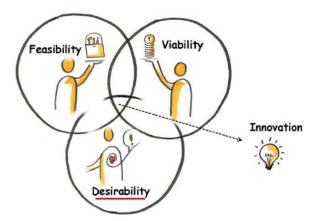


# Management

# **Innovation and Design Thinking**



Everyone is talking about innovation! But to innovate requires two things; the first is for someone to have an 'innovative idea', the second is a process to turn the idea into something valuable. In this article we look at what's needed to create innovative ideas, and then look at one of the ways to transform the best of the 'bright ideas' into something useful, even valuable, 'Design Thinking'.

The challenge of developing an innovative idea to the point where it can be properly considered and if appropriate, implemented is in part personal and in

part cultural. I mean, how useful is a glue that will not stick permanently to anything? If you want to find out ask 3M about the value of Post-It notes to their business: <a href="https://en.wikipedia.org/wiki/Post-it">https://en.wikipedia.org/wiki/Post-it</a> Note

It has been suggested that innovation requires inventiveness where **INVENT** =

- Inquisitive curiosity what may be
- Nerve courage to try
- Voice communicate passionately
- Energy keep fit to keep going
- Nourish your dreams seek support
- · Tenacious keep going.

To this general framework, we would add organizational structures and systems to allow innovation to thrive.

## The Personal part of innovation

Every innovation starts with an idea! So, if you want ideas that may turn into useful innovations you need to allow people time to develop the idea. This may occur in a number of ways:

- The idea may arise as a result of an unexpected outcome from something you are doing, many of
  the major innovations from penicillin to Post-It notes started with something going wrong. What
  sparked the innovation was people taking the time to consider the situation and look for
  opportunities.
- The idea may come from a structured process deliberately set up to generate innovative ideas
  ranging from a brain storming session to a 'hackathon'. What sparks innovation is in part group
  dynamics and in part the challenge posed to the group. Careful planning is needed and skillful
  facilitation to get the best out of the group.
- The idea may come from quiet reflection over time. A powerful way to innovation to solve problems or exploit a possible opportunity is imply to have the 'question / challenge' written on





## Innovation

something you interact with from time-to-time. Maybe on a white board or on a note pad on your desk. Take the time to look at the question and then allow your subconscious to work on it. The problem with this approach is the ideas usually pop up into your conscious mind at highly inconvenient moments. Thought processing benefits from quiet time, ideally doing something that requires little or no conscious thought such as walking.

One of the problems in the modern 24x7 world is most people are too busy being busy to have time to think reflectively.

## The cultural part of innovation

If an organization wants its people to be innovative, the organization needs to create a culture that allows innovative thinking. There are many ways this can be encouraged – getting the mix right is key. Some of the options include:

- Providing quiet spaces and quiet time to allow reflective thinking is a good start if everyone is
  working hard, over extended hours, there's no time for creative thinking and when they stop
  working, they are too tired to think.
- Encouraging innovative conversations. There are many opportunities that can be used including
  various review meetings, quality circles and other less formal interactions. The key is to encourage
  discussion around how things could be improved. Everyone looks at what went wrong, innovative
  organization also play to their strengths "we did that well, could we do it better?".
- Occasionally doing something more dynamic usually focused on a known opportunity or problem. Done properly, events such as 'hackathons' not only generate ideas at the time, they also empower on-going conversations and reflective thinking<sup>1</sup>.
- Allowing people to be wrong every idea is a good idea; some may be useful.
- **Having systems to collect the ideas** and allowing the people who originated the idea to be involved in moving the useful ideas forward if they choose.

Recognition and rewards can help but are far less useful than most managers think. The driver for innovative thought tends to be introspective and when a person has a good idea, self-fulfilling. The real challenge is having an open culture that allows new ideas to come to the fore and be considered on their merits. Systems can help, the old 'ideas box' needs bringing into the 21<sup>st</sup> century if you want an innovative culture.

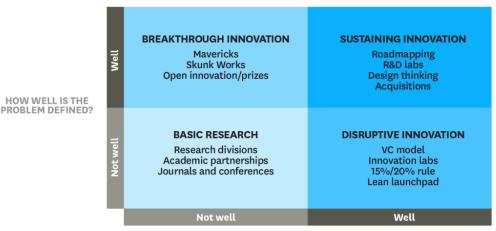
Last, having identified an innovative idea, the organization needs to do something with them! Having an innovative idea is only a small part of the challenge. To create value, the 'bright ideas' need to be transitioned into practical products or solutions that can be applied, sold, or used.

Brainstorming is a technique that is often used in this context. However, very few people can brainstorm effectively without practice and assistance. For more on brainstorming see: https://mosaicprojects.com.au/WhitePapers/WP1068\_Data\_Gathering.pdf (page 4)





# **Four Types of Innovation**



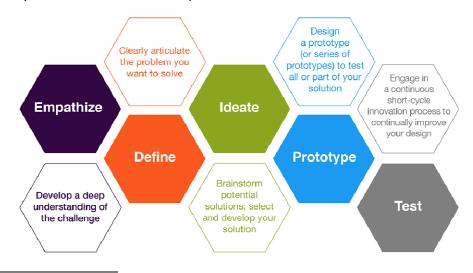
**HOW WELL IS THE DOMAIN DEFINED?** 

The best method to apply depends on how well the opportunity or problem can be defined, the diagram above maps four of the options, there are many more.

Apart from the basic research area, a well-managed project is a key element in building the new product or solution; disruptive and breakthrough innovations almost by definition map to a 'Agile' approach to project management<sup>2</sup>. Innovations in the 'sustaining' segment may need traditional or agile approaches, depending on the product. But if you want an innovative organization, traditional project management, even 'Agile' project management, is rarely sufficient on its own. One well established technique that bridges the gap between an idea and a practical project is 'Design Thinking'.

#### **Design Thinking**

The original concept of Design Thinking was built around problem solving with a shift in emphasis from traditional analysis towards innovation and synthesis.



For more on *Agile* see: https://mosaicprojects.com.au/PMKI-XTR-010.php#Process1



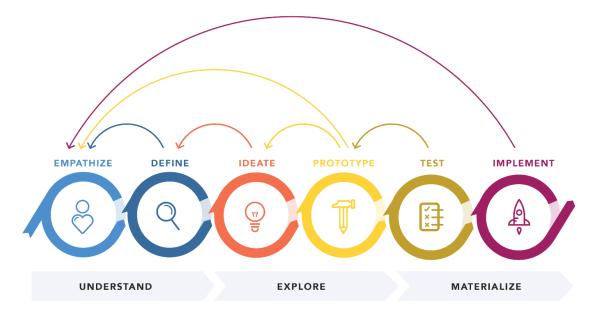


## Innovation

Design Thinking tends to be promoted by advocates as a complete solution to delivering innovation within an organization, a typical model looks like the diagram above<sup>3</sup>. But there is an array of models to explain the process with minor differences here and there, but generally, they all involve the following steps:

- **Understand and empathize**. With observation and qualitative data, create stories that help define the problem. Understanding the context and culture of the people involved, helps you to empathize with the problem. As with Agile, the Design Thinking approach is focused on the end users' needs.
- **Define the problem or opportunity**. Research and find patterns in these insights then diagnose the problem. Translate the diagnosis into a defined plan.
- Ideate, prototype and test. Here's where the creativity comes in. The first round of "solutions" should really be treated as a jumping off point for more in-depth iterations. Create simple prototypes that test possible outcomes, so mistakes are noted and fixed early on.
- **Implement and learn**. The entire process can be cyclical, especially when it comes to ideating, prototyping, and testing. After implementing the solution, feedback facilitates the refining of ideas.

A more sophisticated Design Thinking model looks a bit like this:



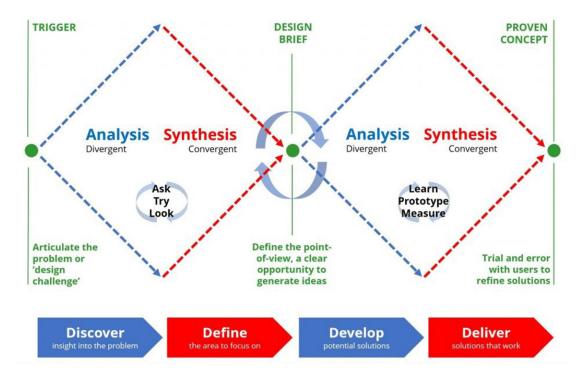
My feeling is while feedback and reviews are important and iterative development can reduce risk, continually going around in circles probably is not a good idea. A more pragmatic management view of the Design Thinking process looks like this<sup>4</sup>:

This model is based on the with the British Design Council's Double Diamond: <a href="https://www.designcouncil.org.uk/news-opinion/what-framework-innovation-design-councils-evolved-double-diamond">https://www.designcouncil.org.uk/news-opinion/what-framework-innovation-design-councils-evolved-double-diamond</a>

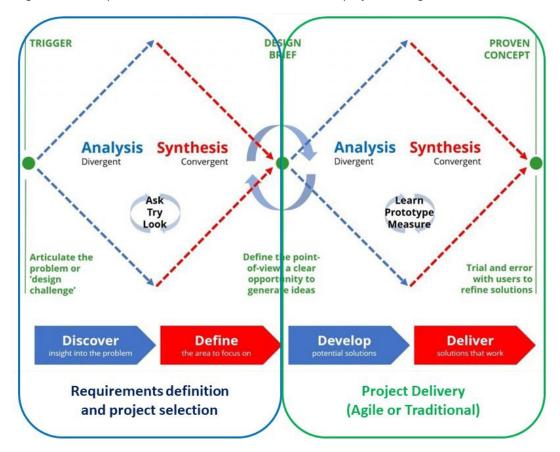


<sup>&</sup>lt;sup>3</sup> This model is based on the Stanford d.school Design Thinking process: <a href="http://dschool.stanford.edu/">http://dschool.stanford.edu/</a>





Taking this last model, we can now start looking a using Design Thinking to link creating a culture that encourages the development of innovative ideas with the use of project management to deliver results.







# Innovation

Bringing some project management discipline into the Design Thinking process from the validation of the design brief (where the questions is the solution feasible, viable, and desirable? Are answered) through to the delivery of the innovation and realization of benefits is likely to result in a more cost-effective outcome in a reduced timeframe.

Innovative thinking is great and should be encouraged within every organization; but you need pragmatic innovation to move the best of the ideas from an abstract concept to a proven concept that is delivering value<sup>5</sup>. Melding Design Thinking and project management seems to be one way of achieving this objective.

First Published 20th March 2020



# Downloaded from Mosaic's PMKI Free Library.

For more papers focused on *Innovation* see: <a href="https://mosaicprojects.com.au/PMKI-PBK-005.php">https://mosaicprojects.com.au/PMKI-PBK-005.php</a>

Or visit our PMKI home page at: https://mosaicprojects.com.au/PMKI.php



Creative Commons Attribution 3.0 Unported License.

**Attribution**: Mosaic Project Services Pty Ltd, downloaded from https://mosaicprojects.com.au/PMKI.php

<sup>&</sup>lt;sup>5</sup> For more on *realizing value* see: <a href="https://mosaicprojects.com.au/PMKI-ORG-055.php">https://mosaicprojects.com.au/PMKI-ORG-055.php</a>



6