

The Power of Design Thinking An Innovative Framework for Social Change

Karen Henken

‘Professor of Practice, Social Innovation and Entrepreneurship

Kroc School

khenken@san Diego.edu

August 20, 2019

City of San Diego Nonprofit Academy

What is Design Thinking?

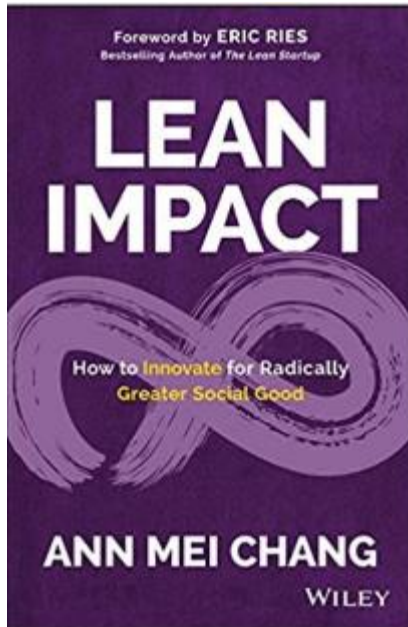
Design Thinking is.....

A creative problem-solving approach where we design solutions starting with people's needs and desires

from IDEO

#1 Mantra of Effective Design Thinking

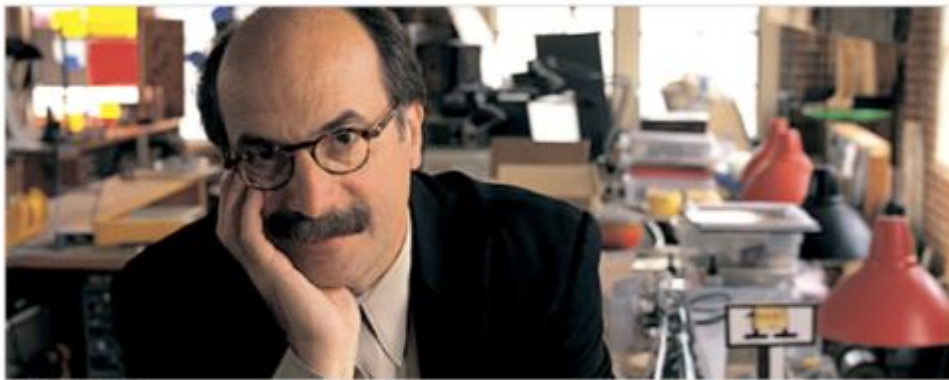
**Fall in love with the PROBLEM,
not your solution**



Ann Mei Chang, Author,
*Lean Impact: How to Innovate for
Radically Greater Social Good*

Ideo's David Kelley on "Design Thinking"

By: Linda Tischler Fri Jan 16, 2009 at 11:12 AM



Courtesy IDEO

David Kelley, founder of the design firm Ideo and the Stanford d.school, was leading a charmed existence. Then he felt a lump.

Related Content

RELATED LINK Infographic: The K-12 Educational Experience

RELATED LINK Ideo's Newest Design Projects

The smell of ramen noodles wafts over the Stanford d.school classroom as David Kelley settles into an oversize red leather armchair for a fireside chat with new students. It's 80 degrees and sunny outside in Palo Alto, and as the flames flicker merrily on the big computer screen behind him, Kelley, founder of both the d.school and the global design consultancy Ideo, introduces his

grad students to what "design thinking" – the methodology he made famous and the motivating idea behind the school – is all about.

Today's task: Design a better ramen experience.

Corey Ford
cford@stanford.edu

PRODUCT DESIGN & JOINT PROGRAM IN DESIGN



HASSO PLATTNER
Institute of Design at Stanford



DESIGN



design thinking



individuals



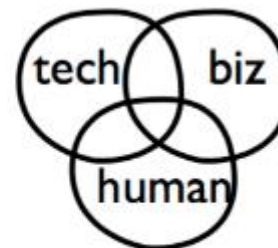
teams



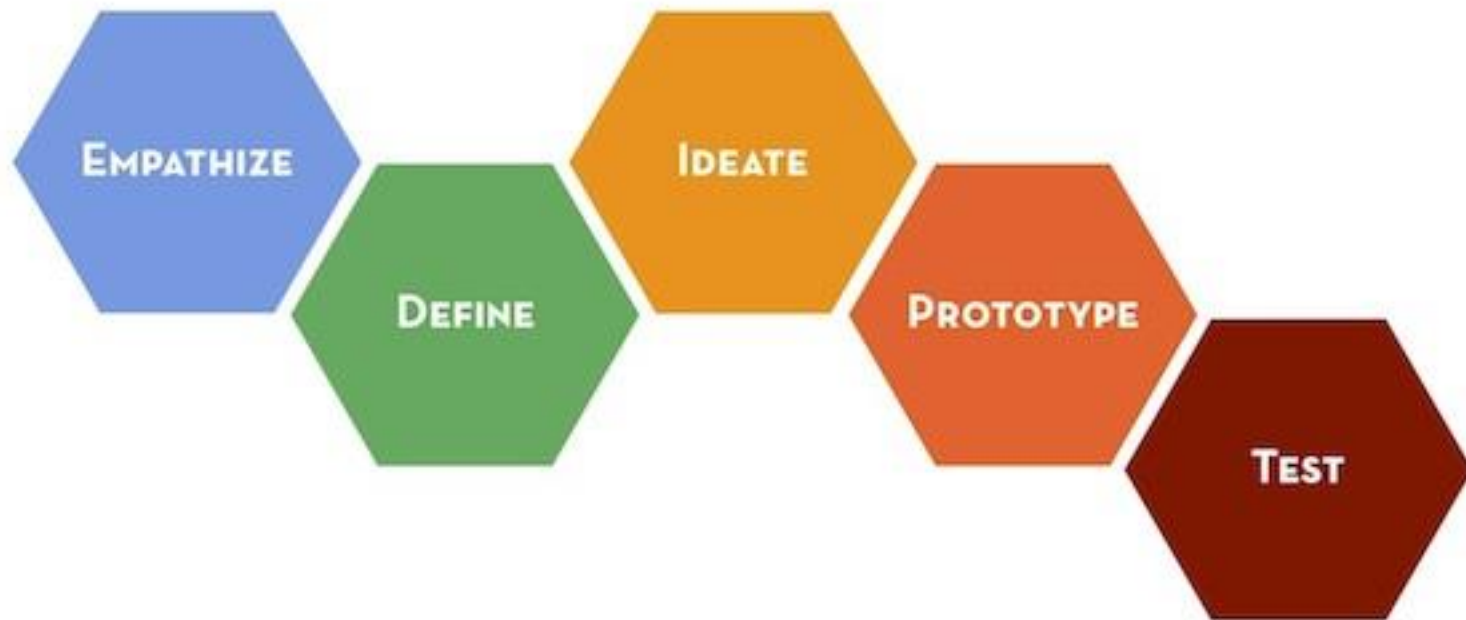
products



experiences



Steps in Design Thinking



3 I's of Design Thinking



INSPIRATION

In this phase, you'll learn how to better understand people. You'll observe their lives, hear their hopes and desires, and get smart on your challenge.



IDEATION

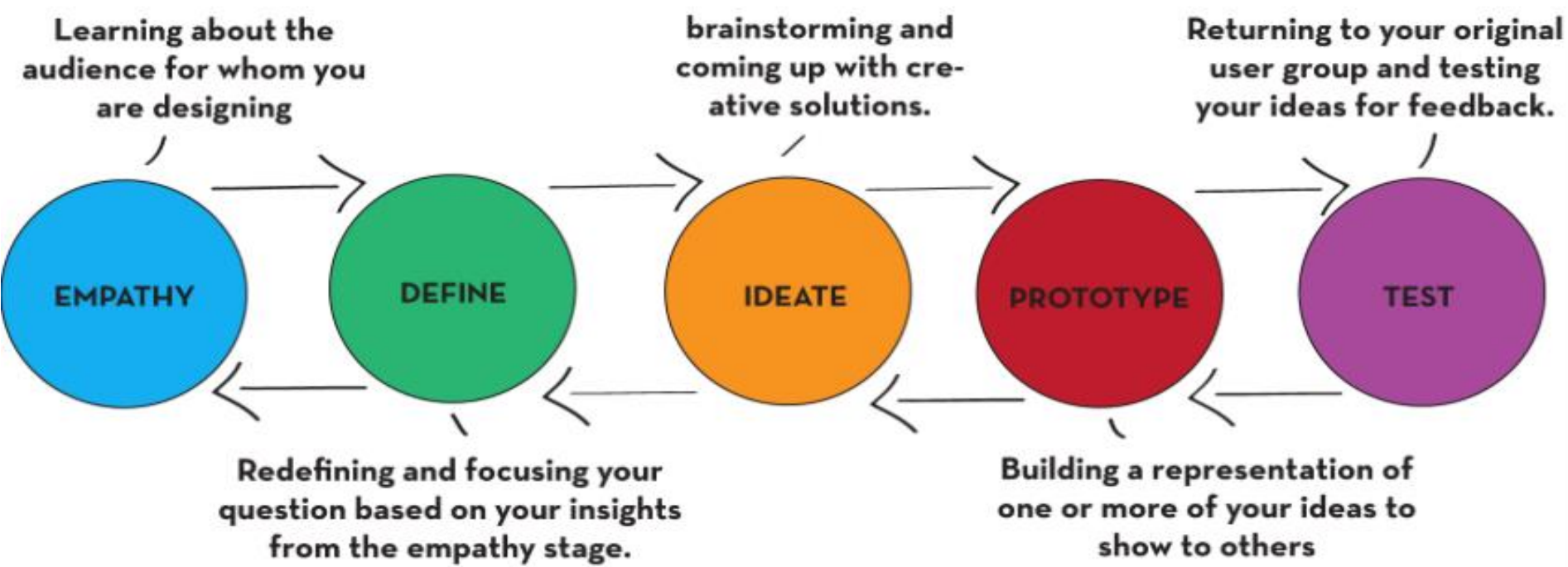
Here you'll make sense of everything that you've heard, generate tons of ideas, identify opportunities for design, and test and refine your solutions.



IMPLEMENTATION

Now is your chance to bring your solution to life. You'll figure out how to get your idea to market and how to maximize its impact in the world.

← **INSPIRATION** → ← **IDEATION** → ← **IMPLEMENTATION** →



Benefits of the design thinking process to your organization?

- You don't jump to the solution first (**which is our nature**) – rather you learn about and use tools to understand the problem first to build towards the solution
- You take the point of view of the user including - What do they really need? Why would they want to choose to use your product or service?
- You work in teams to ensure multiple cross disciplinary perspectives
- You test your ideas, iterate, prototype, refine and test again- minimizing upfront costs and ensuring maximum long term effectiveness
- *Outcome: to design and implement the appropriate and maximally impactful solution together **with** the community you are serving based on their needs*

WHO ✓
you're solving for



WHAT ✓
their needs are



HOW ✓
you'll solve them



WHY ✓
your work matters

Power of Design Thinking

Make others successful

Embrace ambiguity

Talk less, do more

Learn from failure

Take ownership

Collaborate

Be optimistic


Source: IDEO



The Power of Empathy

Definition:

em·pa·thy

/ˈempəTHē/ 

noun

the ability to understand and share the feelings of another.

Empathy

Walk a Mile in Their Shoes



Personally experience the customer's perspective

Seeing what people really do, not just what they say

Understanding why people say what they say

Empathy



To create empathy, you must get outside the building

Know who your product or service will benefit – and be sure it is what they REALLY want and / or need

- *Don't do it in a vacuum-* go out and connect with the population you want to reach, employ, impact, sell to—sit with them in their community, create conversations, do focus groups, test your ideas with them!



Empathy Means Knowing Your Why and the Why of Who You Serve

How do they align?

The story of Veronika [Scott](#) and the Empowerment Plan



**IT NEEDED TO EMPLOY INDIVIDUALS. IT
NEEDED TO IMPACT THE COMMUNITY. IT
NEEDED TO HAVE MORE OF AN AFFECT THAN
IF IT WAS JUST ME.**

Empathy Using The Five Why's

WHY?

↳ WHY?

↳ WHY?

↳ WHY?

↳ WHY?
Real solution is found here

Let's use the example of why you work at your organization?

The 5 Why's

5 Why's exercise with everyone here

In pairs, ask the question:

Why do you work with the organization or in the sector that you work?

- Build on each question, listen to their answer and build on that with another why
- Do in pairs 1 minute each
- Shareouts: What did you learn?

Design Thinking in Action.....



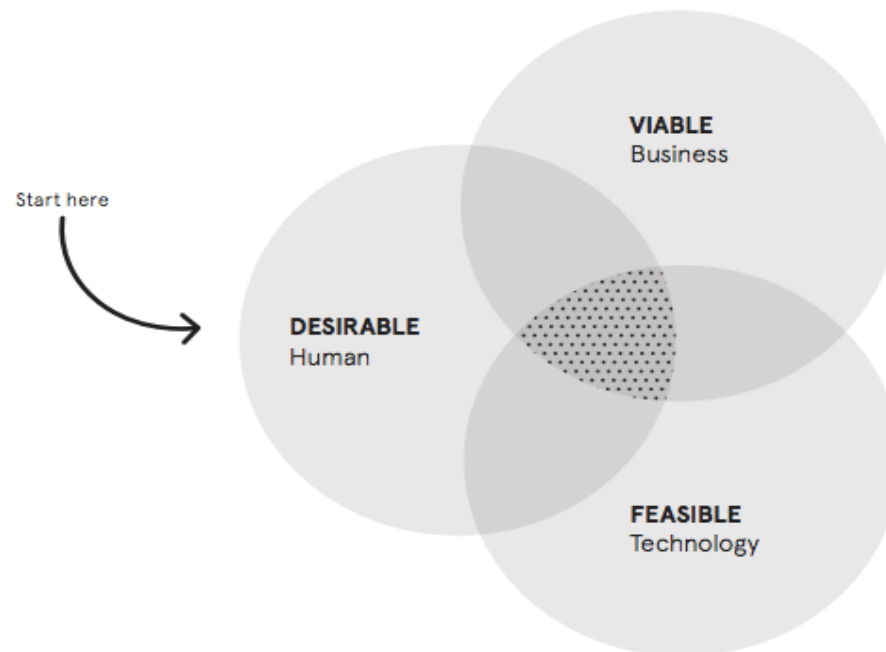
WE TRAIN RATS TO SAVE LIVES



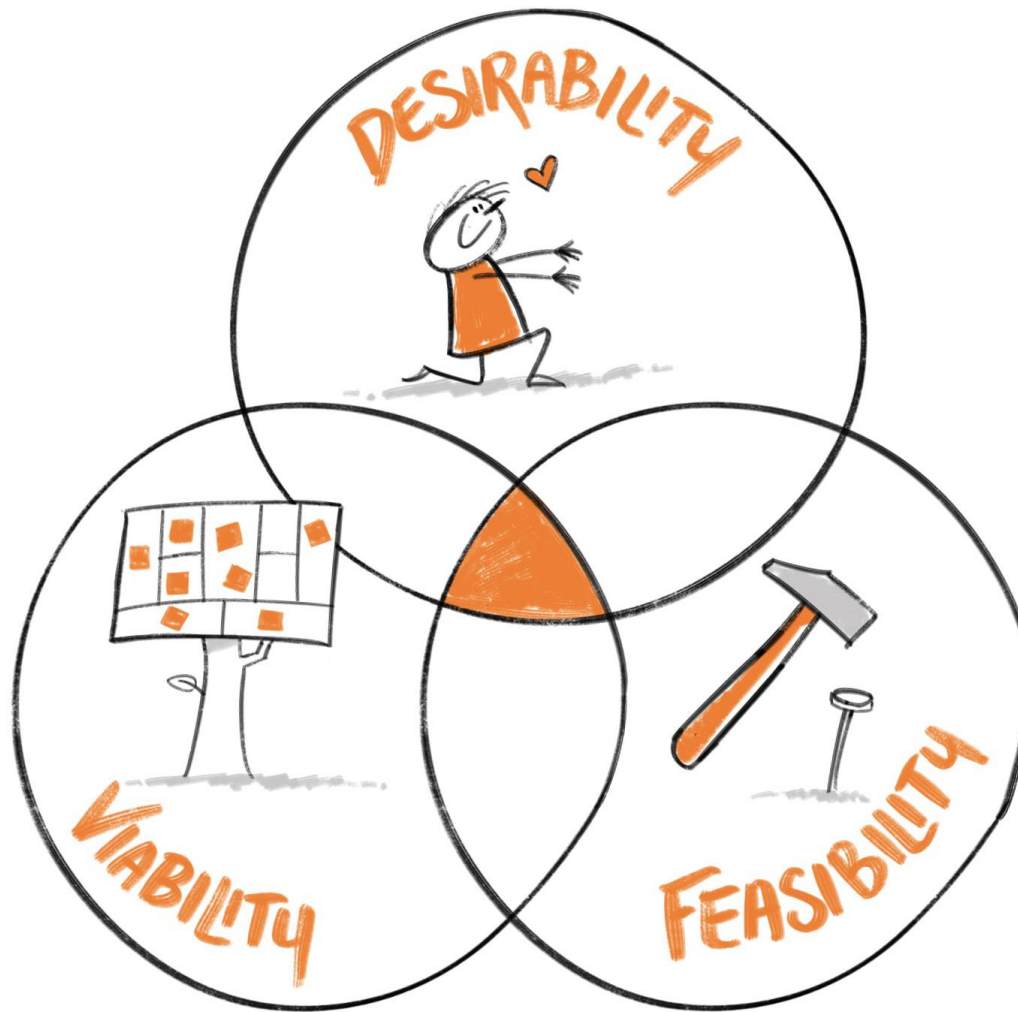
Design Thinking Goals

Create Real Impact

Human-centered design is uniquely situated to arrive at solutions that are desirable, feasible, and viable. By starting with humans, their hopes, fears, and needs, we quickly uncover what's most desirable. But that's only one lens through which we look at our solutions. Once we've determined a range of solutions that could appeal to the community we're looking to serve, we then start to home in on what is technically feasible to actually implement and how to make the solution financially viable. It's a balancing act, but one that's absolutely crucial to designing solutions that are successful and sustainable.



Another way to look at this



3 I's of Design Thinking



INSPIRATION

In this phase, you'll learn how to better understand people. You'll observe their lives, hear their hopes and desires, and get smart on your challenge.



IDEATION

Here you'll make sense of everything that you've heard, generate tons of ideas, identify opportunities for design, and test and refine your solutions.

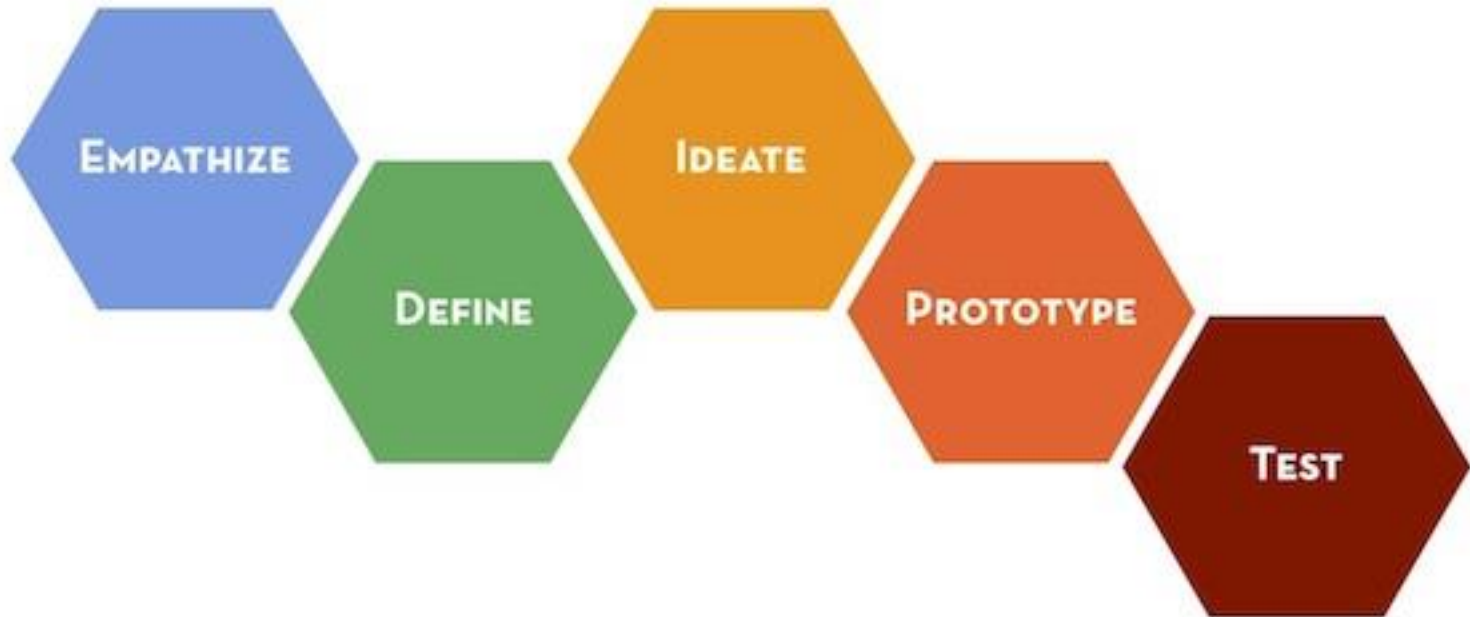


IMPLEMENTATION

Now is your chance to bring your solution to life. You'll figure out how to get your idea to market and how to maximize its impact in the world.

Steps in Design Thinking

<---INSPIRATION---> <---IDEATION---> <---IMPLEMENTATION--->



WHO ✓
you're solving for

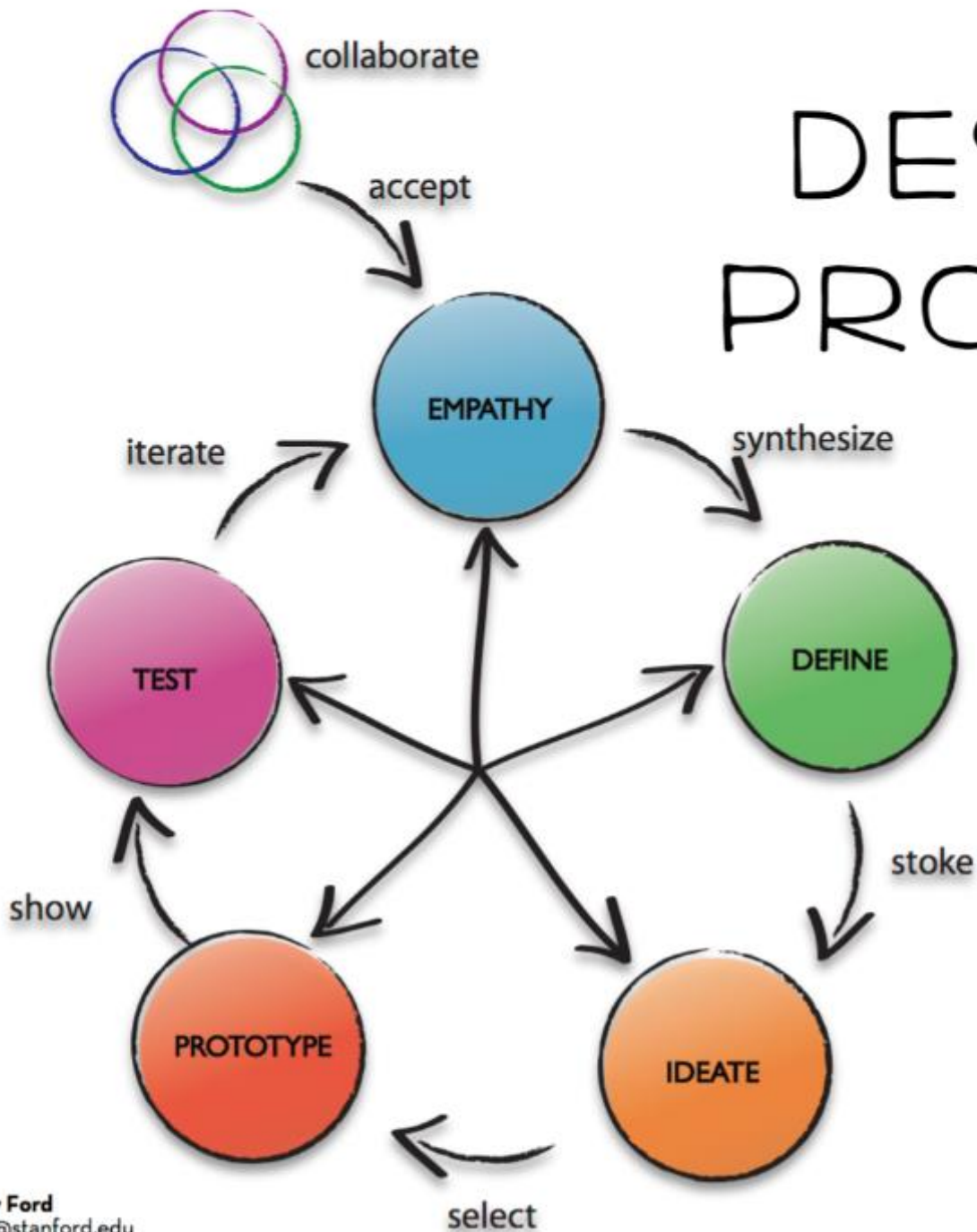


WHAT ✓
their needs are

HOW ✓
you'll solve them

WHY ✓
your work matters

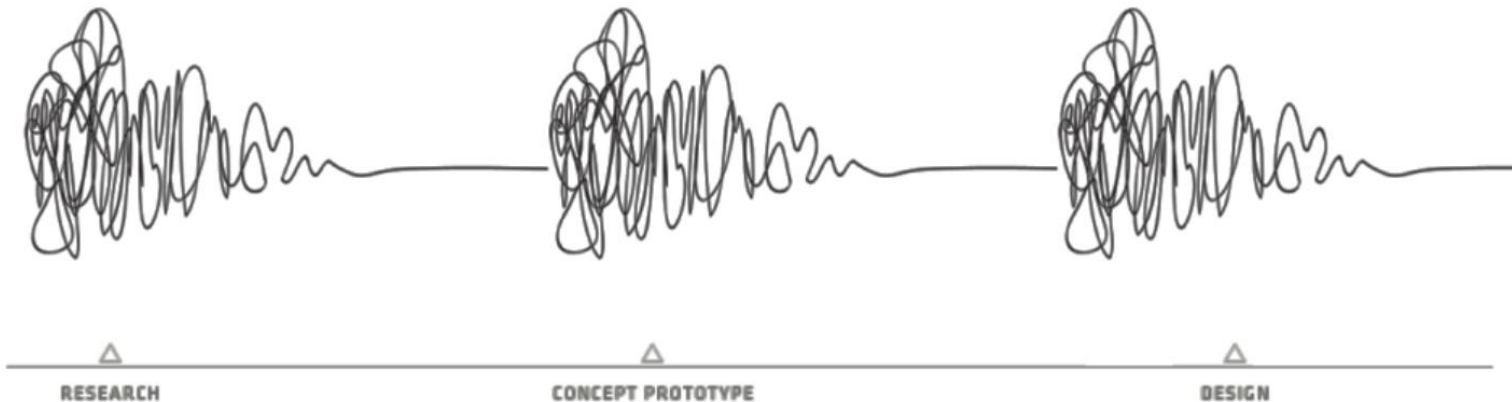
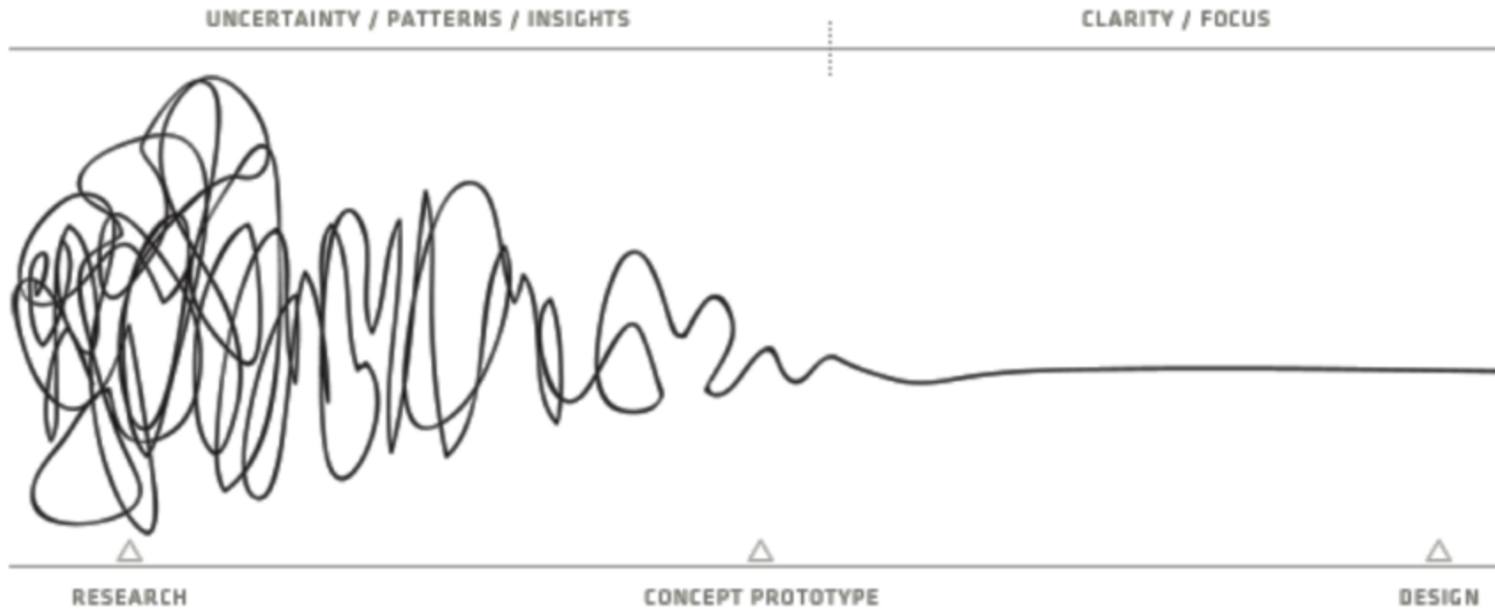
DESIGN PROCESS



Our Ideal Vision of the Design Process



Reality... *Design Thinking is a Messy Process*



Design Thinking in Action

Embrace

A project that was born at the Stanford d.School's class on Design for Extreme Affordability

The challenge: Design a solution that can be delivered for 1/100th of the cost of currently available solutions

Jane Chen's [TED Talk](#)



What was the inspiration for Embrace?

- What were initial steps that led to the idea?
- How and where did they observe the problems that led them to the early prototypes?
- What was the ROOT cause of the problem?
- How and why did they prototype?
- What did they learn from the prototypes?

Premature Babies: Inspiration

INSPIRATION:

20,000,000

premature and low birth weight babies born every year

4,000,000

neonatal deaths every year
1.2 million in India

Hypothermia

is a major cause of death and illness



Observing the Needs: Empathy & Inspiration



Alternative Approaches: Ideation



Ideation: Sourcing Ideas By Collaborating Across Disciplines

Stanford University d.School Class: Design for Extreme Affordability

The Challenge: Create An Alternative Solution for “Less than 1 % of the cost of an incubator”



Jane Chen- Business



Rahul Panicker- Medicine



Linus Liang- Engineering

Naganand Murty



Embrace team is formed³³



Another Approach: Ideation/ Prototyping



embrace

Implementation: How it Works



Implementation



Shilpa

SVYM, Sargur



Implementation: The Phases of Social Innovation: Scaling



GE imagination at work

[for business](#)

[for consumers](#)

[products](#)

[our company](#)

[news](#)

[investor relations](#)

[careers](#)

[News](#) / [Press-Releases](#) / GE Healthcare Partners with Embrace to Help Address Infant Mortality in Rural India Through Affordable Infant Warmer

GE Healthcare Partners with Embrace to Help Address Infant Mortality in Rural India Through Affordable Infant Warmer

December 16, 2010

[↓ Downloads](#)

- *Embrace Infant Warmer costs less than \$200 per warmer*
- *Heated nylon sleeping bag helps protect infants against hypothermia*
- *Product embodies two key healthymagination goals of reducing cost and increasing access to better healthcare*

Implementation: Organizational Structure – Hybrid model

Partnership with General Electric allowed Embrace to scale

- Private: capital intensive manufacturing, distribution, R&D for new products
- NGO: Holds intellectual property, receives donations, free warmers to needy, educating parents on health issues to reduce infant mortality, monitoring and evaluation, takes equity in the private arm



The Phases of Social Innovation: Systemic Change

Embrace Goes Global

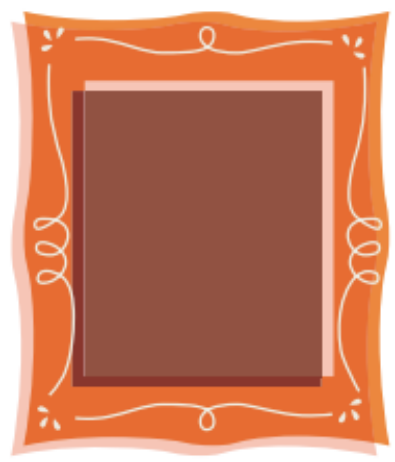


Design Thinking Applications

How and where can you imagine using design thinking processes in other solutions for social impact?

Frame Your Design Challenge

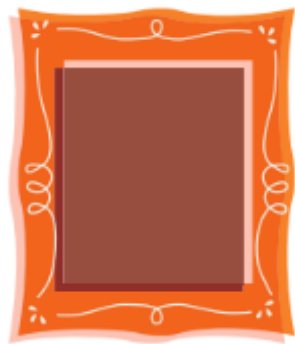
Properly framing your design challenge is critical to your success. Here's how to do it just right.



Getting the right frame on your design challenge will get you off on the right foot, organize how you think about your solution, and at moments of ambiguity, help clarify where you should push your design. Framing your design challenge is more art than science, but there are a few key things to keep in mind. First, ask yourself: Does my challenge drive toward ultimate impact, allow for a variety of solutions, and take into account context? Dial those in, and then refine it until it's the challenge you're excited to tackle.

STEPS

- 01** | Start by taking a first stab at writing your design challenge. It should be short and easy to remember, a single sentence that conveys what you want to do. We often phrase these as questions which set you and your team up to be solution-oriented and to generate lots of ideas along the way.
- 02** | Properly framed design challenges drive toward ultimate impact, allow for a variety of solutions, and take into account constraints and context. Now try articulating it again with those factors in mind.
- 03** | Another common pitfall when scoping a design challenge is going either too narrow or too broad. A narrowly scoped challenge won't offer enough room to explore creative solutions. And a broadly scoped challenge won't give you any idea where to start.
- 04** | Now that you've run your challenge through these filters, do it again. It may seem repetitive, but the right question is key to arriving at a good solution. A quick test we often run on a design challenge is to see if we can come up with five possible solutions in just a few minutes. If so, you're likely on the right track.



Frame Your Design Challenge

What is the problem you're trying to solve?

Improving the lives of children.

1) Take a stab at framing it as a design question.

How might we improve the lives of children?

2) Now, state the ultimate impact you're trying to have.

We want very young children in low-income communities to thrive.

3) What are some possible solutions to your problem?

Think broadly. It's fine to start a project with a hunch or two, but make sure you allow for surprising outcomes.

Better nutrition, parents engaging with young kids to spur brain development, better education around parenting, early childhood education centers, better access to neonatal care and vaccines.

4) Finally, write down some of the context and constraints that you're facing.

They could be geographic, technological, time-based, or have to do with the population you're trying to reach.

Because children aren't in control of their circumstances, we wanted to address our solution to their parents.

We want a solution that could work across different regions.

5) Does your original question need a tweak? Try it again.

How might parents in low-income communities ensure children thrive in their first five years.

How to complete this for Embrace?



Frame Your Design Challenge

1. What is the problem you're trying to solve?
2. Take a stab at framing it as a design question.
3. Now, state the ultimate impact you're trying to have.
4. What are some possible solutions to your problem?
 - a. Think broadly. It's fine to start a project with a hunch or two, but make sure you allow for surprising outcomes.
5. Finally, write down some of the context and constraints that you're facing
6. Does your original question need a tweak? Try it again.

Now do this in teams- 15 minutes



Frame Your Design Challenge

1. What is the problem you're trying to solve?
2. Take a stab at framing it as a design question.
3. Now, state the ultimate impact you're trying to have.
4. What are some possible solutions to your problem?
 - a. Think broadly. It's fine to start a project with a hunch or two, but make sure you allow for surprising outcomes.
5. Finally, write down some of the context and constraints that you're facing
6. Does your original question need a tweak? Try it again.

Free resources to learn more about Design Thinking

IDEO. Org

Create an account on DesignKit.org from IDEO.org and find endless resources

DESIGN KIT

brought to you by
IDEO•ORG

MINDSETS METHODS CASE STUDIES

RESOURCES HI KAREN ▾

Resources

Design Kit is hardly the only place to learn about the power of human-centered design. These books, guides, and free downloads are all great destinations to help you routinely innovate and solve big problems.



The Field Guide to Human-Centered Design

A step-by-step guide that will get you solving problems like a designer.

By IDEO.org




https://www.plusacumen.org/courses/introduction-human-centered-design

Reload this page

USD Mail USD Cal H Cal Contacts Amazon Time Zones Salesforce PJS 593-03 NYC... SOIN 525 MASI S... SHIFA-Care Proje...

OUR COURSES SUCCESS STORIES JOURNAL ABOUT US PARTNERS FAQ LOG IN



CREATIVITY & DESIGN

Introduction to Human-Centered Design

Learn from IDEO.org to use human-centered design for social innovation

f t g +

COURSE DETAILS

PRICE: FREE

START DATE: SEPT 24, 2019

TIME: 4 HOURS/WEEK

DURATION: 9 WEEKS

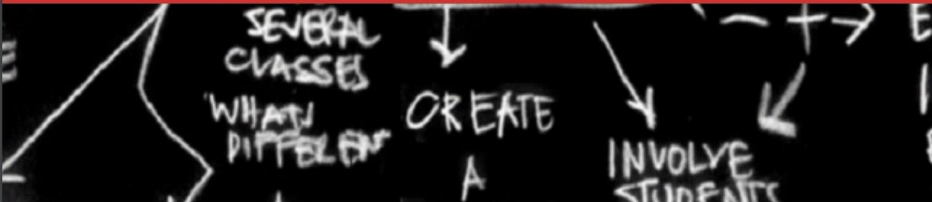
PARTNER: IDEO.ORG

ENROLL NOW

LOGIN



An Introduction to Design Thinking PROCESS GUIDE



Free resources to learn more about Design Thinking

THANK YOU!

Karen Henken

khenken@sandiego.edu

760 271 5413