ARTX-C1013

Thematic Studio II 2023

Bachelor's Programme in Design, Aalto ARTS

Week 3: Ideation

Good morning! How is everyone? 👋🙂

Agenda

Thursday 26th Morning session

09:15	Introduction & warm-up
09:30	Explanation of workshop goals
10:00	Workshop exercise 1 (30 min)
10:30	Review (10 min)
10:40	Workshop exercise 2 (30 min)
11:10	Review (10 min)
11:20	Workshop exercise 3 (30 min)
11:50	Review (10 min)
12:00	Lunch

Warmup!

Let's discuss where you are with your ideas.

Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
Leo	Elisabeth	Hitomi	Mathilda	Harim	Tiina
Lilo	Inga	Katarina	Nici	Jessica	Emilie
Mariam	Margo	Soyoung	Owein	Michelle	Saara
Sasha	Marta		Yuzu	Vilis	Natasa
Satu				Wen	

Maturing of the ideas into concepts

Progression of the exercises and presentations in period III

| Group formation, discussions & benchmarking exercise = shared understanding of issues related to the theme. | Ideation workshop empathizing, defining, ideating. | Ideation work & creating the presentation | Ideas presentations 2.2. | Diffusion theory lecture, exercise, tutoring & report. | Project work & creating the presentation TS1 mid-proj. presentations, tutoring support. | Mid-project Presentations 22.2. | Period IV |
| | Discovery & ideation → | | | Refining & consolidating → | | | |

Most of the workshop is based on materials from Nielsen Norman Group, an excellent
resource on research-based user experience and design thinking:
https://www.nngroup.com/

How many are familiar with the concept of design thinking?

The design thinking ideology asserts that a **hands-on, user-centric approach to problem solving** can lead to innovation, and innovation can lead to differentiation and a competitive advantage.

This hands-on, user-centric approach is defined by the **design thinking process** and comprises **6 distinct phases**.
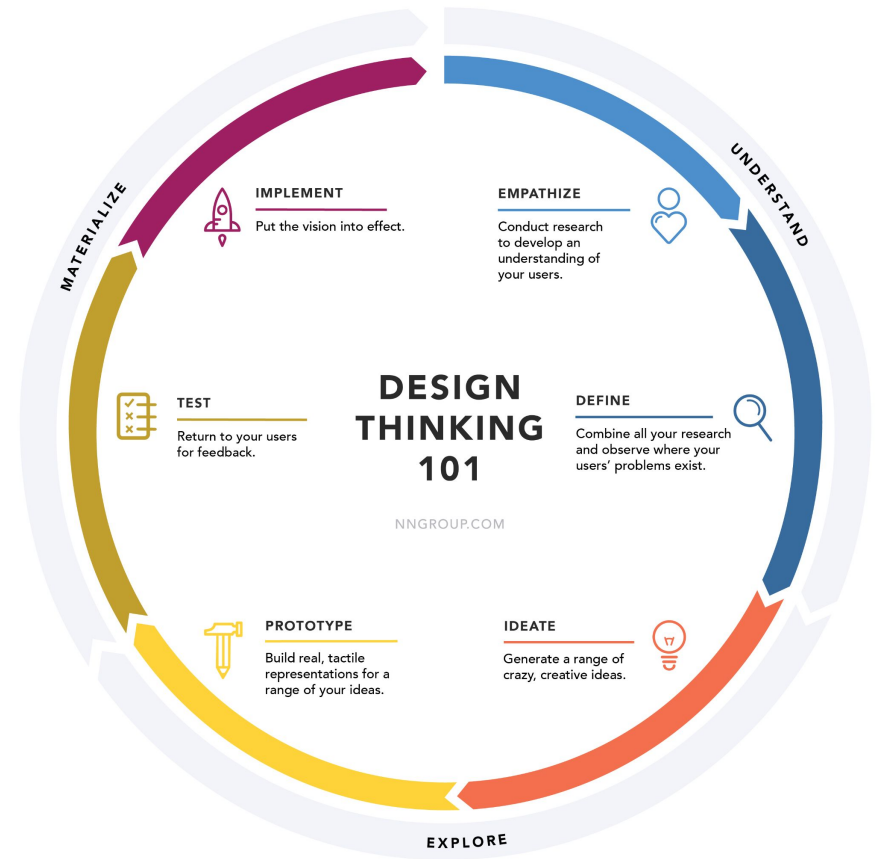
MATERIALIZE

UNDERSTAND

IMPLEMENT
Put the vision into effect.

EMPATHIZE
Conduct research to develop an understanding of your users.

TEST
Return to your users for feedback.

DESIGN THINKING 101

DEFINE
Combine all your research and observe where your users' problems exist.

NNGROUP.COM

PROTOTYPE
Build real, tactile representations for a range of your ideas.

IDEATE
Generate a range of crazy, creative ideas.

EXPLORE

Design thinking is a non-linear, iterative process. Each phase is meant to be iterative and cyclical as opposed to a strictly linear process. You can repeat phases.

EMPATHIZE   DEFINE   IDEATE   PROTOTYPE   TEST   IMPLEMENT

UNDERSTAND   EXPLORE   MATERIALIZE
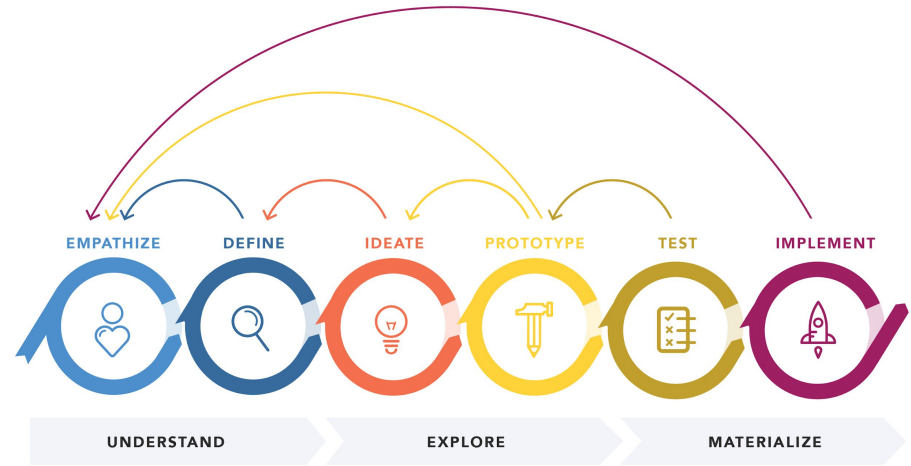
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Three initial steps of a design thinking process

Empathize

An exercise to develop your knowledge about what your users do, say, think, and feel.
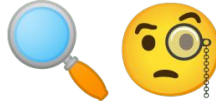
Define

Define the problem you want to solve. Create a problem statement about user needs. What do they want to but cannot?

Ideate

Generate a set of ideas to address the unmet needs. Be open to new approaches.

The following methods are **tools** – you can use them and get useful results from them not only during this workshop but later in the course, in your studies, in your working life and elsewhere. This is not an exercise, but a showcase, and these are only some examples of the many diverse methods available. Seek and discover what works best for you!

Empathize

What is empathy?

SPECTRUM OF EMPATHY
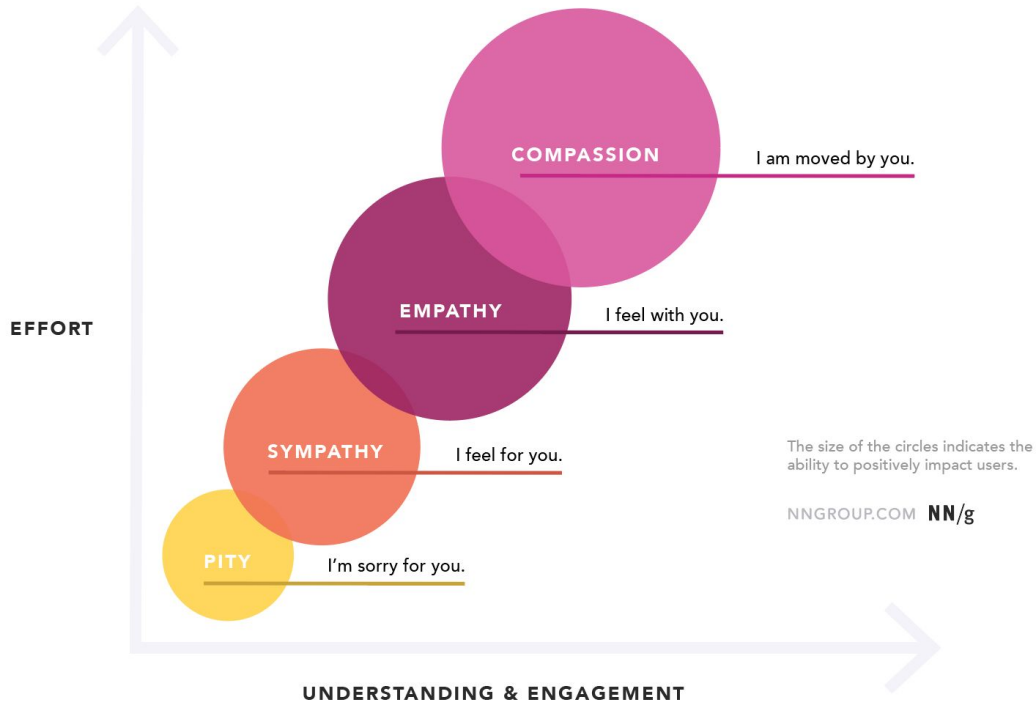
The Spectrum of Empathy, Nielsen Norman Group 2019.

Empathy Map Canvas

1 **WHO are we empathizing with?**
Who is the person we want to understand?
What is the situation they are in?
What is their role in the situation?

GOAL

2 **What do they need to DO?**
What do they need to do differently?
What job(s) do they want or need to get done?
What decision(s) do they need to make?
How will we know they were successful?

7 **What do they THINK and FEEL?**

PAINS
What are their fears,
frustrations, and anxieties?

GAINS
What are their wants,
needs, hopes and dreams?

3 **What do they SEE?**
What do they see in the marketplace?
What do they see in their immediate environment?
What do they see others saying and doing?
What are they watching and reading?

6 **What do they HEAR?**
What are they hearing others say?
What are they hearing from friends?
What are they hearing from colleagues?
What are they hearing second-hand?

4 **What do they SAY?**
What have we heard them say?
What can we imagine them saying?

What other thoughts and feelings might motivate their behavior?

5 **What do they DO?**
What do they do today?
What behavior have we observed?
What can we imagine them doing?

Empathy Map Canvas by Dave Gray
https://gamestorming.com/empathy-map/
https://medium.com/the-xplane-collection/updated-empathy-map-canvas-46df22df3c8a
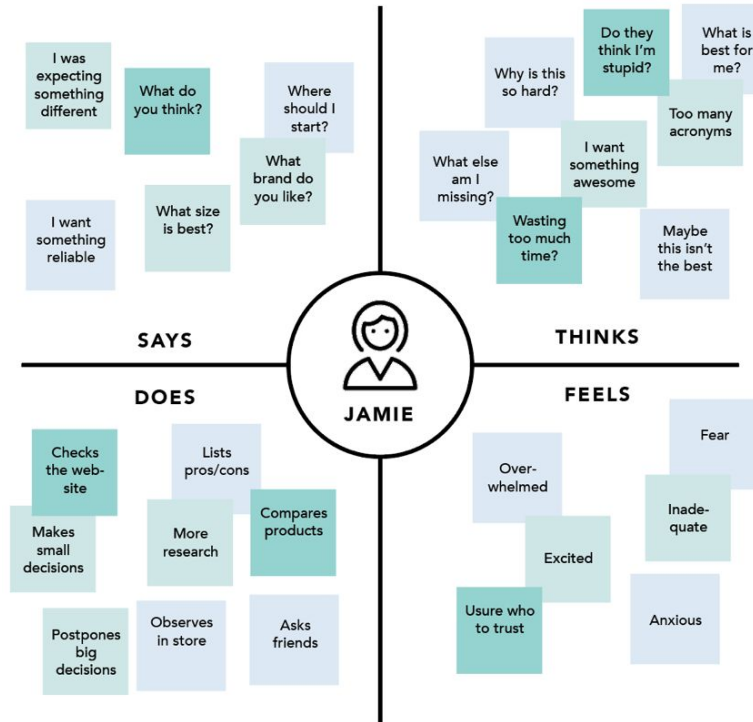
Empathy Map by Nielsen Norman Group

https://www.nngroup.com/articles/empathy-mapping/

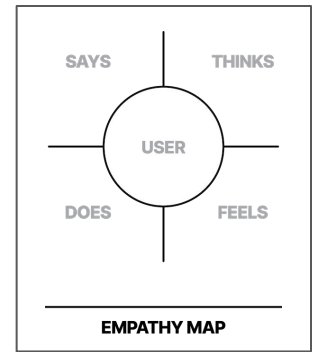SAYS　　　THINKS

USER

DOES　　　FEELS
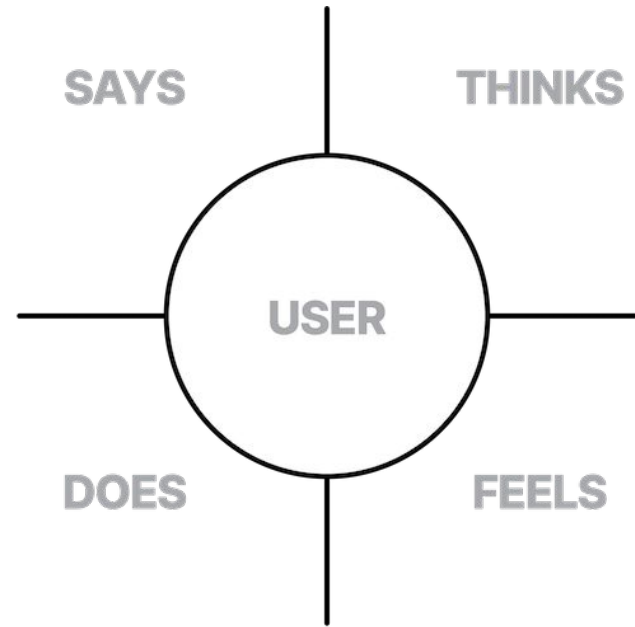
EMPATHY MAP

Task 1: Create Empathy Maps

30 minutes, using yellow stickies on provided templates, discussing in groups


Create 2–3 empathy maps about an ideal target group or user for your project.

You can use information from benchmarking, such as user reviews, or speculate based on your best guess. Find examples of "says" and "does", then empathize about "thinks" and "feels".

At the bottom write the situation where this happens. Where is the user? What are they doing?

Goal is to get to know your potential user better. Use the opportunity to confirm what you already know and to discover what you would need to find out about.
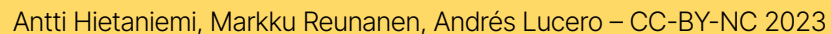
Review! 10 min

Cluster and synthesize discussing

Move through the stickies collaboratively and cluster similar notes that belong to the same quadrant.

Name your clusters with themes that represent each group. Repeat themes in each quadrant if necessary.

The activity of clustering is mean to facilitate discussion and alignment — the goal being to arrive at a shared understanding of your user by all team members. Vocalize and align as a team on your findings. What is missing? What is repeated in all the quadrants? What exists only in one quadrant? What gaps exist in your understanding?
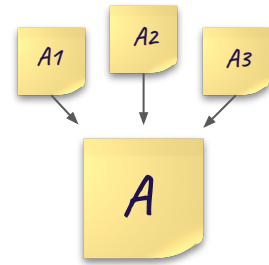
Break!

Remember to document your work!

Define

Defining - what is it?

What user problem will you be trying to solve?

It is important to define the problem you want to solve before spending time and resources on generating possible solutions. The purpose of user need statements is to capture **what** we want to achieve with our design and **why**, not *how*.

In other words, what is your design challenge?
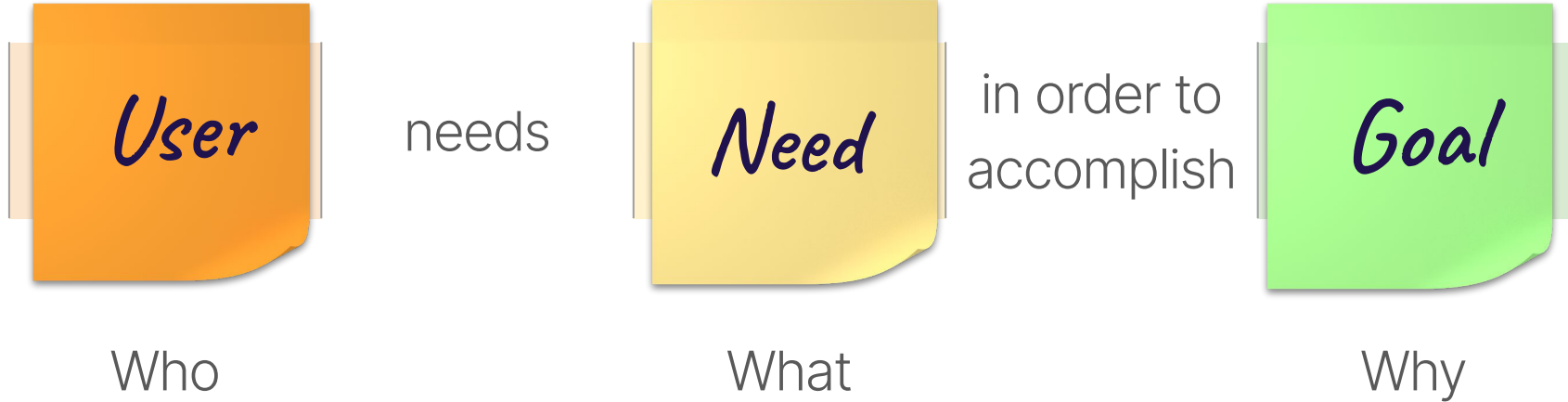
User need statement

A user need statement is an actionable problem statement used to summarize **who** a particular user is, **what** the user's need is, and **why** the need is important to that user.

The need should be real, should belong to users, should not be made up by the team, and should not be phrased as a solution.

Statement defines what you want to solve before you move on to generating potential solutions, in order to 1) condense your perspective on the problem, and 2) provide a metric for success to be used throughout the process.

[A user] needs **[need]** in order to accomplish **[goal]**

1. Who   2. What   3. Why

Need statements have 3 components: a user, a need, and a goal.

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Root causes & the "five whys"

If it seems it is difficult to understand the root of the problem, you can use a question-based method called the "five whys" to get to the root cause of a problem for your user.

By repeating the question "why" five times, the root cause of the problem can be revealed. This can help identify the underlying problem that needs to be addressed, rather than simply addressing the symptoms.

Problem: A machine on a production line is frequently breaking down.

1. **Why** is the machine breaking down? Because it is not being properly maintained.

2. **Why** is it not being properly maintained? Because the maintenance schedule is not being followed.

3. **Why** is the maintenance schedule not being followed? Because the employees responsible for maintenance are not properly trained.

4. **Why** are the employees not properly trained? Because the training program for maintenance is not comprehensive.

5. **Why** is the training program not comprehensive? Because it was not designed with input from the maintenance team.

Conclusion: A machine on a production line is frequently breaking down because the maintenance training program was not designed with input from the maintenance team.

Task 2: Write user need statements

20 minutes, on A3 paper, discussing in groups.

Write a number of potential user need statements based on the users in your empathy maps and their needs. The statements can be verbose and long, but should be made of three parts: who/user, what/need, and why/goal.

The last part, goal, is the result of meeting the need. It can be broad, but should be rooted in empathy. Think what this solution allows the user to accomplish.

A need statement distills your knowledge of the users and their need into a single sentence, helps to align the team along a concise goal, and provides a metric for success.

Process suggestion for writing statements

1. Set the scope: broad or specific? Broad is good in the beginning.

2. Look at the empathy maps for understanding about the users and their needs. What information do you have about them?

3. Generate candidates for each step, see how they fit, then mix and match – change the order of notes in each column and see what new approaches new combinations suggest.

4. Critique and iterate on the statement.

5. Add methods of measurement. If it works, how can you measure its success?

Review! 5 min

Evaluating the user need statements

- Are the needs real, belonging to the users from empathy mapping?
- Are needs described as verbs, and not phrased as solutions?
- Are the goals (whys) deep enough? Could you ask "Why?" a few more times?
- Did mixing and matching produce any new ideas?
- Can you define success?

Ideate

Ideation – what is it?

Ideation is the process of generating a broad set of ideas on a given topic, with no attempt to judge or evaluate them. Three main characteristics of ideation sessions are:

1. Ideas are not evaluated or criticised.
2. Ideas are recorded, even if on pen and paper, and the session is documented.
3. Collaboration nurtures diverse ideas. This is good.

Understand who you design for

From the previous stages you already should understand users' needs and have ability to ground ideas in these needs, not into design trends or convenient technical solutions (like mobile apps). Understanding is important: if you don't understand your users, the ideas are probably off.

Be clear about the difficulties that users encounter, but don't be afraid to dream. At this stage, no idea is too out there. It is much easier to scale back a crazy idea that addresses a true user need, than to try to make a mundane idea desirable.

Brainstorm Rules from IDEO Design Kit

The goal isn't a perfect idea, it's lots of ideas, collaboration, and openness to wild solutions. The only way to get to good ideas is to have lots to choose from.

1. Defer judgement. You never know where a good idea is going to come from. The key is make everyone feel like they can say the idea on their mind and allow others to build on it.

2. Encourage wild ideas. Wild ideas can often give rise to creative leaps. In thinking about ideas that are wacky or out there we tend to think about what we really want without the constraints of technology or materials.

3. Build on the ideas of others. Being positive and building on the ideas of others take some skill. In conversation, we try to use "and" instead of "but".

4. Stay focused on the topic. Try to keep the discussion on target, otherwise you can diverge beyond the scope of what you're trying to design for.

5. One conversation at a time. Your team is far more likely to build on an idea and make a creative leap if everyone is paying full attention to whoever is sharing a new idea.

6. Be visual. In live brainstorms we write down on Post-its and then put them on a wall. Nothing gets an idea across faster than drawing it. Doesn't matter if you're not Rembrandt!

7. Go for quantity. Aim for as many new ideas as possible. In a good session, up to 100 ideas are generated in 60 minutes. Crank the ideas out quickly and build on the best ones.

https://www.designkit.org/methods/brainstorm-rules

"How Might We..."

Pick your best problem statements from the previous stage to be used here.

One way to get forward is to formulate a simple question, based on the discoveries from Empathize and Define stages, starting with the words:
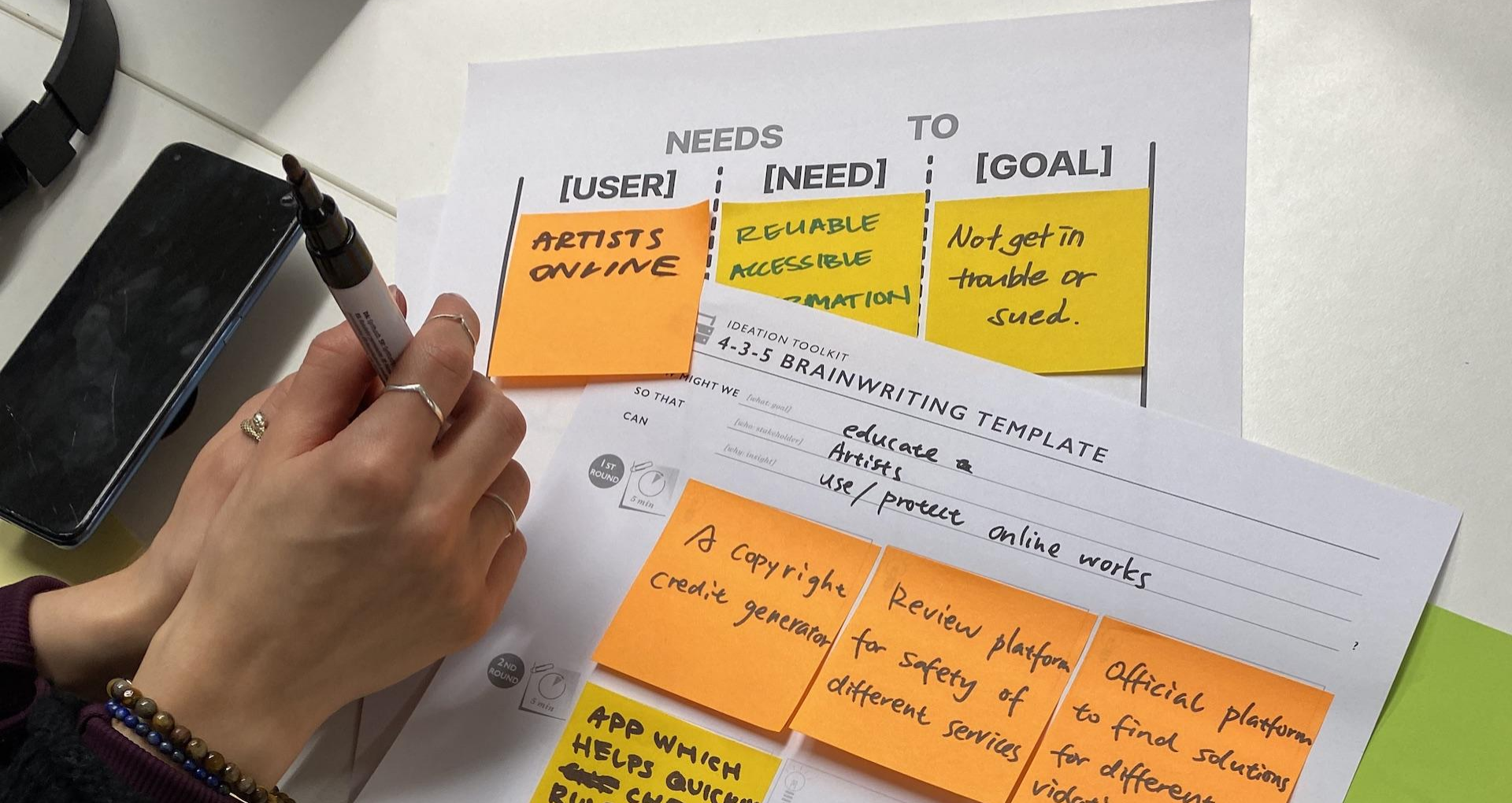
"How might we..."

Task 3:
Use 4-3-5 Brainwriting to generate ideas

20 minutes, on given templates, individually.

Take one 4-3-5 Brainwriting template for each team member. Write a problem statement in "How might we" format at the top. You can focus on one problem or several.

Each group member individually creates and writes down 3 ideas for five minutes, then rotates the template to the next person. Read other's ideas, then write 3 more.

Repeat 3–5 times according to the group size until templates are back at the beginning. Then review the ideas and vote for the best ones to start to develop for the idea presentation.

Review! 10 min

Cluster and vote on ideas

Take a step back and take a break! Then, coming back to the ideation output as a group, cluster and discuss what is there.

When ready, vote on the ideas you would like to advance as a group for your idea presentation. One way is to give everyone 3 votes to place on as many ideas, or all on one single idea.

Remember to document your work!

Feedback!
How was today?

Remember:

Design thinking is a non-linear, iterative process. Each phase is meant to be iterative and cyclical as opposed to a strictly linear process. You can repeat and return to previous phases.

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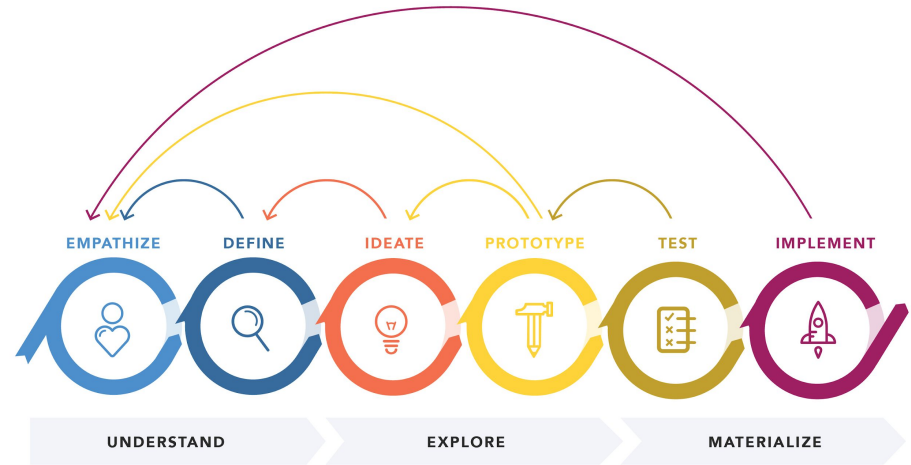
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Thank you
& enjoy the lunch!