



Institute *for*  
Healthcare  
Improvement

# Design Thinking: Foundational Strategies, Methods and Tools

# This Approach is Adapted from:

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**IDEO•ORG**

# What is Design Thinking?

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Design Thinking is about accelerating innovation to create better solutions to the challenges facing business and society.

It starts with people - what we call *human centered design* - and applies the creative tools of design, like storytelling, prototyping and experimentation to deliver new **breakthrough innovations**.

- Tim Brown, CEO IDEO



# What is Co-Design?

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Co-Design is a method within the broader field of design thinking, in which the people we are designing for are actually co-designing processes, programs and systems with us.



# Why Design Thinking?





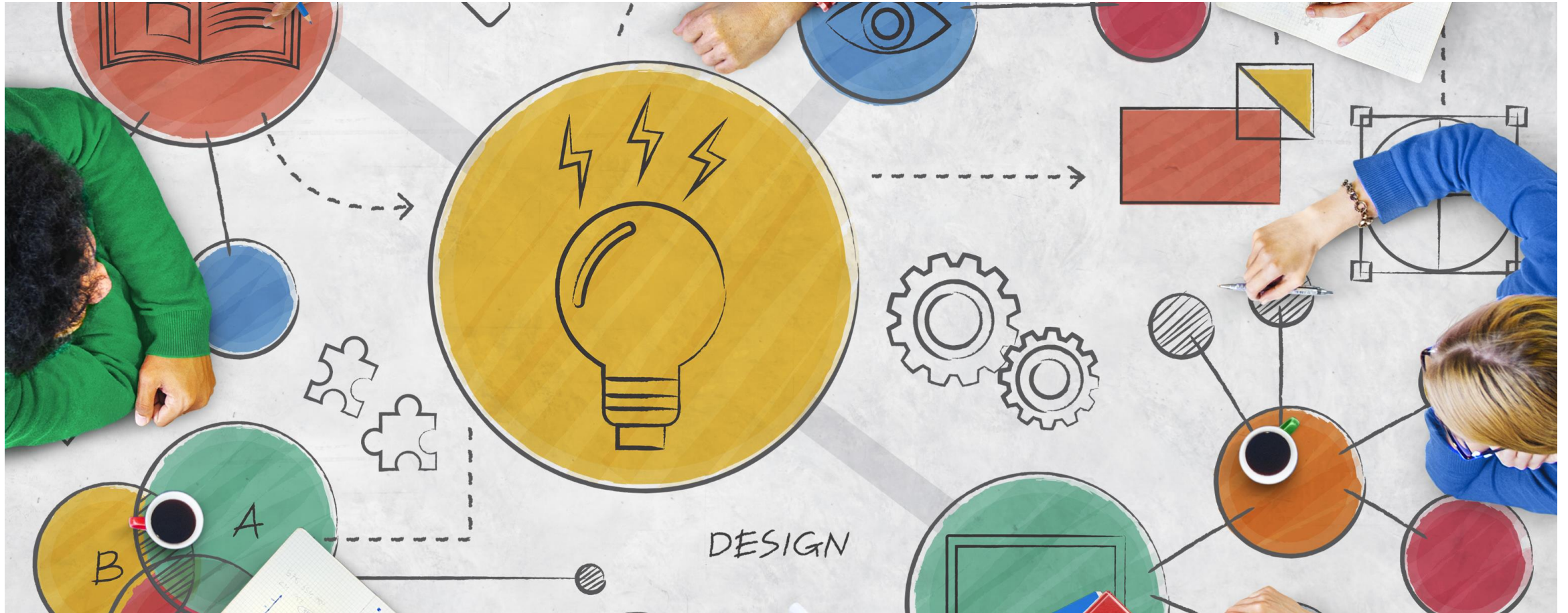
Each system is perfectly designed to  
give you exactly what you are  
getting today.

— *W. Edwards Deming* —

AZ QUOTES

# To Achieve Breakthrough Innovations

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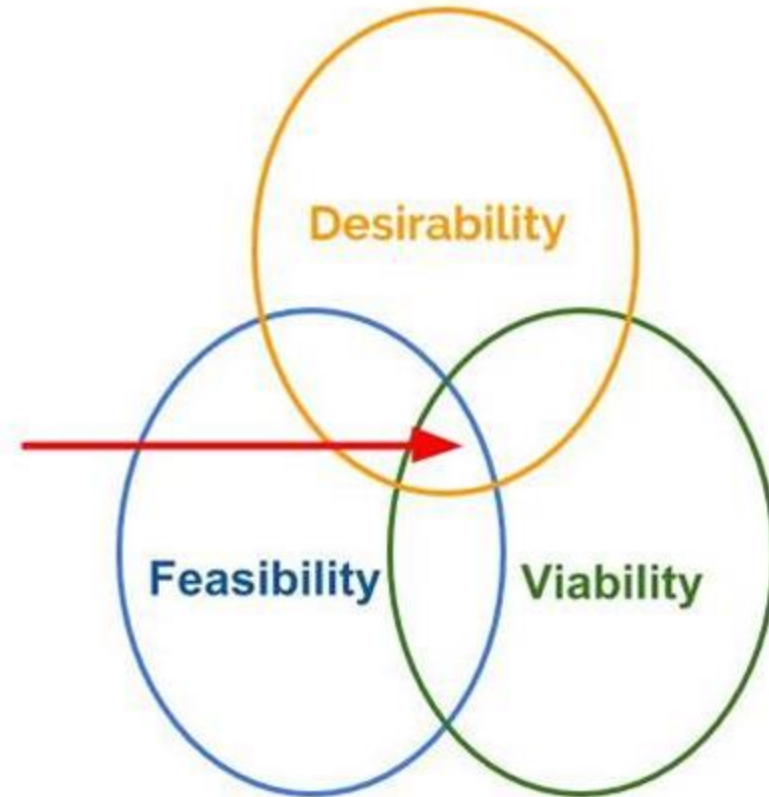


# What are Breakthrough Innovations?

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The solutions that emerge at the end of the Design Thinking innovation process should be centered in the overlap of three lenses:

- **Desirability**
- **Feasibility**
- **Viability**



# How might we?

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Breakthrough innovations  
begin with a question.



# Breakthrough Innovations

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**Hertz Rental Cars -**  
How might we get rid  
of the line?

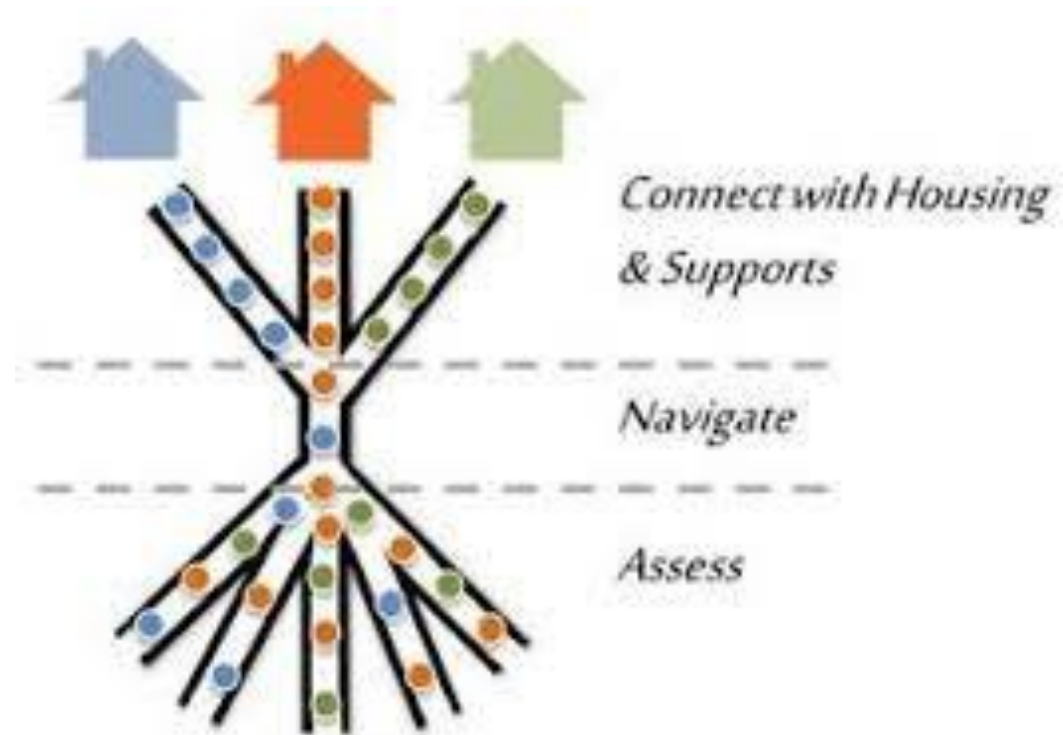


# Breakthrough Innovations

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## Homeless Systems -

How might we have one process for all people experiencing homelessness?



# Three Phases of Design Thinking (IDEO Approach)



**Inspiration** - In this phase you will learn how to better understand your constituents. You'll observe their lives, hear their hopes and desires, and get smart about your challenge.

**Ideation** - Here you'll start making sense of what you've seen and heard, generate tons of ideas, identify opportunities for design and test and refine your potential solutions.

**Implementation** - Now you will get to bring your solution to life. You'll figure out how to get your ideas into your setting and maximize its impact.



# So many frameworks, so little time!

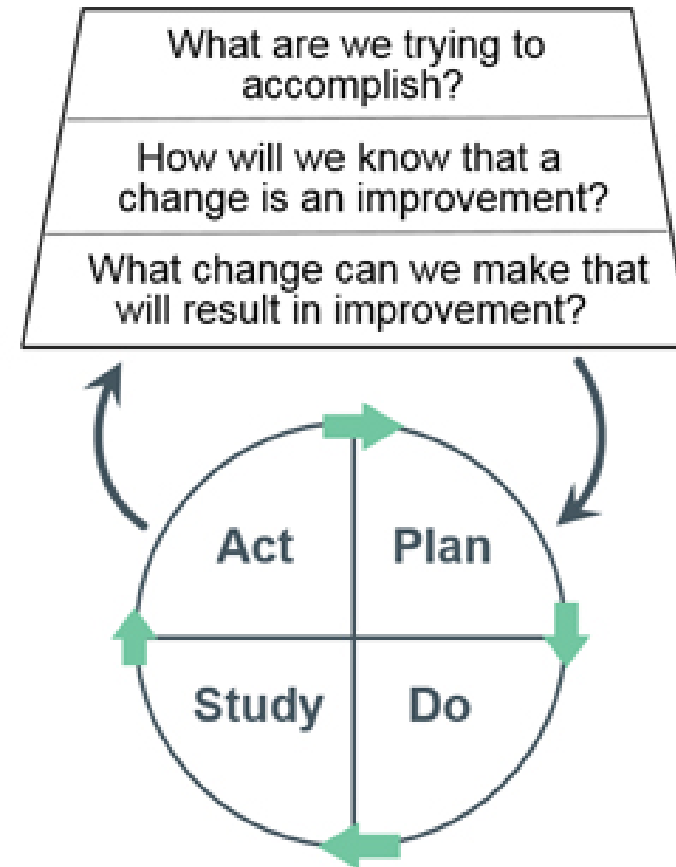
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# Design Thinking and the Model for Improvement



## Model for Improvement



# Orange County Design Challenge

Let's Learn by Doing!



# Let's find our Design VIP!

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- Pick a number between 1 and 100
- Write that number down on a post-it note
- The person at the table who is closest to the number on the next slide is the VIP for the Table!



# Lucky Number...

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# The VIP Will...

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- Have their **“perfect” weekend in Orange County** co-designed/planned by their colleagues at the table
- Weekend Criteria
  - Cannot include things that the VIP typically does (i.e. needs to primarily consist of new experiences for the VIP)
  - Cannot cost more than \$500 per person (assumes they stay at their current home)
  - Starts at 6pm on Friday and ends by 8pm on Sunday
  - Uses the 3 Phases of Design Thinking to develop the perfect weekend (we will be training you on these 3 phases)



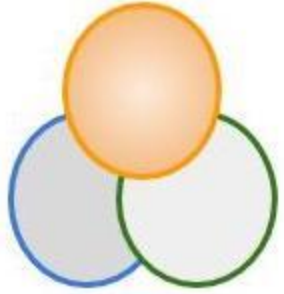
# Materials Needed

- 4 Sheets of flip chart paper per table (flip chart paper can either be put up on a nearby wall or just placed on your table)
- Lots of post-it notes
- Markers and/or pens
- Ears and eyes (for listening and seeing)
- Patience (so we don't jump to ideas/solutions)
- Ideas!



# Inspiration

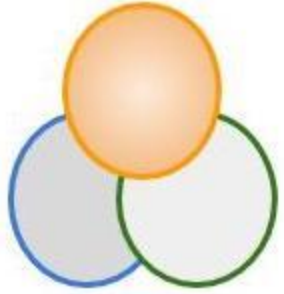
## Phase 1: Inspiration



**Inspiration** - In this phase you will learn how to better understand your end users. You'll observe their lives, hear their hopes and desires, and get smart about your challenge.



## Phase 1: Inspiration



We're going to do three things:

- **Observations**
- **Insights**
- **Design Question**



# Observations

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# Observations

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# Collecting Observations:

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## 1) Open and Honest Questions

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- An open, honest question invites narrative rather than a yes or no response (open) and doesn't show preference for a specific answer (honest).
- It is the opposite of a closed-ended leading question, which encourages a short or single word answer, or steers the person toward a preconceived answer (control).
- The best single mark of an open, honest question is that the questioner could not possibly anticipate the answer.



# Open and Honest Questions, Examples

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- *How do you feel about this?*
- *What's your biggest hope? What's your greatest fear?*
- *When have you faced a similar issue in the past? What did you learn then?*
- *What would help you now? Who might support you?*
- *If this time in your life were a chapter in a book, what would the title be?*
- *What is holding you back? What is urging you on?*



# Open and Honest Questions, Examples

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- *What do you usually do on your weekends?*
- *What's something that you've always wanted to try?*
- *Who do you like to spend time with?*
- *What's your favorite book / movie?*
- *When's the last time you felt joy?*



# Collecting Observations:

## 2) The 5 Why's

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# Insights

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Make  
inferences

Come to  
conclusions

Interpret the  
facts



# A strong insight is...

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## **Authentic**

It should be supported by the observations that you made.

## **Non-Obvious**

The insight should be “news you can use.” Not just something someone would immediately think of when describing the subject.

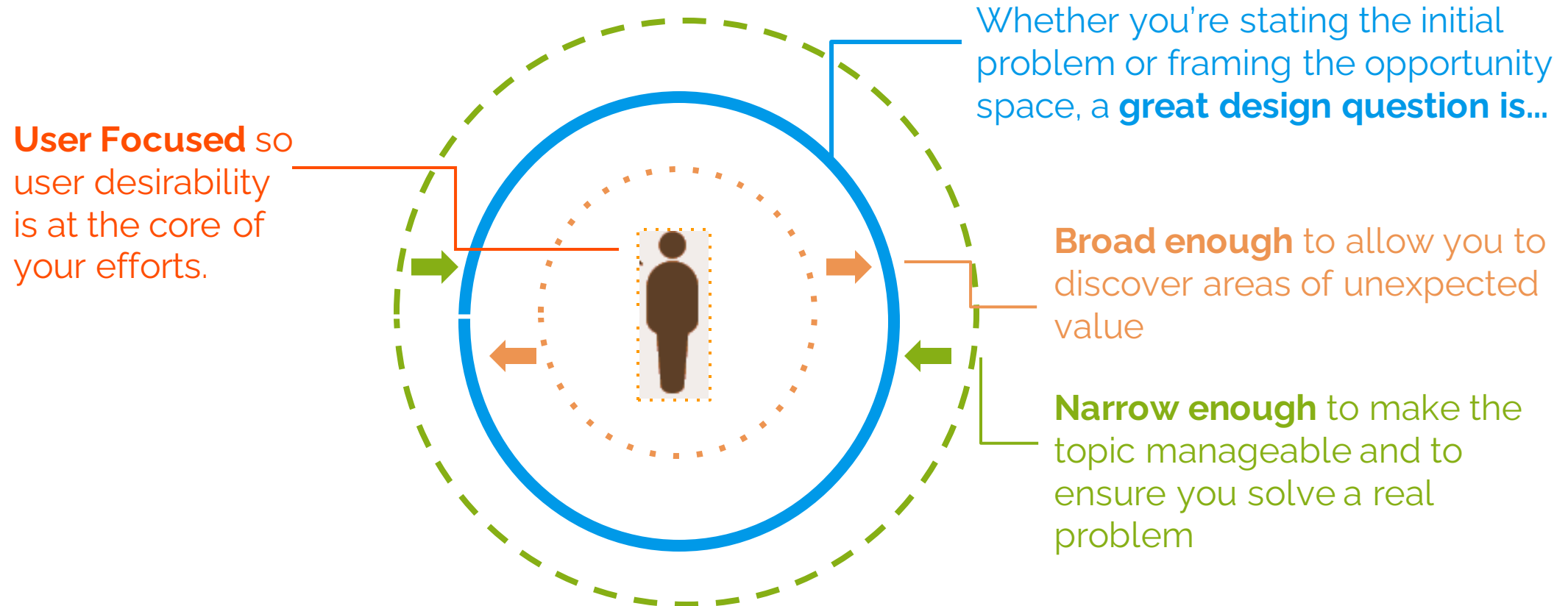
## **Revealing**

It offers a glimpse into how people think and/or feel.



# Design question (How might we...)

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“Always design a thing by considering it in its next larger context - a chair in a room, a room in a house, a house in an environment, an environment in a city plan.” - *Eero Saarinen, Architect*



# Example

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Observations	Insights
<p>I counted 15 pieces of trash on the ground.</p> <p>There were 5 garbage bins in this space.</p>	<p>People who use this space seem to be unaware of the garbage bins or unwilling to use them.</p>
<p>She said that there was a grant that funded this project.</p> <p>She said “community members are angry about the progress of this project.”</p> <p>She said, “I’m being pulled in so many different directions.”</p>	<p>She feels pressured by funders and community members in equal measure.</p> <p>She cares about the community, but also needs to please her funders.</p>



# Example

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Insights	How Might We...
People who use this space seem to be unaware of the garbage bins, or unwilling to use them.	How might we ensure that the people who use this space dispose of garbage properly?
She feels pressured by funders and community members in equal measure.  She cares about the community, but also needs to please her funders.	How might we allow community members voices to be incorporated into the project, working within the constraints of the grant?



# Phase 1: Inspiration Exercise to Plan the Perfect Weekend

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Observations

Insights

How might we...



# Phase 1: Inspiration Exercise to Plan the Perfect Weekend

- Take 7 minutes to interview your VIP to gather **observations** from them about what a Perfect Weekend might entail. Write observations on post-it notes and place them on the “Observation” section of your flipchart page.
- Then take 6 minutes as a group to develop a 3-5 **insights** based on your observations. Put each of your insights on a post-it note and place these on the “Insights” section of your flipchart page
- Then take 7 minutes to develop your **design question** and write the design question in the section starting with “How might we”



# Observations

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- Remember to ask open and honest questions.
- Try to ask five why's.

Document your observations on sticky notes.

Remember not to apply any analysis yet.

**JUST THE FACTS.** Things you see and hear.



# Insights

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Dig deeper:



Remember that a good insight is:

**Authentic:** supported by observations

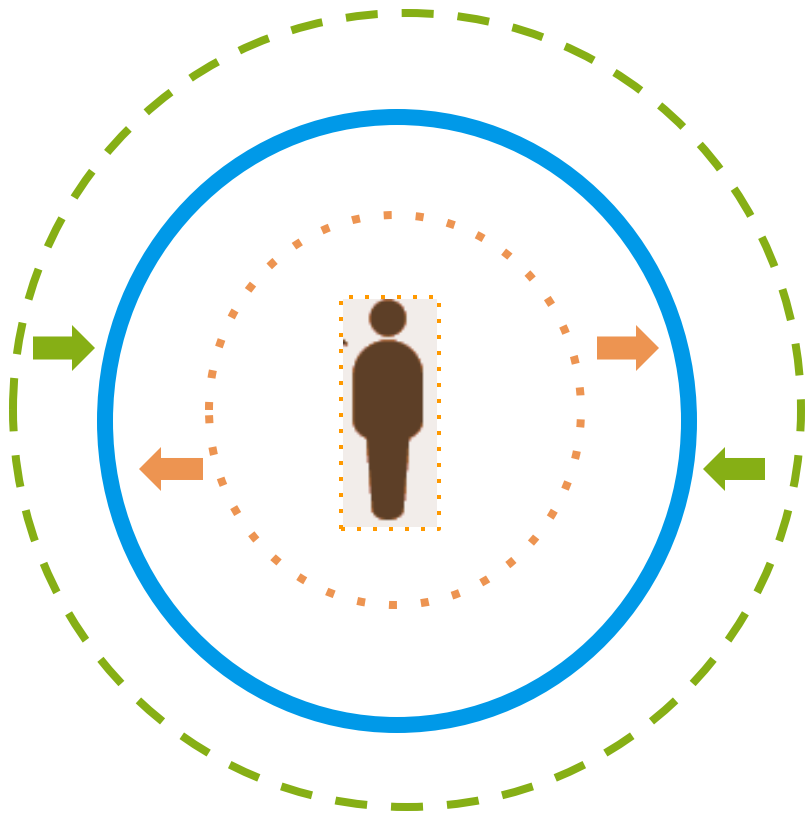
**Non-Obvious:** not something you'd immediately think of

**Revealing:** offer a glimpse into how your VIP thinks and feels



# Design Question: How might we...?

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Remember that a good design question is:

**User Centered:** It has desirability at its core.  
Your VIP should be excited to answer this question.

**Broad enough** to open your mind to unexpected possibilities, but also...

**Narrow enough** to direct your thinking, and make sure you solve a real problem.



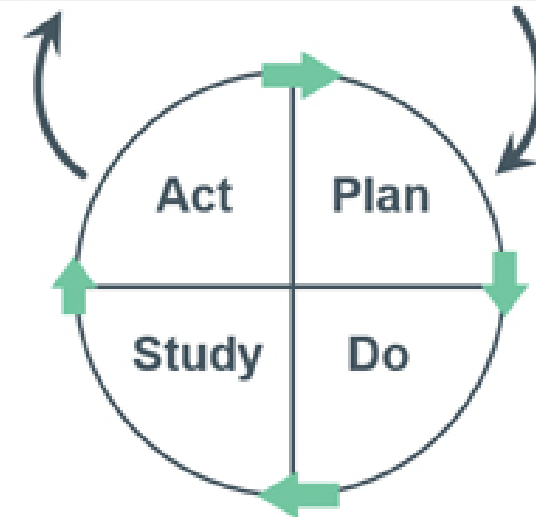
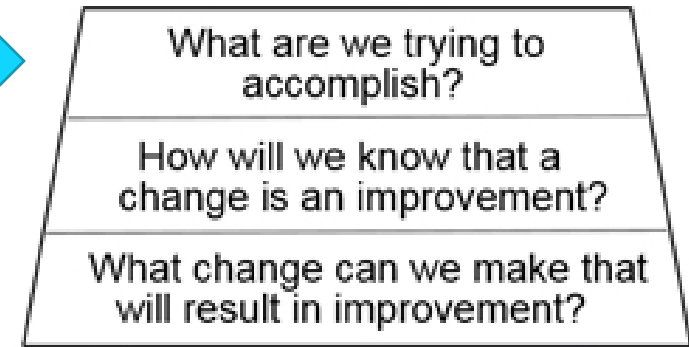
# Making Connections

Inspiration



The methods you use to craft a **design question** are also great tools for creating an **aim statement**.

## Model for Improvement



# Ideation

## Phase 2: Ideation



**Ideation** - In this phase, you'll start making sense of what you've seen and heard, generate tons of ideas, identify opportunities for design and test and refine your potential solutions.



# Brainstorming

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# Brainstorming

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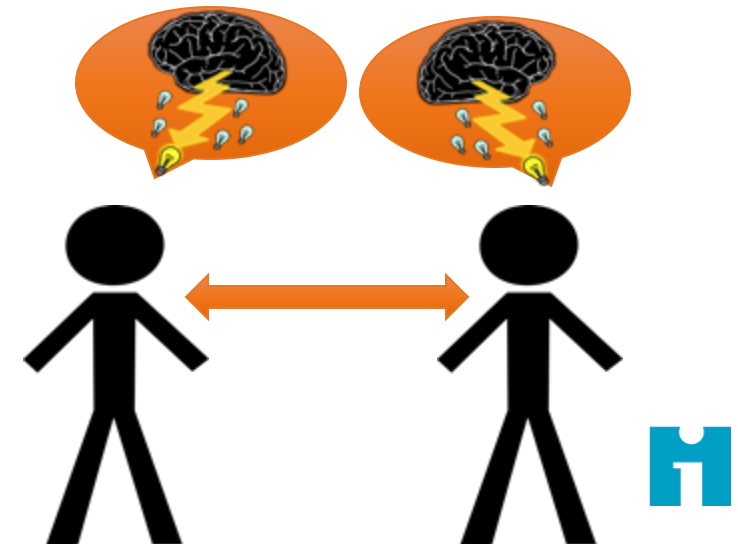
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# Brainstorming

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# 7 Rules for Effective Brainstorming



Defer judgment



Encourage wild ideas



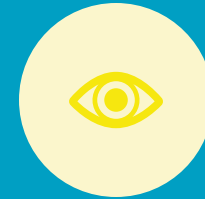
Recognize good ideas from others and build on them



Stay focused on the topic



One conversation at a time



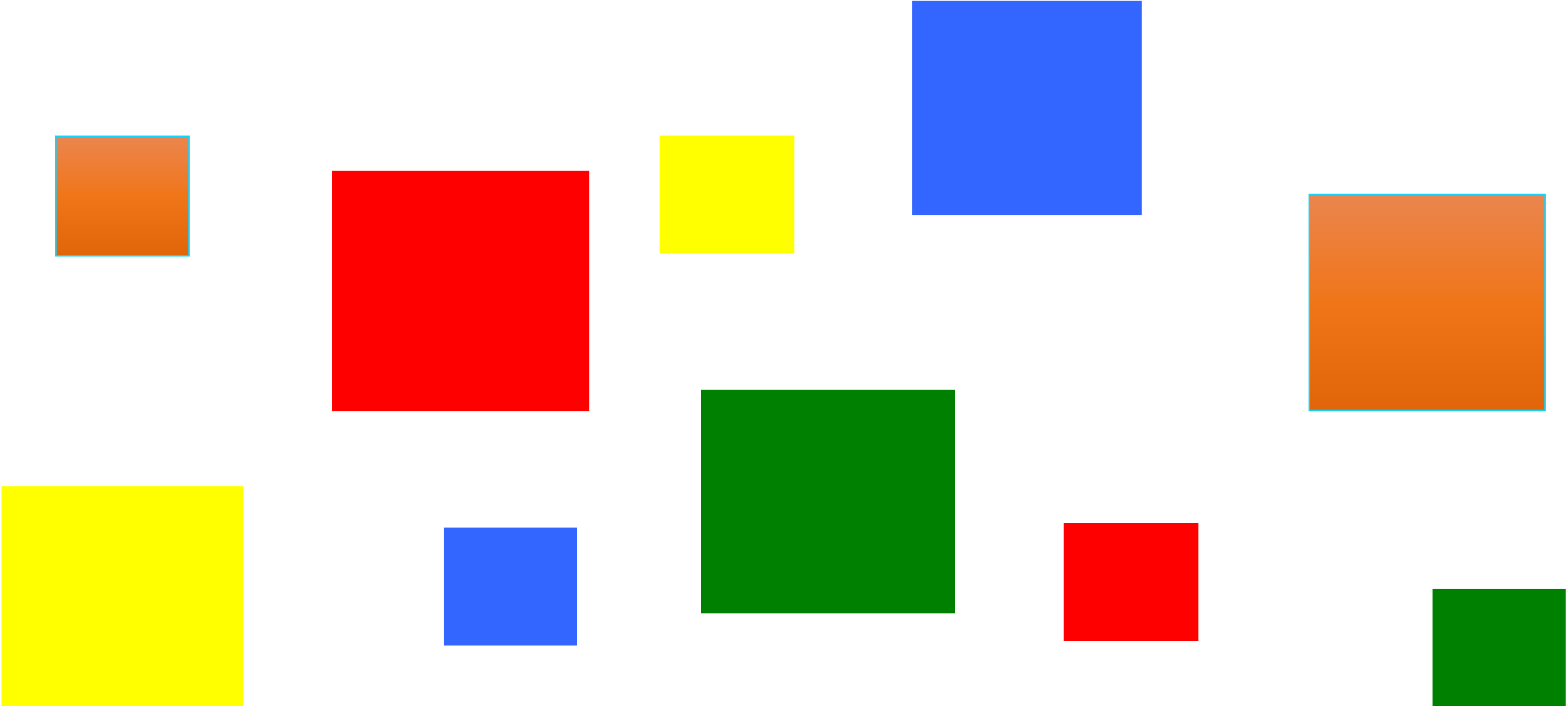
Be visual



Go for quantity

# Grouping

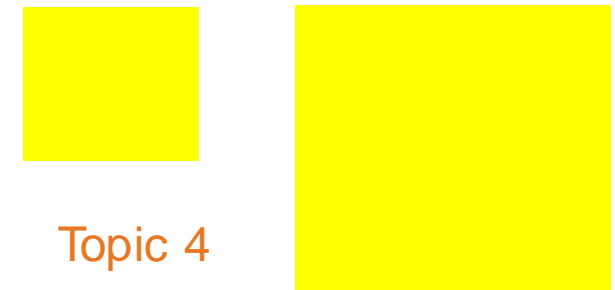
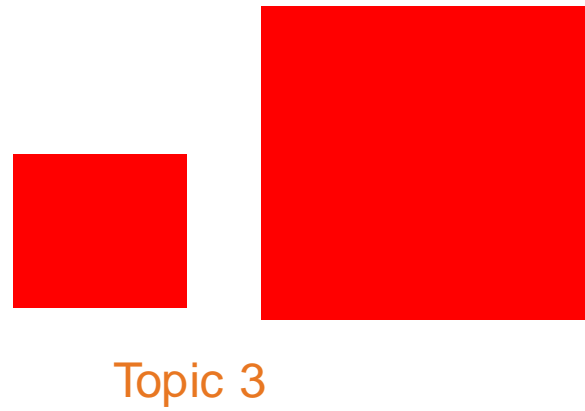
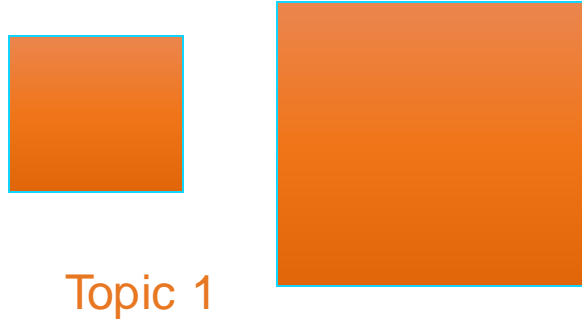
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# Grouping

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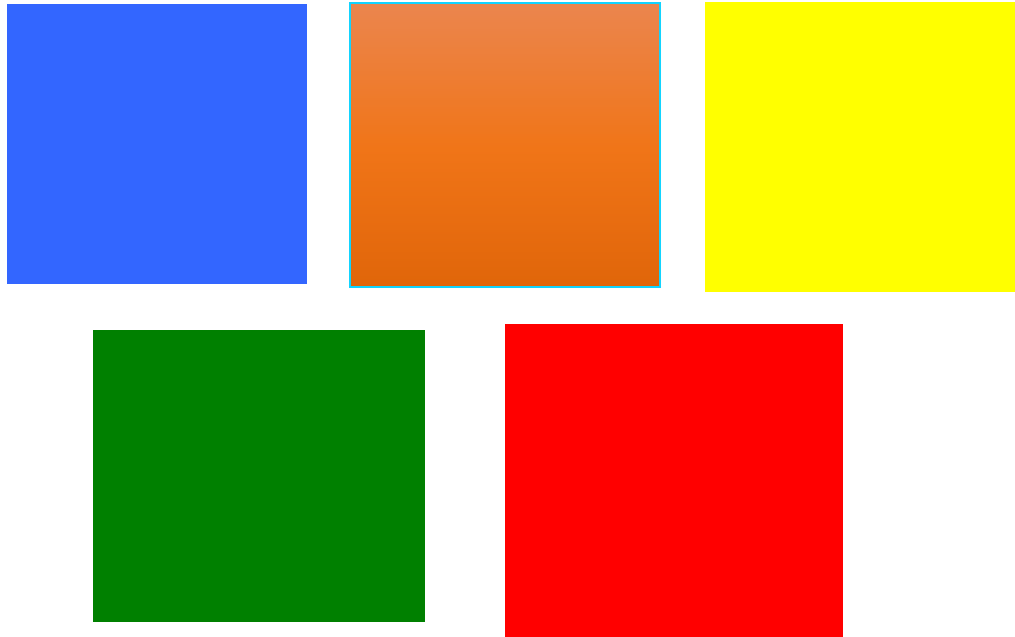
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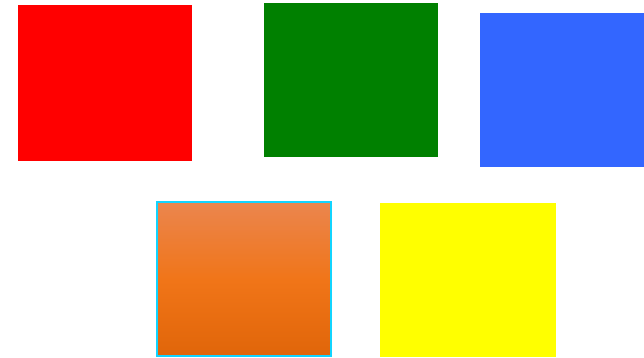
# Grouping

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Large scale  
ideas

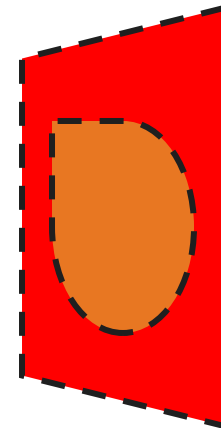
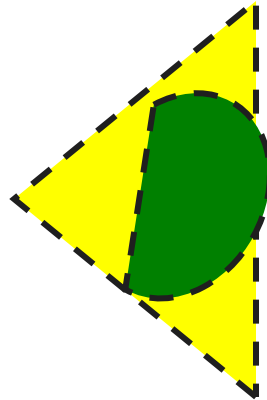
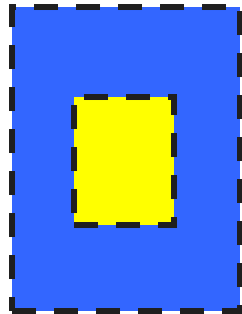


Small scale  
ideas

# Potential Solutions

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## Phase 2: Ideation Exercise to Plan the Perfect Weekend

- Take another piece of flip chart paper and label it “Ideation”
- Take 8 minutes at your table to brainstorm potential ideas that answer your design question.
- Take 4 minutes to theme or group your ideas on the flip-chart paper
- Now take another sheet of flip-chart paper and label it “Potential Solutions”
- Take 4 minutes to develop your potential solutions and write these potential solutions on the Potential Solutions flip chart page



# 7 Rules for Effective Brainstorming



Defer judgment



Encourage wild ideas



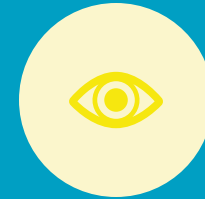
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Stay focused on the topic



One conversation at a time

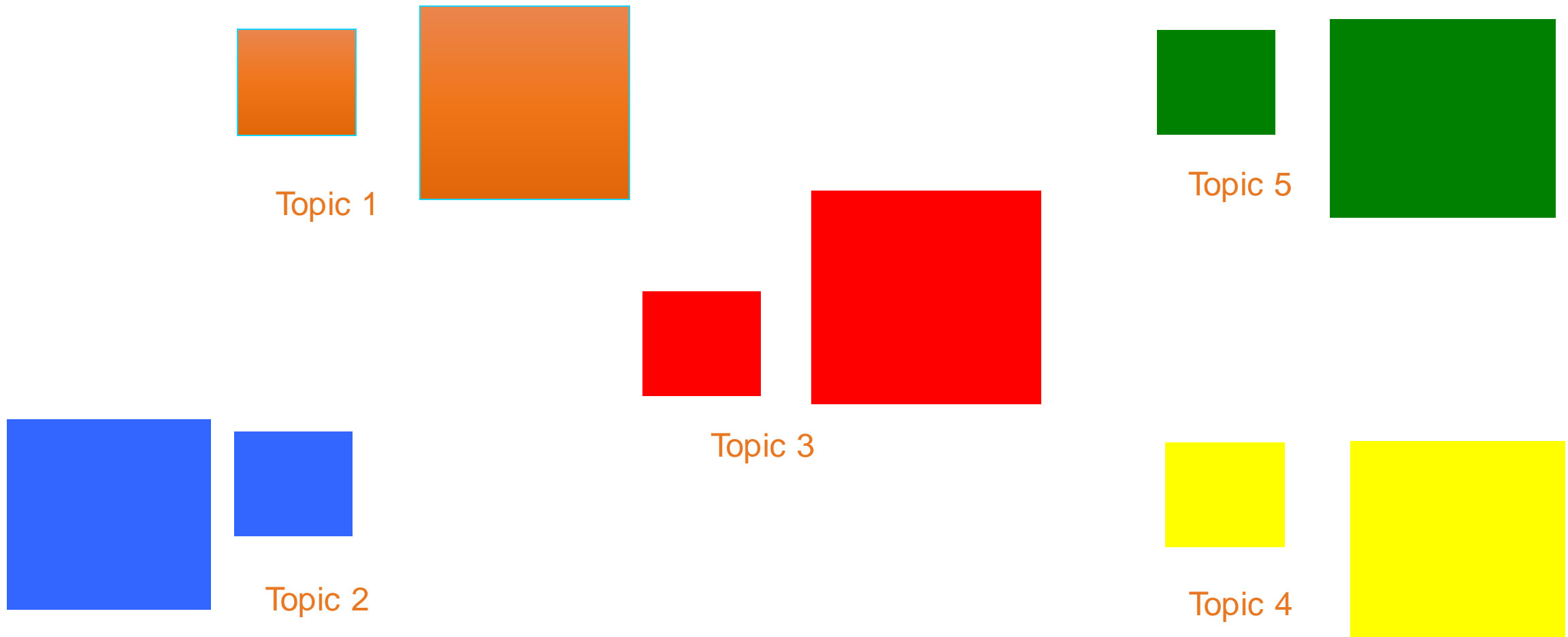


Be visual



Go for quantity

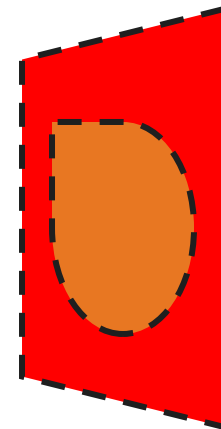
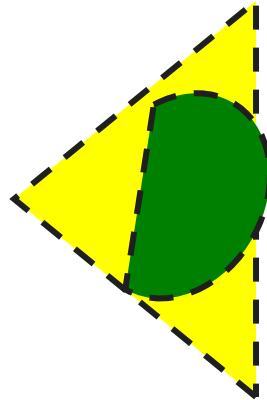
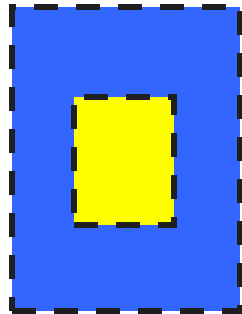
# Grouping



# Potential Solutions

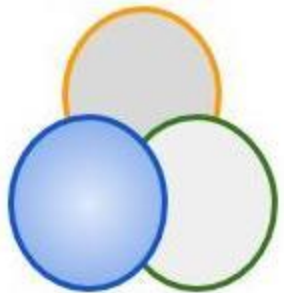
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# Implementation

# Phase 3: Implementation

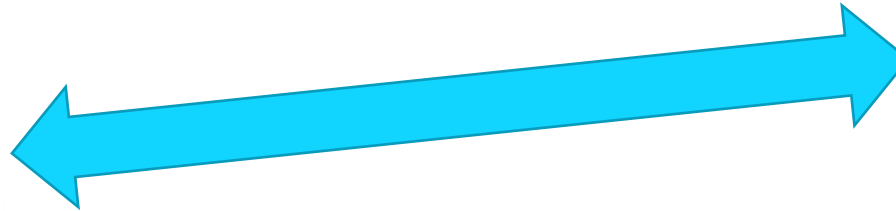


**Implementation** - In this phase, you will get to bring your solution to life. You'll figure out how to get your ideas into your unique setting and maximize its impact.



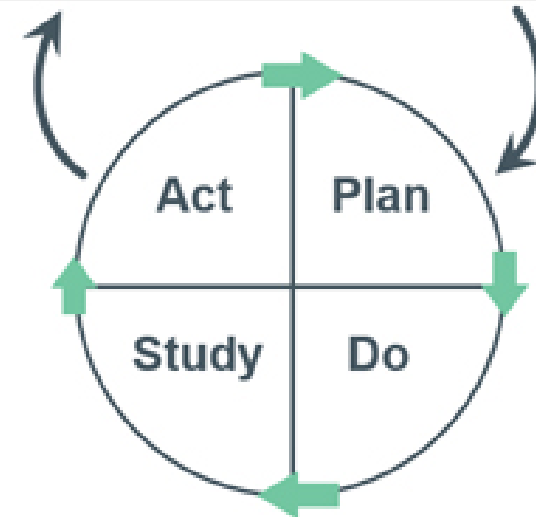
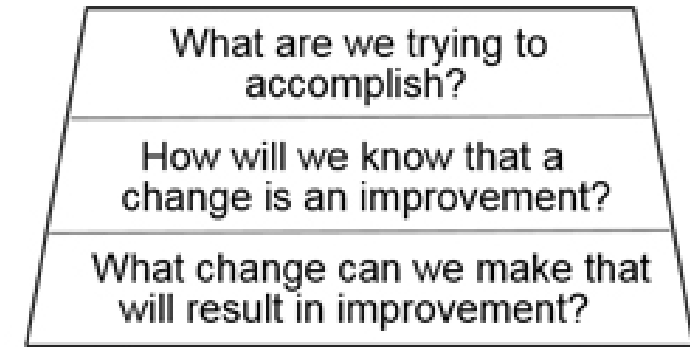
# Making Connections

Ideation



Framing a design question with users of your system, and **ideating** answers to that question, is a great way to answer the question "**What change can we make that will result in an improvement?**"

## Model for Improvement



# Making Connections

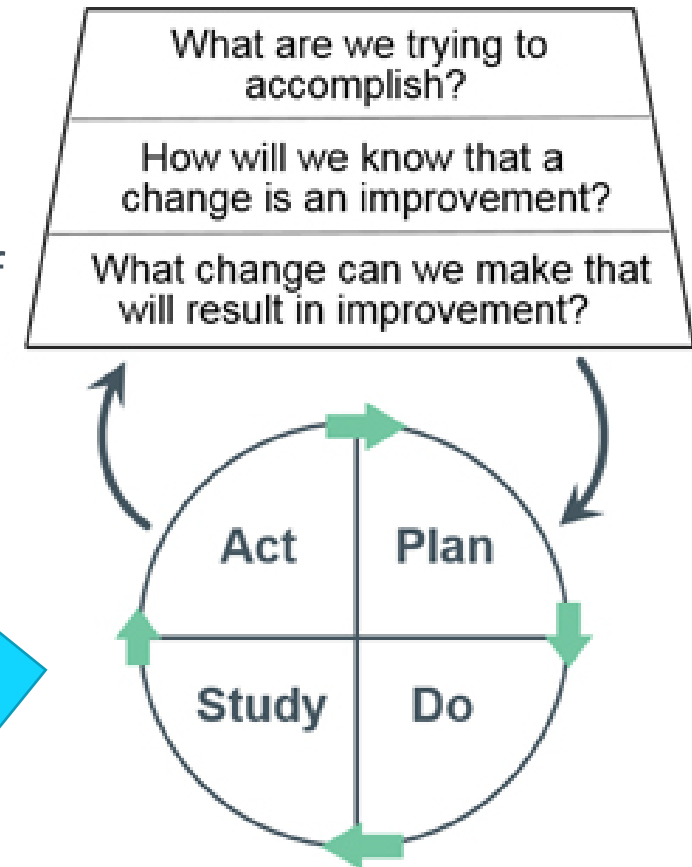


Implementation

The **implementation** phase is very tightly linked to the **PDSA** cycle.

Implementation is the process of making things tangible, putting them right into the hands of people you're designing for, and taking action based on the way they use them.

## Model for Improvement



# Methods

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- Prototype. Right here. Right now.
- Evolve the idea together
- Iterate



# What comes to mind when I use the word prototype?

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# Prototyping

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# Prototyping

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Hey guys,  
what would it  
feel like to be  
in such close  
quarters?



# Prototyping

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not  
great...

Hey guys,  
what would it  
feel like to be  
in such close  
quarters?

# Phase 3: Implementation Exercise to Plan the Perfect Weekend

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- Take another piece of flip chart paper and label it “Implementing the Perfect Weekend”
- Take 5 minutes to develop the agenda/schedule for the perfect weekend including:
  - Activity/experience
  - Time for this activity experience
  - Times for travel, etc.
  - Extra points for using drawings and visualizations



## Phase 3: Report Out!

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Two Teams get 90 seconds each to present their perfect weekend for their VIP

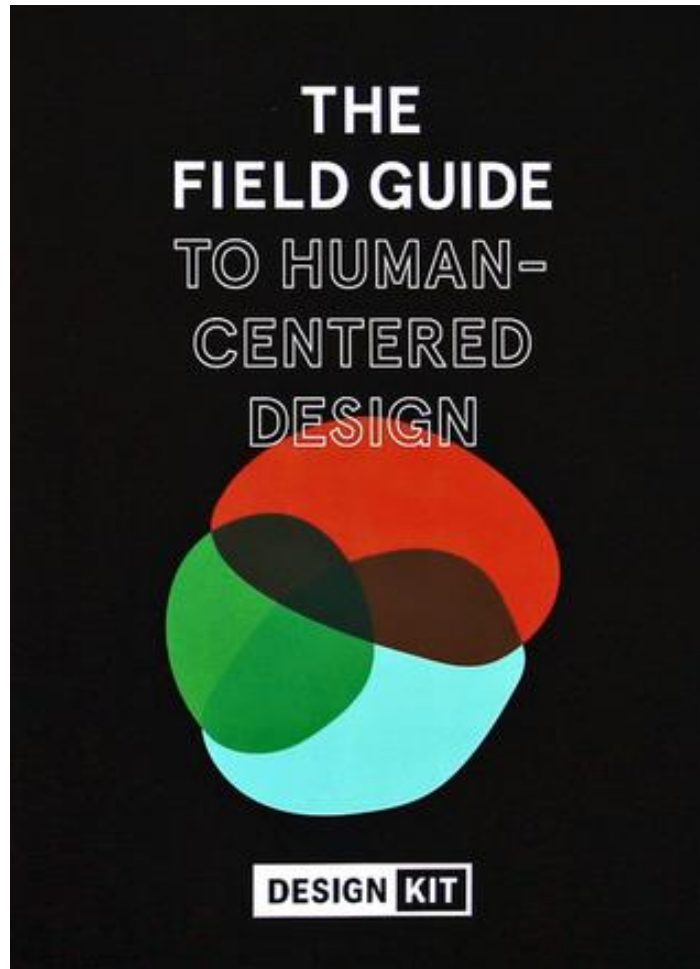
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The VIP for each of these teams gets one minute to talk about the experience and the plan for the perfect weekend



# We only scratched the surface...

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<https://www.designkit.org/>





*Please evaluate this  
session: **Design  
Thinking***

Aim your phone's camera  
at the screen, click this  
QR code, and a short  
survey will open. Thanks  
for helping us improve.