The Startup

How to use design thinking in the UX design process

Rain Lieberman (Follow)   8 min read · Jan 14, 2020

Brands such as Apple and Google, who are famous for their design language, use a design thinking process as a core part of their product design. The rise of its benefits and popularity mean universities such as MIT and Harvard now incorporate it as part of their design degree and many in the product design field are using the design thinking process as a means to encourage innovative thinking and creative problem-solving.

When it comes to UX design, design thinking is particularly helpful for honing in on the issues of a product or service and their causes, expanding knowledge of the field at hand and ensuring the end result is an experience that solves the issue at hand in a satisfying manner.

Breaking down the design thinking process

In a nutshell, design thinking is a user-focused iterative process. Designers focus on understanding the user, defining the issues and identifying new creative solutions through a process of creating and testing a hypothesis. It's important to note that this is not a step-by-step process. Each phase can run in parallel to others and be repeated several times throughout the process. Also, by definition, the process requires collaboration with people in other disciplines and specialties who will contribute insights from their unique perspective and experience.
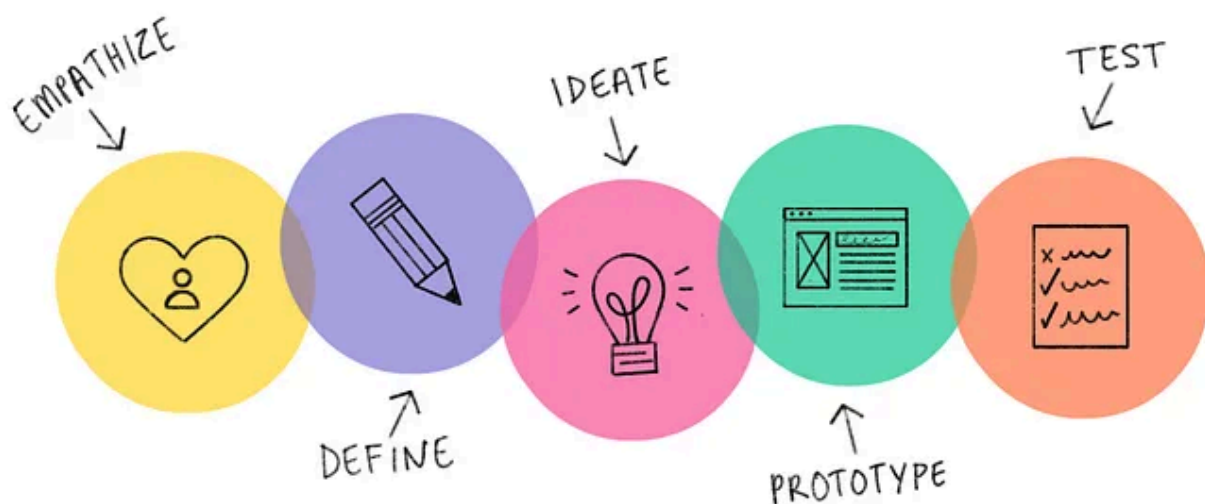
The design thinking process

There are several models of design thinking, each slightly varied in the number of phases and their definition. In this article I will be focusing on the classic method which is a five-phase process. The phases are:

1. **Empathise**

   In this phase the designer observes, engages and discusses with the user about his current experiences and motivations. The goal is to empathise

with your user by getting to know and understand them and their

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they may have gained from the empathise phase. Don't just note these down: analyse your observations, articulate the core issues you identified before now and highlight them.

3. **Ideate**

   Teamwork for this phase is best as you gain outside perspective into your findings. You and your team challenge any current assumptions made so far and look for alternative ways to solve the issues you have highlighted. The more "outside-the-box" ideas, the better. Discuss them all and mark the ones you and your team find most effective.

4. **Prototype**

   Once you have your top ideas selected, materialise them. Sketch out a quick, inexpensive prototype for each. Have your team help you criticise, iterate and reject prototypes that are not ideal. This is an experimental phase, aimed at finding the best possible solution and flushing out any constraints and issues you may have overlooked in previous steps.

5. **Test**

   You should now have a winning prototype you can test with your users. This can be a simple paper or a more polished clickable version. As with all previous phases, this is an iterative process and you will gain insights with each test you conduct. Some of these will drive you to redefine the issues themselves or the user needs, while others push you to polish up and refine the prototype.

How to use design thinking as part of your UX design process

Now that we've discussed each step within design thinking, let's see how we incorporate them into our UX design process:

Empathise

As a UX designer, you are an advocate for the user. Your main goal is to understand who the user (or potential user) is. What drives them? What frustrates them? What are their needs? You want to focus on the emotional state of your user, empathise with their frustrations and aim to delight them with your solution.

I empathise with my users by conducting interviews. At the beginning of each project, I sit and talk with current or potential users of my client. I conduct a one-hour interview consisting of a few steps:

- I start by asking general overview questions: "Where are you from?" "What do you do?" The aim is to get to know them better, understand their background and break the ice.

- I then ask how they came across the product or client I am consulting on and ask for their feedback and experience with it so far. One important note: I ask for open and honest communication and assure them there is no wrong answer or one that will offend. If there is already an existing product, I will ask them to show me how they use it; if not, I ask them to show me a similar product they are currently using.

- I record all my sessions (with the users' consent) via video, audio, and screen recording. I also try to have another member of my team in the session with me. This gives me the ability to focus on the user and not be distracted by the need to take notes.

- While the main goal of the other team member is to take notes, they are also contributing with additional questions that are more related to their field of work and experience which I may not be aware of.

Define

I talk to 5–8 users before moving on to this phase. By this point, I would

users. I have the interview notes and recordings to go back to and dig deeper, fully understanding the user's state of mind. My goal is to analyse the information I gathered and define the core issues at hand.

I will listen to the recordings and pull out any significant insights such as quotes of how they felt at a particular moment, reasons for why they use the product at hand, what they wish it could do better and what they love about it at the moment. If more than one person mentioned the same issue or feeling, I will highlight it.

At times, I may find that we didn't get enough information on a specific topic, or perhaps there was no specific issue arising but general frustration. By the end of this phase I want to be as specific as possible. If I feel I do not have enough information, I will go back and talk to more users. Remember: this is an iterative process. If I feel I am able to define the issue and user needs clearly, I will then go on to the next phase.

Ideate

As I mentioned above, it's most beneficial to include your team members in this phase. The goal is to ideate as many solutions as possible and having team members from other disciplines helps bring in as many different perspectives and ideas as possible.

I tend to start the ideation process by presenting my key findings from the define stage. I talk about the users, their current behavior and their emotional state. I repeat some of the quotes I've collected and answered any questions my team may have.

We then discuss the issue I've defined and brainstorm various solutions. At this point, no idea is too "outside-the-box" or impossible. We write them all down, present them and compare them with one another. The team asks critical questions or offers more insights and we develop some further while rejecting others. By the end of this phase we should have about three ideas the team agrees are most effective.

Prototype

You should now have at least one idea that you can prototype. You've discussed it with your team and have a general idea of what the user flow should be and what it could look like. This is where you pull out some pen and paper start sketching. No matter how basic and general your sketches are, share them with your team and ask for feedback.

In previous projects I've worked on, I tend to start sketching ideas within the ideation phase. It can be a rough idea of what the optimal user flow might look like or a quick doodle of the main screen layout. I share these with the team to get their feedback and talk them through my thought process. These basic sketches are a good base for discussion and we develop them further into a prototype we all agree on.

I would be particularly interested in the developers' input in terms of execution, the product owner in terms of goals and business needs and other relevant stakeholders in terms of their requirements. The benefits of

showing a quick paper sketch are that you can easily change it without wasting time.

Once I receive my team's feedback, I create a low-fidelity prototype. This will usually be a grayscale version with limited functionality to test a specific part of the product.

I will share this with my team who may offer informative feedback once again. Note that at times, we may even decide to reject a prototype as we come to realise it is not feasible to pursue. This is not a bad thing. You've just saved a lot of time and effort you would have spent building something that wouldn't work.

Test

You now have a working prototype that you and your team are happy with. This can be anything from pen and paper, grayscale wireframe or high-fidelity designs, depending on the number of iterations you've made. It's time to go back to your users and test it. Remember to explain the task at hand clearly to your users, while also highlighting that this is just a prototype and it may therefore fail. Do not guide your users through it, simply observe as they test your prototype and ask for their feedback as they go along.

It can be frustrating at times to watch a user get stuck on what you think is very clear and obvious and you might be tempted to offer guidance. Don't. If your user is stuck or unable to complete the task, your solution is not good enough. It is not your user's fault.

While the users interact with the prototype I ask them to "think out loud" and I record the session. Their thoughts during the task are revealing of their

state of mind. Once they complete the task (or give up), I will ask for their overall impression and suggestions.

I use the insights I gain from these sessions to iterate on any of the phases of the design thinking process, from empathise to Prototype. If the prototype failed, I will repeat the process to make sure the solution is better the next time. If the prototype succeeded, I will polish the prototype and add more visual elements. Either way, I will test it again to validate it.

Conclusion

As you can see, design thinking is highly complementary to your UX design process. It gets the whole team involved. It is a great tool to help validate ideas prior to building them, saving your business unnecessary costs and time in the long run.

No matter how experienced you are as a UX designer, different user and product types will always teach you something new.

Stay humble and open to feedback. Listen to your users and team members, and remember: you always have something new to learn.

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Very useful for my schoolwork:)

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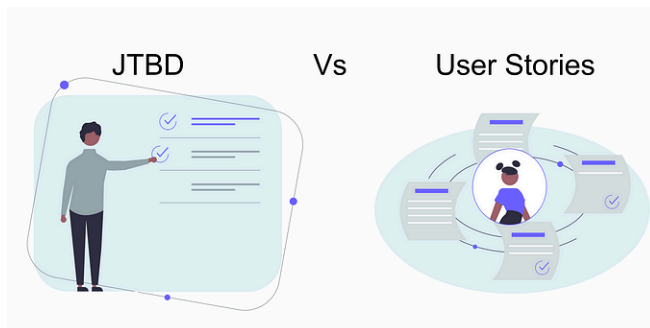
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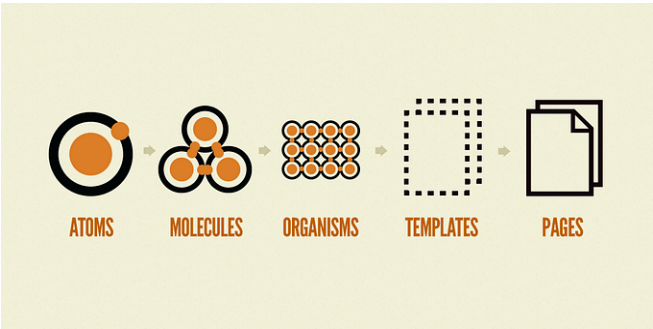Build the unsexy thing. Charge for outcomes. Repeat.

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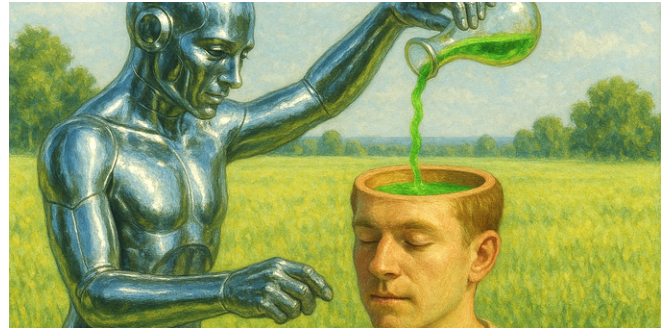✦ Jun 19   👏 245   💬 2   🔖

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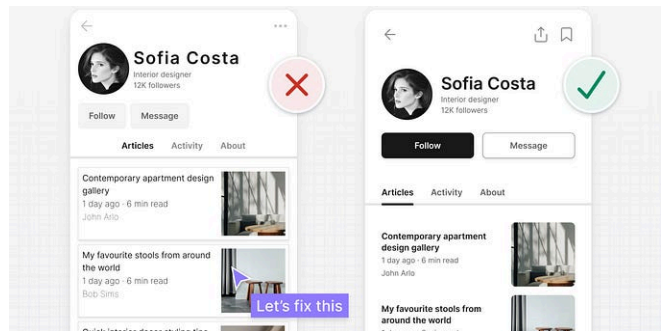How AI Agents and MCP Servers Are Changing the Way We Build Apps

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