

# Design Thinking

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## WHAT IS IT?

Design Thinking is a methodology used by designers to solve complex problems and find desirable solutions. A design mindset is not problem-focused, it's solution focused. Design Thinking draws upon logic, imagination, intuition, and systemic reasoning, to explore possibilities of what could be—and to create desired outcomes that benefit the end user.

Design Thinking is not an exclusive property of designers—all great innovators in literature, art, music, science, engineering, and business have practiced it. The approach has been around for a while and coined Design Thinking in the late 80s. It was adapted for business purposes by David M. Kelley, who founded the design consultancy IDEO in 1991.

There are five stages to Design Thinking: Empathise, Define, Ideate, Prototype and Test (see Figure 1). The five-stage is the most common model, but there are others with six or seven stages.

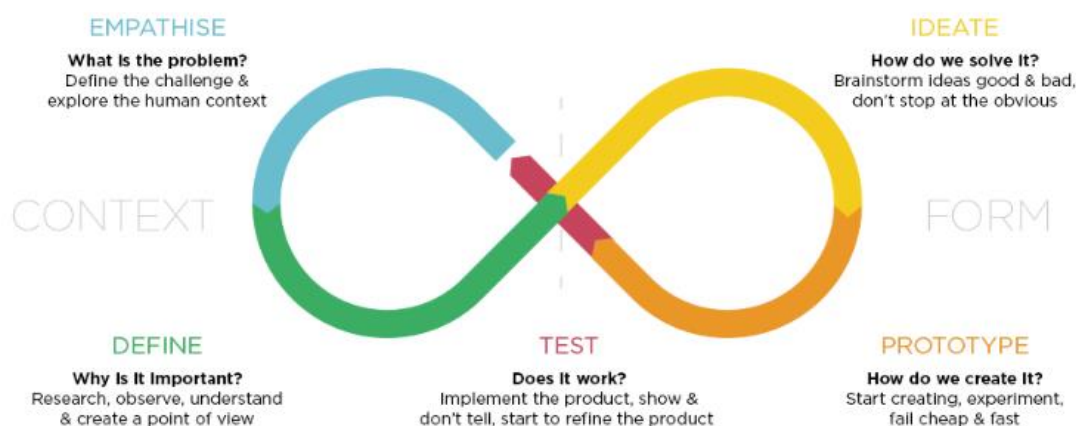


Figure 1. Design Thinking Stages (Billy Loizou, 2016)

## WHY DO YOU NEED IT?

There are numerous reasons for engaging in Design Thinking:

- It is a user-centred process that starts with user data and remains focused on the user.
- It leverages collective expertise and establishes a shared language and buy-in amongst your team.
- It encourages innovation by exploring multiple avenues for the same problem.

## WHEN DO YOU NEED IT?

Design Thinking starts by empathising with users, defining their issues and based on this input, coming up with a variety of relevant ideas. All of these steps are taken before considering the development of a prototype. This approach reduces the risks involved with bringing new innovations to market. In this respect, Design Thinking is most valuable in the earliest stages of a project.

## HOW DO YOU DO IT?

The first, second and last stages (*Empathise*, *Define* and *Test*) are conducted outside of a workshop setting.

### 1. Empathise

Gain an empathic understanding of the problem you are trying to solve: speak to the experts and users to find out more about the area of concern through observing, engaging and empathizing with people to understand their experiences and motivations. Empathy is crucial to a human-centred design and allows you to set aside your assumptions in order to gain insight into users and their needs.

### 2. Define

During the Define stage, you put together the information you have created and gathered during the Empathise stage. You will analyse your observations and synthesise them in order to define the core problems that you and your team have identified up to this point. You should seek to define the problem as a problem statement in a human-centred manner.

The middle stage *Ideate* can be performed in a group workshop where you can invite up to 12 colleagues from a variety of business functions, including technology, product management, account management, finance and support. The session will last approximately 60-90 minutes.

### 3. Ideate

During the third stage of the Design Thinking process, you are ready to begin generating ideas. You've grown to understand your users and their needs in the Empathise stage, and you've analysed and synthesised your observations in the Define stage, and ended up with a human-centred problem statement. You can start to 'think outside the box' to identify new solutions to the problem – looking for alternative ways of viewing the problem.

Give yourself and your team total freedom; no idea is too farfetched and quantity supersedes quality. A simple exercise, like giving your team five minutes to sketch or write as many ideas as possible is the easiest way to generate ideas. When time is up, the team comes together and shares their ideas with one another. Keep an open mind and explore each presented idea with an unbiased point of view. This generally leads to mixing, iteration and building on others' ideas.

Outside of the team workshop setting, you can now build the ideas ready for testing in the last stage of the Design Thinking process.

### 4. Prototype

At this stage the goal is to build real, tactile representations for the selected alternative ideas and to understand what components of the ideas work, and which do not. The solution prototypes (paper or interactive) are investigated and either accepted, improved and re-examined, or rejected. By the end of this stage, the design team will have a better idea of the constraints inherent within the product, the problems that are present, and have a better/more informed perspective of how real users would behave, think, and feel when interacting with the end product.

### 5. Test

This phase is about testing the prototype(s) with the target audience and measuring their understanding and response to the solutions. It is so important to run complete tests of all the best solutions identified and prototyped in the previous phase. Don't forget that the Design Thinking process is mostly iterative; the results obtained in this phase are used to refine and redefine the solutions until they produce the best possible solution for the user.

And there it is. Why aren't more businesses using this approach? While Design Thinking is simply an approach to problem solving, it increases the chance of success and innovation. This is a truly good position to be in, both for the organisation behind the product or service, as well as the user.

## REFERENCES

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