Design Thinking... What is That?

by Mark Dziersk

The methodology commonly referred to as design thinking is a proven and repeatable problem-solving protocol that any business or profession can employ to achieve extraordinary results.

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I have this image of Allen Samuels permanently emblazoned on my brain. This goes back to college. With his usual amazing energy and unrestrained passion, this deeply passionate design professor is explaining to us why the process of design that we are learning is so important. Any profession, he suggests with conviction, medicine, law, choreography or politics can benefit by employing design thinking and achieve better results. Although we all heard and believed then what he was saying, it has taken a great while for the potential of his words to find purchase in a business environment willing to accept his hypothesis.

Although Design is most often used to describe an object or end result, Design in its most effective form is a process, an action, a verb not a noun. A protocol for solving problems and discovering new opportunities. Techniques and tools differ, and their effectiveness are arguable but the core of the process stays the same. It's taken years of slogging through Design = high style to bring us full circle to the simple truth about design thinking. That it is a most powerful tool and when used effectively, can be the foundation for driving a brand or business forward.

Basically Design thinking consists of four key elements.

1: Define the problem

Sounds simple but doing it right is perhaps the most important of all the four stages. Another way to say it is defining the right problem to solve. Design thinking requires a team or business to always question the brief, the problem to be solved. To participate in defining the opportunity and to revise the opportunity before embarking on its creation and execution. Participation usually involves immersion and the intense cross examination of the filters that have been employed in defining a problem.

In design thinking observation takes center stage. Observation can discern what people really do as opposed to what you are told that they do. Getting out of the cube and involving oneself in the process, product, shopping experience or operating theater is fundamental. No one's life was ever changed by a PowerPoint presentation.

Design thinking in problem definition also requires cross functional insight into each problem by varied perspectives as well as constant and relentless questioning, like

that of a small child, Why? Why? Why? Until finally the simple answers are behind you and the true issues are revealed. Finally, defining the problem via design thinking requires the suspension of judgment in defining the problem statement. What we say can be very different to what we mean. The right words are important. It's not "design a chair", it's..."create a way to suspend a person". The goal of the definition stage is to target the right problem to solve, and then to frame the problem in a way that invites creative solutions.

Question: How many designers will it take to screw in a light bulb? Answer: Why a light bulb?

2: Create and consider many options

Even the most talented teams and businesses sometimes fall into the trap of solving a problem the same way every time. Especially when successful results are produced and time is short. Design thinking requires that no matter how obvious the solution may seem, many solutions be created for consideration. And created in a way that allows them to be judged equally as possible answers. Looking at a problem from more than one perspective always yields richer results.

Many times, we are not aware of the filters we may be burdened with when we create answers to problems. In this stage opportunities appear. The trick is to recognize them as opportunities. Multiple perspectives and teamwork are crucial. Design thinking suggests that better answers happen when 5 people work on a problem for a day, than one person for five days. Designers have an advantage in the use of 2D and 3dimensional tools to demonstrate solutions and new ideas -- tools which are almost always far more effective to demonstrate what is meant, than words.

3: Refine selected directions

A handful of promising results need to be embraced and nurtured. Given a chance to grow protected from the evil idea-killers of previous experience. Even the strongest of new ideas can be fragile in their infancy. Design thinking allows their potential to be realized by creating an environment conducive to growth and experimentation, and the making of mistakes in order to achieve out of the ordinary results. At this stage, many times options will need to be combined and smaller ideas integrated into the selected schemes that make it through. Which brings us to stage 3.5.

3.5 Repeat (optional)

Design thinking may require looping steps 2 and 3 until the right answers surface.

4: Pick the winner, execute

At this point enough road has been traveled to ensure success. It's the time to commit resources to achieve the early objectives. The byproduct of the process is often other unique ideas and strategies that are tangential to the initial objective as defined. Prototypes of solutions are created in earnest, and testing becomes more critical and intense. At the end of stage 4 the problem is solved, or the opportunity is fully uncovered.

While of late, there has been quite a lot of discussion regarding what Design thinking is and how businesses can leverage it, as suggested in the introduction to this piece this is not a new or unproven idea.

From Wikipedia: Herbert Simon, in the "Sciences of the Artificial" (MIT Press, 1969) has defined "design" as the "transformation of existing conditions into preferred ones" (p. 55). Design thinking is, then, always linked to an improved future. Unlike critical thinking, which is a process of analysis and is associated with the 'breaking down' of ideas, design thinking is a creative process based around the 'building up' of ideas. There are no judgments in design thinking. This eliminates the fear of failure and encourages maximum input and participation. Wild ideas are welcome, since these often lead to the most creative solutions. Everyone is a designer, and design thinking is a way to apply design methodologies to any of life's situations.

Simon goes on to describe a seven-step process: *Define, Research, Ideate, Prototype, Choose, Implement, Learn.*

Whether the protocol is outlined in a seven, four or even three stage process, *see* – *shape* – *build*, it all comes from the same place a proven method that always delivers. And it doesn't matter what opportunity or problem is put into the front end of the process.

The end result of this simple yet highly effective protocol can be a better mousetrap, symphony, or dry-cleaning service. Implied in design thinking is an objective view and a warm embrace of risk and new ideas.

That said, the outline above is a structure and while it may seem counter intuitive, structure can be one of the key elements to enhancing creativity in problem solving. Design legend Charles Eames once famously said: "design depends largely on constraints". This is very true; sometimes you need to draw the box in order to know what to break out of. After that, the manner in which options are considered, ideas are refined, and selections are executed are the key.

Design thinking describes a repeatable process employing unique and creative techniques which yield guaranteed results -- usually results that exceed initial expectations. Extraordinary results that leapfrog the expected. This is why it is such an attractive, dynamic and important methodology for businesses to embrace today.

Thank you, Allen.