Phase 2: Validate user needs and design solution(s)

During the middle phase, you will:

* Work out how your product or service may be created or evolved to meet the needs identified in phase 1
* Generate multiple potential solutions (in a low-cost, low-effort way using prototypes)
* Test a number of these solutions with the people who are or will be using your product or service
* Select one, refine it, test it again

If you’re looking at the Double Diamond image, this stage represents the middle section.

This phase is a chance for you try out different solutions to the problems you learnt about during your research.

Spend this time building prototypes and testing different ideas. And don’t be afraid to challenge the way things are done at the moment: phase 2 is a chance to explore new approaches.

You don’t have to prototype the user’s entire wider journey, but it’s important to show that you understand that journey.

You might not even want to prototype all of the transaction or element you’re working on: often it makes sense just to focus on the areas you think will be most challenging. This lets you do the minimum you need to test your riskiest assumptions.

With any online solutions you try out, build things that are just complex enough to let you test different ideas, not production quality code. Expect to throw away any code - and lots of the ideas you test - at the end.

By the end of this phase, you should be in a position to decide which of the ideas you’ve tested are worth taking forward.

This phase tends to last between 6 and 8 weeks.

**Focus on testing your riskiest assumptions**

A crucial part of phase 2 is identifying your riskiest assumptions and testing them. What these are will depend on what you’re building, but may well involve examining the constraints you identified in Phase 1.

**Dealing with constraints**

Use the design phase to explore any immovable constraints in legalisation, contracts or legacy technology that affect the service you’re planning to build. By the end, you should be able to explain:

* how you’ll create a service or product that meets user needs while working within these constraints
* how you plan to remove constraints in the long term (for example, by changing a technology platform or contracting with suppliers in a different way)

**When to move on**

This phase is finished when you’ve got a prototype that’s substantial enough to help you make a decision about whether to move on to the build phase or not.

To move on to build you’ll need to be confident that you:

* can create something that meets users’ needs and is cost-effective
* will have the budget and people necessary to deliver what you need to

You should be able to explain how you came to this decision using the success metrics you identified at the end of research at phase 1.

If you get to the end of your design and testing and you’re not confident you could do these things, you could stop altogether, or decide to carry out a further round of research (going back to phase 1).