Design Thinking

Design Thinking is a creative, human-centred method for developing innovative solutions to complex challenges. It focuses on the needs of the people for whom a solution is being designed. Through a structured, iterative process, problems are first understood, then ideas are generated, transformed into prototypes, and tested collaboratively. The method combines creative thinking with systematic problem-solving and encourages collaboration between people from different backgrounds and disciplines.

Participation Depth	Have a say
Project Phase	Onboarding, Concept Development
Goals	Developing Ideas
Format	Analogue
Duration	1 Day
Target Group	Directly Affected, Interested Public, Organised Actors
Group Size	Small Group up to 15, Medium Group up to 30
Characteristics	Structured, Playful

GOAL OF THE METHOD

Design Thinking helps participants approach complex challenges from the perspective of future users and collaboratively develop innovative solutions. The objective is to better understand users' needs, bring together diverse perspectives, and iteratively develop and improve ideas.

PROCEDURE

Preparation

1. Define the Problem and Objective

At the beginning, describe the challenge as openly as possible. Rather than searching immediately for a solution, the focus is on understanding the problem. At the same time, define the target group and clarify the expected outcome of the process.

Examples of guiding questions:

- How can the route to school be made safer?
- How can a public square become more attractive?
- How can young people be better involved in participation processes?
- How can access to public services be simplified?

2. Assemble the Team

Design Thinking thrives on diverse perspectives. The team should include people with different backgrounds, experiences, age groups, and areas of expertise. Teams typically consist of five to six participants. For larger events, several teams can work in parallel.

Depending on the topic, participants may include:

- citizens
- public administration
- politicians
- planners
- community organisations
- businesses
- experts
- affected stakeholders

3. Prepare the Process and Schedule

Although Design Thinking encourages creativity, it follows six consecutive phases. Sufficient time should be allocated for discussion, creative work, and multiple iterations.

Example of a one-day workshop

- 09.00–09.30 Welcome and introduction
- 09:30–10:15 Phase 1: Understand
- 10:15–11:00 Phase 2: Observe
- 11:00–11:15 Break
- 11:15–12:00 Phase 3: Define
- 12:00–13:00 Lunch break
- 13:00–14:15 Phase 4: Ideate
- 14:15–15:30 Phase 5: Prototype
- 15:30–16:30 Phase 6: Test and Feedback
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16:30–17:00 Summary and outlook

Depending on the project, the process may also extend over several workshops or weeks.

4. Prepare Materials
Design Thinking requires a flexible working environment that supports teamwork, visualisation, and prototyping.

Typical materials include:

- pinboards or whiteboards
- moderation cards
- flipcharts
- sticky notes
- markers
- dot stickers
- paper
- scissors
- adhesive tape
- craft materials
- LEGO®, modelling clay, or cardboard
- tablets or laptops (for digital prototypes)

Execution

1. Understand
The team develops a shared understanding of the challenge. Existing knowledge is collected, and open questions are identified. The goal is to understand the problem thoroughly before generating solutions.

Helpful resources include:

- short expert presentations
- maps or plans
- existing studies
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statistics

- user experiences
- team discussions

At the end of this phase, a clearly defined design challenge should emerge.

2. Observe
The focus shifts to the people for whom the solution is intended. The goal is to understand their needs, expectations, and challenges.

Possible methods include:

- interviews
- active interviews
- observations
- walks
- shadowing
- photo documentation
- diaries
- short surveys

Example**:**

For redesigning a school route, one group observes traffic, another interviews parents and children, while a third documents dangerous locations through photographs.

The findings are then shared and discussed.

3. Define
The collected information is analysed and organised. The objective is to identify the underlying challenge behind the observations.

Patterns, similarities, and user needs become visible. Different perspectives are discussed until a shared understanding of the problem is reached.

Helpful methods include:

- Affinity Mapping
- Personas
- Storytelling
- Empathy Maps
- Mind Mapping

The phase concludes with a clearly formulated design challenge, for example:

"How might we redesign the route to school so that children can travel safely and independently?"

4. Create ideas

This is the creative phase of the process. The goal is to generate as many ideas as possible without evaluating them initially.

Unusual or seemingly unrealistic ideas are encouraged, as they often inspire innovative solutions later on.

Useful creativity techniques include:

- Brainstorming
- Brainwriting
- 6-3-5 Method
- Crazy 8s
- Perspective Shifting
- "What if...?" questions

Once many ideas have been generated, they are organised, combined, and evaluated using predefined criteria.

The most promising concepts are selected for the next phase.

5. Prototype

The selected ideas are transformed into initial prototypes. The goal is to make ideas tangible quickly rather than creating perfect solutions.

Possible prototype formats include:

- sketches or storyboards
- paper, cardboard, or LEGO® models
- role-playing scenarios
- digital click-through prototypes
- revised plans or maps
- physical spatial models

Simple prototypes make it easier to test multiple alternatives and improve them rapidly.

Example:

For redesigning a school playground, a cardboard model is built with movable elements representing seating areas, play spaces, and pathways. Alternatively, layouts can be explored directly on a large site plan using paper or sticky notes.

6. Test

The prototypes are tested with the target group or other stakeholders. The objective is to identify what works well, where difficulties arise, and what improvements are needed.

Possible testing methods include:

- presentations with feedback sessions
- short interviews
- user observations
- site visits
- temporary installations
- simulations
- digital usability tests
- small-scale mobility or usage experiments

Helpful questions include:

- What already works well?

- What is still missing?
- What difficulties arise?
- What should be changed?
- Would you use this solution in everyday life?

Feedback is documented and analysed collaboratively. Testing is not the end of the process but the beginning of another iteration. Insights may lead to revised prototypes, new ideas, or even a redefinition of the original challenge.

Evaluation

1. Document and Evaluate the Results

After the workshop, all outputs are collected and documented, including notes, sketches, photographs of prototypes, maps, models, and feedback from the testing phase.

The results are then systematically evaluated by examining:

- which user needs were mentioned most frequently,
- which ideas received the most positive feedback,
- which challenges remain unresolved,
- which improvements were suggested,
- which prototypes should be developed further.

Depending on the project, methods such as Topic Mapping, Sensemaking, or Content Analysis can be used.

2. Further Develop the Results

Insights from the testing phase directly inform the next iteration.

The team decides:

- which ideas should be pursued,
- which require adaptation,
- which should be discarded,
- which questions remain unanswered,
- what the next development steps will be.

Design Thinking views innovation as an iterative process. Multiple cycles of development and testing are expected and encouraged.

3. Communicate the Results
Summarise the results in an accessible report and share them with all participants.

The documentation should explain:

- how the process was conducted,
- which insights were gained,
- which prototypes were developed,
- what feedback was received,
- how the results will be used moving forward.

Transparent communication demonstrates how participants' contributions influence the ongoing development process.

Source: https://partizipation.at/partizipation-anwenden/methoden/

WHEN USEFUL?

- For jointly developing new ideas and innovative solutions.
- For complex challenges involving many different requirements.
- When the needs of future users should be at the centre of the process.
- For projects involving collaboration across different disciplines and perspectives.
- For developing and testing initial solution concepts or prototypes.

WHEN NOT USEFUL?

- For projects with predefined solutions.
- For challenges that are entirely determined by technical or legal requirements.
- When there is insufficient time for testing and iteration.
- If there is no willingness to revise and improve ideas repeatedly.
- For projects focused solely on data collection or information sharing.

TIPS

- Diverse teams often produce more creative solutions.
- Keep users' needs at the centre throughout the process.
- Avoid evaluating ideas during the ideation phase.
- Develop several simple prototypes rather than one complex one.
- Collect user feedback as early as possible.
- Treat mistakes and revisions as valuable parts of the innovation process.
- Continuously visualise and document the work.
- An experienced facilitator helps guide the iterative process and ensures that everyone's perspective is included.

NOT SUITABLE FOR

- Projects with predefined solutions or decisions.
- Processes without sufficient scope for creativity or open outcomes.
- Projects with very limited time for developing and testing prototypes.
- Challenges that are entirely dictated by technical or legal requirements.
- Groups unwilling to collaborate creatively or revise ideas repeatedly.
- Projects without access to the target group or without opportunities to test proposed solutions.

View online: https://methoden.urbankit.de/en/methods/design-thinking