

# User Centred Design

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## WHAT IS IT?

The user centred design (or UCD) process is a framework used throughout the design and development lifecycle of a product which focuses on gaining a deep understanding of who will be using the product. It is such an obviously necessary design process; it's really hard to understand why even today it is not always readily adopted by product development groups.

There are some key principles associated with following the UCD process:

- A clear understanding of user and task requirements.
- Incorporating user feedback to define requirements and design.
- Early and active involvement of the user to evaluate the design of the product.
- Integrating user-centred design with other development activities.
- An iterative design process.

## WHY DO YOU NEED IT?

We are not – usually – the users of the systems we design, or have too much inside knowledge on how they work. Essentially we are not the target audience and it is important when designing user experiences that the real and potential future users are represented for an accurate understanding of their needs, expectations and goals.

## WHEN DO YOU NEED IT?

User centred design is an end-to-end process. Often you'll observe that teams only focus on the design evaluation stage in UCD, this is better than nothing, but actually ensuring that time is spent on exploratory/research and analysis phases, and understanding the user needs will put you in a better position when designing and eventually evaluating designs. Basically you need UCD from the beginning right through to the delivery of the design.

## HOW DO YOU DO IT?

There are five stages in UCD.

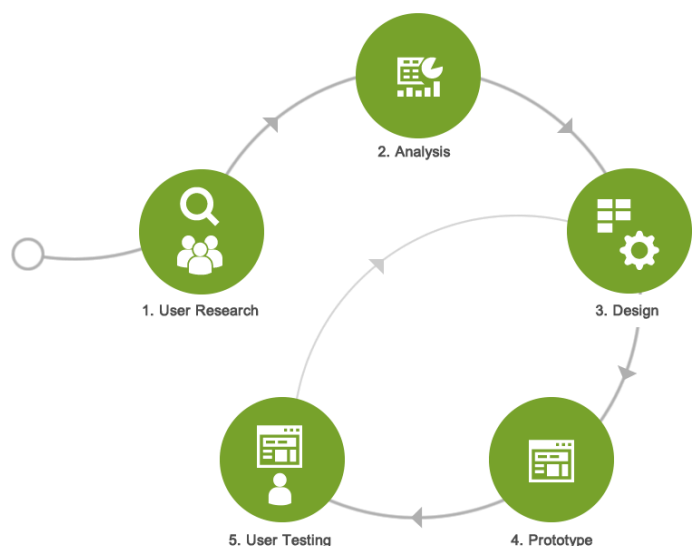
### 1. User Research

This research phase enables you to specify the context of use: who will use the product, what they will use it for, and under what conditions they will use it. If it's an existing product or there are competing products out there, you can get an understanding of what works and what are the current pain points and deficiencies.

There are many ways to gather this data, most common are user interviews, but could also include questionnaires and focus groups.

### 2. Analysis

Identify the user requirements, user goals that must be met for the product to be successful and where these



align with or affect the business requirements. Typical artifacts at this stage will include personas, user flows, scenarios, storyboards and customer journeys, i.e. outputs you can share with the team so everyone has a better understanding of the users and their needs and ultimately the goals for the product development team.

### 3. Design

This part of the process may be done in stages, building from a rough concept to a complete design. You may also involve users at this stage if you are using a *participatory design* approach, or where you are unclear of the navigation and content structure, a *card sort* method could be employed. During this stage, you're likely to develop the information architecture, site maps, sketches and wireframes.

### 4. Prototype

You are now approaching the user testing stage of your design. At this point you'll probably have an interactive prototype. The prototype may cover several tasks or focus on a particular goal. The prototype is prepared for use in the next stage, to facilitate user feedback.

### 5. User Testing

Do your users get your design? This is the evaluation phase. Here you will prepare one or more tasks for the user to complete, observe their behaviour and gather insights on what works and where further development of an idea may be necessary.

You'll see from the UCD illustration above that there is a loop between stages 5 (User Testing) and 3 (Design). UCD is an iterative process and the feedback gathered through the user testing sessions feeds back into the design. Re-testing is important: don't just change the design for an alternative approach and go to production without testing as the change may have made things worse!

### How Much Time Do I Need?

Reading this, if you are unfamiliar with UCD, you're probably wondering how long does it all take? It will of course depend on your setup. If your team is running a waterfall development process, you have a bit more time to plan ahead of any development. If you're working in agile, the pressure is on and achieving a decent level of UCD is tough for small teams of one or two. A larger team, say four UXers ensures that while a couple are doing research the others are working on the design, and can achieve more success.

Google, who of course are not short of resources, have developed a very tight UCD process called *The Design Sprint*, which is a five-day process for answering critical business questions through design, prototyping, and testing ideas with customers.

I have not performed UCD consistently in such a short amount of time and generally worked to more of an initial exploratory user research phase of around four weeks, followed by a couple of weeks analysis and then ongoing design and testing phases of two weeks at a time (generally aligned with the agile developer sprint cycle). Continuing the development process, it's unlikely that you'll need another four weeks user research, so you tend to stay in stages 3-5. However, if building a new feature, which the initial research didn't cover, then yes, a little time, up to a week would be required to gather that user insights needed to inform the feature design.

### REFERENCES

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