

DESIGN THINKING

Dr. Sandeep Bhavsar*

* Librarian

Welingkar Institute,
Mumbai, Maharashtra, India

QR Code



Introduction

Google Search retrieves tons of results for Design Thinking. In simple words, design thinking can be stated as an experimental tactic to solve complex problems that includes both logical and artistic thought process.

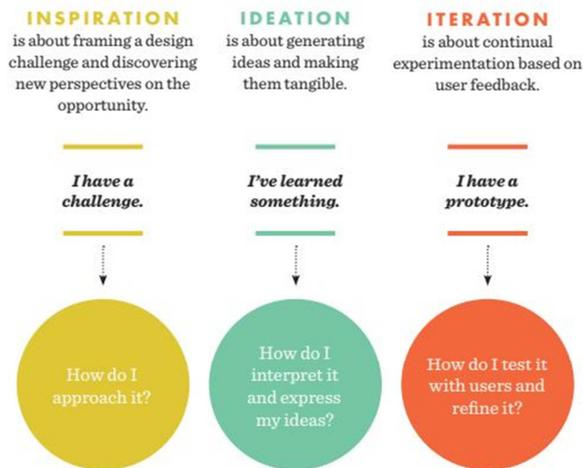
Tim Brown's (*CEO of IDEO*) book *Change by Design* quotes "In so far as it is open-ended, open-minded and iterative, a process fed by design thinking will feel chaotic to

those experiencing it for the first time." IDEO is an eminent design and innovation firm, and Tim Brown is perhaps the pioneer of design thinking approach in business.

Design thinking involves iteration, rapid thinking, exploring and applying ideas to the most critical problems. The process consists of a defined strategy developed based on defined intent, with expectations setting of possible goals, which ultimately leads to you acting faster and better.

The below image from IDEO gives an idea on how to initiate the process of Design Thinking [12]

GETTING STARTED: THE DESIGN THINKING PROCESS



Three "I's of Design Thinking

In the lingo of *Design Thinking for Libraries*, you need Inspiration, Ideation, and Iteration to create a high-quality, responsive final solution.

Inspiration: one can use a variety of techniques to try and achieve a deep understanding of the needs of a particular user, what IDEO frequently refers to as developing empathy. Open-ended interviews, observations, immersive experiences, and analogic activities can all help you see a situation from the user's point of view. There are many parallels in this stage to the participatory or ethnographic studies that Nancy Fried Foster popularized in libraries (e.g., Foster and Gibbons 2007). Design thinking methods provide ways of translating that empathy for a particular user into a problem statement. The *bootcamp bootleg* suggests writing Point-of View Madlibs (d.school 2013, p. 21) of the form "[User] needs

to [Need] because [Surprising Insight]." The POV statement focuses on "defining the user, articulating a specific need (and not a potential solution), and requires that the person base their assertion on evidence, the 'surprising insight,' they've gathered to justify that need."

Ideation:

Deep understanding and identification of the exact needs and why the need wasn't fulfilled yet is the crux of the ideation stage, the following measure is to figure out the best possible way to meet these needs. The utmost important aspect of this stage is to have openness and acceptance of wide range of possibilities.

Iteration:

Continuous improvement through feedback analysis to get an ideal solution is the core of the iteration stage. The initiation process involves creation of a mini-pilot project (product or service) and testing the prototype with the external audience. At this stage, the product should be well functional. As the prototype is not the final product, efforts should not be made to get a finished product before getting the feedback. Else, incorporating changes as per the feedback received won't be easily achieved.

Inspiration phase:

The key element to create an effective solution is to set up a vigorous feedback mechanism. Creation of generic questionnaire with queries like 'how do you like this?' you are bound to get generic responses like 'it's ok.' Open-ended questions such as 'When would you use this product?' 'Why wouldn't you use the product?'

'What is most interesting about this product?' can stimulate important information which might not be otherwise available.

According to IDEO (2015) the questionnaire can follow the outline: "General impressions and initial thoughts; targeted feedback on specific aspects you have questions about; open discussion and broader conversation. Additionally, identifying and engaging with different types of prospective users will help determine who might be primary users of the product and if it is missing the needs of a certain kind of user."

The product or prototype created should speak for itself rather than over explaining it to the probable users, this is difficult for the librarians as their main role is to aid the users in their choice of service or products. But this will help in getting the best possible results and also an idea about the obscurity about the context. (d.school 2013).

When the user react progressively to the service or product it will pave way to uncover a number of novel ways to use the same which otherwise would have remained unanticipated or may have faced barriers. Having the user 'talk-through' their interactions will also help to uncover their cognition when confronted by the product, what they perceive it is, and how they think it works. After they have had a chance to interact with the product for a while and put it through its paces, then there is time to debrief on specific aspects 'Did you notice this button? What do you think it would do? Did you consider trying it or why not?'

The Stages of Design Thinking

One cannot define the process of Design thinking, given its flexible nature. But with years of thinking, experimenting, failing, and succeeding, experts have created various milestones that can serve as benchmarks for tracking progress. However, what happens exactly in each stage of Design thinking purely depends on the challenge and how one approaches it. Given below is an overall understanding of the stages of Design thinking. Once, we are clear about this, we can take a deep dive into the deep ocean of Design thinking.

Stage 1: Learn about the challenge

You need to understand a problem before trying to solve it. Take efforts in understanding what the business challenge is on a short-term and long-term basis. This will help in crafting the right solution. You should dig deep into learning about past and similar challenges of the business, understand the approach taken and accordingly act. Research is the key to success in learning about a problem.



Stage 2: State the problem

Stage 1 must have helped you see clearly what you otherwise would have missed by just skimming through. You must have researched a lot and gained details of what the problem is, where the problem lies, and how the problem impacts your business. After understanding the nuances of the problem, you will now know how to define the problem. And defining it is extremely essential, as only then will you see the significance of addressing it.

Stage 3: Think of solutions

The base is set for you – you know the source of the problem and you have defined it well. So now you can break loose to think creatively how the problem can be solved. Start thinking of solutions generously and do not restrict your thinking. Everyone likes brainstorming and ideating as they can think loudly and give words to their thoughts that can later be considered into an action. Mostly, people tend to skip the first two stages and directly jump to the ideating stage. We all are creative minds and love coming up with solutions but without understanding and defining the problem, the solution may not fall in the right track and come across as a not-very-a-well-thought-of-plan in the later stages.

Phase 4: Demonstrate

By now, you have a plethora of ideas, and everything looks great, but it is important to bluntly reject ideas and go with a few niche ones that do justice to the problem. These are the ideas you can take to the next stage, which is the demonstration stage. To create demos, you need to select the best 3-4 ideas, as a rule of thumb, and plan the demos well before executing.

Creating demos/ prototypes means putting your ideas into action. When you do something, you get to know the nitty gritty of the problem, so that you can alter your solution plans to get the best output. This exercise will add depth to your thinking, allowing you to explore other possibilities. The demos will give you an impression of how the solution will look in reality, and this is essential as what you think may not be practical given limitation of resources, capabilities, etc. Also, may think that creating a prototype means you'd have to craft something tangible. That's not true! One can create demos of any intangible item like a service, experience, process, only to make others understand your thoughts.

Stage 5: Put it to Test!

Testing will give insights into what can be done better while developing the idea and also help you manage risks better. If you dedicate all your resources to the development of one idea, without testing it before hand, and if that idea turns out to be a

failure, then you have risked all you have for nothing. What's great is that testing is not expensive and not at all a complicated process. A small investment on Testing today will save a fortune in the future.

Use of Design Thinking in Libraries

In libraries, design thinking is portrayed as a "human-centered practice that can be utilized to enhance user experience, innovate services and systems, and improve space usage. Librarians may find the design thinking framework familiar as there is significant overlap with the methodologies associated with library user experience (UX)."

There is a sharp increase of librarianship shifting towards design thinking approach and the same is reflected through the courses offered through professional development organizations like Library Juice Academy [15] and LIS programs like the University of Wisconsin [16] and San Jose State University. [17] Design thinking has relevance to a range of different projects in libraries including revisioning signage [18], evaluating data management needs [19], and understanding the transfer student experience. [20] The main benefit libraries get through design thinking approach is to create and test multiple models of a given service or space along with getting opinions and views from stakeholders, as well as the incorporation of this collective expertise.

References:

- Dfree. (2018, May 16). Keeping Up With... Design Thinking. Retrieved from http://www.ala.org/acrl/publications/keeping_up_with/design?cv=1.
- Fosmire, M. (2016). What Can Design Thinking Do for Libraries? *Science and Technology Librarianship*, (Winter). doi: 10.5062/F4SN06ZT
- Ingle B.R. (2013) Introduction to Design Thinking. In: Design Thinking for Entrepreneurs and Small Businesses. Apress, Berkeley, CA