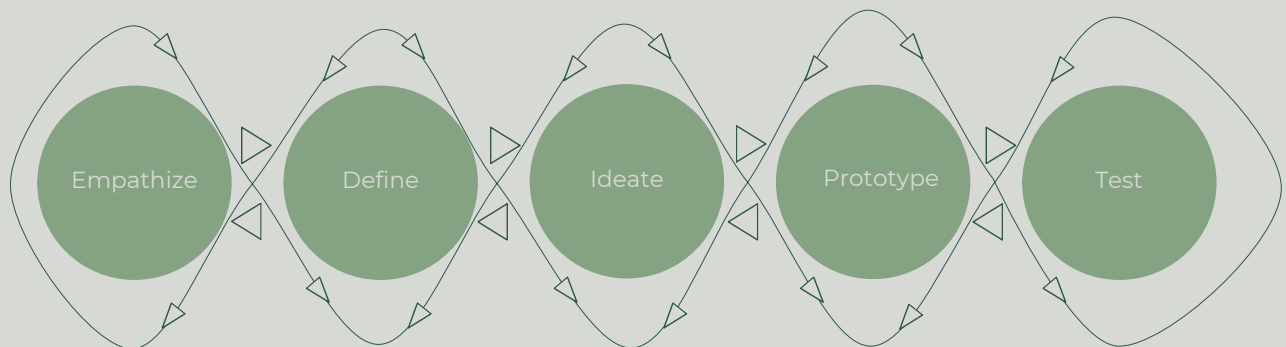


STEP-BY STEP INSTRUCTIONS TO DESIGN THINKING

Follow the five step process. Begin with "Empathize" to deeply understand the users' needs. Then "Define" the problems articulated by users. Continue with "Ideate" phase, generating a variety of solutions. Proceed to "Prototype and test," to gather user's feedback and through "Reflection" refine your solutions iteratively.

Process / phases



1

EMPATHIZE



Time: 7 h (1. 1 h, 2. 3 h, 3. 3 h)



Task:

1. Define the target group for your product or service.
2. Understand your users and their needs and problems through user research.
3. Analyse the market (demand, stakeholders in the sector).



Result: defined target group with various problems and needs of the users.



Useful material:

T1 and T2. Empathy Map, Persona creation, Market research (e.g. interviews or surveys), AIEOU method, Job-to-be-Done, Customer Journey Map, Value Proposition

T3. comparison table, 5-Forces, SWOT method



Time: 4h



Task: Define the problems from the user's point of view based on the information collected and the knowledge from the previous phase.



Result: A precisely formulated problem statement.



Useful material: Build ideas on ideas, Clustering, 2x2-Matrix, Context Mapping, How might we question

3

IDEATE



Time: 7 h (T1. 2 h, T2. 4 h, T3. 1 h)

**Task:**

1. Generate ideas and solutions for the product by thinking "outside the box" (note: ideas, not requirements for the product, should be expressed).
2. Further develop the ideas.
3. Choose an idea that you would like to explore further.



Result: A mature, user-centered, economically feasible and realistic idea.

**Useful material:**

- T1. Brainstorming, Moodboard, Research and trend analysis
 T2. Build ideas on ideas, morphological box, NABC
 T3. Benchmarking, decision matrix, pros and cons list



Time: depends on the type and complexity of the prototype



Task: Build a prototype that can be used for testing. This does not necessarily have to be functional or built in the correct size or with the right material at first.

1. Select a version of the prototype (sketch, form model, functional model, demonstration model, MVP)
2. Build a prototype with low-cost materials (e.g., paper and cardboard)
3. Test with the team involved in this DT process and collect feedback
4. Optimize the prototype based on feedback
5. Test and collect feedback from potential users
6. Optimize the prototype based on feedback of the users

Tasks three and four, as well as five and six should be repeated as often as necessary. Through every round of observation or feedback you can get new ideas for optimization.

While testing, it is important to carefully observe the user's behavior and to take notes. In order to create a realistic testing environment explain to the user as little as possible about the prototype of your product.



Result: A prototype that is tested with users



Useful material: For Testing: [A/B-Testing](#), [Wizard-of-Oz-Experiment](#), [Feedback-Capture-Grid](#), solution interview



Iterate on the solutions and ideas by incorporating the feedback of users

5

REFLECT



Time: 2 h



Task: Take a moment to consider both your team's collaboration process and the outcomes achieved thus far. Ask questions: what works well and what can be improved? You should use this step at least at the end of the process, but you can also use it at any time to make your work more effective.



Result: Suggestions for improvement for further work together.



Useful material:

Feedback-Capture-Grid, Five-Finger Feedback, write down your lessons learned



WHAT IS THE DESIGN THINKING METHOD?



THE PROCESS OF DESIGN THINKING



In the next page you will find a Design Thinking example for a “Wallet case”