INTRODUCTION TO THE METHOD

Result: the outcome of this step is

- a problem tree and a solution tree a mind map in the form of a tree with a detailed cause-and-effect analysis of a core problem (climate change) and its solutions
- in-depth understanding of the problem
- realistic and justified solution to the problem of climate change
- a business idea that addresses climate change





HOW THE PROBLEM SOLUTION TREE METHOD CAN HELP US REACH SUSTAINABLE DEVELOPMENT GOALS?

STEP-BY-STEP INSTRUCTIONS TO CREATE A **PROBLEM TREE**

DEFINE THE CORE PROBLEM



Time: 15 min



Result: Identified core problem for further analysis.



Question: What is the climate change -related core problem that I would like to analyse?



Description: To begin, you need a central problem that you want to analyse, to understand the root-causes of. You can place "Climate change" as a central, first problem in the middle of the problem tree template.

ANALYSE THE **PRIMARY CAUSES** OF **2** THE CORE PROBLEM WITH 5 X WHY



Time: 1h



Result: Identified primary root causes of the core problem.



Question: What are the primary causes of the core problem, why does it exist and what are the secondary causes?



Description: This is the first level of root-causes on a problem tree. Ask five times 'why this problem exists' – what are five key direct and immediate causes of this central problem? Define five causes of the core problem.



Note: Remember that causes always have a negative connotation.



ANALYSE THE **SECONDARY CAUSES** DIRECTLY LINKED TO PRIMARY CAUSES

Time: 15 min



Result: Identified secondary root causes of the core problem.



Question: What are the secondary causes of each previously defined primary cause?



Description: This is the second level of the problem tree. Each primary cause is analyzed separately, and the roots of the tree are further extended downward. Continue asking "why" - why do the selected primary causes exist? You can limit your analysis to "3 why" for each primary cause.

ANALYSE THE **ROOT CAUSES** OF THE SECONDARY CAUSES WITH 2 X WHY



Time: 15 min



Result: Identified root causes of the core problem.



Question: What are the root causes of each previously defined secondary cause?

Description: This is the third level of root-cause analysis. Each secondary cause should be further analysed with "2 x why" questions to define the causes of the problems identified on the second level.



Tip! Question: How detailed should the problem tree be?

Answer: The more details you provide the better your solution to the existing problem. For the purposes of this step, develop 5 horizontal branches and work 3 levels down. Be realistic – take time constraints into account.

STEP-BY-STEP INSTRUCTIONS TO CREATE A SOLUTION TREE

Follow these steps to set up the solution tree.

By completing the problem tree, you gain a comprehensive understanding of the root-causes of the core problem. Now your task is to find a solution to the problems identified. For that purpose you will create the solution tree mind map.

How to do it? Turn all the negative statements in all the boxes or post-it notes on the problem tree into positive statements!

TURN THE CORE PROBLEM STATEMENT INTO A SOLUTION STATEMENT.



Time: 15 min

Description: The negative problem statement needs to be reformulated into positive statement. Assuming that your central starting problem was "Climate Change", you can reformulate it as "Climate change slowed down" or "Climate change impact reduced", for example.

TURN PRIMARY CAUSES STATEMENTS INTO POSITIVE SOLUTION STATEMENTS



Time: 15 min

Description: Turn all five first level causes or problem statements into positive statements, write them as assumptions that the problem is solved. For example, if one of your primary causes was formulated as "Deforestation", this problem can be reformulated into a positive assumption as "Restoration of forests".

JURN SECONDARY CAUSES INTO **POSITIVE SOLUTION STATEMENTS**



Time: 15 min

Description: Continue with the reformulation of negative problem statements into positive statements for each post-it of your tree.

TURN ROOT-CAUSE STATEMENTS INTO POSITIVE SOLUTION STATEMENTS.



Time: 15 min

Description: The third level of root-cause analysis also needs to be transformed into positive solution statements, as with the two previous levels.



THE PROBLEM SOLUTION TREE METHOD



Note: Solution tree is mirroring all the problems as solutions.