

PDP ideation workshop

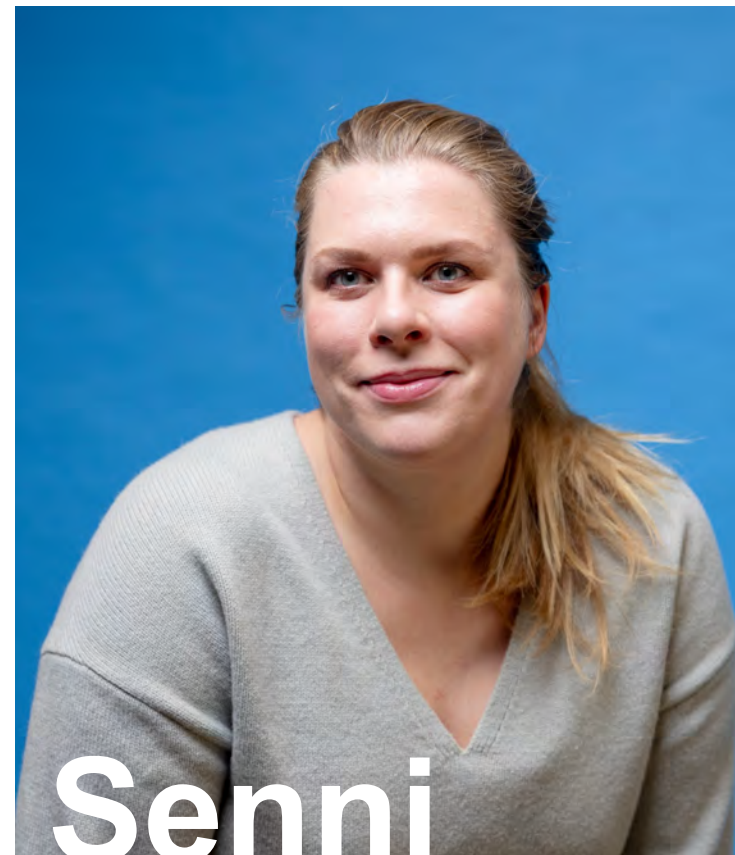
Welcome!
We'll start 16.15.

Vikki Eriksson – Postdoc Researcher, Aalto University Design Factory
Senni Kirjavainen – Researcher, Aalto University Design Factory





Vikki



Senni



Goals for the session

- **Learn how to organize effective ideation sessions using a variety of methods**
- **Increasing exploration to cover a larger potential solution space early on in the project**
- **Get new ideas in relation to your project topic!**

Warm up!

Getting into the creative flow.

Warm-up: The Alien!

Draw an imaginary alien

Ward (1994, 1995)

Very similar outcomes
(borrowing from sci-fi etc.)

89 % have eyes

78 % have feet

59 % have nose

.... etc.



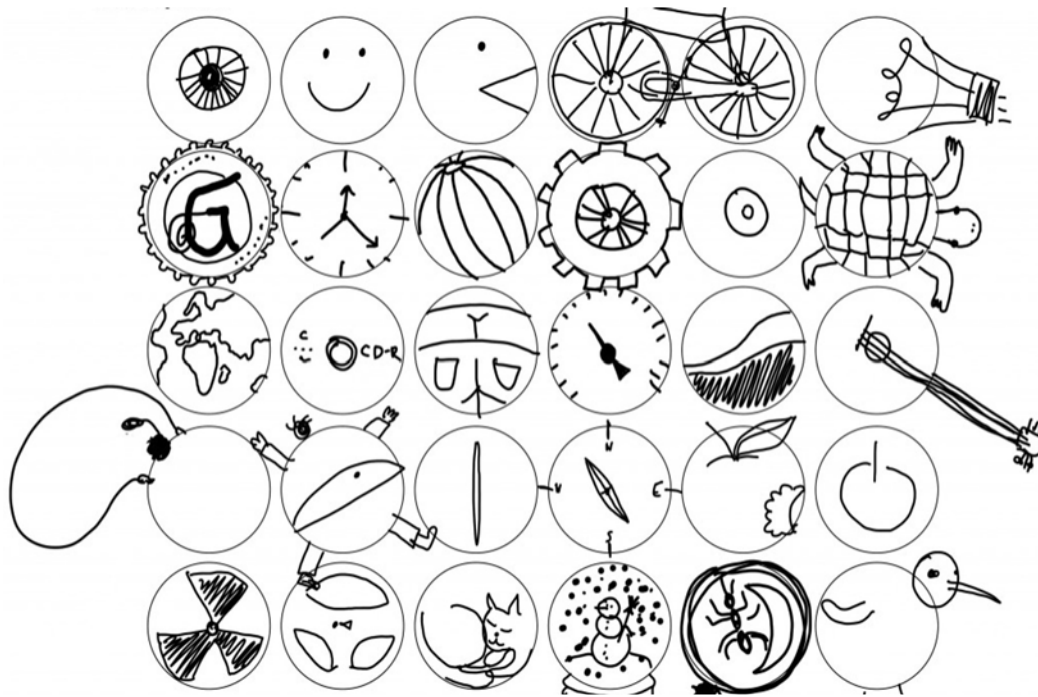
Warm-up: 30 Circles

Draw something in as many circles as you can.

30 circles, McKim

Quick tools for getting into creative mode

May be task-related (getting the most obvious ideas out of the way)



<http://blog.departament.org/wp-content/uploads/2012/09/WJtxv-1024x723.jpg>



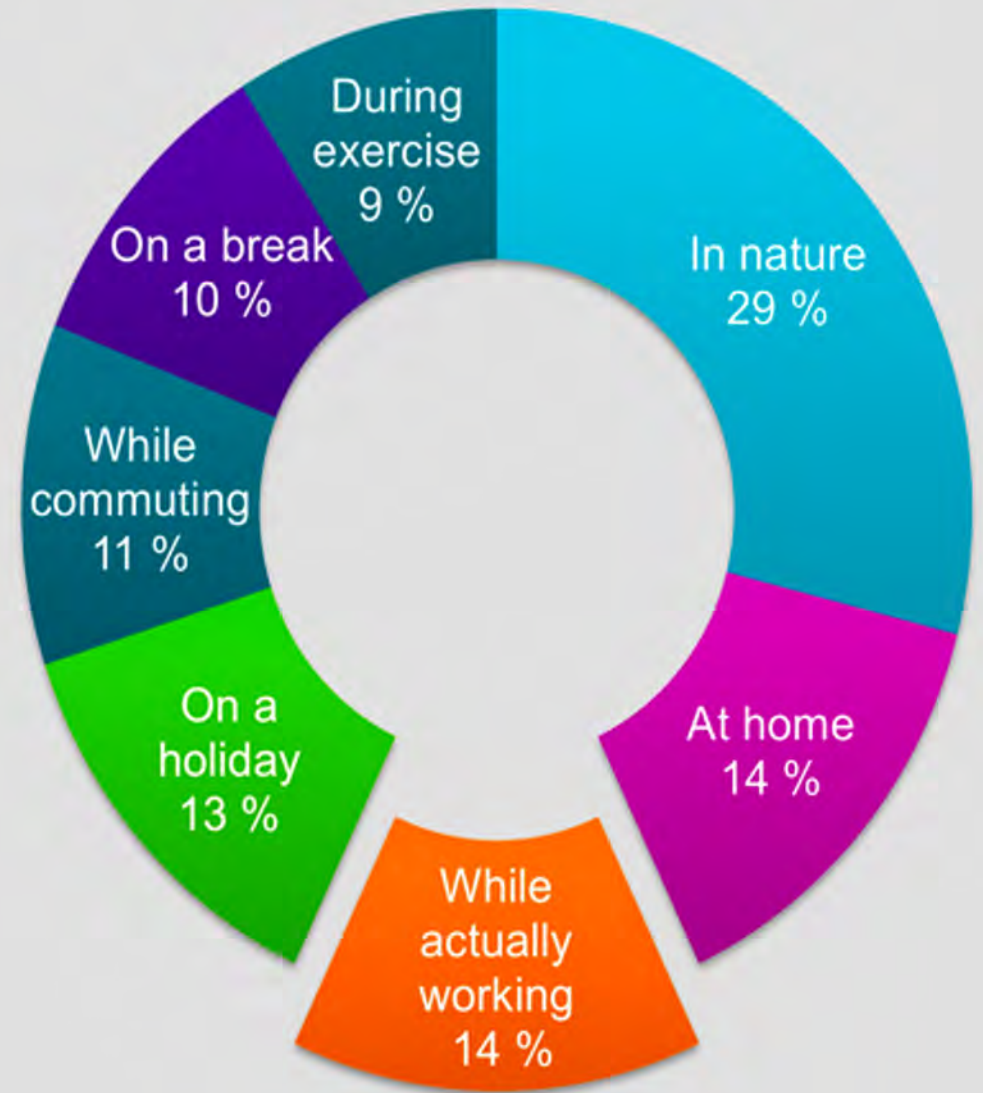
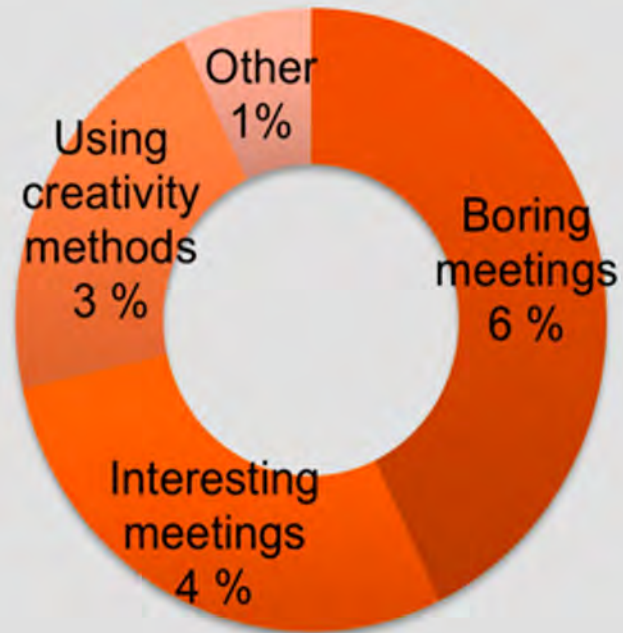


Where do ideas come from?

Patterns and possibilities.

Where are ideas born?

Berth, 1993





Ideation session goals from the perspective of ideas

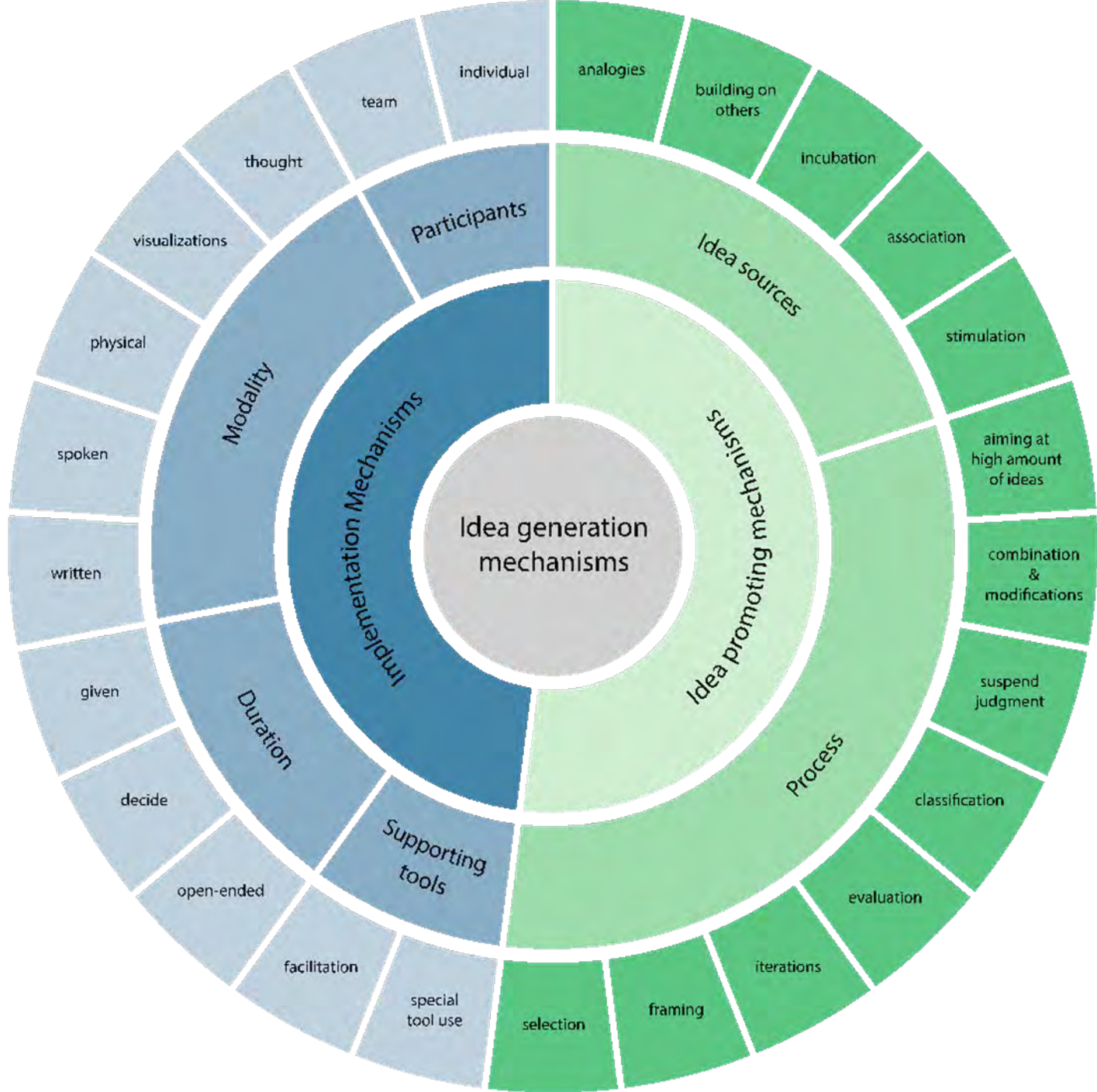
- Quality through quantity
- Sharing and creating new and surprising combinations
- Pushing the boundaries – you can always come down to earth

... but there's the **human side**, too:

building shared understanding, commitment, excitement, trust

Ideation sessions: the basics

Kirjavainen & Hölttä-Otto, 2021





Recognise the role of individual biases.

Cognitive biases can hinder ideation...

- anchoring
- available heuristic
- confirmation bias

Let's try out the techniques

Together, We Create!

Building confidence and exploring options.

But, first: Ideation needs questions

Focus on an actionable scope

- Does the question allow for a variety of solutions? If not, broaden it with “why” questions.
- Does it provide a narrow enough scope to get started? If not, narrow it down “how” questions.

Ensure reasonable assumptions

- Are the assumptions made in the question clear? If not, form another.
- Are the assumptions made in the question true? If you’re unsure, collect more data or test them.

How might we

[what: goal]

so that

[who: stakeholder]

can

[why: need/insight]

*Making ideation
accessible.*

Negative brainstorming

“What is the worst way that we can solve this problem?”

- As a group, discuss the worse way to solve your (or address) your HMW.
- Note down as many ideas as you can.
- Feel free to go a bit radical.
- Try to be as specific as you can.

Negative brainstorming

Why?

- Removes the pressure to come up with good ideas
- Can lead to more novel ideas when the bad ideas are turned to positives
- A good way to kick-off ideation particularly when everyone does not know one another well

How?

- Turn the design challenge to a negative one
 - How to create a service no one wants to use?
 - How could we create partnering criteria which prevent all R&D collaboration?
- Generate ideas freely for a short period of time
- **Finish by trying to turn negative ideas into their positive opposites**

Yes, and...!

Building on ideas is a critical part of the ideation process.

- Consider one of the ideas you 'flipped' in the previous task.
- The next person builds on this idea, starting with "Yes, and..."
- Go on until everyone has had at least three tries.



Bodystorming



Bodystorming

**Cardboard
hospital**

<http://vimeo.com/46812964>

Image: Juha
Kronqvist

Six thinking hats

A group of people in a meeting room, smiling and engaged in a discussion. The background shows a modern office environment with large windows and a whiteboard.

White: facts, information

Yellow: positives, value, benefits

Black: problems, risks

Red: feelings, intuition, hunch

Green: possibilities, new perceptions

Blue: managing thinking process, observing guidelines

Brainstorming rules

1. Go for quantity (quantity brings quality)
2. No criticism
3. Welcome unusual ideas
4. Combine and improve the ideas of others



5. Challenge assumptions
6. Focus on the topic
7. One conversation at a time
8. Be visual

Also consider:

- Have a facilitator if possible
- Be mindful of hierarchies and personalities
- Start with reflecting on the problem
- Impose structure (categorization, break)
- Use stimuli

*Going for a great
number of ideas.*

We need another question!

Focus on an actionable scope

- Does the question allow for a variety of solutions? If not, broaden it with “why” questions.
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Ensure reasonable assumptions

- Are the assumptions made in the question clear? If not, form another.
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How might we

[what: goal]

so that

[who: stakeholder]

can

[why: need/insight]

435 *Brainwriting*

Grab a template, write your HMW statement on it.

1. Then, for 5 minutes, add ideas on post-its to the first round space.
2. Pass the paper clockwise.
3. Read the ideas on the piece of paper you received. Grab 3 more post-its, add them to the sheet and write/draw a new or elaborated idea to each.
4. Repeat.

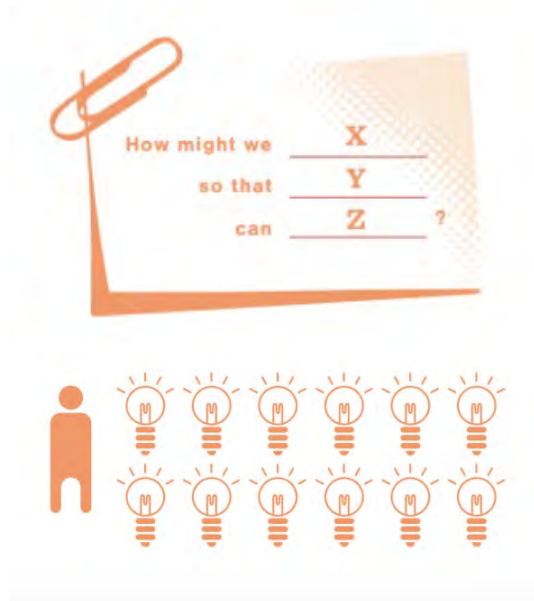
435 *Brainwriting*

Why?

- A method combining individual and group input.
- Allows everyone to be heard without group pressure – great when there are large power differences or dominating personalities.
- Rotation allows improving the ideas.

How?

- For 5 minutes, add ideas on post-its to the first round space.
- Pass the paper clockwise.
- Read the ideas on the piece of paper you received. Grab 3 more post-its, add them to the sheet and write/draw a new or elaborated idea to each.
- Repeat.



1

Pick the other how might we question your team created that you haven't yet ideated solutions for.

2

Distribute the 4-3-5 Brainwriting template for each group member. You will do 4 rounds of 5 minutes, and should aim to create at least 3 ideas each round.

3

For 5 minutes, individually write down 3 ideas (again each idea on its own post-it) on your template. When time is up, pass the paper on clockwise.

When you receive a new template, read the ideas that are already written on it. In 5 minutes, add at least 3 new ideas to the sheet, either building on the ones that you read or something completely new.

4

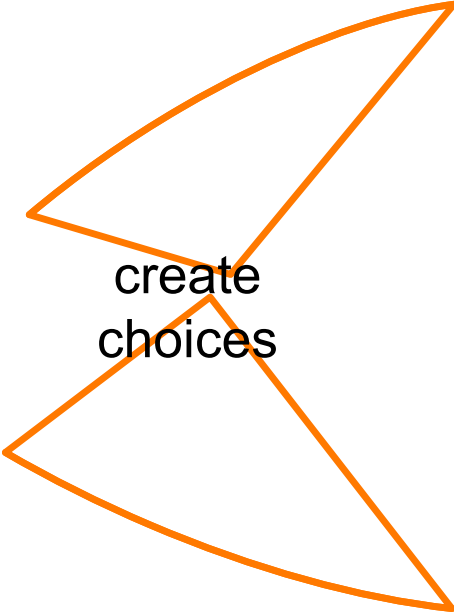
Repeat two more times.

The background is an abstract composition of various elements. It features a color gradient from a warm yellow-orange on the left to a soft purple on the right. Scattered throughout are numerous small, dark dots, some of which are arranged in faint, dotted lines. Several larger, colorful circles are present, some with a dark, almost black border, and others with a more vibrant, multi-colored interior. The overall effect is one of dynamic movement and convergence towards a central point.

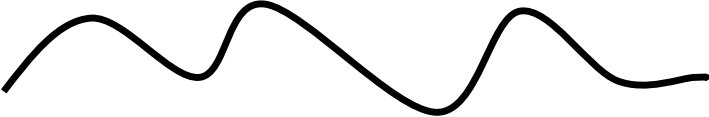
Make sense of ideation.

Converging, options further exploration.

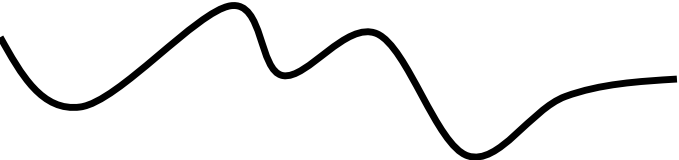
diverging



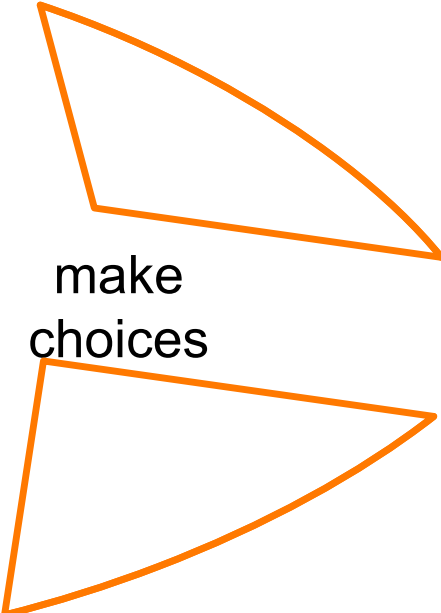
create
choices



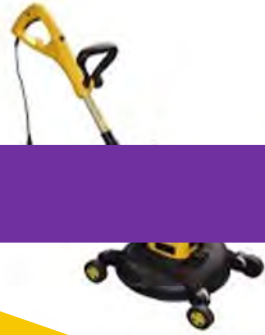
groan
zone



converging



make
choices



CUTTING POWER



FREEDOM OF MAINTENANCE

AUTOMATION



Idea evaluation and selection.

Fast, intuitive in the early process with “raw ideas”

- Dot voting
- Plus, minus, interesting (PMI)

Systematic and thorough with more developed concepts

- Idea selection matrix
- Rating ideas

PMI – plus, minus, interesting



What is good about the idea (Plus)?

- Good aspects worth developing further (into concepts) or taking advantage of.



Which aspects would you need to improve (Minus)?

- Negative aspects not worth developing further.



What makes the idea interesting (Interesting)?

- Interesting aspects, but need more development in order to become good ideas.

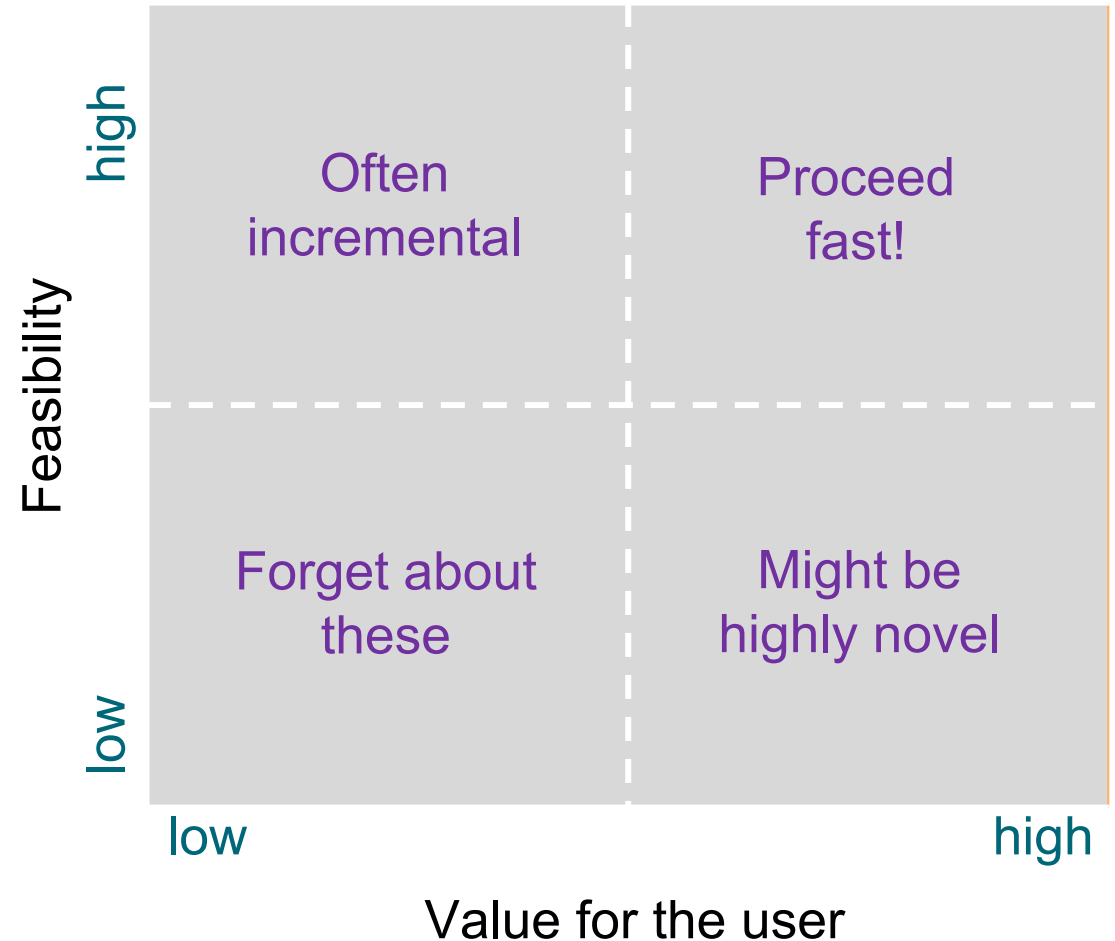


Dot voting

1. Individually, each place three votes for ideas or clusters you think are promising solution directions.
2. As a group, choose an idea (or a combination of ideas) to develop further.

Selection matrix

- Quick evaluation of ideas against one another on two axes
- Axes defined to suit the challenge and context

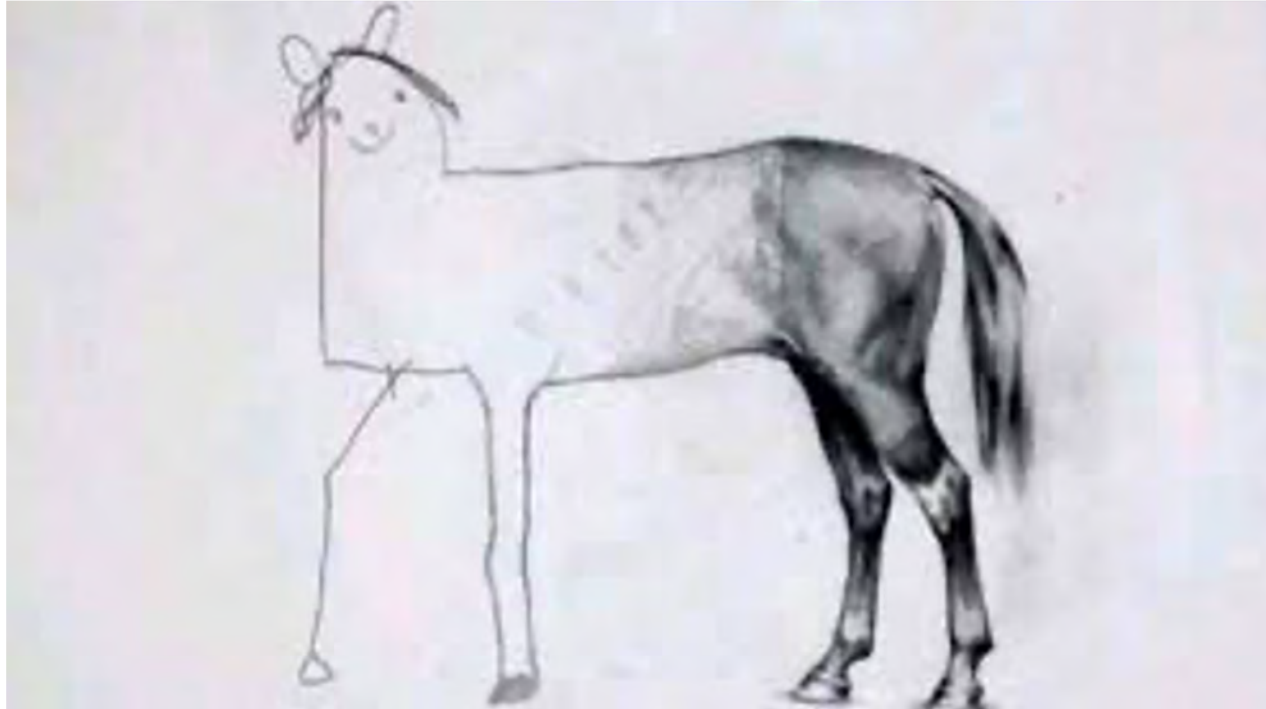


Idea selection is not just about choosing between ideas.

It is just as much (if not even more) about improving the ideas by combining them, taking features from other ideas to strengthen others and possibly getting even more ideas.

Adding detail

From one-liners to one-pagers



- **Ideation sessions offer raw ideas – more work is needed to flesh out ideas**
- **Concept development can also be done in collaboration with customers in a form of more detailed ideation or through prototyping different potential versions**

Concept description

Team name:

Concept name:

What is the value to the customer? – also, who is the customer?



How is it different from other solutions?



How does it work? - Describe in practice?



What is the business value? – How do you make money?



Takeaways:

**How can you have
better ideation with
your team?**



Planning an ideation session.

A space, a team, a tool and a question.



Example structure: 60min ideation session

- **5 min** Going over the challenge
(what are we ideating solutions for)
- **5 min** Ideating alone
- **10 min** Sharing ideas
- **20 min** Ideating together and building on ideas
- **15 min** Clustering ideas and voting
- **5 min** Individually documenting thoughts on winning ideas

Materials and guidelines for a 2 hour ideation session

- <https://designfactory.aalto.fi/toolkits/>





<https://designfactory.aalto.fi/toolkits/>

TOOLKITS FOR CO-CREATION



Experimentation is a great way of learning in conditions of uncertainty – such as a pandemic! Exploring and testing new solutions can help to mitigate short-term adverse effects of crises, but also build new capabilities to leverage in the long run.

While the myth of a lone inventor seems to persist even in the present day, there is increasing evidence on how connections and networks are in fact the key to innovations. Here, we've collected some tips and tools to get you started in finding untapped potential in your networks through the interactive stakeholder mapping tool (coming soon), look at challenges from multiple angles to create diverse solution options through the ideation toolkit, and help plan how to bring initial ideas into something you can try out through the experimentation toolkit. Mix and match these free-to-use tools depending on your own needs.

Looking for inspiration for sustainable design instead? Check out the **Design+Sustainability Card Deck** [here!](#)

Toolkits in English

Työkalupakit suomeksi

For an additional PDP study credit:

By attending the session and submitting the homework assignment you can earn 1 extra credit as a part of PDP!
HOMEWORK

For an additional PDP study credit:

1. Read

- Thomke (2020), "Building a culture of experimentation," Harvard Business Review and
- Brown (2008), "Design Thinking," Harvard Business Review.

2. Organize an ideation and idea selection session for your team (3hrs recommended)

- Identify assumptions in your challenge and generate alternative "How might we" statements.
- Use at least 2 different ideation methods to generate solutions.
- Cluster generated solutions and generate names for the clusters
- Document the 4 most promising or interesting ideas.

3. Write an approx. 3-4 page report

- Reflect on how your project team could work to support creative processes, citing both papers at least twice (approx 1p)
- Report your ideation and idea selection session design and reasoning for the design of the session (approx 1p)
- Report the results of the session (pictures or attachments)
- Reflect on how the session went and what you would do differently next time (approx 1p)

4. Return your report to Senni Kirjavainen

senni.kirjavainen@aalto.fi, by 31.1.2024