

DESIGN THINKING MINDSET / DESIGN PHASE / PROTOTYPE

[How To] Build a Prototype

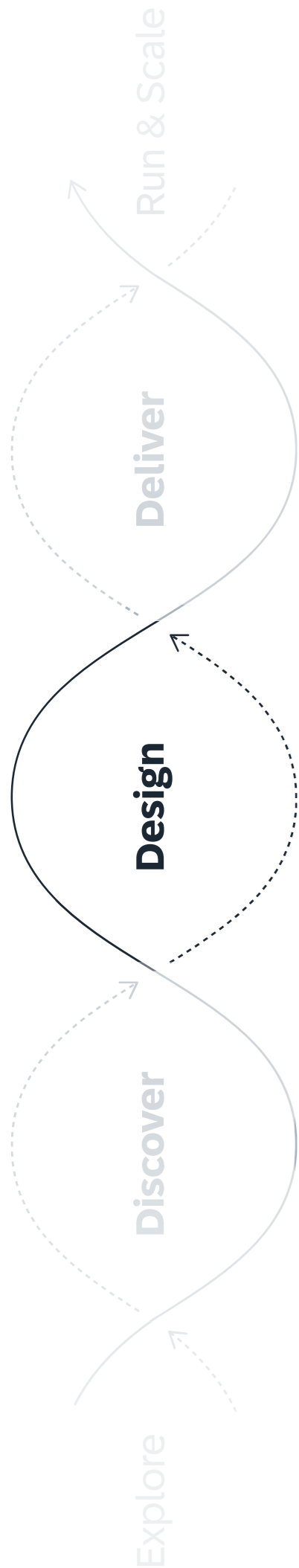
Make ideas tangible and ready for validation by creating a model of how they might work.

Why To Build a Prototype

Once ideas have been generated, you need to test them and validate them with stakeholders and end users to make sure you are going in the right direction.

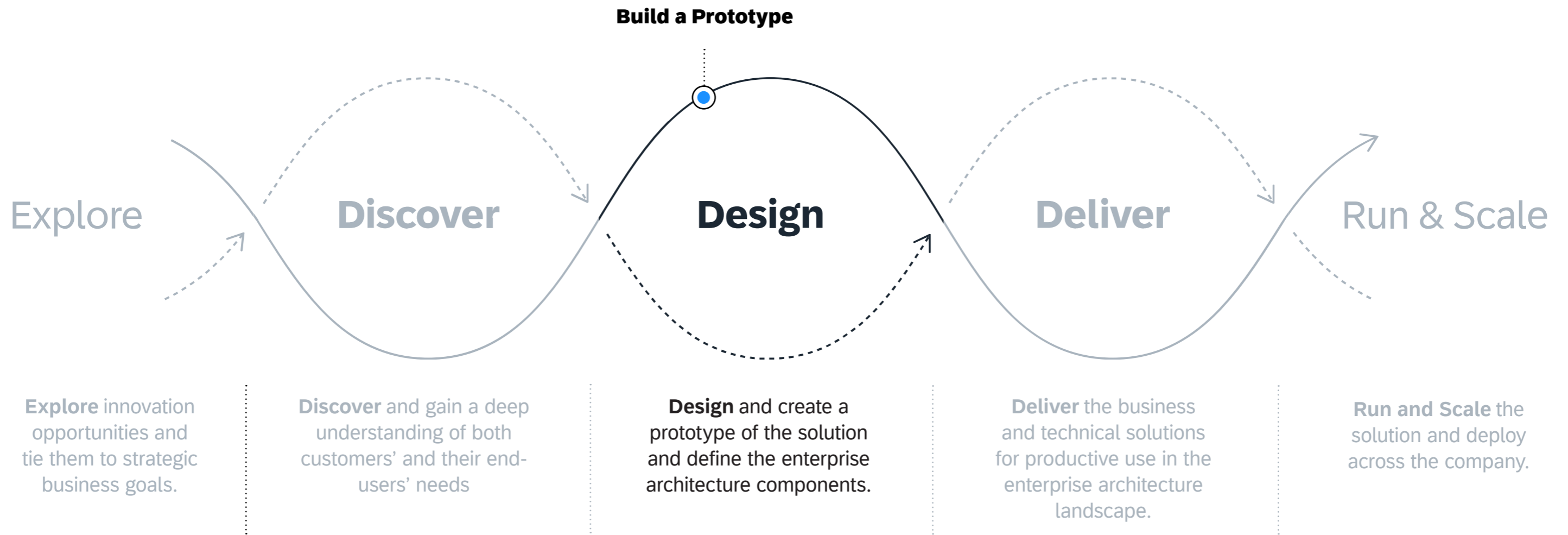
Prototypes are a way to transform ideas described on paper into tangible representations that can be shown to others to get feedback.

Prototypes help to refine your ideas, deepen understanding, and facilitate clear communication, fostering a shared vision among project members for implementation.



When To Build a Prototype

The creation of prototypes happens usually after ideation, during the Design Phase. Prototyping is an iterative activity. This means that initial prototypes are enhanced and recreated several times based on gathered feedback until the team is satisfied with the solution.



Learn more about SAP's Human-Centered Approach to Innovation: <https://apphaus.sap.com/approach>

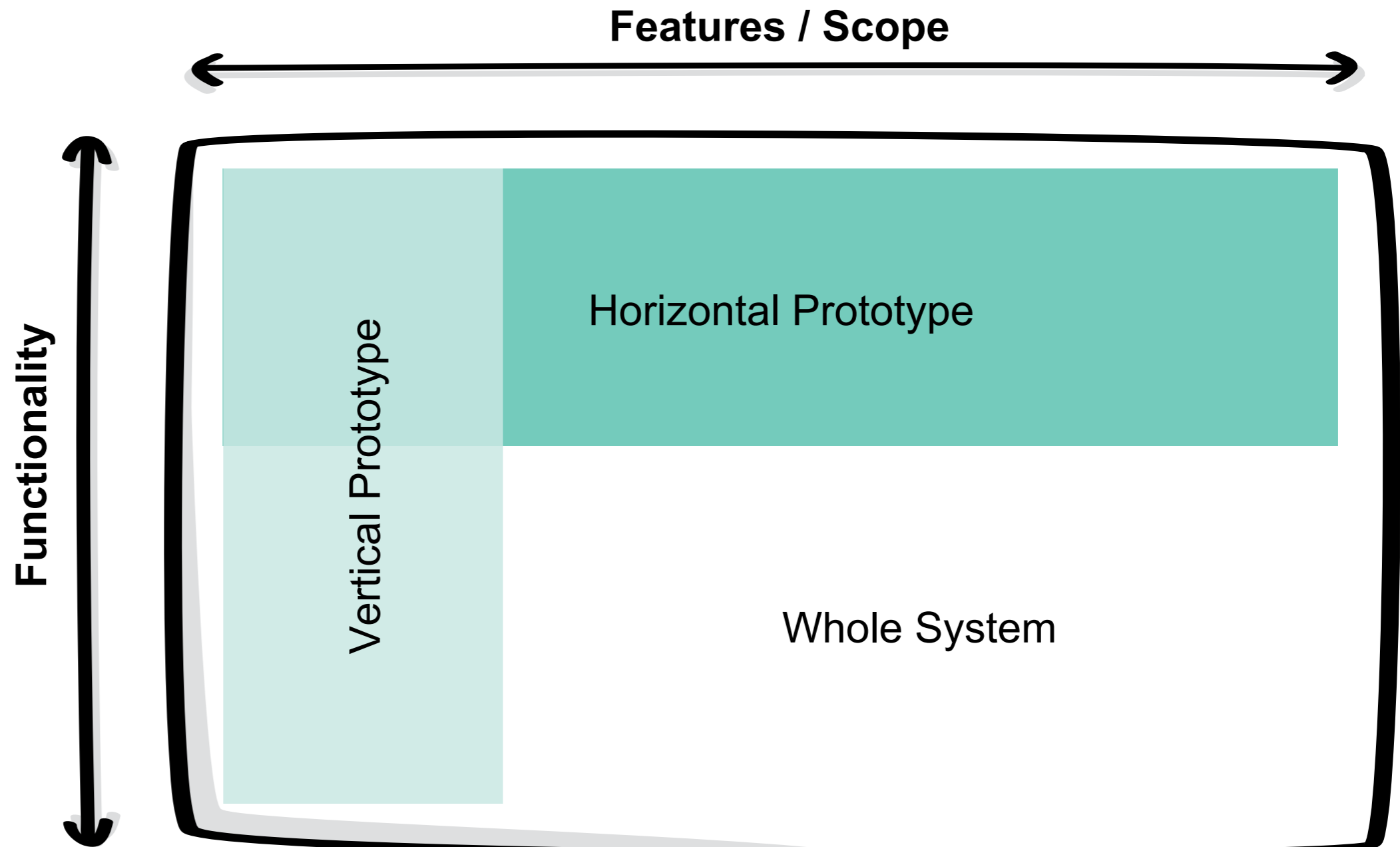
Detail Level for Your Prototype

Depending on your project, the stage you're at, and what you want to validate, you may choose to create either a horizontal or vertical prototype.

Horizontal prototypes can cover the entire concept of your project but won't go in details, while vertical prototype can cover certain functionalities in depth.

Horizontal prototypes are more useful during early stages of a project, when it is important to know if the entire idea makes sense. A good example of a horizontal prototype is a storyboard.

Vertical prototypes are very useful during usability test sessions, when you need to know if a certain feature can be found or used as intended. An example of a vertical prototype is a clickthrough screenflow to test the search functionality of an e-commerce site.



Some Techniques for Prototyping



Role Play

Work with your team to role-play how the solution would function in a specific situation.



Storyboards

Create a **Vision Storyboard** about your solution idea.



Physical Prototypes

Build a prototype of your proposed product using materials like cardboard and foam board.



Paper Prototypes

Use simple pen and paper to sketch a screen flow of your solution idea.



Digital Click-Dummy

Create an interactive digital prototype with tools like Figma, Adobe XD or others.

How To Build a Prototype



Duration
Depends on Method



Participation
5 - 6 People



Roles
**Designers, Architects,
End Users**



Use Input From

- **Generate Ideas with Ideation**
- **Create an Idea Napkin**

Steps

- 1 Select the idea(s) you want to create a prototype for.
- 2 Consider which aspects of your idea(s) you'd like to receive feedback on.
- 3 Select a prototype method that fits the level of detail you want for your prototype and that will help you to validate the selected aspects.
- 4 Create the prototype using the selected method.
- 5 Get feedback and iterate.

Expert Tips

Don't be afraid to show unfinished prototypes. The purpose of prototyping is to test ideas with minimum effort, so you can avoid major changes during design or implementation. Therefore, the time you spend on a prototype should be less than the time spent creating the real solution.

Prepare your validation questions in advance to determine which parts of your solution to prototype.

Be prepared to start over. Prototypes are meant to be discarded, so don't worry if validation suggests you need to go back to the drawing board.