# Collaborative Problem Solving Through Design Thinking

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# Agenda

- Welcome & Introductions
- Overview of Design Thinking
- Why is there so much talk about Design Thinking?
- The Design Thinking Methodology
- Idea Dashboard
- Q & A

IDEAS!
Messaging/Media
Public Awareness
Getting together
Leverage
Universal
Peer to peer
Empower Mom + Dad
New Message =
Unlikely Partner

# Introductions

Name

Affiliation

Position

Share something that might surprise us

What does Design Thinking mean to you….and why is there so much talk about it?

Design Thinking…

An ideology or mindset that involves approaching every problem in a human-centered/user-centered way

A system of tools/processes/steps to help you practice the human-centered problem-solving methodology.

Pssst: the design thinking mindset isn’t really just about design

Helping businesses, teams & individuals think differently

about strategic options….

and system impact

MARCOS CHIN

INNOVATION

# Why Design Thinking Works

by Jeanne Liedtka

FROM THE SEPTEMBER–OCTOBER 2018 ISSUE

WHAT TO READ NEXT

The Right Way to Lead Design Thinking

# Brands that employ design thinking

April 2019

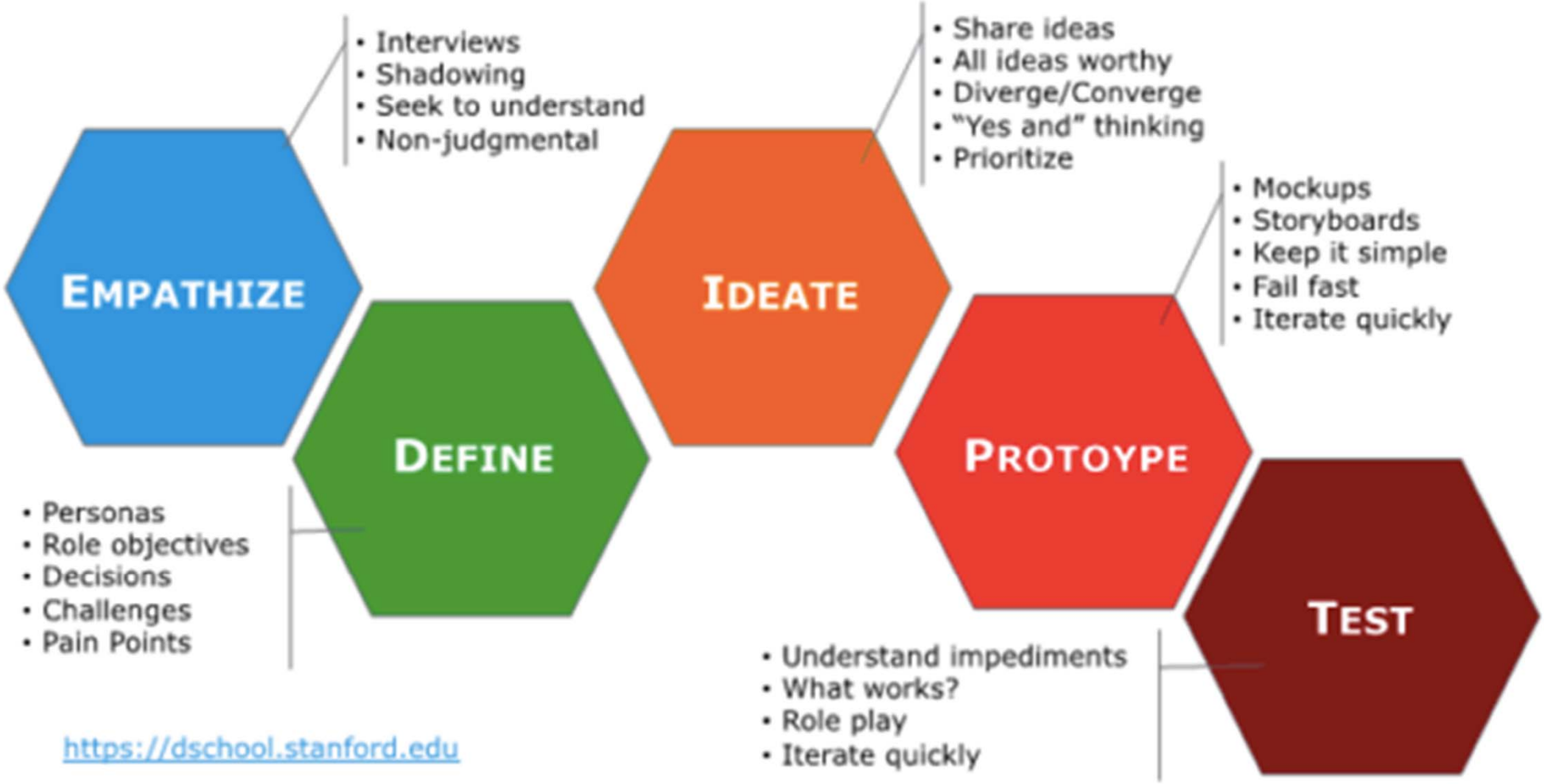
- 1. Capital One
- 2. Airbnb
- 3. Dyson
- 4. Ikea
- 5. Netflix
- 6. Virgin Atlantic
- 7. Tesla
- 8. IBM
- 9. Barclays
- 10. PepsiCo

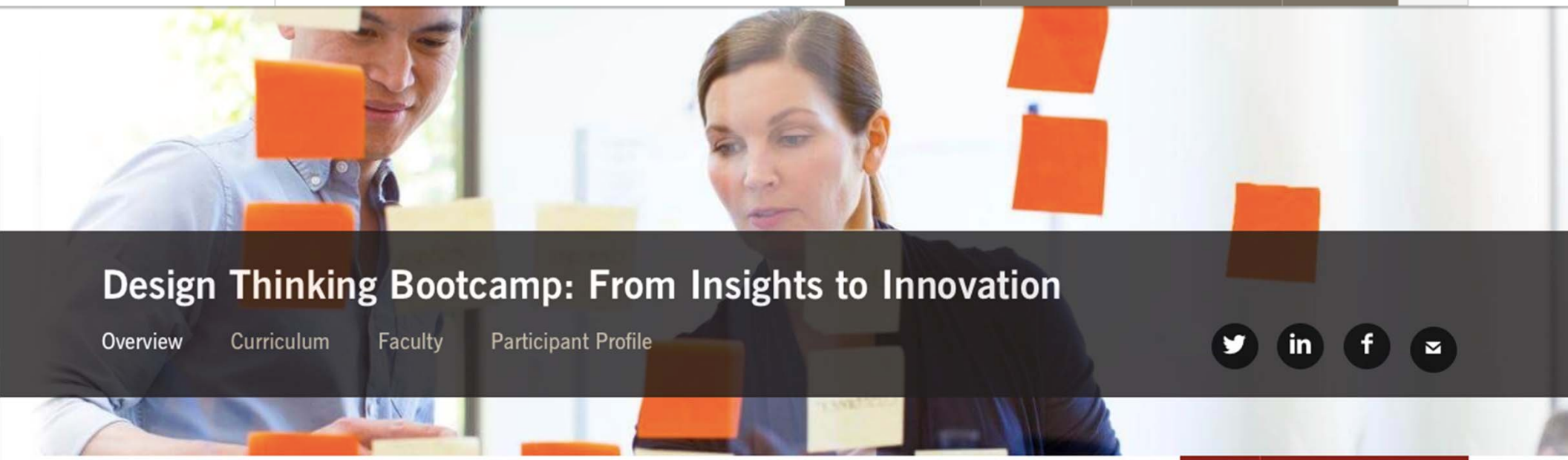
# Distinctions Between Design and Design Thinking or the big D and the little d of design

- "Design thinking can be described as a discipline that uses the designer's sensibility and methods to match people's needs with what is technologically feasible and what a viable business strategy can convert into customer value and market opportunity."

- Tim Brown, CEO & President of IDEO, the design company that popularized the term design thinking*
- (stepping down as CEO in August 2019)

# Stanford d.school Design Thinking Process





# Design Thinking Bootcamp: From Insights to Innovation



Apply | Download Brochure

Immerse yourself in a four-day hands-on design thinking workshop, working in the field and with the Stanford d.school.

Empathy and experimentation. Inspiration and ideation. Design Thinking Bootcamp is a dynamic mix of short instructional lectures, demonstrations, and guided, hands-on teamwork.

## At Stanford | 26 Mar 2019 – 29 Mar 2019

### Format

In-person | Stanford University
Full-time

### Program Fee

US $12,600

The program fee includes tuition, course materials, and breakfast, lunch, and light dinner each day. Lodging is not included in the

### Application Requirements »

## FRAME A QUESTION

*Identify a driving question that inspires others to search for creative solutions.*

## GATHER INSPIRATION

*Inspire new thinking by discovering what people really need.*

## GENERATE IDEAS

*Push past obvious solutions to get to breakthrough ideas.*

## MAKE IDEAS TANGIBLE

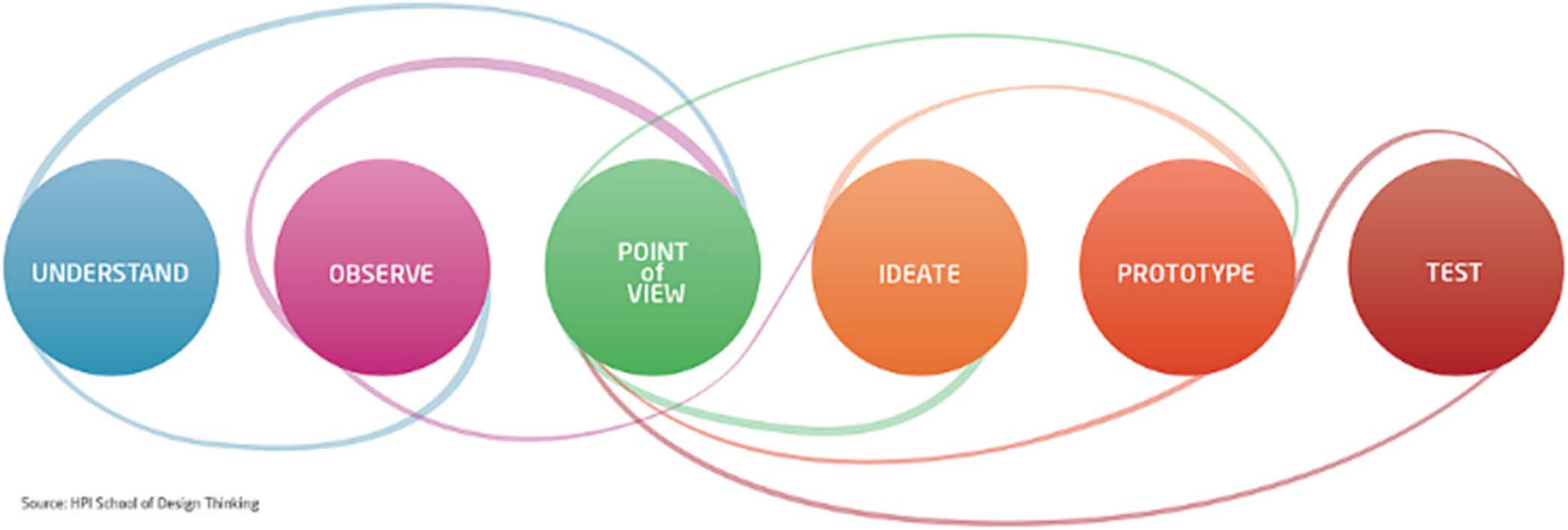
*Build rough prototypes to learn how to make ideas better.*

## TEST TO LEARN

*Refine ideas by gathering feedback and experimenting forward.*

## SHARE THE STORY

*Craft a human story to inspire others toward action.*




Source: HPI School of Design Thinking

**FRAMING**

Defining questions to answer and people to engage

**RESEARCH**

Learning from people about their needs and values

**SYNTHESIS**

Finding patterns of behavior and areas of opportunity

**CONCEPTING**

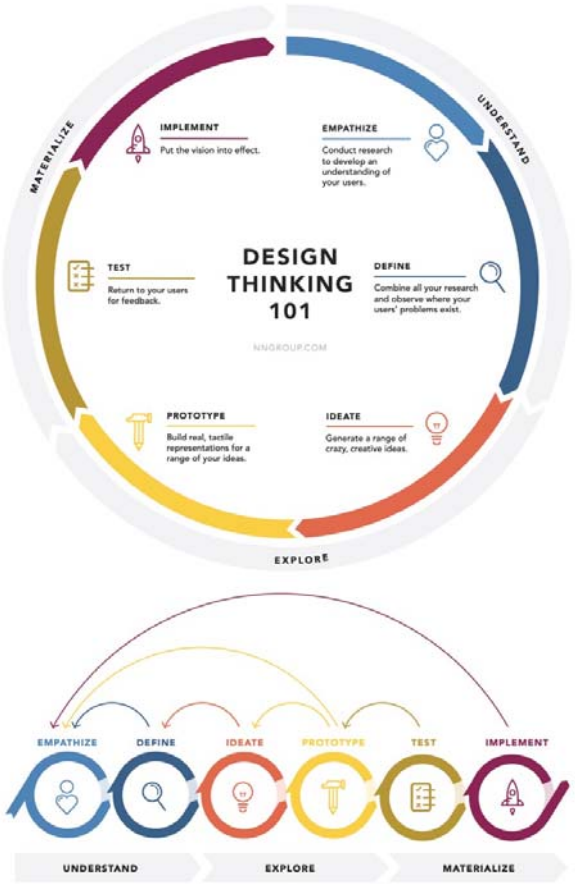
Creating a high volume of new ideas

**PROTOTYPING**

Making tangible mock-ups and gathering feedback

**PILOTING**

Testing solutions in real time with real people




DESIGN THINKING 101 NNGROUP.COM NN/g

# Definitions vary. Similarities exist.

Creative, collaborative problem solving methodology

Tools and processes that rely on diverse collaborative efforts while addressing complex issues, problems & challenges

Design Thinking has not generated entirely new processes; rather it has pulled methodologies from different genres to apply them in new ways

Gives you a tangible way to ensure that you are keeping the user at the center of your solution

A design thinking/human-centered design framework invites you to develop a mindset in which to approach problem solving and collaboration

Transferable. Not exclusive to any field

https://vimeo.com/90355541

1. Take a Post-It
2. Draw a Vase. Imagine you are a florist and you want to provide your customers with a really nice vase for your flower arrangements
3. Put it aside

1. Take a Post-It
2. Design a way for people to enjoy flowers in their homes and draw it
3. Put it next to your first vase

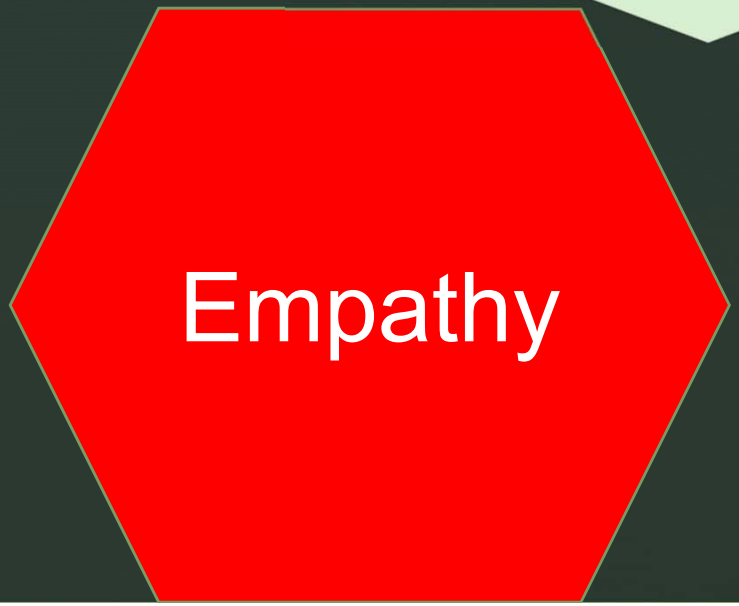
Learning how to reframe brainstorming can trigger thinking outside the box

Empathy is the foundation of design thinking/human-centered design (HCD). The problems you are trying to solve are rarely your own; they are those of particular users/beneficiaries. Build empathy for your users by learning what is important to them:

Observe

Engage

Immerse



The define mode explicitly expresses the problem you strive to address. In order to be truly generative, you must reframe your challenge based on new insights gained through your empathy fieldwork. Your reframed problem statement can then be used as a solution-generating springboard

# Define

The goal of ideation is to explore a wide solution space – both a large quantity and a broad diversity of ideas. You ideate to transition from identifying problems to exploring solutions for your users. From this vast repository of ideas, you can build prototypes to test with users.

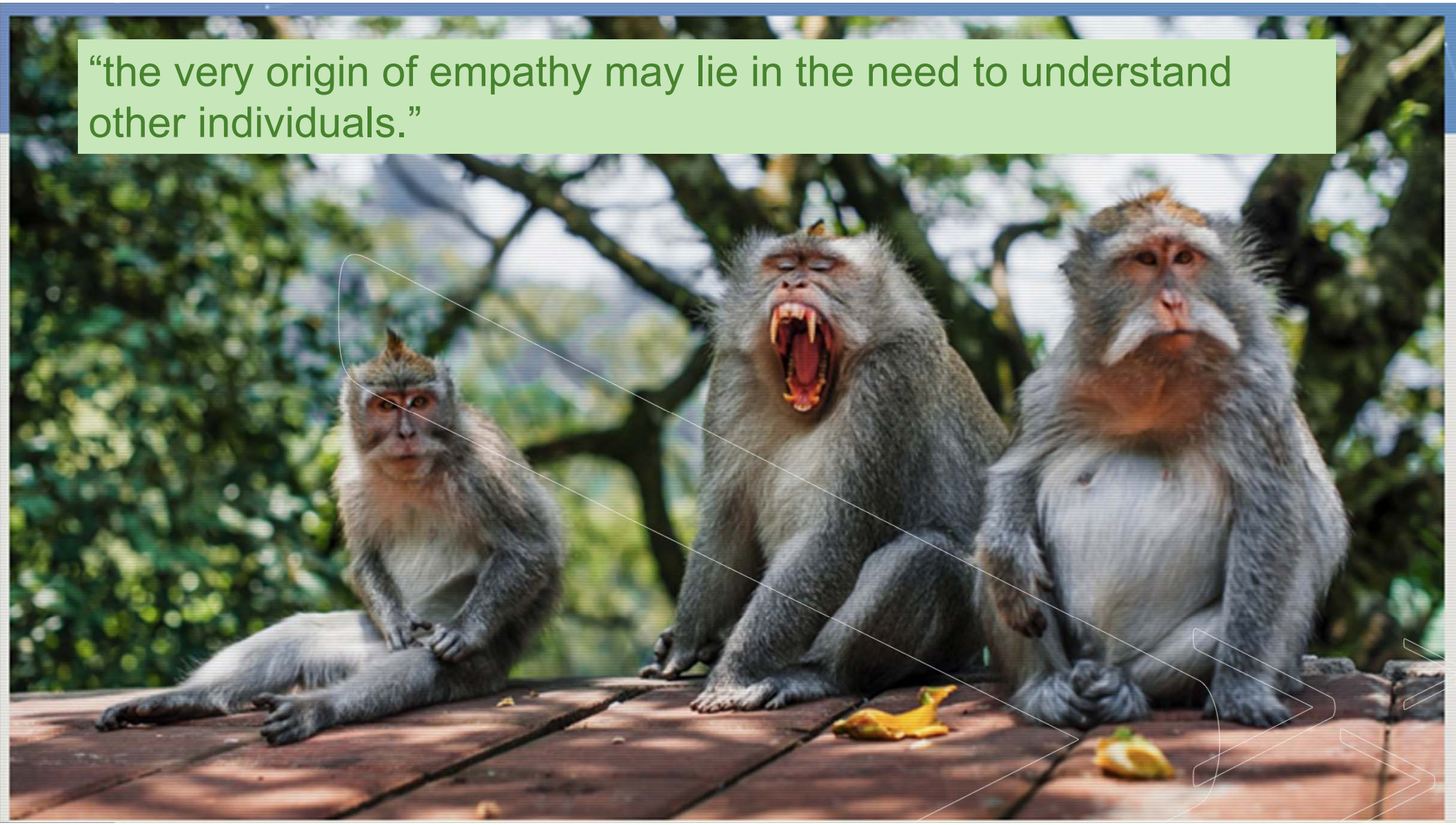
# Ideate

Prototyping gets ideas out of your head and into the world. A prototype can be anything that takes a physical form: a wall of Post-its, a role-play, an object, etc.
Low resolution keep prototypes inexpensive to learn quickly, iterate and explore possibilities.

# Prototype

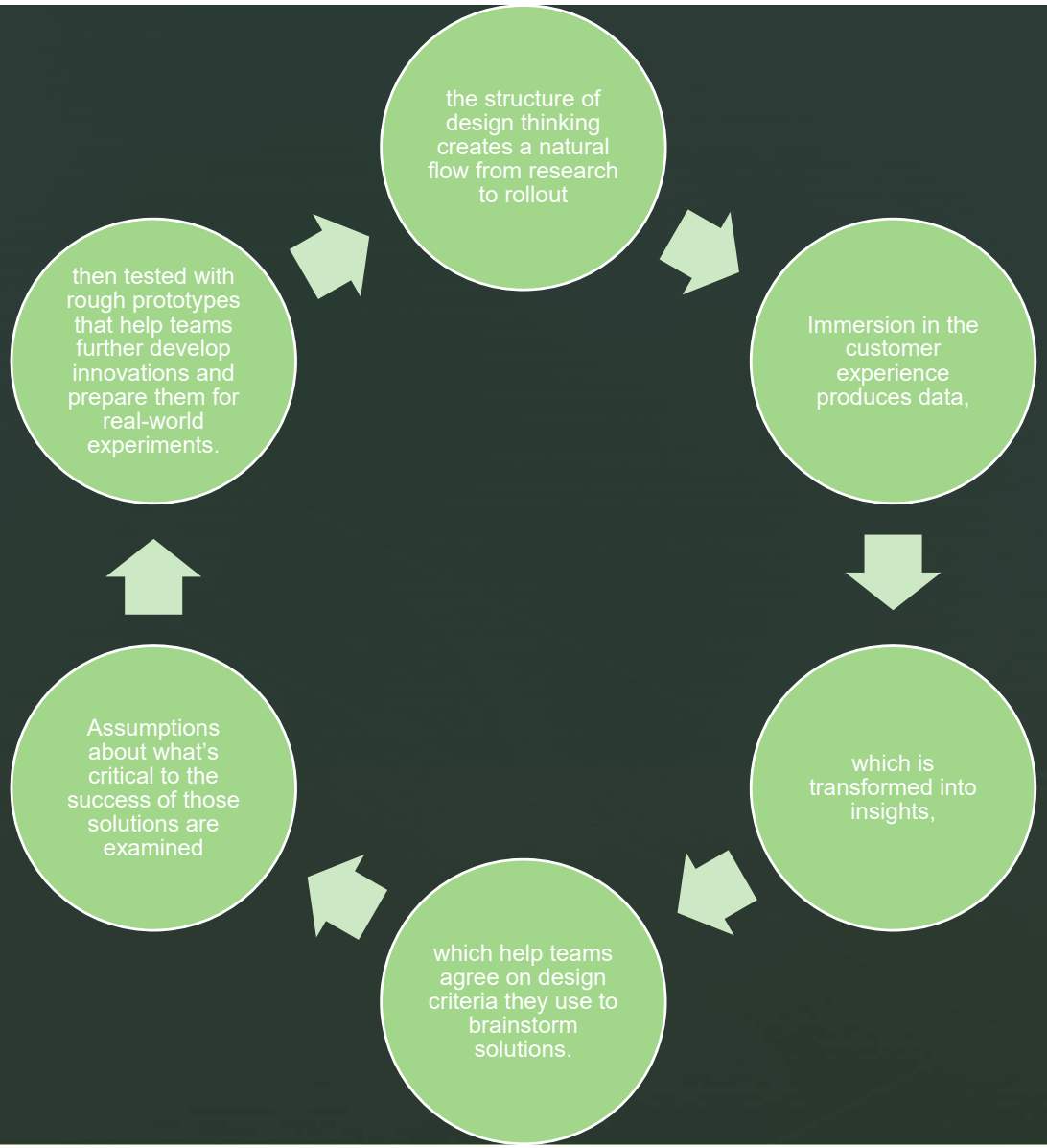
The test mode is an iterative process in which you place your low-resolution prototypes into the context of your user's life. Testing is another opportunity to build empathy through observation and engagement and often yields unexpected insights. You learn what you got right, what missed the mark and if the problem is actually framed correctly.

# Test


“the very origin of empathy may lie in the need to understand other individuals.”

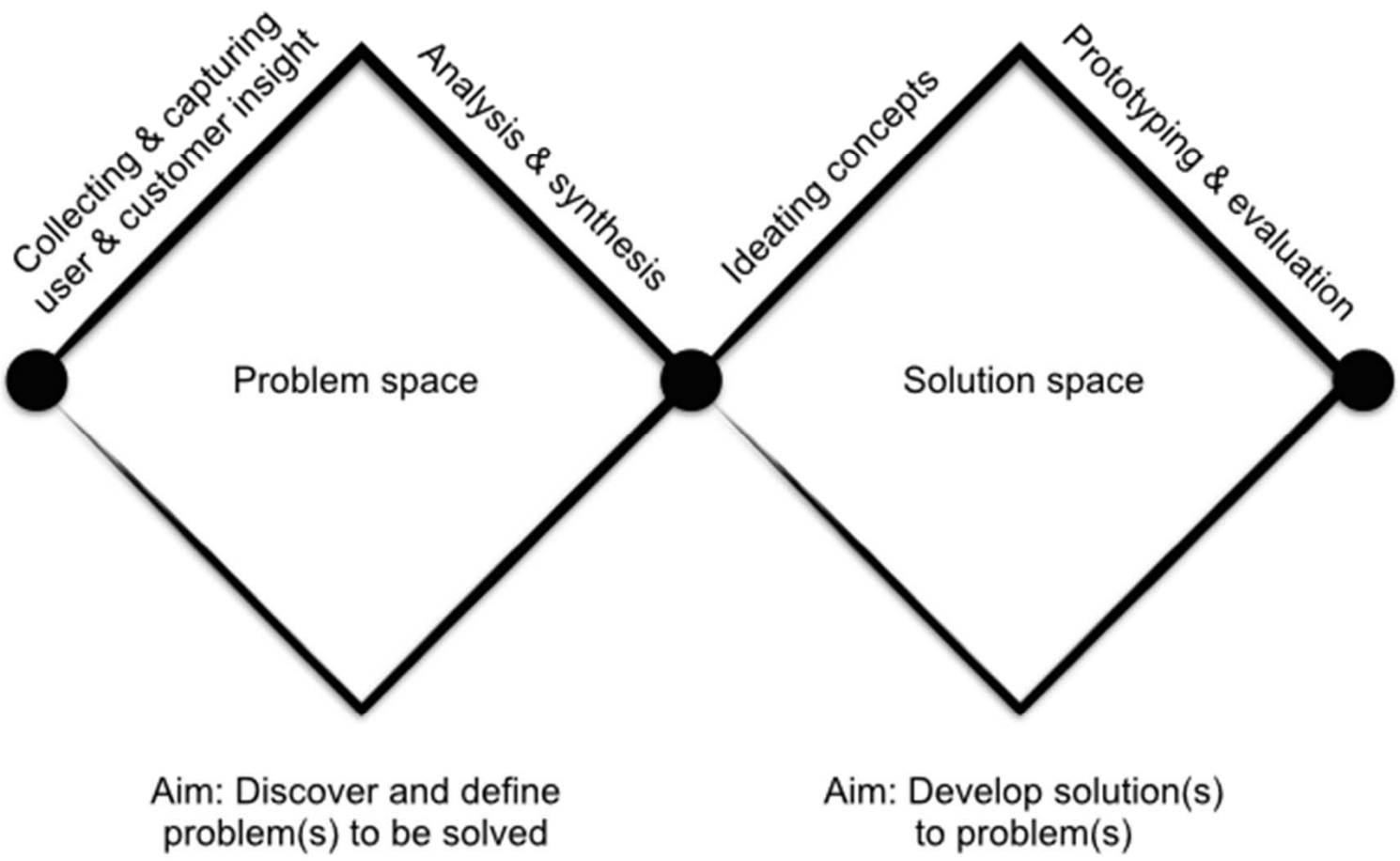
# Personal Design Behaviors and Attitudes

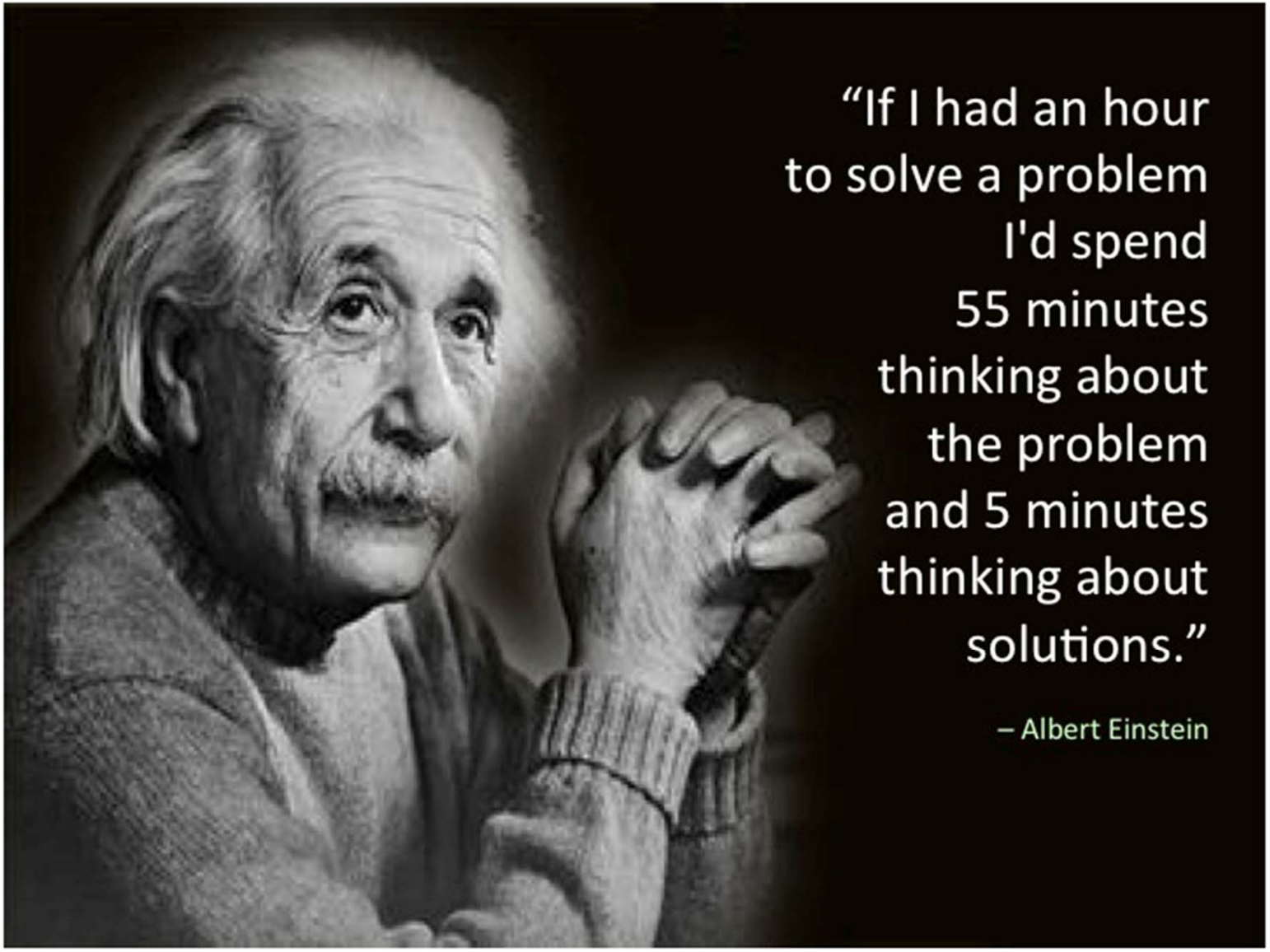
| Be | Create and harbor | Suspend | Navigate | Show | Make |
|---|---|---|---|---|---|
| Be curious and observe | Create and harbor empathy by keeping humans at the center of the process | Suspend judgement of yourself and others | Navigate ambiguity | Show unfinished work | Make ideas visible |

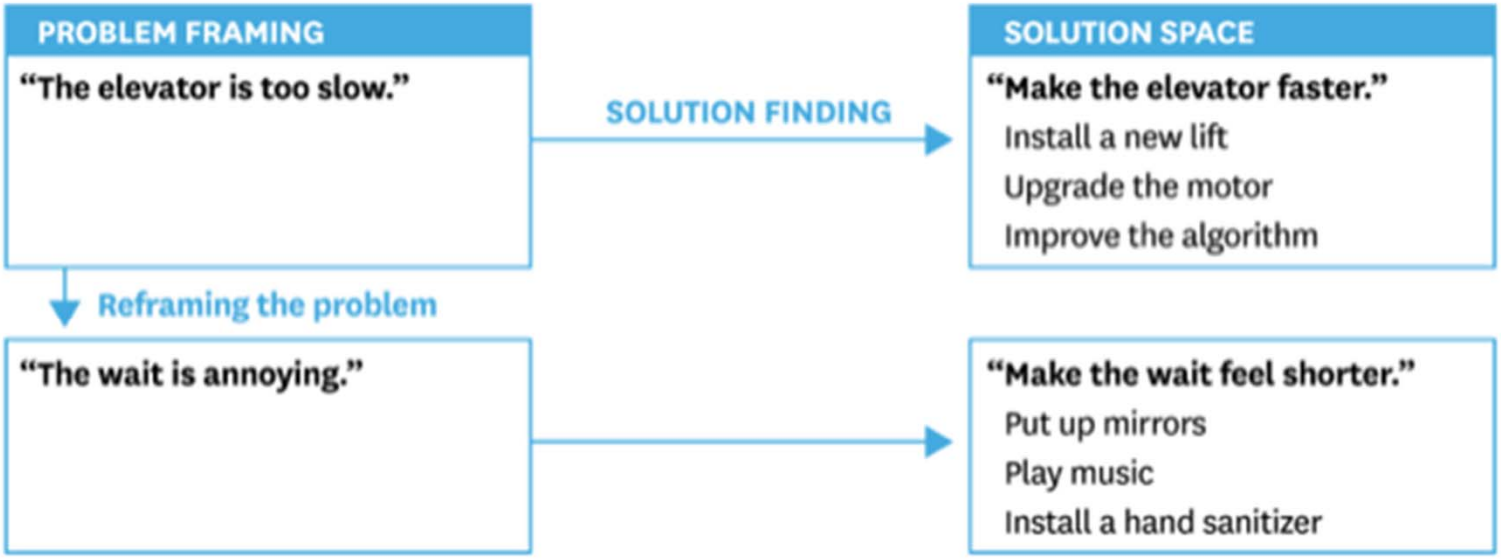

the structure of design thinking creates a natural flow from research to rollout
Immersion in the customer experience produces data,
which is transformed into insights,
which help teams agree on design criteria they use to brainstorm solutions.
Assumptions about what's critical to the success of those solutions are examined
then tested with rough prototypes that help teams further develop innovations and prepare them for real-world experiments.

# Fail forward…

- https://youtu.be/8y-1h_C8ad8?fbclid=IwAR0u5DMZ7SOCVA2iCi8su8jMtwb2zdPU1L4Zcy2z4fFu781M6aIHflwysB0


Collecting & capturing user & customer insight
Analysis & synthesis
Ideating concepts
Prototyping & evaluation
Problem space
Solution space
Aim: Discover and define problem(s) to be solved
Aim: Develop solution(s) to problem(s)


"If I had an hour
to solve a problem
I'd spend
55 minutes
thinking about
the problem
and 5 minutes
thinking about
solutions."
– Albert Einstein




The first appearance in print of the elevator problem was in Russell L. Ackoff, "Systems, Organizations, and Interdisciplinary Research," *General Systems,* vol. V (1960).

The best way to learn design thinking….is to do it!

# IDEA DASHBOARD

FLESH OUT YOUR INTERVENTION

## WHAT...

*What's the intervention/solution?*

## WHY...

*What change does it creates for people?*
*Why is it an effective step toward the near star?*

## WHO/HOW...

*Who will implement it?*
*How can it be created in the system?*

**DRAW IT**

# Questions??

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