

## SIMULTRAIN® STRATEGIC MANAGEMENT USER GUIDE

You develop a strategy for a portfolio of projects. Working in a large company, you start planning a five-year portfolio of projects. You need to put the right resources on the right work at the right time. You choose and prioritize projects and assign teams to execute them. Your mission is:

- 1) To obtain at least **80 strategic benefit points** (strategic value) for **4 main strategic objectives** of the company.
- 2) To complete the five-year portfolio with a positive cash balance - at least **20 million**.
- 3) To obtain an expected net present value (NPV) of **50 million**.
- 4) To make the portfolio profitable in **three years**.

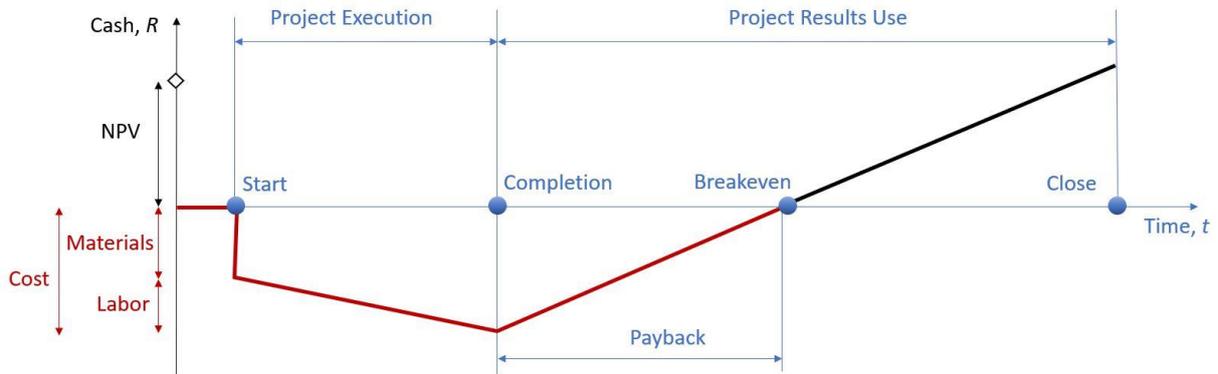
An aggregate performance index (API) is calculated based on these four criteria. There are **20 potential projects** and eight teams, with total personnel of 50 people. You can obtain credit up to **10 million**. If your budget exceeds the limit, then no new project can be started until the cash balance becomes smaller than the limit. The eight teams work on other portfolios/programs/operations so that you don't always need to keep them busy.

Different teams have competences in three main domains: core business of the company, information technology, and sales and marketing.

### People

Team Leader		Number of people	Competencies		
			Core Business	Information Technology	Sales and Marketing
1	 Janet	9	✓	✓	
2	 Tonio	8		✓	
3	 Reto	7	✓		
4	 Karen	6			✓
5	 John	4	✓	✓	
6	 Livio	6	✓		
7	 Luc	5			✓
8	 Peter	5		✓	✓
Total		50			

The payback period of a project is defined as the time it takes after the project is completed to get the money back:



$$NPV = \sum \frac{R(t)}{(1+i)^t}$$

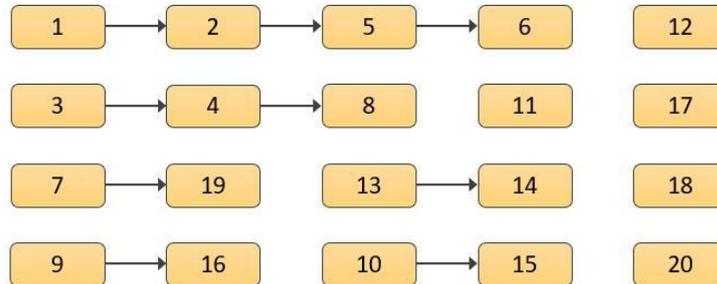
$R$  = Cash Inflow – Outflow;  
 $i$  = the discount rate

The payback period of your portfolio is defined as the time from the beginning to the moment of the getting money back.

You have information on 20 potential projects that might be included in your portfolio:

		Strategic Value, (0-10)	Risk, (0-10)	Net Present Value, x1000	Cost, x1000	Payback Period, months	Depends on previous project	Estimates, man-years		
								Core Business	Information Technology	Sales and Marketing
1	Software Development / ECOM	9	3	7800	3900	9		6	14	4
2	Back-End Technology Choice	8	6	-1600	1600		1	4	6	0
3	Hosting Commission	7	2	3000	4400	11		8	14	0
4	Upgrade Storage Capacity	6	5	1700	1000	6	3	0	6	0
5	Migrate Existing Services	8	2	3800	3500	24	2	4	14	2
6	Security and Certification	8	7	7200	3600	7	5	8	18	0
7	Social Media Platforms	6	6	4300	1700	6		0	0	8
8	Support Module Development	6	3	3400	1400	7	4	0	8	0
9	Services Branding	6	2	6000	2900	10		12	0	10
10	Platform Virtualization	7	6	1800	3300	9		6	18	0
11	SME Acquisition	8	4	8000	3000	16		12	0	6
12	Multi-Language Core Interface	5	4	2100	1200	15		1	0	6
13	Mobile Applications	6	6	7400	4200	20		4	14	2
14	Develop On-Go Reporting	4	7	2000	800	12	13	2	3	0
15	Virtual Team Training Materials	1	8	1400	1400	24	10	6	0	1
16	Marketing Campaign	7	4	3200	2200	9	9	2	0	8
17	International Market Expansion	7	3	5900	2400	30		6	2	4
18	Customer Involvement Program	6	1	4000	2000	12		4	0	6
19	Industry News Service	2	3	1400	1700	14	7	3	0	2
20	AI Services Enhancement	3	9	7200	3800	18		6	16	6
Total		120		80000	50000			94	133	65

Execution of certain projects is constrained by execution of previous project(s):



- The main indicators of the Dashboard:
  - There are four **strategic objectives** and their target values given by the top management. Each project contributes differently to the strategic objectives – see the Portfolio description document.
  - **Strategic values (SV)** for four main strategic objectives are the sum of the corresponding values of all projects. The higher the value, the better. Its target values are given in the table.
  - The **percent of completion** (green bar) is calculated by reaching the target values of all four strategic objectives.
  - **Cash balance** (target at the end of 5 years, expected at completion, and actual) is the amount of the cash: cash inflow minus cash outflow. The higher the actual and expected values, the better.
  - **Net present value (NPV)** is calculated as the sum of cash inflow minus cash outflow of all completed and expected to be completed projects. All future revenue and spending are calculated with a given discount rate, for example, 5%. NPV is the time value of money. The higher the actual value of NPV, the better.

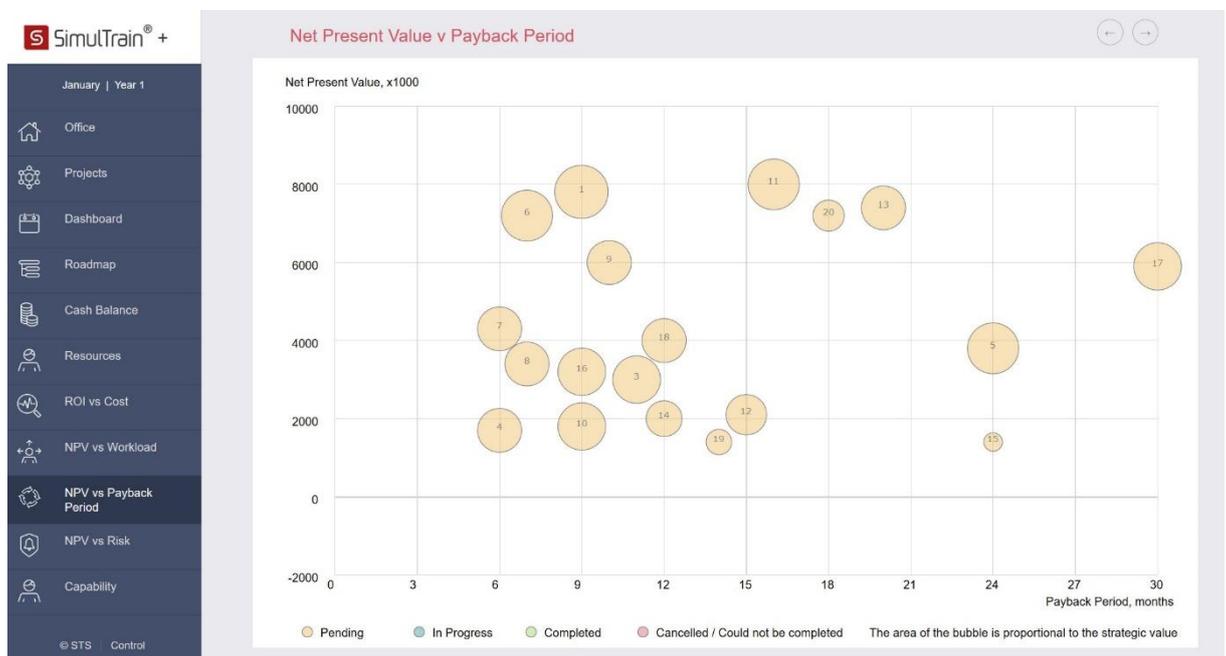
- **Payback period** is the time when the portfolio cash balance becomes positive. It is measured in months from the beginning of the first year. The smaller the payback period, the better.
- **Aggregate performance index (API)** is the average of ratios of the seven above-mentioned indexes to its target values (4 strategic objectives and 3 financial indicators: Cash Balance, NPV, and Payback period). The performance of the portfolio is measured by this key performance index. The higher the index, the better.

There are two phases of the simulation:

## 1) Planning

- You analyze the four-page document (portfolio description) and charts, including the NPV vs Cost. The main tasks in the planning stage are
  - to select projects;
  - to allocate teams to the selected projects, to define when to start them;
  - to set the projects' priorities.

The bubble diagrams help to select projects. Make your selection based on the information given in the charts, for example “NPV versus Payback.”



You select projects to complete. The number of selected projects can be between 8 and 16. To do so, click on a project from the list.

Project	Project Health	Strategic Value	NPV, x1000	Workload, man-years	Teams
1. Software Development / ECOM	Green	9	7800	24	2
2. Back-End Technology Choice	Yellow	8	-1600	10	1
3. Hosting Commission	Yellow	7	3000	22	2
4. Upgrade Storage Capacity	Yellow	6	1700	6	1
5. Migrate Existing Services	Yellow	8	3800	20	1
6. Security and Certification	Yellow	8	7200	26	1
7. Social Media Platforms	Green	6	4300	8	1
8. Support Module Development	Yellow	6	3400	8	1
9. Services Branding	Green	6	6000	22	1
10. Platform Virtualization	Yellow	7	1800	24	1
11. SME Acquisition	Green	8	8000	18	2
12. Multi-Language Core Interface	Yellow	5	2100	7	1
13. Mobile Applications	Yellow	6	7400	20	1
14. Develop On-Go Reporting	Yellow	4	2000	5	1
15. Virtual Team Training Materials	Red	1	1400	7	1
16. Marketing Campaign	Yellow	7	3200	10	1
17. International Market Expansion	Green	7	5900	12	1
18. Customer Involvement Program	Yellow	6	4000	10	1
19. Industry News Service	Red	2	1400	5	1
20. AI Services Enhancement	Yellow	3	7200	28	1

Choose up to three teams to execute the project. Click the **Add** button. The project starts as soon as possible. If you want to delay its start, please specify the corresponding year.

Strategic Objectives:	Market Share Expansion	Profitability	Customer Retention	New Technology Readiness
Strategic Value	4	2	1	1

To analyze and acquire the innovative small businesses in the core business of the company. To limit the acquisition to five SMEs.

0% Completed

Year 3 To start the project in the year 3 or later.

	Core Business	Information Technology	Sales and Marketing
Workload, man-years	12	0	6
Janet	✓	✓	
Karen			✓

Add

NPV Chart: Y-axis ranges from -4000 to 8000. X-axis shows years 1 to 5. The NPV starts at 0, drops to approximately -1000 in Year 3, and then gradually increases back towards 0 by Year 5.

- If a team has several projects to do, the **priority is defined** in the project list.
- Many teams on a project shortens the execution and cause the smaller productivity.
- If a team can work in two domains, it tries to advance both domains with the same workload that is left to complete.

Give the priorities by sorting the projects list. To do this, drag and drop projects:

Project	Project Health	Strategic Value	NPV, x1000	Workload, man-years	Teams
1. Software Development / ECOM	●	9	7800	24	[Icons]
3. Hosting Commission	●	7	3000	22	[Icons]
4. Upgrade Storage Capacity	●	6	1700	6	[Icons]
7. Social Media Platforms	●	6	4300	8	[Icons]
2. Back-End Technology Choice	●	8	-1600	10	[Icons]
8. Support Module Development	●	6	3400	8	[Icons]
11. SME Acquisition	●	8	8000	18	[Icons]
13. Mobile Applications	●	6	7400	20	[Icons]
12. Multi-Language Core Interface	●	5	2100	7	[Icons]
5. Migrate Existing Services	●	8	3800	20	[Icons]
9. Services Branding	●	6	6000	22	[Icons]
6. Security and Certification	●	8	7200	26	[Icons]
10. Platform Virtualization	●	7	1800	24	[Icons]
14. Develop On-Go Reporting	●	4	2000	5	[Icons]
15. Virtual Team Training Materials	●	1	1400	7	[Icons]
16. Marketing Campaign	●	7	3200	10	[Icons]
17. International Market Expansion	●	7	5900	12	[Icons]
18. Customer Involvement Program	●	6	4000	10	[Icons]
19. Industry News Service	●	2	1400	5	[Icons]
20. AI Services Enhancement	●	3	7200	28	[Icons]

Legend: ● Pending, ● In Progress, ● Completed, ● Cancelled, ● Could not be completed

## 2) Executing (when the trainer starts the clock)

You decide upon issues that your colleagues bring to you in your office.

Performance Indexes\*

- Strategic Value 106% ●
- Cash Balance 91% ●
- Net Present Value 108% ●
- Payback Period 67% ●

\* Expected at completion

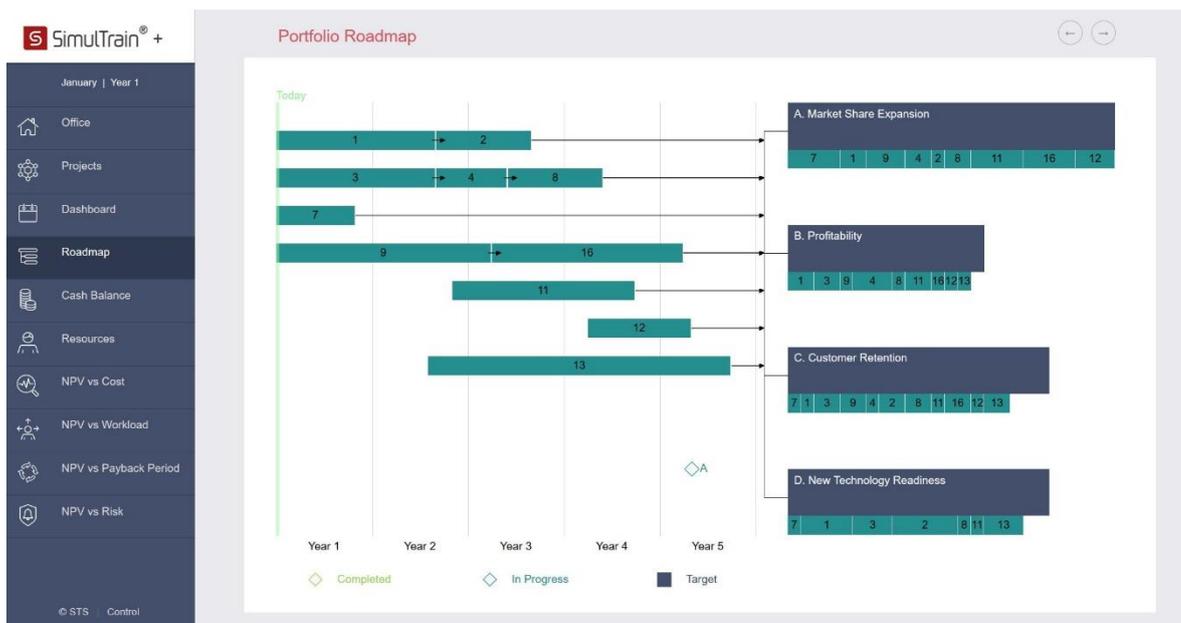
Aggregate Performance Index, Expected at completion: 93%

Click on the question mark, read the question, and choose one of the three options.

The Board of Directors may re-evaluate the strategic values of certain projects at their annual meeting. There are also changes in the workload, NPV, and other parameters of the projects – you will be informed by mail. **New opportunities / projects can be found and added to the project list** during portfolio execution.

You adapt, update, or change your plan, include or cancel projects, and change priorities and teams according to new circumstances and information you find in the **Dashboard, Projects list, Cash Balance, and Resources** charts. The **Aggregate Performance Index** shows the performance of the portfolio. The higher the index, the better.

The Portfolio Roadmap details the interdependences of the planned components, the time of the execution, their contribution to the four strategic goals of the company, and the moment when the objectives are met.



Please analyze your plan, decisions when the simulation is completed and share your conclusion with your trainer and team members.