

# Warming up

## Small exercises to get you started

It can be useful to do a quick warming up exercise to get you in the right mood to start the brainstorm for your actual project. For example:

- Come up as many things as possible which you can do with post-its apart from using it for notes.

Or:

- Come up with as many ideas as possible to get an elephant to the moon

Or:

- Come up with as many ideas as possible to sneak into a student nation in Uppsala

Or.... come up with your own warming up exercise

Since this is only a warm up you will not have to record your ideas. Keep a high pace, avoid criticism and be open to new ideas. Do not spend more than 5 minutes on warming up exercises.

# Throwing balls

## **Fun method to increase the pace of the brainstorm and to record many new ideas**

At times you will notice that the energy level during a brainstorm decreases or the brainstorm could evolve in long discussions. To change this mood, stand up and find something you can throw to each other (e.g. a tennis ball or a marker pen).

One person will record the brainstorm and sits down with a piece of paper and a pen. The rest of the team will stand in a circle. One team member will start by calling out an idea which will solve your problem and throws the ball to a team member, then this member must come up with an idea and throw the ball to someone else (make this random).

Keep a high pace when throwing the ball around and call out the first idea which come to your mind without thinking about it too much.

The team member whom sits down will record the ideas the best way possible.

# Superhero Brainstorm

**A method for crazy, fun ideas and it works well as a warm-up exercise**

Think about your problem statement and imagine that you are a specific Superhero. Try to come up with as many different solutions this superhero would have for your problem. For example think about:

- Spiderman
- Pippi Longstocking
- Superman
- Or your own favorite superhero ...

Pick 3 or 4 heroes and brainstorm for approximately 10 minutes for each hero. You can work together as a group or each member could pick a different superhero, brainstorm individually and share the results afterwards. Write or sketch each idea that comes to mind!

# The Anti - Brainstorm

**A method to explore opposite ideas – great method for when you feel frustrated with the project**

Spend approximately 10 to 15 minutes to brainstorm on different ways how you could turn your problem into the worst situation possible. What would absolutely not solve it? Write/sketch each idea to make the problem worse on separate post-its.

Important: After this first step, take each idea you have come up with (to make the problem worse) and create different ideas that will have the opposite effect and which could lead to a solution to your problem. Write/sketch each new idea you have created. (Without this second step this method will lose its value)

# Random input

**A method for crazy, fun ideas which really forces you to think in new directions**

Go around Geocentrum, Blåsenhus, or any other environment where you will be working on this assignment and try to find 3 – 5 random objects, for example look at signs/decorations/small objects/anything else.

Try to think of different ways on how these objects can be used in trying to solve your problem. Write/sketch each new idea you have come up with.

# Morphological connections

**A method for crazy, fun ideas which really forces you to think in new directions**

Write 3 to 5 elements which play a big role in your problem and write down all the associations that come to mind when thinking about these elements or other associations which have come up already. Be free with your associations, there is no right or wrong here. For example:

<b>Waste</b>	<b>Sweden</b>	<b>Energy</b>	<b>Companies</b>
Recycling	Snow	Electricity	Businesses
Compost	Cold	Lights	Arlanda
Food waste	Reindeers	Home electronics	Airplanes
Nutrients	Stockholm	Solar power	Travel

Make the list of associations as long as possible, take approximately 10 minutes to associate on different elements. Second, pick a random selection of words, for example by drawing a straight line through your lists. From the example above you could get; nutrients, reindeers, lights and business.

Now try to think of as many ways as possible of how this combination of associations can contribute to solving your problem. Write/sketch each new idea you have come up with. Once you feel new ideas stop coming, try to work with another combination of associations.

Important: With this method it is easy to fall into long discussions about associations and ideas – try to keep a high pace when coming up with new ideas.

Source: The Universal Traveler by Koberg and Bagnall

# Lotus Blossom

A more structured method to generate a larger volume of ideas relatively easily

Pick up one of the worksheets with the following pattern (or make one at home later):

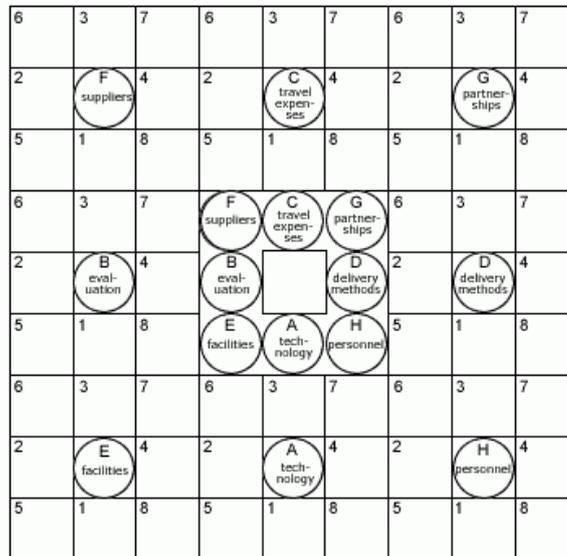


Image from <http://www.innovationmanagement.se/imtool-articles/creative-thinking-technique-lotus-blossom/>

Write your problem statement in the square in the middle. Come up with 8 different ideas to solve this problem and write/sketch these ideas in the squares around the problem statement. For each of these 8 ideas, come up with 8 more ideas to develop the solution further. Write these ideas in the squares around the 8 initial ideas. Try to focus on one of the 8 ideas (A-H) at a time. Iterate this process as often as you like using the ideas you have placed in the pattern or start over again with an empty pattern and 8 fresh, new ideas.

Source: Tinkertoys by Michael Michalko

# Move along

## **A method which encourages you to review and add to each other's ideas**

Each team member takes a piece of paper and writes/sketches a new idea to solve the problem you are working on, use separate papers. When finished move all the papers with ideas clockwise to another team member. This team member reviews the idea and completes the following statement:

*'This is a good idea, we could make it even better by...'*

Alternatively you could also add to the sketch you have received. Continue at least until all team members have reviewed each idea. After, that iterate as often as you like or start again with new ideas. Keep a high pace when passing along the ideas and avoid negative criticism.

This method can also be useful in the idea development phase, when you are combining and expanding your solutions.

# Brainwriting

**A good method to also hear the ideas from the more silent team members, can increase the volume of ideas easily**

In contrast to brainstorming, this is a silent approach. Each team member takes some paper and post-its and sits individually for approximately 15 to 20 minutes. Try to come up with as many new ideas as possible and write/sketch each separate idea. Try to come up with at least 20 new ideas per person to solve your problem.

After 20 minutes each team member briefly shares his/her ideas and the other team members can elaborate/build on these ideas, but do not criticize. Combine all of your ideas on a big sheet of paper.

# Assumption smashing

**A method which will help you to reveal hidden assumptions and to use them as a source of inspiration**

Even after doing research and increasing your understanding of the problem you will still be dealing with many assumptions. You might not even be aware of all the assumptions you have made throughout the process. Critically review your research and problem statement and list all the assumptions you have made. Examples of assumptions in your project can be:

- Potential customers do not want to pay for sustainable solutions.
- Civilians care about solving this problem.
- Politicians have the power to create change.

Try to list as many assumptions as possible and then reverse each of your assumptions, e.g.:

- What happens if customers are willing to pay for sustainable solutions?
- What if only students of the Sustainable Design course care about this problem?
- What would the situations be like if the politicians have no power?

Explore what happens, which opportunities open up when the assumptions are reversed. Write/sketch each idea you come up with.

*Source: <http://members.optusnet.com.au/charles57/Creative/Techniques/assump.htm>*