the platform.
- ▶ Management who may be responsible for management of some strategic area or initiatives. Management usually makes the decisions on how strategy will be managed. Management makes sure that strategy is properly planned and is responsible of execution. Management can see the progress on portfolio level and delegate and empower responsible users to take action.
- ▶ Responsible users Strategy planning and execution may be de-centralised to responsible users or managers at the various levels, and the common tools and practices make the process more aligned to ensure desired results. Status of individual initiatives may be filled in and followed by responsible users and the data can be analysed on a portfolio level.
- ▶ Common organization users who are either seeing both the big picture and their own part in strategy. Depending on desired access right per users or roles common users get the relevant picture of organization's strategy.
- ▶ Strategy management professionals or Strategy Facilitators and Administrative Users are the janitors or the agents of the platform at the user organisation. They may not have a role in planning and managing the strategy but may also facilitate and administrate the strategy process. They can make changes on the platform as the organisation and the business environment evolve.



# The Main View of Your Strategy Portfolio

– The Main View presents an overview of the whole Strategy Portfolio

In our approach, the most valuable Risk Management information is gathered for the user organisation to facilitate quick decision-making and follow-up.

The Portfolio view (Figure 2) gives an overview of the Strategy Portfolio and presents the selected strategy information, e.g. initiatives. Color-coded fields may indicate the strategy initiative status immediately.

The header row helps to arrange and filter the portfolio according to selected criteria. For example, initiatives and other strategy elements can be organised by organization or other categories with a single click.

The image shows two screenshots of the 'thinking portfolio' software interface. The top screenshot displays the 'Strategy hierarchy' view, which is a tree-like structure of strategy elements. The bottom screenshot displays the 'Portfolio' view, which is a table of strategy initiatives.

Strategy hierarchy	Type	Resource need	Cost estimate	Strategy element name	Status	Second level strategy element
1 Top level strategy element	First level strategy element	●●	€€€	1 Top level strategy element	Preliminary	1.1 Second level strategy element
1.1 Second level strategy element	Second level strategy element			1.1 Second level strategy element	Preliminary	1.1 Second level strategy element
1.1.1 Third level strategy element	Third level strategy element	●●	€€	1.1.1 Third level strategy element		1.1 Second level strategy element
1.2 Second level strategy element	Second level strategy element			1.2 Second level strategy element	Preliminary	1.2 Second level strategy element
1.3 Second level strategy element	Second level strategy element	●●	€€	1.3 Second level strategy element	Ongoing	1.3 Second level strategy element
1.3.1 Third level strategy element	Third level strategy element	●●	€€€	1.3.1 Third level strategy element	Preliminary	1.3 Second level strategy element
1.3.2 Third level strategy element	Third level strategy element	●	€€	1.3.2 Third level strategy element	Preliminary	1.3 Second level strategy element
1.3.2.1 Fourth level strategy element	4th level element	●	€€	1.3.2.1 Fourth level strategy element	Preliminary	1.3 Second level strategy element
1.3.2.1.1 Fifth level strategy element	5th level element			1.3.2.1.1 Fifth level strategy element		1.3 Second level strategy element
1.3.2.2 Fourth level strategy element	4th level element	●●●	€€€	1.3.2.2 Fourth level strategy element	Preliminary	1.3 Second level strategy element
1.3.3 Third level strategy element	Third level strategy element	●●●	€	1.3.3 Third level strategy element		1.3 Second level strategy element
1.4 Second level strategy element	Second level strategy element			1.4 Second level strategy element		1.4 Second level strategy element
1.5 Second level strategy element	Second level strategy element			1.5 Second level strategy element		1.5 Second level strategy element

Vision	Strategic objectives	Organization	Owner	Current phase	Overview
Business Growth Vision	License to operate Strategy	Thinking Portfolio Demo Area		Initiation	Initiation
Business Growth Vision	Storage Strategy	Thinking Portfolio Demo Area		Execution	Execution
Business Growth Vision	Neartime	Thinking Portfolio Demo Area		Execution	Execution
Business Growth Vision	New energy Strategy	Futurgen		Execution	Execution
Business Growth Vision	Solar Strategy	Thinking Portfolio Demo Area		Execution	Execution

Figure 2. Strategy Portfolio Main Views

# Strategy Management Reference Model

– The common practices the organisations use to manage strategy

In the Thinking Portfolio approach, we organise the platform to align the practices of the user organisation. With Thinking Portfolio, the user organisation can reinforce their chosen practices.



Figure 3. Thinking Portfolio's Strategy Management Reference Model

Depending on the user organisation and their business there are different practices and requirements for Strategy Management. In Thinking Portfolio approach, the platform may be aligned to the processes, practices, methods policies, and models of the user organisation. With Thinking Portfolio, the user organisation can reinforce their chosen practices.

The user organisation may, for example, consider that all business locations need to implement predefined set of strategic initiatives and steer and follow their execution and resources. On the other hand, the organisation may consider every business and processes unique and have individual strategic initiatives to discover new businesses and customers. An organisation may have specific policies that need to be followed, such as investment guidelines per organization unit. The Thinking Portfolio platform will be set up to follow and reinforce the most important guidelines and reinforce strategic management in the organisation.

The starting points for the development of the Strategy Portfolio is the Strategy Management Reference Model that includes best practices and tools in strategy management.

In Thinking Portfolio's Strategy Management Reference Model, there is a process as well as functionalities typically used in Strategy Management (Figure 3). The included functionalities are innovated with our customers and used by organisations with different requirements. Functionalities are tested in real life use cases and continuously developed further with our customer. The platform is customised as the customer desires using the Reference Model as a baseline and chosen functionalities as building blocks.

► The Strategy Process or cycle is typically set up according to user organisation practices and process. The

process may include a schedule for reviewing strategy and/or a process for keeping the strategy continuously up to date.

- **Strategy discovery** is typically a phase that strategy management facilitates. The strategy discovery may be organised, for example, by process or tools that aim to analyse the operational environment or discover strategic opportunities. Strategy discovery may also be rolling or initiated continuously by events, such as change in operational environment or new investment that needs to be evaluated from a strategic point of view.
- **Strategic analysis** is typically a task for management and strategy facilitators. A simple strategy analysis may be a combination of categorisation and verbal descriptions. Strategic analysis is highly dependent on organisation and may be developed according to the needs of the customer. Based on needs different analysis can be added when considering e.g., customer, environmental, social, financial, or competitive aspects.
- **Strategic planning** culminates to choosing initiatives and actions and other strategic elements. Initiatives and actions and other necessary elements are created in the system. Reporting the whole portfolio with tools such as cascading strategic view, or a roadmap chart may give a holistic view of the organisation's strategic plan.
- **Strategic execution** is all about executing and adapting the plan and recording the progress and changes on the platform. Follow up by management is possible and overall view is always up to date. Changes are instantly visible to everyone, and strategy stays aligned. The platform can be used flexibly to gain momentum, accountability, and controllability.

- Strategy Review includes regular strategic reviews and reporting as well as discussions on direction and strategic management. These are supported by reports of the status for individual initiatives as well as portfolio reports to gain a holistic view of whole strategy landscape.

The common Strategic Management functionalities included in the Thinking Portfolio platform include:

- **Strategic Initiative Categorisation**, which includes dimensions most important to the user organisation's environment. The dimensions may be e.g. process, products, services that the planned strategic elements are related to. The categories are most appropriate aspects for the user organisation's needs. The needs and requirements are usually based on how the strategy portfolio is communicated and reported to stakeholders.
- **Strategy impact analysis** can be done with existing tools in reference model or with configured tools based on the needs of the organization. Strategy impact analysis may include for example simple scoring or more comprehensive financial and statistical analysis and/or scenario work. Various templates and tools can be used to develop analysis according to the user organisation's specific needs.
- **Actions and Governance** includes accountability, controllability, follow-up, paper-trail, and ex-post evaluation can be managed in the Strategy Portfolio. For example, changes in strategy execution may be recorded. The platform can be extended to lifecycle management and integrated to many business processes.
- **Resource management** can be integrated in portfolio tool and may be used for planning, scenarios, and follow-up. Same resource management can be used across all portfolios and management tools.
- **Reports and reminders** are there to support execution and reporting. The needed reports can be detailed financial reports or high-level progress reports for the whole portfolio and can be developed further when there is need for new reporting. Various templates and graphs can be used to develop reports according to the user organisation's specific needs. Reminders helps to drive the process and remind the responsible personnel involved in strategy management to perform actions or reporting.

## Strategy Management Process in portfolio

The strategy management process may include several levels of integrated processes or cycles. Processes or cycles may include:

- Top management and board level planning, review, and approval
- Business or unit level planning, review, and approval
- Different Strategic, tactical, and operative level planning cycles

- Cross functional (e.g. Finance, Markets or EHSQ<sup>1</sup>) planning, review, and approval
- Individual initiative or investment analysis, review, and approval

The processes may be scheduled around the (rolling-) calendar or waken by an event.

Strategy planning and review is usually scheduled and aligned according to the strategy process and/or fiscal reporting. In Thinking Portfolio, these presented processes or cycles may be modelled and integrated in the tool. Approvals and reminders may be used to facilitate the process.

Strategy planning and reviews may also be event based on emergent planning: whenever there is change in the environment or new opportunity presents itself, the opportunity is analysed, and the execution may be started instantly. Thinking Portfolio platform may help to drive the process to review the changes in strategy. The result is that the strategy portfolio reflects an always up-to-date status of strategy execution.

Hierarchy	Type	Resource need
First level strategy element	First level strategy element	●●
1.1 Second level strategy element	Second level strategy element	
1.1.1 Third level strategy element	Third level strategy element	●●
1.2 Second level strategy element	Second level strategy element	
1.3 Second level strategy element	Second level strategy element	●●
1.3.1 Third level strategy element	Third level strategy element	●●
1.3.2 Third level strategy element	Third level strategy element	●
1.3.2.1 Fourth level strategy element	4th level element	
1.3.2.1.1 Fifth level strategy element	5th level element	
1.3.2.2 Fourth level strategy element	4th level element	●●●
1.3.3 Third level strategy element	Third level strategy element	●●●
1.4 Second level strategy element	Second level strategy element	
1.5 Second level strategy element	Second level strategy element	
2 Top level strategy element	First level strategy element	
2.1 Second level strategy element	Second level strategy element	
2.1.1 Third level strategy element	Third level strategy element	
2.1.2 Third level strategy element	Third level strategy element	
Climate change OKRs for 2030	Second level strategy element	●●
The loss of biodiversity Kick-back Goal Metrics	Third level strategy element	●●
Operational disruptions - as new opportunity	Third level strategy element	●●●
Social sustainability - Happy People 1st Benchmark	Third level strategy element	●●●
3 strategy element	First level strategy element	
4 Second level strategy element	Second level strategy element	
5 Third level strategy element	Second level strategy element	
6 Third level strategy element	Third level strategy element	
7 4th level element	4th level element	
8 5th level element	5th level element	
9 Second level strategy element	Second level strategy element	●●
10 Third level strategy element	Third level strategy element	
11 Second level strategy element	Second level strategy element	

<sup>1</sup> EHSQ = Environmental Health Safety and Quality

## Strategy management process and other processes and portfolios

There are many options the strategy information and link may exist in Thinking Portfolio HUB modules (Figure 4). Strategy link may be included as information in project portfolio: e.g., Projects are connected to the strategic goals in project portfolio. Information includes (but not limited to) names of the strategic goal and the information be used to search strategy related projects.

Strategy links can be utilized as part of a portfolio. E.g., Project can be connected to strategic goals in project portfolio and there may be additional related information such as budget and resources planning and follow-up information. Portfolio information such as these can be reported per strategic goals. This information may e.g. give holistic view about weights of strategic investments per strategic goals from project portfolio view. If the project portfolio is only one dimension of strategy the information may be included to enrich other strategic reporting and e.g., project fol-

low-up information such as traffic lights may be included in strategy reporting.

Standalone strategy portfolio is made to fit the needs of the organization strategy planning or strategy execution. Strategy portfolio may be flexibly extended further to capture multiple dimensions of strategy. Strategy portfolio may capture a holistic view of the strategy and its many dimensions (e.g. not just single portfolio view).

Strategy information may be added as additional portfolio in HUB. In this case the module can be very simple or comprehensive strategy portfolio. Simple strategy portfolio includes only information that is needed for defining strategy but can be developed further to comprehensive and standalone strategy portfolio. Third option is standalone strategy portfolio that can be used as comprehensive tool for strategy management.

## Strategy link implementation options in Thinking Portfolio HUB modules

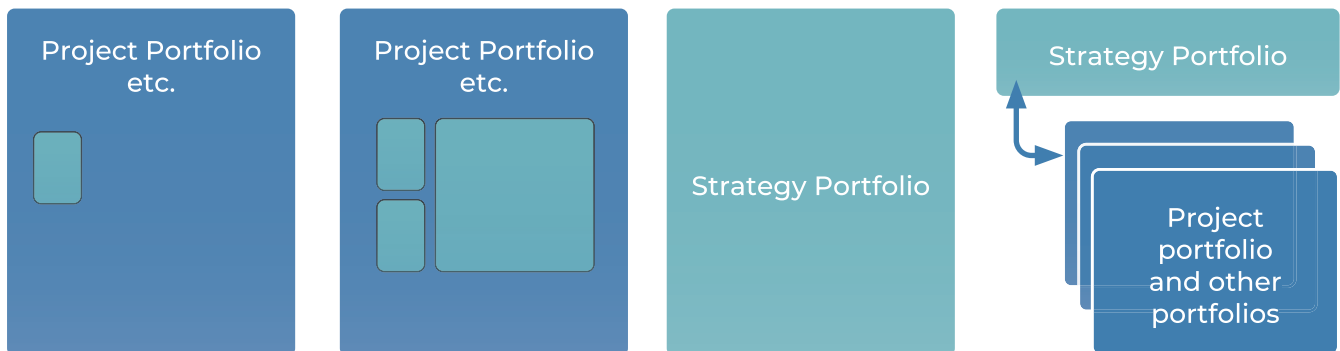


Figure 4. Strategy link implementation options in Thinking Portfolio HUB module

### Strategy link as a part of portfolio

E.g., Projects are connected to the strategic goals in project portfolio. Information include (but not limited to) name of the strategic goal and the information be used to search strategy related projects.

### Strategy link as a utilized part of portfolio

E.g., Project are connected to strategic goals in project portfolio and there may be additional related information. Portfolio information such as budgets and resources are reported per strategic goals.

### Strategy portfolio

Standalone strategy portfolio is made to fit the need of the organization strategy planning or follow up and can be extended further. Incorporates the whole strategy if many dimensions (not just single portfolio view).

### "Portfolio HUB"

Full strategy portfolio utilizes links to other portfolios. Strategy portfolio may be used standalone or utilize extended HUB portfolio capabilities. E.g. resources are allocated among hub portfolios.



# Strategy process and TP modules

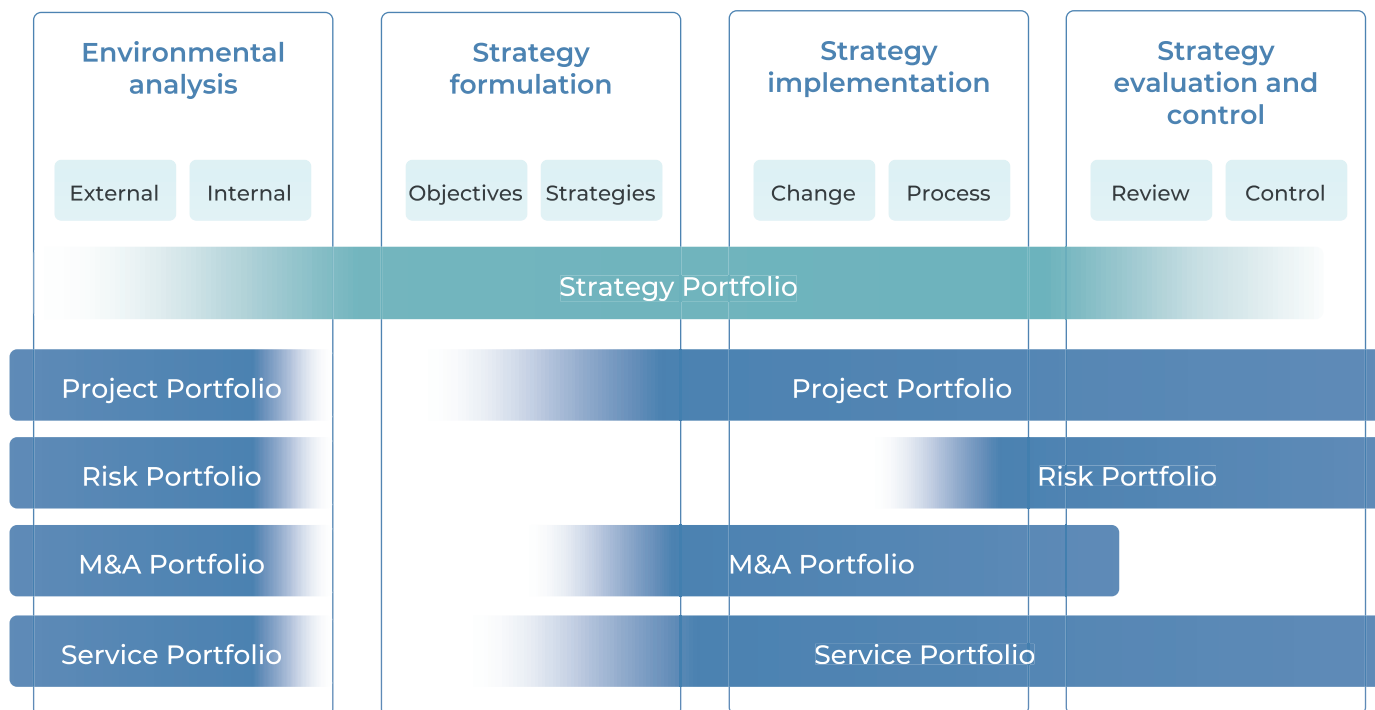


Figure 5. Strategy process and TP modules

Strategy management tool and process may co-exist in co-operation with other portfolio management tools. For example, here in picture (Figure 5) the strategy portfolio is drafted in strategy process with other portfolios. Main idea is that there may be links between the portfolios and all portfolios are aligned to same (strategic) goals.

Other portfolios are utilized when considering different stages in strategy process. In different stages other portfolios may be used either as input (project ideas from idea- or project portfolio, opportunities from risk or M&A portfolio etc.) or as steering and review tools when executing strategies.



Figure 6. Views of Thinking Portfolio Application Portfolio, Project Portfolio and Strategy Portfolio



# Strategy Management Functionalities

– The Strategy Management tools to support the organisation's practices

We bring our expertise in digitalising desired strategy management practices to your individual Strategy Management platform.

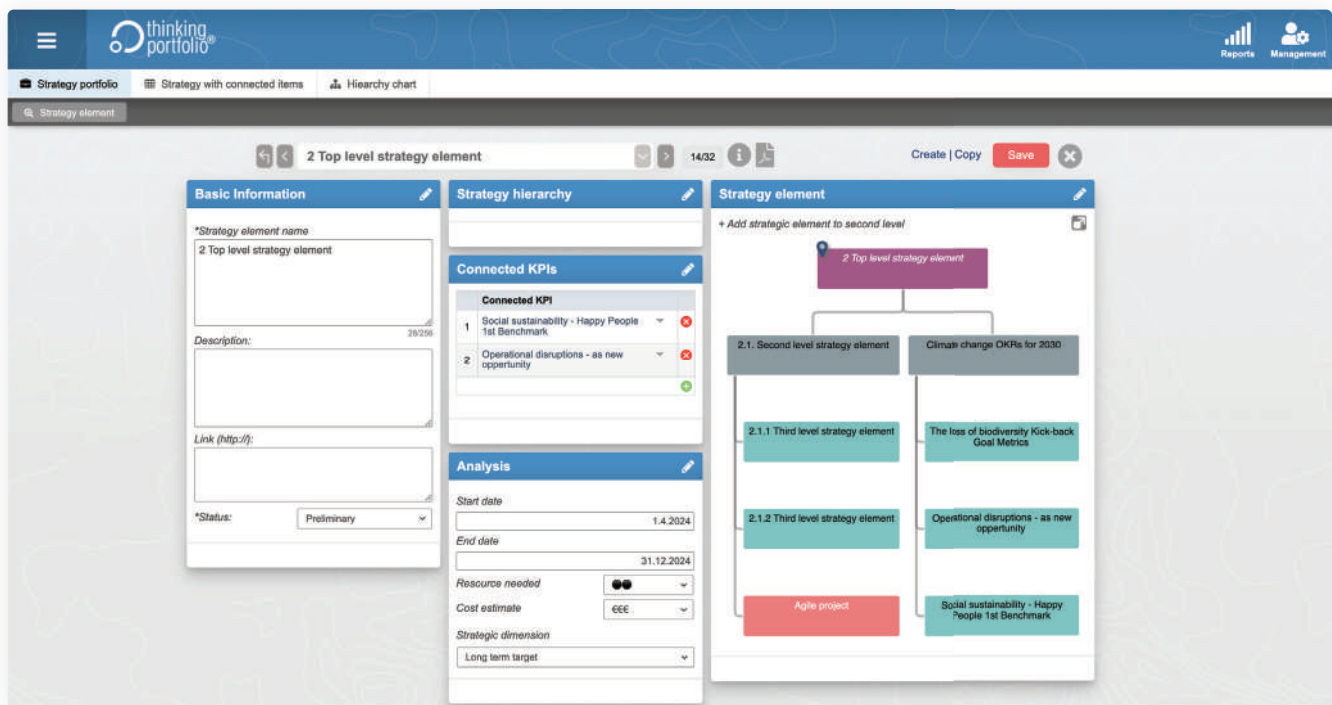


Figure 7. Strategic Entity View

Thinking Portfolio tools are commonly used to manage the portfolio and the big picture. In efficient portfolio management, up-to-date data needs to be reported, for example, by all individual strategy initiative managers and responsive persons. The Thinking Portfolio's Strategy Management Reference Model is a quick way to start building a platform that supports the strategy process from planning to execution and reporting. At the operative level, the platform's functionalities can be used to maintain the overview of the strategy management status and assist the personnel (or units, functions, teams etc.) in their own strategy management, involvement, and empowerment.

Thinking Portfolio's building blocks are called widgets. Currently, there are dozens of widget designs in our library. The following are a few examples of the most frequently used in strategy management.

## Strategy analysis and planning

The analysis is done to get a better understanding of strategy and to gain a better understanding of the elements in

strategy portfolio. The information may be used to steer decisions and follow-up.

Thinking Portfolio has an ever-growing set of analysis and planning tools that are further developed in co-operation with the customers. The tools may be used for a quick analysis as well as more comprehensive analysis of the specific initiatives. Analysis may be aligned with organisations' core processes and functions to avoid unnecessary paperwork and handovers.

There are several strategy analysis widgets that may be used as a baseline for customised strategy analysis. There is a possibility to use fully customised comprehensive forms and check lists to ensure preciseness, efficiency, and compliance.

In more sophisticated financial and business analysis may be calculated, and value analysis may be prepared over the portfolio or scenario. Even sophisticated expected value of the initiatives can be analysed and opportunities over portfolio may be weighed against expected risks and costs.

## Strategic Entity View

Strategy entity view is for displaying information on strategy entities such as initiative. Here is one example how the strategy entity view might look like (Figure 7). This view is presented when new entity is created and there is some basic information on entity such as name of the element. Information needed in this view depend on the needs of the user organization.

In strategy portfolio there might be different kind of information elements and there are examples presented in the following sections in this whitepaper. In portfolio there might be multiple views as in Figure 7 for different kind of information, analysis and follow up.

## Strategic initiative categorisation

The initiatives and other items in portfolio are usually organised or categorised in relation to the strategic objectives defined by the organisation.

Thinking Portfolio's risk categorisation widgets align strategy management according to, for example, strategy or process (Figure 8 and Figure 9). This area is highly dependent on the user organisation's needs and environment, and the solution is defined with the customer. Possible dimensions may include:

- ▶ Strategic objectives
- ▶ Business lines or areas
- ▶ Organizational units (functions, teams etc.)
- ▶ Process
- ▶ Products
- ▶ Services
- ▶ Customers (segments etc.)
- ▶ Competitors (M&A Opportunities, Competitive landscape, Complements etc.)
- ▶ Etc.

The Strategy Portfolio may be created hierarchically including multiple dimensions. For example, actions may be placed under initiatives or must-win-battles. Another example is that an important strategic initiative (e.g. implementing new service) may be added to all business areas to get the aligned view on strategy execution.

## Priorisation

Priorisation of strategies is highly dependent on user organization's needs. There are multiple ways to prioritize and create prioritization models in Thinking Portfolio.

There are simple priorisation criteria (Figure 10) in the Strategy portfolio or there might be more comprehensive model for initiative prioritization including strategy alignment and cost & benefit analysis. Both approaches are possible and there is always possibility to develop further the areas that are needed for your analysis of strategic initiatives.

Here is an example how priorisation might work in reporting (Figure 11). Axis of the charts might be e.g. costs and benefits and size of the circle might be needed resources. Also, colour of the circle might be e.g. initiative category and there is more space for needed information in tooltip.



Figure 8. Strategic Objectives

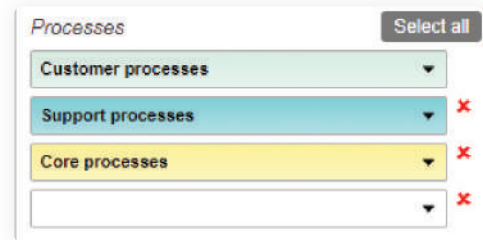


Figure 9. Processes

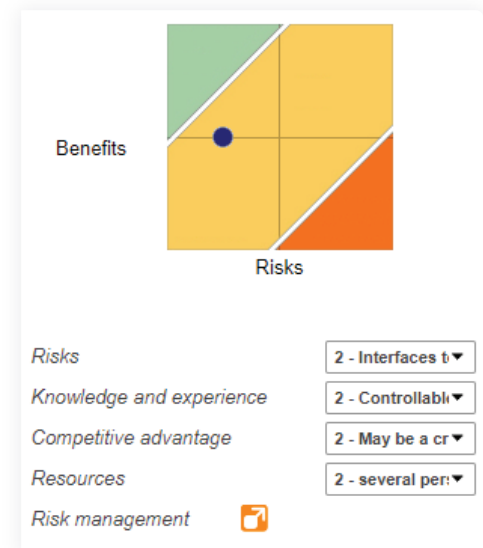


Figure 10. Project Selection Criteria

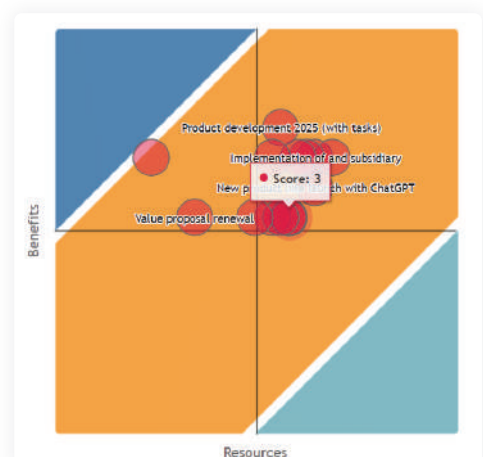


Figure 11. Priorisation

## Business Case and Cost Benefit Analysis

Cost Benefit Analysis and business case calculations can be added (Figure 12).

Financial analysis can be used with scenarios to facilitate strategic decisions.

Options of business calculations are limitless with Thinking Portfolio's configurable input, table, and calculation tools (Figure 13, Figure 14). Sometimes Excel modelling is more flexible than this kind of financial formatting, but the excel usually lacks defined formatting of information, version control, portfolio aggregating and access management.

## Scenarios

Scenarios may be used in planning to create analysis of different approaches. If the organization must choose between multiple possible scenarios there is possibility add functionalities to analyse these scenarios in the tool. Scenarios can be overlapping so some initiatives may appear in multiple scenarios. Scenario analysis over the portfolio may include e.g.

- Financial analysis
- Timing and roadmap analysis
- Resource analysis
- etc.

Export/Industry model latest estimate (€)	2011	2012	2013	2014	2015
Estimation of Sales m³/3Month	100	200			

Calculation	2011	2012	2013	2014	2015
Cost €/place	1.225	1.225			
Cost €/m³	2.45	2.45			
Quantity place/year	25	1.200			

Figure 13. Calculation Tools

« » BUDGET €	2011	2012	2013	2014	2015	Total
External work (€)	75 000	35 000				110 000
Applications/Licences (€)	100	125				225
Materials (€)	5	100				105
Other costs (€)	100	75				175
TOTAL	-75 205	-35 300				-110 505

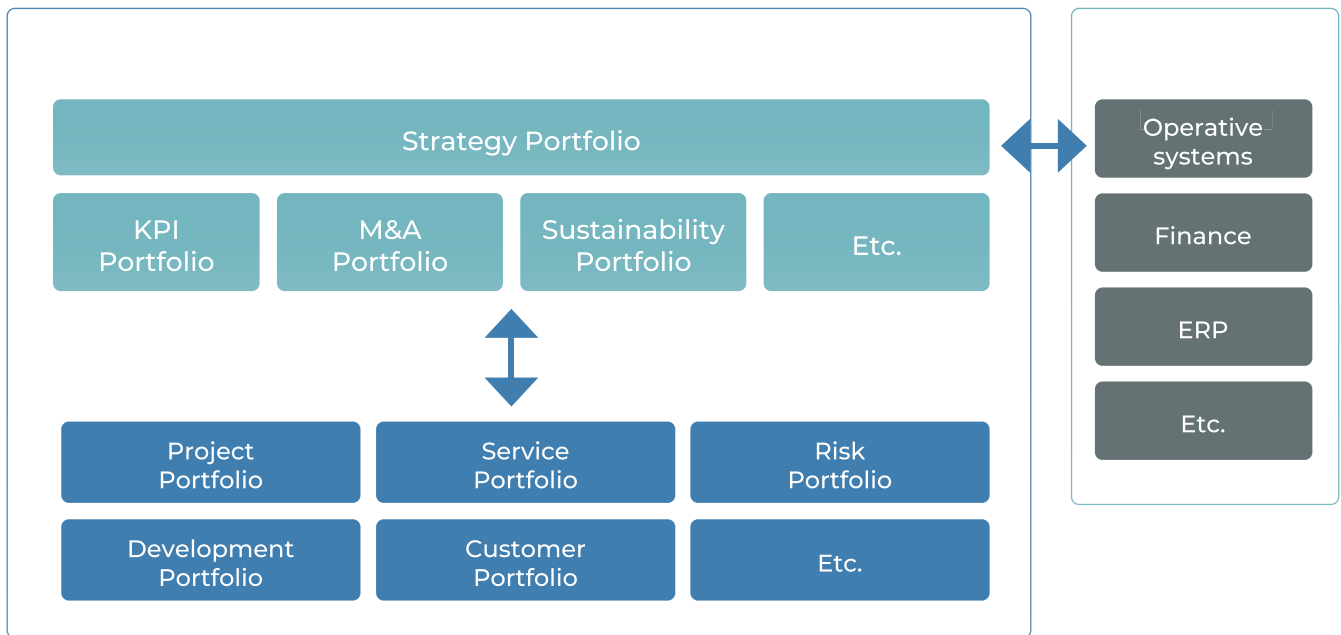
« » ACTUAL €	2018	2019	2020	2021	2022	Total
External work (€)	80 000	15 000				95 000
Applications/Licences (€)	70	110				180
Materials (€)	125	0				125
Other costs (€)	80	0				160
TOTAL	-80 275	-15 190				-95 465

« » Current estimate (€)	2023	2024	2025	2026	2027	Total
Investment Costs	50 000	60 000	80 000			272 000
Operating Expenses	8 000	9 000	10 000			49 000
Savings	800 000	200 000	400 000			2 040 000
Profits						
Total/Year	742 000	131 000	310 000			1 719 000

Figure 12. Cost Benefit Analysis

Cost element	Description	Budget	Forecast	Actual	Budget left	2024		2025	
						Forecast	Actual	Forecast	Actual
1 Employee costs	Personnel hired for the proj	15 000	24 000,00	17 000,00	7 000,00	5 500,00			
2 Licences	Other Purchases of Service	16 000	24 000,00	9 000,00	15 000,00	5 000,00			
3 Purchases of Services	Workload transfer	25 000	26 500,00	10 500,00	16 000,00	7 500,00			
		36 000,00	74 000,00	36 000,00	36 000,00	18 000,00			

Figure 14. Financial Input



## Integration to other processes

Integration between other business processes creates visibility through the digitalized management system.

Integration to business processes transforms strategy management to integrated part of organization. For example, integrating information from project management to the strategy management system may be used to create and establish a process for strategy management activities, reporting and reviews.

Inside the Thinking Portfolio's HUB (between portfolio-modules) the information may be exchanged easily. There is possibility to create integrations and links to other business processes to allow seamless flow of information (Figure 15).

Strategy portfolio may be accompanied with closely related portfolio-modules such as Project portfolio, Risk portfolio, Development portfolio, M&A portfolio, Process portfolio, Service Portfolio, Product Portfolio, Customer portfolio etc.

Basic information such as KPI titles are possible to include in strategy portfolio. If there is need for more mature process and comprehensive features some aspects of strategy portfolio may be divided into a new complementing portfolio-module based customer needs. For example KPI measurement and data collection may be expanded as new KPI portfolio to utilize more comprehensive KPI measurement tools.

Other portfolios may be used to combine and create information. For example, project portfolio's individual project may be action of a strategic initiative (Figure 14). Information from other portfolios may be displayed beside the link inside the strategy portfolio. This way project information and status can be linked to strategy management. In another example organization's products may be linked to the strategy portfolio. This gives an opportunity to facilitate a strategy linked Product Portfolio management.

Connected projects				
	Project Name	Project Manager	Project Phase	Link (requires access)
1	Roll out Juniper	Jukka Thinking	Implementation	<a href="#">Link</a> <span>✖</span>
2	Mobile Friend 2020	Asko Thinking	Analysis	<a href="#">Link</a> <span>✖</span>
3	Upgrade Sales Concept	Asko Thinking	Complete	<a href="#">Link</a> <span>✖</span>

Figure 15. Connected projects

# Reporting

– Views to the portfolio for communication, documentation, analysis and decisions

Thinking Portfolio's reports crystallise the situation and outlook for the executive management. The views and presentation methods of reports depend on their functional purpose and may be customised to the user organisation's needs.

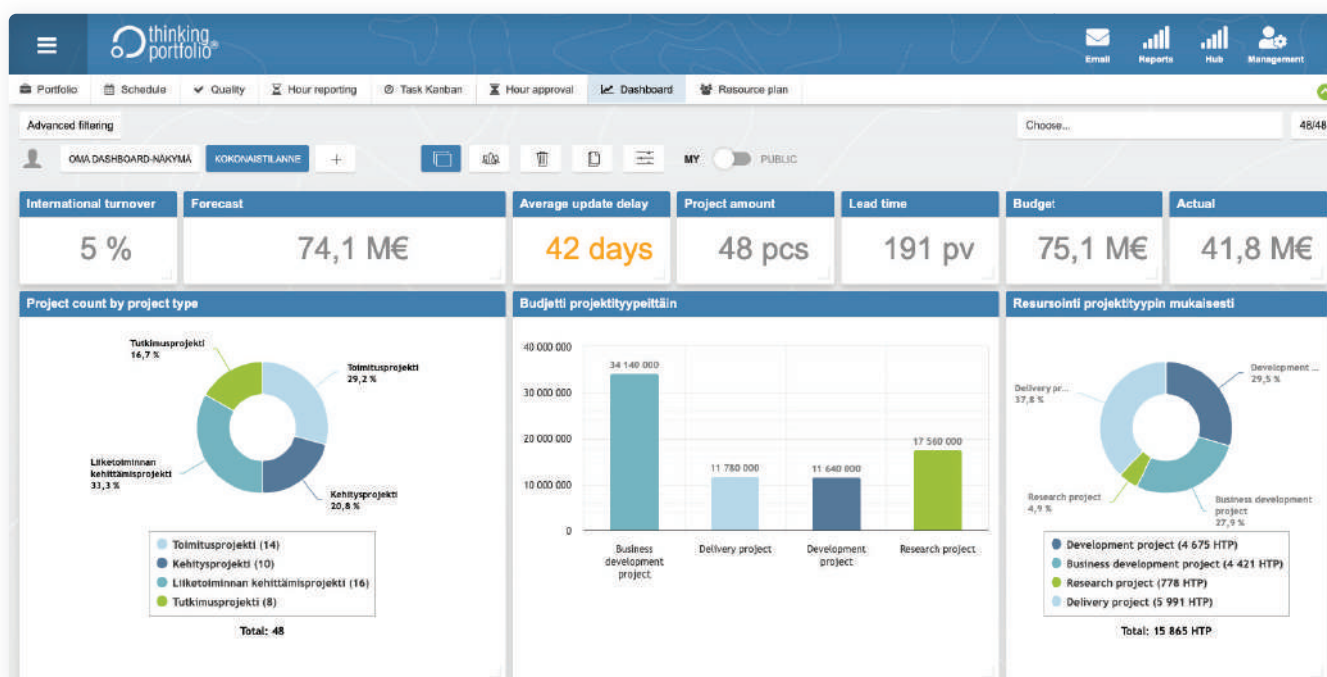


Figure 18. Dashboard view

In portfolio view, the user can filter the portfolio according to several simultaneous criteria. The filters remain effective when the user wants to see the other views and reports. The filter settings can be saved for later use and shared among users.

The dashboards and pivot reports may be used to generate new views, presentation, and analyses and of the information. Visual tools and reports of Thinking Portfolio can be shown in the tool or exported as presentation material.

For example, the Full Pager -report can facilitate slideshows straight from the platform and many kinds of information and report may be included to the presentation. The links and documents can be attached into the tool next to the task at hand to keep information organised and available.

A so-called Strategy Charter is generated automatically for every entity, containing all the information entered on the platform on a single report.

Examples of other possible reports used in strategy portfolio management are:

- ▶ Strategy analysis and strategy portfolio from various dimensions
- ▶ How strategic elements are related to strategy, business, processes, projects, products, customers etc.
- ▶ Relations and dependencies of strategy entities and other areas important to the organisation
- ▶ Ongoing status of actions and opportunities
- ▶ Development of risks
- ▶ Etc.

## Dashboards

**Dashboard** introduces a personalised view for the most important reports on impact on focus areas (Figure 18). It allows reports to be generated for different needs. For example, a manager could create a specified view for the control group and project team.



## Reporting capabilities

Thinking Portfolio reporting capabilities includes various basic report types such as column charts, pie charts, line charts and table sheets. These reports are building blocks in reporting that can be tweaked further in various ways. Addition to these standard reporting capabilities there are more specialized reporting types for aspects of strategy visualization and presentation.

## Roadmap Chart

At the portfolio level, the roadmap report (Figure 19) is a report in which all initiative timelines may be seen over the whole portfolio.

The roadmap report composition is done so that sequential initiatives can be on same swimming line. Because of this composition it can be also used when planning less concurrent and more sequential initiatives. It is best practice not to plan everything to start at first of January next year. It is advised to run limited amount of initiatives concurrent at the same time and plan sequential roadmap with the roadmap report. Roadmap report fits in one display / or paper. The roadmap may include timelines and key milestones.

Reports make the communicating status of actions easy and visual.

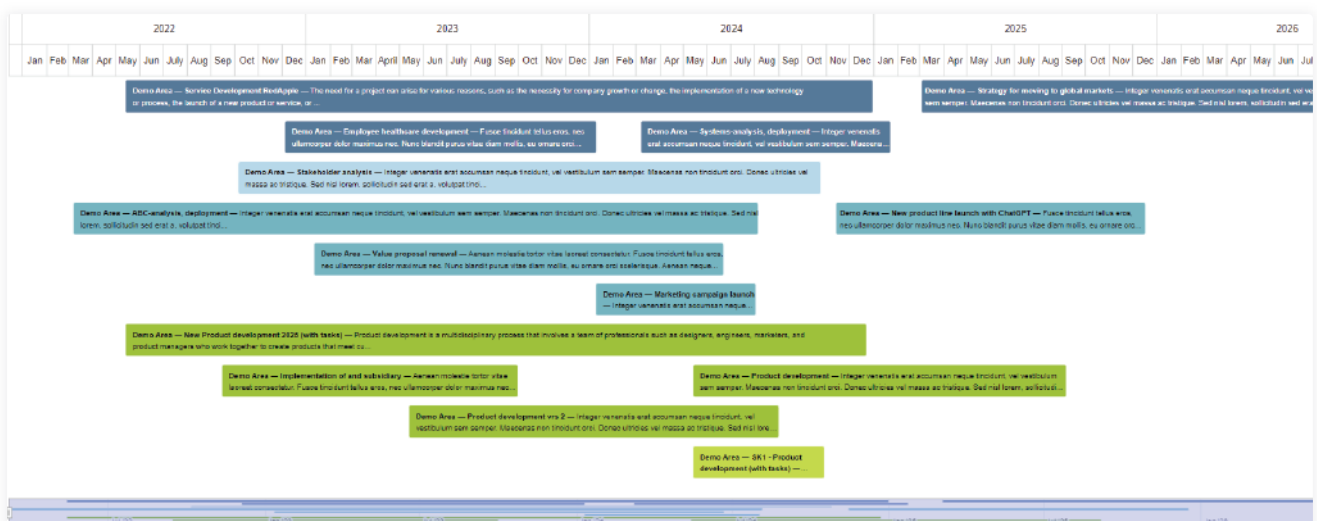


Figure 19. Roadmap Chart



## Pivot Report

The pivot report is a table or chart in which the values are presented and calculated based on pre-defined selections (Figure 26). Common term for this kind of presentation is cross tabulation between selectable dimensions (=categorizations).

The layout of the pivot report can be easily modified by the user to match the analysis need at hand. Needed information or analysis may be information on certain category or categorization etc. The modified report may be saved as a new report and shared with other users.

The pivot report may be configured as a table chart that is versatile in displaying lots of financial information, in which the values are presented and calculated based on user selections (Figure 26). The pivot report may be configured as graphical chart (Figure 27) including bar, line, area, pie and other common chart types. Further customizations are possible by Thinking Portfolio consultants.

With pivot report it is possible to dynamically select scenarios and other dimensions that needs to be reported. This enables making instant analysis and up-to-date reporting.

## Full Pager report

Full Pager report (Figure 28) resamples a full screen slideshow with selected information and reports. This report type can be implemented to portfolio upon request.

## Pipeline report

Pipeline report (Figure 29) gathers many kinds of information from project portfolio. For example, on x-axis there might be decision gates or execution stages. On y-axis there might be importance of projects or costs etc. Circle size might signify size of business case or need of resources. The color of the circle might point to type of initiative etc.

## Timeline and Gantt reporting

Thinking Portfolio Strategy portfolio included many ways to do timeline visualization and reporting. For example, portfolio timeline view is one option to view timeline and roadmap data (Figure 30).

For some customers the management of strategic initiatives may require more detailed project management tools. Thinking Portfolio provides many project management tools and reports e.g. GANTT charts, to visualise tasks and milestones (Figure 31).

Table With Subtotal		Year		2021		2022	
Project	Expense	Actual	Forecast	Actual	Forecast		
[+] New Product development 2025 (with tasks)				25,000.00	25,000.00	60,000.00	
	Employee costs						
	Licenses			1,750.00	2,800.00	4,550.00	
	Materials and Supplies			900.00	1,000.00	1,900.00	
	Other Expenses			20,000.00	20,000.00	40,000.00	
	Purchases of Services			4,000.00	5,000.00	9,000.00	
	Rents						
				51,650.00	53,800.00	105,450.00	
[+] ABC-analysis, deployment							
	Employee costs			5,000.00	5,000.00	10,000.00	
	Purchases of Services			300.00	300.00	600.00	
				5,300.00	5,300.00	10,600.00	

Figure 26. Pivot Report

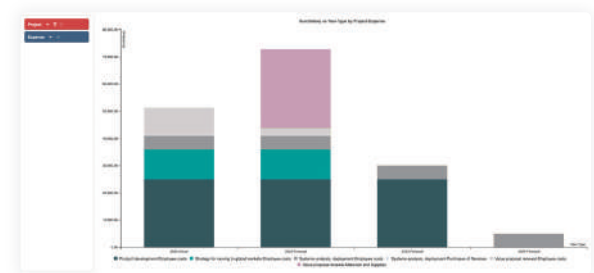


Figure 27. Pivot Report stacked bar chart



Figure 28. Full Pager report

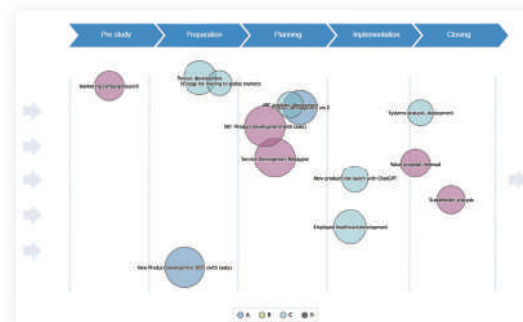


Figure 29. Pipeline report

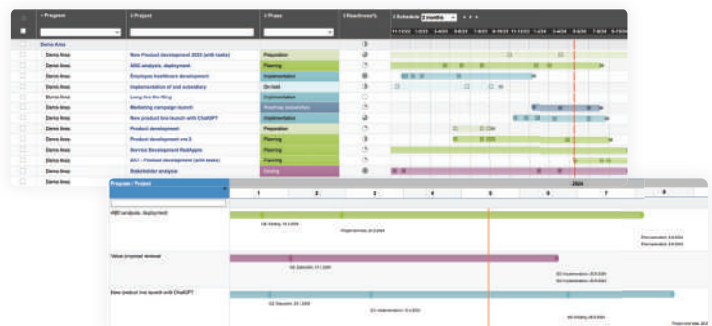


Figure 30, 31. Timeline and Gantt reporting

# Other Strategic Portfolio Management Tools

The Thinking Portfolio platform includes portfolio management tools that extend the common Strategy Management functionalities.

Up-to-date and comprehensive information is usually a requirement for a strategy management system. On the Thinking Portfolio platform, the strategy management process may be kept up-to-date with help of timely reminders (Figure 32). A reminder is sent on predefined schedule or events to the receiver, accompanied by the information and actions the receiver must perform. The message may include a followable link to the platform to the exact page where the action is performed. Reminders may be emails or notifications in the system. Also other systems such as Teams or Slack can be used for notifications, information sharing and further collaboration.

## Sustainability

There might be a need to connect strategic initiatives to sustainability targets and there are possibilities to achieve this. Here is an example of sustainability view that might be prepared for certain level of strategic elements (Figure 33).

## Status reporting

Status reporting on strategic initiatives can be done in strategy portfolio. There might be a process in place to remind people of reporting (via email) and then collecting information e.g. with status traffic light and free text (Figure 34). There might be more information that needs to be attended to such as financial information or measurement data. There can be standard reporting where the information is gathered as status report (Figure 35). This data might be aggregated on portfolio level and reporting might be prepared.

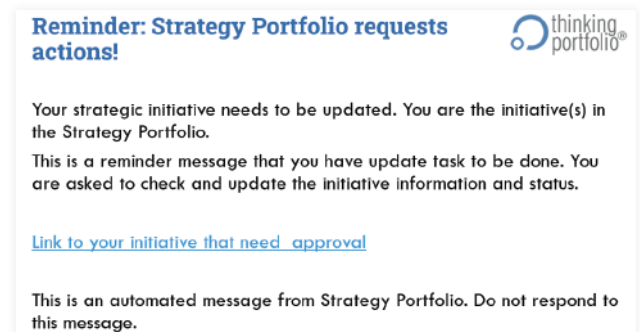


Figure 32. Reminders

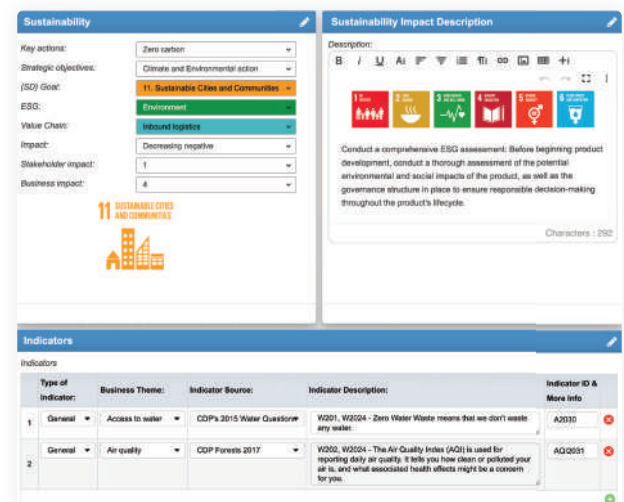


Figure 33. Sustainability view

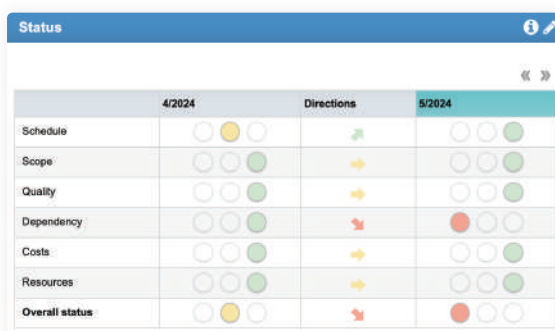


Figure 34. Status traffic lights

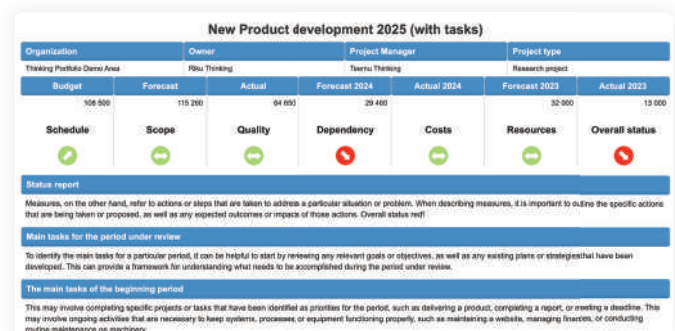


Figure 35. Status report



## KPI Definitions and follow-up

KPI Definitions and follow-up are areas that may be included in the strategy portfolio. Here is an example (Figure 36) where KPI definitions and targets are added on strategic element level. There might be more advanced definitions with units and other information. These KPI targets may be aggregated on portfolio level and reported as aggregated strategic goals or as scenario options.

There are practical limits to how much different information can be included in the Strategy Portfolio, and at some point it may be advisable to move KPIs to separate portfolio (e.g. KPI Portfolio that is made available by Thinking Portfolio). In some cases, might be beneficial to define targets and measurement on KPI Portfolio and follow up the information in both KPI and Strategy portfolios. Here is a sample of a connection between Strategy Portfolio and KPI Portfolio (Figure 37).

## Templates

Initiatives and lists may be created as templates that may be used as new initiatives or template lists to work further. Using template initiatives might be useful, for example, when there is a need to add similar initiatives for many instances of business lines or branch offices etc.

List templates may be used as a set of best practices for e.g., execution check lists, risk management, communication plan, etc.

## Resources planning

In Thinking Portfolio there are resource management capabilities and time sheet reporting available if needed (Figure 38). These options can be hidden entirely if such capabilities are not needed in strategy portfolio.

Resource management is integrated to any other portfolios available, such as project portfolio. It might be defined so that strategy is planned as additional work on top of previously approved projects. On the other hand, strategy work might be planned on strategy portfolio as additional line work and as extra investment e.g. in different scenarios.

Planned resources might be reported in portfolio (Figure 39 & Figure 40).

## Document Templates

Document Templates are document files that can be opened in the portfolio tool for local editing. These may include evaluation and analysis templates, documentation, meeting notes and decisions.

KPI	Target 2022	Target 2023	Target 2024
Market share, %	35	40	45
One time CAPEX, M€	10000	30000	20000
Volume, tons	15	27	42

Figure 36. KPI targets

Connected KPI
1 S1.1: Strategic KPI

Figure 37. Connected KPIs

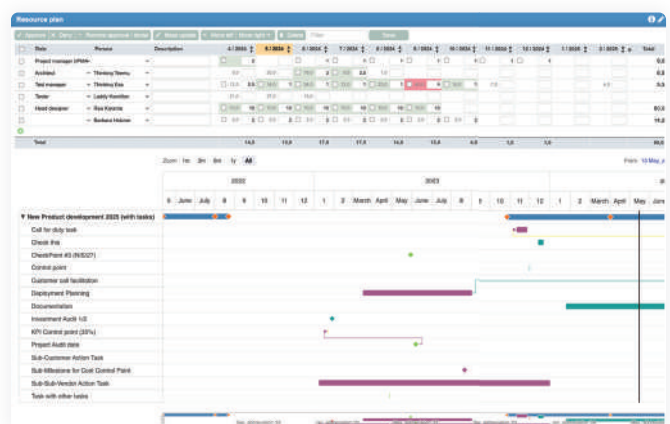


Figure 38. Resource planning

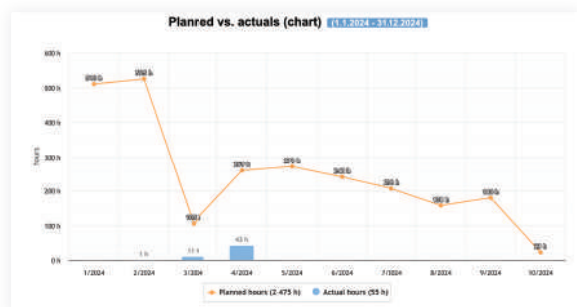


Figure 39. Planned vs. actuals chart

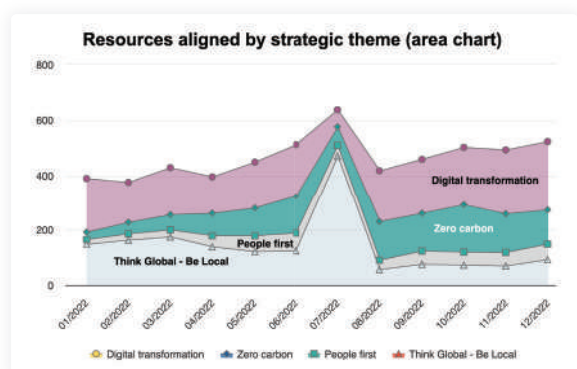


Figure 40. Resources aligned by strategic theme



## User Interface depending on Initiative type or another categorization

Different types of initiatives may have different information and tools suitable for them (e.g. R&D or IT-development initiatives). The widgets on the platform can be changed accordingly. It is advised to avoid changing based on dependence in the beginning of the journey, but it is definitely a possibility in the long run.

### Log / Diary

The Log Widget is a simple way to record Strategy Management history, such as the decisions made in meetings, in a memo-like format (Figure 41). The Log may contain desired information about development, for example, the status, notes, tracking data, other widgets and links to intranet pages or project documents.

### Collaboration and commenting

Efficient strategy management is a collaborative effort. Thinking Portfolio adds a new secure collaboration channel for the strategy information sharing. Information sharing may not be secure through e.g. email but inside the Thinking Portfolio Platform the information sharing is secure. Strategy may be collaboratively edited and analysed.

For example, the simple commenting of risks is an available option (Figure 42). This can be used to pass important information to responsible persons or track information on the latest changes in the environment. There is also the possibility for voting and polling whereby multiple users may, for example, cast their votes, opinions, or analysis on how initiative should be evaluated. If there are comprehensive needs also Polling Portfolio (offered by Thinking Portfolio) is possible for comprehensive crowd sourcing or sophisticated analysis.

### Governance

The user organisation may use the strategy portfolio platform to strengthen its accountability and governance. Roles, authorities, and responsibilities may be aligned in the system and these responsibilities may generate actions and reporting needs into the system. This way accountability and empowerment is automatically reinforced.

### Documents and links

Thinking Portfolio includes multiple ways to work with documents to keep them organised and available. Almost any type of information can be included on the platform. It is possible to integrate strategy management documentation in the platform either by attached documents or by linking to other systems and data (Figure 43). The diaries and templates are available for following analysis efforts, development, and decisions. The check-lists can be used to ensure efficiency and compliance.

## Paper trail

On the Thinking Portfolio platform there are several options to save the paper trail and follow the recorded information.

Full logging can be done with tracker-functionality. The tracker makes a log of selected data and records the change that has happened and who has made the change.

An initiative snapshot is a record of initiative at a given moment. The initiative snapshot can be made automatically at a certain moment, for example, at the moment of approval of initiative. The initiative data is saved available for the later use to observe or to report on.

Auto-snapshots record the data analysis automatically into the log. This can be useful for some derivative information such as number of initiatives.

When there is tracker-, snapshot-, or auto-snapshot-data available, the trend reports can be formulated from the data.

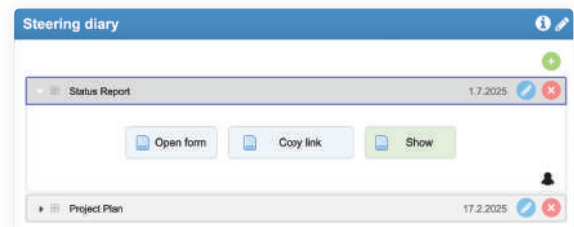


Figure 41. Log / Diary



Figure 42. Commenting

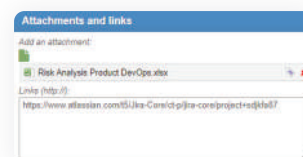


Figure 43. Attachments and links

# Customisation

## Customisation

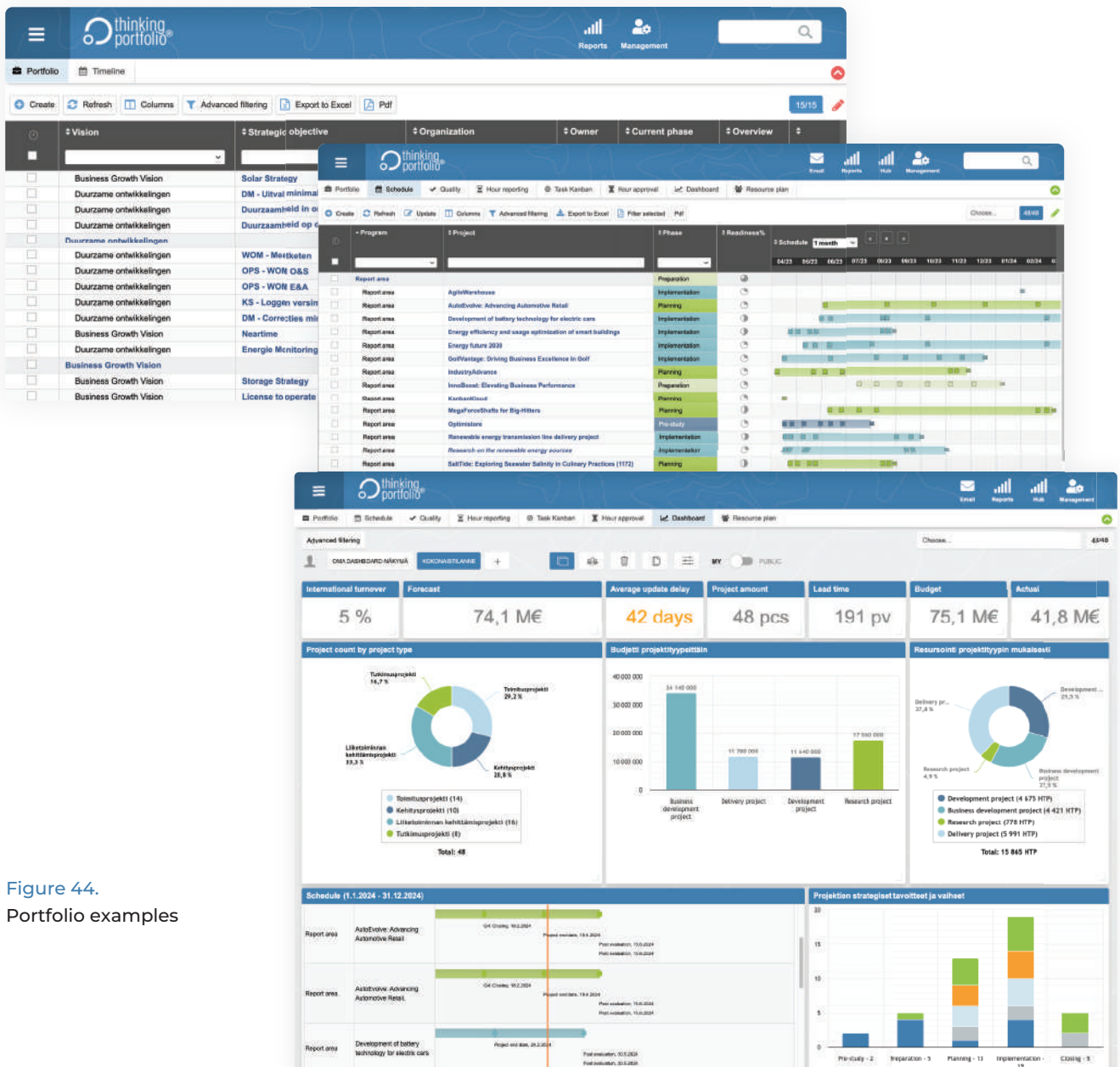
Thinking Portfolio is customized to meet the customer's portfolio needs, as well as portfolio management processes and concepts. The user interface can be in the Finnish, Swedish, English, German, or Dutch languages (Figure 44).

Conceptual independence and parameterization have been the starting points for the design of Thinking Portfolio's database structure. Customers can personally modify the tool facilitating the maintenance of the directory fields visible in different user interfaces.

## Different Portfolio Models

Thinking Portfolio's basic components – the widgets – facilitate the construction of various portfolio models. The widgets' content can be parameterized according to the concepts used by the customer.

The application's database solution has designed for maximum flexibility; customer-specific customization requires no structural modifications in the database. Thanks to its structural solution, customizing the application customer-specifically for Proof of Concept use is rapid.



# Deployment and Use

## User interface

Thinking Portfolio is a fully responsive browser-based application, allowing its mobile use. It is compatible with the newest browsers.

## User management

The access rights in Thinking Portfolio are defined role-based. Roles can include CIO, Data Architect, Application Owner, Technical Administrator, System Administrator, Viewer User etc. The role nomenclature will be customer-specific and can be maintained by the customer's Administrator.

Each Portfolio has one root user or more, with the largest access rights, e.g., App Startup permissions. The root user can be specified for the whole portfolio or the portfolio of a given business division.

After logging into the system, the user is allowed, according to their role, to only view and report certain data in the application, or edit the data.

## User authentication

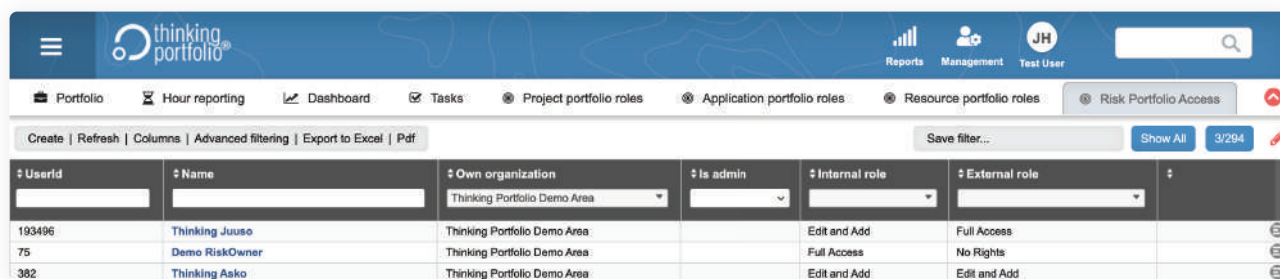
The application supports two ways of user authentication: Microsoft AD authentication and the in-app username + password authentication.

## Federated single sign-on (ADFS / Azure AD)

The single sign-on is based on Microsoft Active Directory Federation Services (ADFS), and Thinking Portfolio also supports SAML 2.0 and Azure AD solutions.

When the user arrives at the sign-on address defined for the company, the user is redirected to the company's own authentication service. After logging in with the organisation's username, the user will be redirected again to the Thinking Portfolio service. If the user is already in the company's own authentication service, there is no need to enter a username or password, the redirectioning will be immediate (AD/SSO concept).

Traditional usernames and passwords can be used with external Internet users.



Userid	Name	Own organization	Is admin	Internal role	External role
193496	Thinking Juuso	Thinking Portfolio Demo Area		Edit and Add	Full Access
75	Demo RiskOwner	Thinking Portfolio Demo Area		Full Access	No Rights
382	Thinking Asko	Thinking Portfolio Demo Area		Edit and Add	Edit and Add

Figure 45. User Management



Figure 30. Deployment process

## Connections to external systems

Thinking Portfolio can be equipped with connections to various external data systems, like PowerBI, Teams, Outlook, ServiceNow, Jira, Salesforce, SAP, M-Files, Slack etc.

The URLs entered in the application text fields and referring to documents are automatically transformed into hyperlinks, including when using Teams workspace to save documents.

The REST API interface is a new solution to create real-time integrations. The connections are described more in detail in the Thinking Portfolio Integration Whitepaper. We will be happy to tell you more about the implementations made and draw an appropriate solution for you.

## Our cloud computing model

Thinking Portfolio offers portfolio management under a Private Cloud model. Our cloud data is always stored in Finland. There is no need for the customer to install any application components into their own environment, and the version available will always be the newest one.

We offer the service with a fixed-price monthly fee, with no user limitations.

Use and maintenance are browser-operable with an SSL-encrypted connection. It is possible to limit the use to certain IP addresses only.

Our service model includes support for the customer's Administrator.

## Proof of Concept (PoC)

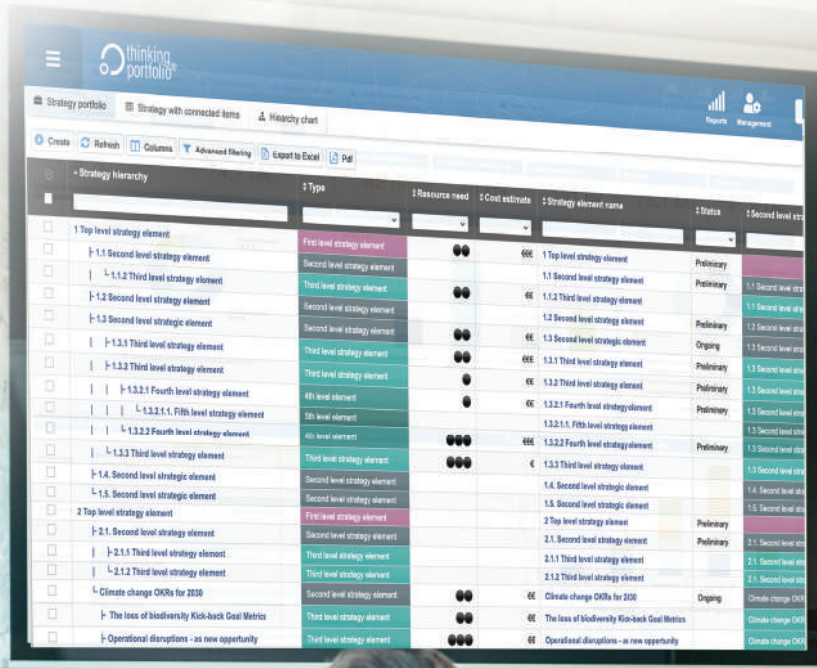
If required, we can carry out together a fast Proof of Concept project (PoC) for our customer. After a few work meetings, we will implement the application with customer-specific adaptations, and it will be usable on our server during the period agreed.



## Thinking Portfolio HUB - One platform, multiple portfolios

## Utilizing multiple parallel portfolios for management, communication and decision making

- |                         |                  |                         |                            |
|-------------------------|------------------|-------------------------|----------------------------|
| ◆ Project Portfolio     | ◆ Risk Portfolio | ◆ Application Portfolio | ◆ Service Portfolio        |
| ◆ NPD Portfolio         | ◆ R&D Portfolio  | ◆ Strategy Portfolio    | ◆ Sustainability Portfolio |
| ◆ Development Portfolio | ◆ Task Portfolio | ◆ Investment Portfolio  | ◆ +30 others               |



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