

# What is Design Thinking?

Business problems are getting more complex and harder to solve. Without innovation and a human centered focus, we will find it difficult to satisfy and delight our customers in the future. Design thinking is a creative approach to problem solving and innovation that puts people at the center and is solution focused.

Design thinking allows you to truly understand your customers and their needs so that you can design a solution that address those needs and create a better future state for the customer.

Understanding your customer and their needs within their context will help you to build products and solutions that customers really want and will consume.

While there are many different frameworks that you can apply to design thinking, and most include some variation of analysis, synthesis, testing, and adjusting based on feedback. Design Thinking is not to be confused with User Experience (UX) Design. While UX design is a way of designing a product (or user interface) after the solution has already been determined.

Design Thinking comes before the solution is known and allows you to build the <u>right</u> solution.

In the following pages, I'll share the Design Thinking approach used by Stafford's Institute of Design.

There are no strict guidelines and there's not just one approach to Design Thinking. It's all about failing fast and learning.

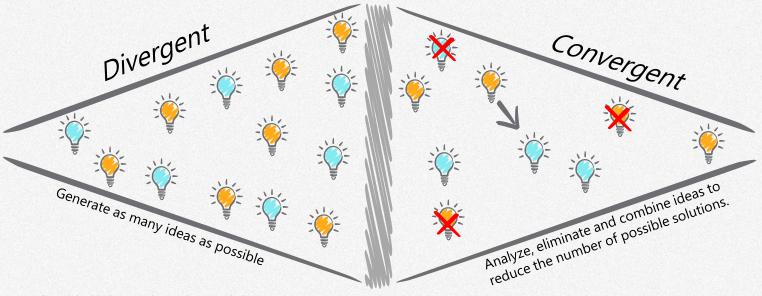
In reality, Design Thinking just is good business analysis.

### The Design Thinking Process

Design Thinking employs divergent thinking (creating as many potential solutions as possible) and convergent thinking (narrowing down the potential options to a final solution).

Divergent thinking is similar to brainstorming in which the goal is to generate a lot of ideas without considering feasibility or making other judgments. Collaborating with others helps create diverse viewpoints and leads to better innovation.

Convergent thinking allows you to analyze ideas for feasibility and make other value judgments. The more you can involve the customer in the convergent thinking portion, the better your results will be.



# Mode: Empathize



#### **Empathy Tools**

Interviews • Observation • Surveys Focus Groups • Empathy Maps Customer Journeys • Personas Five Whys

### Empathize to gain a deeper understanding of the customer.

When you develop empathy, you are better able to understand your customer's needs, pain points, and their context. This is the core of human centric design.

This mode gives you insights into the customer and helps shape potential solutions. Without gaining empathy, you are at risk of creating a solution that does not match the customer's needs in their context.

It's critical that you and your team are able to meet with customers to gain empathy. Short of meeting with actual customers, you may gain insights from customer representatives or other techniques listed in the Empathy Tools section to the left.

Ask customers about pain points in the context of your product or market and understand what's meaningful to them. Asking open-ended questions helps elicit details that will allow you to probe deeper.

As you exit the empathy mode, you will consolidate what you've learned and make it visible. You may decide to create artifacts such as customer journeys or empathy maps to remind you of the customer needs.

## Mode: **Define**



#### **Define Tools**

Outputs from Empathy mode such as Empathy Maps, Customer Journeys, and Personas.

Problem Statements • Hypothesis

### Define the problem to clarify scope.

In the design mode, you review what you learned in the Empathy mode and develop a problem statement to bring focus and clarity to the problem space.

The goal is to create a well-defined problem statement for which you can take action and devise solutions. A good problem statement should encapsulate customer needs and inspire the team to develop a solution.

An example problem statement template that you can use is: <*Customer>* needs a way to <*User's Need>* because <*Why/Insight>* 

A clear and meaningful problem statement that expresses who the customer is, what they need, and why they need it will lead you to the next mode, Ideation.

It's important that the problem statement does <u>not</u> mention a solution; it should only mention the need or goal the customer is trying to achieve. You must frame the right problem the right way to make Design Thinking meaningful.

# Mode: Ideate

Ideate Tools Problem Statement from Define mode

Brainstorming • Mind maps • Sketches (visual thinking)

### The Ideate mode focuses on quantity first, then quality.

In the Ideate mode, you review the problem statement and create as many ideas as you can to address the problem. Similar to brainstorming, suspend judgment during this exercise as the goal is quantity, not quality. Think of outrageous or radical ways to solve the problem without regard for feasibility.

Bringing together a diverse group for this exercise often leads to better results due to combining different viewpoints and experiences.

Make your thoughts visible using flip charts, whiteboards, and sketches. You don't need to be an artist and bad drawings even provide a reminder that this is simply an idea and there is no judgment. Drawing pictures is more powerful than text since people process and retain images much better than the written word.

After this divergent thinking phase, get feedback from customers or customer representatives. Analyze the options and make feasibility judgments with the goal of narrowing down the potential solutions.

It's best to time box both the divergent and convergent phases of ideation. Make the allowed time slightly longer than you think you need so participants can dig need and create radical options.

# Mode: Prototype

### **Prototype Tools**

A few solution options from Ideate mode.

Lightweight prototypes • Mock-ups Wireframes

### Build the simplest thing possible that will allow you to learn.

Once you have narrowed down the number of potential solutions to a few (or one), build a simple prototype that you can share with customers to get feedback. The prototype can be very simple and made from paper, quick videos acting out an experience, or anything else you can develop quickly.

As this will be a throw-away prototype and you will iterate on the design, don't spend much time on your first iteration (think minutes, not hours).

As you receive feedback and adjust your design, you can spend a little more time in developing prototypes. The concept here is to spend just enough time on the prototype to get the level of feedback you need.

You don't want to spend hours making a working prototype when you haven't yet validated the idea with the customer. Changing one variable at a time in your prototypes will give you more meaningful information than if each iteration includes many radical changes.

### Mode: Test



Test Tools Prototypes

Demos • Interviews • Focus Groups

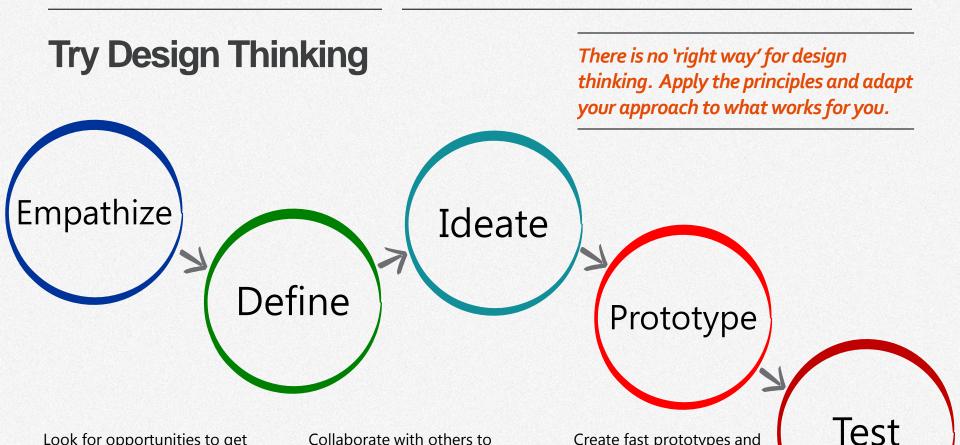
### Show, don't tell

The Test mode and the Prototype mode occur together in an iterative cycle, rather than as separate liner steps.

In the Test mode, you share the prototype with the customer to get feedback and adjust your solution design based on that feedback. Seeking feedback is another opportunity for you to gain empathy and better understand the customer and their needs.

Testing works best when customers can see something rather than simply telling them about a solution. Put something in their hands and ask for feedback. Use open ended questions and ask 'why' to get richer feedback.

Allowing customers to compare prototypes (or compare the prototype to an existing product) often results in insights that allow you to innovate and create a better solution.



Look for opportunities to get closer to customers and develop a deeper understanding of their pains and desires.

Create an actionable problem statement to focus your efforts.

Collaborate with others to brainstorm potential solutions to the problem. Be sure to employ divergent and convergent thinking. Create fast prototypes and get feedback as you iterate on the solution design.