



MEC-E3020

METHODS IN EARLY PRODUCT DEVELOPMENT

A”

Aalto University
Design Factory

We start at 15.15 !

**Find your group
and sit with them!**

Sessions

Wednesday 23.10. 15-17

Introduction to product development processes and course practicalities

Wednesday 30.10. 15-17 *shared session with PDP
Needfinding

Wednesday 6.11. 15-17 *shared session with PDP
Value mapping, Visiting lecture from [Ville Eloranta](#)

Wednesday 13.11. 15-17
Problem framing

Wednesday 20.11. 15-17 *shared session with PDP
Ideation

Wednesday 27.11. 15-17 *shared session with PDP
Concepts and Patents, Visiting lecture on patents from [the Finnish Patent and Registration Office \(PRH\)](#)



Today's session

Mapping stakeholders

Tools for needfinding

Introducing first assignments





STAKEHOLDERS IN PRODUCT DEVELOPMENT

Users and stakeholders

Primary users

- Use the product themselves

Secondary users

- Do not use the product or system directly, but give or receive feeds

Tertiary users

- Affected by product use even though are not directly interacting with the product

+ Facilitators; develop, fix or maintain the product or the system it belongs to



**Who is the customer?
Who is the user?**



Stakeholder roles

Stakeholders can be used..

- ... gathering knowledge
- ... in co-designing
- ... as information sources
- ... in evaluating and validating
- ... driving change
- ... securing resources

...



A close-up photograph of a smiling child wearing a white protective garment. The child's hands are covered in colorful paint (blue, green, red, yellow). The text "BRAINSTORMING STAKEHOLDERS" is overlaid in white, bold, sans-serif font. The background is slightly blurred, showing a red and black striped pattern. There are teal-colored rounded square shapes on the left side of the image.

BRAINSTORMING STAKEHOLDERS



Brainwriting stakeholders

- 1) Scan the qr-code and go to Miro.
- 2) Claim one of the frames for your group. Write down your groups alphabetical name or PDP project on the first sticky-note.
- 3) Follow the instructions of writing down different stakeholder groups related to you PDP or the Brief in MyCourses.
- 4) Do not jump ahead to task 2.



round

4

INTO THE ECOSYSTEM

Take an even wider look at the ecosystem. Consider if anybody else might have an interesting stake in this issue.

- 13 Who else might be affected by the issue?
- 14 Who else might be helpful in addressing it?

round

1

USUAL SUSPECTS

Start by adding some usual suspects.

- 1 Who are primary users? Which user groups are more likely to experience the issue?
- 2 Who are key customers? Who pays for offerings or operations influencing the issue?
- 3 Who are key suppliers? Who provides materials or resources for the offerings or operations in the context of the issue?
- 4 Who are key collaborators? Who are collaborators in developing these offerings or operations?

INSTRUCTIONS

Individually, write down stakeholders (people, groups, organizations) relevant to your chosen issue, each on a separate sticky note without sharing with your group members. You have five minutes for each round, aim to identify at least two stakeholders in each question.

round

3

DOWN THE CHAIN

Take it a step further down the chain.

- 9 Who are secondary users? Which user groups are impacted by the primary users' experience?
- 10 Who are customers' key customers? Who receives offerings from the key customers, whose needs do they serve?
- 11 Who are suppliers' key suppliers? Who do the suppliers receive (raw) materials or resources from?
- 12 Who are collaborators' key collaborators? Who else do the collaborators work with to develop new offerings, operations, or other solutions?

Everybody:
PLACE ALL STAKEHOLDERS HERE
on one pile as you go through the rounds.

Don't review yet, don't worry about double ones!

round

2

EXTREME USERS

Consider who might be disproportionately impacted by your issue.

- 5 Who might struggle to use the current solution, for example due to their permanent or temporary physical attributes and abilities?
- 6 Whose expressions or experiences might be undervalued in relation to the issue, for example due to their gender, ethnicity or sexual identity?
- 7 Who might struggle to access the current solutions, for example due to their social status, wealth or education?
- 8 Who might struggle to participate equally in the issue, for example due to their language skills, neurodiversity or sensorial experiences?

A close-up photograph of a smiling child wearing a white protective garment. The child's hands are covered in colorful paint (blue, green, red, yellow). The text "MAPPING STAKEHOLDERS" is overlaid in white, bold, sans-serif font. The background is slightly blurred, showing a red and black striped pattern. There are teal-colored rounded square shapes on the left side of the image.

MAPPING STAKEHOLDERS



Mapping stakeholders

1)

In Miro, move to the 2nd task. Map the stakeholders you identified into the matrix of potential co-designers, sceptics, informants, and change-agents.

Share!



ENTHUSIASTIC ABOUT THE CHANGE EFFORT

Potential change agents

could become ambassadors of your project or concept. Consider talking to change agents if you feel good about your idea but need more buy-in or if you need help advocating for your project.

Potential codesigners

could help generate more ideas and elaborate ideas through testing. They are likely to help improve your idea but less likely to advocate on your behalf. Consider talking to codesigners if you would like to explore new solution directions or are unsure your solution fully tackles the identified issue.

NOTE

The change effort enthusiasm can either relate to developing the issue in general (if you are just starting in your project) or be relative to a specific solution direction you are thinking about (if your project is already further along).

DISSATISFIED ABOUT THE CURRENT SITUATION

SATISFIED ABOUT THE CURRENT SITUATION

Potential informants

could help you better understand present issues. They are likely to be willing to share their concerns but less likely to participate in supporting your change effort. Consider talking to informants if you are unsure you are targeting the right issue or would like to increase your understanding of different needs.

Potential skeptics

can be more difficult to motivate, but you might still need their support or buy-in. If that's the case, you could think about how you could demonstrate the effects of the issue you're trying to tackle or the benefits of a solution you've developed to build enthusiasm. Consider inviting skeptics to demonstrations and sharing insights or results gained together with change agents, codesigners, or informants.

NOT ENTHUSIASTIC ABOUT THE CHANGE EFFORT



NEED FINDING



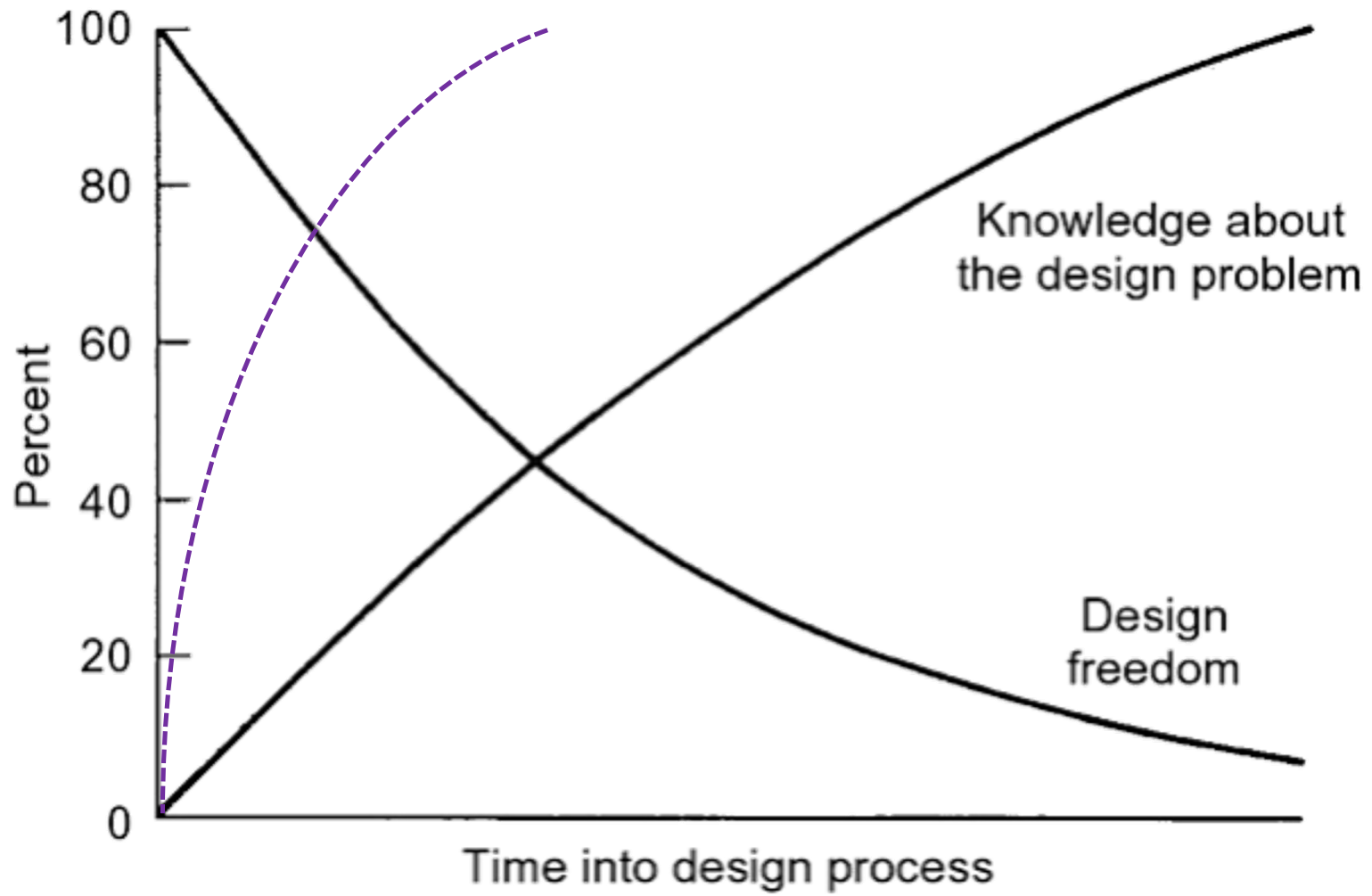
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Why to put users in the center?

Leading edge technology and great ideas alone are not sufficient if the product does not meet users' needs.

Lack of sufficient understanding of the users causes costly changes after launch.





Needfinding tools and methods

Approaches and principles

- User-inspired design
- User-centered design
- Emphatic design
- Contextual design
- User innovation
- Participatory design
- Crowdsourcing
- Usability design / usability engineering
- Design for all
- Co-creation
- ...

Methods

- Observation
- Interviews
- Surveys
- Focus groups
- Mock-ups
- Scenarios
- Role playing
- Intuition
- Design probes
- Toolkits
- ...



A good product from user perspective

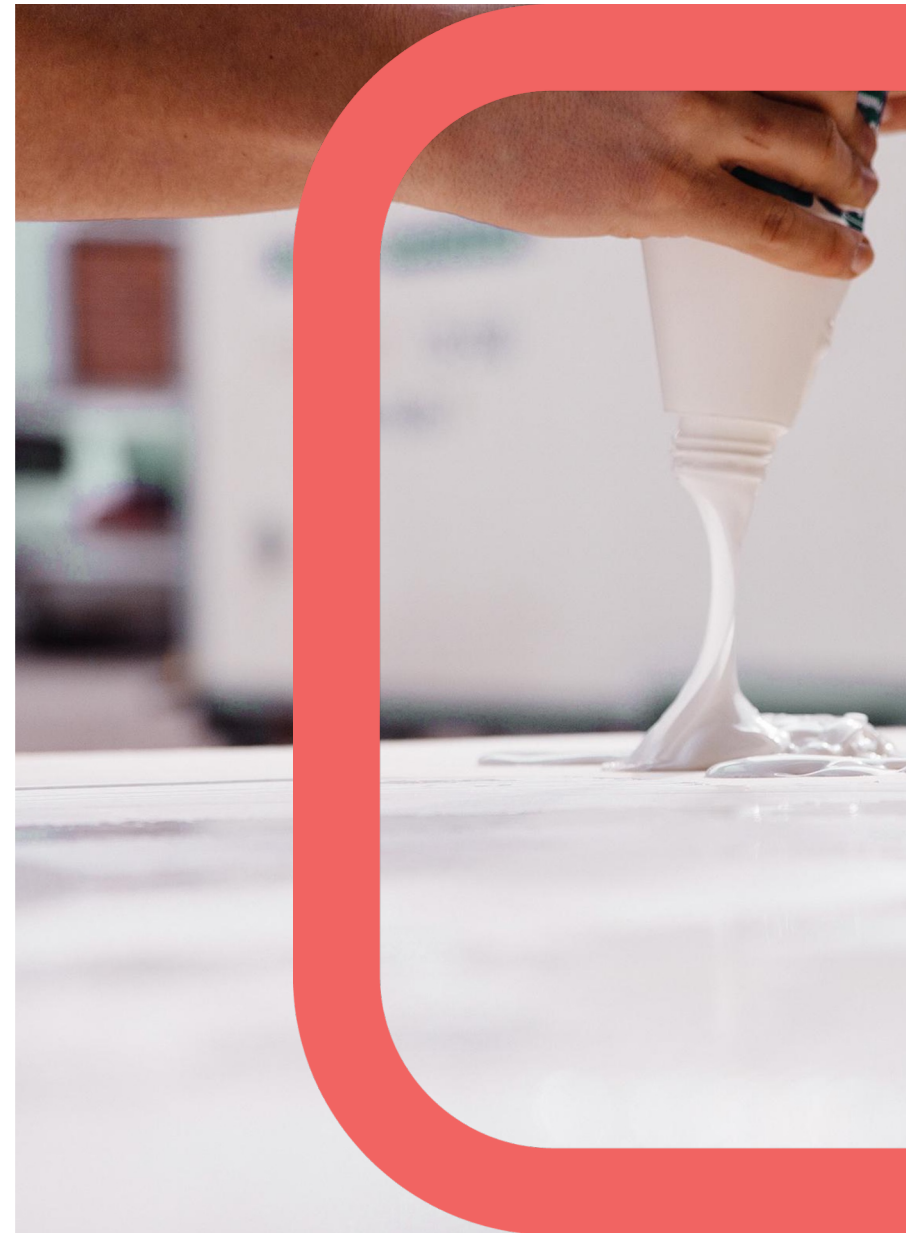
Useful; helps the user to reach their goals

Usable; easy to operate and performs as intended also in practice

Desirable; conforms with user needs, desires and emotions

Pleasurable; using or owning it provides joy and pleasure (or diminishes misery)

Consistent; especially for services, seamless experience across all channels



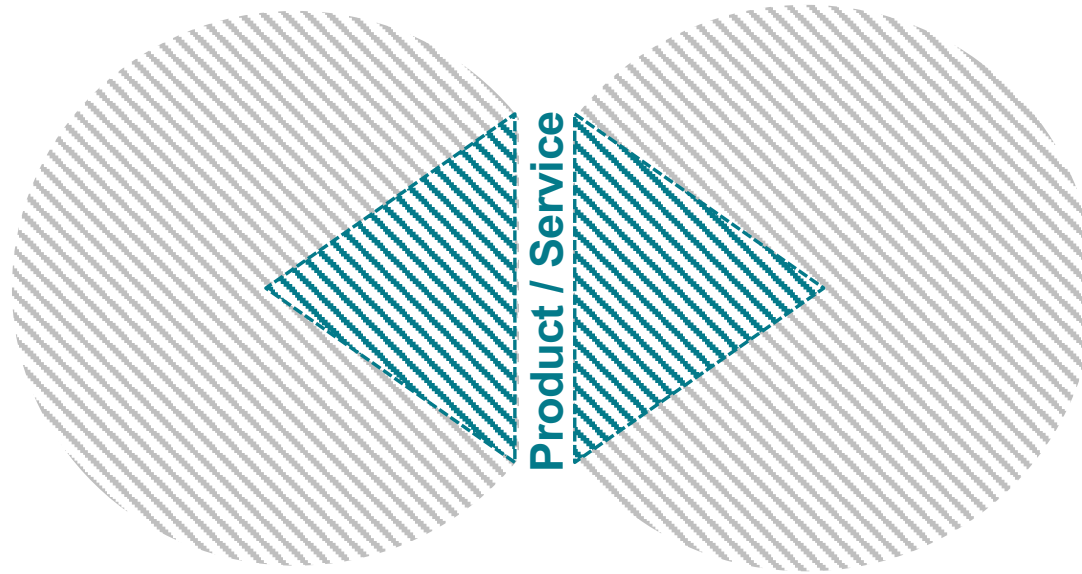


Ability to empathize

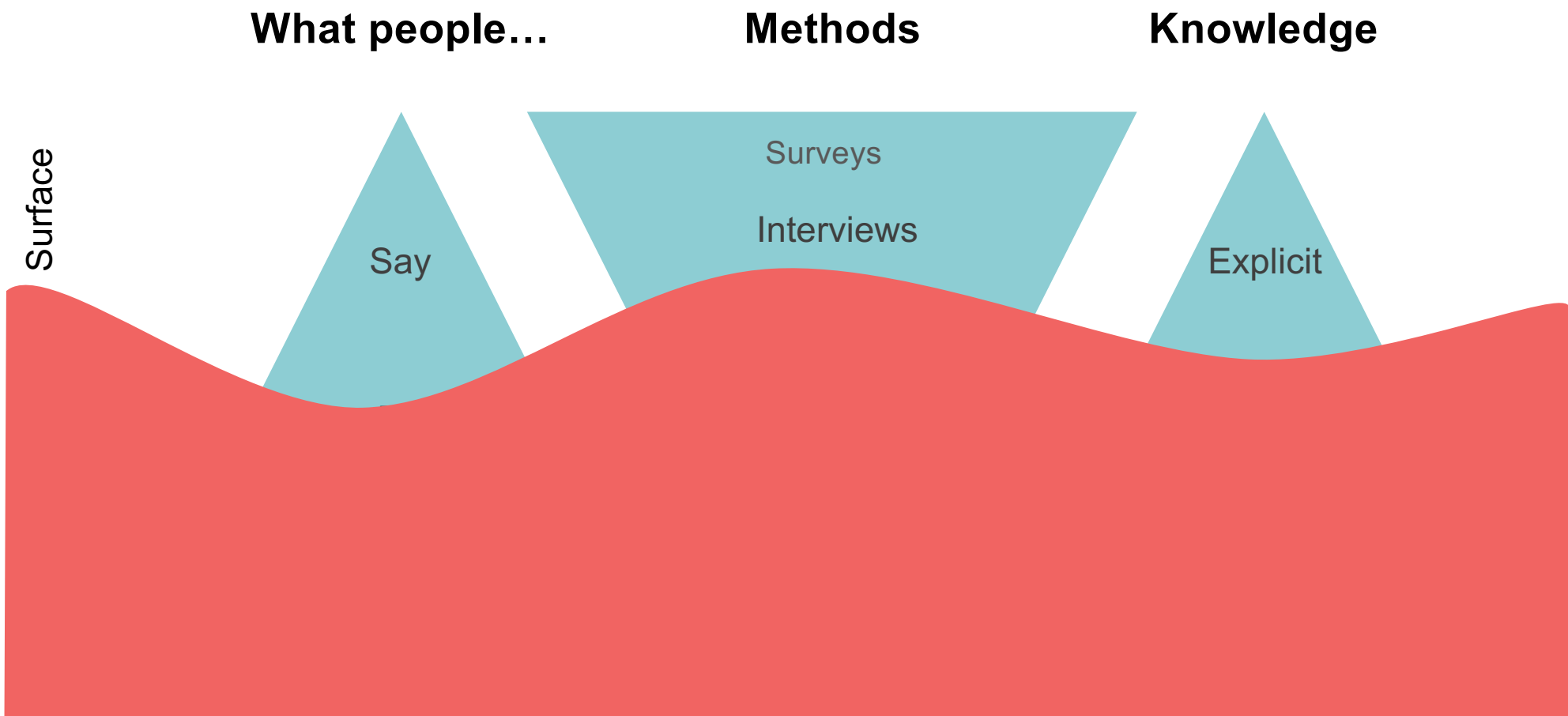
The further we are as people from the people we aim to understand, the more difficult empathizing gets.

Be careful not to assume, be sensitive to what you hear and see.

DESIGNER



USER



What people...

Methods

Knowledge

Surface

Say

Do

Surveys

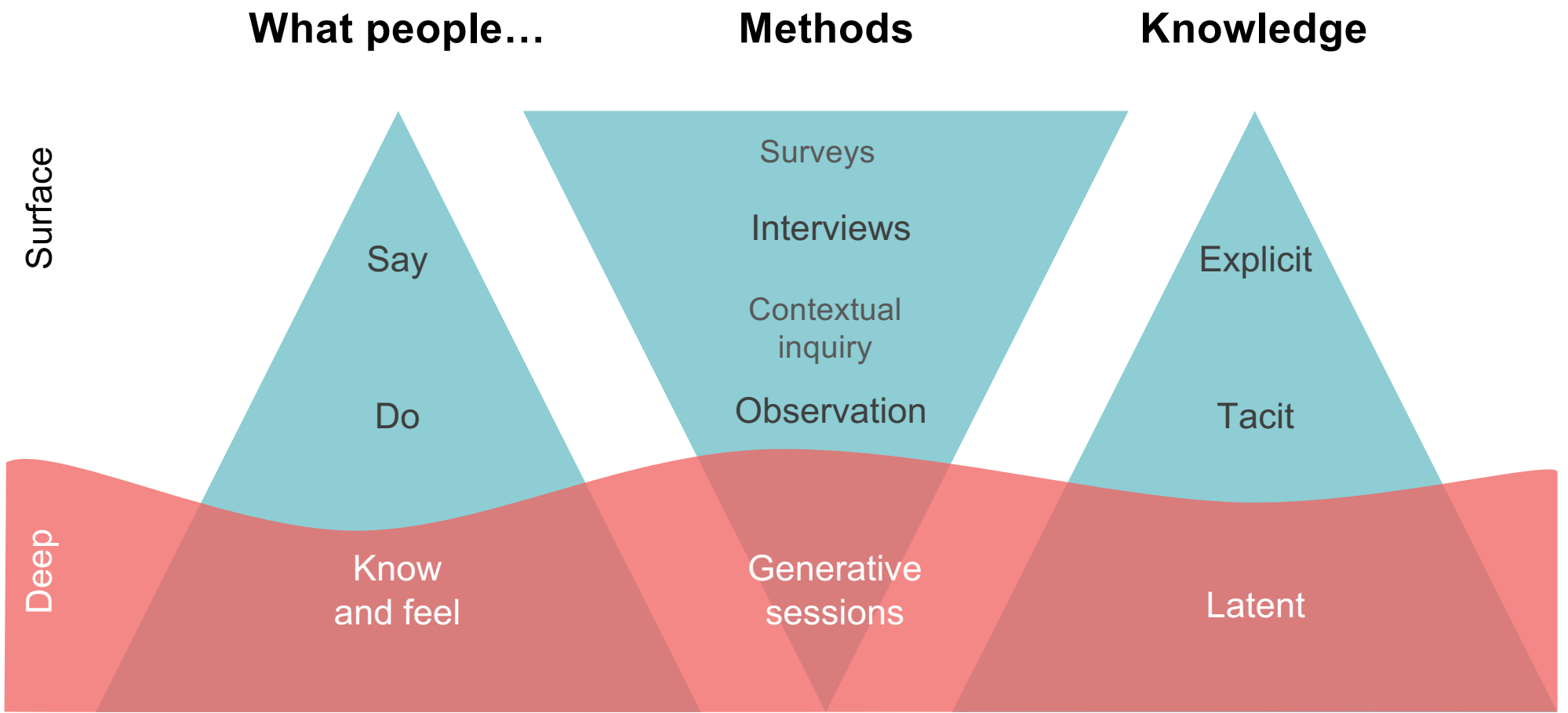
Interviews

Contextual inquiry

Observation

Explicit

Tacit



Methods to find out...

What?

Surveys
Questionnaires
A/B testing
Structured interviews
Metrics, tracking, analytics
Data mining
Usability studies
Polls

To capture:

Patterns of behavior, numeric data on preferences and behavior, preferences, opinions on designs...

Why?

Open ended interviews
Focus groups
Observation, shadowing
Design probes, diaries, tech probes
Prototype trials
Participatory design, co-design

To capture:

Motivations, feelings, goals in life, emotions, attitudes, values, prejudices, behaviors, actions, practices, cultures, personality traits, identity ...



Interviewing

Structured – open

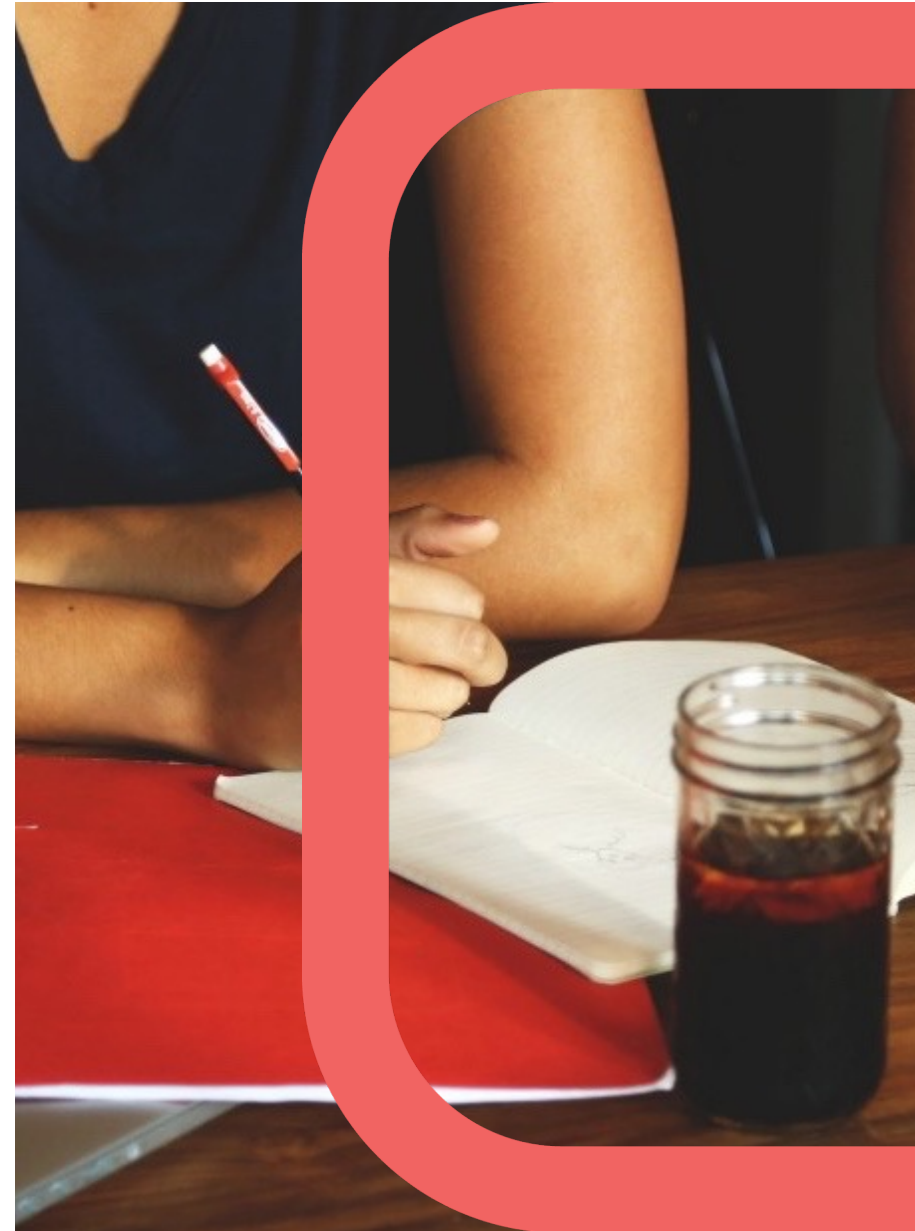
One-on-one

Focus groups

Contextual inquiry

Mood cards, card sorting...

Critical incidents



Planning interviews

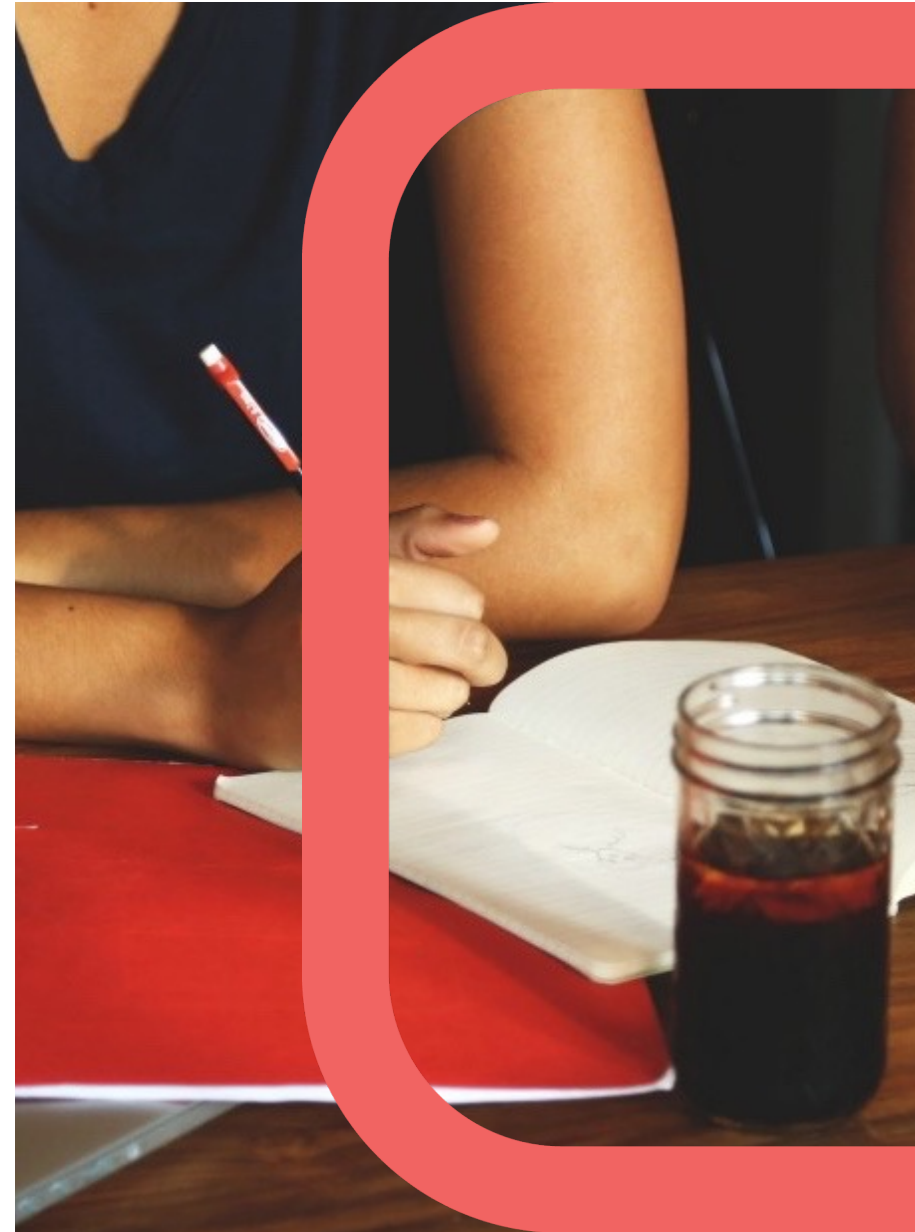
Choose your approach according to your case.

- What needs to be found out? What are you designing? Who is the user?

Make the interviews in context if possible and prepare a list of questions and themes.

Good questions do not guide the answers or contain the "right answer".

- The interviewers own opinions should not show through – try to stay objective.



Planning interviews

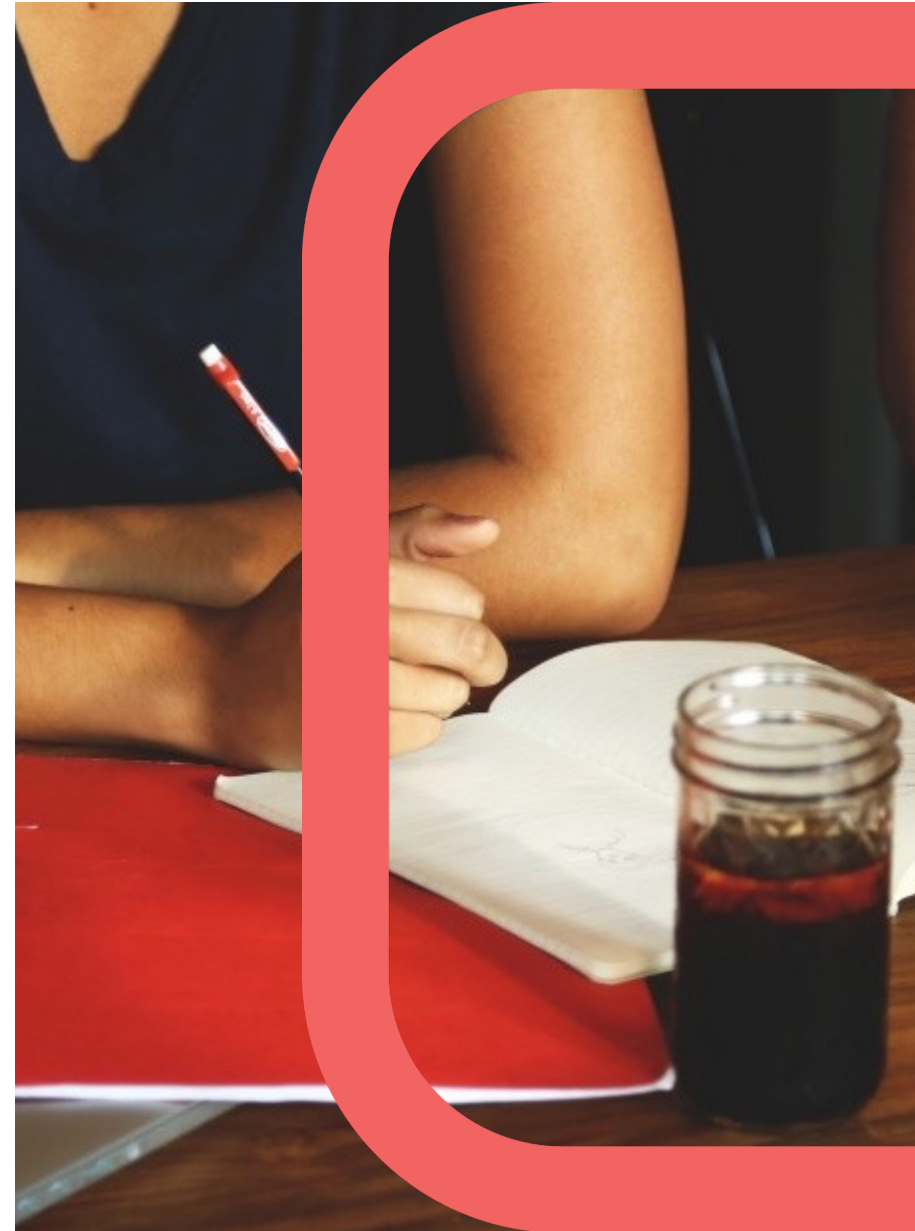
Pilot, test, and document the unique situation well

You can tease out JOBS-TO-BE-DONE type of knowledge by e.g.

- Giving a task
- Asking for a demonstration
- Walkthrough
- Concrete examples of situations

You can ask different things from experts and users

- Experts -> opinions, recommendations for other interviewees
- Users -> No straight forward questions



Observing

Passive observation


Shadowing

Stimulated recall

Observation in a laboratory setting

Participant observation

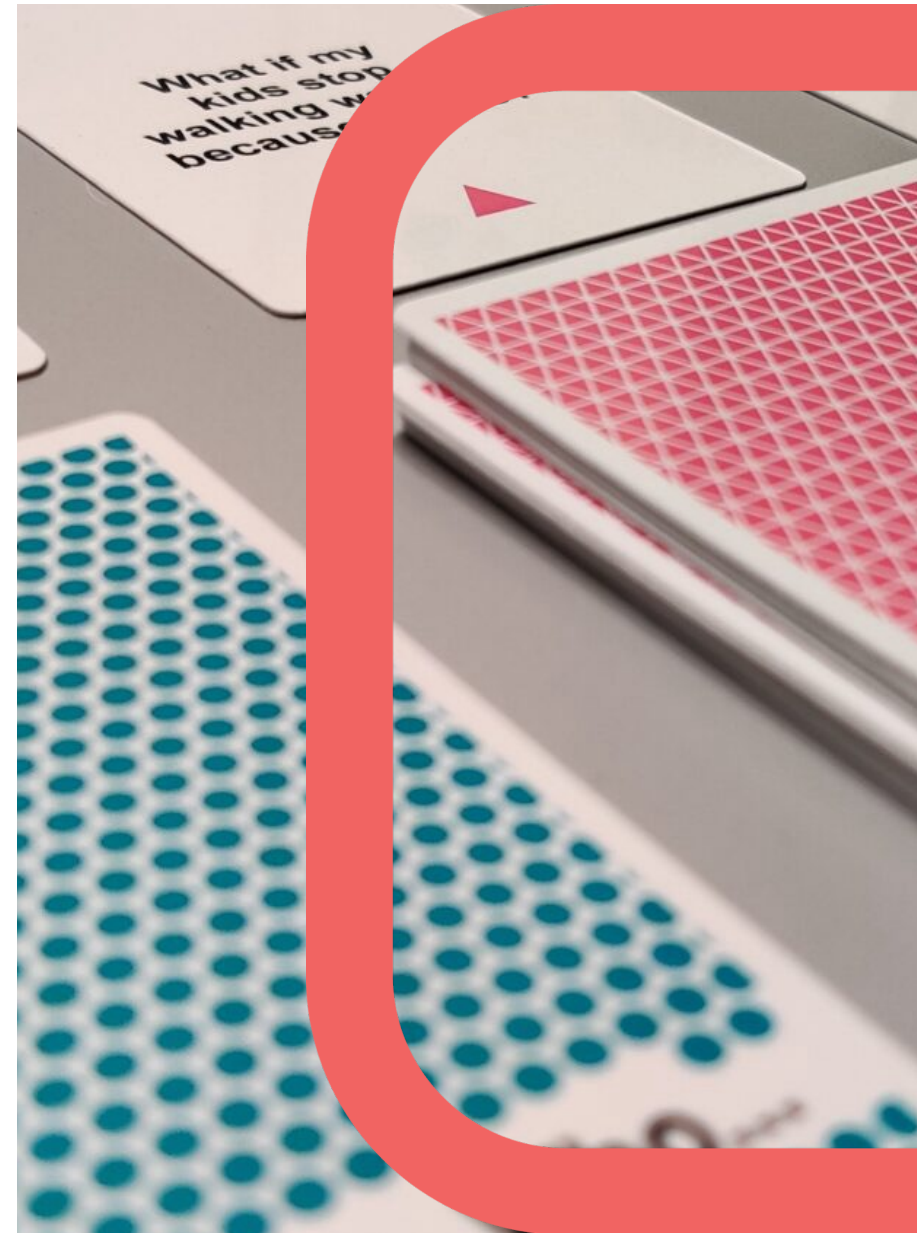
Contextual inquiry



Could you walk me through what happened when...?

Co-creating, probes...

- Probes are resource-efficient tools for user self-documentation.
- Games for gathering insights or co-creating solutions
- Empathizing through acting
- Creating your own method?



For the next time!

Group assignment

Create a research plan and an interview guide.
DL 5.11. 11.59 PM

Group submission through MyCo

Individual assignment :

Interview a stakeholder, write a summary and reflection. DL 12.11. 11:59 PM

(Notice! A survey is not an interview!)

Submission through MyCo





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**SEE YOU
NEXT TIME**

On 6.11.2024

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Aalto University
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