

Agenda:

1. What is a method, tool and technique trying to achieve?

What do the words mean?

What makes it participatory, and **why** emphasize participation?

2. What and how do we talk about methods, techniques and tools as participatory?

The 'pd-mindset' (Sanders and Stappers, 2008); Having a say, mutual learning and co-creation (Bratteteig et al., 2012)

Tell, make and enact (Brandt et al., 2012)

Explorative, generative and evaluative (Sanders and Stappers, 2014)

3. Concrete examples of tools and **techniques**.

Probes (Gaver et al., 1999)

Collaging (Visser et al., 2005)

Future Workshop (Handbook of PD, p. 145-146 & 152-153)

The goal of this lecture is to begin connecting the dots between what makes a method, tool or technique participatory. Connecting previous lectures on participatory experimental design to the practice of PD. We are going to go through how you emphasise design of the designprocess to fit users needs.

The goal is to show you that you can apply (almost) any method, from any tradition of design (see for example Universal Methods of Design, 2012), as long as you apply a *pd-mindset* that tailors method, tools and techniques to the context of use.

What are we trying to achieve in Participatory Design

Current perception of methods?

«.. **data gathering is a central part of establishing requirements**, and of evaluation. Within the requirements activity, the purpose of data gathering is to collect sufficient, accurate, and relevant data **so that a set of stable requirements can be produced**, within evaluation, data gathering is needed in order to capture users' reactions and performance with a system or prototype» (Preece, Sharp and Rogers, 2015, p 226).

Data gathering is a central part of getting to know the user, how to approach continued design; finding ways of including users into the design-process.

Why emphasise participation?

“The heart of Participatory Design is participation” (Brandt et al., 2012)

The book emphasize the “participatory mind-set” (Sanders and Stappers, 2008), democratization, empowerment, a scandinavian/norwegian/institute heritage.

Under-emphasized reason the practical reasons for having the PD-mindset, for *how* we enable participation: namely, practical reason.

Example: oil-rig



- Interviews
- Observations of work practice
- Follow-up interviews
- Ideation session



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Exercise

Tools, techniques and methods.

Q: What is a method?

A way in which to think about the three words.

What is this wallet to you, why *this* thing to do something?

What *goal or thing* are you trying to achieve with the use of your wallet?

How *can* we view these words:

Method = the framework

Technique = How you apply the method and the object

Tool = the object

This is not *the* definition but *a* definition, among an infinite ways to define, all depended on who you ask.

Ways of seeing the Participatory Design Process

We are moving beyond the basics of inquiry, to make informed design propositions, towards methods, tools and techniques that foster empowerment and better design results through the principles you have read about: Mutual learning; co-creation; *having a say* (Bratteteig et al, 2012). We are doing design to enable the participation of users into the design-decisions (Bratteteig and Wagner, 2014)—to show you that you can apply (almost) any method, from any tradition of design (see for example Universal Methods of Design, 2012), as long as you apply a mindset that tailors method, tools and techniques to the context of use. Bratteteig et al., (2012) view the method as a “set of principles of method which in any particular situation has to be reduced to a method of inquely suitable to that particular situation” (from, Checkland 1981, p. 161).

- We are moving beyond inquiry to inform designers (meta-design)
- empowerment and democratization (Computers Dividing Man and Work (Sandberg, 1979) if you are interested PDs history)
- *Having a say*, Mutual Learning and Co-creation (Bratteteig et al., 2012)
- Enabling participation of end-users into design-decisions (Bratteteig and Wagner, 2014)
- Bratteteig et al., (2012) view the method as a “set of principles of method which in any particular situation has to be reduced to a method of uniquely suitable to that particular situation” (from, Checkland 1981, p. 161).

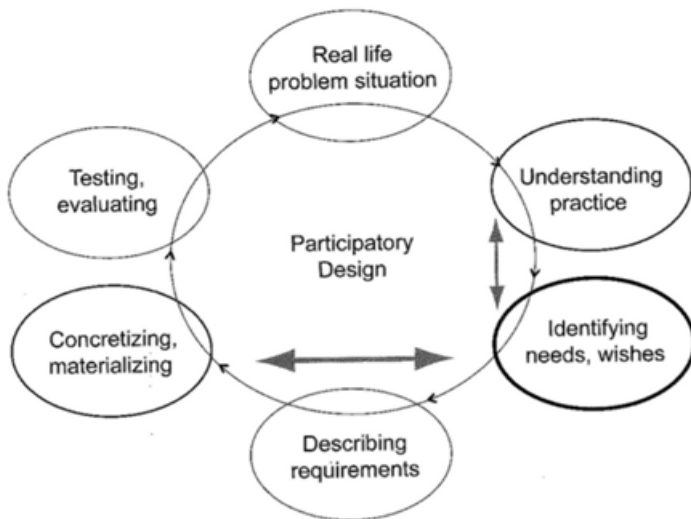


Figure 6.5 The use-oriented design cycle

(p. 128, Handbook of PD)

“There is still a reluctance to have the contribution of the PD community reduced to stand-alone tools and techniques if these are not accompanied by what Sanders and Stappers [Sanders and Stappers, 2008] have called a participatory mind-set” (Brandt et al., 2012).

What is the participatory mind-set?

Bratteteig et al., (2012) says, “this basic worldview leads us to the three core perspectives: having a say, mutual learning and co-realization”. (meta-design)

In chapter 6, the authors describe the general notional understanding of a method: “Method, as a general concept, is often interpreted as a ‘recipe’ for how to carry out a set of activities – Like a cookbook recipe.” (Bratteteig et al., 2012). This is not how they view the PD approach.

(Ignore chapter 6’s emphasis on the example methods: MUST, CESD, STEPS. Read them, and try to understand why, but don’t emphasise these methods. It is a bit outdated.)

What and how do we talk about methods, techniques and tools as participatory?

What makes a PD use of methods different to other kinds of design processes?

Not a black-and-white world, UCD and PD are based on the same principles of engaging users. There is overlap.

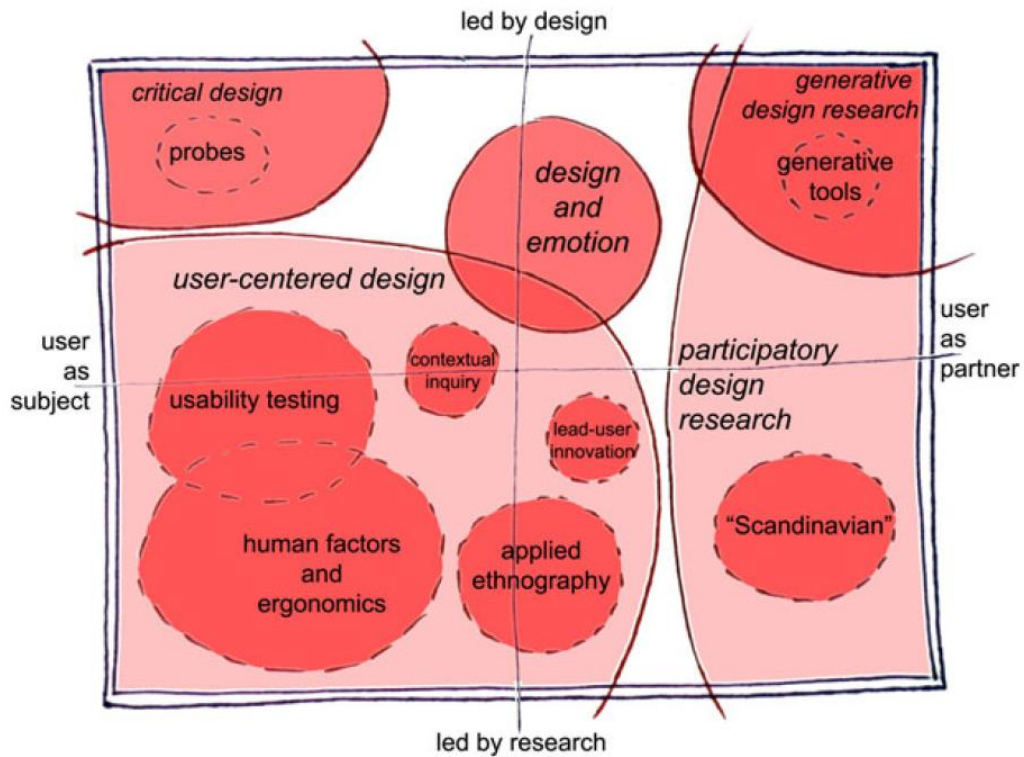
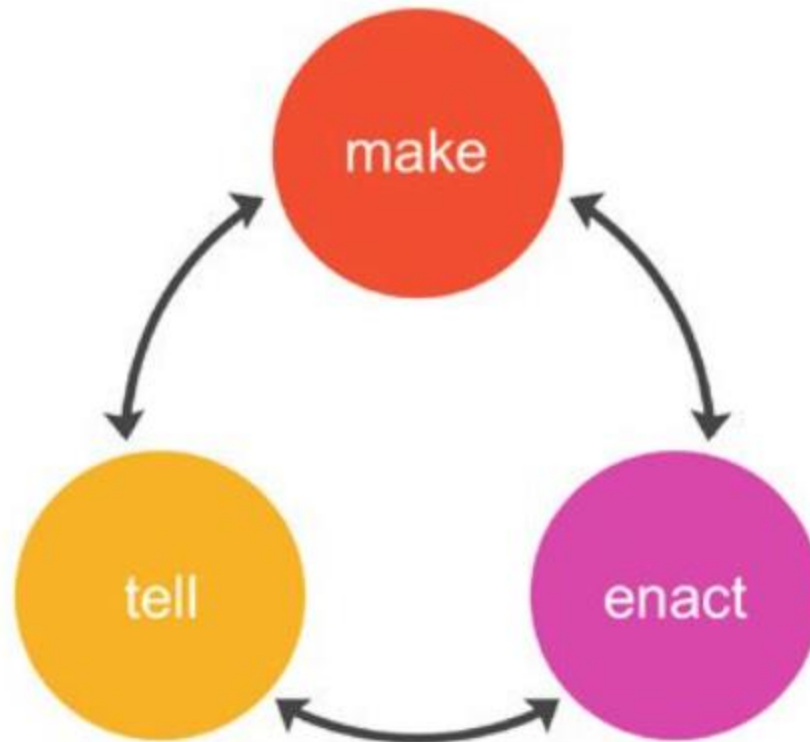


Figure 2. The map of design research, showing different approaches laid along two axes: role of the user (horizontal), and approach of the research (vertical). *Source:* From Sanders and Stappers (2008).

(Sanders and Stappers, 2014)

Different ways to think about the participatory design process



(Brandt et al. 2012)

Brandt et al., (2012) creates a framework where tools and techniques should enable *telling, making and enacting* as a way of finding and conducting Participatory Methods of doing design.

Telling, making and enacting:

Telling: ways of introducing the designer to the context, but also a means for participants to articulate their contexts and explore challenges and problems.

Making: co-design, an important part of making decisions (see Bratteteig and Wagner, 2014), happens in the making of design-artefacts.

Enacting possible futures: lets participants experience and explore what the future could look like.

Not mutually exclusive activities:

in the act of making something, you can ask participants to tell stories about their artefacts, or enact possible use.

People are different: some like telling, some like acting, some like making. Different angles. We, the designers, might see the world differently, this engages in an exploration through multiple mediums.

Table 3. The three approaches to making are expanding across different time frames.

	Probes	Toolkits	Prototypes
The world as it is	Cultural probes (Gaver, Dunne, and Pacenti 1999) Design probes (Mattelmäki 2005)	Toolkits for understanding experience: a day-in-the-life exercise	Usability testing of an incrementally improved redesign
The near future	Design Noir (Dunne and Raby 2001)	Toolkits for exploring future experience: my-ideal-future-product exercise	Usability/field testing of a radical new product
The speculative future	Diegetic prototypes (Kirby 2011) Artefacts from the future (WIRED magazine)	Toolkits for experimenting with experience: make-believe role-playing with co-constructed artefacts	Research through Design prototypes (Keller et al. 2009)

From the later work of Sanders and Stappers, (2014), and how making can happen across time, within different time frames, for different reasons.

“Things-to-think with” (Brandt, 2007)



Fig. 6 Mock-ups of valves and manifolds from the WORM project. The mock-up to the *left* was from the second workshop, middle third workshop, and the mock-up with the most details to the *right* is from the fourth workshop

Brandt (2007) used high fidelity mock-ups to engage the participants into co-design. Lower fidelity = broader conversation topics, Higher fidelity = more specific topics. Note that such discussions require deep professional knowledge on the subject of these specific valves.

things and, by that, gets further with the design. The design process in the WORM project is best described as reflective conversations with problematic situations and generation of possible solutions through collaboration between users, customers, and the full design team. The reflective conversations were centered

of finishing than the earlier ones (see Fig. 6). They looked as if they could almost work. The amount of details and finishing seemed to affect the communication by making it more focused and detailed. This is

This kind of prototyping, letting the hands on objects of future use lets the user tell stories of the context of use, enact futures on how they would work and, if knowledgeable enough about the topic, be a part of making future iterations (co-creation).

A different way.

Table 2. The research phases compared.

Design research	Pre-design and post-design	Generative	Evaluative
Purpose	To understand people's experiences in the context of their lives: past, present and future dreams	To produce ideas, insights and concepts that may then be designed and developed	To assess, formatively or summatively, the effect or the effectiveness of products, spaces, systems or services
	To prepare people to participate in codesigning	What will be useful? Usable? Desirable?	Is it useful? Usable? Desirable?
Results	Empathy with people	Opportunities for future scenarios of use	Identification of problems
	Creative codesigners	Exploration of the design space	Measurement of effectiveness
Orientation	Past, present and future	Future	Present and near future

(Sanders and Stappers, 2014)

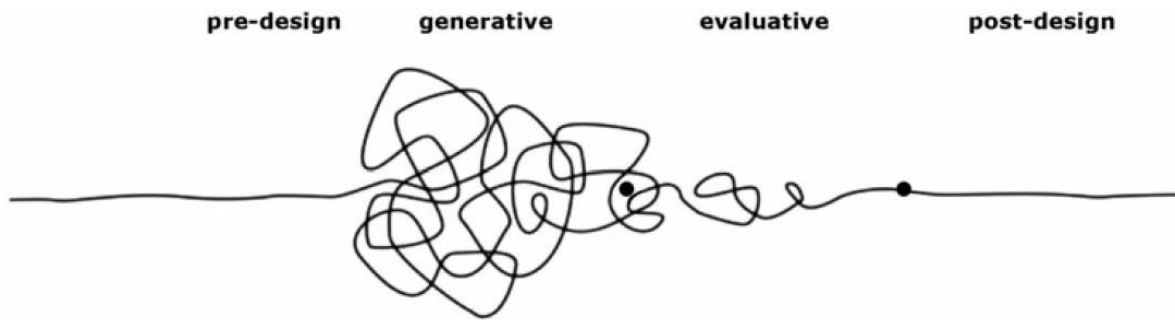


Figure 4. Phases along a timeline of the design process; the first dot indicates the determination of the design opportunity and the second dot represents the finished 'product'.

(Sanders and Stappers, 2014)

Examples of tools, techniques and methods

Probes (Gaver et al., 1999, Visser et al., 2005)

Gaver et al. (1999) uses the probes for gaining insight into the context as inspirational data to stimulate designer's imagination, while the generative toolkits of Visser et al. (2005) seek "a more deliberate and steered process of facilitation, participation, reflection, delving for deeper layers in the past, making understanding explicit, discussing these, and bridging visions, ideas and concepts [scenarios] for the future."

Visser et al., (2005) calls these probes, 'sensitization packages'.

The difference is in whether you see the subject as subject or partner (Sanders and Stappers, 2008).

Cultural probes as design research (Gaver et al., 1999), investigating: "Novel interaction techniques to increase the presence of the elderly in their local communities" (p. 22).



Figure 1. A cultural probe package.

Postcards

Informal, friendly and suited to people who are familiar with this sort of activity. This can be seen as an alternative to a questionnaire.

Maps

Inquiry into their use of their local community. Where they meet people, daydream, to be alone, where they can't go. Ranging from specific inquiries to poetic.

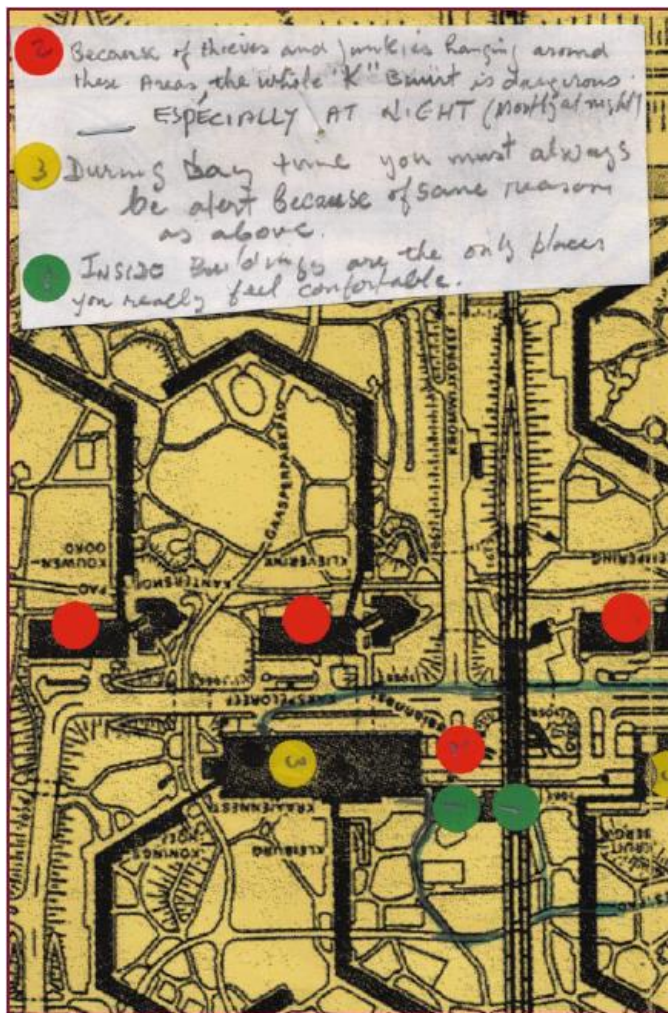


Figure 7. A returned map showing zones of safety and fear in the Bijlmer.

Photography/camera/diary

Asked to photograph their home, what they will wear... casual topics—which they were asked to collect into a diary, telling 'their story'.



Figure 6. Some of the returned items.

Why they used probes

Generational gap

Get access to the deep generational knowledge of the communities that elderly people has experienced and accumulated throughout their life.

Combat distance

Physical

Researcher-researched: avoiding feeling of being researched

Probes for sensitizing participants (Visser et al., 2005)

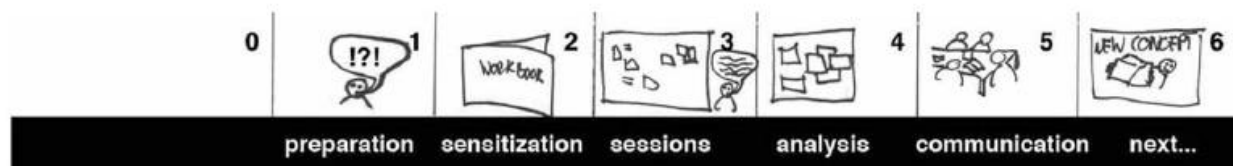


Figure 4. Procedure of a contextmapping study.

“Sensitizing is a process where participants are triggered, encouraged and motivated to think, reflect, wonder and explore aspects of their personal contexts in their own time and environment.” (Visser et al., 2005, p. 123)

Use the probe as a sensitization means, in order to better engage participants into later sessions of co-design.

The article discuss the advantages and disadvantages of group, pair, and individual sessions.

Collaging/toolkits

Collaging (and toolkits) are created to better understand day-to-day experience, explore future possibilities, and speculate (think: tell, make, enact) (Sanders and Stappers, 2014).

Toolkits can also specifically be crafted to enable co-creation—as physical prototyping kits for the participants to have hands-on experience with future materials:

https://sphero.com/collections/all/family_littlebits

In creating toolkits (and collages), the participants' experience, capabilities, are the limit!

Future Workshop (Handbook of PD, p. 145-146 & 152-153)

Phase	2-day schedule	1-day schedule	1/2-day schedule
<u>Preparation phase</u> Designing the room, introducing the Theme and working method	1 h	½ h	1/2 h
<u>Critique phase</u> Creating a richer; common image Of the problematic situation	4 h	2 ½ h	1 h
<u>Fantasy phase</u> Generating visions of an improved Situation without restrictions	6 h	2 h	1 ½ h
<u>Realization phase</u> Bringing the visions down to earth and Developing a plan	4 h	2 h	1 ½ h
<u>Follow-Up Phase</u>			

Jungk & Müller, 1987

Future workshop *can be seen* as a method in which you can put all kinds of tools and techniques into. It is a framework that can help you structure your workshop, and also gives you a sense of how much time you need in order to have meaningful outcomes from co-design. It can be adapted to any stage of design. E.g. it can be about planning the future, where realization is about concretizing a plan, or it can be about concretizing a product using toolkits. The user and the context is the delimiting factor.

Example from practice: Facilitating for Capabilities: Empowering People With Intellectual Disabilities using Proxies to Facilitate Participation (Dæhlen, 2019)



Figure 31: The complete Polaroid Diary toolkit

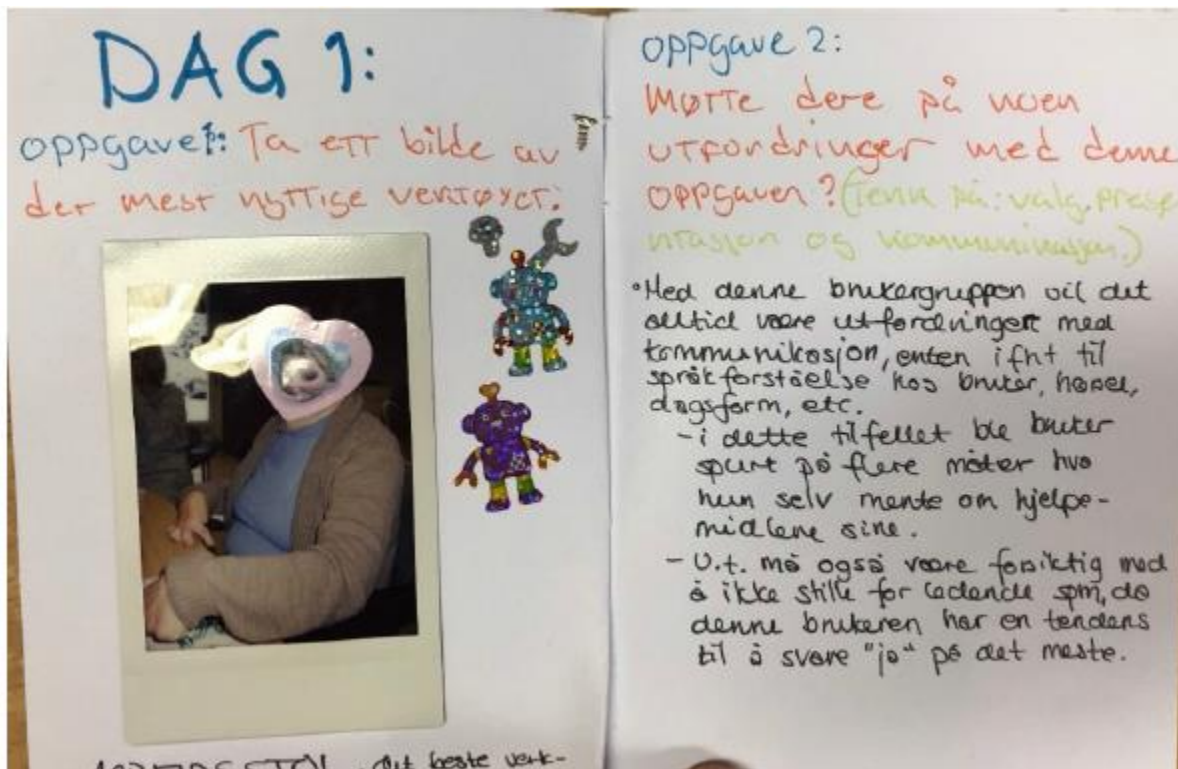


Figure 37: CW4 Reflects on the presentation of choice and cognitive capabilities.

The goal of this approach wasn't to elicit information about the context and use, I had already done ethnography to cover that. These tools and techniques were shaped to enable the healthworkers to

become designers, to think critically about capabilities to participate into design, as well as their wants and needs.



Figure 43: (left) collaging tools, (middle) U4s screen interaction (right) exploring choice.



Figure 48: Icons on post-its, used to explore the users understanding.



Figure 47: CW2 exploring U3s capabilities

I challenge you to use other methods, tools and techniques than what has been shown here. Make your own approaches that fits with the context! Your adaptations, and following reflections will look good on the exam and final report ☺

For example, see use of Universal Methods of Design from lecture for inspiration.