# THINK TANK Lab

## PROBLEM TREE ANALYSIS

## WORKSHEET

## What is it for?

The problem tree analysis supports consideration of the problem context by examining the root causes of a challenge and identifying associated effects. With this information, the focus for further work can be determined more precisely and the foundation for targeted research is laid.

The field of vision is broadened in relation to the problem. Different points of view and concerns can be collected objectively in the team and effectively sorted. In the process, patterns or dependencies become visible and enable systematic processing.

**References:**
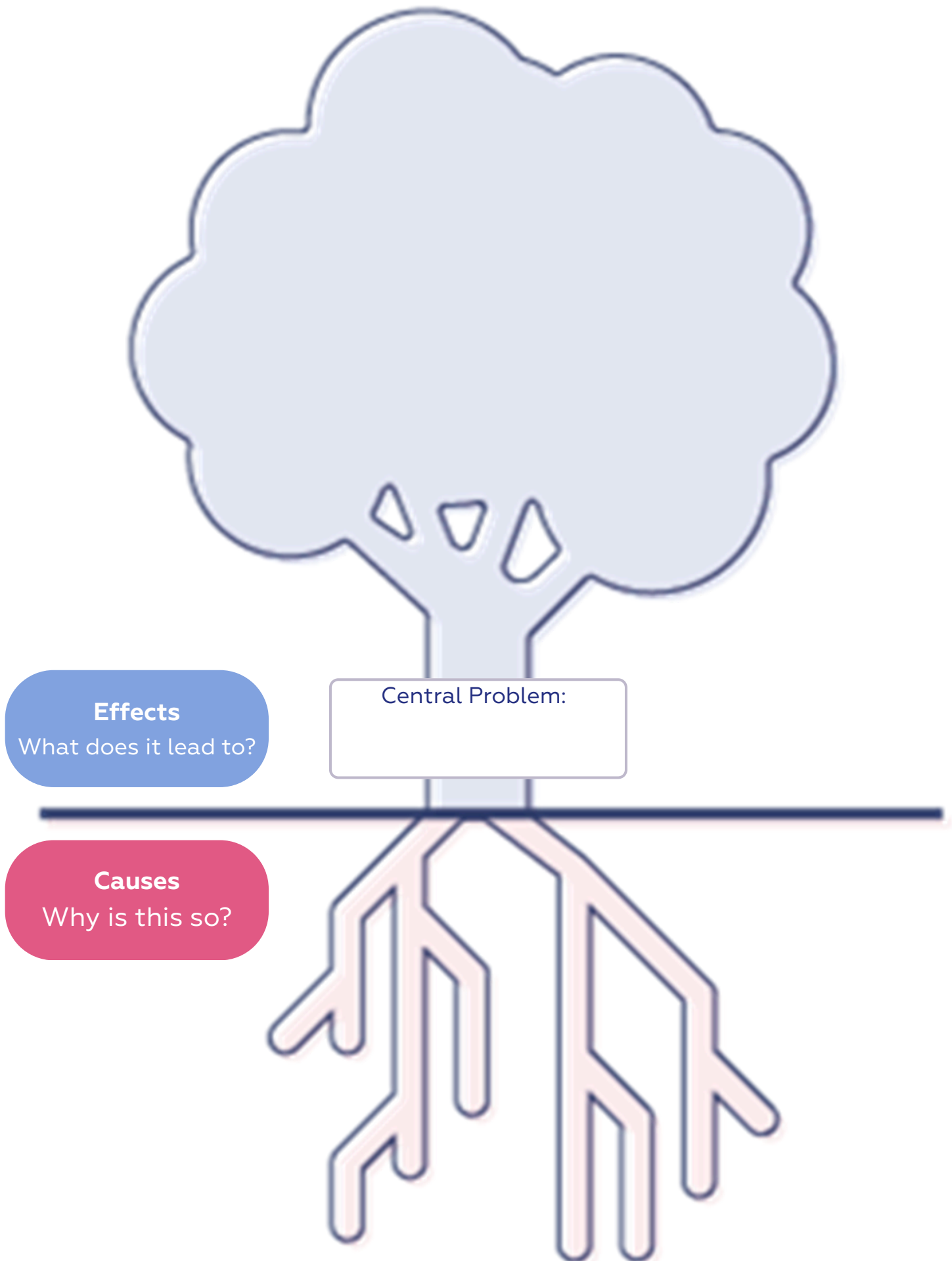Caroline Paulick-Thiel, et al. (2020), Öffentliches gestalten
Johannes Kern (2021) Ursache-Wirkungs-Diagramme erfolgreich einsetzen: Das Ishikawa-Diagramm in Theorie und Praxis

# Step by Step

**1** Draw a diagram of the tree on a large sheet of paper. All team members have sticky notes and markers at hand. The problem tree analysis can also be conducted individually.

**2** Write the central problem in the middle. The center represents the trunk, which is the starting point for the problem exploration.

**3** To identify causes of the problem, ask several times, "What is the root cause of a deeper cause?" Write down all aspects and put them in a logical order below the central problem. This is where the causes of the problem come together.

**4** To determine effects of the problem, ask several times, "Which effect triggers which further effect?" Write down all aspects and place them above the central problem in logical order. This is where the symptoms of the problem come together.

**5** Consider all aspects in the root or tree crown as a whole. What is relevant for dealing with the problem? What causes or effects should be particularly addressed? Highlight the most important points.

**6** Clearly document key points that have emerged. Examine in detail the area with the most highlighting.

**Note: Further important points often emerge at a later stage (after meetings, interviews, etc.). Additions are useful.**

# PROBLEM TREE ANALYSIS

**Effects**
What does it lead to?

Central Problem:

**Causes**
Why is this so?

Fig.: based on Luma Institute, modified by Paulick-Thiel & Arlt, 2020

# PROBLEM TREE ANALYSIS

**THINK TANK Lab**

Effects 3. order

Effects 2. order

Effects 1. order

**Central Problem**

Causes 1. order

Causes 2. order

Causes 3. order