

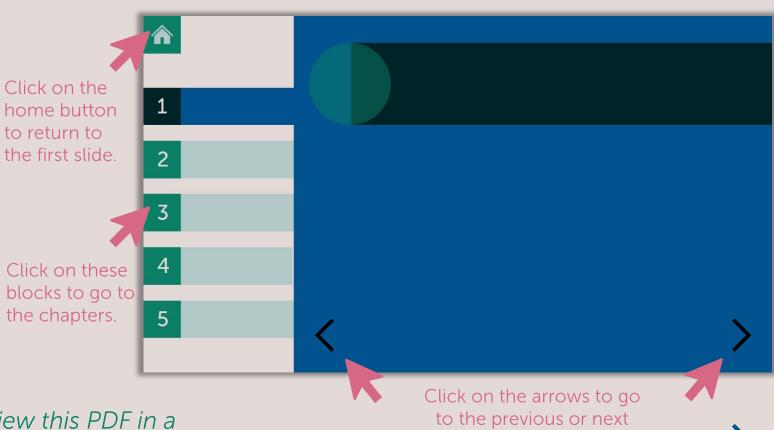
# Using Design Thinking as A Tool for Creating Solutions With Stakeholders





### How it works

This module is presented as an interactive PDF, providing you with a seamless navigation experience. You can easily move to different topics by simply clicking on them. In addition to the visible navigation buttons on the side of each page, you will also find clickable sections within the module. These clickable sections are identified within the text.



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You also have the option to view this PDF in a continuous scrolling mode if you prefer.





- Principles of design thinking
- How does design thinking work?
- What to consider when applying design thinking?
- 5 Final steps

#### LEARNING OBJECTIVES

#### After completing this module, you can:

- Explain the **benefits of design thinking** for collaborating with stakeholders
- 2 Identify the **steps** of design-thinking
- Recognize the **issues** significant for applying design thinking with stakeholders



#### 1. WHAT IS DESIGN THINKING?



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# WHAT IS DESIGN THINKING?

Design thinking is a mindset approach to problem solving and innovation that revolves around human-centered design.

It is solution-based and usercentric, rather than problembased, which means it focuses on the solution to a problem, rather than the problem itself.





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### WHAT IS DESIGN THINKING?

The approach emphasizes understanding the user's perspective and identifying the challenge before jumping into solutions. Therefore, the initial stage of design thinking involves empathizing with the target audience to gain a thorough understanding of their needs and challenges.





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# WHAT IS DESIGN THINKING?

Design thinking is particularly useful for social innovation, which involves developing new or improved interventions or services to address social or environmental challenges and generate positive impact.

This approach can facilitate collaboration with individuals from diverse perspectives, enabling organizations and communities to discover new opportunities, co-create innovative ideas, and validate solutions in real-world scenarios.





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# WHAT IS DESIGN THINKING?

#### Key elements of design thinking:

- Thinking through visualization, storytelling, and experimentation by building and testing prototypes.
- This approach helps bridge gaps between the perspectives of those involved in a challenge and the insights of the researcher or expert.
- Because these perspectives come together in a design-oriented manner, it often leads to more innovative solutions for approaching challenges.





#### 2. PRINCIPLES OF DESIGN THINKING





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### PRINCIPLES OF DESIGN THINKING

#### Principles of the design thinking mindset





Click on the principles to learn more





Holistic and integrative



Flexibility and comfort with ambiguity



**Growth mindset** 

Click for the next chapter







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### PRINCIPLES OF DESIGN THINKING



#### User centric







Design thinking prioritizes users' values, experiences, and needs over products and technology, ensuring that solutions address real-world challenges effectively.









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### PRINCIPLES OF DESIGN THINKING



#### **Cross-disciplinarity**









Embracing diverse teams with varied backgrounds fosters openness to different perspectives, including those of external stakeholders. This cross-disciplinary approach enriches problem-solving by integrating insights from various fields.





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### PRINCIPLES OF DESIGN THINKING



#### Holistic and integrative thinking









Design thinking encourages considering relationships and connections between seemingly unrelated ideas, alongside important details. This holistic perspective enables comprehensive problem analysis and innovative solution development





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### PRINCIPLES OF DESIGN THINKING







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Adaptability is key in addressing ambiguously defined societal challenges. The design thinking mindset embraces uncertainty and ambiguity, allowing for flexible approaches to problem-solving.







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### PRINCIPLES OF DESIGN THINKING



#### **Growth mindset**









Design thinking promotes experimentation and learning from failure. Embracing a growth mindset, designers test ideas and prototypes iteratively, continuously refining solutions based on feedback and insights gained along the way.





# 3. HOW DOES DESIGN THINKING WORK?



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#### HOW DOES DESIGN THINKING WORK

Design thinking generally consists of **five activities**. Although presented as steps, it is important to recognize that design thinking is not strictly linear. Rather, the steps can be considered as **distinct modes or spaces for navigating the design process**.

The level of stakeholder participation may vary per phases and should align with the core objective of the project. In design thinking, multiple iterations occur throughout the various phases.

The design thinking process typically begins with 'Identify' (empathize and define) and then 'Solve' (create, prototype, and test).

This **non-linear structure** encourages the rapid generation of potential solutions, recognizing that they may be incomplete or flawed, which facilitates learning and refining solutions.

Click here for a visual overview of the five activities



Principles of design thinking

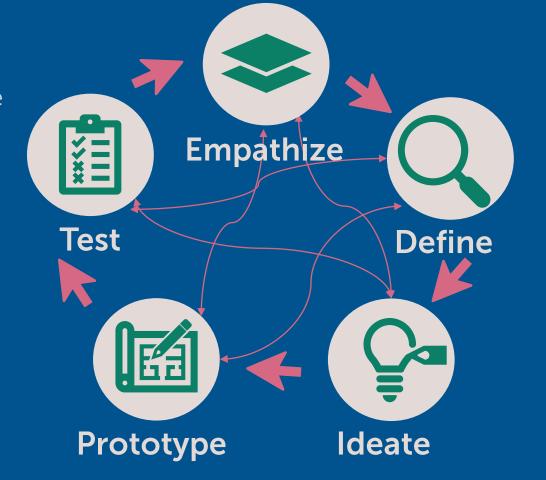
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### HOW DOES DESIGN THINKING WORK

Click on the icons to learn more about the design thinking activities.



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#### HOW DOES DESIGN THINKING WORK



The initial step in design thinking is to gain a deeper understanding of the challenge from the user's perspective. To achieve this, it is recommended to become fully immersed in the physical context of the challenge, such as a neighborhood or community.

Qualitative methods, such as observation, interviews, group discussions, workshops, and other approaches, are highly prioritized in design thinking. Insights can be obtained from literature reviews, experiments, or any other analytical processes.

Video





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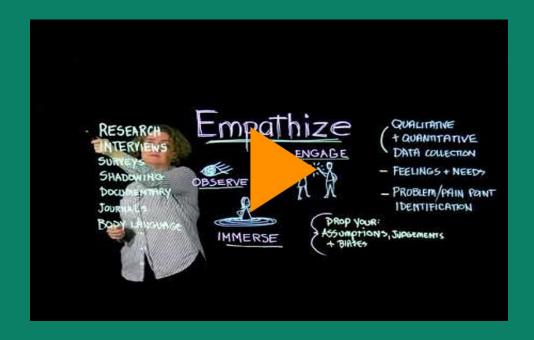
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### HOW DOES DESIGN THINKING WORK



**Emphatize - Video** 







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#### HOW DOES DESIGN THINKING WORK



In this step, the team (ideally also including the stakeholders) collaboratively identifies and reaches consensus on the insights that appear most interesting and relevant. If reaching unanimous agreement is challenging, consider a more systematic approach by grouping insights into clusters based on common stakeholders, institutions, or other relevant factors.

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Click for a format of a clear problem statement



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#### HOW DOES DESIGN THINKING WORK



To help formulate a clear problem statement in this step, the following format can be used:

{Stakeholder X} needs/is lacking {specific need or lack} because/due to/although... {insight}

Click here for an EXAMPLE

Click here for a video



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### HOW DOES DESIGN THINKING WORK



The municipality is lacking comprehensive information on the factors that play a role in tackling alcohol reduction among youth **although** they recognize addressing this behavior is crucial for their youth's wellbeing.

**EXAMPLE** 





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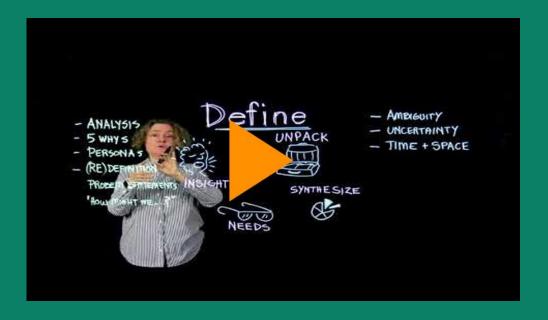
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### HOW DOES DESIGN THINKING WORK



**Define - Video** 







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#### HOW DOES DESIGN THINKING WORK



During this step, the team engages in a brainstorming session to generate potential solutions, using the problem statement as a focus. The principle of 'no judgment' is emphasized, meaning that there are no wrong solutions, and the group avoids debating or critiquing at this stage. The goal is to capture a wide variety of solutions, prioritizing quantity over quality.

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### HOW DOES DESIGN THINKING WORK



There are several methods that can facilitate a brainstorming session. One example of such a method is as follows:

Each group member writes down the first solution that comes to mind. Solutions are then shared one-by-one, layered on the table, with the next person adding or introducing new solutions that build on the previous ones. This process consists of multiple two-minute rounds, which encourage innovative ideas due to time pressure.

Click to read

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### HOW DOES DESIGN THINKING WORK



After the brainstorming session, a variety of ideas should emerge. It may be advantageous to establish a **set of criteria** for the desired solution and then evaluate and select ideas that meet these criteria.

These criteria may include:

- **Desirability**: is this what the organization or community wants/needs?
- Feasibility: can we deliver the solution?
- Viability: is the solution aligned with long-term goals?

Click here for a video



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### HOW DOES DESIGN THINKING WORK



Ideate - Video







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#### HOW DOES DESIGN THINKING WORK



Prototype

During this step, the objective is to create a physical or conceptual prototype of the selected solution. The main purpose of prototyping is to concretize the concept and identify potential blind spots. Prototyping is therefore an essential activity in design thinking employed to examine and improve concepts by testing different variations. The team may develop multiple prototypes before choosing one or more to showcase to individuals who could benefit from or utilize the solution.

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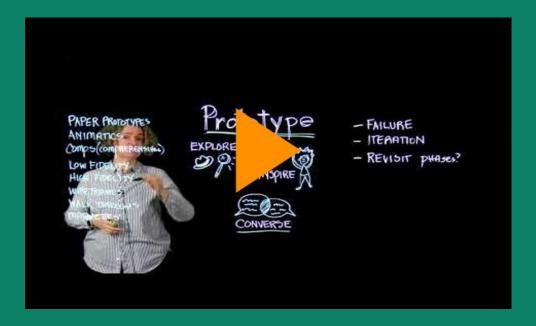
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### HOW DOES DESIGN THINKING WORK



**Prototype - Video** 







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#### HOW DOES DESIGN THINKING WORK



**Test** 

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The purpose of this step is to receive feedback on concept prototypes and the ideas and assumptions embedded in them. In the design thinking process, feedback is used to make enhancements, particularly in the early stages.

This is not the final step, as the feedback serves to educate and discover, not just confirm. Potential prototypes should be presented to stakeholders as soon as possible, especially those who may be affected by the solution. Their input can facilitate prompt improvements.

Click here for a video





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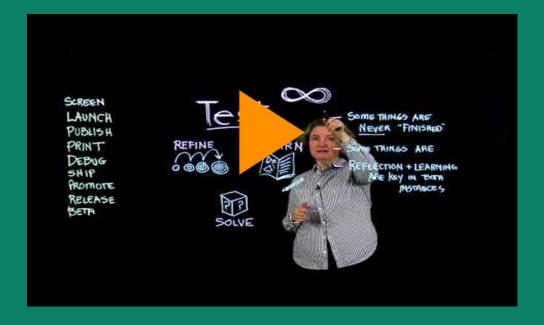
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### HOW DOES DESIGN THINKING WORK



**Test - Video** 







## 4. WHAT TO CONSIDER WHEN APPLYING DESIGN THINKING?



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# WHAT TO CONSIDER WHEN APPLYING DESIGN THINKING

### The challenges of using design thinking with stakeholders

Using design thinking with stakeholders can present **challenges** due to their varying backgrounds, expertise, and resources. While this approach can be beneficial for addressing societal challenges, it may also complicate the design thinking process. As stakeholders have individual goals and interests, frictions can arise, such as:

- A vague or inaccurate challenge definition.
- Deviation from the original goals
- Resistance from stakeholders to further involvement in the project.



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# WHAT TO CONSIDER WHEN APPLYING DESIGN THINKING

### The tools to support stakeholder management in design thinking

Stakeholders can benefit from new perspectives, insights, and innovative approaches to the problem. Cocreation facilitates the generation and maintenance of stakeholder commitment to the project. The project's eventual outcome can be positively influenced by actively engaging stakeholders in every activity, fostering a sense of ownership.





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# WHAT TO CONSIDER WHEN APPLYING DESIGN THINKING

### The tools to support stakeholder management in design thinking

In projects involving diverse stakeholders with different interests, it is essential to align these perspectives. By helping stakeholders understand the perspective and experiences of these organizations or communities, they are more likely to be open to alternative solutions, rather than solely adhering to their own interests. Therefore, it is important to involve stakeholders in "empathize" activities.



Click here to see the tools that can help with stakeholder management.



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# WHAT TO CONSIDER WHEN APPLYING DESIGN THINKING









Storytelling

**Early prototyping** 

Generative session



Stakeholder mapping

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# WHAT TO CONSIDER WHEN APPLYING DESIGN THINKING



Using both visual and verbal narratives to convey intricate information in a persuasive and efficient manner can foster commitment among stakeholders. These presentations enable stakeholders to provide feedback, generate novel ideas, or embrace one of the proposed ideas.



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# WHAT TO CONSIDER WHEN APPLYING DESIGN THINKING



Testing various ideas in a rapid and iterative manner, presenting stakeholders with a prototype of prospective options, provides novel avenues for exploration.





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# WHAT TO CONSIDER WHEN APPLYING DESIGN THINKING



Inviting individuals from the organization or community with whom you are collaborating to share their viewpoints and experiences regarding the solution being developed helps create an open forum for collaborative discussion and reflection. In this way, there is an open space for sharing opinions and co-creation that fosters reflection and discussion.



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# WHAT TO CONSIDER WHEN APPLYING DESIGN THINKING



This is an approach to visualizing stakeholders, their interests, relationships and interdependencies. It can be used to build a shared agenda and identify opportunities or obstacles.





#### 5. FINAL STEPS



### Literature

#### References

- Calabretta, G., & Gemser, G. (2015). <u>Integrating design into the fuzzy front end of the innovation process</u>
- Swiss Academies of Arts and Sciences (n.d.). **Design thinking**
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# About this e-module

#### **AUTHORS**

The content of this module was developed by **Dr. Crystal Smit**, Assistant Professor at ESSB (project lead), **Denise Levy**, Learning Innovator at Impact at the Core, and **Dr. Niko Vegt**, Researcher at ESSB, all from Erasmus University Rotterdam.

#### CONTEXT

This e-module is intended to be used in impactdriven courses where students collaborate with external stakeholders such as non-profit organizations, municipalities, health institutions, youth initiatives, schools, and others.

#### **DESIGN**

The instructional design of this e-module was developed by Akke van der Laan, Learning & Development Expert at L&D talents. The graphic design is done by <u>Risbo</u>.

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Impact at the Core

