

G2: What is Design Thinking?

Design thinking can be said like it is creative problem solving. Every day we face different problems hence finding different solutions. one problem can have many solutions and some problems can only have one. understand users, challenge assumptions, redefine problems and create innovative solutions to prototype and test (Interaction Design Foundation). According to Tim Brown, design thinking's value as a world-improving, driving force in business (global heavyweights such as Google, Apple and Airbnb have wielded it to notable effect) matches its status as a popular subject at leading international universities. With design thinking, teams have the freedom to generate ground-breaking solutions.

Design thinking is divided into five steps, - empathize, define, ideate, prototype and test (Rikke Friis Dam). First, Empathize - understanding of the problem you are trying to solve. This involves consulting experts to find out more about the area of concern through observing, engaging and empathizing with people to understand their experiences and motivations, as well as immersing yourself in the physical environment so you can gain a deeper personal understanding of the issues involved. Empathy is crucial to a human-centered design process such as Design Thinking, and empathy allows design thinkers to set aside their own assumptions about the world in order to gain insight into users and their needs. Next define, defining the problem The Define stage will help the designers in your team gather great ideas to establish features, functions, and any other elements that will allow them to solve the problems or, at the very least, allow users to resolve issues themselves with the minimum of difficulty. In the Define stage you will start to progress to the third stage, Ideate, by asking questions which can help you look for ideas for solutions by asking: "How might we... encourage teenage girls to perform an action that benefits them and also involves your company's food-product or service?". Third, Ideate - There are hundreds of Ideation techniques such as Brainstorm,

Brainwrite, Worst Possible Idea, and SCAMPER. Brainstorm and Worst Possible Idea sessions are typically used to stimulate free thinking and to expand the problem space. It is important to get as many ideas or problem solutions as possible at the beginning of the Ideation phase. You should pick some other Ideation techniques by the end of the Ideation phase to help you investigate and test your ideas so you can find the best way to either solve a problem or provide the elements required to circumvent it. Moving on to Prototyping, The design team will now produce a number of inexpensive, scaled down versions of the product or specific features found within the product, so they can investigate the problem solutions generated in the previous stage. Prototypes may be shared and tested within the team itself, in other departments, or on a small group of people outside the design team. This is an experimental phase, and the aim is to identify the best possible solution for each of the problems identified during the first three stages. Lastly, Testing - the final stage of the 5 stage-model, but in an iterative process, the results generated during the testing phase are often used to redefine one or more problems and inform the understanding of the users, the conditions of use, how people think, behave, and feel, and to empathize. Even during this phase, alterations and refinements are made to rule out problem solutions and derive as deep an understanding of the product and its users as possible (Teo Yu Siang).

References:

Interaction Design Foundation and Tim Brown, (N.A). Design Thinking.
<https://www.interaction-design.org/literature/topics/design-thinking>

Dam. R, and Siang T. (August, 2020). 5 Stages in the Design Thinking Process.
<https://www.interaction-design.org/literature/article/5-stages-in-the-design-thinking-process>