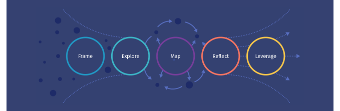
systemic
design
group

System Mapping Toolkit

A toolkit designed to help you to visualize systems, embrace complexity and uncover opportunities for positive change.

About the Toolkit

The System Mapping Toolkit is a free, collaborative guide to help you make sense of complex challenges and to uncover opportunities for systemic change. It is designed for everyone who works with and within complex systems. The toolkit guides you through the most important steps of framing, mapping and reflecting on complex challenges. Along the journey, the toolkit gives you helpful background information to learn about systems thinking, its approach, and its unique language.



Our System Mapping Process

1 - Frame: Set the stage of your systemic journey, define your goals & frame your context

2 - Explore: Define the essence of your issue, collect important variables & identify emerging clusters

3 - Map: Uncover the causal relationships between the variables & identify feedback loops

4 - Reflect: Create your system story to share it with others & get feedback on your map

5 - Leverage: Analyze your System Map to anticipate future scenarios & identify points of opportunity

How to use this Toolkit?

This toolkit provides you with three levels of information.

Template
The templates help you and your team with targeted questions tasks to navigate you through the mapping process step by step.

Background Information
Below each template, you find a section for more in-depth information about the tasks, the process and systems thinking in general.

Example
Finally, you find an example to give you a better idea of how each of the process steps could look like in action.

The System Mapping Toolkit helps you to...

GAIN DEEP SYSTEM UNDERSTANDING
Understand what happened in the system and why. Make better decisions and achieve better results with fewer resources in more sustainable ways.

CREATE COMMON UNDERSTANDING
Engage your stakeholders, learn from each other and develop a shared understanding of the situation.

ANTICIPATE IMPACT OF YOUR ACTIONS
Identify the impact of your ideas, products, and services before you implement them. Anticipate and avoid unintended consequences.

FIND EFFECTIVE POINTS FOR INTERVENTION
Find places in the system where small changes have large impacts. Develop how-might-we questions that embrace the whole system. Use it as your starting point for brainstormings, innovation sprints, or design thinking projects.

BECOME A SYSTEMS THINKER
Visualizing the complexity, helps you to unveil the story of the system. Share your story and invite others to do the same. You will become a better listener and observer of the system.

About the authors

The Systemic Design Group is a platform by and for system innovators who seek to tackle wicked problems collaboratively. We invite and connect professionals from diverse backgrounds and talents to jointly work towards a sustainable future. Our work ranges from research endeavors, system innovation consulting, toolkit development to capacity building programs.

www.systemicdesign.group

Find further information about the toolkit and our trainings on our website:
www.system-mapping.com

1 Frame

Let's get started! The first phase is all about setting the stage and defining your focus and goals for your system mapping journey. Reflecting on the actual problem(s) and formulating a sound research question helps you to get more clarity about your endeavor and about where to start with your map.

"If I had an hour to solve a problem I'd spend 55 minutes thinking about the problem and five minutes thinking about solutions."
Albert Einstein

2 Explore

In this phase, you define a main variable which summarizes the key issue you want to improve. This will give you are starting point for your mapping process (but does not need to be your end point). You use your research insights to collect variables that play a crucial role in the system. Grouping the variables allows you to see emerging themes relevant to your issue.

"The less we understand a phenomenon, the more variables we require to explain it."
Russell Ackoff

3 Map

As the name suggests, this phase stands at the very core of the mapping process. You explore the relationships between your variables and visualize them within the map. You start from your main variable as we want to understand what drives it. Step by step you add and integrate another cluster of variables. Don't be afraid: Trying to make sense of complexity is hard at the beginning and can get messy. But you can iterate through your map anytime and adjust things as as you learn about it. One of the goals is to unveil feedback loops - one of the most important elements in understanding systems and their behavior.

"Systems thinking is a context for seeing wholes. It is a framework for seeing interrelationships rather than things, for seeing patterns of change rather than static snapshots."
Peter Senge

4 Reflect

Congrats, you have created the first version of your map! Now, it's time to take a step back and to reflect on your map - by yourself and with others. Create a systems story that synthesizes your learnings and insights. The story helps you to start conversations with experts and stakeholder to get valuable feedback. Use it to validate your own assumptions and test how well your map is understood.

"Remember, always, that everything you know, and everything everyone knows, is only a model. Get your model out there where it can be viewed. Invite others to challenge your assumptions and add their own."
Donella Meadows

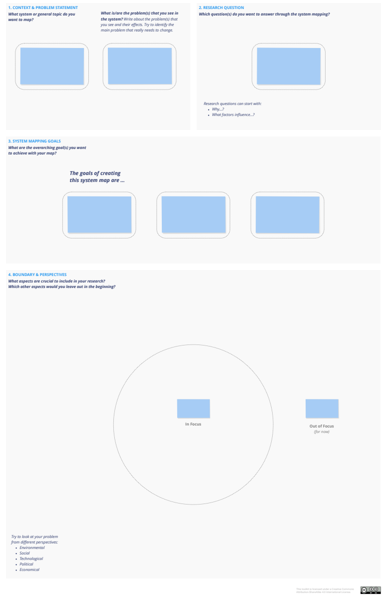
5 Leverage

The final phase is all about finding Leverage Points: Places in the system where small changes could have huge, positive impacts on the overall system. You start by analyzing the revised System Map to identify potential areas for initiating change. Finally, you choose the most promising leverage points and describe their potential for system change in the leverage hypothesis.

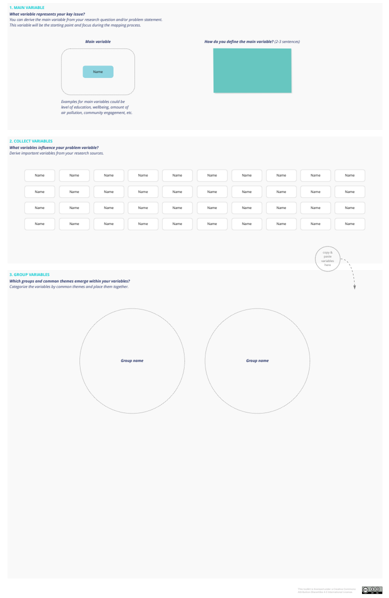
"A part is never modified unless it makes the whole better. That is a systemic principle. You don't change the part because it makes the part better without considering the impact on the whole - that is systemic thinking."
Russel Ackoff

TEMPLATES

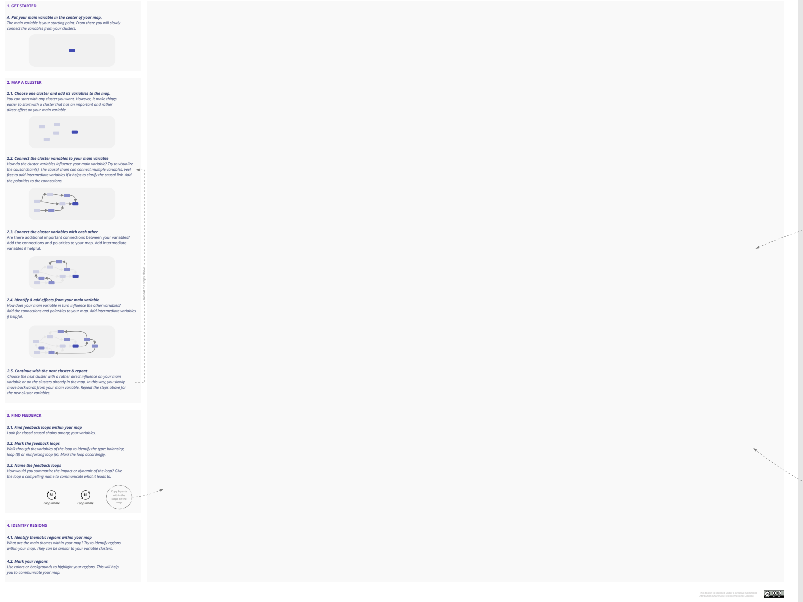
1. Frame the System
Define the context, occurring problems, and research questions for framing your system mapping



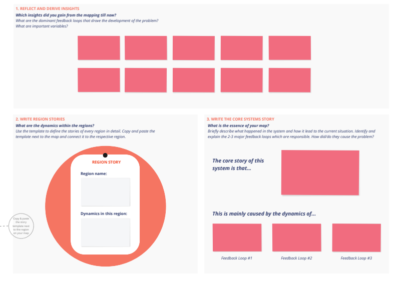
2. Explore the System
Define a problem variable and derive variables from your research to build the basis for your system map



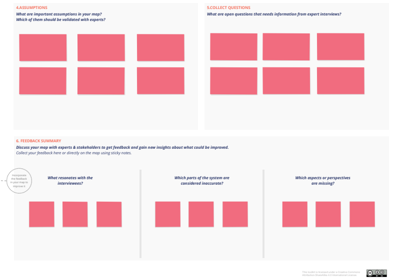
3. Map the System
See how the parts form the whole and how feedback loops drive the behavior of the system



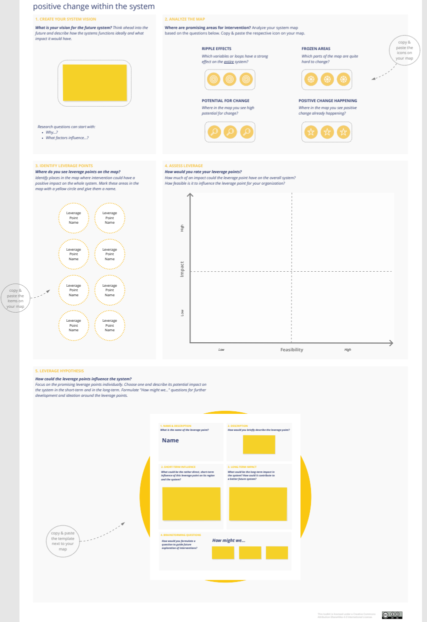
4. Reflect your Map
Reflect, synthesize your learnings and create your system stories



Get Feedback and Improve your Map
Conduct interviews to get validate your assumptions, to discuss open questions, and to get feedback



5. Find Leverage
Identify leverage points that could drive positive change within the system



BACKGROUND INFORMATION