CATALISI

Catalysation of institutional transformations of Higher Education Institutions through the adoption of acceleration services

CATALISI Final Webinar - Co-Design and Co-Creation

11th December, 10.0-12.00
Online

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Introduction to the concept of Co-creation

- Introduction to co-creation
- Co-creation toolkit context
- Presentation of the toolkit and the tools for co-creation

Co-creation in the Living Lab

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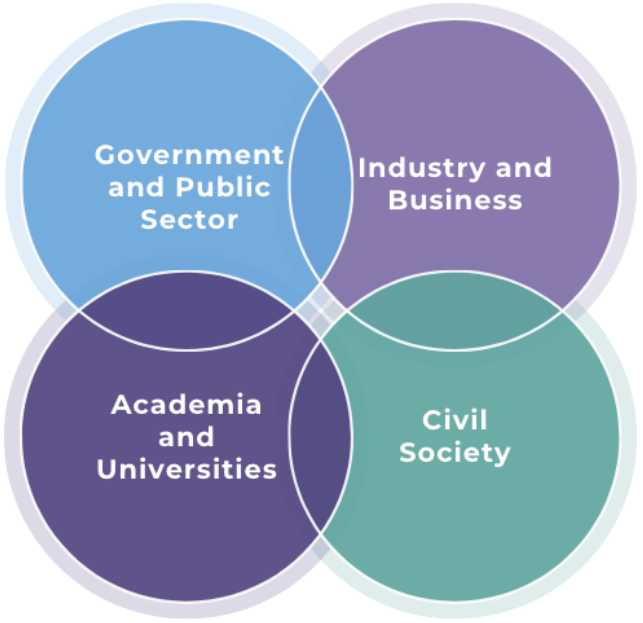
"Living Labs are **open innovation** ecosystems in real-life environments based on a systematic **user co-creation approach** that integrates research and innovation activities in communities, placing citizens at the centre of innovation."

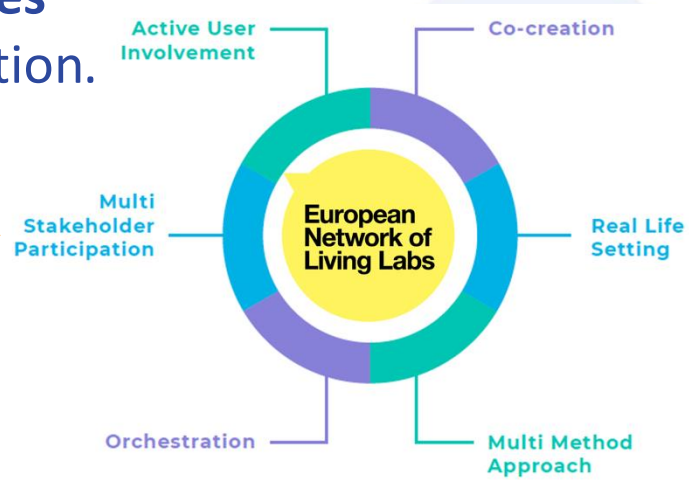
Quadruple Helix of Engagement



Living Labs operate as **intermediaries among citizens, research organisations, companies, and government agencies** for joint-value co-creation, rapid prototyping or to scale up innovation and businesses.

They are open innovation ecosystems in **real-life environments** using **iterative feedback processes** throughout the **lifecycle approach** of an innovation.

Within the **wide variety of types of living labs** and their implementations they all have **common elements**

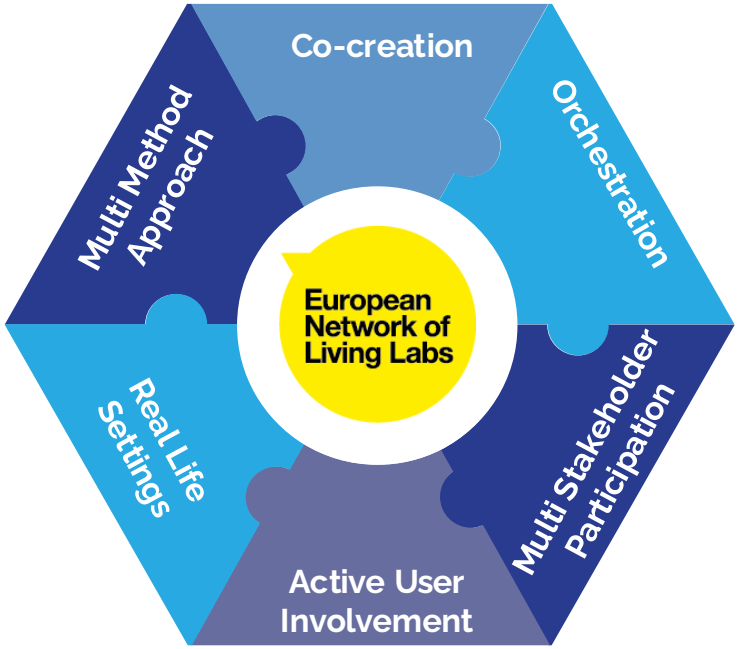


CATALISI ACTING-Living Labs

Living Lab methodology to enable institutional transformation of HEIs

European Network of Living Labs

Living Labs are **open innovation** ecosystems in real-life environments based on a systematic **user co-creation approach** that integrates research and innovation activities in communities, placing citizens at the centre of innovation.



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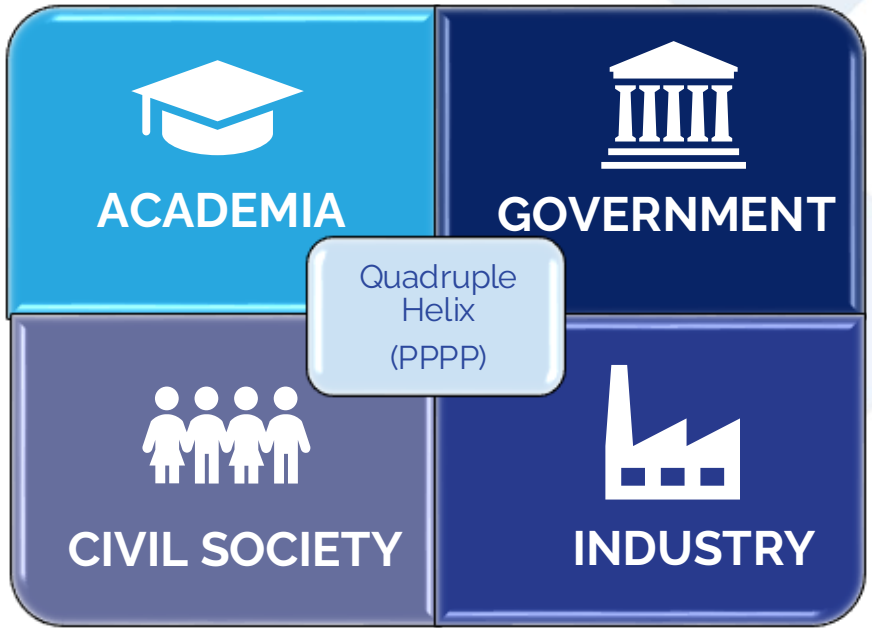
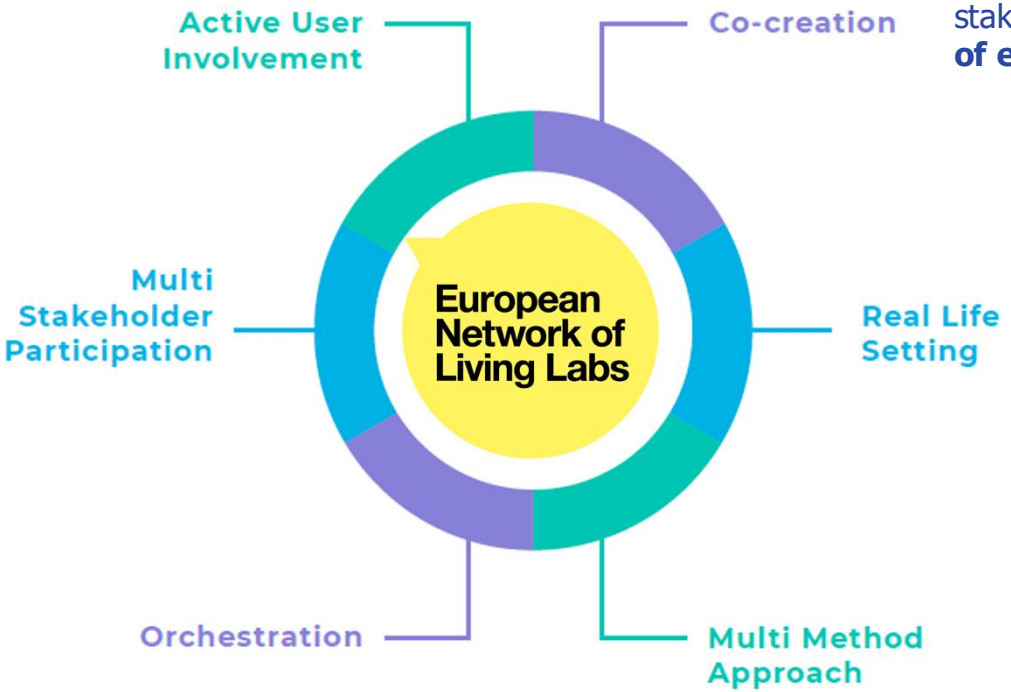


CATALISI ACTING-Living Labs for HEI transformation

- Reinforcing and strenghtening the **role** of universities in **local innovation ecosystems**
- Supporting the **transition to knowledge- and digitally-driven** HEIs that mainstream Open Science practices and include R&I outputs in teaching
- **Engaging citizens** in solving **societal challenges** and contributing to green and digital transformation of Europe

Taking **a holistic view on society**, involving stakeholders from the **quadruple helix model** (government, academia, private sector and citizens)/



In a Living Lab values are **bottom-up co-created** not only for but also by all relevant stakeholders, ensuring a **higher adoption of end users**

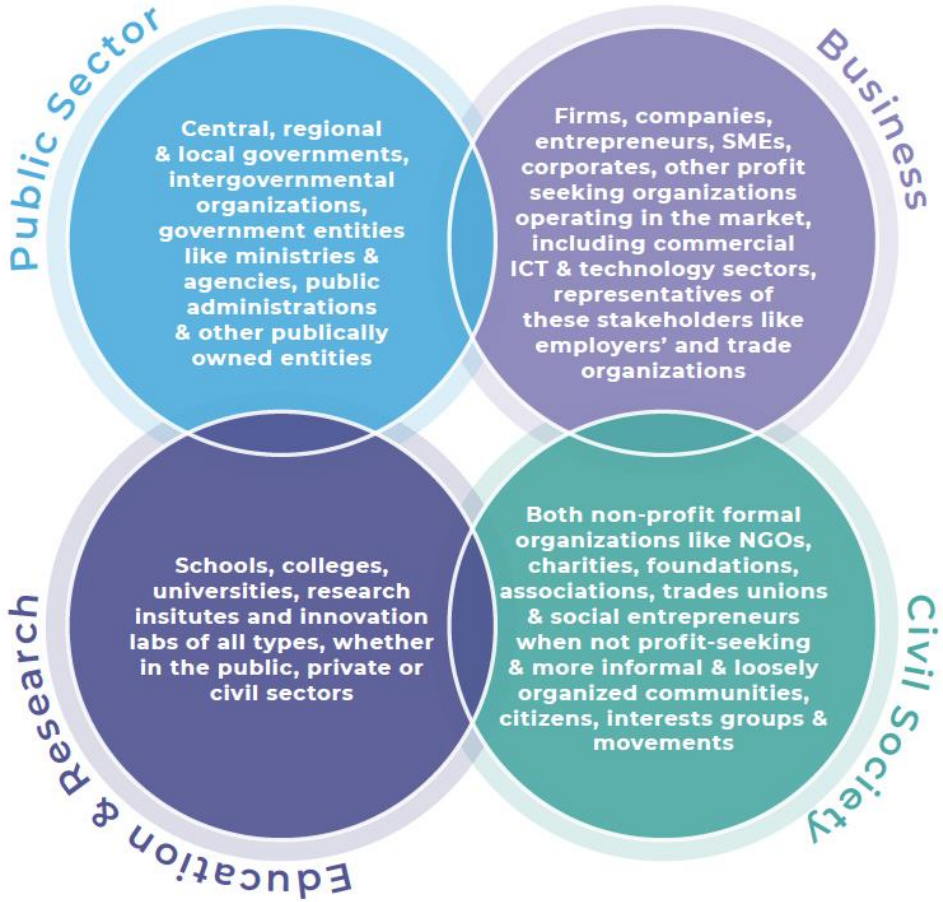
Muti-stakeholder participation

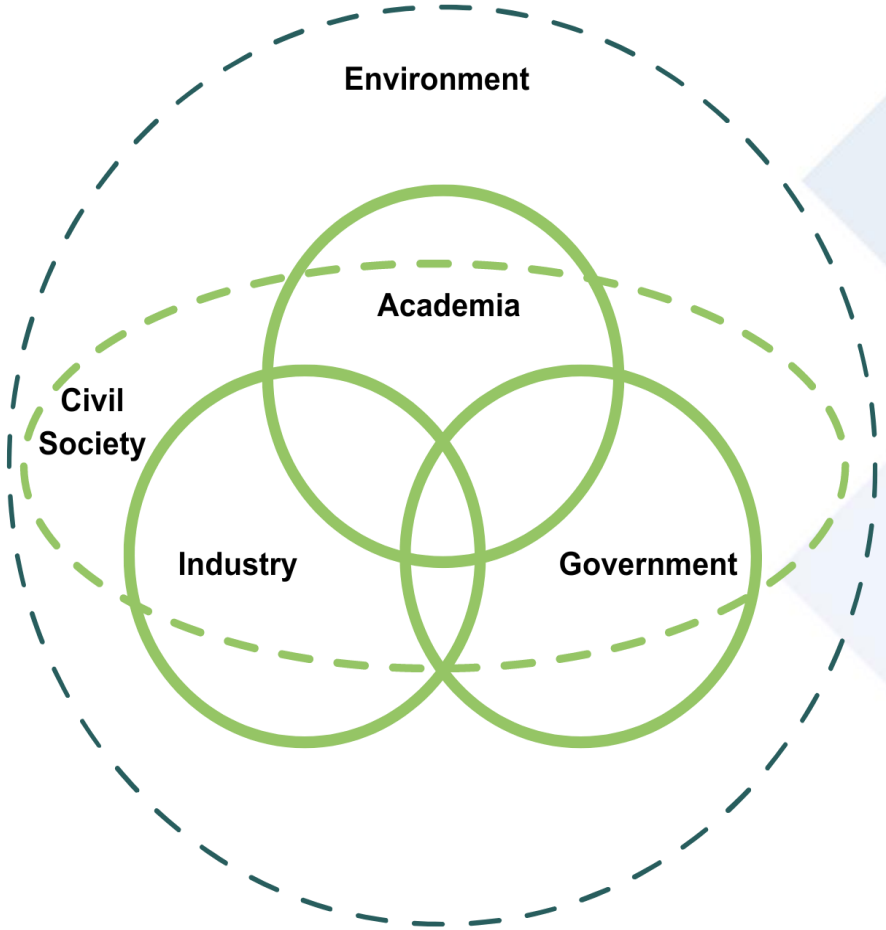
Stakeholders are individuals or organizations who are:

- Involved/interested in a particular Living Lab/project
- Affected by the Living Lab/project in some way

Their input has a direct impact on the Living Lab/project's upshot.

Muti-stakeholder participation





Co-Creation

- A **collaborative and participatory approach** to innovation that involves users, stakeholders, and researchers in the design, development, and testing of new products, services, or solutions.

- The process may involve a range of methods and tools:

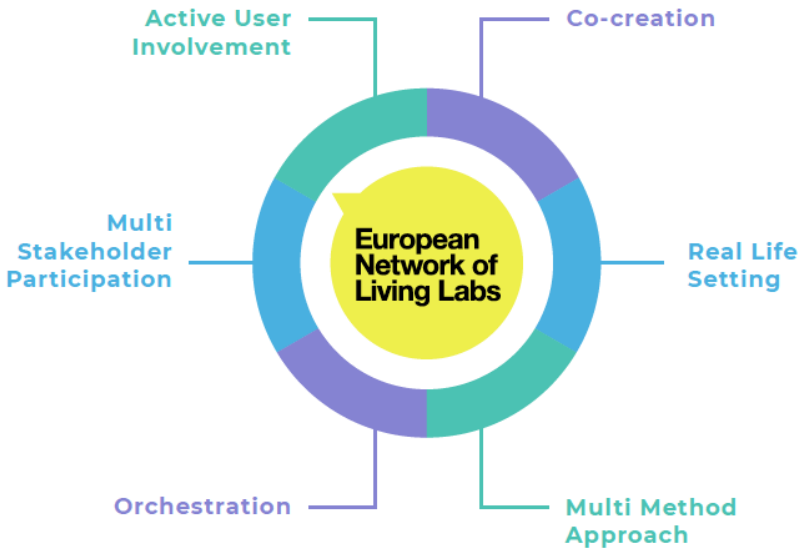
Participatory workshops | Surveys | Interviews | focus groups | user testing

The importance of Co-Creation in LLs

- Co-creation is defined as a multi-level process for **boosting the participation of end users** in the process of innovation.

- A well-conducted co-creation process can go **beyond** the generation of new solutions, and it can lead to reconfigure the system in which it take place.

- It's important to put in place a co-creation process using **the right methodology**.



Co-creation

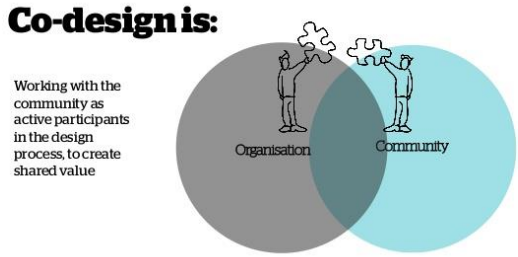
- Voorbeg et al. (2015) identified a series of influential factors that affect the level and quality of the **co-creation** process. These factors should be considered, some of them should be encouraged while others should be avoided:

To be encouraged	To be avoided
• Compatibility of public organizations with citizen participation • Open attitude towards citizen participation. • Presence of clear incentives for co-creation. • Citizen characteristics. • Citizen awareness/feeling of ownership/being part of something • Presence of social capital	• A risk-averse, conservative administrative culture. • Aversion by citizens

Co-design

- **Co-design** is a process that places the involvement of citizens at the very heart of the design of a development process that answers a specific need. This enables a wide range of people to make a creative contribution in the formulation and solution of a problem, going beyond consultation by building and deepening equal collaboration between citizens affected by, or attempting to resolve, a particular challenge (Bradwell, P. & Marr, S., 2008). A key principle of co-design is that users, as 'experts' of their own experience, become co-designers.

- The Service Design Tools site based on the work of Roberta Tassi (2009) provides a good selection of co-design tools



Co-Creation Toolkit Context

Implementation and demonstration of co-created, innovative, replicable and locally-attuned nature-based solutions to enhance the climate and water resilience of cities

UNaLab
URBAN NATURE LABS

Our partners and cities

28 partners & 2 observers from industry, research and public organisations.

10 cities with a balanced geographical spread, diversity in size and climate conditions.

Front-runner Cities: Eindhoven, Genova & Tampere

Follower Cities: Başakşehir, Cannes, Castellón, Prague, Stavanger, Buenos Aires & Hong Kong

Observers: Guangzhou (CN) & Brazilian Network of Smart Cities

The Challenge

Climate Change

OUR CHALLENGES

Biodiversity loss

Heat stress

Densification

Pollution

Flooding

Climate driven health issues

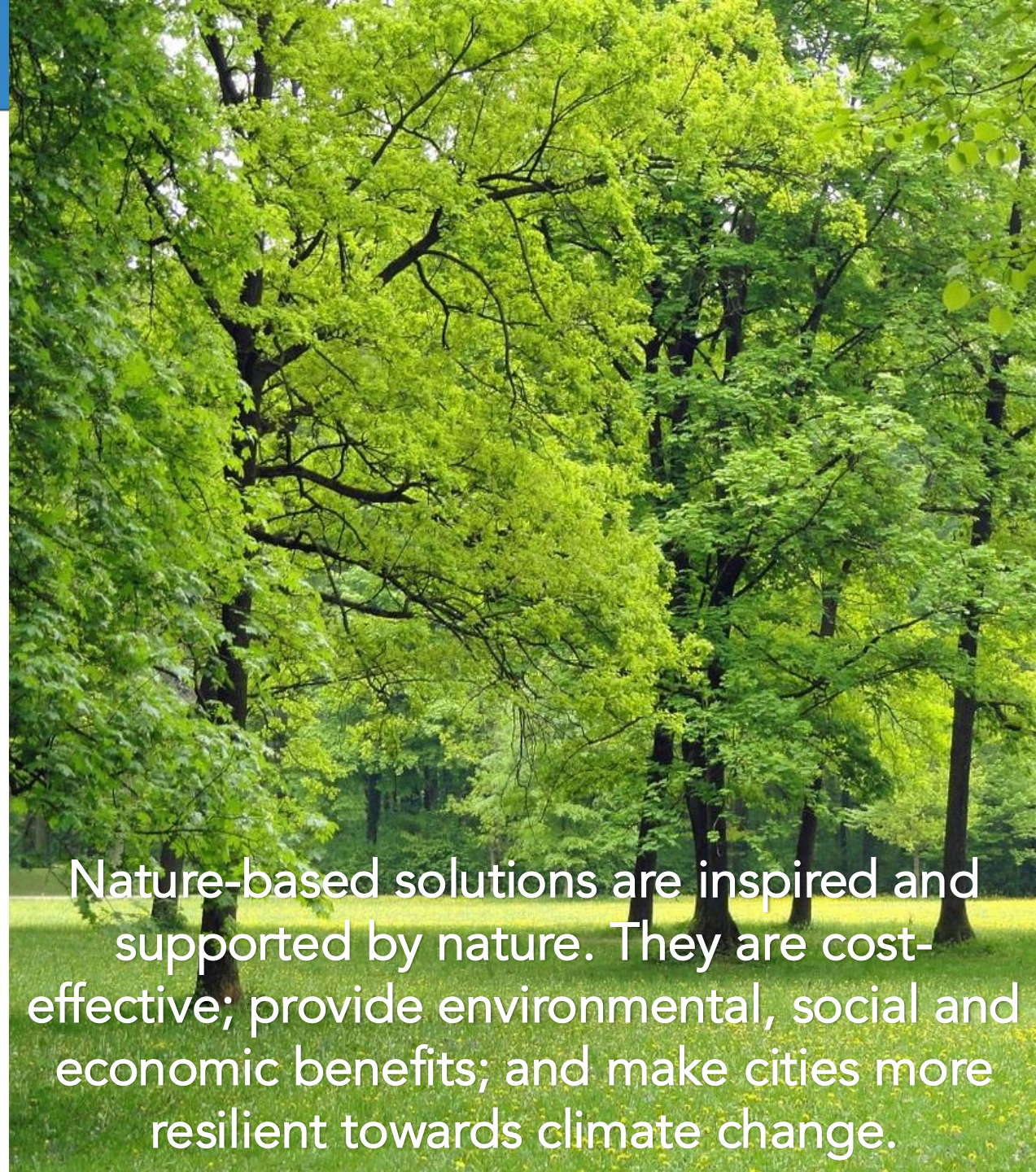
Habitat loss

Water scarcity


The Opportunity
Nature-based Solutions

OUR NBS

- Green spaces
- Rivercourse daylighting
- Wetlands
- Green walls & roofs
- Stormwater retention ponds
- Biofilters
- Permeable pavements
- Vegetated floodway
- Reforestation
- Alluvial meadows



Nature-based solutions are inspired and supported by nature. They are cost-effective; provide environmental, social and economic benefits; and make cities more resilient towards climate change.

Implementation and demonstration of co-created, innovative, replicable and locally-attuned nature-based solutions to enhance the climate and water resilience of cities

UNaLab
URBAN NATURE LABS

Co-creation? Where do we start?


25mm

Target audience and Co-creation toolkit

- UNaLab cities, who will continue employing co-creation methods in their context to run activities with the quadruple helix

- Any public or private actors, institution or organisation interested in running co-creative workshops and seeking to find the most appropriate tool based on their needs and skills

How was the toolkit created

(1) Research and overview of publicly available toolkits to define common elements and good examples which would be applied and bad examples which would be avoided

(2) Ideation, collection of tools, structure propositions and multiple testing workshops with project partners


UNaLAB
MEMBER AREA
LOGIN
HOME
ABOUT US
NEWS
EVENTS
DOCUMENTS
CONTACT US
FUTURE TELLING
TASK/PROJECT RELATED
WAS THE TOOL/TECHNIQUE:
RESULTS
DESCRIPTION
RELEVANT LINKS


UNaLAB
MEMBER AREA
LOGIN
HOME
ABOUT US
NEWS
EVENTS
DOCUMENTS
CONTACT US
OVERVIEW
UNaLAB
EXPLORE
EXPERIMENT
EVALUATE
Roadmapping
Community building
Panel Management
5 Why's
PARKING LOT

(3) Translation of the testing activities into a digital web-based site

(4) User evaluation and refinement of the toolkit

NEED FINDING

Tools to discover user needs, goals, and values to get the right solution

IDEATION

Tools to unleash creativity, discover valuable insights, and generate innovative solutions

STRATEGY

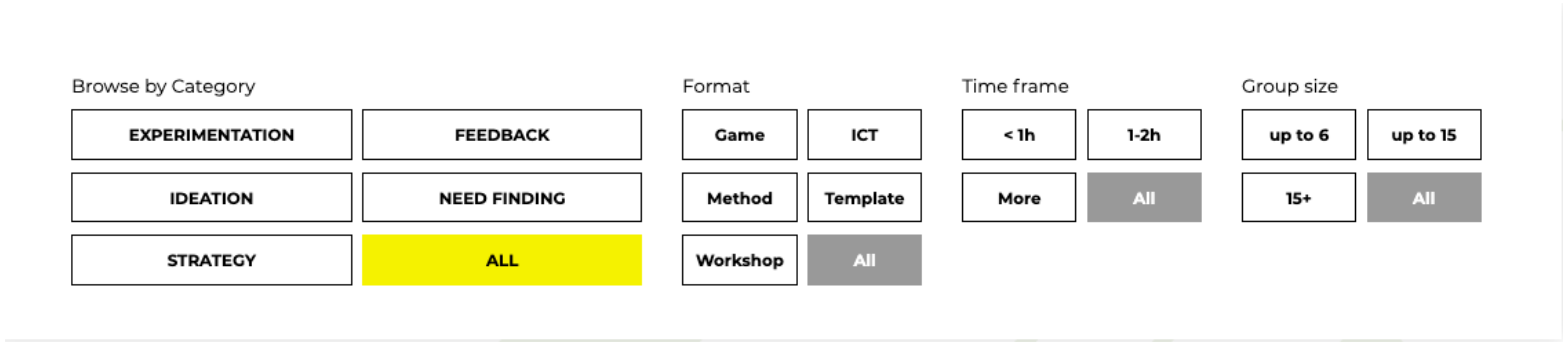
Tools to design action plans to achieve long-term aims

EXPERIMENTATION

Tools to test and validate the developed solution

FEEDBACK

Tools to evaluate the user's reactions to the solution



Method, Game | All | All

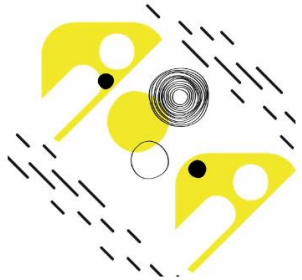
Method | < 1h | All

Method | 1h | All

Method | < 1h | All

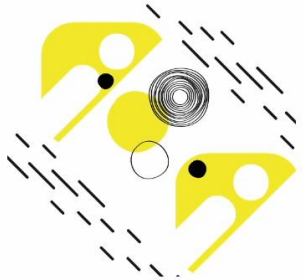
DIGITAL PRESENCE
STRATEGY

Meethod | 1 day | All



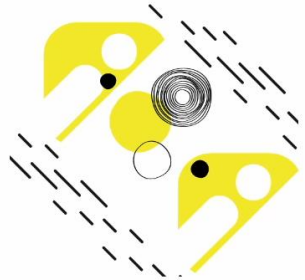
OPERATION MANUALS
STRATEGY

Method
Duration of sensing stage | All



DATA JOURNALS
EXPERIMENTATION

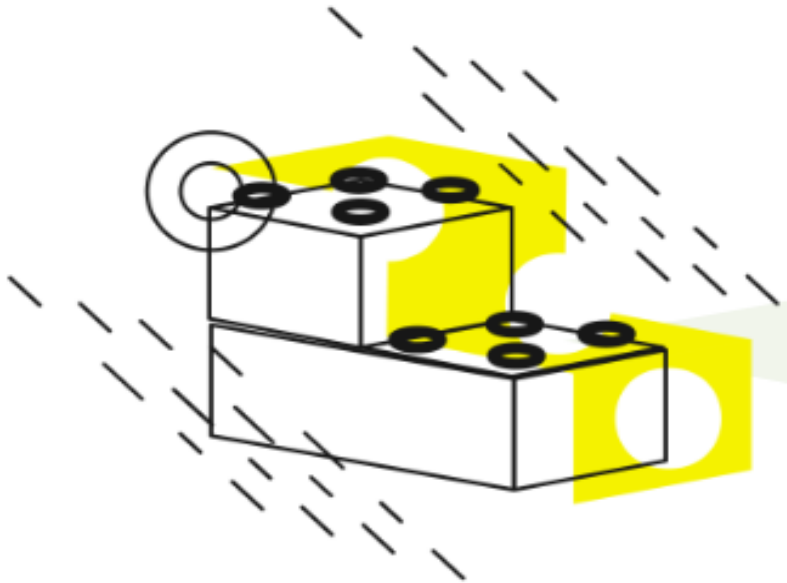
Method
Duration of sensing stage | All



SENSING GUIDES
STRATEGY

Method
Duration of sensing stage | All

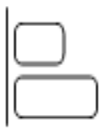
Tool demonstration: Lego Serious Play



IDEATION

LEGO SERIOUS PLAY

Lego Serious Play is a hands-on, minds-on serious game where participants are posed with challenges, to which the answers are built using Lego bricks: building 3D models of your thoughts. The workshop is built on a tried and tested process of building, sharing and reflecting, creating an equal playing, thinking, sharing and learning ground for all participants. Through this process of building and sharing Lego models and their stories, insights, ideas and meaningful discussions are conducted at the tables, addressing serious challenges.



FORMAT
Game, Method

TIMEFRAME
45mins

GROUP SIZE
5

FACILITATION LEVEL
Advanced

REQUIRED MATERIALS
Presentation slides. Post-its. Pens. Timer. Legos

Benefits

- Coaching on specific topics.
- Sharing values and behaviours.
- Idea development.
- Team building.
- Creating innovative concepts.
- Shared vision creation.
- Strategy development.
- Scenario building

Tips

The workshop facilitator should be trained in the Lego Serious Play methodology and must train the table facilitators also to follow the process at their tables.
The table facilitator's role is:

- During the 3-5minute model building phase, to urge participants to act quick and to build their models, "thinking with their hands" instead of leaning back and thinking of answers to the questions before starting with the building.
- During the sharing phase, to systematically allow each person at the table their turn to share their models, stories & ideas ensuring that others are paying attention and "listening with their eyes" - with the main focus on the models.
- During the follow-up question phase, to ask targeted questions based on elements or features in the model that the participant has not yet explained in their story, encouraging further exploration and creative ideas.
- Taking notes and documenting all Outputs & ideas of the participants in bullet points.
- Photographing the models & notes.
- Taking care of the time spent.
- Encouraging a good team spirit and enthusiasm during the shared model building. Warm-up skills building exercises at the beginning (20-30 minutes) are a must and table facilitators must be trained.

1

The methodology starts with a short introductory presentation explaining the history behind Lego Serious Play and continues on to a series of skill-building exercises. Throughout the skills-building exercises, participants are introduced to the flow of the methodology, while building up crucial skills needed in order to be able to foster the seriousness of the game: from technical skills to the skill of creating metaphors using Lego bricks, to the skill of telling stories through your model.

2

Once participants are feeling comfortable with the methodology throughout the skills-building exercises, the posing of the serious questions can begin. The first question is presented on the slides, to which each participant is given 3-5 minutes to build their answer to. Each participant builds their own model.

3

Once the models are built, an alarm rings to signify the end of the building time. At this moment, the table facilitators start with the first person to their left, by asking the participant to share their model. The participant tells the story of their model in 2-5 minutes, while the rest of the group listens.

4

The facilitator is trained to ask targeted follow-up questions, in order to dig deeper and to uncover further potentially hidden ideas that the model signifies.

5

After the first person has shared their model and follow-up questions are answered, the facilitator moves on to the next person, and the process is repeated.

6

In the end, the models are broken up and pieces are returned back in the middle of the table for the next question, and the same process is repeated. In some cases, however, a shared model is built instead - in this case, the models are not broken up completely, but the participants are allowed to keep one crucial part of their model - one metaphor, which they find most important. This metaphor is then moved to a base plate in the middle, shared with the others, and the building of a common model commences. In the common model, each participant can thus bring one item to the table, after which the team can together begin building connections and shared ideas around these key elements.

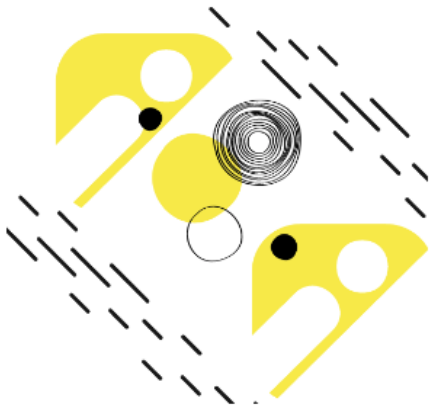
Sources

1. LEGO® Serious Play®
2. European Network of Living Labs

DOWNLOAD TOOL

SUPPORTING FILES

Tool demonstration: Fishbone Analysis (Ishikawa diagram)



IDEATION

FISHBONE (ISHIKAWA) DIAGRAM

The fishbone diagram is for sorting ideas into categories and it can be used for structuring a brainstorming session. This cause analysis tool is considered one of the seven basic quality tools. The fishbone diagram identifies many possible causes for an effect or problem.

SHARE

FORMAT
Method

TIMEFRAME
1 - 2 hours

GROUP SIZE
All

FACILITATION LEVEL
Medium

REQUIRED MATERIALS
Pen and paper, Post its

STEPS

1. Agree on a problem statement (effect). Write it at the center right of the flipchart or whiteboard. Draw a box around it and draw a horizontal arrow running to it.
2. Brainstorm the major categories of causes of the problem. If this is difficult use generic headings.
3. Write the categories of causes as branches from the main arrow.
4. Brainstorm all the possible causes of the problem. Ask "Why does this happen?" As each idea is given, the facilitator writes it as a branch from the appropriate category. Causes can be written in several places if they relate to several categories.
5. Again ask "Why does this happen?" about each cause. Write sub-causes branching off the causes. Continue to ask "Why?" and generate deeper levels of causes. Layers of branches indicate causal relationships.
6. When the group runs out of ideas, focus attention to places on the chart where ideas are few.

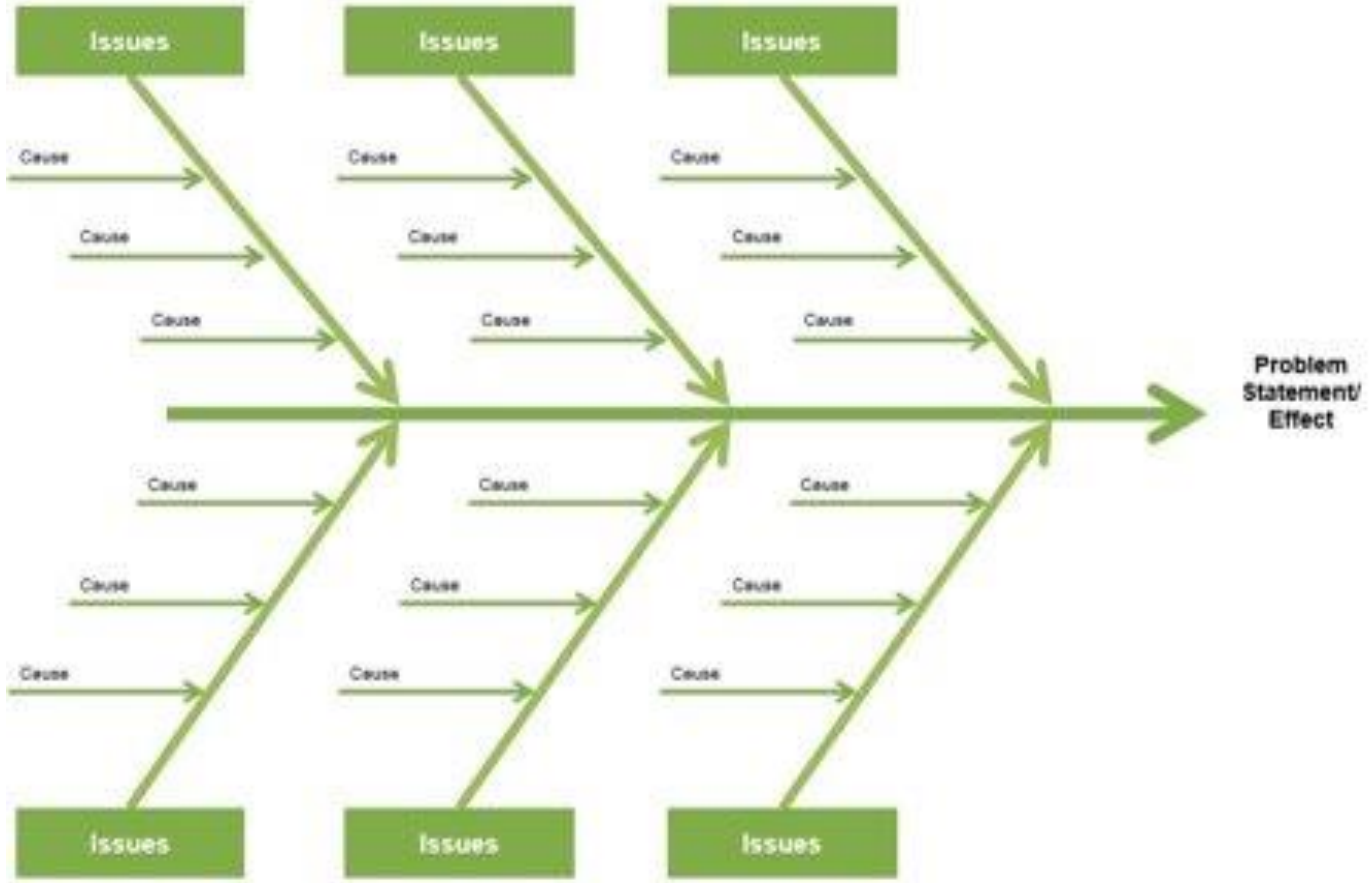
Benefits

The Fishbone diagram can be used to structure a brainstorming session. It immediately sorts ideas into useful categories.

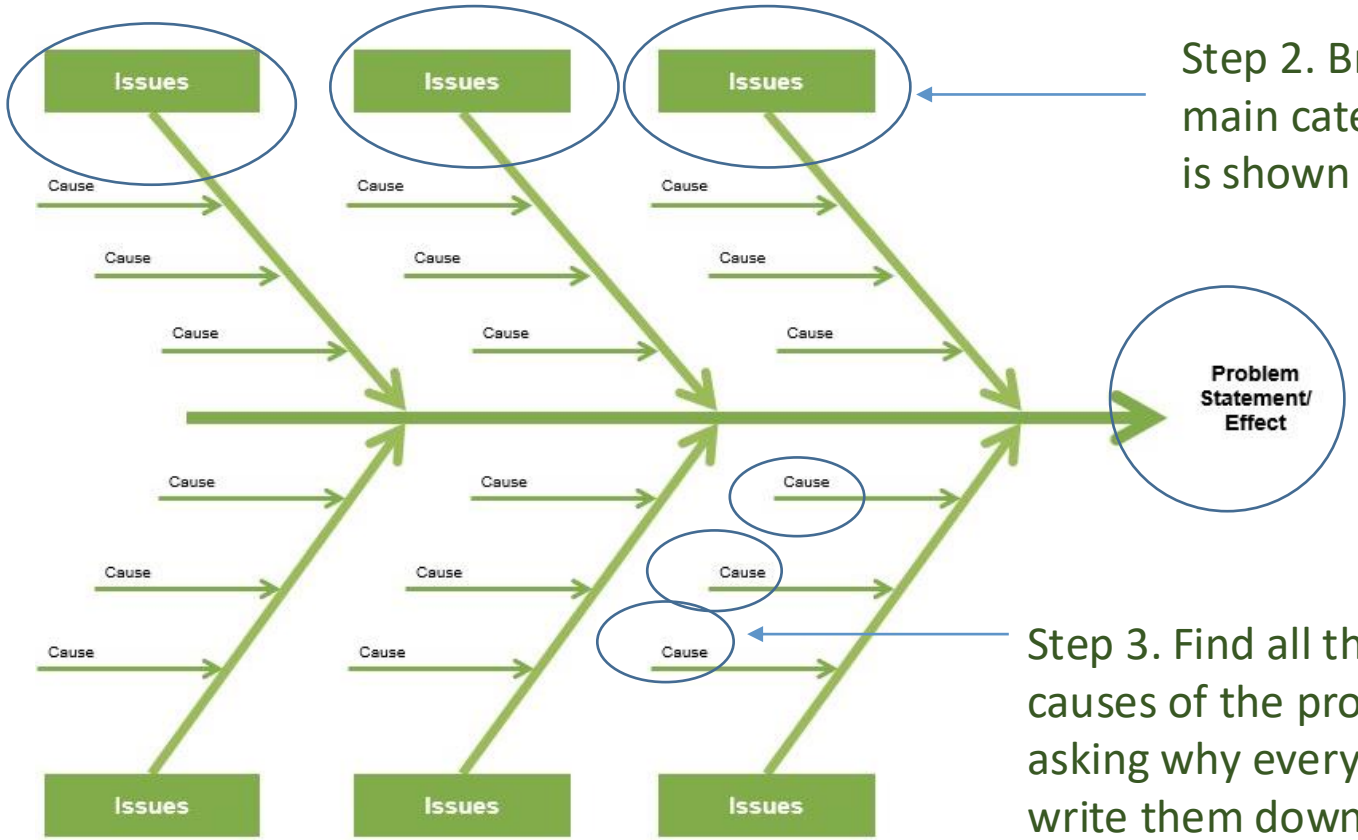
Tips

Follow the process step by step – do not rush into a presumed root cause. Make a clear division of the causes of problems and the symptoms of the problem. Focus on long-term solutions/

Fishbone Diagram + 5 Whys



A root-cause analysis visualization tool combining the practice of brainstorming and mind mapping. This tool determines the cause-effect of a problem. Also known as the Ishikawa diagram named after Dr. Kaoru Ishikawa, a japanese quality control expert



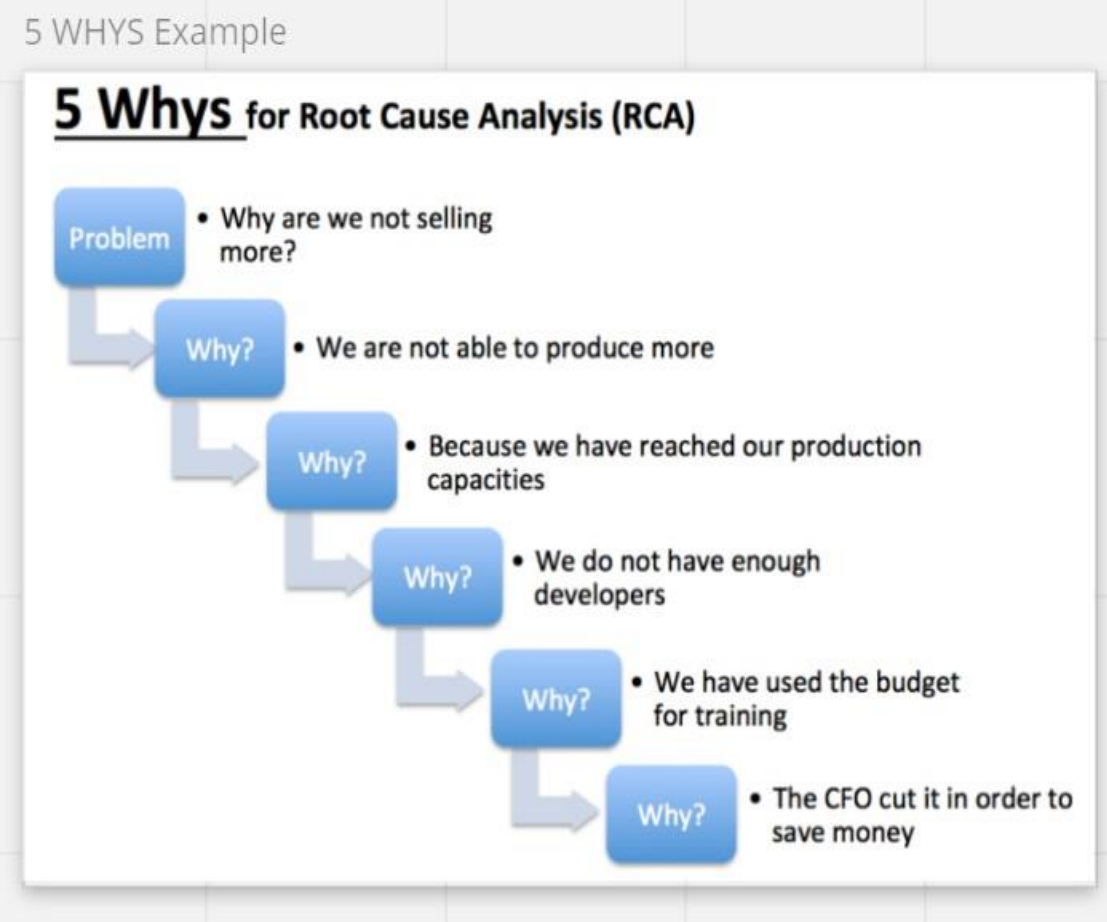
Step 2. Brainstorm and write the main categories of the causes, as it is shown on the diagram

Step 1. Identify a specific problem based on the evidences of data you have gathered.

Step 3. Find all the possible causes of the problem by asking why every time and write them down as branches from the appropriate categories

Step 4. Continue with the 5 whys process to discover deeper levels of the causes

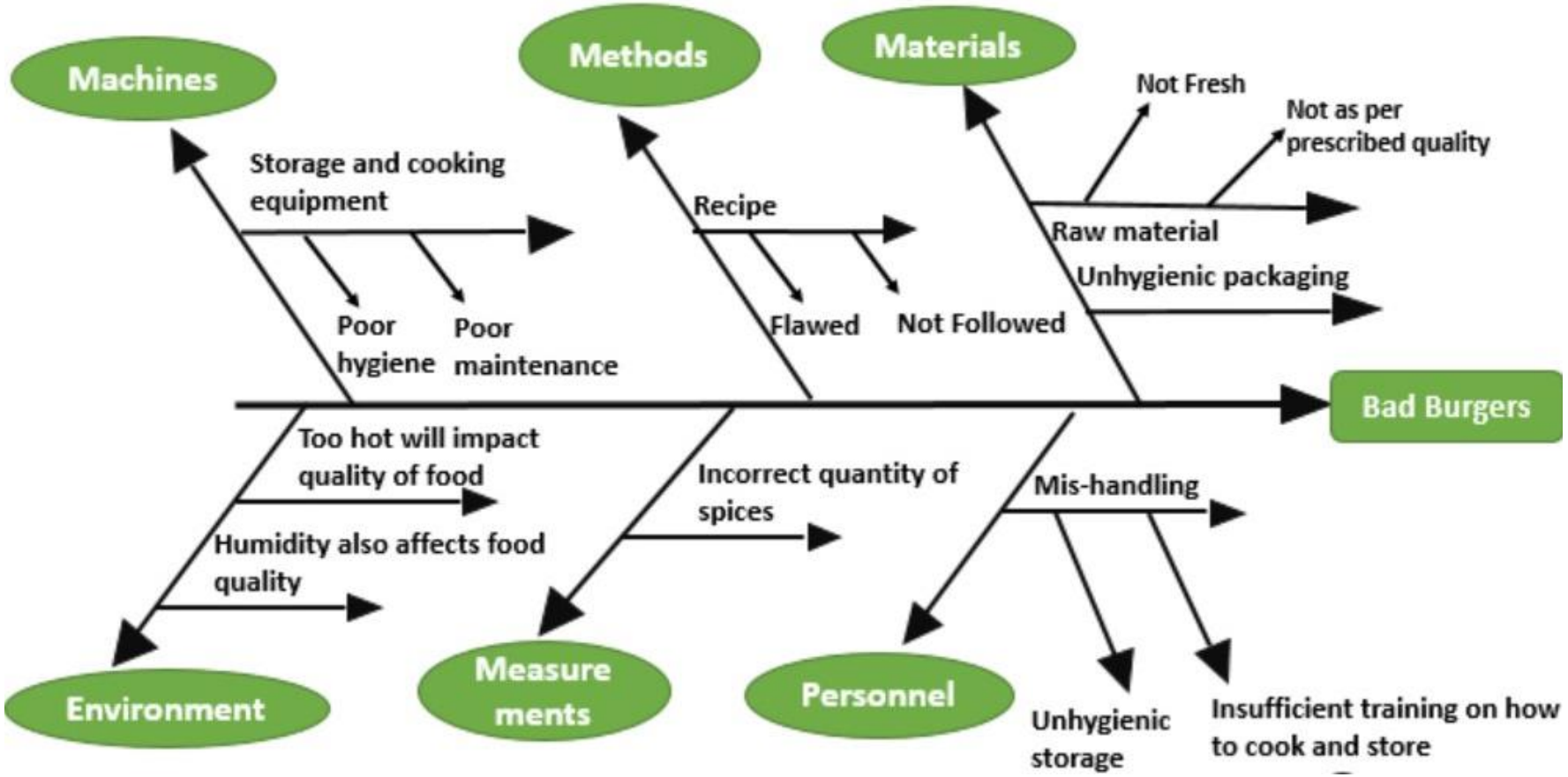
5 Whys in combination with the Fishbone Diagram



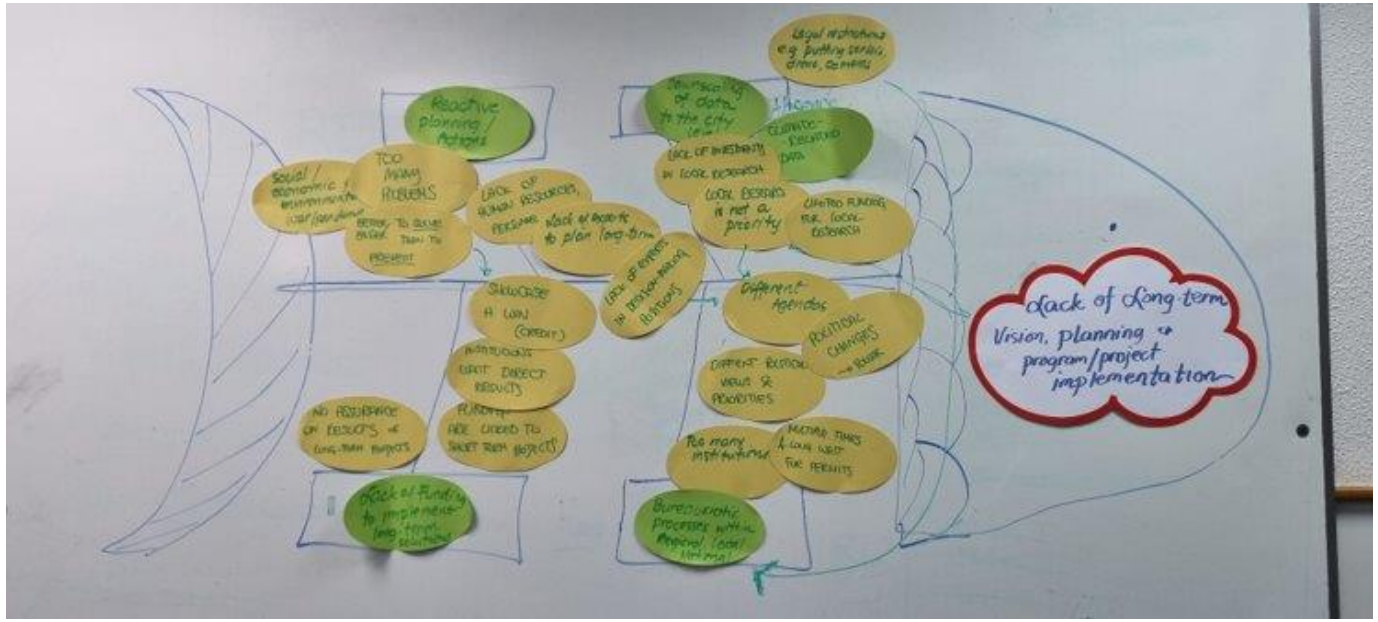
5 whys is a technique for **Root Cause Analysis (RCA).** RCA is a systematic method for identifying and exploring in detail the specific “root causes”; the primary sources of a problem

It can be used for identifying the cause of a problem, showing an evidence-based analysis, eliminating issues that are not so important and be more productive.

Fishbone Diagram Example



But…how does it look like in real life?



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Thank you!

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