

Improving the Potential for Innovation through Design Thinking

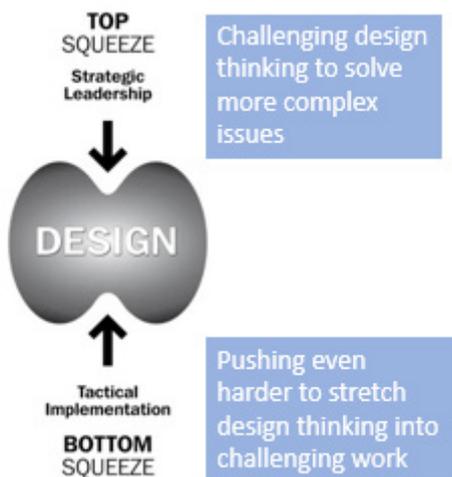
by **Paul Hobcraft**



Introduction

Design Thinking (DT) evolved at many organizations as the way to solve problems in creative and innovative ways. Much of the thinking behind the DT iterative process focuses on challenging assumptions and redefining problems for products, services or customer experiences.

As Design Thinking has taken hold, there has been an increasing demand to raise up its capacity to help solving problems in our business complexities, in our countries and in our lives.



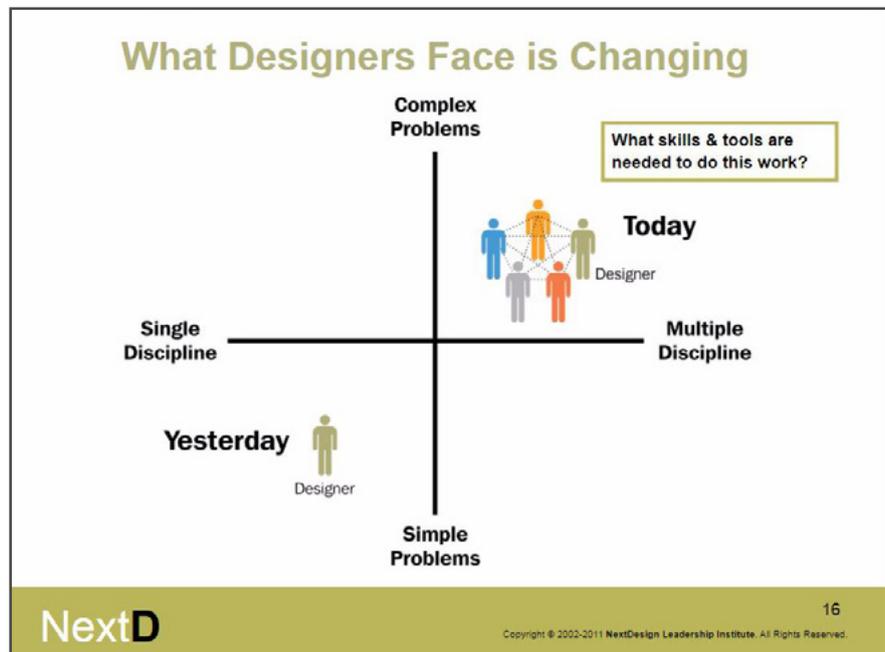
Credits: Reality Check, GK Van Patter & Elizabeth Pastor, NextDesign Leadership Network, New York.

We have been pushing Design Thinking to evolve that it responds to the very different challenges that are emerging, to apply this human-centred set of techniques to solve increasing complexity across broader problems and challenges.

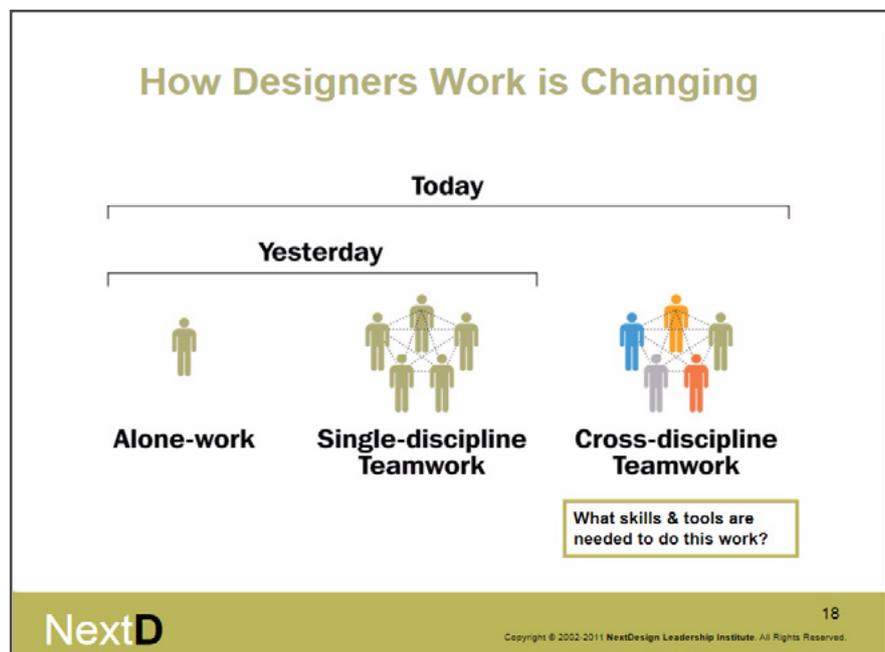
This means, we are entering a new period of raising the 'game' of DT. Within this report, I lay down a foundation of Design Thinking as we see it today. Thus, the intent is to step back first, then take the step up to the present and then where Design Thinking is heading. It should be more strategic, as it shifts and adjusts to the needs of more complex challenges and problems where traditional approaches are now requiring this different thinking perspective.

A new scope within Design Thinking is raising the game significantly

The present difficulty is that many of those who have been trained in Design Thinking a while ago didn't adopt their way of usage. Thus, they apply older ways of DT that lead to unsatisfying results. But we are facing different challenges, recognizing the simple ones work well with design thinking but we need to think differently in tools, skills, and DT approaches for the more complex problems that most organizations are needing to tackle.



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What is Design Thinking?

How broad would you define design? We found it in product design, industrial design, design systems and graphic design. McKinsey's Jennifer Kilian offered this for DT:

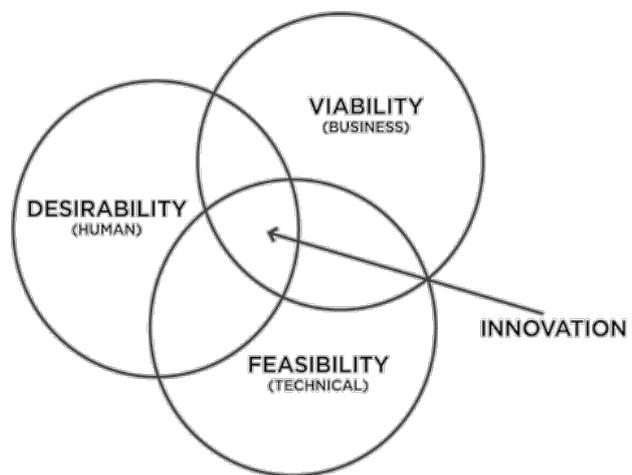
"Design Thinking is a methodology that we use to solve complex problems, and it is a way of using systemic reasoning and intuition to explore ideal future state. We do this with the end user or the customer in mind, first and foremost."

With the view of McKinsey, they go on...

"As a broad term, it could mean such different things for different disciplines, from industrial design to experience design to digital design. It is increasing in importance as we are seeing the limitation of traditional ways of approaching problems."

In this opening summary, I quote Tim Brown, the CEO of IDEO, one of the early pioneers of establishing Design Thinking as we know it today.

"Design Thinking is a human-centred approach to innovation that draws from the designer's toolkit to integrate the needs of people, the possibilities of technology, and the requirements for business success."



Tim Brown,
CEO OF IDEO

Exploring the current status of Design Thinking

I am not reinventing the wheel here but I took a "walk" around several useful references and great explanations and tried to synthesize them along with some of my own observations.

I found great articles produced by **Rikke Dam & Teo Siang**, they wrote extensively about Design Thinking on behalf of the **Interaction Design Foundation**. Rikke & Teo and the rest of the team are doing a great job by reviewing much within the current practice of Design Thinking, wherefore I asked Rikke if I could reproduce the parts. She agreed with the citations and references that she clearly deserves.

They work with the [Interaction Design Foundation](#) and many further good organizations are shown below in the references/resource section at the end of this e-Book. They are an independent non-profit initiative, established in Denmark with an objective to democratize learning to create low-cost, high-quality education to change the way people learn design by providing top-notch curricular materials, and aim to strike the perfect balance between academic rigor and practical relevance.

Is Design Thinking on everyone's agenda?

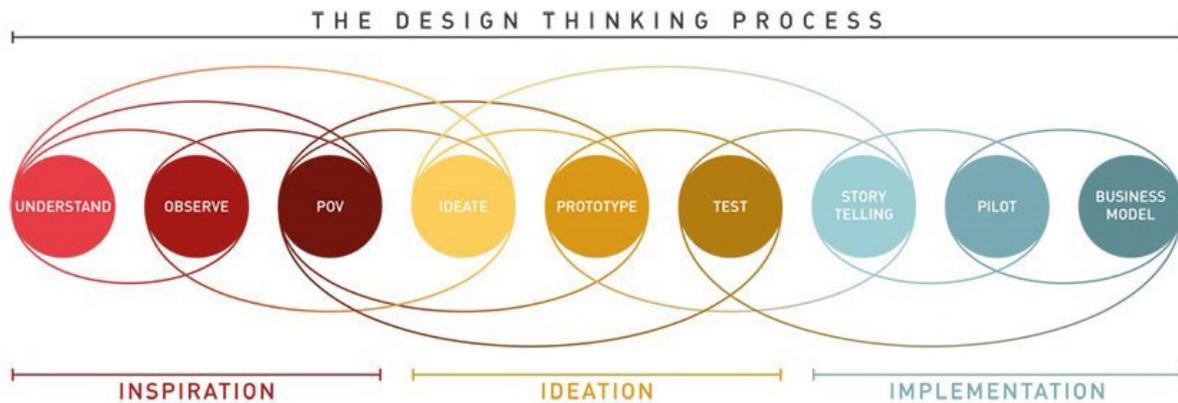
Well, it is getting there. The argument is that Design Thinking meets a need. With new generations of designers who are trained to blend technology and business, they became more agile in moving across different spheres and connecting more of the dots. There are broader conversations. Design Thinking helps to break down siloed thinking into more 'integrated' conversations.

Design Thinking becomes more central to business strategies, marketing strategies and execution, works in operations and product design and helps to tackle social problems. So, it is becoming far more important than in the past. Furthermore, experience design can be a real source of competitive advantage, as the meeting point where a company wants to be and creating solutions that improve on getting there to achieve customer needs far more in 'their' ways of understanding.

You can increasingly recognize that we live in a constraint-limited environment. What we do needs a fundamental rethink and design. We spend our Design Thinking pushing downstream¹ but the expectations need to change as the challenges become more complex to tackle. Leaders are pushing Design Thinking to be part of this complex solving. **Can Design Thinking move beyond its approach to products, services and experiences, and become far more upstream?**¹

¹Methodology terms originally coined by GK VanPatter & Elizabeth Pastor, CoFounders, Humantific, Authors: Innovation Methods Mapping, De-Mystifying 80+ Years of Innovation Process Design.

Overview: Rikke Dam And Teo Siang Pieces



- Design Thinking **starts with empathy**, a deep human focus to gain insights which may reveal new and unexplored ways of seeing, and courses of action to follow in bringing about preferred situations for business and society.
- It involves **reframing the perceived problem or challenge** at hand, and gaining perspectives, which allow a more holistic look at the path towards these preferred situations.
- It encourages **collaborative, multi-disciplinary teamwork** to leverage the skills, personalities and thinking styles of many in order to solve multifaceted problems.
- It initially employs **divergent styles of thinking to explore as many possibilities**, deferring judgment and creating an open ideation space to allow for the maximum number of ideas and points of view to surface.
- It later employs **convergent styles of thinking to isolate potential solution streams**, combining and refining insights and more mature ideas, which pave a path forward.
- It engages in **early exploration** of selected ideas, rapidly modelling potential solutions to encourage **learning while doing**, and allow for gaining additional insights into the *viability* of solutions before too much time or money has been spent
- It **tests the prototypes** which survive the processes further to remove any potential issues.
- It **iterates** through the various stages, revisiting empathetic frames of mind and then redefining the challenge as new knowledge and insight is gained along the way.
- It **starts off chaotic** and cloudy steamrolling towards points of clarity until a desirable, feasible and viable solution emerges.

Which problems can Design Thinking help us solve?

One of the first questions people ask when hearing about Design Thinking is, "What is Design Thinking best used for?". Design Thinking is suited to address a wide range of challenges and is best used for bringing about innovation within the following contexts:

- Redefining value
- Human-centred innovation
- Quality of life
- Problems affecting diverse groups of people
- Involving multiple systems
- Shifting markets and behaviours
- Coping with rapid social or market changes
- Issues relating to corporate culture
- Issues relating to new technology
- Re-inventing business models
- Addressing rapid changes in society
- Complex unsolved societal challenges
- Scenarios involving multidisciplinary teams
- Entrepreneurial initiatives
- Educational advances
- Medical breakthroughs
- Inspiration is needed
- Problems that data can't solve

A holistic approach to challenges

Design Thinking is best suited to addressing problems where multiple spheres collide, at the intersection of business and society, logic and [emotion](#), rational and creative, [human needs](#) and economic demands and between systems and individuals. We would most likely not require Design Thinking to tackle tame problems - problems that are simple and that have fixed and known solutions - unless we were seeking a novel or innovative means to solving the problem with a different desired goal than the typical available solutions.

It's NOT just a process or set of steps

However, Design Thinking is not necessarily only understood as a process or method for solving a set-in-stone collection of problems. It is also a mindset that can be applied in almost any scenario where innovation or thinking differently is required. It can also be combined with other methodologies, business strategies, social innovation models, and management practices. It's something that changes depending on its context and can include tools and techniques from other disciplines.

One of the biggest issues: we need to resolve ingrained pattern thinking

Authors at the [Interaction Design Foundation](#) offered this to ponder. Sometimes, the easiest way to understand something intangible, such as Design Thinking, is by understanding what it is not.

Humans naturally develop patterns of thinking modelled on the repetitive activities and commonly accessed knowledge. These assist us in quickly applying the same actions and knowledge in similar or familiar situations, but they also have the potential to prevent us from quickly and easily accessing or developing new ways of seeing, understanding, and solving problems.

These patterns of thinking are often referred to as schemas, which are organised sets of information and relationships between things, actions, and thoughts that are stimulated and initiated in the human mind when we encounter some environmental stimuli. A single schema can contain a vast amount of information.

For example, we have a schema for dogs which encompasses the presence of four legs, fur, sharp teeth, a tail, paws, and several other perceptible characteristics. When the environmental stimuli match this schema — even when there is a tenuous link or only a few of the characteristics are present — the same pattern of thought is brought into the mind.

As these schemas are stimulated automatically, this can obstruct a more fitting impression of the situation or prevent us from seeing a problem in a way that will enable a new problem-solving strategy. Innovative problem solving is also known as “thinking outside of the box”.

The real push is on getting maximum value out of Design Thinking.

It's about human-centred innovation

Design Thinking works best when it comes to creating the human sense of things and tackling challenges in a way that best meets human needs, regardless of the scope and authority of the challenge. A conformist, controlled, technical or linear approach is no longer able to grapple with the newly complex and sensitive needs of modern society.

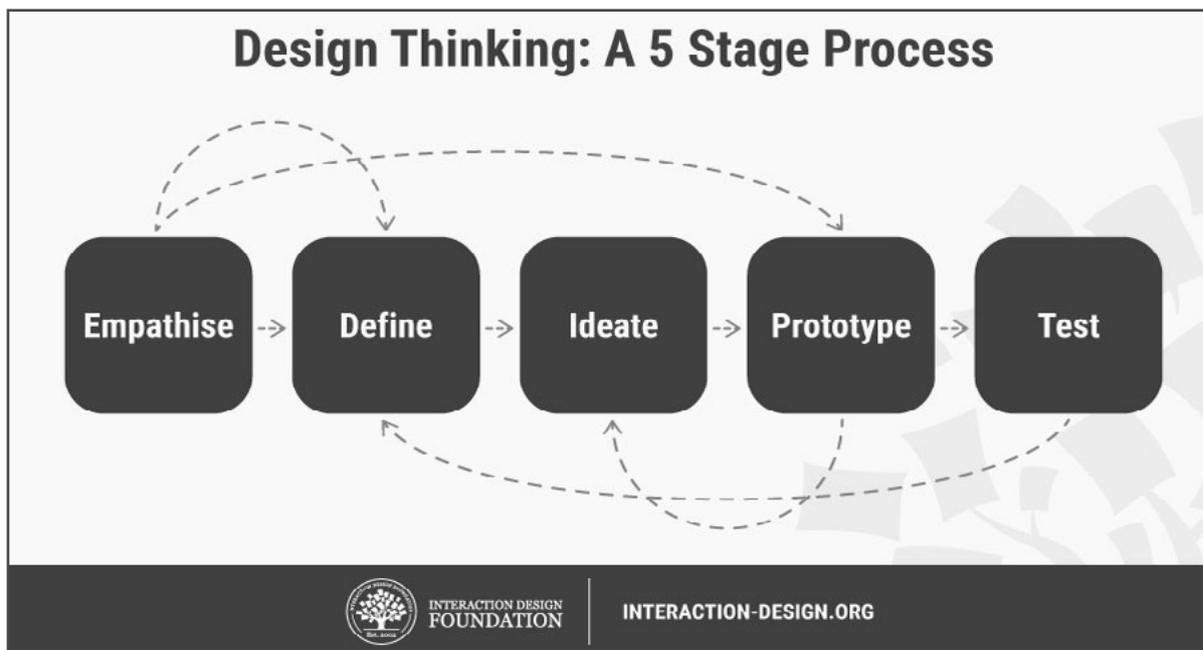
It starts with an intention, a desire, a need or yearning towards a better situation or state. We don't know whether this is a mere dream or a practical and viable path to take, but Design Thinking gives us the tools to explore *What Could Be*.

Popular DT Frameworks

Heart, Head and Hand

The Design Thinking process is a blend of Heart, Head, and Hand. This means the process is based on vision, need, [emotion](#) and feeling to begin with, continuing on to the cognitive processing for ideation and evaluation and then diving into the practical creation by hand. It's a holistic process and demands input from all faculties to be successful.

d.school's 5 Stage Process



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The Stanford Design School (d.school), now known as the Hasso Plattner Institute of Design, began teaching a Design Thinking process with the following 3 steps:

- Understand
- Improve
- Apply

Since then, they moved on to formulate and open source their famous 5 stage process which is widely used. The d.school represents the 5 stage process by their hexagonal Design Thinking Lenses. The lenses are purposely defined so they will be seen more as enablers or modes of thinking, rather than concrete linear steps.

Deep-Dive

The Deep-Dive was IDEO'S first expression of this process, which they aired LIVE on ABC Nightline back in the late 90's. Deep-Dive process comprises of the following steps:

- Understand
- Observe
- Visualise
- Evaluate
- Implement

Deloitte acquired the Deep-Dive process in 2006.

IDEO's best known Design Thinking Process

IDEO uses a different process, and while it has only three stages, covers pretty much the same ground as the other processes covered here. The three stages are:

- Inspire: The problem or opportunity that motivates the search for solution
- Ideate: The process of generating ideas
- Implement: The path that leads from the project room to the market

Also, IDEO released a deck of IDEO Method Cards covering the modes **Learn, Look, Ask, Try**, each with their own collection of methods for an entire [innovation](#) cycle.

HCD - Human-Centred Design

Furthermore, IDEO developed contextualised toolkits which repackaged the Design Thinking processes. One such iteration focuses on the social innovation setting in developing countries. For this context, the terminology needed to be simplified, made memorable and restructured for the typical kinds of challenges faced. The HCD process (Human-Centred Design) was re-interpreted as an acronym to mean **Hear, Create, Deliver**.

H: Hear

Similar to early phases in other Design Thinking processes, the Hear stage is about developing an empathic understanding of users, as well as [defining the problem](#) that the team is trying to solve. It serves the purpose of gaining a solid foundation in the context of the problem and sufficiently reframing it to progress. In this phase of the process, design thinkers need to:

- identify their challenge,
- recognise existing knowledge in the challenge space,
- identify people to engage with to understand the deeper human side of the challenge,
- engage in a range of ethnographic research activities to uncover sufficient human insight, and
- develop points of view or stories to guide the creation phase.

C: Create

Similar to the Ideate and Prototype phases in d.school's 5-stage approach, the Create stage is concerned with exploration, experimentation and learning through making. It involves pinpointing potential areas of exploration, and then engaging those closest to the problem to co-create solutions. This allows design teams to maintain the highest levels of empathy during early design phases, as well as weed out potential problematic [assumptions](#) made by designers who do not sufficiently understand the context.

- Highlight opportunities to explore from insights gained in the Hear phase
- Recruit participants for the co-design task from a diverse pool of those affected
- Maintain awareness of sensitivities by avoiding judgements
- Encouraging storytelling and expression
- Facilitate action orientated creation of tangible solution

D: Deliver

The Deliver phase of the HCD process is centred around logistical implementation, and overcoming any obstacles which may exist when rolling out a solution within the required context. Though solutions arrived at may provide a functional patch to a problem, getting by in communities and bypassing any other roadblocks on the path of implementation is essential for the process to be completed successfully.

Design Council of the UK: 4 D's

The Design Council of the UK has settled on 4 D's: Discover, Define, Develop, Deliver. They make use of a Double Diamond process diagram to indicate 2 cycles of divergent and [convergent thinking](#) and activities.

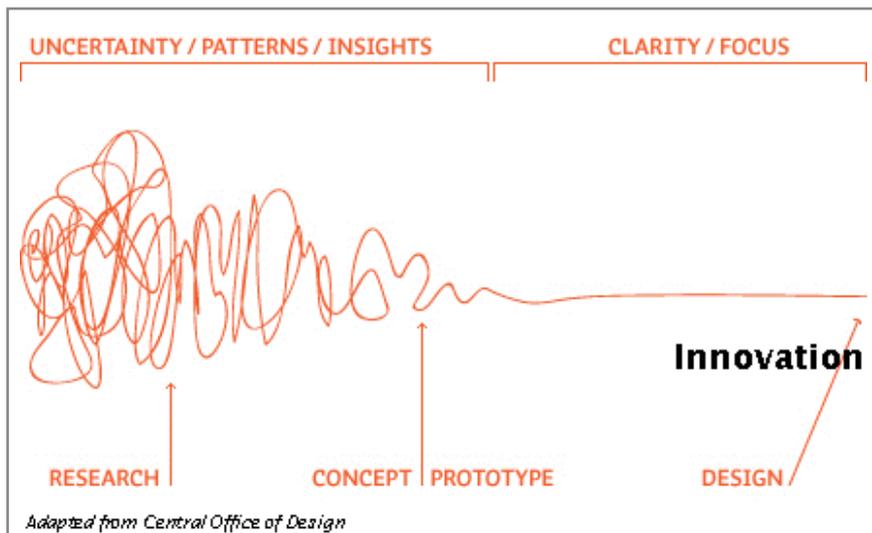
Frog Design

Frog Design's 3 D's Discover, Design, Deliver has been replaced with Explore, Converge and Support, indicating a focus on more than just finite projects or products, but an ongoing relationship with their clients well after delivery date.

The LUMA System

The LUMA Institute, a global firm that teaches innovation and human-centred design, has its own expression of [Design Thinking modes](#): Looking, Understanding and Making. This unfolds through a series of steps per mode completed with a proprietary user manual and method cards. The modes allow for remixing a wide range of processes through the 3 modes using methods specific to your needs.

Design Thinking Is Evolving As a Strategy 'Assist' for Innovation



How do you create a strategy for guaranteeing that innovation and creativity flourish in your organization?

Design thinking has evolved beyond making objects. Organizations are pushing hard to get DT instilled in many parts of their business. They want their people to think like designers and understand how to apply the basics of design principles. It provides a unique edge to understanding problems, challenges and issues, a powerful competitive edge. Increasingly, the design way of thinking can be applied to solutions for procedures, system resolution, customer and user experiences. It moves from finding desirable solutions for products, services, and experiences - it is pushing into contributing to solve more complex problems.

The growing appeal of Design Thinking comes from its capability of combining imagination and intuition, by applying a certain logic and a systemic reasoning to explore possibilities. Possibilities of what could be and what is coming closer to the point of providing desired outcomes that enhance, solve or benefit organizations and end users.

Divergent and convergent process

Design Thinking employs [divergent thinking](#) as a way to ensure that many possible solutions are explored in the first instance, and then [convergent thinking](#) as a way to narrow these down to a final solution. Divergent thinking is the ability to offer different, unique or variant ideas adherent to one theme, while convergent thinking is the ability to find and realize the best idea/solution to the given problem.

Larry Keeley 's view on Design Thinking

Larry is a Director of the Deloitte Consulting LLP and President and Co-Founder of its innovation practice, Doblin. He is a strategist who worked over three decades to develop more effective innovation methods. As a globally recognized teacher, speaker, writer, and thinker, he fervently champions the strategic combination of design and business.

His book, **Ten Types of Innovation, The Discipline of Building Breakthroughs**, codifies much of the research and tradecraft that drives effective innovation.

In a piece written for Deloitte, called "[Beyond Design Thinking](#)", he commented about "**The trend in a nutshell**":

"Design Thinking" has been increasingly embraced by the world of business and business education over the last decade. During a time of intense change, this is a positive development. It helps firms develop the courage and use tradecraft that moves beyond analysis to embrace synthesis as well. This is part of what it takes to help firms commit to building something bold and newsworthy, instead of only seeking the tactics needed to better sell what is already known.

What many people are missing. Too often advocates of "design" overreach, regarding it as an elixir that can somehow transform conservative companies into creative ones. In the most egregious cases, advocates suggest Design Thinking can somehow replace nearly all other forms of analysis, planning, and strategy.

What great leaders should know and do now. The power of design is real and increasingly important. It can help firms build breakthroughs and change industries, but it has to be balanced and integrated with other skills and capabilities. This is especially true now because

there is a parallel revolution in how to get new insights from analytic techniques—and no one should ever jump right into innovating without first producing some set of profound insights that can be the basis for an innovation team to do the hard work of building a breakthrough.

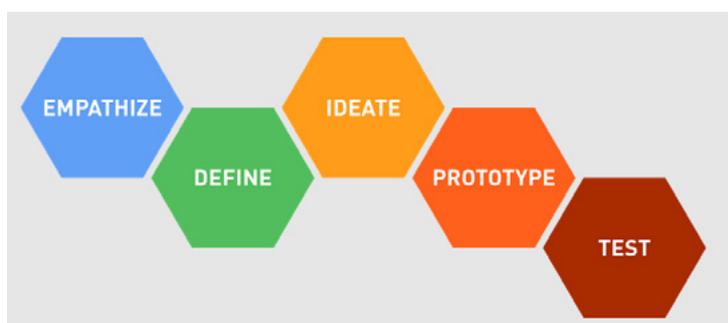
Put simply, analysis without synthesis is predictable and commonplace. Design Thinking without deep analysis is reckless. The savvy leader now seeks to do both, recursively, in integrated, even dazzling new ways.”

Last year the Design Management Institute rigorously selected 15 design-centric publicly traded companies. Those that made the cut include Apple, Coca-Cola, Ford, IBM, Intuit, Procter & Gamble, Starbucks, Nike, and others. These companies, which use design strategically and integrate it through their business processes, tend to grow faster and have higher margins than their competitors - **the identified companies’ returns were 2.28 times larger** than the S&P’s returns over the previous decade.

Take away from Rikke Dam and Teo Siang

“We could spend weeks exploring the Design Thinking Processes, their differences and similarities and the merits of variety or conformity. It is important for us to peel away the facade to understand the foundations. To the first timer, at first sight, the Design Thinking process is mysterious, chaotic, and at many times complex. However, it’s a discipline, which will grow on you with direct practice. You will learn things in a practical manner, which no theory can adequately cover growing in confidence with each new experience. You may even be tempted to develop your own expression of these steps, modes, and phases to suite a completely new context, and that’s part of the beauty of Design Thinking.”

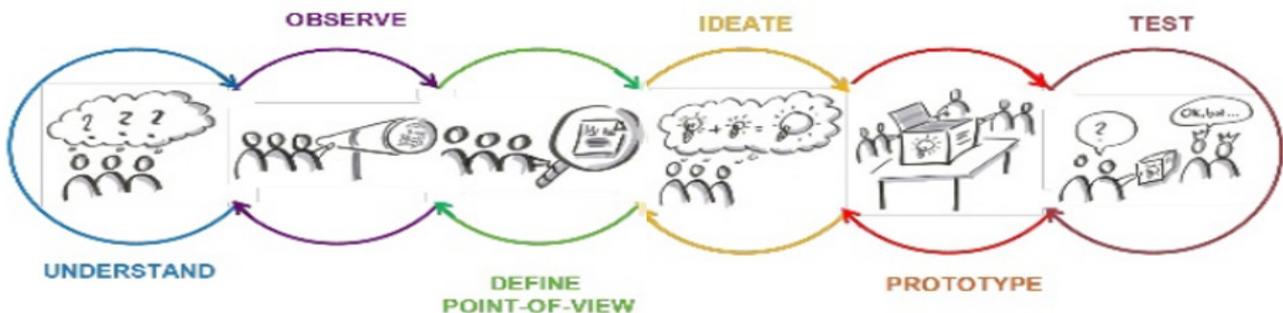
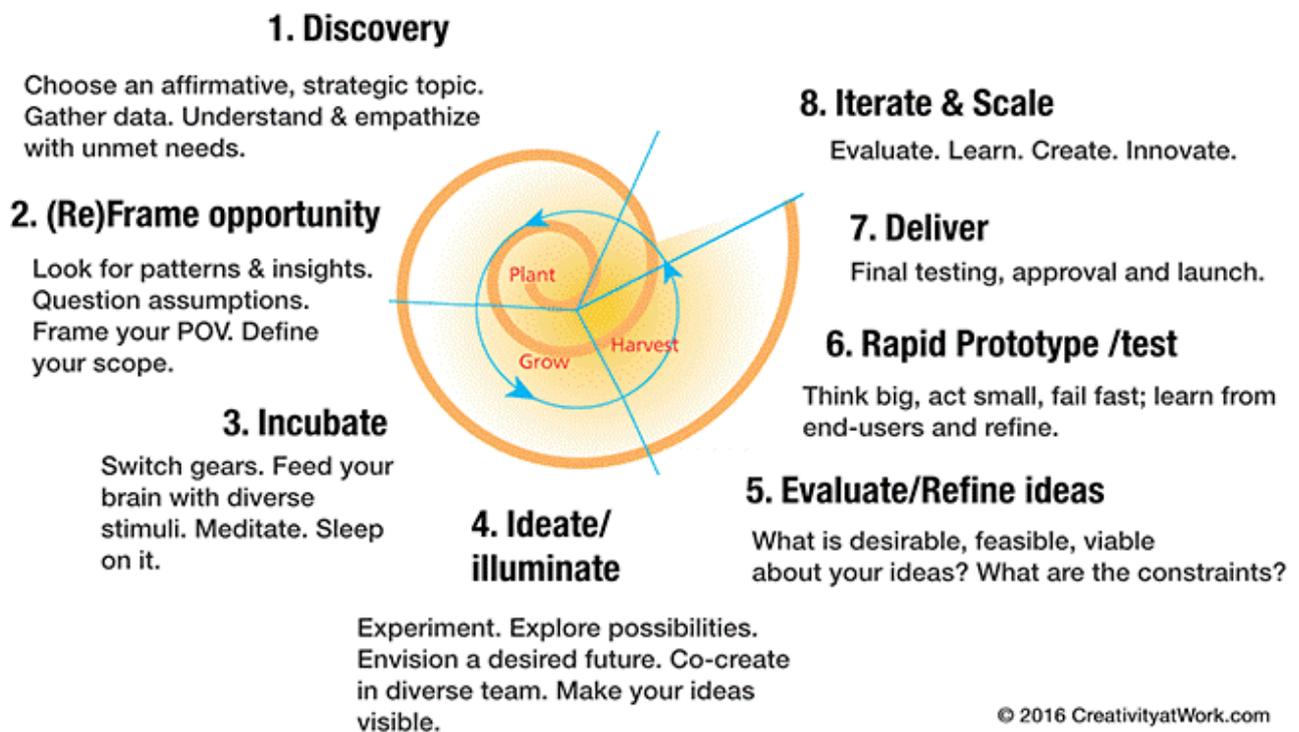
The critical thing is to be ready to engage in all of the five stages:

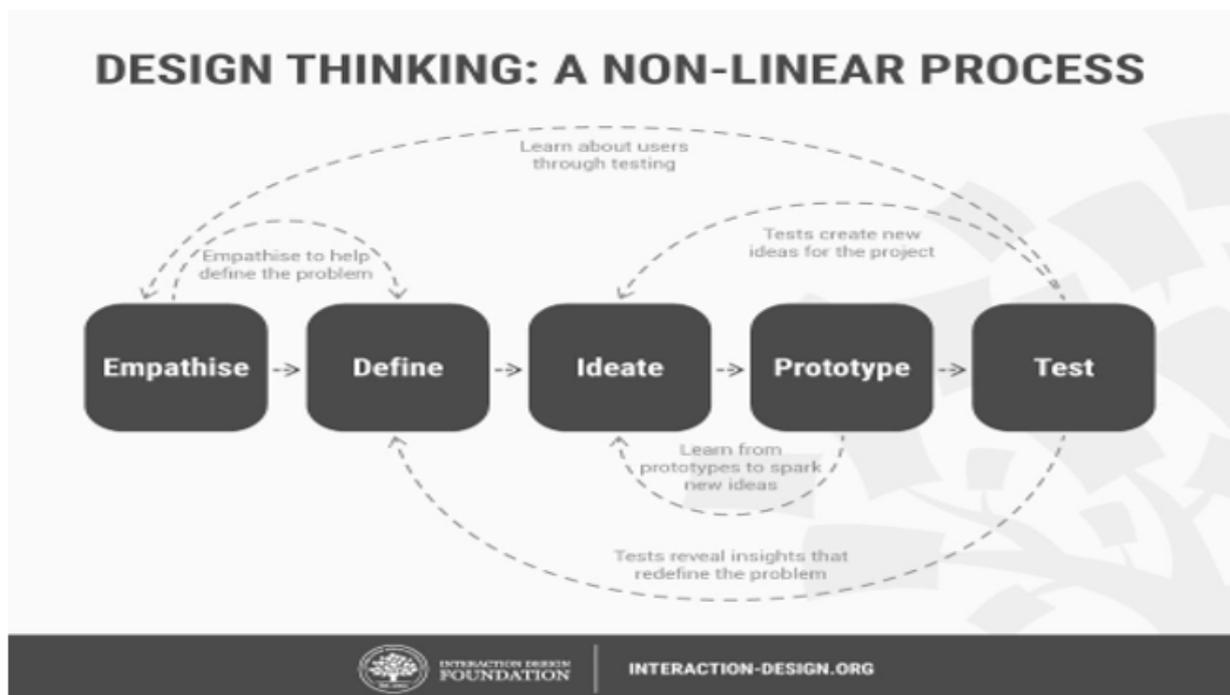
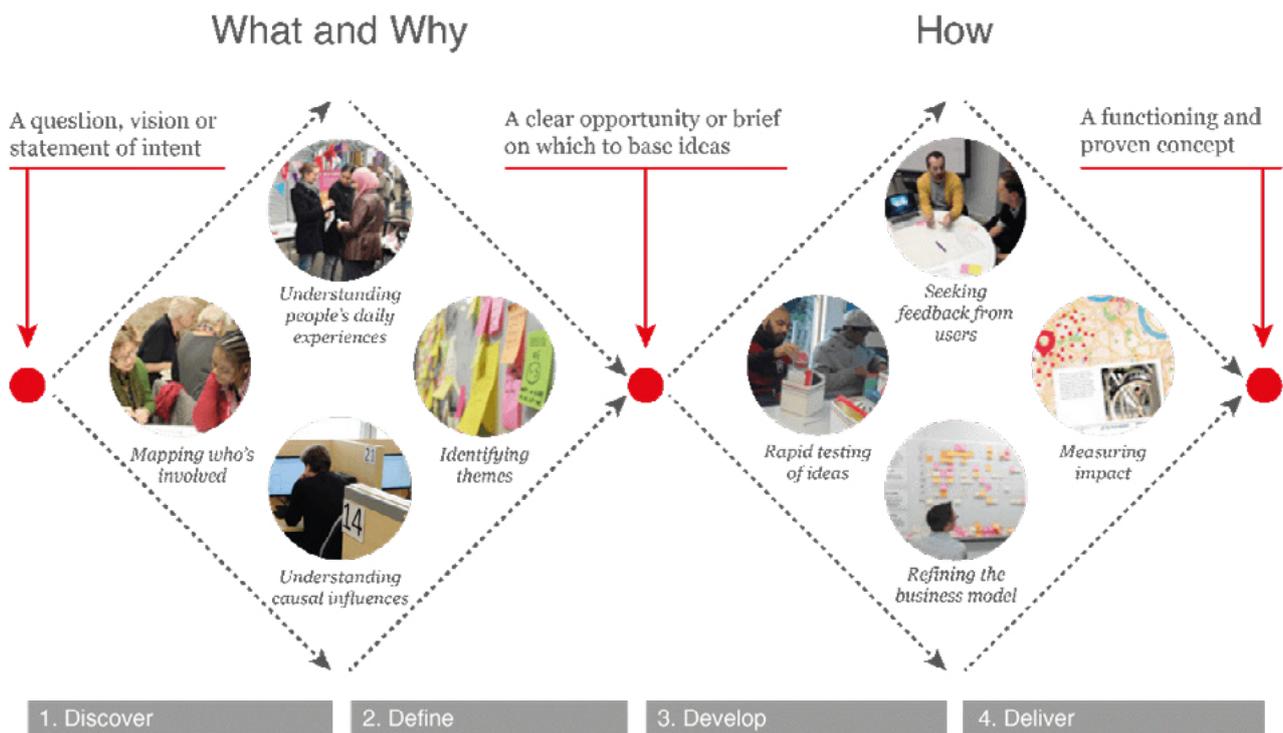


A pause here...

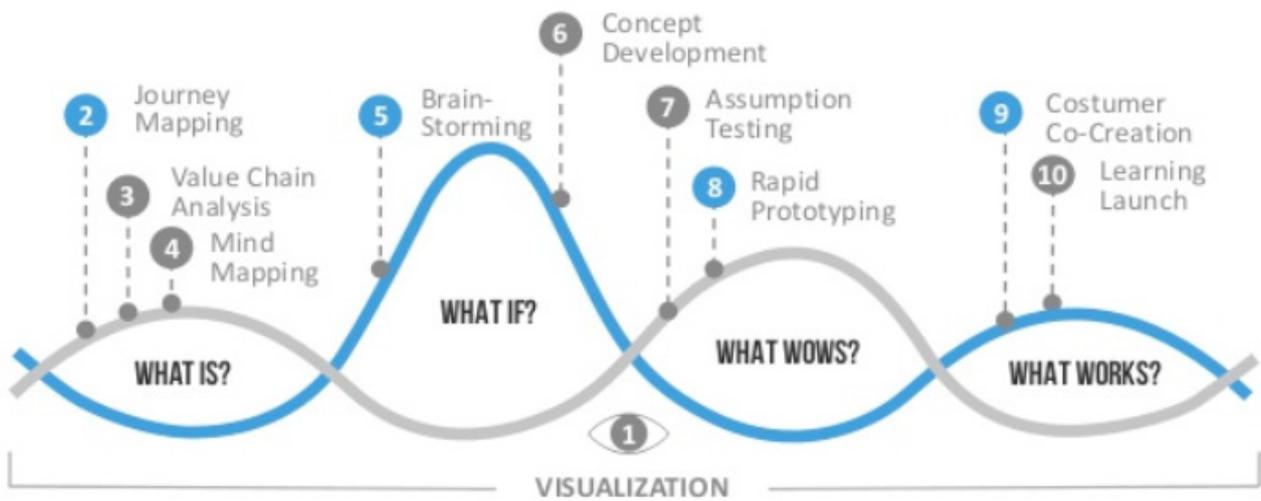
Let's do some visual feasting

Because there are so many frameworks for Design Thinking, I clustered and rated some of my favourite ones. By searching Google Images under "Design Thinking" you will find many more.

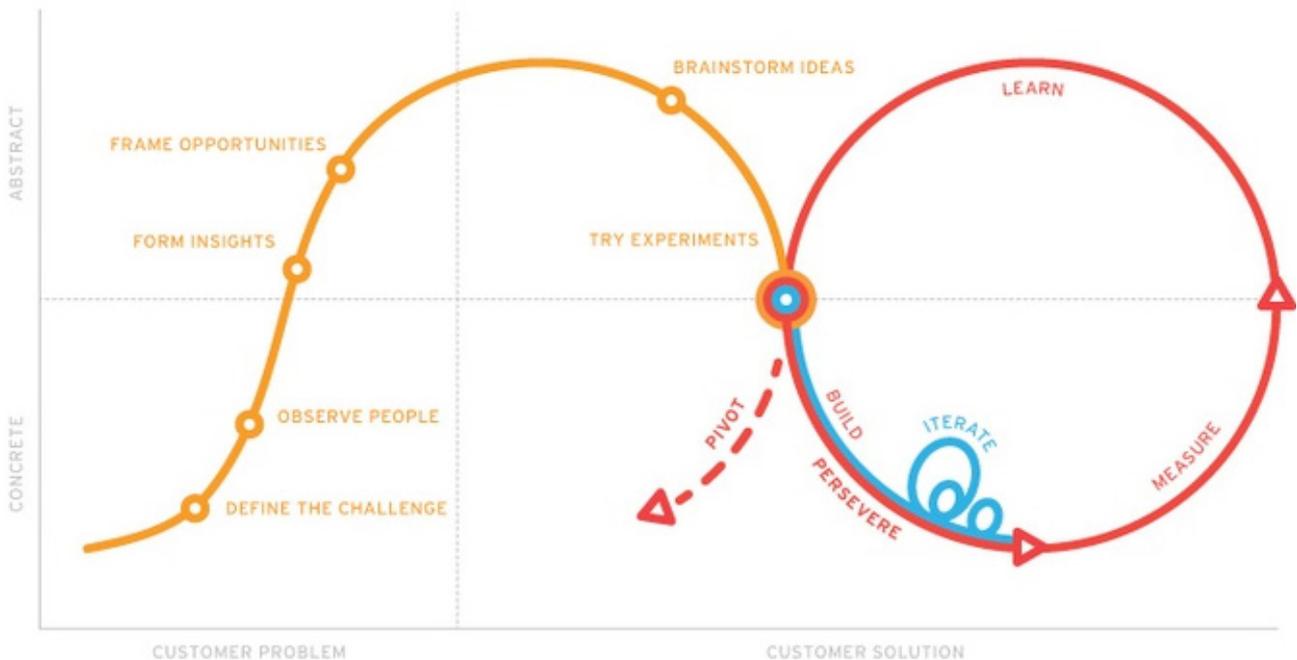




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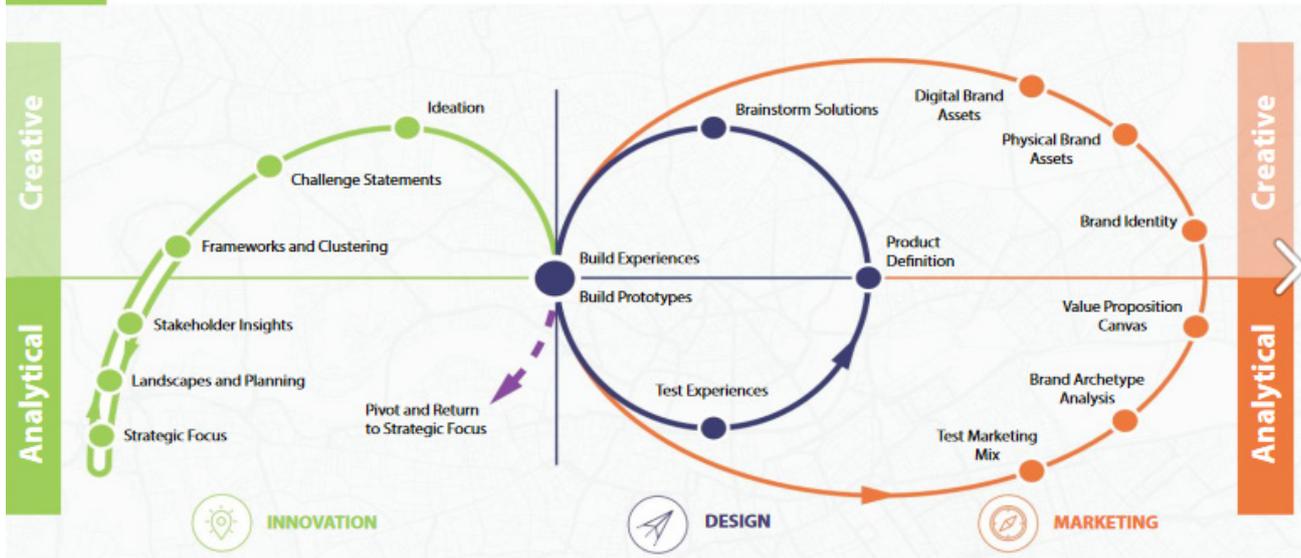


DESIGN THINKING DISCOVERS CUSTOMERS



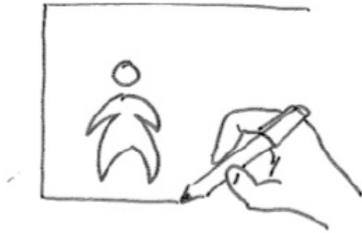


DESIGN THINKING AND THE CUSTOMER EXPERIENCE



HERE'S WHAT SETS DESIGN THINKING APART

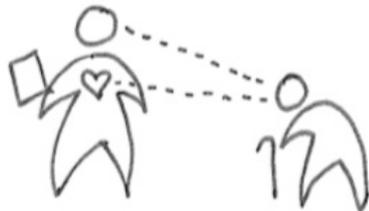
2. VISUALIZE



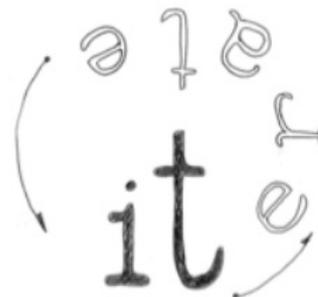
3. CO-CREATE



1. EMPATHIZE



4. ITERATE



Summary: Where Are We Today?

I have the feeling that Design Thinking is currently a 'burning platform' and we are suffering from the term 'Design Thinking' as it is so loaded. We are seeing it as a solution to all creative problems and often messy to understand. It has raised a lot of expectations as well as its fair share of controversy with a fair share of failure when it was not achieving what was expected.

I got the impression that there is an immense interest in DT as being a valuable contributor, and part of a solution within organizations to tackle their tougher problems, as well as those that need a level of creativity to move through in understanding.

So why are organizations so caught by DT? Often it became the promise of having creative ways to solve solutions and work in harmony with all the rational thinking that dominates much of business thinking today. DT sounded so appealing, it quickly became "oh, we need some of that." But the question then becomes "some of what?"

Where Design Thinking Can Earn Its Place

Design Thinking can make real contribution through a good understanding and analysis of the users, their problems, and challenges they are facing, by making use of ambiguous information, reframing opportunities, exploring ecosystem conceptualization, investing in prototyping to fail early and synthesizing the results as better outcomes. All this adds up to a creative process. Creativity is one of the key essences contributing to innovation, and Design Thinking is hugely valuable to harness this creative energy.

Much of DT is working in a parallel space with many different paths to work through broad phases of investigative work. This makes DT seem “fuzzy, ambiguous and strange” to many who are more trained in being analytical, often with backgrounds in science and engineering. It is bringing a degree of art and creativity to science and rational thinking. This combination must constantly search for a common language to get the best out of a diverse group of thinkers, all trying to find solutions.

Design Thinking: the best friend of innovation, strategically and tactically

When DT is applied to business or social issues, it is by making ‘creativity logical’. You have its power of contribution. It can transform our innovative solutions. Design Thinking is a highly creative problem-solving approach with a toolkit of methods, but more a specific mindset where adapting is constant. If the same process gets repeated too often, it may bring only the same results or dampens the potential to spark different ideas and solutions. Design Thinking as something far too prescribed ‘dulls’ the process. Design Thinking needs creativity within itself, bringing different framing concepts to different stages of the thinking through process.

Danger: trying to “systematize” DT into a familiar, easy to use process

Organizations turned Design Thinking into a linear, often gated, by-the-book methodology and suddenly it is not true Design Thinking anymore, it becomes just another too linear, slow and not as bright way to be ‘so creative’. But hey, we are design thinkers, that’s not bad, is it? The dominating thinking about ‘process’ starts to ‘screw up the freedom’ of true Design Thinking.

It quickly became boiled down to aiding and supporting the incremental innovation. It loses its real powerful edge of harnessing creativity to solve problems in highly imaginative and insightful ways, it becomes just the encouragement to help thinking along.

Design Thinking often gets reduced down to supporting small project-related work, happily being used at the periphery of the organization. It becomes simply a friend to incremental innovation and change. Leaders start to ask questions about all this Design Thinking 'hype' and begin demanding far more from a Design Thinking process to tackle their complex problems.

We need a different pathway ahead, otherwise the existing form of DT will fail

Design Thinkers should restate their value proposition before it is too late, to deepen the techniques and avoid moving out of their specialized role of being great facilitator to connect others to thrive and build solutions.

We should begin to equally establish that Design Thinking is a specific creative, human-centred process for all our thinking to pass through.

Strengthening our thinking through processes

To strengthen our thinking, it takes constant creative work, blending design and business thinking, and applying various techniques and frameworks for different scenarios. We need to move from that one correct answer, often blindsiding us, to the many solution possibilities that take innovation out into new realms of solutions. Those meet a more integrative thinking that connects ideas more to customer needs.

Enter the need for a new Design Thinking

Design Thinking can play a richer role and be a more powerful contributor to bigger problems, but it needs to evolve and be seen in a wider context and not seen as specialized, narrow and limited. It can connect to a wider universe of problems and complexity of design itself, over the centuries it broke out of past confines. Design thinking makes us all design-conscious if we allow it to. It is the human-centred design that can draw out the best of our thinking if we do allow it to.

DT encourages us to abandon the linear thinking and keeps us constantly undergoing that looping circularity as the accepted process, and that needs to reset mindsets significantly. DT needs to evolve in all our minds, away from those past experiments limited to narrow, linear paths of Design Thinking. Understanding is highly liberating, sometimes scary but deeply satisfying when you truly break through a complex problem.

We need to allow the creative flow to emerge and seek experienced Design Thinkers

Good well-trained Design Thinkers are 'schooled' to be naturally creative thinkers, that is their space. They need to extend their toolkit of methods and tools to produce new value through the approaches they undertake. They thrive in the ambiguities, recognizing in growing complex problems there will never be a concrete set of predictable answers.

Design Thinkers work through the messy and unpredictable business, typical for innovation and discovery, analyzing and synthesizing to push those unpredictable, surprising, creative outcomes. To achieve this, DT can't be a prescribed step-by-step detailed process, it simply passes through stages, loops back when necessary, and moves forward when it seems right.

The search is even more centred around strategically connected value creation

Design Thinking needs a new lifting up into both tactical and strategic approaches. As we face the task of solving more complex and strategic problems, it is the time for Design Thinking to step-up and become a key component on how to do this, relating far more to customer needs, to solving organizational challenges or market challenges, and more 'knotted problems' that corporations and society are grappling with.

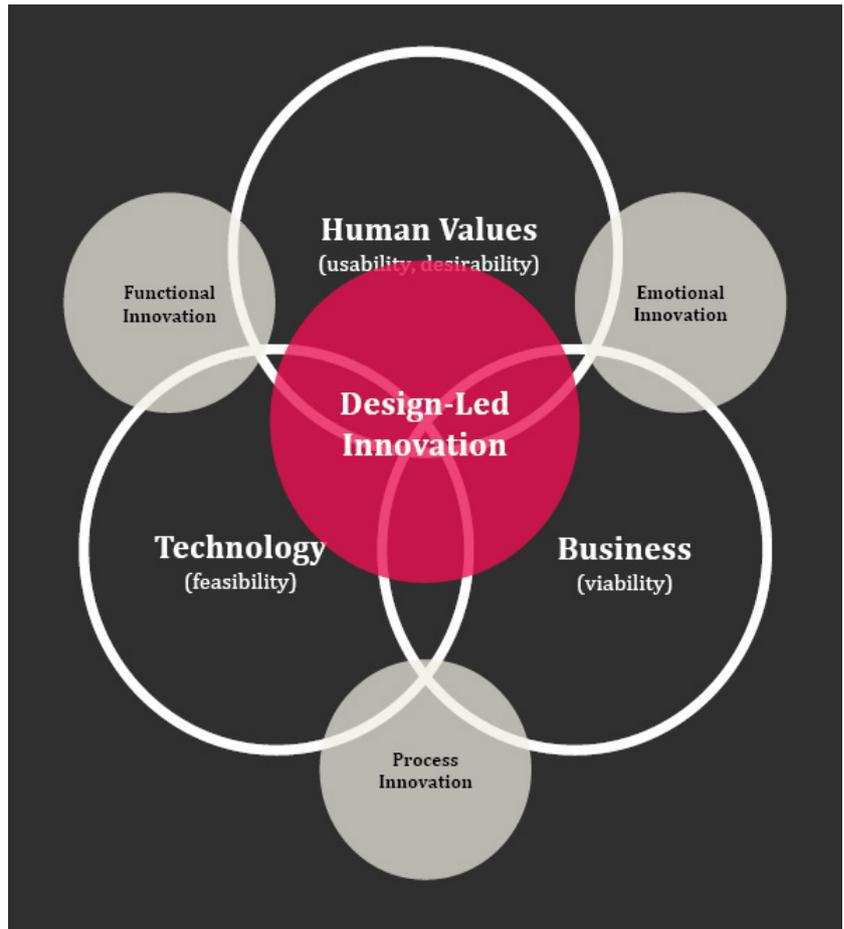
The ability to extract from Design Thinking methodologies can significantly help in the future. What is increasingly demanded today is to solve more complex problems in creative ways, and Design Thinking needs to work in harmony with many other thinking skills to make its contribution.

To summarize, Design Thinking certainly needs to mature way beyond a one frame thinking concept to achieve its potential. DT needs to go beyond just product, customer experience, or service level. System level thinking is where the future of design is focused, and where much of the current confusion lies, as we are in the middle of these changes and they are being worked through in multiple ways.

The Beginnings of Different Design Thinking Views

The remainder of this e-Book points towards the early stages of alternative approaches to Design Thinking. As different views are emerging, I took the work of two Design Thinking consultants to cast out Design Thinking into a possible future, but there are plenty of others emerging.

One is where **IDEO** is going with their suggestion that design is increasingly circular. The other one is **Humantific** who is taking Design Thinking out and forming it around a more robust set of thinking, way beyond just Design Thinking but more into “sensemaking” through different approaches.



The changes are questioned as many want Design Thinking to stay the way it is, especially those that invested in the old way. They ignore the market need that Design Thinking needs to evolve as part of an evolutionary process.

Humantific argues that Design Thinking is evolving to strategic Design Thinking

To keep it simple, they see and explain Design Thinking this way:

Design Thinking (also known as Meta Design Thinking, Strategic Design Thinking, and Transformation by Design) starts upstream with no outcome assumptions, and results in diverse outcomes.

Product Design Thinking starts downstream with product creation assumptions and results in product outcomes.

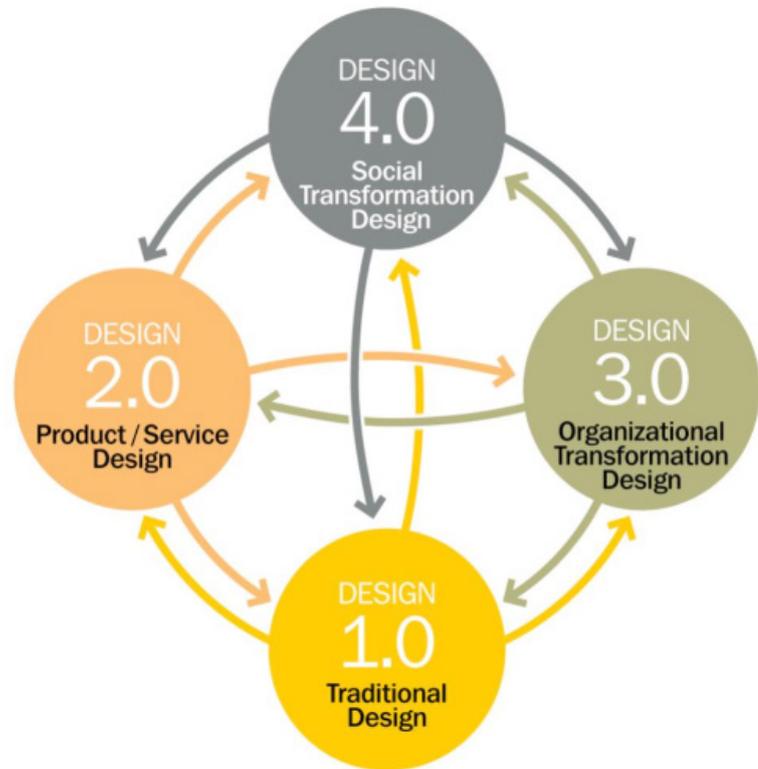
Service Design Thinking starts downstream with service creation assumptions and results in service outcomes.

Experience Design Thinking starts downstream with experience creation assumptions and results in experience outcomes.

In Humantific's view, today these approaches are sold in the marketplace (and by various graduate schools) as Design Thinking. It is presently quite a mess out there. Due to this confusing mess around Design Thinking, Humantific recommends organizational leaders who consider applying some form of DT, to step back, and then (from a sensemaking perspective) better understand the differences, options, intentions, limitations, and possibilities, before making any investments.

According to Humantific, *"The good news is that today marketplace expectations around the subject of Design Thinking are changing. Savvy organizational leaders now expect less spin and more clarity"* - GK VanPatter, CoFounder Humantific, New York

The shifts are more towards strategic design practice.



To quote GK VanPatter, one of the Co-Founders of Humantific:

*“In the future, there will be a better fit between methodologies and challenge scale. Five years ago, no one could have guessed that by 2015 **clarity** would become the next Design Thinking competitive advantage but the mess that has been created around the subject now makes that rather clear.*

*A **new imperative** has emerged and that is simply being clearer about **Design Thinking**, what it is and isn't from a methodology perspective. Understanding how, where and when to tap into various versions of Design Thinking has become key”*

*“A not so hidden elephant in the **Design Thinking** living room is that it is not unusual for anyone to encounter difficulties when trying to use downstream **Product Design Thinking, Service Design Thinking** or **Experience Design Thinking** in the context of upstream organizational and or societal challenges...a context that these methods were not designed for. **Method Misfit** is often encountered and a phenomenon known to savvy **Strategic Design** practice leaders for a decade”.*

***Product Design Thinking** kicks off from a **Product Design** brief (framed challenge) ie: someone has already decided that product creation is the challenge and will be the outcome. In the context of organizational and societal/civic engagements the innovation cycle often begins upstream without assumptions that products, services or experiences are needed or will be outcomes.”*

GK suggests:

"For many, the notion of operating upstream from briefs is a new terrain, where different skills and tools are required. Although, as practitioners, we have for ten+ years, been pointing out the need, we still see very few graduates coming out of the graduate design academies with upstream skills. Most have downstream skills that have, in a competitive marketplace, been depicted by their schools as upstream universal methods. This is essentially a stretched, some might say false narrative, more marketing lingo-dingo than methodology reality. Whether we all like it or not many of the competing graduate schools are now in the spin business as well as the education business...:-)

*Don't go build a downstream **Product, Service or Experience Design Thinking** capacity and expect it to perform like an upstream **Strategic Design Thinking** capacity. While they all add value, we suggest being clear about what challenges you seek to address and what value you seek to create! One simple thing to do when someone brings up the subject is simply to ask: **Which Design Thinking methodology** are you talking about?"*

Humantific raise the question "What is a design driven company, government, community, society?" From their [Humantific](#) perspective, it is one that is capable of moving beyond the enabling of **Product/Service/Experience Design** (Design Scale 2) to include broader value creation within organizations (Design Scale 3) and societies (Design Scale 4). This is already the operational space of the leading practice arena and has been for years (see the above visual)

GK challenges all in his final comment in one article I've read: *"If we are collectively serious about moving the Design Thinking conversation forward let's make an effort to move beyond Design Thinking as blur."*

My note:

At first glance you see Humantific looking beyond Design Thinking into sensemaking, and does that fit in where Design Thinking is heading?

I argue yes, when we are dealing with far more strategic problems, as one tool alone can't solve these problems. His upstream view has merit if DT can be robust enough to take on more complex challenges and problems. It becomes part of a greater "thinking through" set of frameworks to draw out the challenges with Design Thinking being one part of these, a highly critical part.

Understanding Upstream and Downstream within DT

Let's look at "upstream"² and "downstream"² a little deeper to give some clarity — it points to a real difference in how you construct your Design Thinking approaches.

Below are a few key differences, and similarities offered from the [Humantific perspective](#). The terms upstream and downstream relate to the assumed starting points of the methodology.

UPSTREAM: Upstream means upstream from the "brief", which is a framed or semi-framed challenge. In upstream contexts, one cannot and does not assume to know what the challenges might be. You must establish the broader context and impact it might have. Part of the work is to create the interconnected constellation of challenges, often seen for the first time. The everyday context for upstream is complex organizations and societies where many types of challenges tend to exist. Why would anyone assume all challenges on the planet are product or service related?

DESIGN THINKING [Also known as Meta DT, Strategic DT and Adaptable Inquiry]

Key Words: Upstream, meta, iterative, human-centred, empathetic, nonlinear, creating, optimizing, insight creation, design research, data/information fuelled, visual sensemaking, challenge framing, focus on right challenge, acceleration, adaptive, inclusive.

1. *Is a meta, iterative, nonlinear, holistic, human-centred innovation process.*
2. *Is oriented towards multiple participants, cross-disciplinary co-creation.*
3. *Begins with no preconceived assumptions regarding what the challenges and opportunities are.*
4. *Begins upstream in the Opportunity Challenge Definition Phase.*
5. *Begins with a fuzzy situation to be defuzzed.*
6. *Contains empathetic research insight creation that informs challenge framing and opportunities for change making.*
7. *Recognizes that a constellation of diverse challenges likely exist simultaneously that can be visually mapped.*
8. *Contains a high degree of empathetic visual sensemaking that shapes insights for accelerated digestion by all participants.*
9. *Contains the surfacing and orchestration of participant innovation behaviours.*
10. *Contains the surfacing and orchestration of participant cognitive thinking style preferences.*
11. *Is like a Swiss army knife, adaptive to various challenge types, found in organizational and societal contexts.*
12. *Serves as human-centred, adaptive toolkit/skill-set in the pursuit of organizational adaptive capacity building.*

² Methodology terms originally coined by GK VanPatter & Elizabeth Pastor, CoFounders, Humantific, Authors: Innovation Methods Mapping, De-Mystifying 80+ Years of Innovation Process Design.

DOWNSTREAM: Downstream is the brief view within business, where much of the traditional design industries (and graduate design schools) have been focused for decades. Most often in downstream methods, the assumption is that the addressed challenge is pre-assumed to be related to product, service, or experience design, regardless of what the challenges might be.

PRODUCT/SERVICE/EXPERIENCE DESIGN THINKING

Key Words: Downstream, situational, iterative, human-centred, empathetic, nonlinear, insight creation, sensemaking, acceleration, creating, optimizing, products, services, experiences.

1. *Is a situational, iterative, nonlinear, holistic product/service/experience creation process.*
2. *Is oriented towards a project team, or teams creating products/services/experiences.*
3. *Begins with preconceived assumptions that the challenges or opportunities are product/service/experience related and will be outcomes.*
4. *Begins downstream in product/service/experience Opportunity Challenge Definition Phase.*
5. *Most often begins with a predefined product/service/experience brief.*
6. *Contains empathetic research focused on insight creation that informs the creation of products/services/experiences.*
7. *Recognizes product/service/experience challenges.*
8. *Might contain a high degree of empathetic visual sensemaking that shapes insights for accelerated digestion by all participants.*
9. *Most often contains no surfacing or orchestration of innovation behaviours.*
10. *Most often contains no surfacing and orchestration of cognitive thinking style preferences.*
11. *Is like a hammer, screwdriver and wrench. Each applicable situationally to product, service or experience challenges.*
12. *Can serve as a useful toolkit/skill-set in the pursuit of product/service/experience creation capacity building.*

Both upstream and downstream methods are useful. The problems arise when downstream methods are force-fitted into upstream contexts. If your starting point involves being unsure what your organizational or societal challenges are, situational methods with their built-in challenge and solution path assumptions are not the ideal tools to help you figure out that fuzzy strategic picture.

Situational methods are geared for downstream contexts, i.e. after someone has determined what the challenges and opportunities are for your organization, community or society.

Humantific suggests *“Before you invest in innovation capacity building understand the difference between upstream and downstream, and meta and situational methods. Understand in detail why building adaptive innovation capacity and building capacity just geared to creating software or products, services and experiences are very different things.*

The fuzzy fog era of Design Thinking is over. Get some methodology clarity up front before you embark on any innovation capacity building adventure”

- GK VanPatter, Co-Founder Humantific, New York

The Next Big Thing in Design is Circular

A radical, restorative, regenerative approach to business. Tim Brown at IDEO suggests a new mindset for business is emerging. It's worth around a trillion dollars, will drive innovation in tomorrow's companies, and reshape every part of our lives. It designs for the circular economy, a more sustaining approach to reducing complex problems.

What is a circular economy?

Looking beyond the current "take, make and dispose" extractive industrial model, the circular economy is restorative and regenerative by design. Relying on system-wide innovation, it aims to redefine products and services to design waste out, while minimising negative impacts. Underpinned by a transition to renewable energy sources, the circular model builds economic, natural and social capital.

But making the shift isn't easy. That's why they created a [guide](#) to help innovators create more elegant, effective, creative solutions for the circular economy. Solutions that are invaluable for people, give businesses a competitive advantage, and are regenerative for our world.

Why, what's changed?

- The scale of what we're designing has shifted from products, to companies, to economic systems.
- Who we're designing for has expanded from a solitary user to an intimately connected web of people, spanning the globe.
- New tools such as artificial intelligence, the internet of things, and biomimicry mean our design ambitions are limited only by our imagination.
- Meanwhile, creativity has never been more important: the global economy is stuttering and disruptive technologies challenge established business models.

What if you could redesign everything?

What would you do differently?

You might be questioning the health of our organisations, social systems, and business models. With a good reason. Companies are currently deeply rooted in a linear approach to growth - make, use, dispose.

The Design Thinking approach that underpins this guide allows you to explore new ways to create sustainable, resilient, long-lasting value in the circular economy, giving you the creative confidence to redesign the world around you.

The Circular Design Guide is a collaboration of [Ellen MacArthur Foundation](#) and [IDEO](#). It specifically focuses on frames to tackle societal issues. But as we tackle more complexity within business organizations, we are touching and impacting far more of society with the actions we take. The thinking is to be “regenerative by design”.

Finally, understanding human-centred Design

Taking the view of [Designorate](#):

“Design is a complex process that is implemented in different disciplines with many factors in mind; one of these factors is the target of the design process. Generally, there are three design process paradigms based on this target; technology-driven design, human-centred design and environmentally sustainable design.

Based on this categorization, human-centred design can be defined as the process that places human needs and limitations in a higher priority compared with other targets during the Design Thinking and production differential stages.”

Conclusion

Design Thinking has become a major methodology, presently running ahead in the expectations of what it can deliver. Design Thinkers need to take a step back and re-think how to take this concept forward. The Design Thinking community will then follow and respond.

There is hope, well beyond a glimmer that we are seeing Design Thinkers recognize they need to step up their game, and take the concept to a more strategic position at system level. This will mean that Design Thinking will change in the future into a greater, fuller “thinking” mindset that can be applied to more complex problems at an organizational level, and contribute to numerous challenges organizations are facing today. It needs to evolve, otherwise it simply fades away, into the background of being just another interesting tool.

It certainly needs to mature way beyond a one frame thinking concept to achieve this. DT needs to go beyond being a thinking method for products, services, and customer experience. System level thinking is where the future of design is focused, and where much of the current confusion lies, as we are in the middle of these changes. Investing time in defining the desired outcome is critical in any Design Thinking journey. And the same may hold true for the the journey of the method itself.

These are exciting times! We are witnessing how one of the most promising — since human-centered — innovation methods is evolving towards becoming essential for organizational thinking.

PAH July 2017.

Resources

For essential Design Thinking videos and methods:

<https://www.interaction-design.org/literature/article/essential-design-thinking-videos-and-methods>

<https://uxplanet.org/a-complete-list-of-ux-deliverables-d62ccf1de434>

<https://uxplanet.org/most-common-ux-design-methods-and-techniques-c9a9fdc25a1e>

The Interaction Design Foundation a 15-year old non-profit community founded in Denmark:

<https://www.interaction-design.org/literature>

<https://www.interaction-design.org/discuss/category/design-resources-links-and-tools>

Terrific outstanding articles around Design Thinking (stacked full of gems):

<https://www.interaction-design.org/literature/topics/design-thinking>

<https://www.interaction-design.org/literature/article/design-thinking-a-quick-overview>

<https://www.interaction-design.org/literature/article/design-thinking-essential-problem-solving-101-it-s-more-than-scientific>

<https://www.interaction-design.org/literature/article/design-thinking-new-innovative-thinking-for-new-problems>

Other Design Thinking articles to read:

<https://dupress.deloitte.com/dup-us-en/focus/business-trends/2015/beyond-design-thinking-business-trends.html?icid=hp:ft:04>

McKinsey had a good article, "The Power of Design Thinking" in 2016:

<http://www.mckinsey.com/business-functions/digital-mckinsey/our-insights/the-power-of-design-thinking>

The Hasso Plattner d-School and Dr Claudia Nicolai (April 2017)- An excellent guide to all the recommended reading on Design Thinking. Opens directly to PDF:

<http://tinyurl.com/ydck887r>

Resources

Designorate

<http://www.designorate.com/>

<http://www.designorate.com/characteristics-of-human-centered-design/>

For new thinking on Strategic Design Thinking

<http://www.humantific.com/>

<http://www.humantific.com/the-other-design-thinking/>

<https://www.amazon.com/Innovation-Methods-Mapping-mystifying-Process/dp/1540788849>

<https://www.linkedin.com/pulse/making-sense-why-design-thinking-fail-gk-vanpatter>

NextDesign Leadership Network

<http://tinyurl.com/3pp3ffn>

http://issuu.com/nextd/docs/nextdfutures2011_v02

On the circular design thinking - The Circular Design Guide is a collaboration between the [Ellen MacArthur Foundation](#) and [IDEO](#):

<https://www.circulardesignguide.com/>

Human-centered design

<http://www.designkit.org/methods>

Learn More on Design Thinking

Reference list supplied by www.interaction-design.org

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https://monoskop.org/images/9/9c/Simon_Herbert_A_The_Sciences_of_the_Artificial_3rd_ed.pdf

Deloitte, Deep diving for innovation, 2011:

<http://globalblogs.deloitte.com/deloitteperspectives/2011/10/deep-diving-for-innovation.html>

d.school, The Design Thinking Process:

<http://dschool.stanford.edu/redesigningtheater/the-design-thinking-process/>

Tim Brown, Design Thinking for Social Innovation, 2010:

https://ssir.org/articles/entry/design_thinking_for_social_innovation

IDEO, Method Cards:

<https://www.ideo.com/post/method-cards>

IDEO, Design Kit: The Human-Centered Design Toolkit:

<https://www.ideo.com/post/design-kit>

Design Council of UK, Eleven lessons: managing design in eleven global brands:

[http://www.designcouncil.org.uk/sites/default/files/asset/document/ElevenLessons_Design_Council%20\(2\).pdf](http://www.designcouncil.org.uk/sites/default/files/asset/document/ElevenLessons_Design_Council%20(2).pdf)

Frog design, Collective Action Toolkit:

<http://www.frogdesign.com/work/frog-collective-action-toolkit.html>

Jeanne Liedtka and Tim Ogilvie, Designing for Growth: A Design Thinking Tool Kit for Managers, 2011:

<http://www.designingforgrowthbook.com/>

LUMA Institute's Design Thinking modes:

<https://www.luma-institute.com/story>

Humantific, The OTHER Design Thinking:

<https://issuu.com/humantific/docs/theotherdesignthinking>

Humantific, SenseMaking for ChangeMaking:

https://issuu.com/humantific/docs/humantific_sensemaking4changemaking

NextD: Design 1,2,3,4 / Understanding the Future that Has Already Arrived

<https://issuu.com/humantific/docs/nextdfutures09>

About Paul Hobcraft



Paul researches across innovation, looking to develop novel innovation solutions and frameworks where appropriate.

His aim is to provide useful knowledge about innovation that builds understanding and supports individuals, teams and organizations in their innovation activity so as to apply what I have learnt to further develop the readers core innovation understanding.

www.hocaconsulting.com | www.paul4innovating.com | www.agilityinnovation.com

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CORPORATE HEADQUARTERS

HYPE Softwaretechnik GmbH
Trierer Straße 70-72
53115 Bonn
Germany

Phone: +49-228-2276-0
Email: info@hypeinnovation.com
www.hypeinnovation.com/de

NORTH AMERICA OFFICE

HYPE Innovation Inc.
625 Massachusetts Ave.
Cambridge, MA 02139
USA

Phone: +1 617-401-7917
www.hypeinnovation.com

