

A brief introduction to Human-Centered Design

NOVEMBER 5, 2013

LUCIE RICHTER: CREATING IMPACT THROUGH INSPIRING INSIGHTS



- ANTHROPOLOGIST
- IDEO ALUMNA
- HEALTH CARE AND AGING
- ADJUNCT FACULTY AT CALIFORNIA COLLEGE OF THE ARTS

PARTIAL CLIENT LIST

- Amgen
- California HealthCare Foundation
- Eli Lilly
- Embrace
- Facebook
- GOOD/Corps
- Johns Hopkins Hospital
- LUMO BodyTech
- National Council on Aging
- Novartis
- Novo Nordisk
- On Lok
- Proteus Digital Health
- Reputation.com
- Stanford Clinical Excellence Research Center/
Stanford School of Medicine
- Stanford Coordinated Care/
Stanford Hospital & Clinics
- The Lucille and David Packard Foundation
- UCSF

ANTHROPOLOGIST ON MULTIPLE CONTINENTS



TODAY

- *Human-Centered Design Process*
- *Experience pieces of the process*
- *Get ready for visiting the Garfield Center*



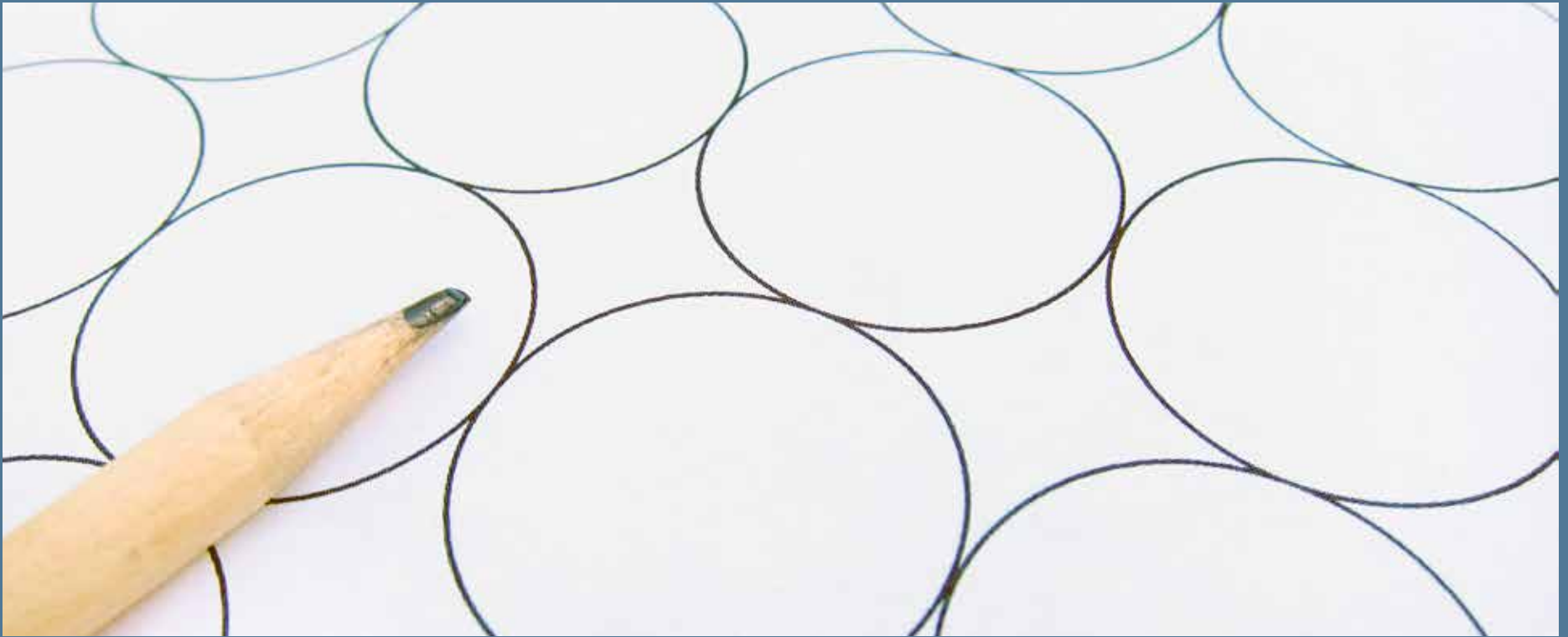
ACTIVITY

LET'S GET THE CREATIVE JUICES FLOWING



ACTIVITY

YOU NEED





ACTIVITY

90 SECONDS, 30 CIRCLES

- ▶ *Adapt as many circles into objects of some form*
- ▶ *Don't repeat objects*
- ▶ *Go for quantity, not quality*

Learn more about the 30 Circle Challenge here: <http://www.skills21.org/2013/01/jumpstart-creativity-with-the-30-circles-challenge/>



ACTIVITY

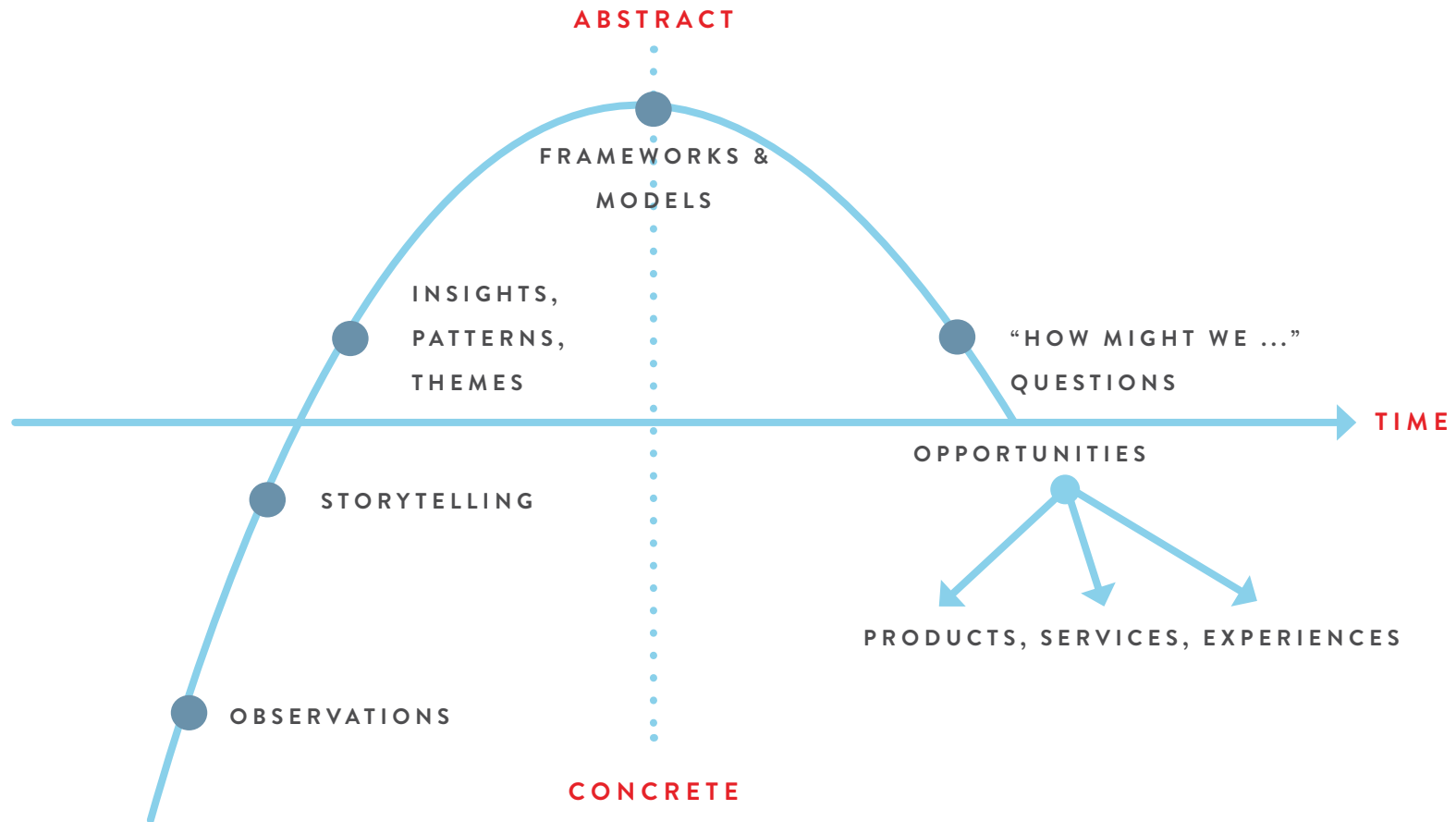
SHARE WITH YOUR NEIGHBOR

▶ *Any surprises?*

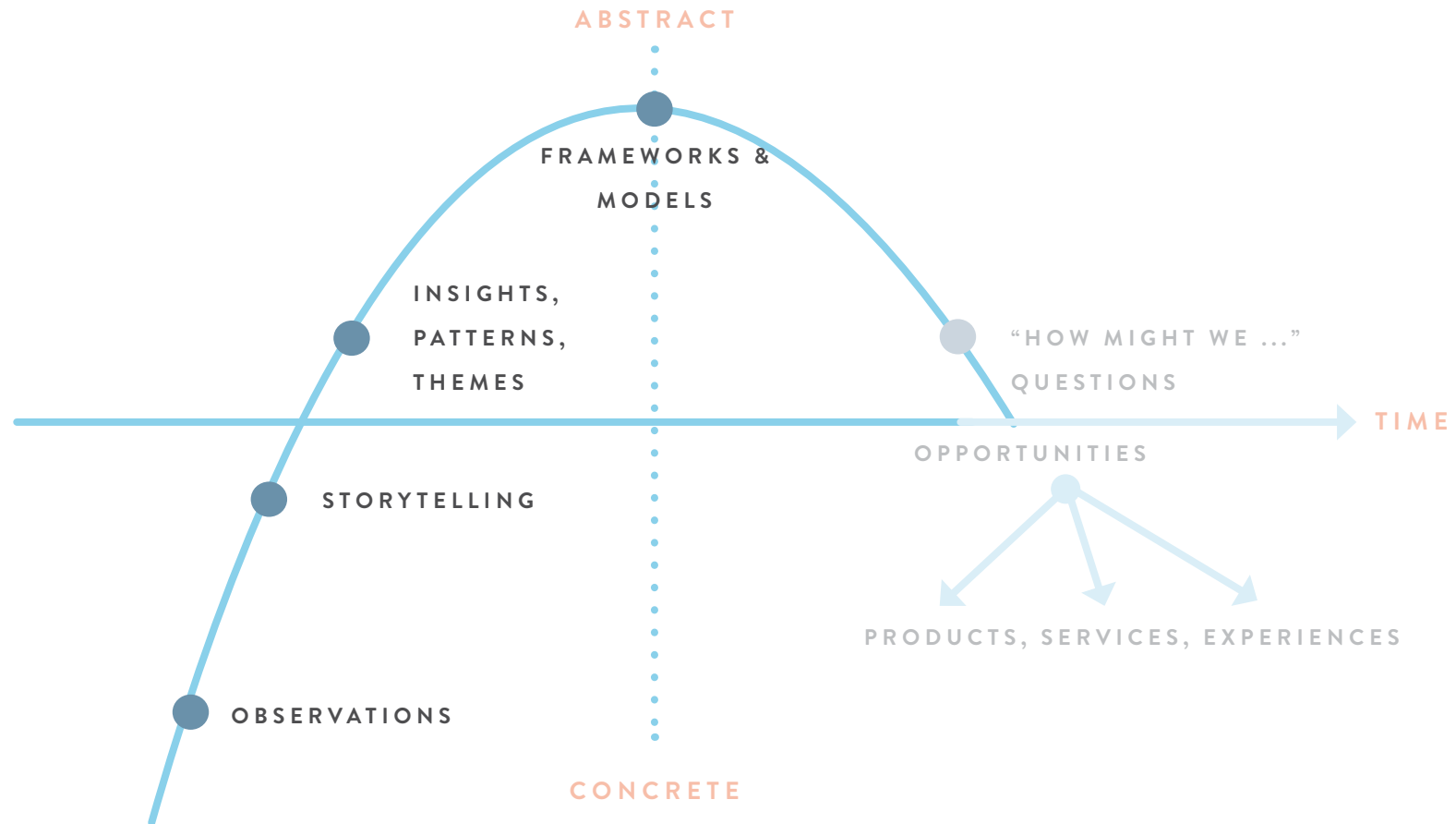
▶ *What was it like?*

HUMAN-CENTERED DESIGN

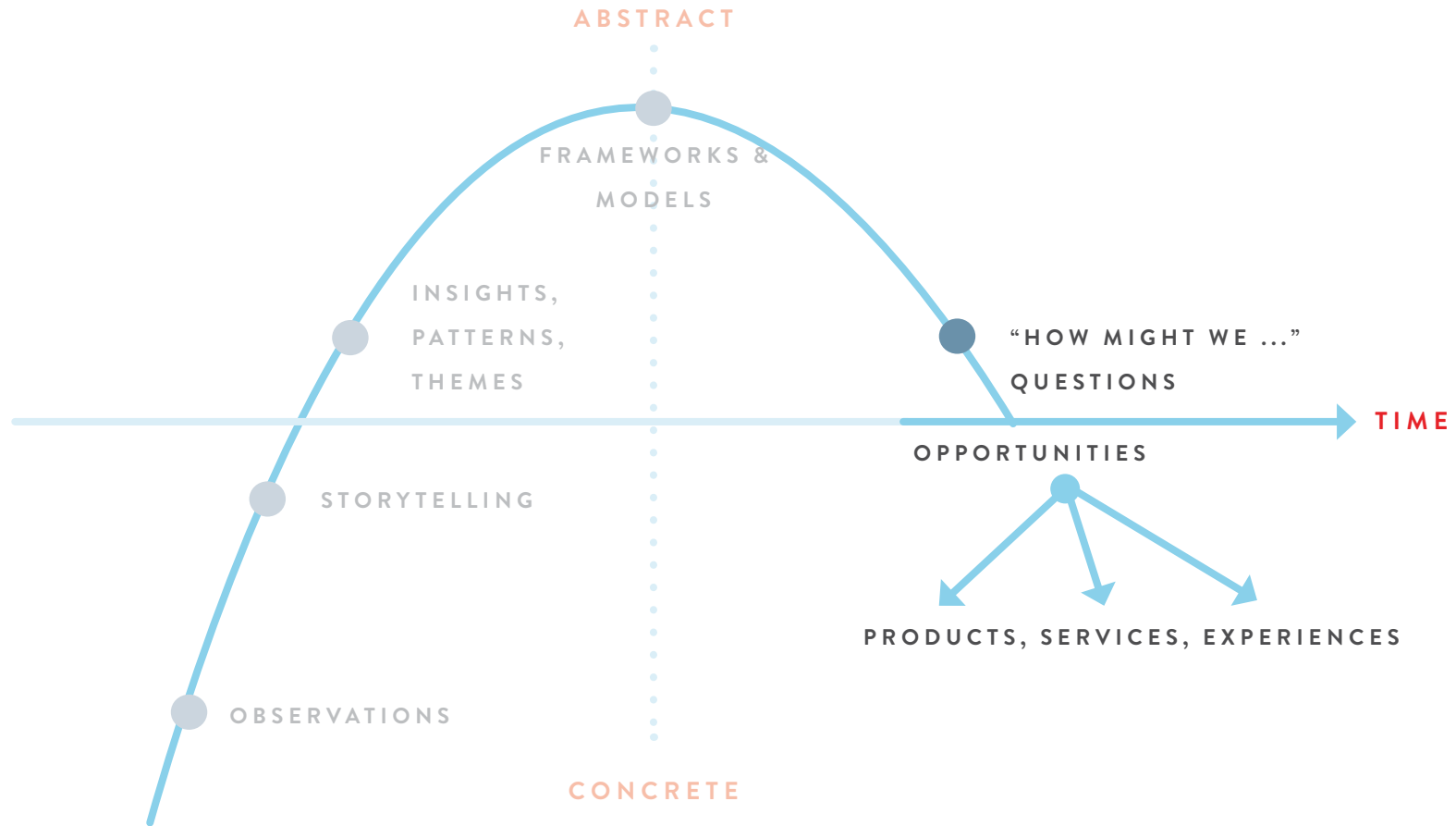
HUMAN-CENTERED DESIGN IS A STRUCTURED PROBLEM SOLVING PROCESS



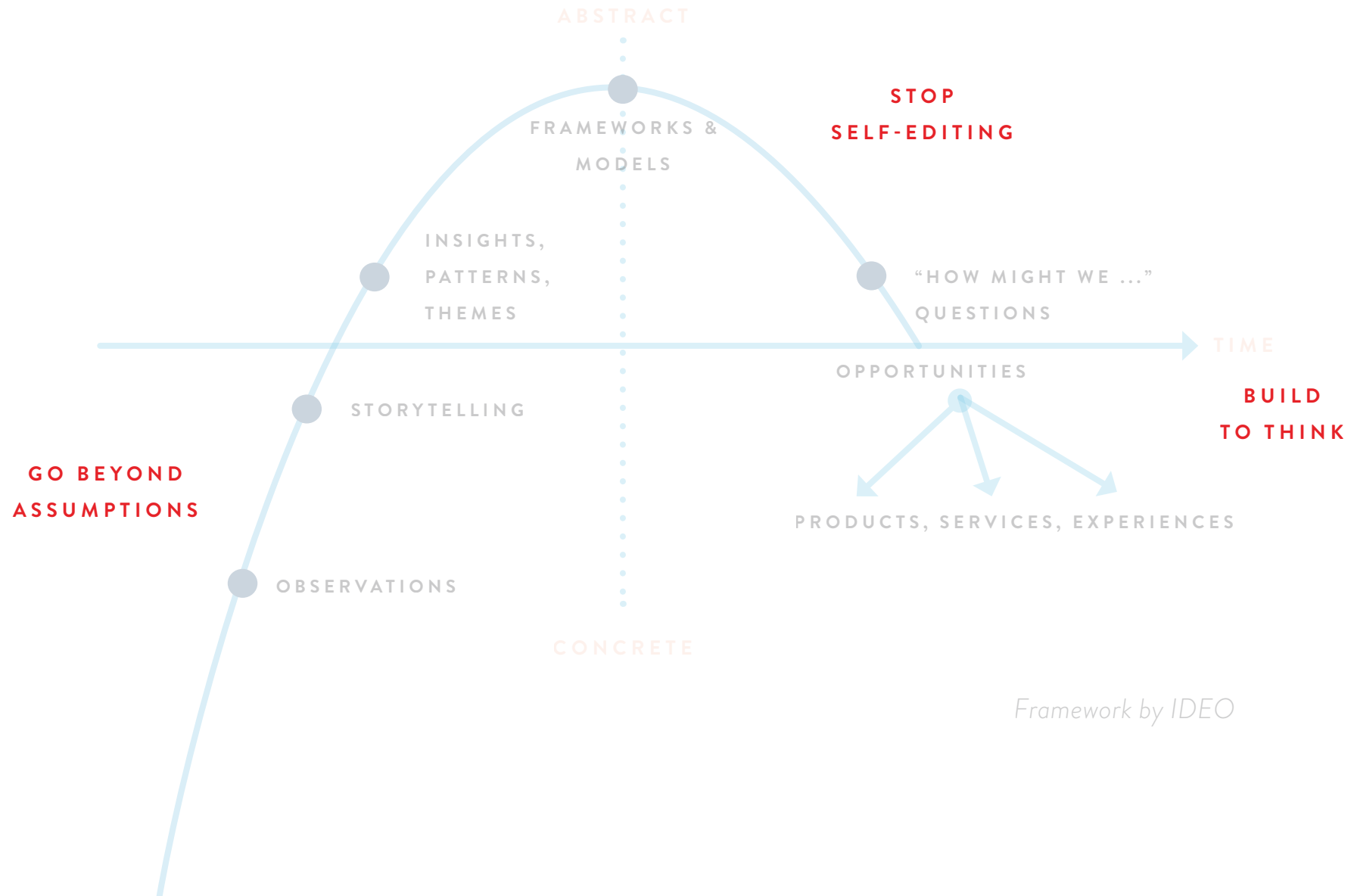
STEP 1: IDENTIFY THE RIGHT PROBLEM



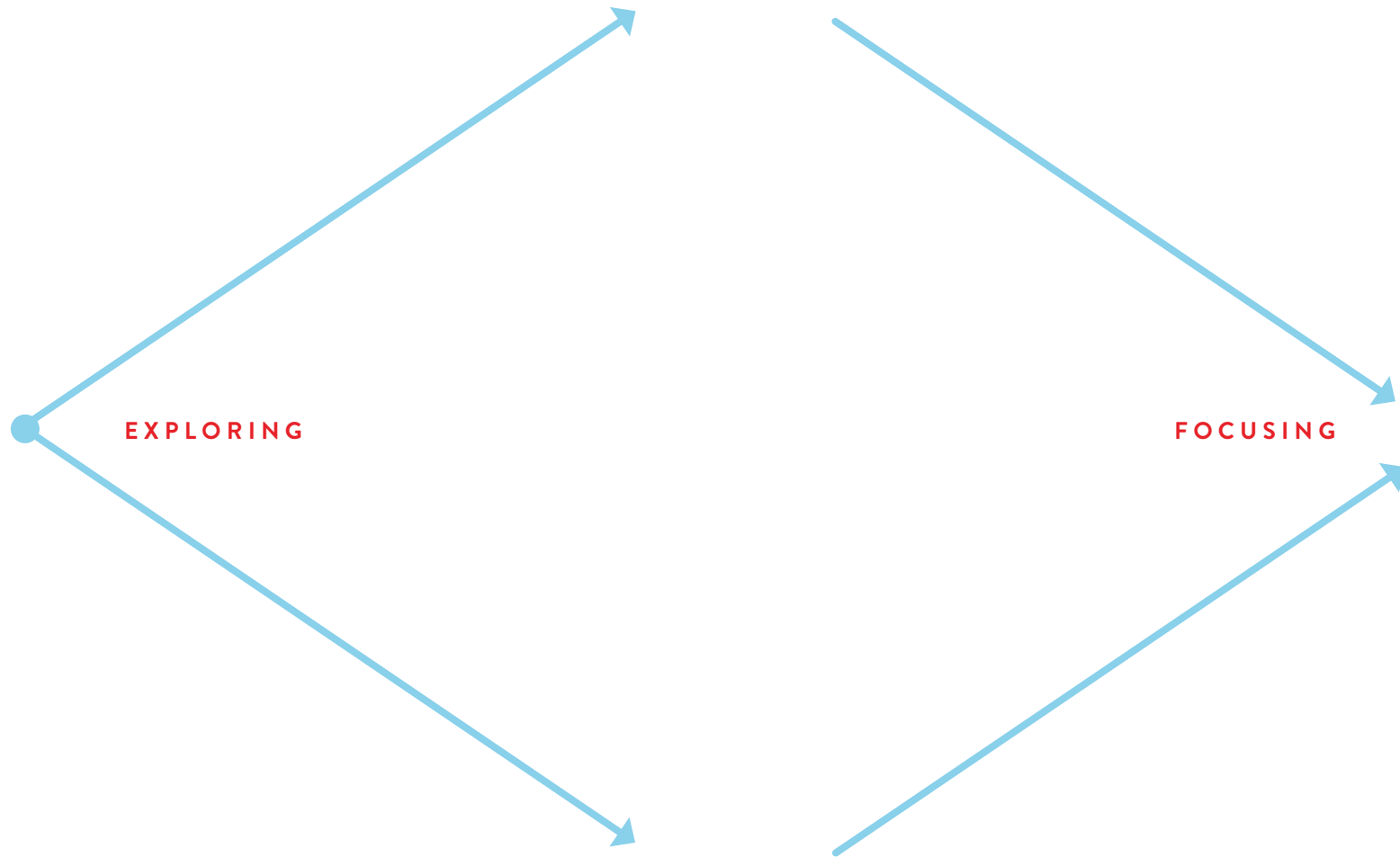
STEP 2 - EXPERIMENT TO FIND THE RIGHT SOLUTION



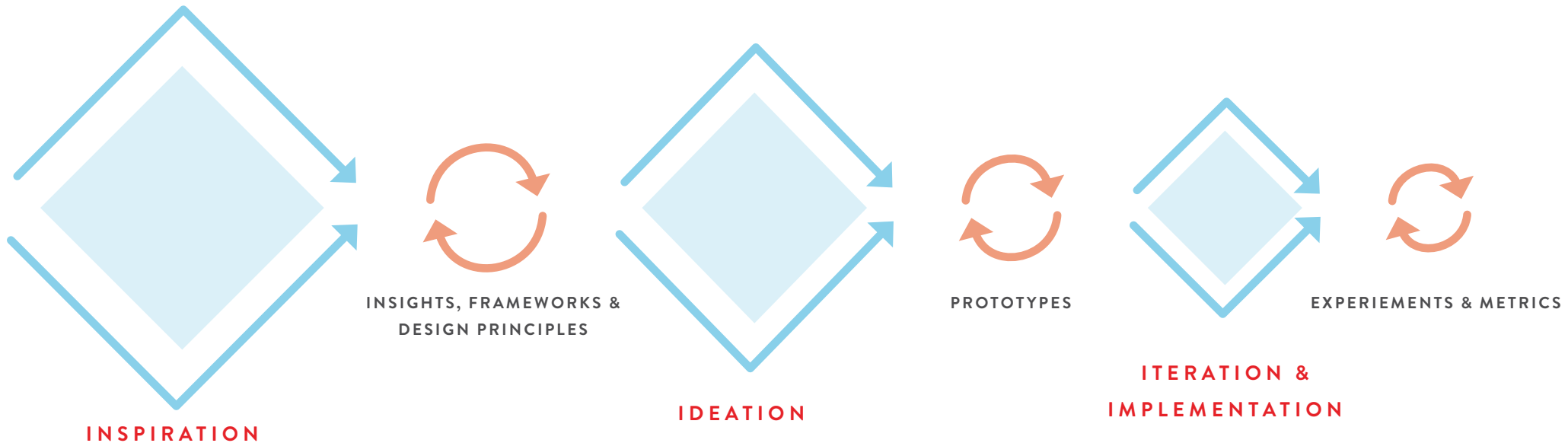
DESIGN THINKING: TAKING ON THE RIGHT MINDSETS



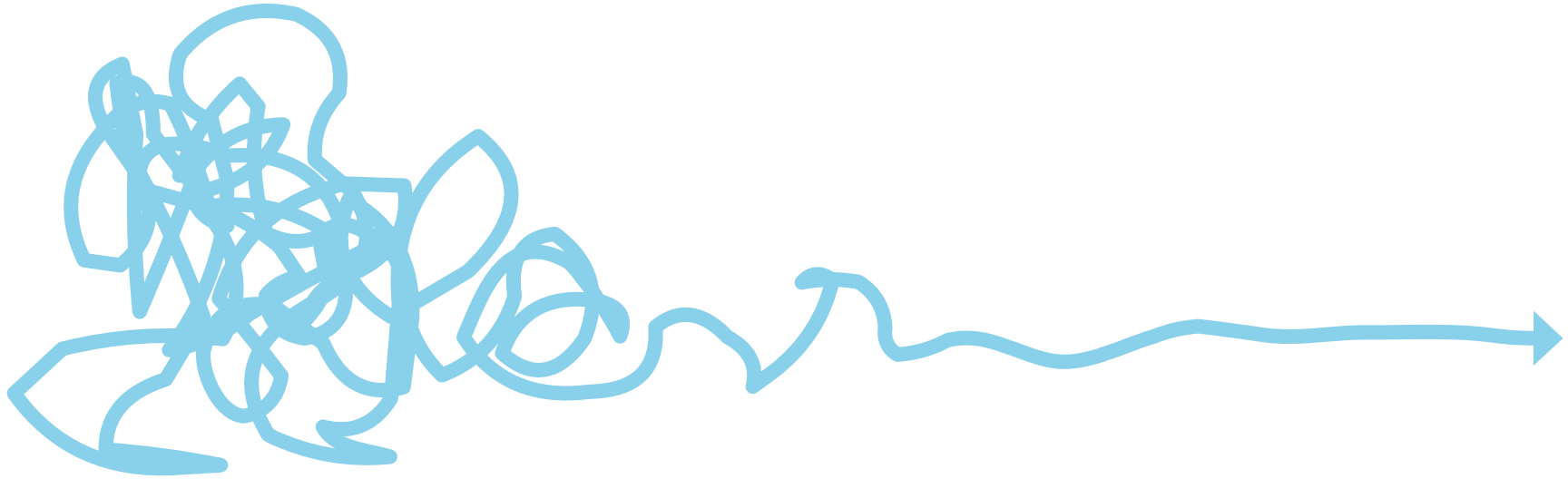
THROUGHOUT PROBLEM SOLVING THERE ARE
TIMES TO EXPAND AND TIMES TO FOCUS



OVER THE COURSE OF A PROJECT, WE CONTINUE TO NARROW DOWN

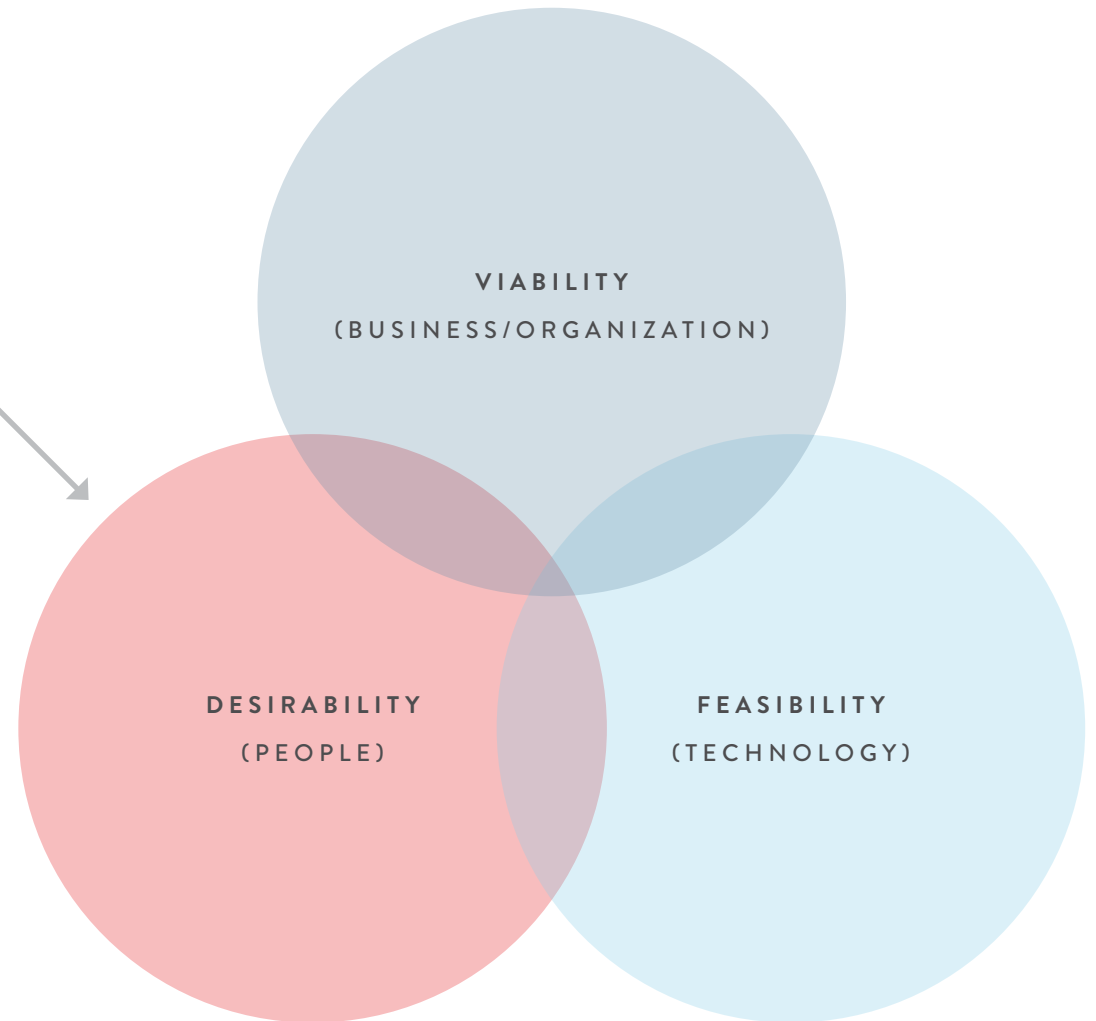


IT IS A MESSY AND NON-LINEAR PROCESS



WE BEGIN WITH INSIGHTS ABOUT PEOPLE, UNDERSTANDING THEIR NEEDS AND ASPIRATIONS

START HERE



FRAMEWORK BY IDEO

IT'S IMPORTANT TO CIRCLE BACK TO PEOPLE THROUGHOUT THE DESIGN PROCESS



EXUBERA, INHALABLE INSULIN DRUG
PHOTO CREDIT FLICKR HANDLE MIKEDUDERX

IT'S IMPORTANT TO CIRCLE BACK TO PEOPLE THROUGHOUT THE DESIGN PROCESS



EXUBERA, INHALABLE INSULIN DRUG
PHOTO CREDIT FLICKR HANDLE MIKEDUDERX

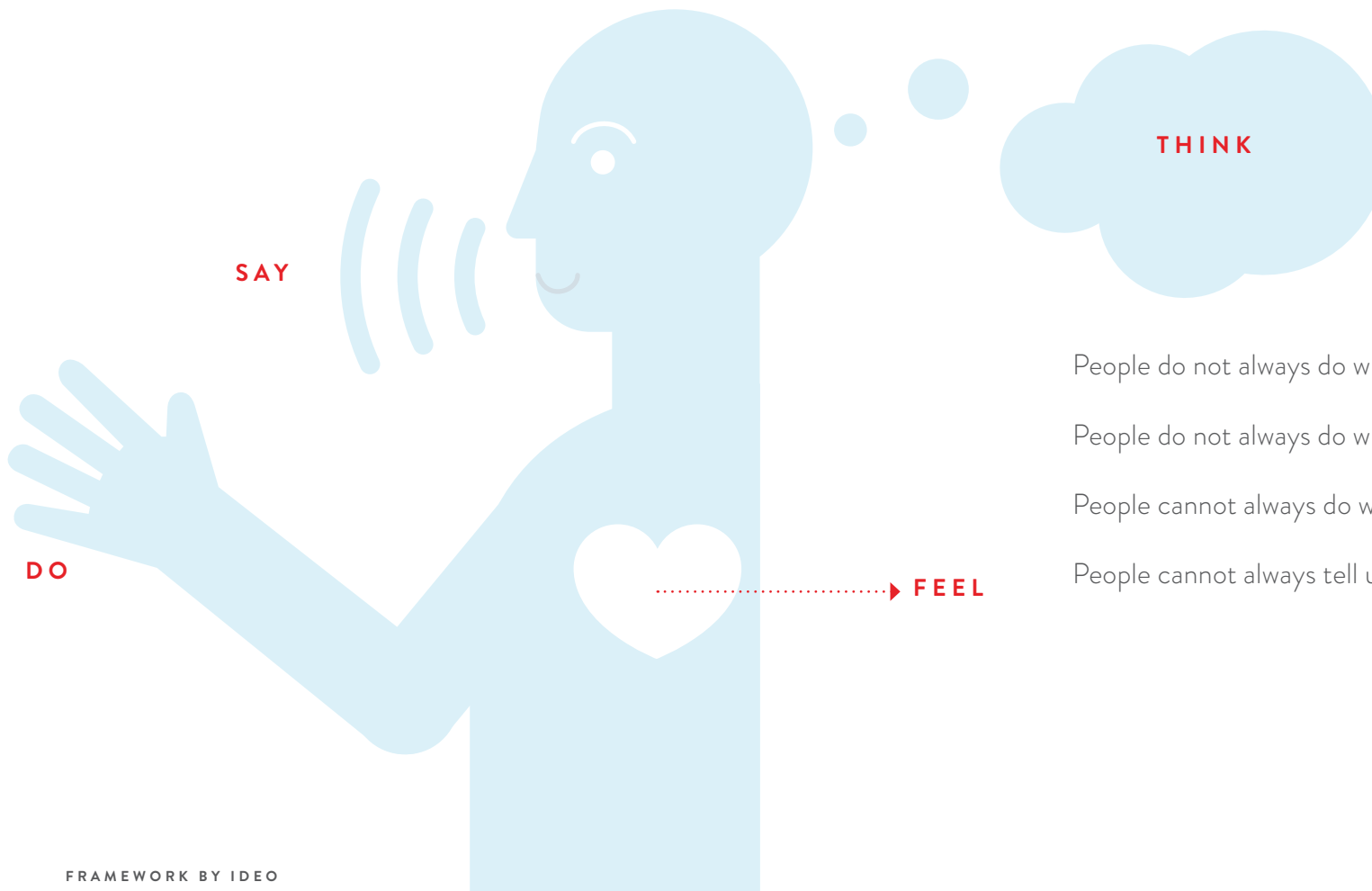


SMOKING DRUGS IN A GLASS BONG
PHOTO CREDIT AP PHOTO/CHUCK BURTON

OBSERVATION LETS US FIND OUT WHAT PEOPLE REALLY DO AND NEED

OBSERVATION

EMPATHY



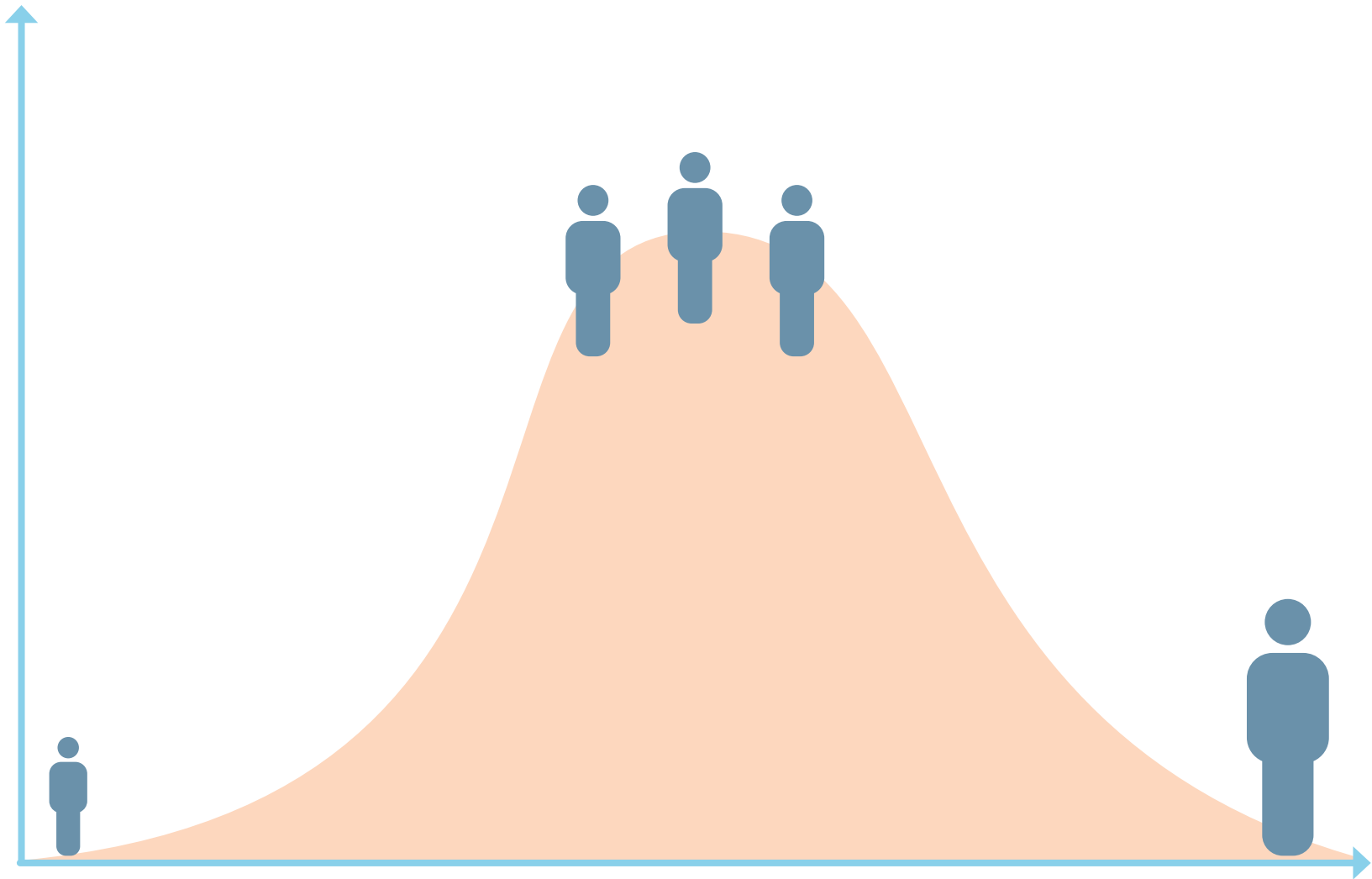
People do not always do what they say they do.

People do not always do what they think they do.

People cannot always do what we think they do.

People cannot always tell us what they need.

EXTREME USERS HIGHLIGHT COMMON NEEDS AND BEHAVIORS



FRAMEWORK BY IDEO

5 THINGS THAT SHOUT OPPORTUNITY!

What to look out for

①

THINGS OR QUALITIES THAT PROMPT BEHAVIORS:

Meeting people in their context to understand what prompts behaviors.



②

WORKAROUNDS & ADAPTATIONS:

How have people applied creativity to solve their own problems?

③

WHAT PEOPLE DEEPLY CARE ABOUT:

What matters most to people and why?

④

BODY LANGUAGE:

Interpreting what people think and feel rather than how they want to be perceived.

⑤

SURPRISING BEHAVIORS AND USES:

Keeping an open mind to discover where errors make sense.



ACTIVITY

OVER TO YOU

Let's try this out



ACTIVITY

WHILE AT A CONFERENCE, HOW DO PEOPLE MAINTAIN THEIR WELLBEING?

5 minutes

*Turn to your other neighbor, this time,
and interview them*



ACTIVITY

SWITCH

While at a conference, how do people maintain their wellbeing?

5 minutes



ACTIVITY

LET'S HEAR SOME HIGHLIGHTS



ACTIVITY

NOW ASK “WHY?”

5 minutes



ACTIVITY

SWITCH

Now ask “WHY?”

5 minutes



ACTIVITY

LET'S HEAR SOME HIGHLIGHTS



ACTIVITY

NOW HAVE THEM SHOW YOU WHAT THEY DO

5 minutes



ACTIVITY

SWITCH

Now have them show you what they do

5 minutes

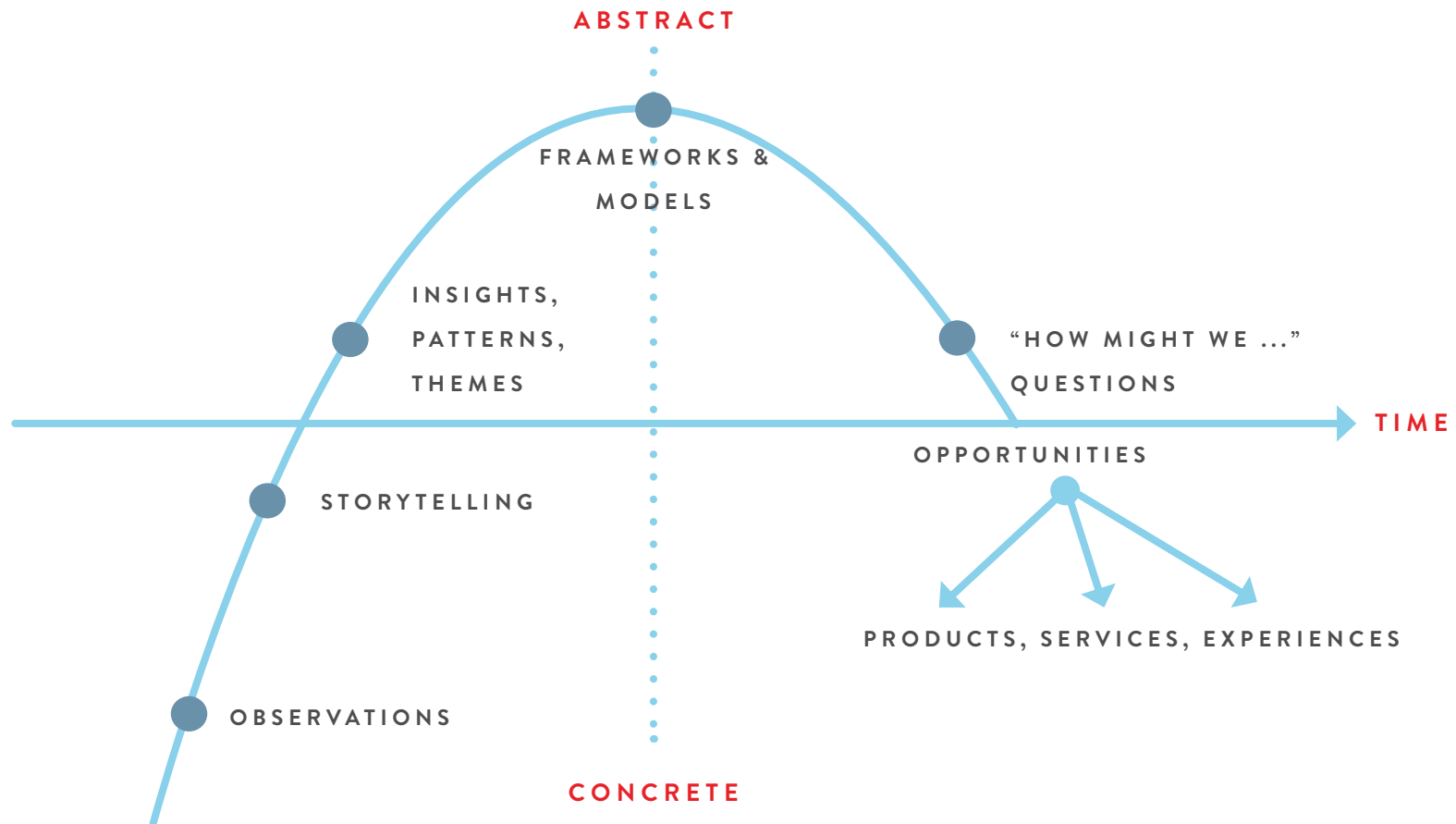


ACTIVITY

WHAT DID YOU NOTICE?

DESIGN THINKING FOR HEALTH CARE

DESIGN THINKING





①

CURIOSITY

Keeping an open mind and going beyond the assumptions, especially important for experts.



②

EMPATHY

Discovering the needs of all stakeholders involved. There are many more in health care than just the patient.

PHOTO CREDIT IDEO

BECOME
AWARE

PRE-
CONTEMPLATION

CONSUME

PARTICIPATE

CONTEMPLATION

PLANNING
FOR
CHANGE

NOTICE

FIRST
IMPRESSION

FIRST
STEP

FIRST
DATE

LEAN
IN

GETTING
TO
KNOW EACH
OTHER

DATING
COURTING
WOODING

CHALLENGE
ONGOING
&
PERSISTENT

OF CARE OF
IN CAMPUS
FAMILY/SECURITY
→ KEEP WORKING
HEALTH SERVICE

"ARE THERE
FOR PPL
WHO DON'T
TAKE CARE OF
THEMSELVES"

Some
Katie's
folks
call

"WHAT IS
SCC?
WHAT DO
THEY DO?"

"What's in
this for
me"

"IT'S A NEW
CLINIC,
HOW LONG
WILL IT BE
AROUND?"

"WHAT IS
COORDINATED
CARE?"

"Who else
goes here?"

"I'm not
sick enough"

"WILL ALL
MY COLLEAGUES
KNOW WHAT'S
WRONG WITH
ME?"

"HOW MUCH
NEW STUFF
DO I NEED TO
DEAL WITH?"

"Will
transferring
be a total
pain?"

"WILL MY
CURRENT DOCS
KNOW THAT
I'M DATING
ANOTHER CLINIC?"

"I HEARD
THEY DON'T
TAKE ~~EVERYONE~~
WILL THEY REJECT
ME?"

"I'M CLOSER
TO RETIRING.
CAN I STAY
W/ SCC?"

"Who is
going to
help me
through this?"

Will this
limit my
opps (if
they know)

Do I have to provide
my own records?

Sadness
Separation
from
prior
PCP
Breakup

Care
Support -
why would
I need that

③

INTEGRATIVE THINKING

Going beyond either/or solutions by seeing the nuances
and complexity of the challenge.

PHONE
CALLS

Letter

Fairs

presentations

OPEN
HOUSE

WEBSITE

15 MIN
MEET & GREET
(20 MIN!)

→ VIDEO
EDITION

A close-up photograph of the side window of a red car. A white rectangular sign is affixed to the window, featuring the text 'LICENCE TO CARRY PASSENGERS' in a bold, sans-serif font, followed by the number '49' in a larger, bold font. The car's body is a vibrant red, and the window frame is black. The background, visible through the window, shows a blurred outdoor scene with a fence and some greenery.

LICENCE TO CARRY
PASSENGERS 49

④

OPTIMISM

Believing that at least one potential solution is better than the existing alternatives.

PHOTO CREDIT FLICKR HANDLE KYKNOORD



⑥

EXPERIMENTALISM

Getting tangible early and creating safe spaces to fail.



7

COLLABORATION

Working across multiple disciplines while putting titles and organizational hierarchies aside.

SUMMARY

CURIOSITY	Keeping an open mind and going beyond the assumptions.
EMPATHY	Putting all people first Who are all the stakeholders? What are their latent and unmet needs?
INTEGRATIVE THINKING	Going beyond either/or solutions by seeing the nuances and complexity of the challenge.
OPTIMISM	Believing that at least one potential solution is better than the existing alternatives.
EXPERIMENTALISM	Getting tangible early and creating safe spaces to fail.
COLLABORATION	Working across multiple disciplines while putting titles and organizational hierarchies aside.

**DEFINING THE PROBLEM:
“HOW MIGHT WE ...?”**

A “HOW MIGHT WE ...?” QUESTIONS
(HMW) IS A WAY TO FRAME
AN OPPORTUNITY TO INSPIRE IDEAS -
LOTS OF IDEAS!

WHY DO WE SAY “HOW MIGHT WE ...?” AND NOT HOW CAN, SHALL OR DO WE?

- IT'S AN INVITATION FOR INPUT, SUGGESTIONS AND EXPLORATION.
- IT IMPLIES DIFFERENT POSSIBLE SOLUTIONS, AND ENCOURAGES PEOPLE TO FEARLESSLY ENVISION MULTIPLE FUTURES.
- IT'S EXCITING AND FULL OF POSSIBILITIES!

IT TAKES MUCH PRACTICE TO WRITE A GOOD HMW QUESTION

- OUT OF 20 ATTEMPTS, YOU MIGHT HAVE ONE GOOD ONE. GO FOR QUANTITY!
- YOU RECOGNIZE A GOOD HMW BECAUSE IT TRIGGERS LOTS AND LOTS OF NEW IDEAS

A GOOD HMW IS NOT TOO BROAD, AND NOT TOO NARROW

TOO BROAD:

HMW... design patient-centered primary care services?

TOO NARROW

HMW... call a patient the day before they need to refill their prescription?

EXAMPLE

DISCHARGE SUMMARY

Problem

At a teaching hospital the residents took one month to write their discharge summaries. How do we achieve a 24 hour turnaround?

Reframed problem

- How might we create a culture of support for the residents to make discharge summary writing easier?
- How might we enable residents to learn how to write a discharge summary without losing face?
- How might we provide residents with timely feedback to improve their discharge summary writing skills?



ACTIVITY

LET'S TRY IT OUT



ACTIVITY

SHIFTING TO A HUMAN-CENTERED MINDSET

4 Steps for defining problems, before solving them



ACTIVITY

STEP 1: DECIDE ON A PROBLEM

HERE ARE A FEW CURRENT AND
POTENTIAL PROBLEMS:

- 1 - *Physicians tend to leave after National Health Service Corps repayment ends*
- 2 - *Staff burnout and retention issues*
- 3 - *Specialists tend to be reluctant to collaborate with Safety Net clinics*
- 4 - *Newly insured patients might flood into clinics in January 2014*
- 5 - *Newly insured patients need more hand holding and guidance*
- 6 - *Competition with other providers over newly insured patients*
- 7 - *Transition from the old way to new arrangements under Obamacare*
- 8 - *Increased demand on rural clinics being the sole providers in a region.*

1 minutes

Tip: Find out what is relevant to people in your team. If none of the proposed problems resonate, come up with your own.



ACTIVITY

10 minutes

STEP 2:

WHY IS THIS PROBLEM WORTH SOLVING? WHAT'S STOPPING US?

Tip: Capture all the obvious as well the hidden reasons on post-its: one reason per post-it. Focus on people, their behaviors, emotions and struggles. Have everyone participate in writing post-its.



ACTIVITY

2 minutes

STEP 3

**SELECT 1 REASON THAT HASN'T
BEEN ADDRESSED, YET.**

*Tip: Pick something that has an element of surprise,
something unusual or unexpected.*



ACTIVITY

10 minutes

STEP 4

NOW WRITE AS MANY HMWS AS YOU CAN

Tip: It takes practice to write a good HMW. You recognize a good HMW because it immediately triggers lots of ideas. Have everyone participate in writing one HMW per post-it note.



ACTIVITY

LET'S HEAR SOME HMWS



ACTIVITY

NEXT STEPS

**SELECT THE MOST INSPIRING
HMW & RUN A BRAINSTORM**

*Note: Go for quantity because there might only be
1-2 good ideas out of 100*

7 BRAINSTORM RULES

①

DEFER JUDGMENT

Don't dismiss any ideas. Any idea is a good idea, no matter how crazy. Nothing can kill the spirit of a brainstorm quicker than judging ideas before they have a chance to gain legs.

PHOTO CREDIT FLICKR HANDLE ALLIE KENNY

②

ENCOURAGE WILD IDEAS

Embrace the most out-of-the-box notions because they can be the key to solutions. The whole point of brainstorming is coming up with new and creative ideas.

PHOTO CREDIT FLICKR HANDLE SOPHIA LOUISE

③

BUILD ON THE IDEAS OF OTHERS

No “buts”, only “ands.” Sometimes people say crazy and bizarre things, like “make it on Mars”, but there is some element of truth in it. When you build on the ideas of others, you might bring those crazy ideas back down to earth and make them real innovations.

④

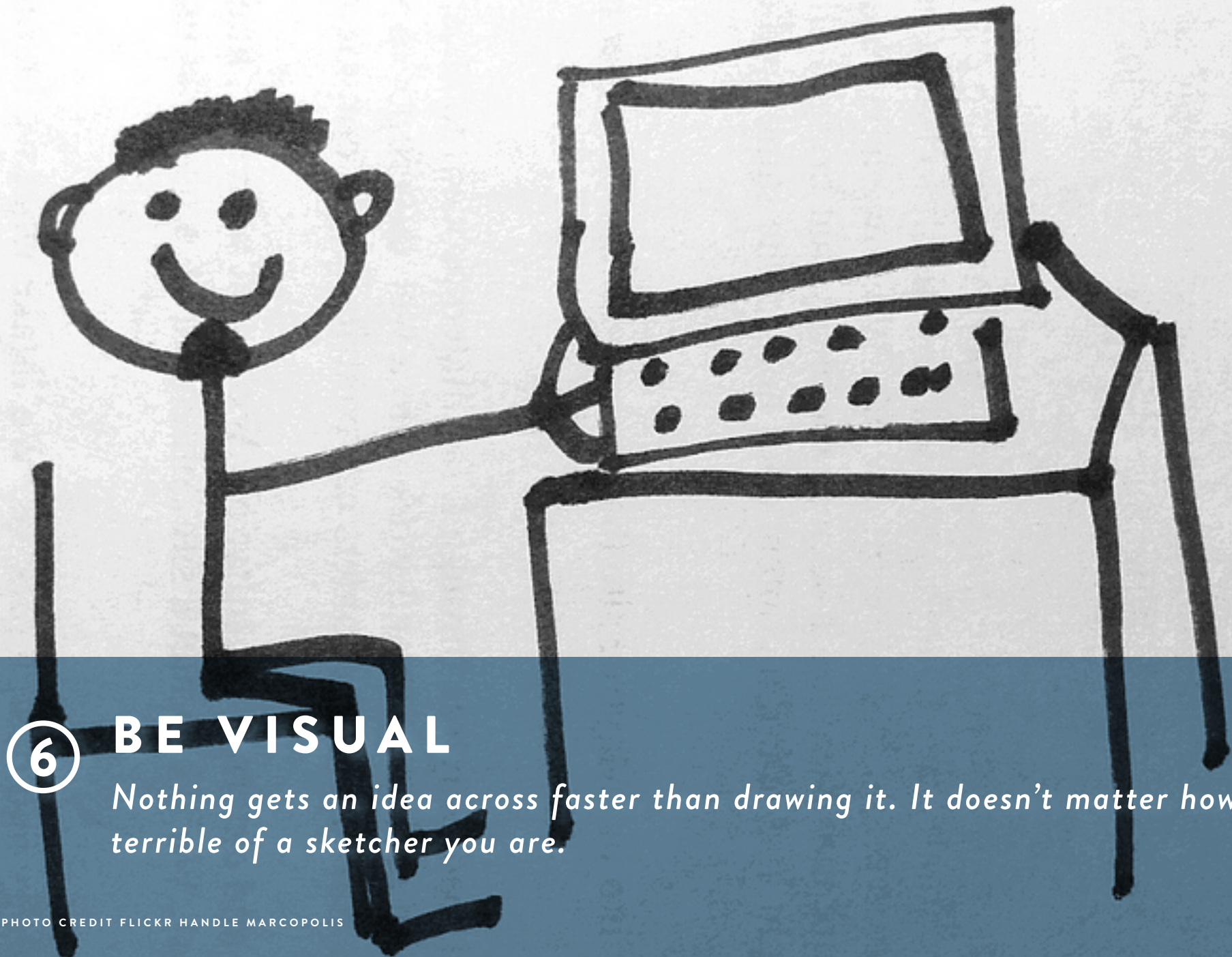
STAY FOCUSED ON THE TOPIC

Always keep the brainstorm on topic. It's easy to go off on a tangent and lose sight of the selected problem.

⑤

ONE CONVERSATION AT A TIME

No interrupting, no dismissing, no disrespect, no rudeness. Let people have their say.



6

BE VISUAL

Nothing gets an idea across faster than drawing it. It doesn't matter how terrible of a sketcher you are.

7

GO FOR QUANTITY

Aim for as many new ideas as possible. In a good session, up to 100 ideas are generated in 60 minutes. Crank the ideas out quickly.

BRAINSTORMING RULES

1 *DEFER JUDGMENT*

2 *ENCOURAGE WILD IDEAS*

3 *BUILD ON THE IDEAS OF OTHERS*

4 *STAY FOCUSED ON THE TOPIC*

5 *ONE CONVERSATION AT A TIME*

6 *BE VISUAL*

7 *GO FOR QUANTITY*

VISITING KAISER'S INNOVATION HUB

OBSERVATION GUIDE FOR VISITING THE GARFIELD CENTER



CC IMAGE COURTESY OF TED EYTAN ON FLICKR

THE GARFIELD CENTER IS A LIVING LABORATORY where people come together to develop new solutions in a hands-on, mocked-up clinical environment. New technologies are brought here to explore and test out before considering, and new designs are tested here before implementing in Kaiser hospitals.

THE GARFIELD CENTER BRINGS INTERDISCIPLINARY TEAMS TOGETHER TO:

- Collaboratively solve complex problems
- Accelerate decision-making
- Provide a safe space to experiment.

OBSERVATION GUIDE FOR VISITING THE GARFIELD CENTER



CC IMAGE COURTESY OF TED EYTAN ON FLICKR

WHAT TO LOOK FOR:

- How have the spaces been designed to support ideation and prototyping?
- How are the various spaces supporting the exploration of all aspects of people's lives, such as home environment, clinic, hospital, out in the world?
- How is technology being showcased in the space?

Thank You

LUCIE RICHTER

C O N S U L T I N G

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APPENDIX

SETTING UP A BRAINSTORM

DEFINITION

Brainstorming is a process for groups to generate lots of ideas quickly, fluidly and effectively.

BENEFITS

Speed, quantity, jump-start inspiration, enthusiasm, team building

INGREDIENTS

Set up in advance, provide some snacks, prepare the team, use a facilitator, do a warm-up exercise (borrow from improvisation theater), follow the rules, record every idea, set a timer for 15-20 minutes, aim for 60 ideas per round, switch topics when energy dips, evaluate the ideas after the session.

PEOPLE

Invite 6-8 people, get a diverse group

FACILITATOR

Review the rules, introduce the topic, lead warm-up exercise, make sure everyone records their ideas, lead the group, provide energy.

FLOW

Participants write and sketch their ideas on post-its, wait for their turn to speak, introduce idea and hand post-it to facilitator. Facilitator puts ideas up, encourages people to be visual, keeps track of time, keeps the drum beat going “go for quantity!”, “3 more ideas, come on!”, stops side conversations, reminds people of the rules such as “defer judgment.”

BRAINSTORM EVALUATION

Distill ideas promptly to not forget the reasons, have a small core group identify the best ideas, cluster and classify ideas into themes, one great idea makes the effort worthwhile!