

4. PROCESSES AND METHODS OF SERVICE DESIGN

# SERVICE DESIGN

Prototyping

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## RECAP

- » Ideation
- » Leads to insights
- » Lateral thinking: thinking “outside the box”
- » Iterative process from research data, to insights, to ideation, and the right problem to solve

# ABDUCTIVE THINKING

- » Abductive thinking: the “logic of what might be” – the “probable”, the “possible”
- » Synthesis from data from research combined with intuition
- » Abduction as an act of insight
- » Different than deductive or inductive reasoning, but close to inductive

Deductive reasoning, or *deduction*, is making an inference based on widely accepted facts or premises. If a beverage is defined as "drinkable through a straw," one could use deduction to determine soup to be a beverage.

Inductive reasoning, or *induction*, is making an inference based on an observation, and often an observation of a sample. You can induce that the soup is tasty if you observe all of your friends happily consuming it.

Abductive reasoning, or *abduction*, is making a probable conclusion from what you know. If you see an abandoned bowl of hot soup on the table, you can use abduction to conclude the owner of the soup is likely returning soon.

Kolko, 2008



Critical card

# CRITICAL CARDS FOR IR2

## » Topic #1 Ethnographic and qualitative research in SD → W9 (and W10)

Questions: Is it enough to do quick ethnographic and qualitative research in service design?  
What if it is not rigorous or scientific?

## » Topic #2 Erasing complexity? → (W11 and) W12

Questions: Are tools like the journey map or the Service blueprint erasing complexity (e.g. of people, life contexts and situations), instead of helping us take it into account? Should we use other tools or alter the ones we already use?

## » Topic #3 Abductive thinking in design → W13

Questions: What is abductive thinking as sensemaking in design? How is it different than inductive and deductive thinking in research? Does it allow us to be less rigorous in research or no? → W13

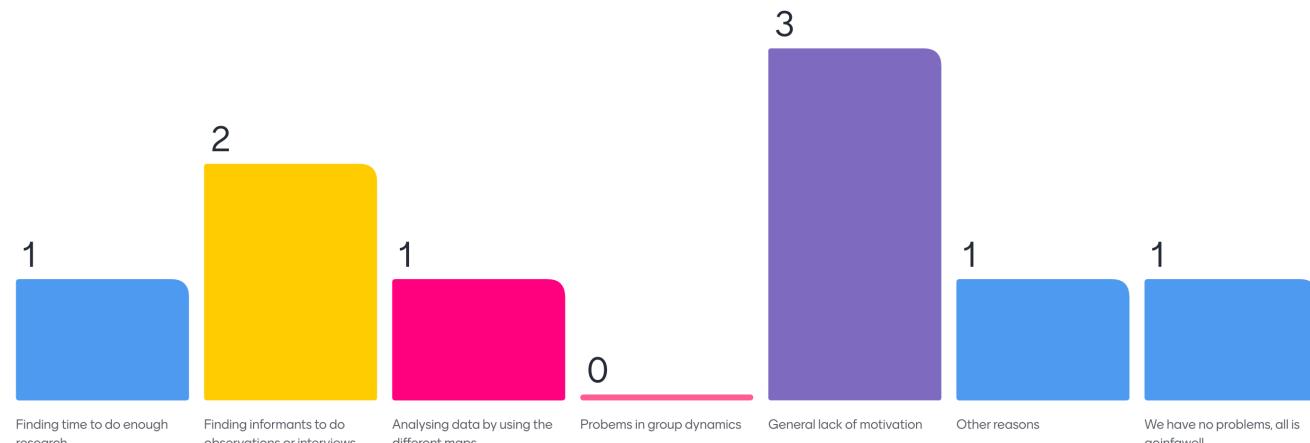
## GP2

- » Prepare a min. 1 minutes / max. 3 minutes\* video that presents your group's prototyping work for the course project
- » You will use photos or videos taken during your prototyping work (e.g. of yourselves working on the different prototypes, the material you have used, when things go wrong and when things go right, testing the prototypes, the different versions of the prototypes you have made)
- » If there are images or recordings of people not from your group, please ask for their permission
- » Show a disclaimer at the end of the video if you use material taken from other sources
- » The aim of the video is to explain service prototyping in practice to next year's Service Design students

# YOUR DIFFICULTIES WITH THE PROJECT

Join at [menti.com](https://menti.com) | use code 3660 7524

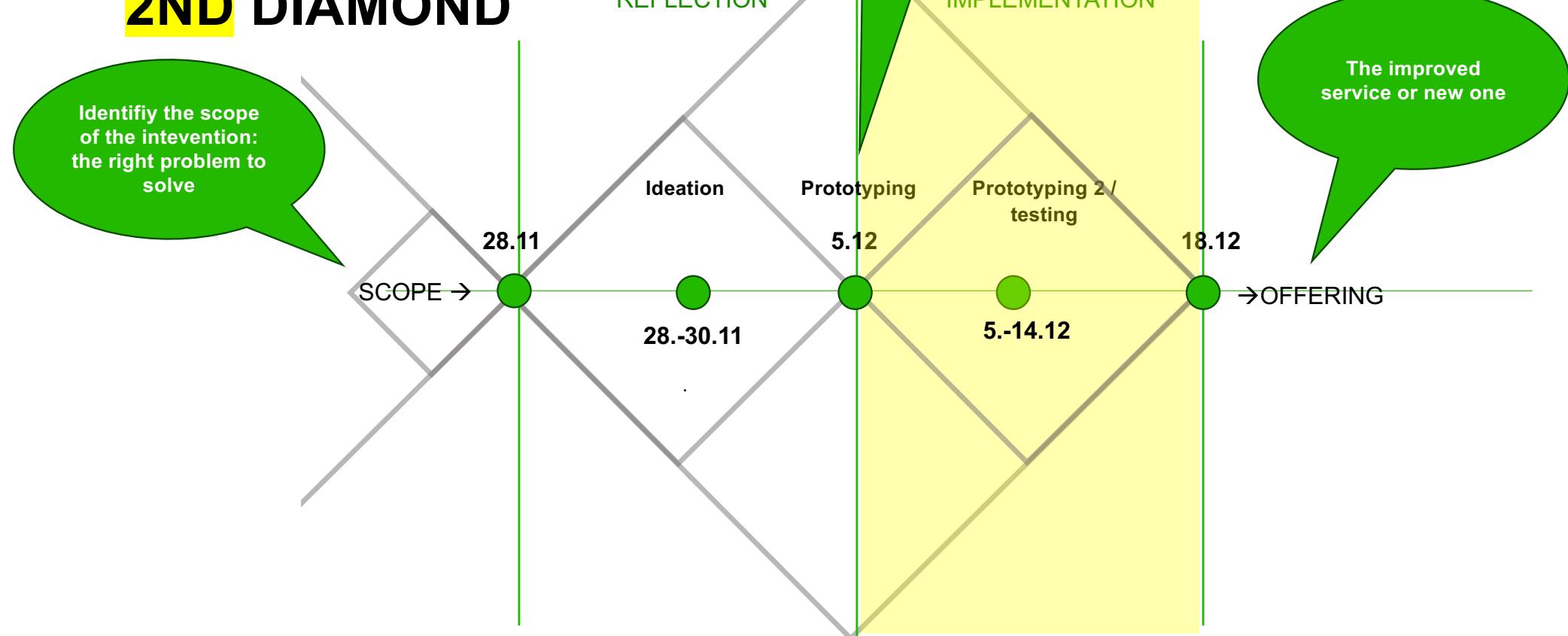
What difficulties are you encountering with your group project?



## SPECIFIC PROBLEMS

- » IR difficult to understand – would have likes example
- » Language issues to understand and write and implement the instructions
- » Instructions sometimes unclear
- » Heavy load in the program
- » Service blueprint difficult to understand
- » Group members not contributing enough – leaving all the work to be done by others, especially for assignments
- » Communication gap in group
- » Some group members have jobs and no tiem

## 2ND DIAMOND



# PROTOTYPING

- » The term prototype derives from the Greek prototypon, which can be interpreted as “first or early form” of something (TISDD, p. 65)
- » Prototypes are tangible (built with physical or digital material), so how can we prototype in service design?
  - » Prototypes of ecosystems and value exchange
  - » Prototypes of interactions, service processes, and experiences
  - » Prototypes of touchpoints: physical objects, environments, spaces, architecture, digital artifacts and software

## HOW MUCH AND WHAT TO PROTOTYPE?

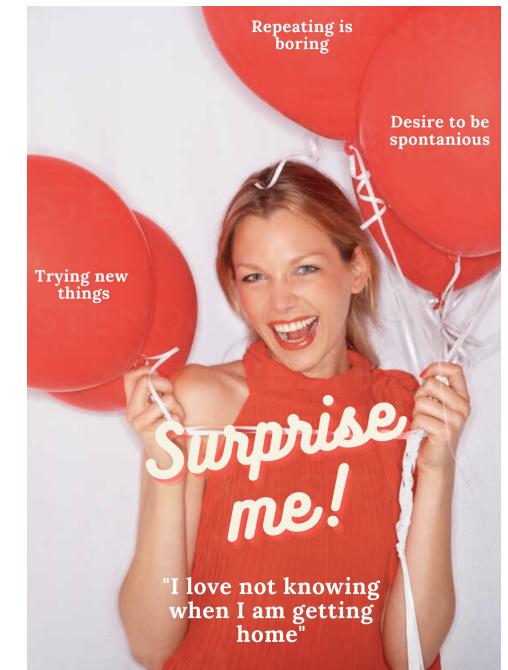
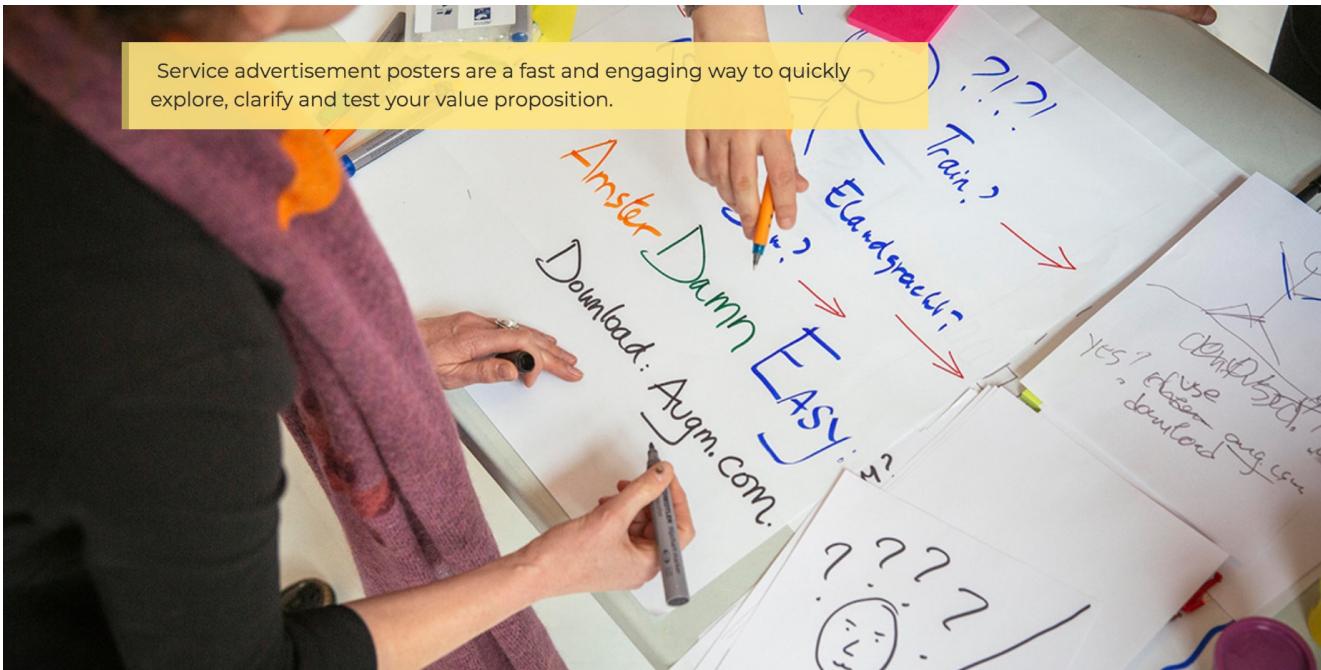
- » The amount of prototypes produced depend on resources available (esp. time)
- » Prototyping one touchpoint only is not enough – it should be combined with at least with a prototype of the service experience and with a prototype of value exchange
- » “One of the key challenges in service prototyping is the constant interplay between prototyping of single touchpoints vs. consistent and iterative development of holistic service experiences.” — Johan Blomkvist
- » The experience of even simple artifacts does not exist in a vacuum but, rather, in dynamic relationship with other people, places and objects. Additionally, the quality of people’s experience changes over time as it is influenced by variations in these multiple contextual factors. “Experience prototypes” aim at constructing a representation of this.

## DIFFERENT PURPOSES

1. Value proposition → **service advertisement**, Value proposition canvas...
2. Touchpoints → ***paper protos, carboard protos, wireframes***
3. Service as a whole / service experience → **Scenarios, storyboards, bodystorming, desktop walkthrough...**

→ we will experiment with these 3 types of prototypes

## Value proposition → Service advertisements



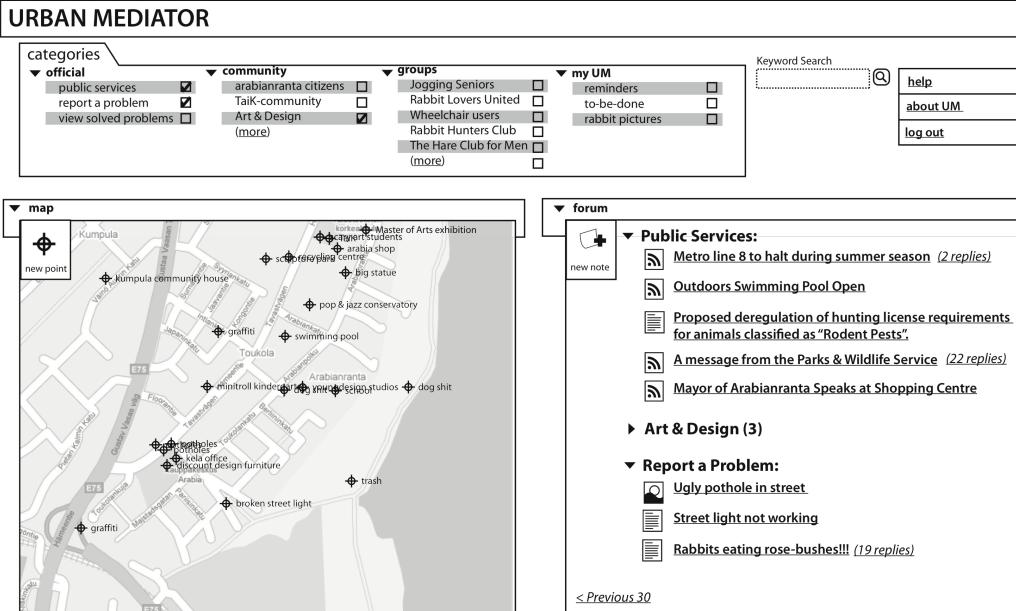
<https://www.thisisservicedesigndoing.com/methods/service-advertisement>

Surprise me!  
– student project ITU

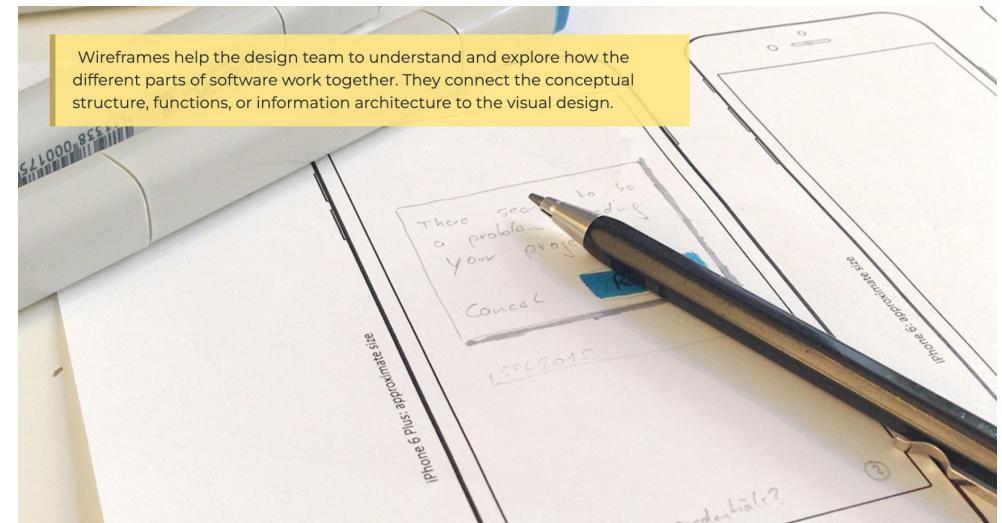
## Touchpoints → Wireframing

*two-equal-column-view*

### URBAN MEDIATOR

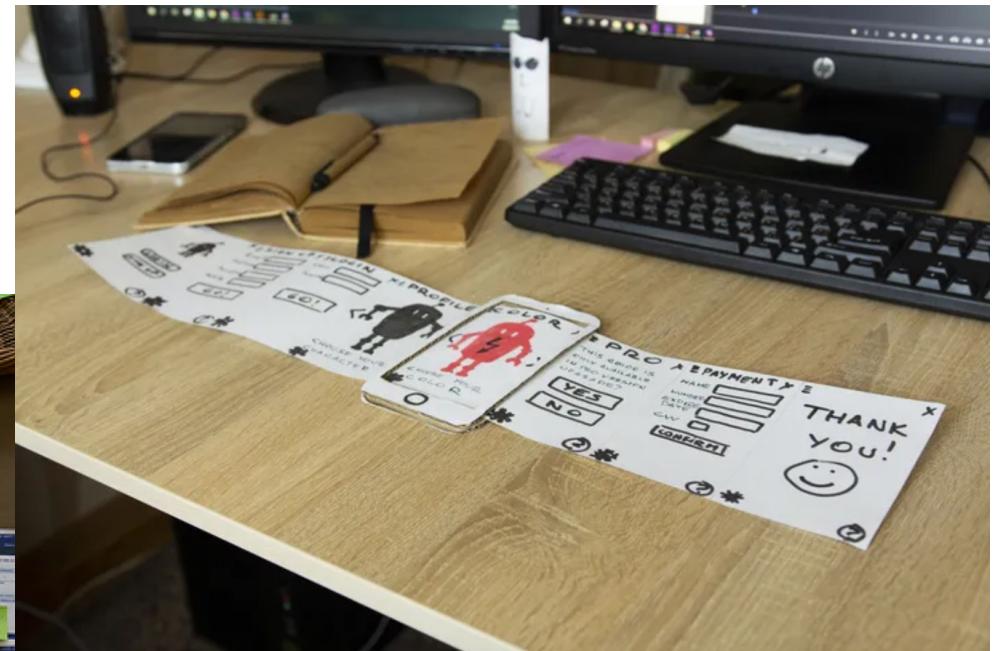
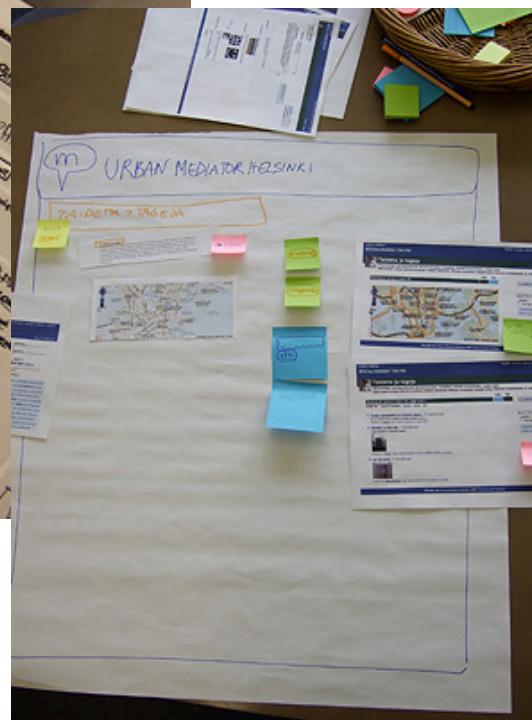
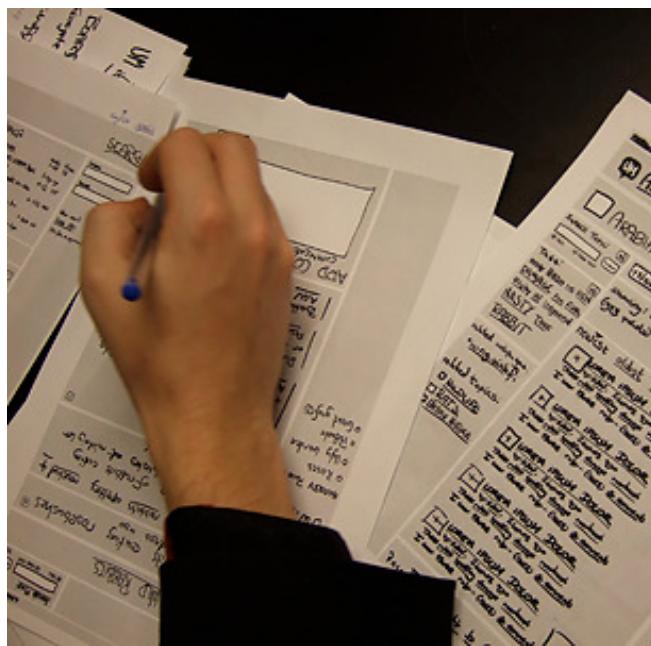


The wireframe illustrates a two-equal-column-view layout for the URBAN MEDIATOR application. The left column contains a map view showing various locations with icons and labels such as 'Kumpula', 'Toukola', 'Arabianranta', and 'Arabia'. The right column contains a navigation menu with sections like 'categories', 'map', and 'forum', along with specific content blocks for 'Public Services', 'Art & Design', and 'Report a Problem'.



<https://www.thisisservicedesigndoing.com/methods/wireframing>

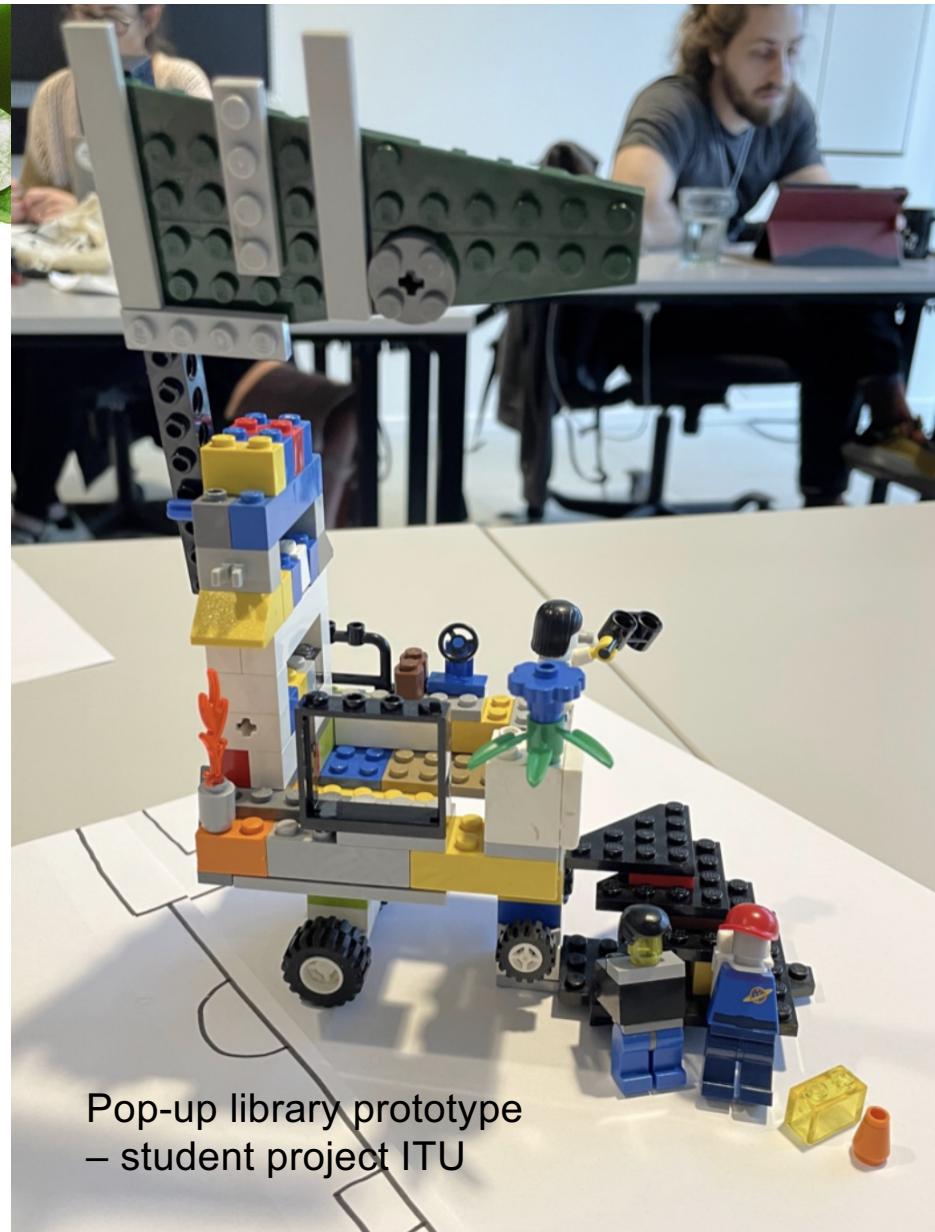
Touchpoints → Paper prototyping



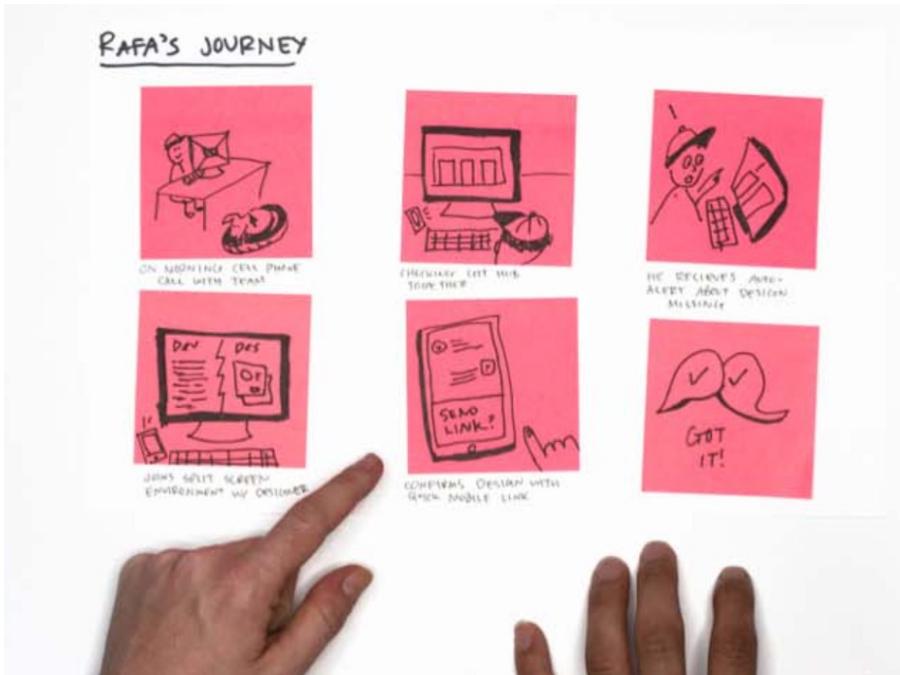
<https://www.interaction-design.org/literature/topics/paper-prototyping>



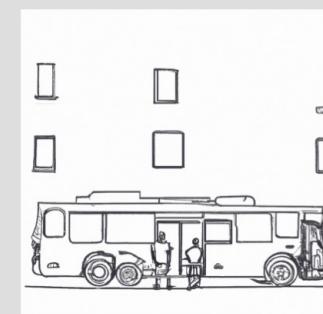
Touchpoints →  
LEGO prototyping



## Service experience → Scenarios or storyboards



After an e-mail about the CPR Bus, Jesper and his two colleagues form a team and sign up.



As the CPR Bus arrives, the registered participants are notified and they enter the bus.



The brush-up course is introduced by the instructor, who initiates with theoretical knowledge.



Hereafter, practical CPR skills are trained in teams.



In the end, Jesper and his colleagues take a recap quiz about the brush-up course.



After two weeks, Jesper is prompted by a notification to take another recap quiz.

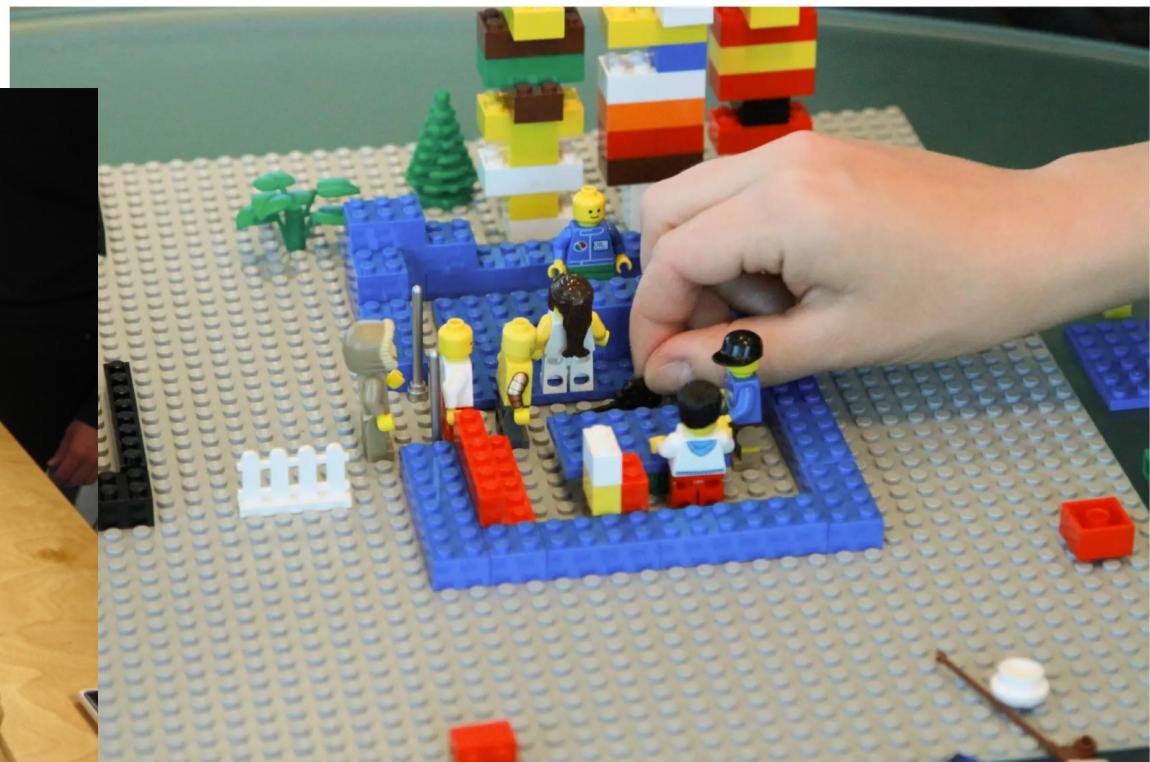
<https://www.ibm.com/design/thinking/page/toolkit/activity/storyboard>

CPR bus – student project ITU

Service experience → Desktop walkthrough



<https://sidlaurea.com/2015/10/06/design-thinking-childs-play-provides-competitive-advantage/>



Low Threshold Service Design: Desktop Walkthrough  
Johan Blomkvist, Annita Fjuk, Vasilisa Sayapina

Touchpoints + service experience → Cardboard prototyping

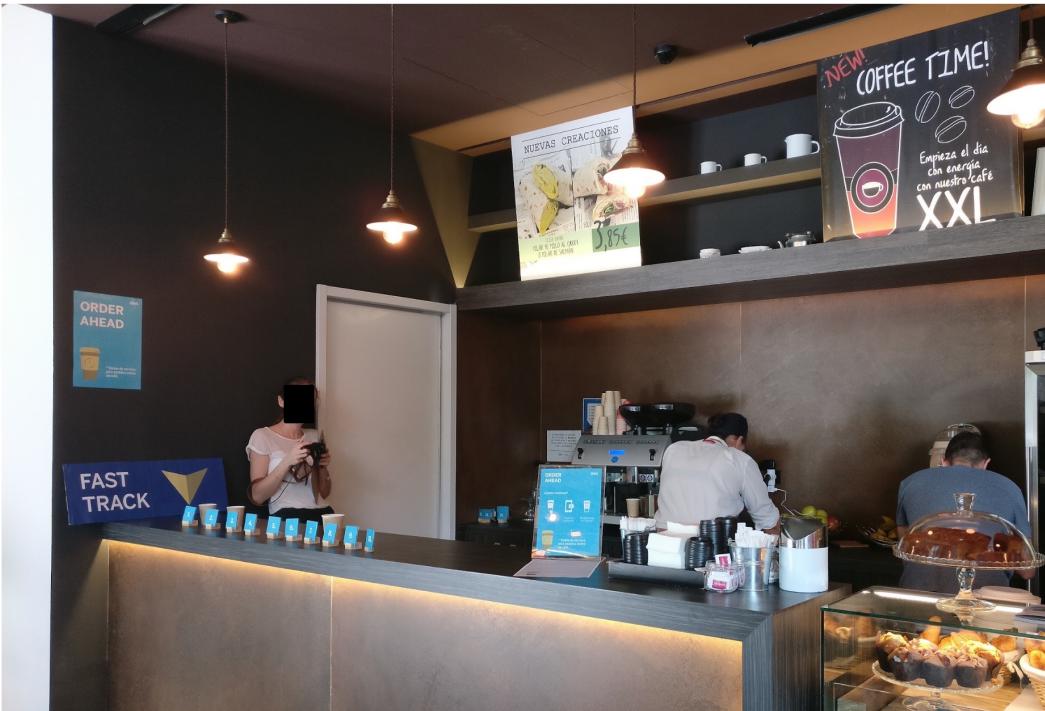


1:1 Cardboard hospital prototype (Aalto University)  
<https://vimeo.com/46812964>

Watch  
video!

<https://medium.com/@jonbarnett/what-makes-service-prototyping-unique-8fa7d0af5149>

Touchpoints + service experience → Contextual prototyping, role playing, and bodystorming



Order Ahead prototyping in the coffee shop - Marcela Machuca

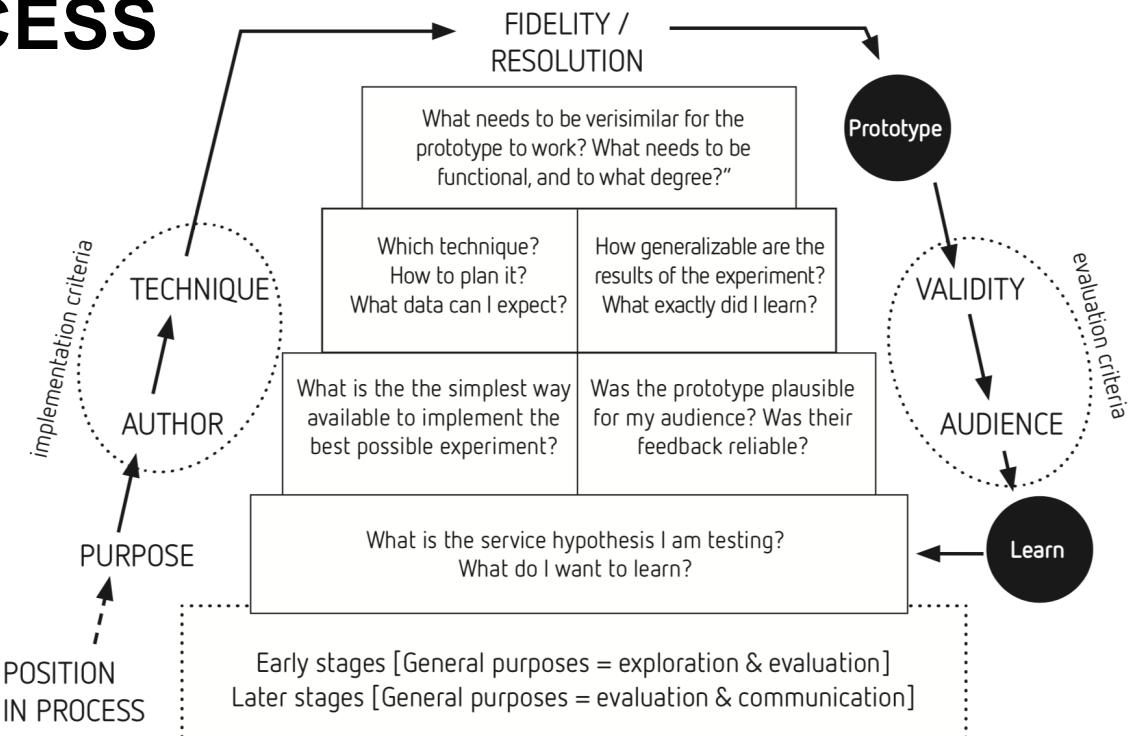


National University of Singapore, Service Design Lab;  
<https://servicedesigntools.org/tools/role-playing>

## ... THERE ARE MANY MORE TYPES OF PROTOTYPES

» <https://www.thisisservicedesigndoing.com/methods>

# PROTOTYPING PROCESS



**Figure 2** The Service Prototyping Practical Framework  
(Passera et al., 2012)

# CHOICES

Where?

Who?

What?

(Passera et al., 2012)

**Table 2** Heuristics to assess the prototyping resources available to the prototype author

Prototyping in a “service prototyping lab” when:	Prototyping on site when:
<ul style="list-style-type: none"> <li>The real location doesn't exist yet</li> <li>The real location is not available for changes</li> <li>The prototype would be a hindrance to the users and staff interacting in the real location</li> <li>Different spatial setups need to be tested and are still under exploration</li> </ul>	<ul style="list-style-type: none"> <li>The space setup is the same, but it will be used in a different way when prototyping</li> <li>It is possible to easily make modifications to the existing space setup, and these modifications do not alter the existing whole business setup</li> <li>The real context is indispensable for validating the prototyping hypothesis</li> </ul>
<b>“Artificial users” (students, colleagues...) to be used when:</b> <ul style="list-style-type: none"> <li>Real users do not exist yet (a totally novel service)</li> <li>Target group is mainstream (everyone is a potential user)</li> <li>Real users cannot be easily recruited</li> <li>The hypothesis / concept is still too unclear and it would confuse the users</li> </ul>	<b>Real users to be used when:</b> <ul style="list-style-type: none"> <li>When the value proposition for the user is clear and easy to understand</li> <li>The target group has specific needs (e.g. seniors)</li> <li>Real users are available to collaborate, and a test failure is not risky (e.g. it doesn't affect the customers' trust or the company image)</li> </ul>
<b>“Artificial staff” (actors, development team...) to be used when:</b> <ul style="list-style-type: none"> <li>The staff hasn't been designated yet</li> <li>The prototyping process is a hindrance to the staff's work activities (e.g. prototyping is done in quick rounds and the staff cannot be involved easily...)</li> <li>The role and script of the staff is still unclear and under development</li> </ul>	<b>Real staff to be used when:</b> <ul style="list-style-type: none"> <li>The staff specific expertise is needed (e.g. to reveal opportunities/limitations in the tested idea; if their skills cannot be imitated by others; key role in service concept...)</li> <li>The staff has been designated and is a key player in the co-creative service development</li> <li>The goal of the prototype is to communicate the new service to the staff and train them</li> </ul>
<b>Mock-ups to be used, when:</b> <ul style="list-style-type: none"> <li>The object needed in the prototyping doesn't exist yet, it is something completely novel</li> <li>Real prop is too expensive or difficult to get (time/cost constraints)</li> <li>It is necessary to be able to implement quickly different alternatives or modifications</li> <li>The object is not a crucial touchpoint, or its fidelity is irrelevant to make the service plausible to the test subjects</li> </ul>	<b>Real props to be used, when:</b> <ul style="list-style-type: none"> <li>They already exist, and are available for use</li> <li>They can be easily changed/modified in order to prototype the new service</li> <li>The service dynamics cannot be truly tested without them, they are a crucial touchpoint</li> <li>The verisimilar look and feel of the servicescape is tested (or it is known to have a strong impact on users reactions)</li> <li>Their usability is the scope of the prototype</li> </ul>

## KEEP IN MIND

- Prototyping is about trying out and learning, not getting it right the first time nor getting it perfect!
- Prototypes are tools to think and work with
- "...prototype whenever you are *in doubt*, and as early as possible" (Passera et al., 2014)

## IDEATION PROCESS SO FAR

- » You have come up and collected ideas through various processes
- » You have selected the most promising ones based on the criteria of “feasibility” and “impact on user experience”
- » Before moving to prototyping, let’s do one more exercise to check your ideas against the different mappings you have previously done
- » This checking allows you to go back to the service as you have analysed and understood it and consider how your new ideas may improve the service, highlighting what you will need to focus on

## YOUR IDEA AS VALUE PROPOSITION (10 MINS)

- » Bring up your most promising idea from your ranked list of last Monday and write it down in the form of a **value proposition** separately on an A4
- » Bring up your "as-is" Stakeholder, Service Ecosystem, User Journey maps, and Service Blueprints
- » Taking one map at a time, how does your idea impact the maps you have? Does it address key painpoints? Does it strengthen relationships between stakeholders or facilitate exchanges? How? If not, should the idea be tweaked?
- » Highlight the areas on these maps that require change through your design intervention and note down
- » Take a picture!

# VALUE PROPOSITION

- » It is the business proposition, but seen from both the business and the customer/user perspective
- » It should be based on real insights garnered from the research
- » It tells a customer the number one reason why a service is best suited for them
- » A value proposition should be communicated to customers directly, either via the company's website or other marketing or advertising materials.
- » Value propositions can follow different formats, as long as they are "on brand," unique, and specific to the company in question.
- » A successful value proposition should be persuasive and help turn a prospect into a paying customer.

<https://www.investopedia.com/terms/v/valueproposition.asp>

<https://www.uxmatters.com/mt/archives/2013/03/service-design-chapter-6-developing-the-service-proposition.php>

# EXAMPLES

Grammarly

## Great Writing, Simplified

Compose bold, clear, mistake-free writing with  
Grammarly's AI-powered writing assistant.

Short but sweet, [Grammarly](#) tells you everything you need to know right away with its value proposition.

Nike



[Nike](#) immediately offers value with three benefits: exclusive access, free shipping, and birthday rewards.

<https://www.constantcontact.com/blog/value-proposition-examples/>

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## SERVICE ADVERTISEMENT (20 MINS)

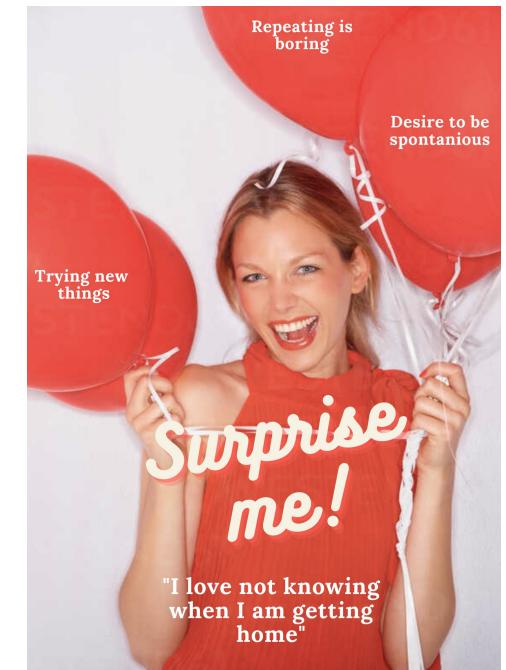
Service advertisements are prototype advertisements that allow us to (re)focus on your core idea and test the desirability and perceived value of a new offering. Like simple advertisement posters, they use concise slogans, engaging visuals, and text to sell the new offering. Later, service advertisements can be created as online ads, web landing pages, or TV or video advertisements (including in-depth documentary-style variants).

- » Preparation: Use the Value Proposition statement you have articulated in the previous exercise. The service advertisement poster will focus on this value proposition.

Do a brief brainstorming on ideas for emotional and factual content for the poster. What do you want to communicate in the ad? What could be suitable emotional hooks or narratives? What are the facts? Could you use quotes from the people you have interviewed? Sketch out a couple of advertisements on big pieces of paper.

- » Use: Show your advertisements to people who do not yet know your project and collect their feedback. Keep a list of bugs, insights, and ideas. Discuss what worked or what didn't work, and what you would like to change. Revise your prototype and iterate.

## Value proposition → Service advertisements



<https://www.thisisservicedesigndoing.com/methods/service-advertisement>

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## NEXT PROTOTYPING

- » Wednesday 4.12: Scenario or storyboard (using paper or generative AI)
- » Monday 9.12: One touchpoint prototype or wireframing (using paper or cardboard or LEGOs) → check out the videos on Moodle
- » Wednesday 11.12: Test your touchpoint prototype or wireframes with others using the desktop walkthrough method (building a miniature spatial model with cardboard or LEGOs) or using contextual prototyping in real life location
- » Final assignment submission, DL 18.12 on all prototyping exercises of these 2 weeks

## GP2

- » Prepare a min. 1 minutes / max. 3 minutes\* video that presents your group's prototyping work for the course project
  - » You will use photos or videos taken during your prototyping work (e.g. of yourselves working on the different prototypes, the material you have used, when things go wrong and when things go right, testing the prototypes, the different versions of the prototypes you have made)
  - » If there are images or recordings of people not from your group, please ask for their permission
  - » The aim of the video is to explain service prototyping in practice to next year's Service Design students ☺
- More details on Moodle!

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## REFERENCES

- » Passera, S., Maila, R., & Kärkkäinen, H. (2012). When, how, why prototyping? A practical framework for service development. ISPIM Conference Proceedings; Manchester : The International Society for Professional Innovation Management (ISPIM). 1-16.

