Design thinking essentials

Corndel Advance.

What is design thinking?

- a making-based problem solving approach

- rooted in human empathy

- conducted by collaborative interdisciplinary teams

- best approach for challenges where there isn't an obvious linear solution

- best approach for complex human problems

> *It's not 'us versus them' or even 'us on behalf of them'. For a design thinker, it has to be 'us with them'.*
>
> Tim Brown

Design thinking teams

Tim Brown (author of the book *Change By Design*) describes design thinking teams as *interdisciplinary*. An interdisciplinary team has collective ownership of the project and the ideas, and they work together to solve the challenge.

Design thinkers are T-shaped. They bring a breadth of personal and professional experience as well as a depth of specialist knowledge and both have value for the team. For example, you might be a medically trained professional and a competitive cyclist, an officer in the military with a keen interest in cutting edge technology in the home or a senior police officer who studied social anthropology. Different perspectives help to create new solutions.

A foundation of trust is critical for a design thinking team. Challenging the prevailing thinking in the group, putting forward ideas that are well outside of the box, or prototyping something that fails means being vulnerable. To put ourselves in that position, we need to trust that the team has our back and that we are in this together. Creating a strong team contract at the outset is important.

Inside the mind of a design thinker

Design thinking is a mindset characterised by:

Optimism and creative confidence

You need to believe that all problems, even the seemingly intractable challenges, can be solved and that anyone can generate creative ideas.

Comfort with ambiguity

Missing pieces of the puzzle and not knowing the right answer or the next step is uncomfortable, but it also drives curiosity and fuels innovation.

Collaboration

The core team needs to collaborate, not only with each other, but also with stakeholders across the system. Think about designing **with** people rather than **for** them. The people who hold the challenge usually hold the solution, even if they don't know it or can articulate it.

Empathy

We need to get to know people. We need to understand their wants, needs, beliefs and perspectives, and keep them at the forefront of our thinking.

Curiosity

We need to stay curious, observe people and ask lots of questions. We need to speak to all stakeholders, not only to generate solutions, but also to ensure that the solutions don't have unintended negative consequences.

Experimentation

Experimentation, and developing and testing prototypes of products or services are at the heart of design thinking. We need to bring our ideas into the physical world so that they can be seen, touched and experienced.
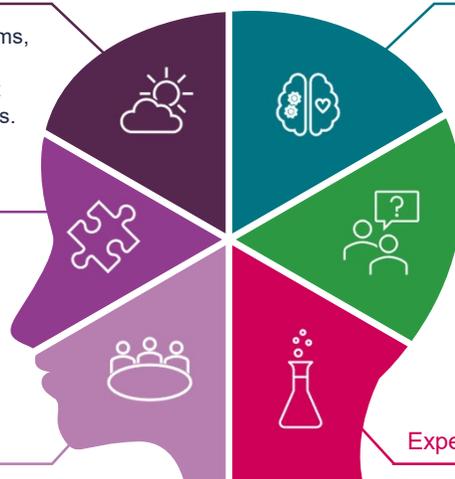
Process

The design thinking process has three phases:

Inspiration

Gathering information and generating insights from every possible source

Ideation

Translating insights into ideas, prototyping and iterating the solution

Implementation

Developing the best ideas into a concrete plan of action

These are not sequential stages, but rather overlapping phases. A design thinking team might move between these phases several times over the course of a project, e.g. your prototype will generate more inspiration that will lead to further ideation and iteration of solutions.

When you are considering complex human systems, remember that points of leverage and solutions may lie upstream from the challenge as well as downstream (or on the banks).

Solutions must balance three things:

Desirability This is where we start. What are the human needs, wants and aspirations that underlie the challenge you are trying to solve

Viability We also need to consider the sustainability and financial constraints surrounding the challenge. Think broadly and creatively; cost in one area may generate huge savings elsewhere with a positive overall impact on spending.

Feasibility This speaks to the technical considerations, e.g. does the technology exist and is it, or can it be made, accessible to all?

Resources

1. Brown T (2019) Change by Design. HarperCollins, New York.

2. Brown T (2009) Designers – Think big! TedGlobal. Available from: https://www.ted.com/talks/tim_brown_designers_think_big (Accessed August 2021)

3. Heath D (2020) Upstream: how to solve problems before they happen. Bantam Press, London.

4. Heath C and Heath D (2011) Switch: how to change things when change is hard. Random House Business, London.

5. IDEO (2015) The field guide to human-centered design. Available from: https://www.designkit.org/resources/1 (Accessed August 2021).

6. Brown T (2008) Tales of creativity and play. Serious Play Conference. Available from: https://www.ted.com/talks/tim_brown_tales_of_creativity_and_play (Accessed August 2021)

7. Stroh DP (2015) Systems Thinking for Social Change: A Practical Guide to Solving Complex Problems, Avoiding Unintended Consequences, and Achieving Lasting Results. Chelsea Green Publishing, Vermont.

Design thinking is the search for a magical balance between business and art; structure and chaos; intuition and logic; concept and execution; playfulness and formality; and control and empowerment.

Idris Mootee