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Tools & Methods

TOOLS FOR REDUCING THE UNCERTAINTY OF AN IDEA

DESIGN THINKING

Making innovation happen, doing innovation, especially disruptive forms of innovation that bring about a major transformation, is difficult, elusive, and expensive. The last decade has witnessed phenomenal growth in design thinking, at least in name more than in practice, as a way to bring about innovation.

What is Design Thinking?

Design thinking is a general term to refer to a project-based technique for innovation and for creating solutions to problems. It is a human-centred approach in that the focus is always the user; it is co-creative and solution-focused.

A core part of design thinking is an emphasis on rapid prototyping. Rapid prototyping is the creative process of constantly building your design using arts and crafts, junk, LEGO, or any other materials (including 3D printing).

Despite the growth in people who label themselves design thinkers, very few actually practice design thinking beyond running a workshop on ideation. Often they will leave it at that. Indeed, there are debates within design thinking as to whether it is something everyone can do, or whether it is a specialized craft.

In other words, the only way to make design thinking a sustainable strategic advantage is to embed it within your organization (Brown, 2015).

The reality is that design thinking is a serious method that has evolved over many decades and is a game-changer in terms of not only how we innovate, but also how we design and deliver complex projects with a focus on the human (which is also why it's often referred to as human-centred design). However, as Brown (2015) argues, it has to be embedded through sustained use.

Focus on the Solution

The focus in design thinking should always be on the solution, the users, and its implementation (which is basically the definition of innovation). Implementation is critical – coming up with an idea is not enough.

Organisations such as Parsons-Brinkerhoff, IBM, GE, Westpac Bank, Arup, Siemens, P&G, NASA, the military (such as The Royal Australian Air Force) and so many more, now have active engagement with design thinking, dedicated design thinking departments and have developed several design thinking capabilities.

Indeed, IBM now employs more designers than any other profession and has instituted IBM Design Thinking. In many cases, the design thinking movement within these organizations has provided a new service that they can now offer to their clients. The return on investment in design thinking is, therefore, great.

The greatest strength of design thinking is that once you get the core principles, and have the right resources and people in place, it is a method and process you can develop for your own business needs, and it can also transform into a dynamic capability for your own service provision for your customers and clients.

“Innovation requires curiosity and an open mind. Design thinking is thinking in terms of opportunities, not restrictions or prohibitions. It is a holistic approach and encourages thinking across boundaries, thereby enabling real and fundamental innovations”

- Hasso Plattner (co-founder of SAP)

Once in contact with design thinking, people experience a sustainable shift in their mindset and how they act and think. There is also a shift in the way people approach challenges. (...) design thinking views problems from a human perspective, with the objective of designing innovative products, services, or experiences that are technically feasible, economically viable, and desirable for the target group” (Plattner, Meinel & Leifer (2016: v).

The Core Components of Design Thinking and How to Do It

There are some core principles in design thinking, which you will find in almost all derivations of the practice. Let’s look at these now:

1.Design Thinking is Multi-Disciplinary and Co-Creative

Multi-disciplinary and co-creative: design thinking works best because it includes people with differing world-views from our own. It is critical in design thinking that you involve people a) from across departments, b) from different disciplines, and c) wherever possible from your client or end-user.

When thinking about doing design thinking, you need to ensure a good representation of people from key parts of the organization. One error many people make in design thinking is they believe anyone can be part of the team; this is not the case at all.

It is highly recommended that whatever the problem you are seeking to solve, you include an expert in the field. For example, if you are seeking to innovate a car seat, you include an expert in ergonomics and or perhaps in touring. However, that is not enough, you would include in your team a client or user, a designer, and other key people you believe to be critical to the design problem.

An important note here: sometimes you need to think about various users. For example, a driver needs different things from a car seat to say a passenger, however, people who must service the seat may also be a user of your design, so what good is a car seat if the service people cannot access parts to maintain and repair for example? So think about whom your user is, and also try to think from multiple users' perspectives. Include them in the design process.

2. Design Thinking is Human-Centred

Empathy and the human at the centre is a core strength of design thinking. One of its most challenging features for many people in organizations is that it is human-centred.

As such design thinking emphasizes the need to display empathy, which simply means the ability to appreciate and understand other's feelings and experiences. For this reason, in design thinking, we spend a lot of time and effort to know our user (which is why it is often referred to as a user-centred approach).

In design thinking, there are many ways to get to understand and make sense of our users and the problems they are dealing with. *One method is to actually embed yourself or your team with the client or user.* See what she sees, experience what she experiences, and make sense of the problems she faces each day.

You will tend to find that there are multiple problems, which complicate the solution. This gives you a real-life understanding of the problem and how you might design the solution by focusing on the real problem rather than a symptom.

Another way is to create an empathy map, or persona, where you literally map your user. Often we ensure that your user is a real person or group of people, you draw them, give them a face, a name, a history and back story, likes, dislikes, fears, the challenges they face, how they feel, what they want to achieve at work and in life. These can be based on real people, or you can create the person you believe is your idealized user.

On a Final Note, this article is quite general, and you need to take into consideration the type of industry you are in and also how you define innovation as an organization.

Secondly, design thinking works best when it's not forced on people and when it's tailored to the organization, and to its technologies.

REFERENCES

Brown, T. (2015). *When Everyone Is Doing Design Thinking, Is It Still a Competitive Advantage?* *Harvard Business Review*, August.

Brown, T. (2009) *Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation*. HarperCollins: NY.

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