



CONCEPT DESIGN

Training handbook



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INTRODUCTION

Think globally, act locally. This idea has traditionally been associated with the environment and sustainability, but it can be applied to food consumption, politics and much more. In today's changing markets, it's time to consider what 'think globally, act locally' can mean in terms of social responsibility. There are many issues and causes that affect companies, local communities, and the world. Those issues demand innovative leaders who will be capable to employ integrated approaches that deliver transformative results. Traditional approaches that focus on individual sectors and policymaking are not enough to address the challenges facing the world today in a comprehensive way.

Design thinking is a process ideal for generating insights about human problems in order to create innovative approaches to address those issues. Design thinking encourages to develop solutions that are good enough and that can be starting points for continued innovation. It allows groups to try out multiple ideas/approaches as early as possible in the design process to see what works for real users.

Design thinking can be considered a process as well as a mindset and is widely viewed as a mechanism for addressing problems and exploring possible futures. It becomes more central to business strategies, marketing strategies and execution, works in operations and product design and helps to tackle social problems. It is becoming far more important than in the past. Design thinking seems well placed to facilitate new solutions to the complex and challenging civic issues that face our communities and society more widely.

The training described in this handbook has been specially structured to include interesting, workable, techniques to enable students and young entrepreneurs to break out of their comfort zones and think creatively. Thinking-Outside-the-Box provides ways to generate and implement innovative ideas and solutions to address difficult situations. The training material is based on interactive learning, experiential activities and facilitative training style. A variety of proprietary training tools, games and activities, group discussion and reflective circle is used.

During the trainings 15% of the time will be devoted to explanations and theoretical aspects of relevant background material and 80% devoted to working on practical cases, provided tools, development of own ideas.

Duration: one day

Language: English

Target group: university students from different subjects, young entrepreneurs and other individuals interested in innovation, technology and entrepreneurship.

Number of participants: 20+

Training outcome is to give participants basic tools and methods of design thinking which could lead them to find and create innovate ideas for solving social problems.

Training Objectives:

- Practice creative thinking methods to generate ideas and solutions to solve social problems
- Apply design thinking to analyse initiatives within a given local context
- Turn existing problems into opportunities for growth or business creation

Throughout the training participants learn about particular methods not only through a theoretic background, but also experience it as trainees in real idea generating workshop.

The training should improve participants' abilities to:

- Understand and master creative thinking skills
- Focus on creativity and problem solving
- Become more creative, think laterally and produce more desirable solutions
- Become a better team member/leader/manager

Training format: workshop. This format is used for some reasons:

- It is creative problem solving
- Strengthens the teamwork
- Provide an opportunity for participants to learn something new
- Provide a space and a time for participants to make headway on problems they are interested in

Plan of the workshop:

- Panel discussion with local ecosystem experts and representatives on local and global sustainability issues and challenges
- PowerPoint Presentation with learning material on subject topic
- Working in groups
- Working with the experts
- Pitching

WHAT IS DESIGN THINKING?

Design thinking provides a solution-based approach to solving problems. It is a way of thinking and working as well as a collection of hands-on methods. It begins with understanding humans needs. From that insight emerges a process for innovation that encompasses concept development, applied creativity, prototyping, and experimentation. Thinking-Outside-the-Box can be used to ensure optimal effectiveness in decision making, planning, problem solving, new product development, personal growth and much more.

LET'S PLAY THE GAME!






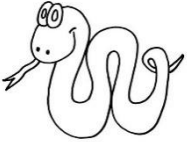




There are three main spaces in design thinking to keep in mind:

1. Inspiration - the problem or opportunity that motivates to search for solutions.
2. Ideation - the process of generating, developing, and testing ideas.
3. Implementation - the path that leads from the project stage into people's lives.

For the beginning to understand how design thinking works, try three simple games. It helps participants more interact during the learning process. Games are interesting activities to stimulate and awaken the creativity. Using problem-solving games helps to think outside the box and find solutions for the issues while fostering team communication and collaboration. The games listed below require a small amount of time and minimal supplies:

- Forced connections
- Random doodles
- Opposites

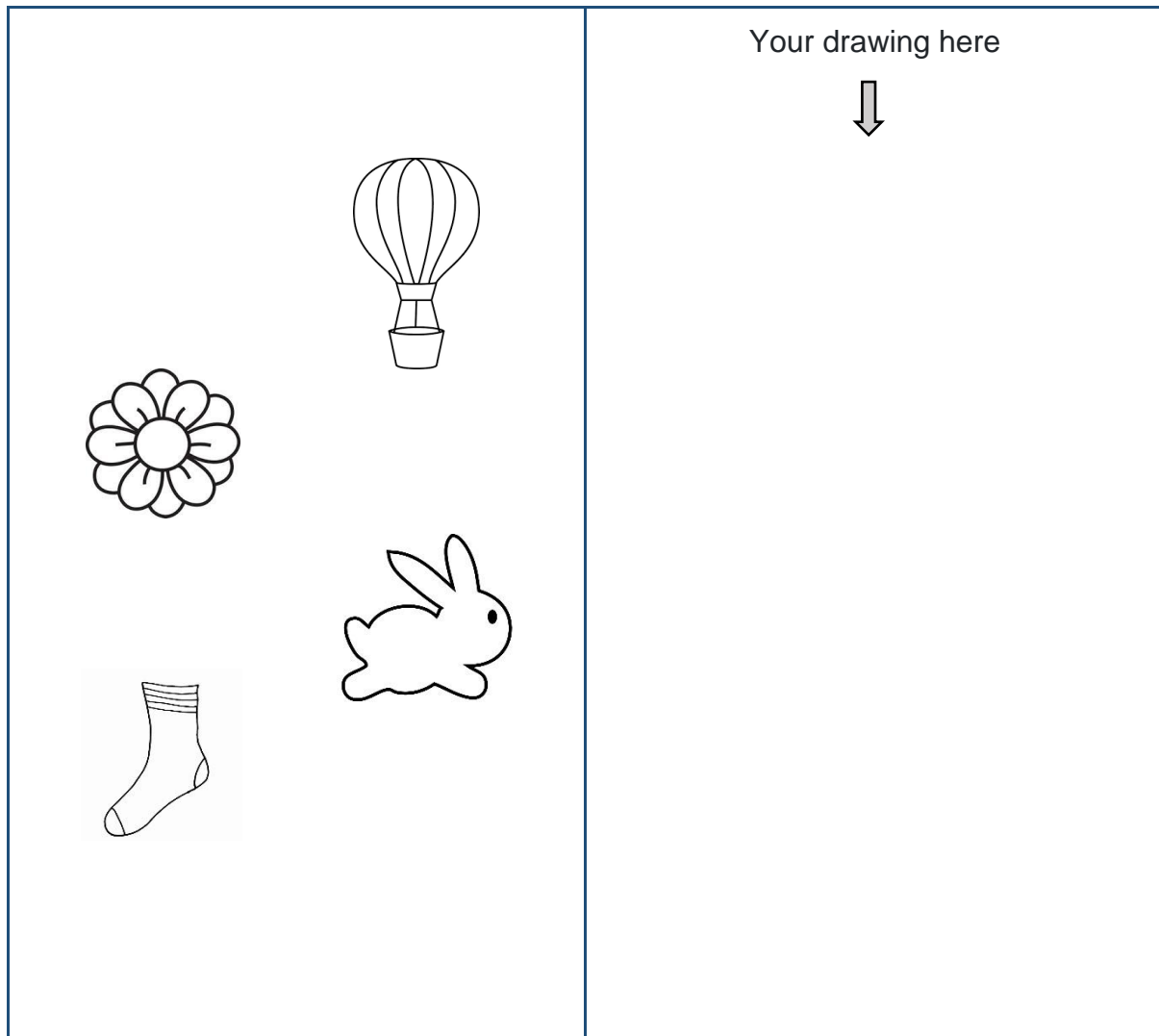
Forced connections forces brain to make visual links that you wouldn't find regular way. Choose one drawing from the corresponding column and one from the top row. Sketch your own illustration combining the selected drawings (for example the snake and eyeglasses). The resulting drawing should form a connection between the two original objects. Every space should be filled!

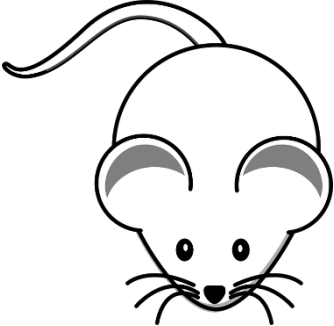
Going outside of your comfort zone, you'll be more likely to make creative connections in real life.

Random doodles. Take a rabbit, air balloon, sock and a flower and combine them into one object. The drawing can be something abstract or more literal. You can alter the size and rotation of each separate element or add entirely new elements.

By processing a collection of random objects and consolidating them into a whole, you're training your brain to take random, inconsistent information and search for patterns, in other words — try to give order to chaos.



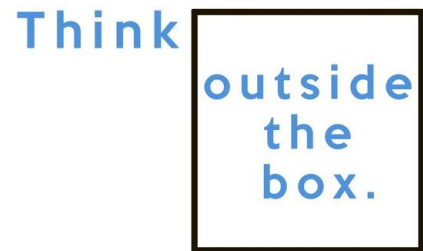
Opposites. Each row in the chart contains 2 antonyms. The challenge of this exercise is to illustrate the meaning of each word with a mouse. You can use other objects to help you, but a mouse must be included in each box. It will train your brains to think critically about how best to bring text to life. When preparing presentations or pitching, this ability to creatively use images can be a huge asset.

Happy	Sad	
Fat	Thin	
Dark	Bright	

Games are designed to bring out creativity, brainstorming and problem-solving skills; lateral thinking; innovation and innovativeness; presentation (influence, persuasion).

DESIGN THINKING TECHNIQUES

Many design thinking methods and tools facilitate the concept of design innovation process. In this training session two design thinking methods are presented: **3-12-3 Brainstorm method and Lotus Blossom method**. The criteria for choosing these methods lie in their simplicity in use by non-experts and ability to enhance communication within multidisciplinary teams.



3-12-3 BRAINSTORM METHOD

3-12-3 method is a variant of brainstorming that is performed in a particularly short time. It can be used well to warm up before a longer task, or also as a single activity. The method is suitable for generating new ideas as well as for enriching and improving existing ideas. It was developed by James Macanuso and is used in particular when speed is required. The 3-12-3 Brainstorm method is used to compress the essentials of an ideation session into one short format.

The numbers 3-12-3 refer to the amount of time (in minutes) given to each of three activities:

- 3 minutes for generating a pool of ideas or observations,
- 12 minutes for combining those ideas into a draft of concepts,
- 3 minutes for presenting the concepts back to a group or other groups.

The key element is speed and the result is the increased creativity. A time constraint forces the mind to work very fast in generating innovative ideas, without over-thinking or second-guessing. The method works best with up to ten participants, with larger groups also small subgroups are possible.

The material needed for the session:

- Post-it for the generation of the ideas
- One pen per person

- A stopwatch to control time in a visible way
- DIN-A3 pages to write down the concepts

The chronological development of a brainstorming session using the 3-12-3 method could be as follows:

- 5 minutes topic/problem presentation
- **3 minutes of ideation**
- **12 minutes to develop the concepts**
- 5 minutes to discuss ideas/solutions with the team members and to choose one or two
- **3 minutes per team to explain the developed concept/s**

Choose a problem or challenge as a focus and start the brainstorming session. This could be an existing problem, such as “food waste”.

Phase 1 (3 minutes)

Generate a pool of aspects. Start with generating ideas, each on his own, and write them on sticky notes. In this phase, the game feels similar to traditional brainstorming, but with two key differences: first, each team member works on his own; second, the strong time constraint. No idea filtering should be put on this phase as the goal is a large pool of aspects.

Phase 2 (12 minutes)

Develop Concepts. Once all team members are done with their own brainstorming, all sticky notes are collected. Each team chooses three random notes and starts developing a concept around them. The challenge of this phase is that the three different notes can involve clashing ideas. Team members need to consolidate and work together in order to truly join forces. A more detailed solution or full rough sketch of concept could be developed using drawings and/or crafts that encourage creativity. The key of this phase is in preparing for a short presentation of their concept back to the other teams.

Phase 3 (3 minutes)

In this phase, teams use the rough sketches made during phase two to present their ideas to the other teams. Every team should have a maximum of three minutes to present their concept. After every team has presented their concepts, the entire group may reflect on what was uncovered.

To ensure the success of this session, both experts and non-experts should participate. Non-experts (training participants) suggest unconventional ideas while experts have the knowledge of what has worked successfully in the past.

The facilitator of the workshop keeps the session on track and ensures participation of all members with no one person dominating in the discussion. At the end of the session the facilitator compiles all the ideas and concepts in a document. S/he should also explain the next steps and provide a summary to all the participants.

After presenting concepts back to the group, teams may do a number of things. They may dig deeper on an individual concept or try to integrate the ideas into each other. They may vote or rank the concepts to decide on which to spend more time developing.

LOTUS BLOSSOM METHOD

This brainstorming method was created by Yasuo Matsumura, director of the Clover Management Research (Japan). Lotus Blossom method organizes thinking around significant themes and helps to expand thinking beyond usual paths and explore several alternate possibilities and ideas.

The main objective of this method is to establish relationships between concepts starting from a main theme and developing the creative potential. This technique involves starting with a central theme or problem and working outward, using ever-widening circles or "petals." The central issue or theme determines the 8 secondary ideas that are built around the main one. The unfolding themes trigger new ideas and

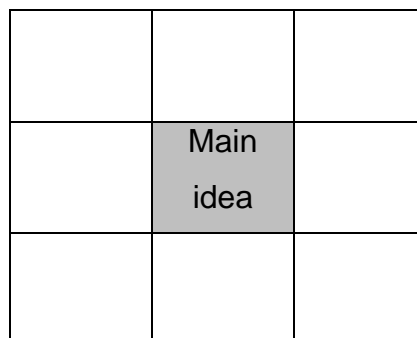
new themes. You start with a central subject and expand into themes and sub-themes, each with separate entry points.

The material needed for the session:

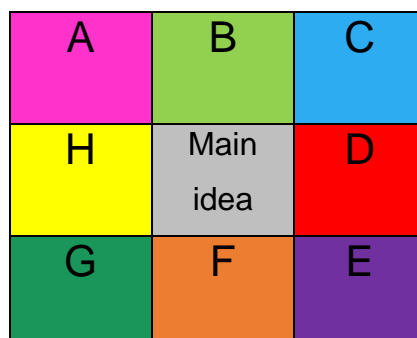
- Post-it for the generation of the ideas
- One pen per person
- A1 pages to write down the concepts and draw the diagram

Here is the **step-by-step process** to use the Lotus Blossom technique to create fresh ideas and insights:

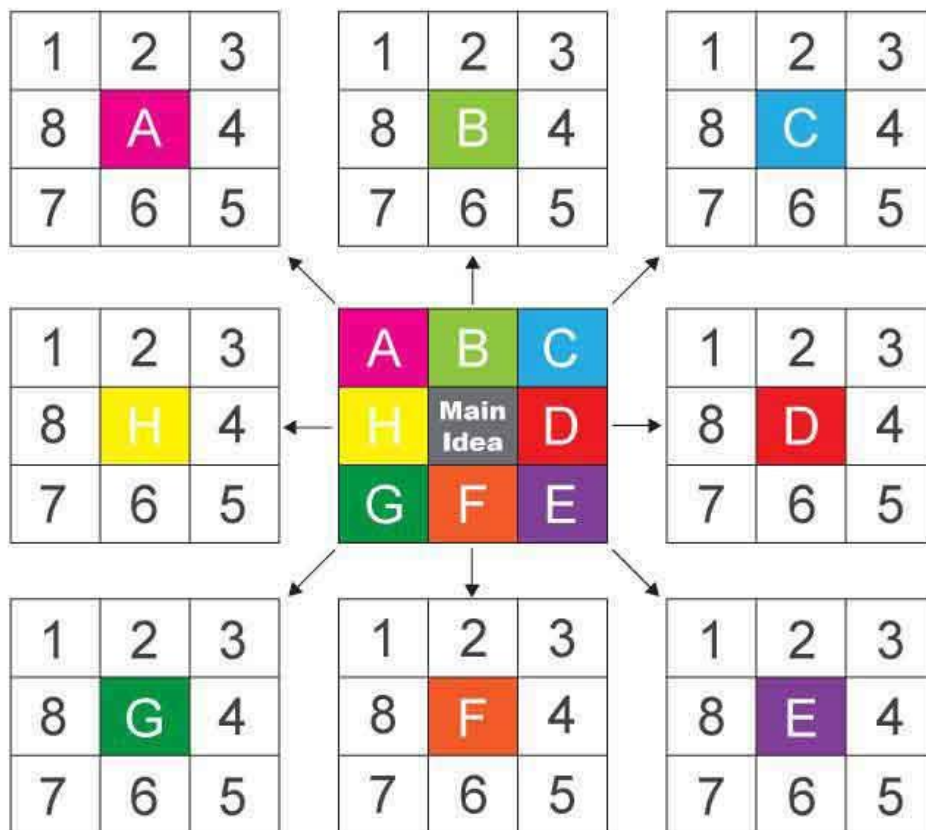
1. Draw a lotus blossom diagram (see picture below) made up of a square (the pistil) in the centre of the diagram and 8 circles/squares (the petals) surrounding the square.
2. Write a challenge, problem or idea in the centre of the diagram.



3. Find 8 solutions, components, dimensions or associations for this central idea and write them in the squares labelled A to H surrounding the central idea. Think of these as the functional equivalent of first-level topics in a mind map.



- Use the ideas written in the squares as the main idea for the surrounding lotus blossom petals or boxes (see picture below). Each idea written in the surrounding squares (A-H) becomes a central theme in the new lotus blossom. It now becomes the basis for generating eight new ideas. For each of these 8 solutions ideate 8 sub-solutions that helps solve each a part of the challenge or sub-categories that relates the previous. Note that each of the central topics and their corresponding "blossoms" are colour coded for the ease of use. This makes it easier for you to see how ideas start at the centre and flow outward.



- Continue the process until the lotus blossom diagram is completed.

You should use this technique if you want to generate more creative ideas or you are trapped in single mode of thinking or want to create seed idea to trigger furthermore good ideas. The Lotus Blossom technique works because it gives you a way to dig deeper into and explore ideas related to your problem, idea or challenge with successive levels of topics, sub-topics and sub-sub-topics.

Working in groups. The teams will be working on selected ideas or challenges using one of the design thinking method. Here are a few tips that could foster applying design thinking methods in finding solutions outside the box:

1. Identify the issue.
2. Determine whether a regular or typical solution to the problem exists.
3. If one does, you're done. If no, map out everything that went into creating the issue. In this aspect, be expansive. Include everything possible.
4. Once you start mapping out the issue more completely, start looking for ways to address the situation in one of the more outlying areas that was not considered previously.
5. Never dismiss a possible solution on the basis. Consider everything. Go through every possibility until you know for a fact it can or cannot be done.



This process generates a huge number of solutions for a specific problem or idea. In the case of brainstorming, there is no assessment of ideas: people can speak out their ideas freely without fear of criticism. Even strange ideas are accepted. In fact, the crazier the idea, the better.

Working with the experts. All teams will be supported by experts from different fields in developing the ideas and solutions.

Presentations/Pitching (20-30 min.). Teams will present the developed ideas.

Reflection and next steps (30 min.)

Feedback from the training is collected at the end of the workshop, but the best measure of the success of a workshop is the impact of the ideas and solutions created. At the end of this workshop at least 5 best ideas should be selected for further development with the aim to turn them into concrete, fully conceived action plan. The

goal is to create motivation and open doors for participants to real successful cases and whole ecosystem.

Participants of this training module are encouraged to participate in further training modules: project cycle management, entrepreneurship, IPR.