

# Workshop

# User Experience Design III

Lecturer: Alexander Wiethoff

Tutorials and Organization: Hanna Schneider, Beat Rossmly

External Lecturer: Veronika Ritzer (BMW)

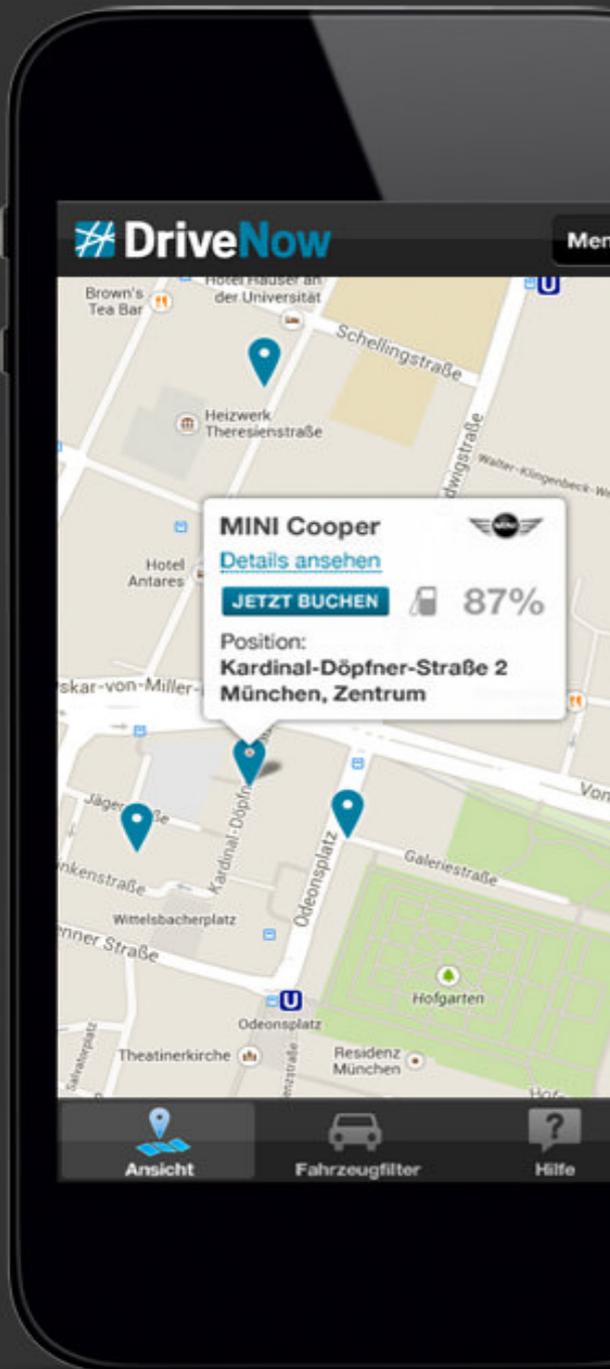
# Agenda 15.03.2018

- 9:15 – 10:00 Introduction
- 10:00 – 12:20 Insights Generation - **Affinity Diagramming**
- 12:20 – 13:20 Lunch Break
- 13:20 – 14:20 Opportunity Areas - **HowMightWe**
- 14:20 – 14:50 Preparing Presentation
- 14:50 – 16:30 Group Presentations (10 Groups x 10 mins)



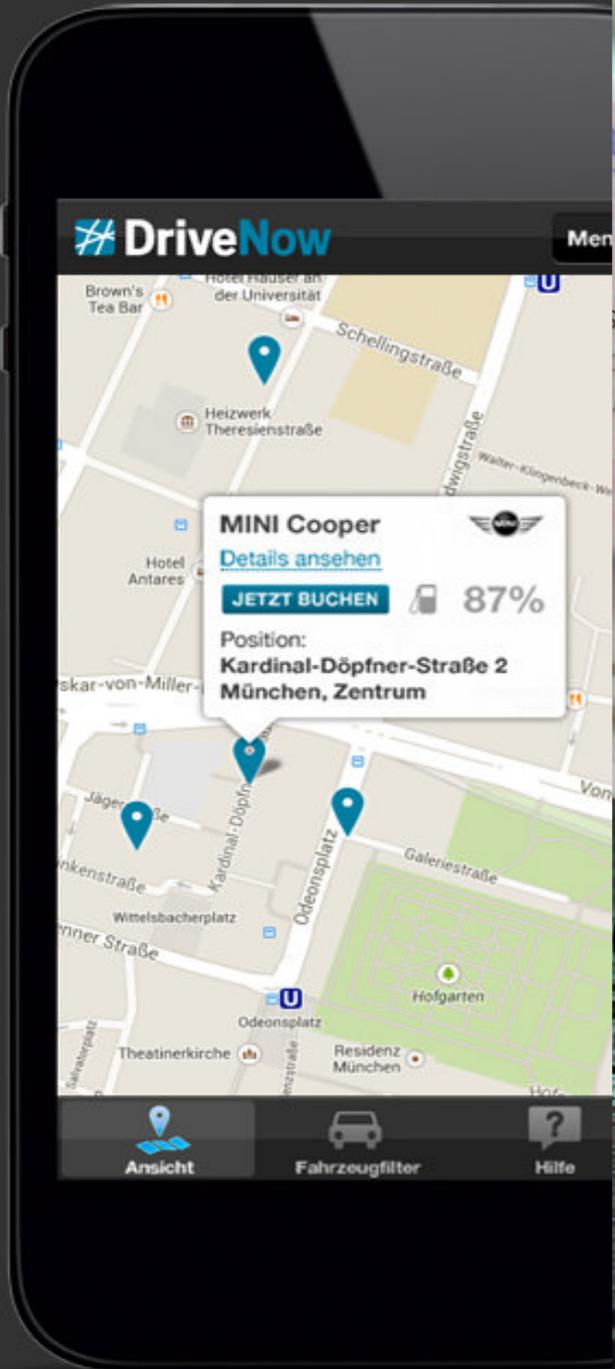
# DriveNow

Car Sharing von BMW i, MINI u



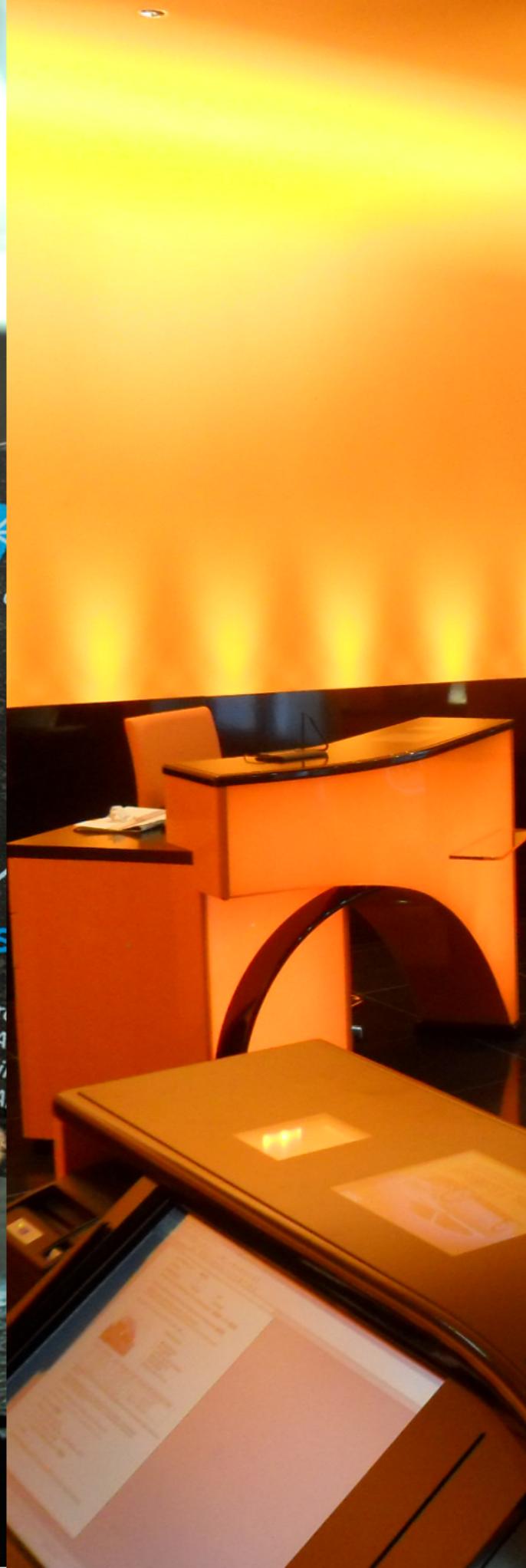
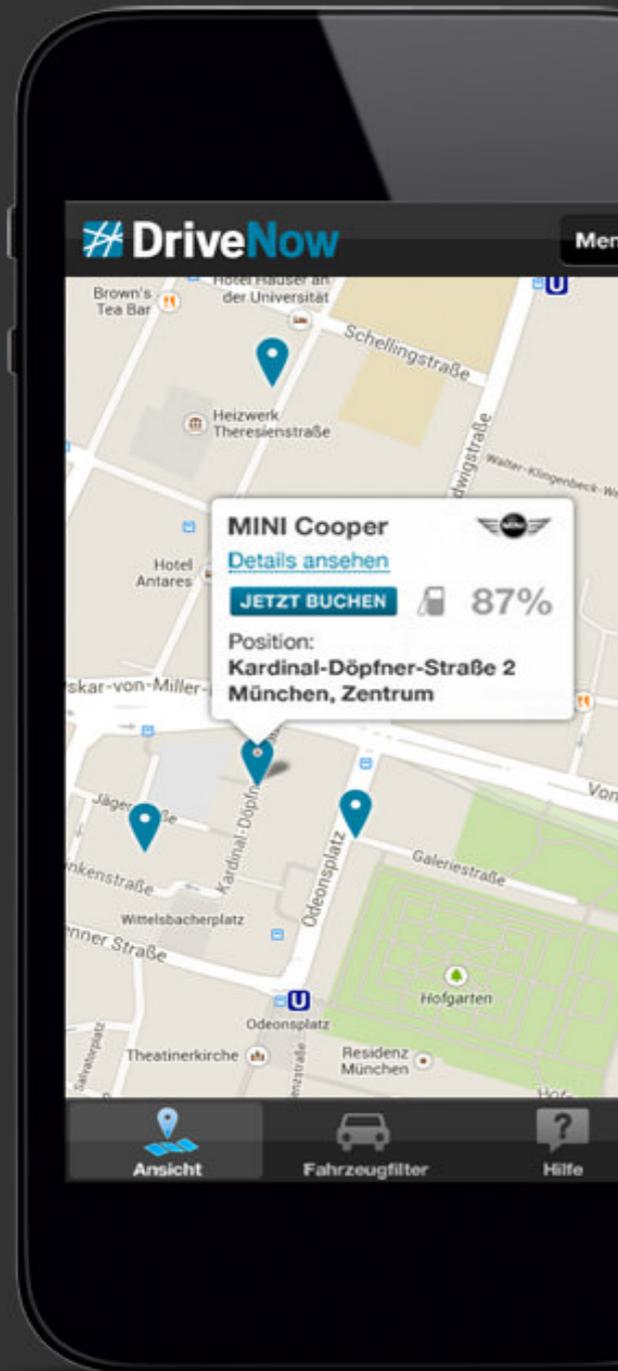
# DriveNow

Car Sharing von BMW i, MINI und



# DriveNow

Car Sharing von BMW i, MINI und



GRAPHIC  
DESIGN



**2D**

PRODUCT  
DESIGN



**3D**

+Z-axis  
(spatial depth)

INTERACTION  
DESIGN



**4D**

+T-axis  
(temporal dimension)

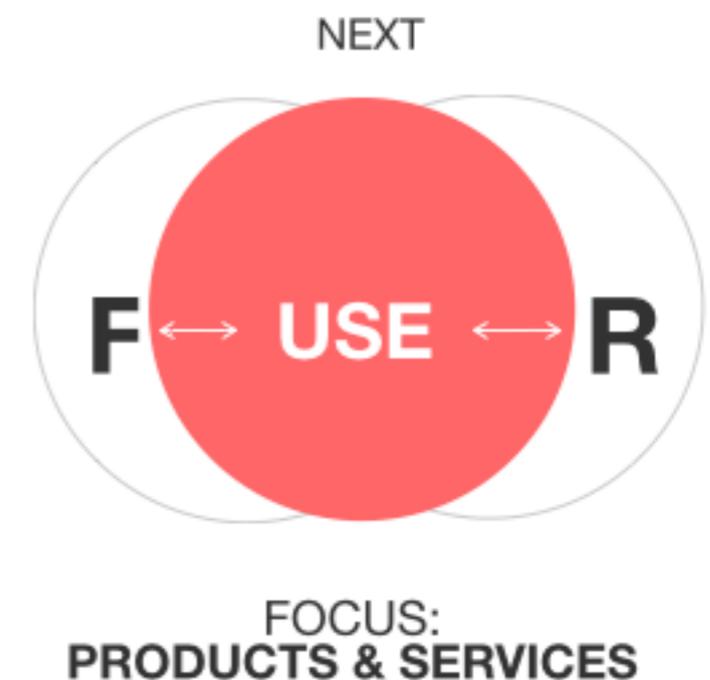
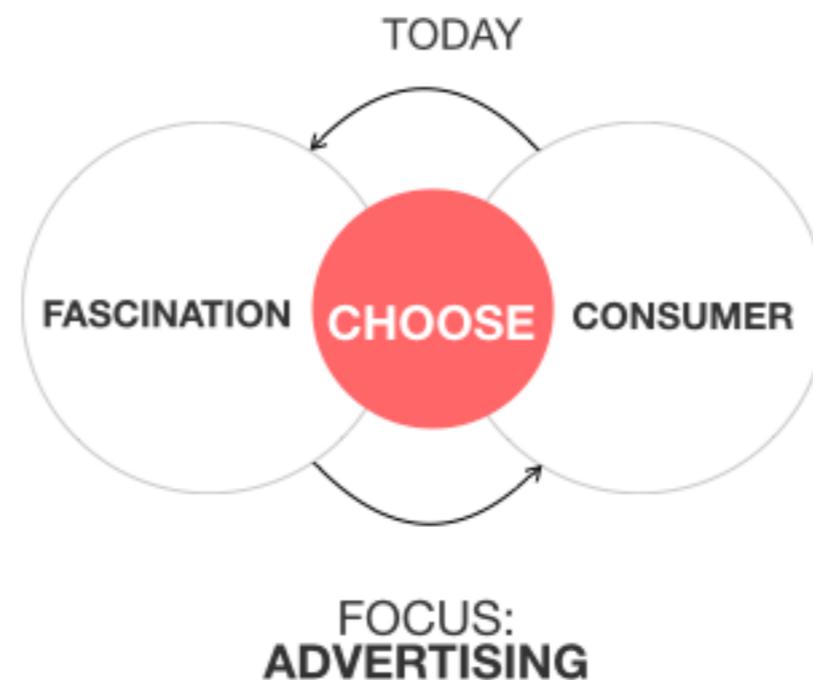
SERVICE  
DESIGN



**5D**

+W-axis  
(multi-local simultaneity)

# A new marketing logic.



**A new complexity**



# Front Stage

<http://www.markabull.com/wp-content/uploads/2011/01/stage.jpg>



# Back Stage

<http://blog.entrepreneurhearts.com/etablog/wp-content/uploads/2010/08/backstage.jpg>

Products being usable is expected and won't differentiate it from competitor offers.

They need to serve  
your needs ...

... and deliver memorizable  
experiences.

How do you develop  
these kind of products  
and services?

# Definition & Focus

User Experience Design is a rapid-creative process for concept development. All participants work and iterate through the design-led process to create valuable and tangible results.

# Definition & Focus

It is made to generate product ideas, validate and enhance existing products or ideas, and to find solutions to all sorts of problems. From a user perspective.

# Related fields

Creativity

HCD/UCD

HCI

Design Thinking

Strategy

Innovation

Future Studies

Decision Making

Lean

Product Design

Service Design

User Experience Design

Teamwork/Collaboration

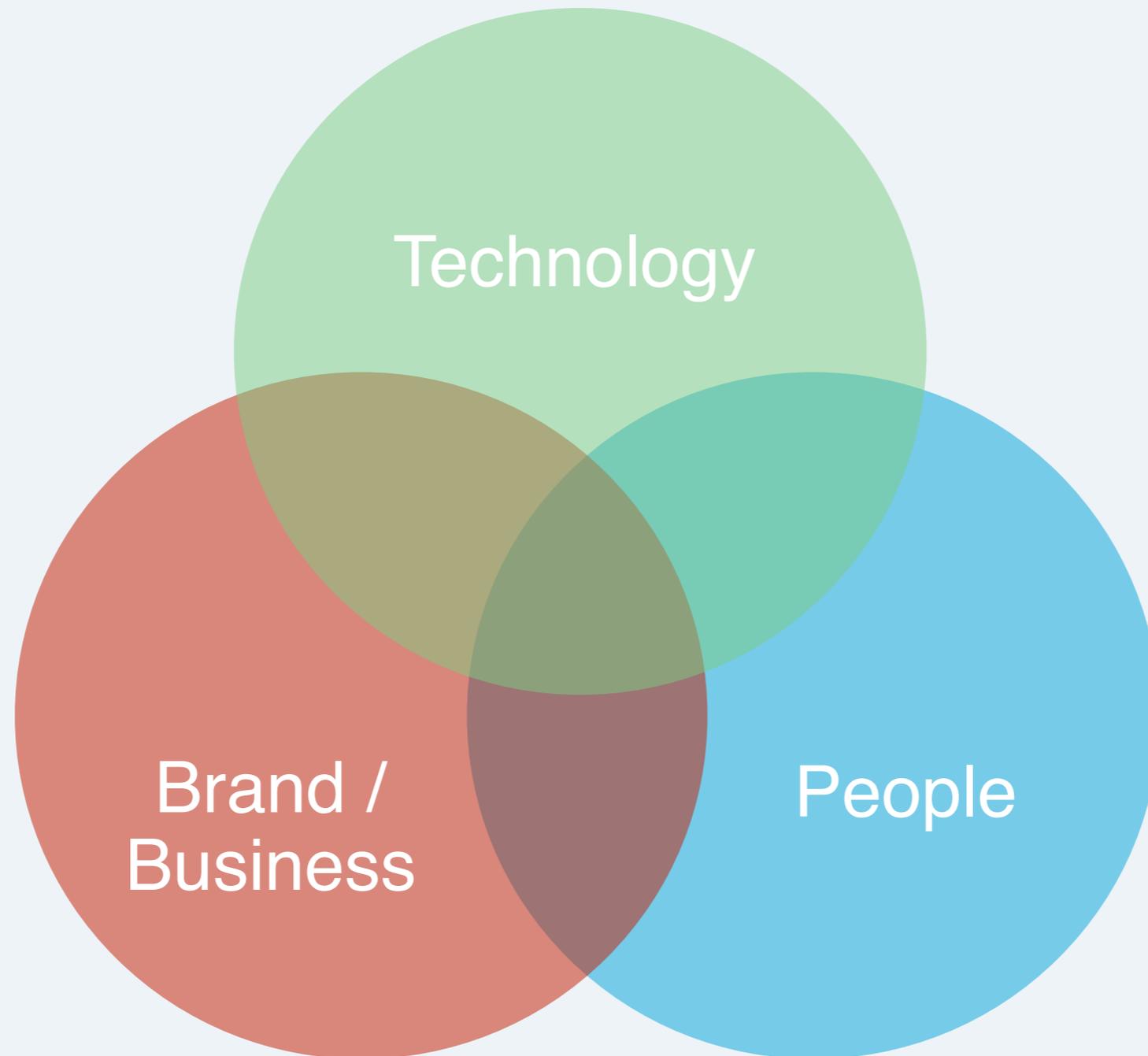
# Human Centered Innovation

# Human Centered Innovation

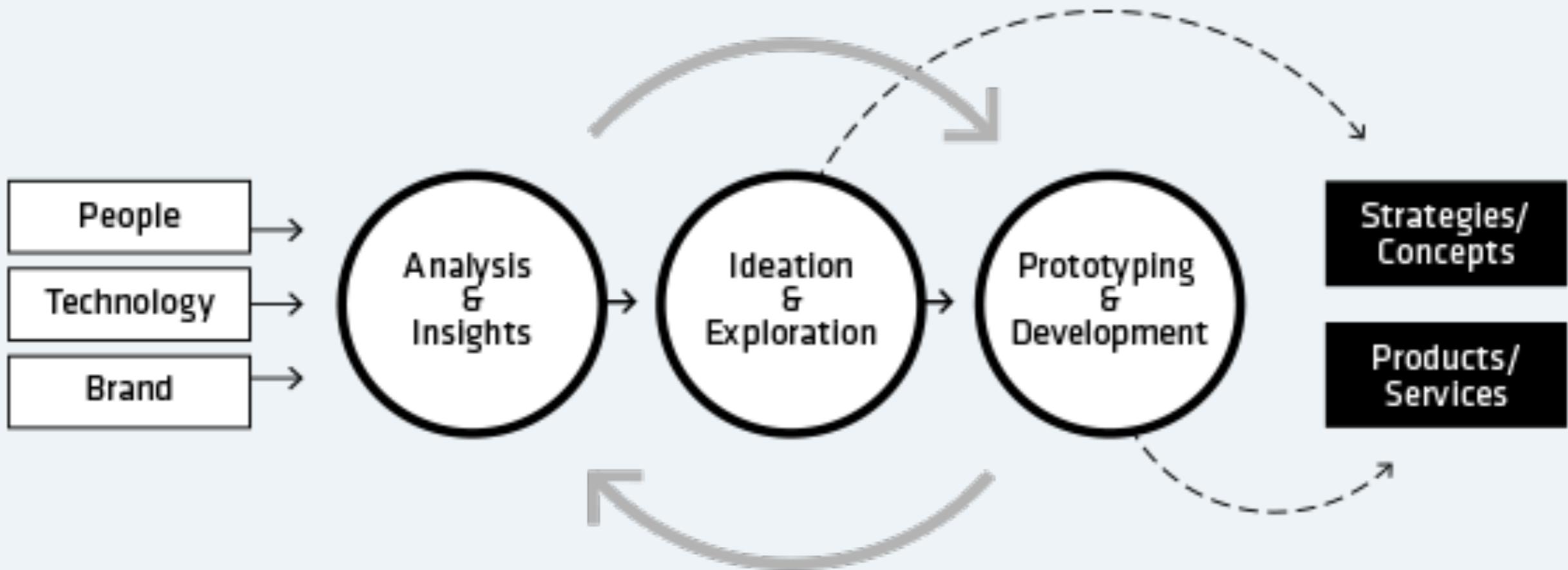
- An innovation methodology
- Carried out in interdisciplinary teams
- Business requirements taken into account
- Focus on the user perspective



# The sweet spot of innovation



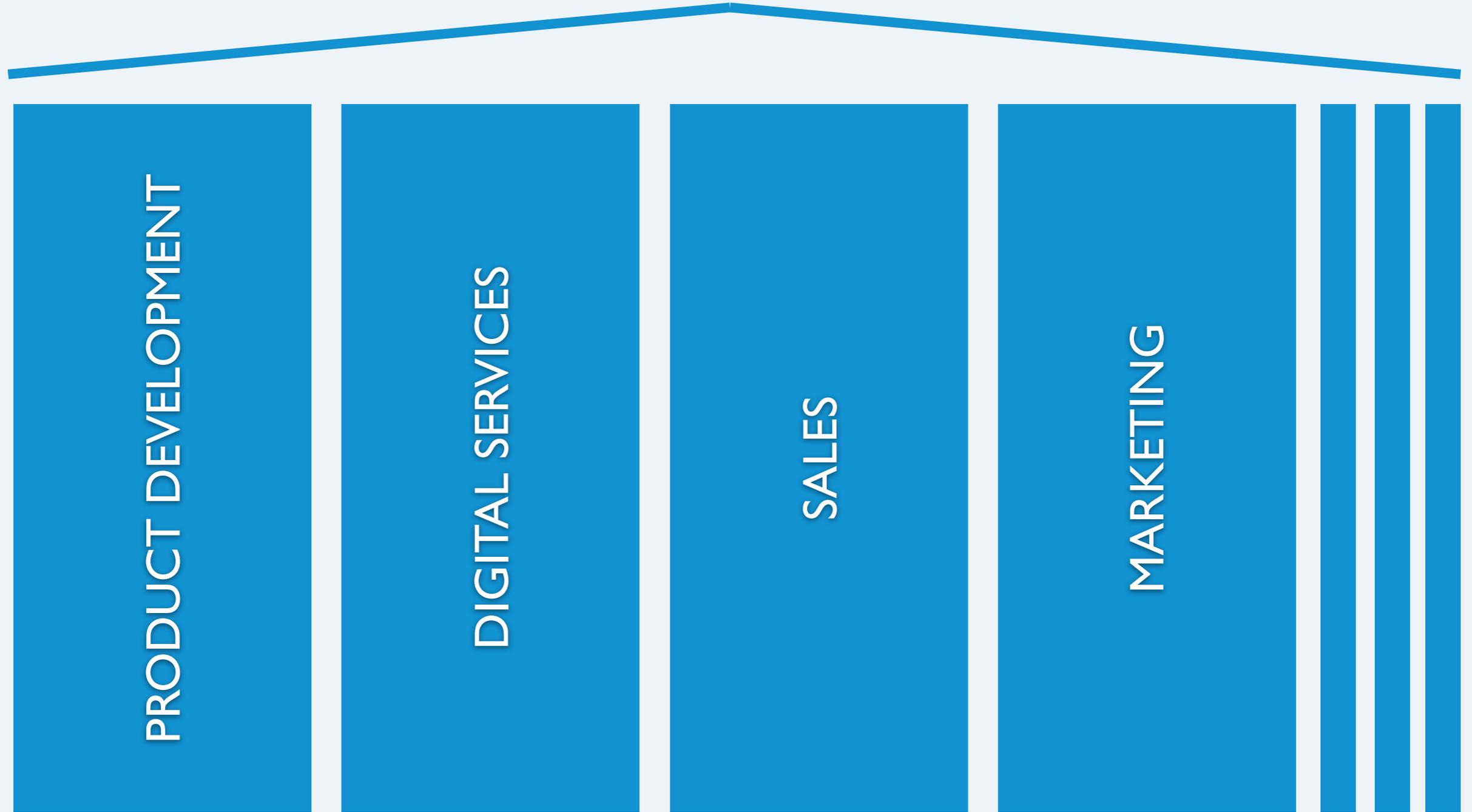
# Human Centered Design - Process



# „Ergebnisoffene Projekte“

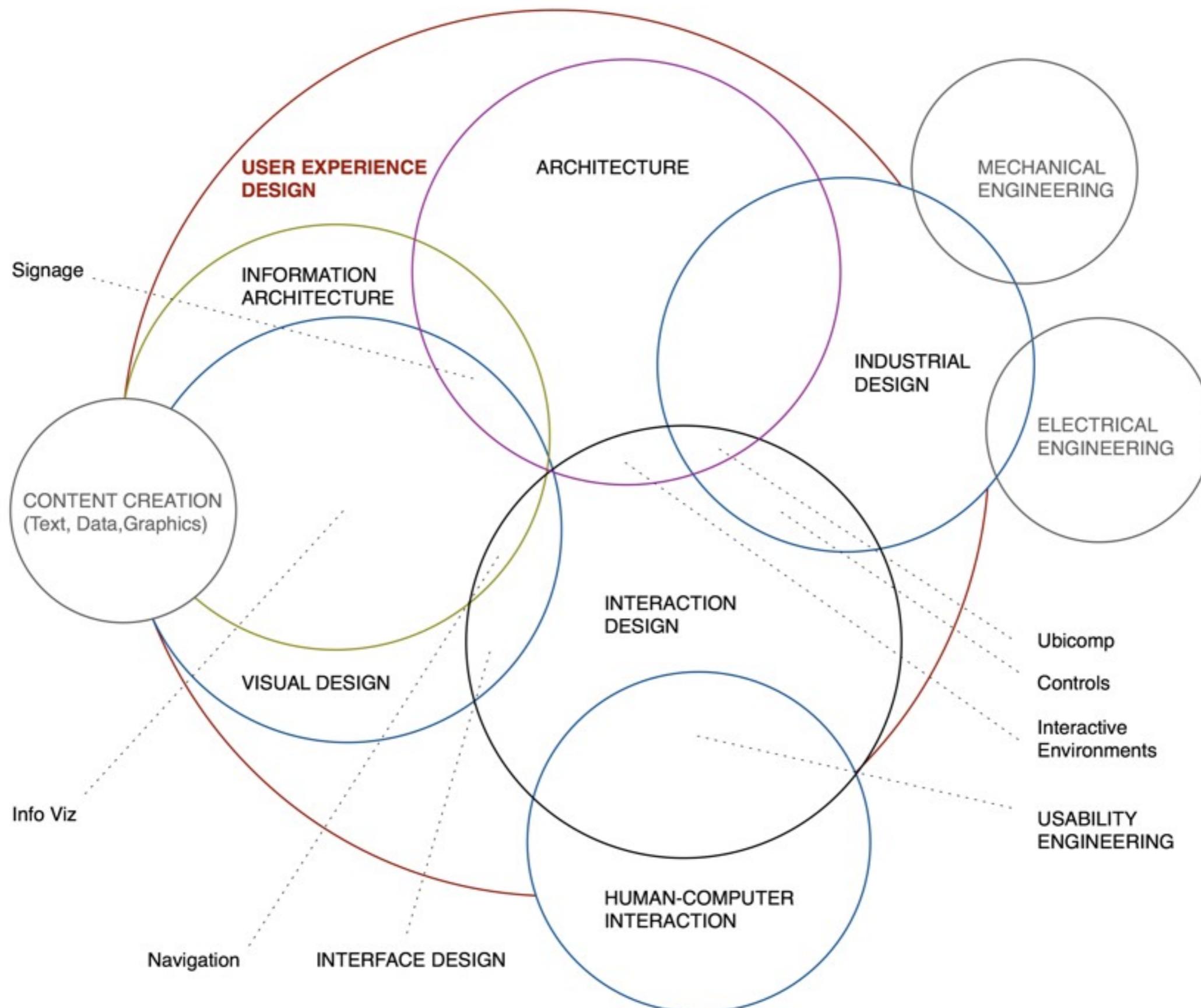
It is not about designing an app – it is about **the right solution that meets user AND business needs.**

# Organisational design and silos



Organisational design will define whether teams work towards a common goal & vision – and if interdisciplinary work can be lived in reality!

Who is applying this methodology?



# Design Thinking

# Design Thinking

Design Thinking refers to the methods and processes for investigating ill-defined problems, acquiring information, analyzing knowledge, and positing solutions in the design and planning fields.

“Zoomed out vs. Zoomed in”

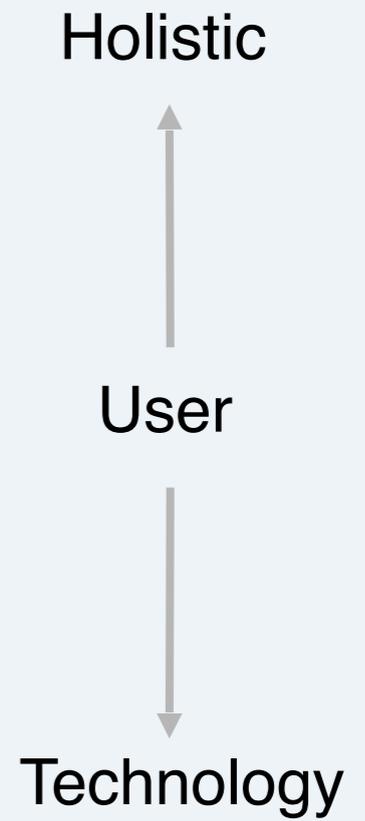
# Zoomed Out vs. Zoomed In

Zoom Out vs. Zoom In is a way of Design Thinking.

Interactions designers are often facing increasingly complex situations.

Zooming in and out makes them flexible and helps to define on which level to intervene.

# Zoomed Out vs. Zoomed In

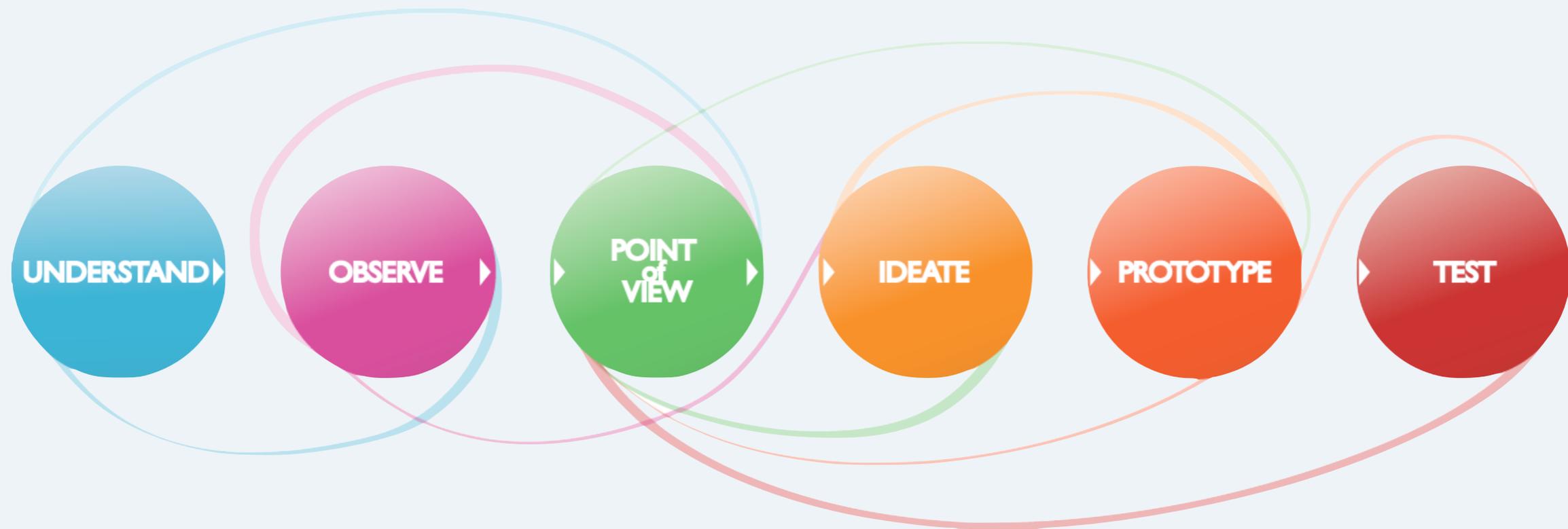


# Design Thinking

Design Thinking is generally considered the ability to combine:

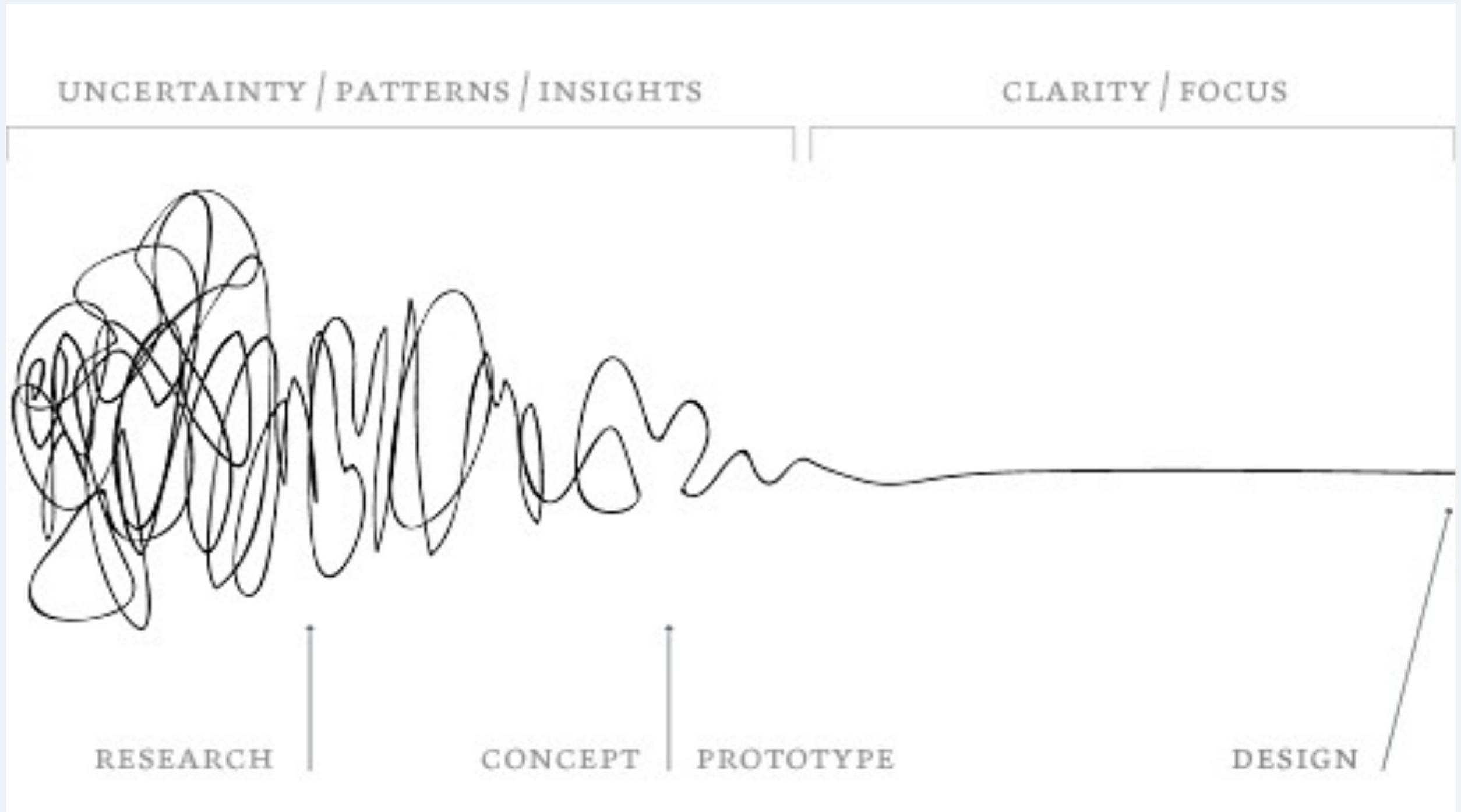
empathy for the context of a problem, creativity in the generation of insights and solutions, and rationality to analyze and fit solutions to the context.

# Design Thinking - Process

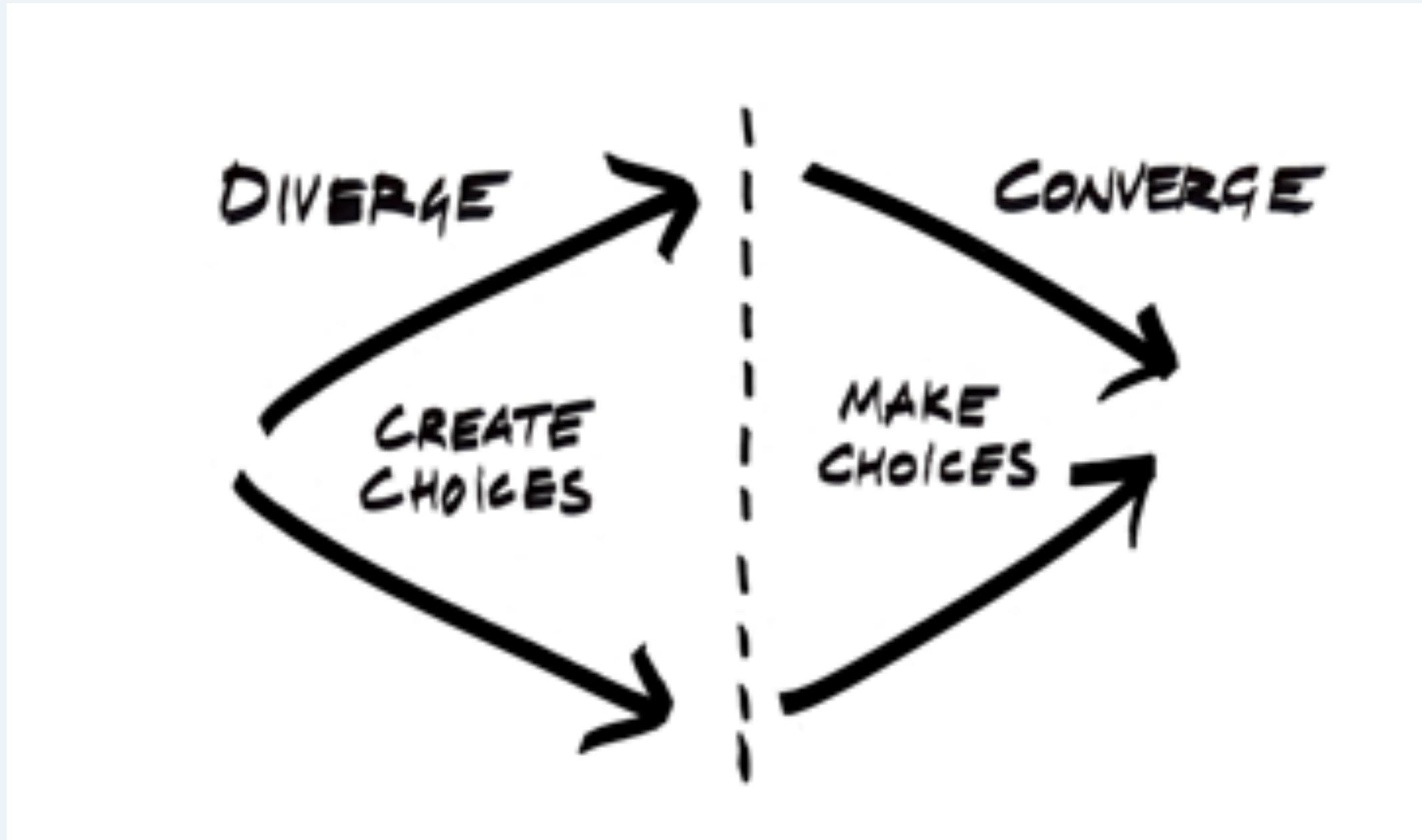


# User Experience Design Process

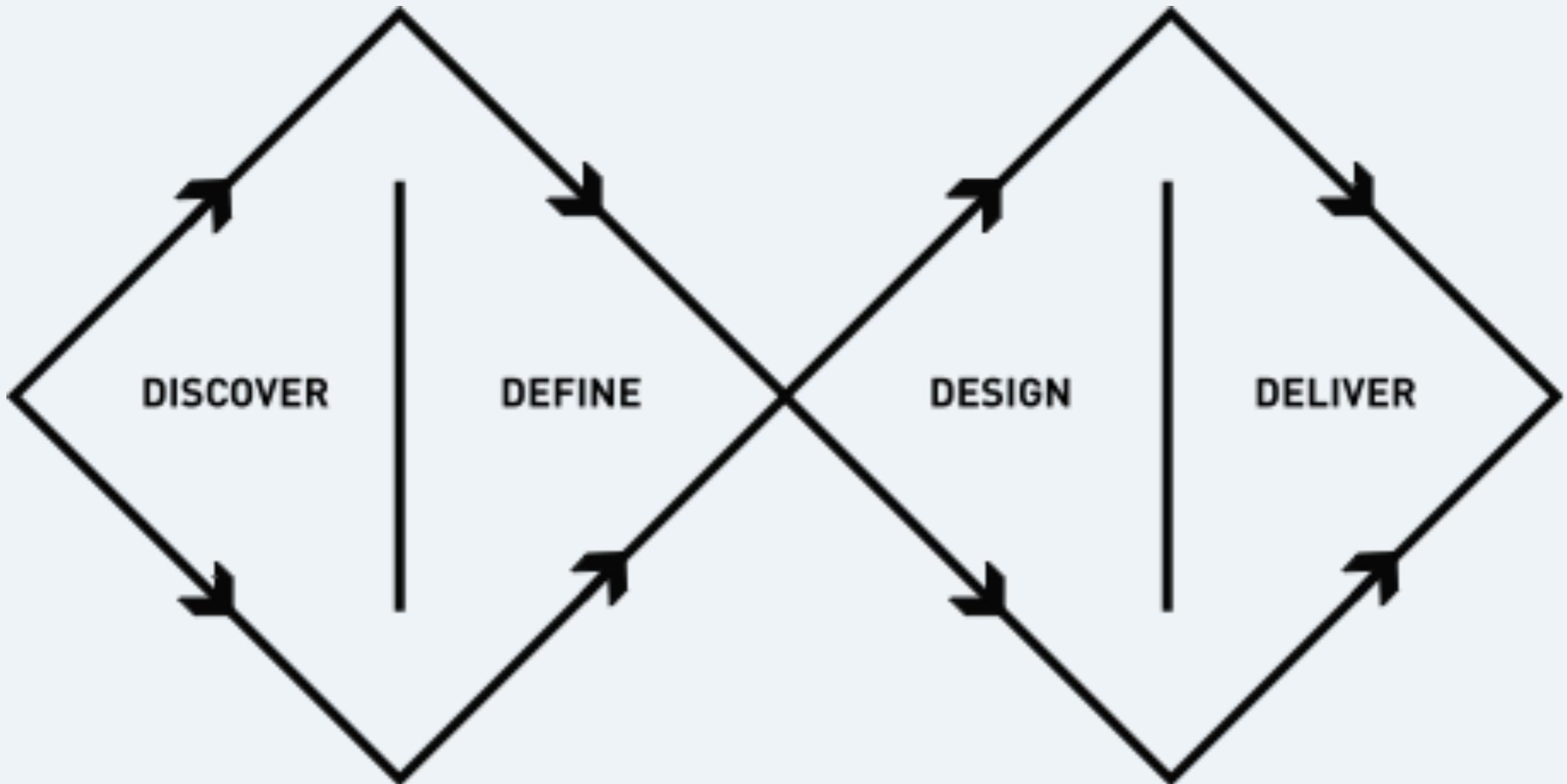
# The creative process.



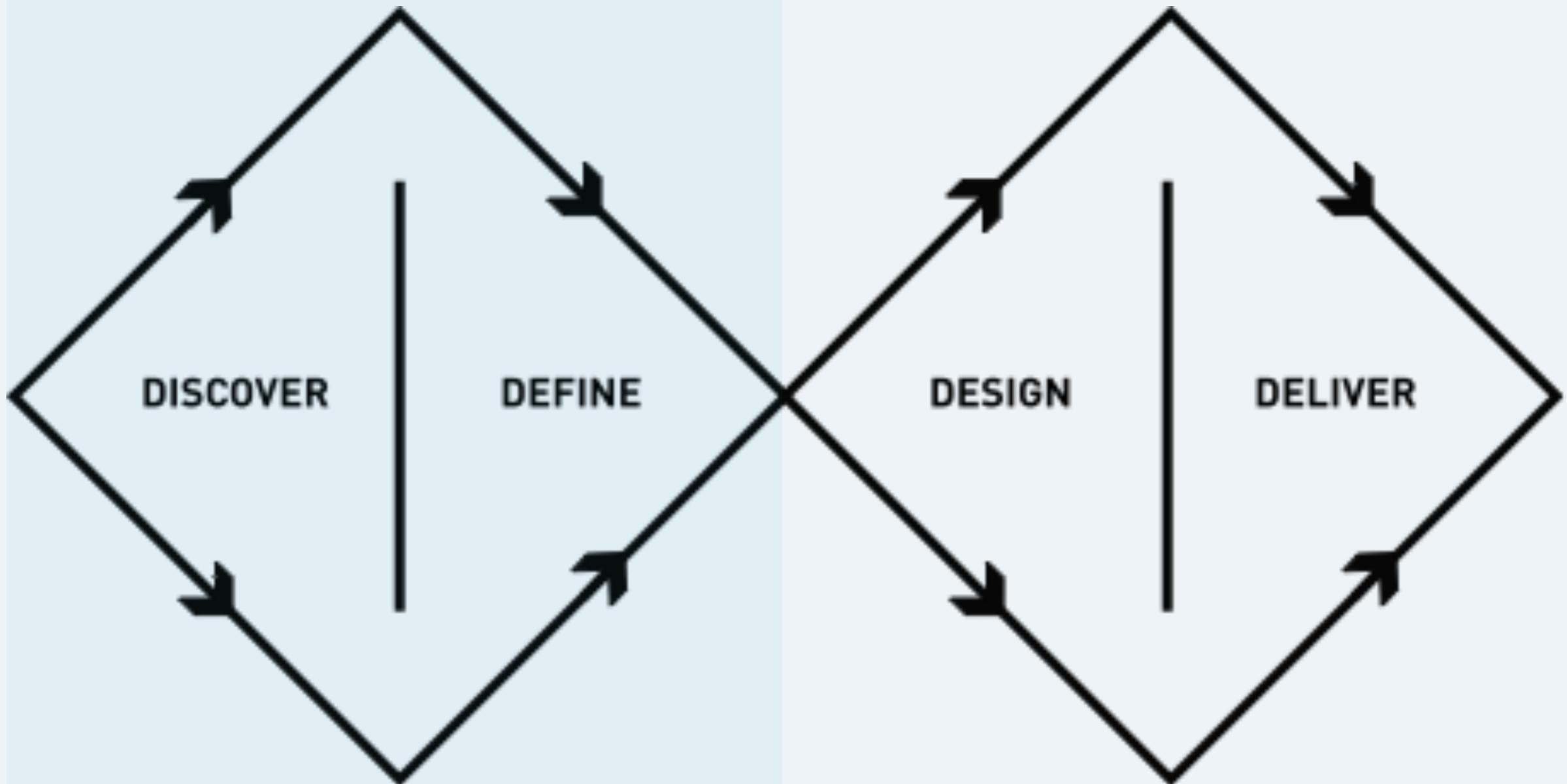
# The basis.



# Double Diamond

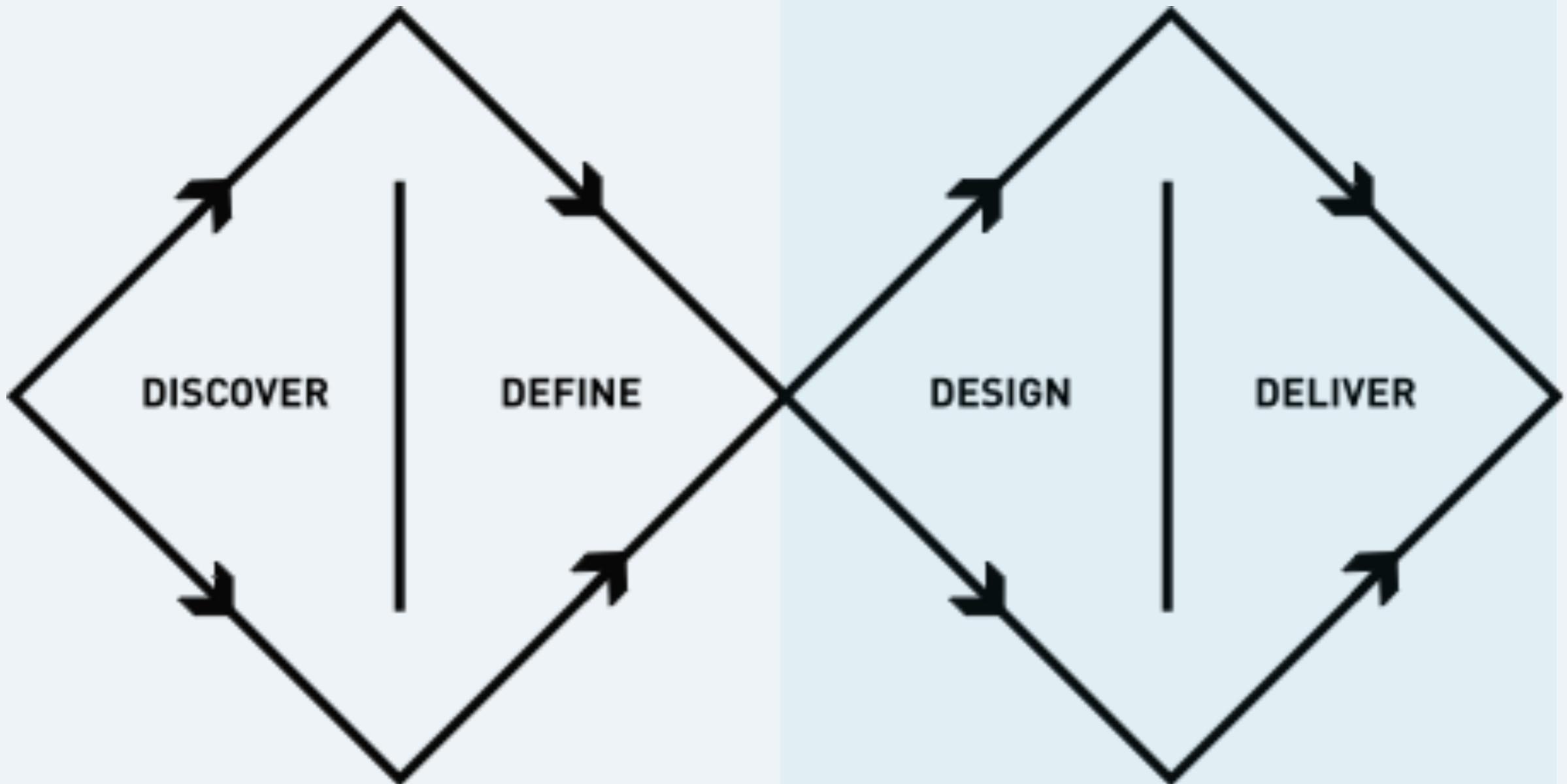


# Double Diamond



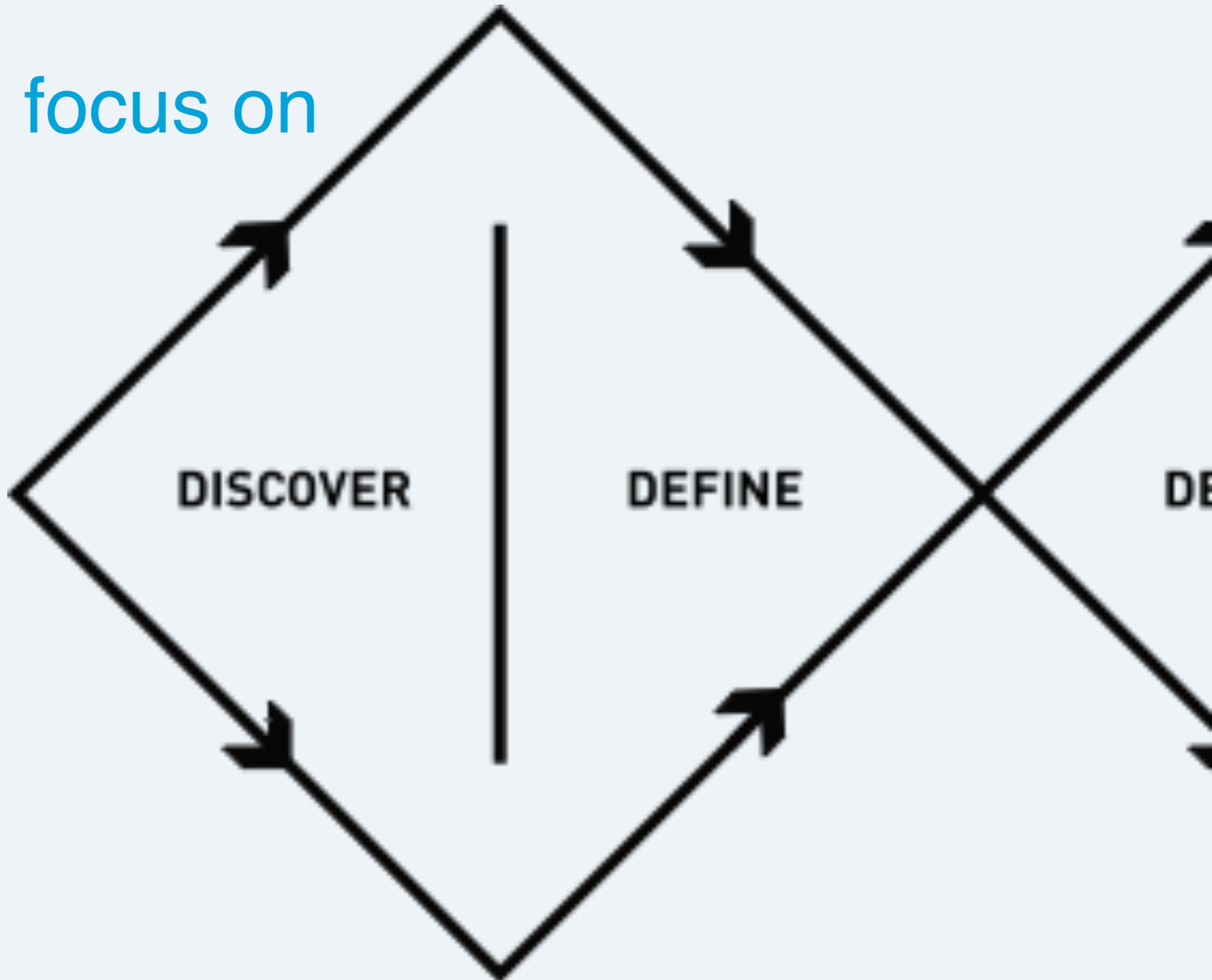
Why? and How?

# Double Diamond

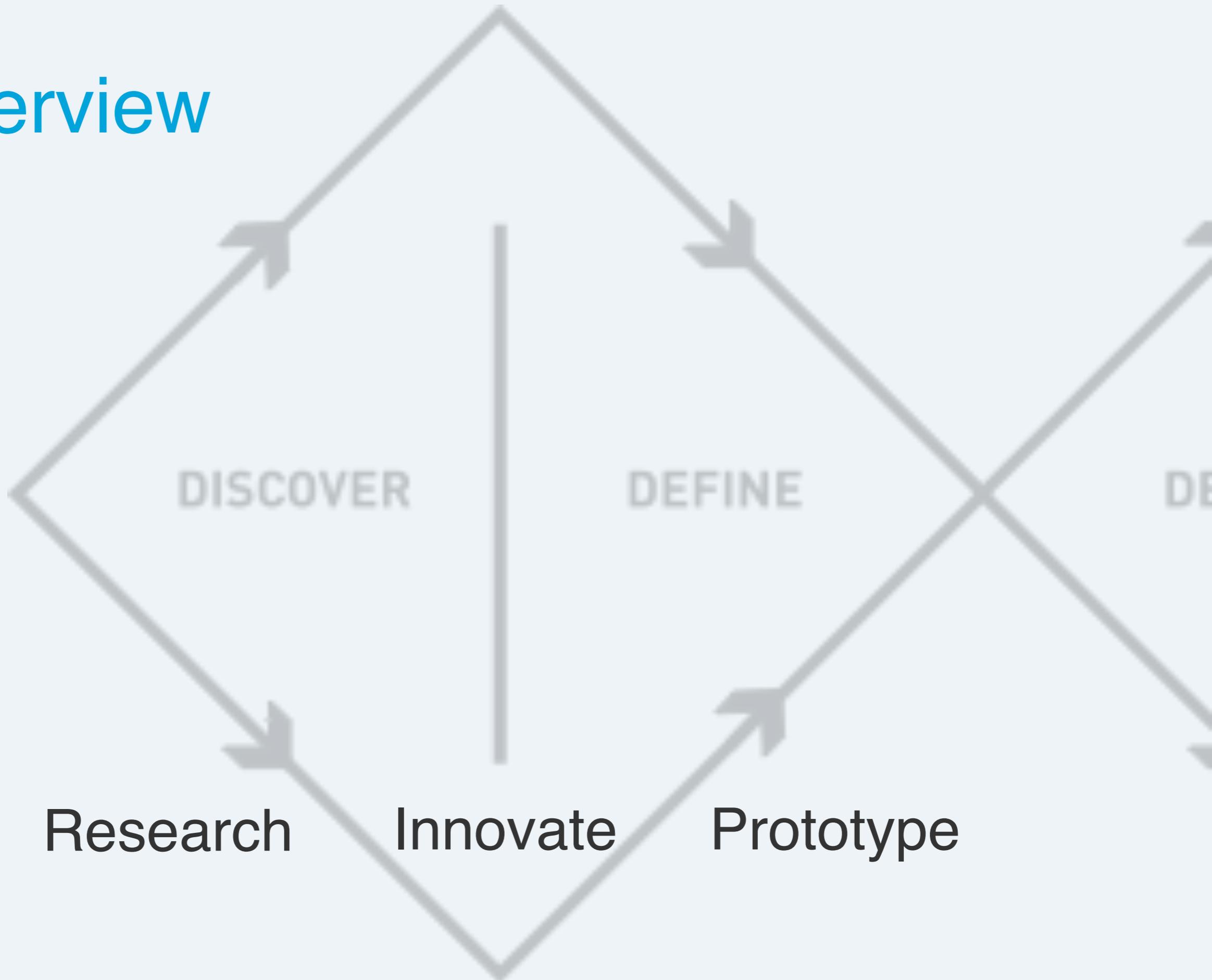


What?

We focus on



# Overview



# Overview

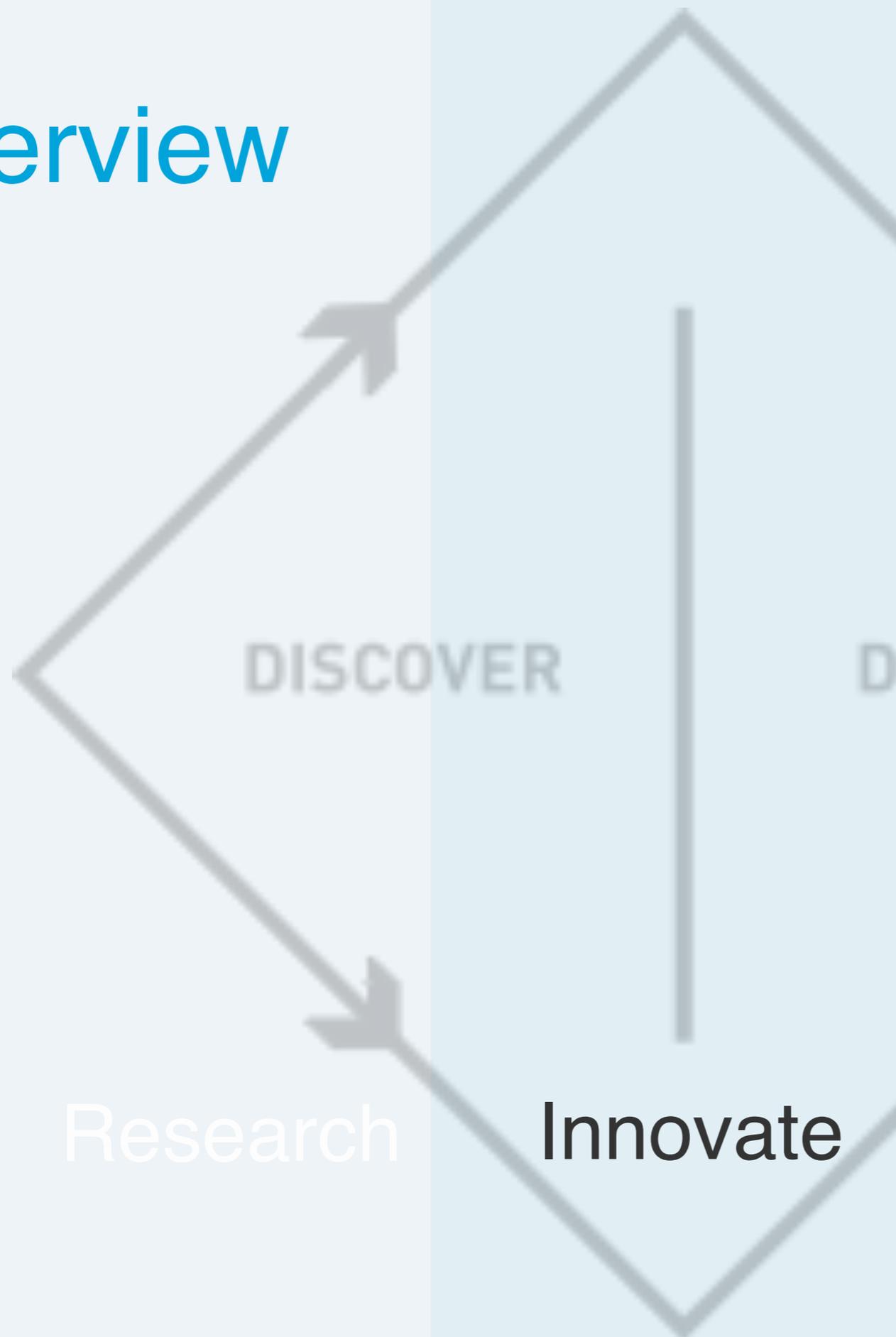


Get to know your problem/  
subject

Gather insights about the  
user and their life

Collect artifacts &  
impressions

# Overview



Make sense of your data

Identify important facets

Keep all players in mind

Collect and prioritize ideas

Develop, test & validate solutions

# Overview

Tell a story

Make it tangible

DISCOVER  
DEFINE

DEVELOPE

Prototype

# User Experience Design

## 5 Principles

# User Experience Design

## 5 Principles

### 1 - Stay user/consumer focused

Watch them. What are they doing? What are their daily problems and hurdles?

Focus and follow on their needs.

Try to identify their habits and their workarounds to make their lives easier.

# User Experience Design

## 5 Principles

### 2 - Gather a diverse team to succeed

It is good to have multiple perspectives to the world!

Only a diverse group of people is able to look at a problem from different perspectives as their backgrounds and experiences are different.

# User Experience Design

## 5 Principles

### 3 - Be flexible / Stay low-fi as long as possible

Do not waste energy by creating hi-fi work as you are working through the process!

If you are not emotionally attached to a piece of work you can easily let go.

# User Experience Design

## 5 Principles

### 4 - Short time frames

Set yourself constraints!

If you set a time limit your output and work will be more focussed and you will not be distracted by too many influences.

This principle lets you stay focussed!

# User Experience Design

## 5 Principles

### 5 - Show and tell as often as possible

Present your ideas and findings often to the whole group or others.

Gather feedback and make use of it in the next iteration

# Tool-Kits

# IDEO Method Cards

<http://www.ideo.com/work/method-cards/>



Learn Look Ask **Try**

## Scenarios

**HOW:** Illustrate a character-rich story line describing the context of use for a product or service.

**WHY:** This process helps to communicate and test the essence of a design idea within its probable context of use. It is especially useful for the evaluation of service concepts.



Learn Look

## Bodystorming

**HOW:** Set up a scenario with roles, with or without a product, and act out the scenario on the intuitive reactions of the participants by the physical environment.

**WHY:** This method helps to generate and test ideas for behavior-based design.

# nForm

<http://nform.com/tradingcards/>

TRADING CARDS

## User experience trading cards. Created for the IA Summit in 2007, 2008 and 2009.

### 2009 Series



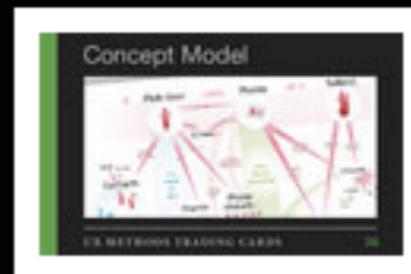
[A/B Testing](#)  
#33



[Affinity Diagram](#)  
#34



[Collaborative Inspection](#)  
#35



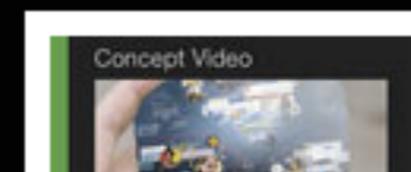
[Concept Model](#)  
#36



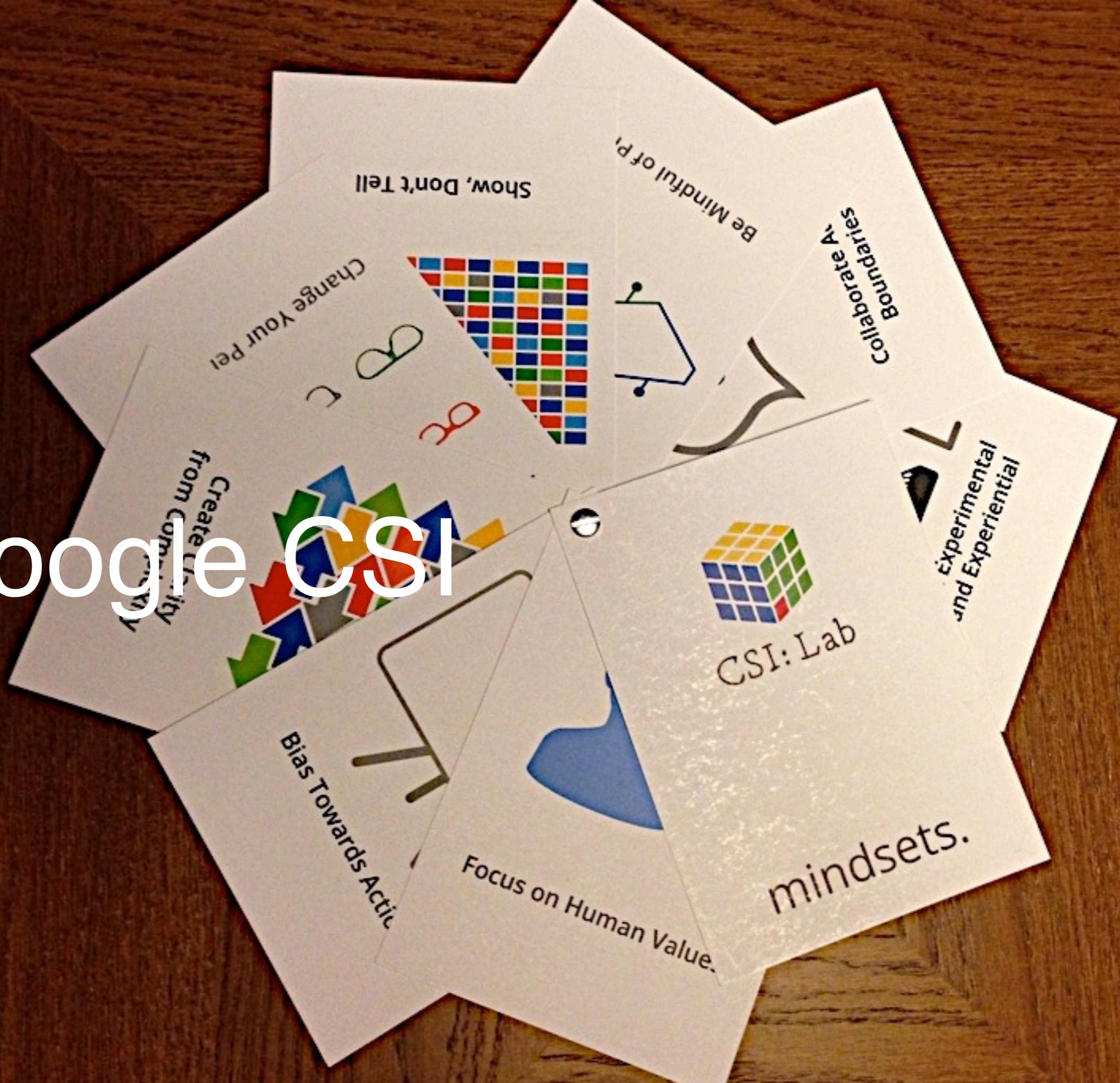
[Diary Study](#)  
#37



[Five Sketches™](#)  
#38

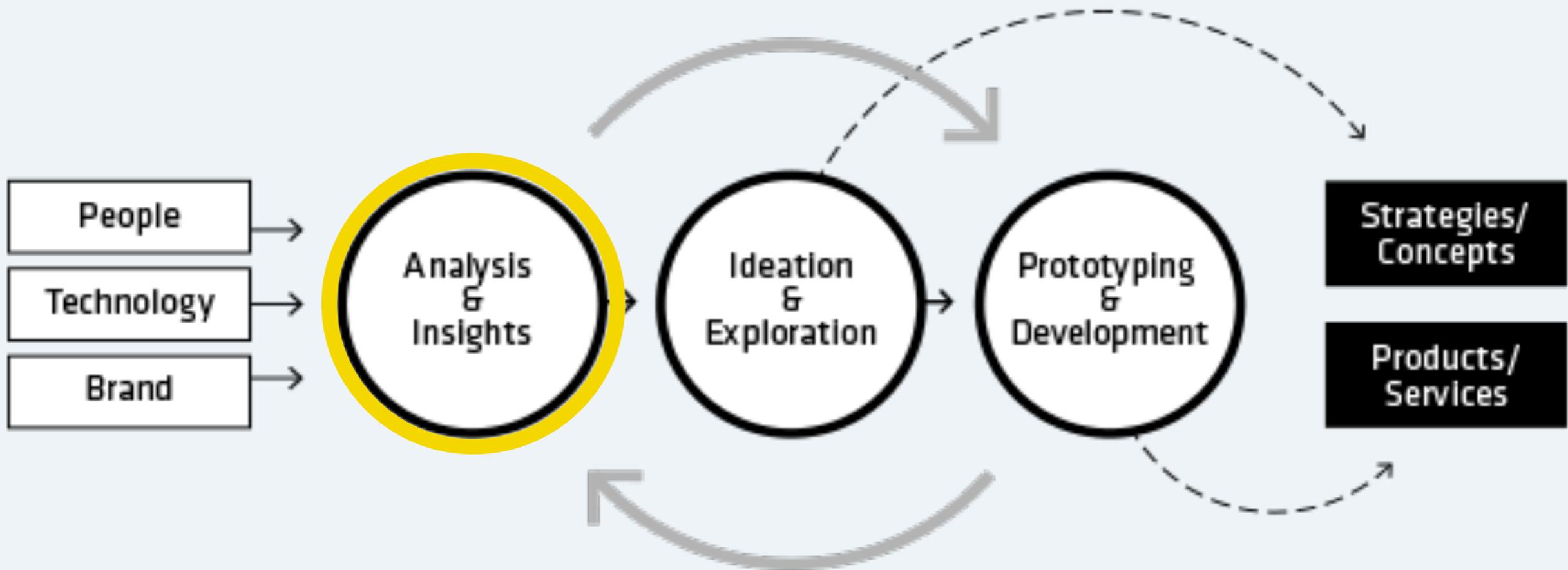


# Google CSI



# Concept Development Tool-Kit

# Human Centered Design - Process



# Analysis & Synthesis

Combining data in new ways

Questioning the obvious, identifying patterns

Judging and learning

# Analysis & Synthesis - The goal

Insights („Erkenntnisse“) on human behaviour.

We need to understand what people do, but moreover **why**. What motivates or drives them to love or hate something? Where is a need originally coming from?

If we understand the patterns behind, we have a foundation to create true, meaningful and relevant products, services and systems.

# Analysis & Synthesis - The goal

Insights („Erkenntnisse“) on human behaviour.

**I saw this** + I know this = Insight

Data gathered through design research:  
ethnography, contextual inquiry, questionnaires and interviews

# Analysis & Synthesis - The goal

Insights („Erkenntnisse“) on human behaviour.

I saw this + **I know this** = Insight

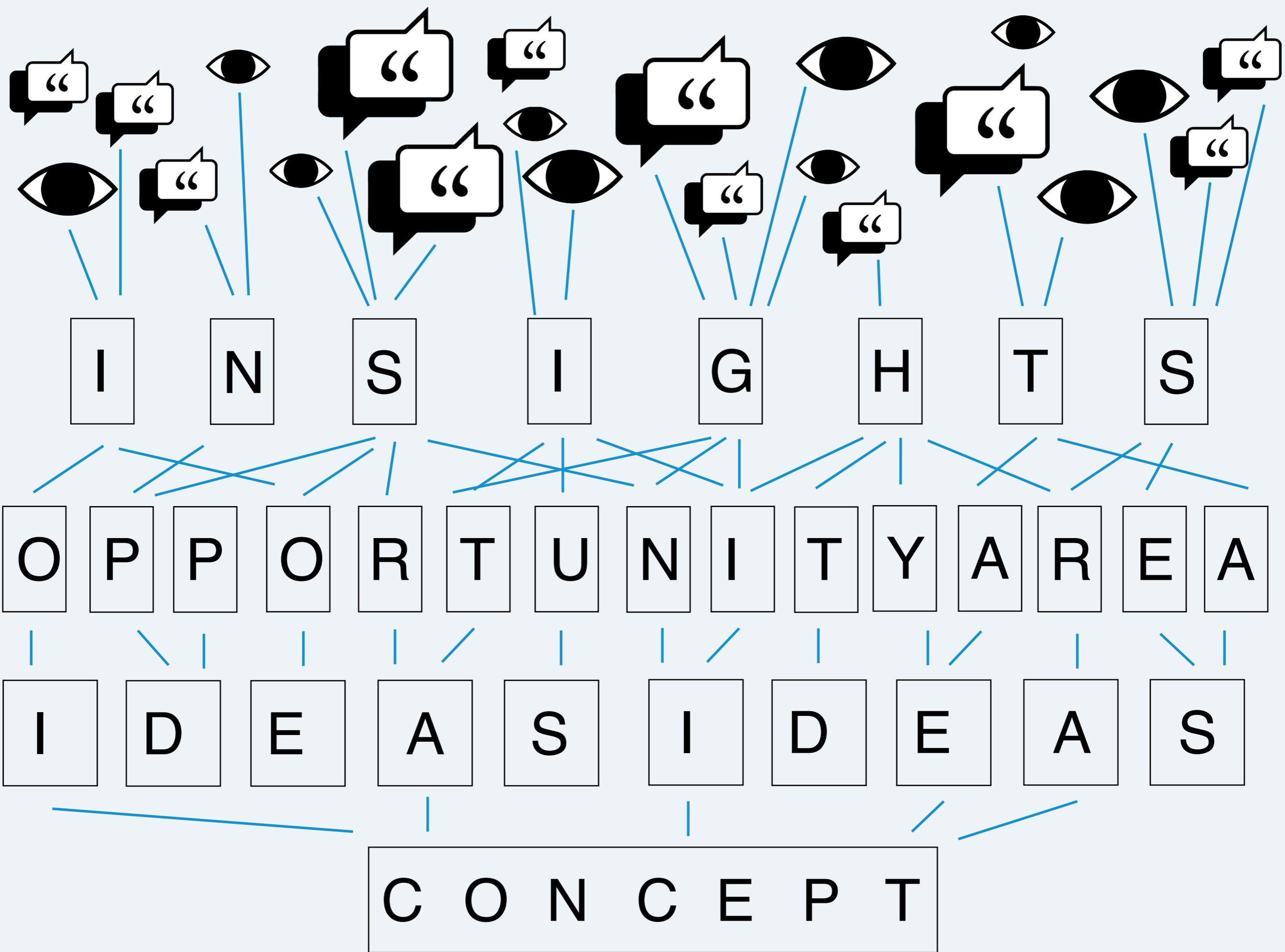
Guided by ethics & morals,  
intellectual prowess, and the  
accumulation of world view  
and breadth of experience

# Analysis & Synthesis - The goal

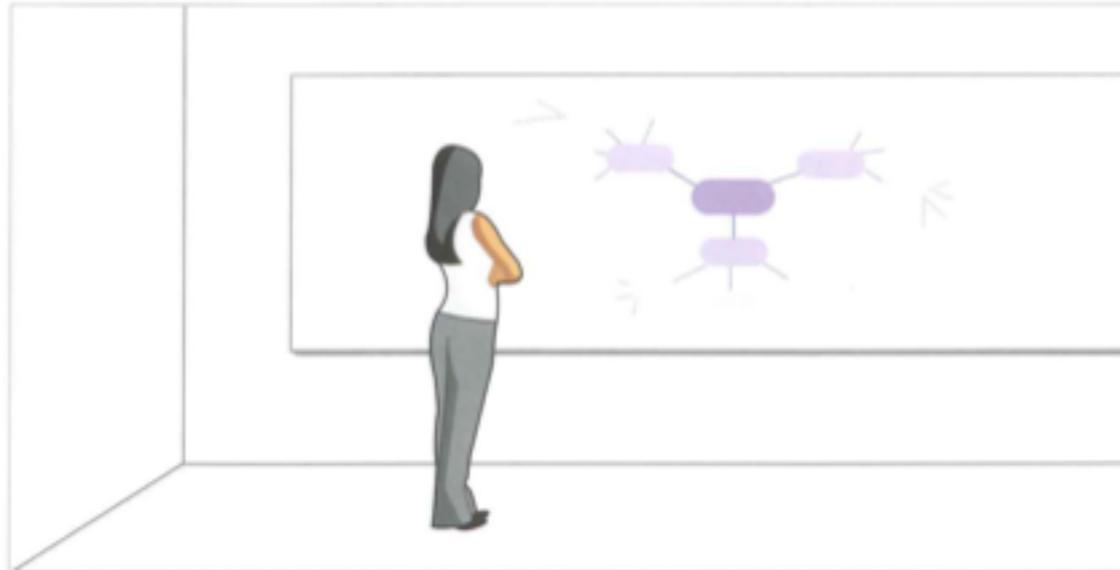
Insights („Erkenntnisse“) on human behaviour.

I saw this + I know this = **Insight**

A provocative statement of truth about human behavior (that may be wrong, but is stated as fact)



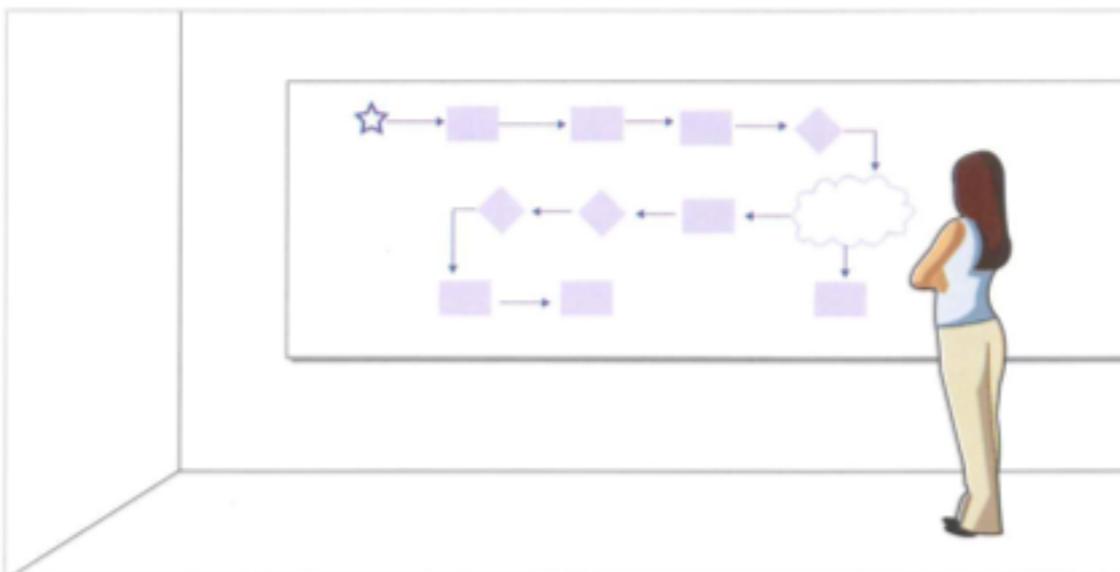




1. Brainstorming Webs

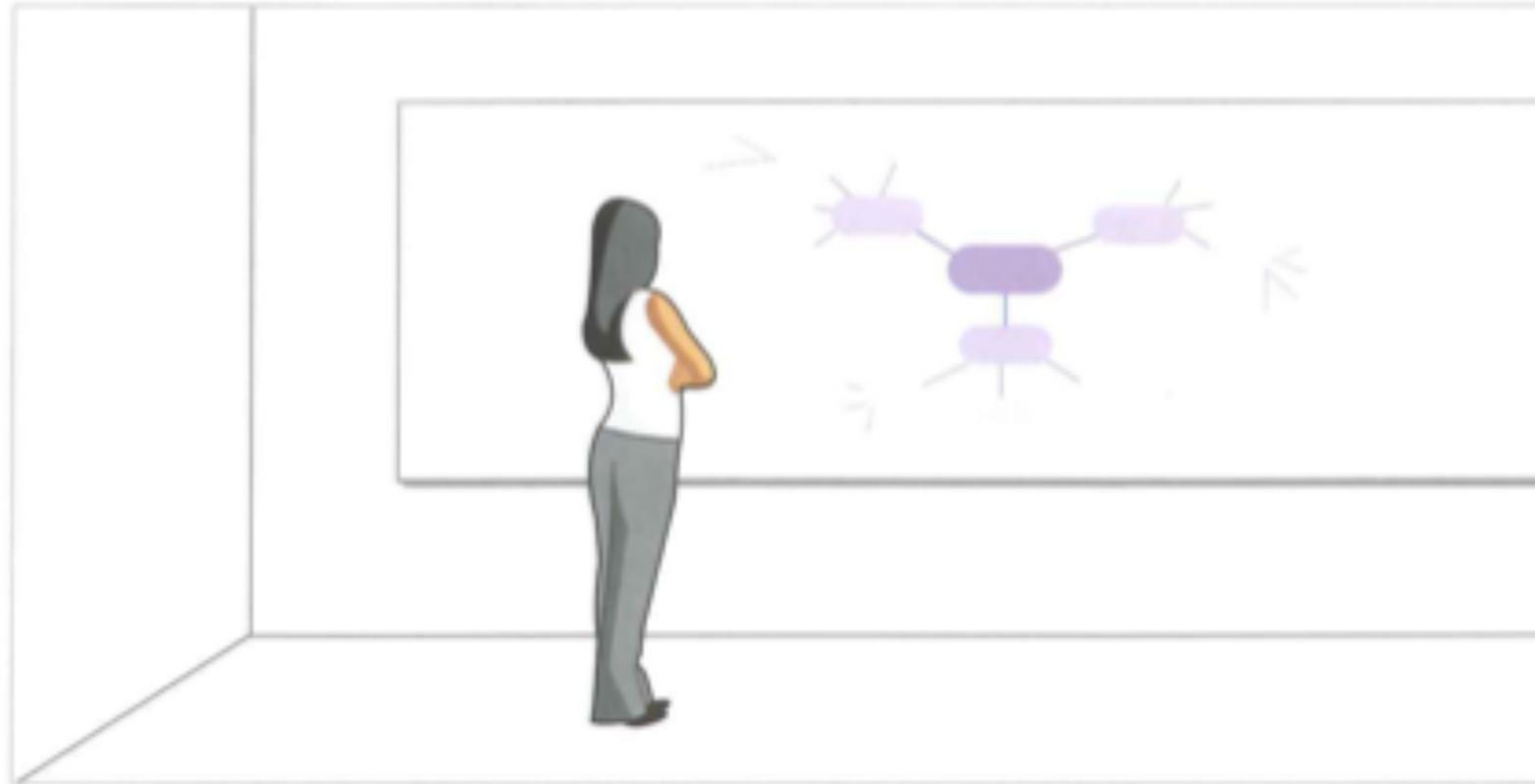


2. Affinity Diagrams



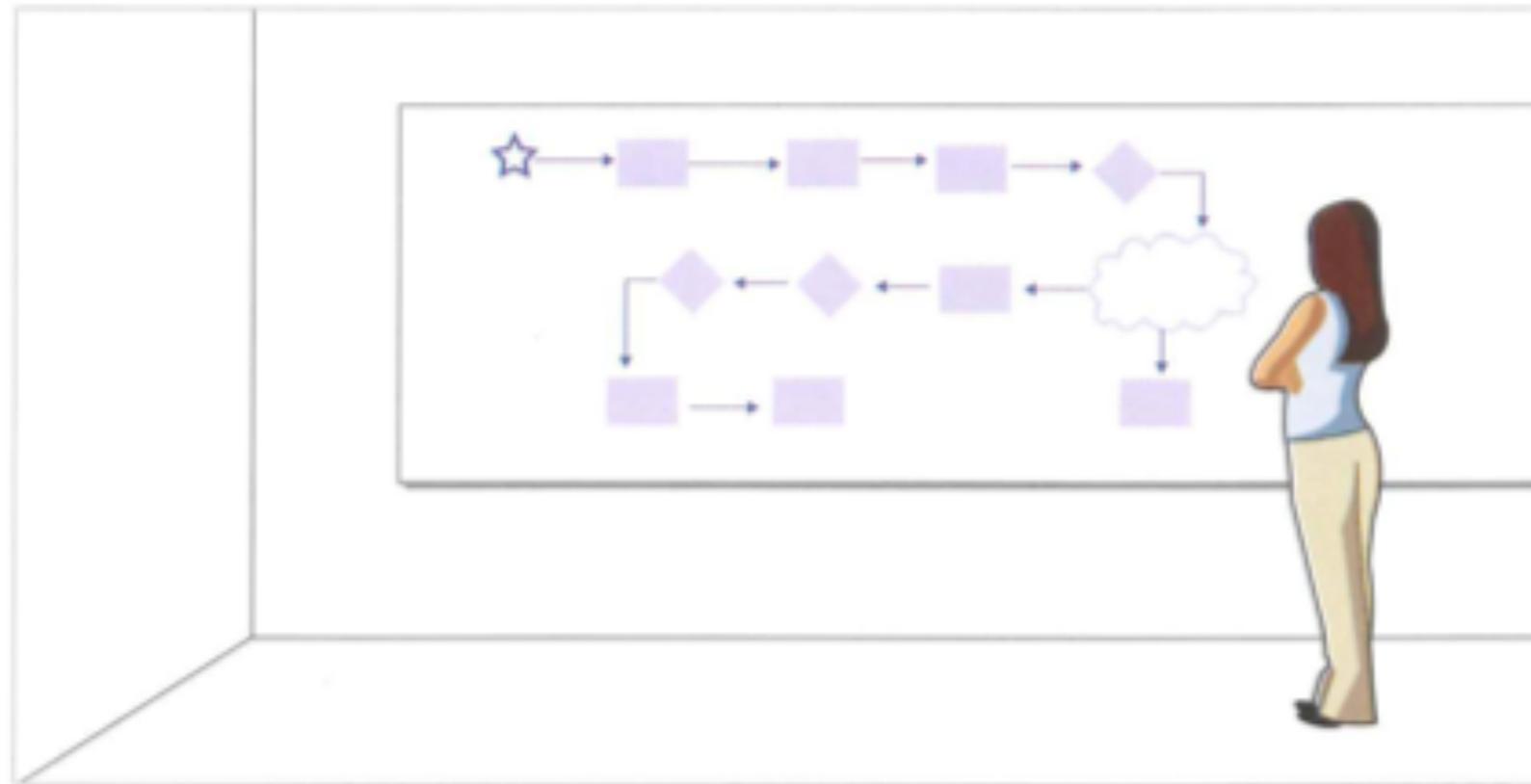
3. Flow Diagram

# Brainstorming Webs



Used when developing a central concept or question  
Can be build by identifying the center first, then all of the extensions

# Flow Diagram



Represent a series of events, actions or processes of different actors  
Usually have a beginning and an end point

# Affinity Diagram



Communicate a hierarchy or relationships between  
main and supporting ideas  
Can be constructed from “bottom up” or “top down”

# Affinity Diagram

## What?

It is a method for sorting data and an necessary step towards making sense of it.

Data points can be recorded on [sticky notes](#) and sorted into logical groups - as an individual or group exercise.

# Affinity Diagram

## Why?

You can experiment with different arrangements to see which makes the most sense.

Affinity Diagramming helps to **expose crucial relationships and patterns** in data that may not be initially apparent.

# Affinity Diagram

## Guidelines

Every little counts!

Use all data you gathered and cluster it by identifying relationships.

When groups start to emerge, give them a meaningful title.

Have your user in mind while clustering the data.

When groupings start to become too big (8+ items), split them into smaller ones.

„I force myself not too just communicate on What's App with my friends. I really do an effort to call. To spend time, even when apart. “

„It's about listening to someone, to care. No about the fastest way of communication.“

Observation note:  
A private instagram feed shared only with her boyfriend bridging the long-distance relationship

„I love when businesses have a What's App account and I can just write them there. Makes life so much easier.“

„I force myself not too just communicate on What's App with my friends. I really do an effort to call. To spend time, even when apart. “

„It's about listening to someone, to care. No about the fastest way of communication.“

Digital communication tools aren't always the best way to communicate for her.

Observation  
A private Instagram feed shared only with her boyfriend bridging the long-distance relationship

...ve when  
...nesses have a  
...at's App account  
... and I can just write  
them there. Makes  
life so much easier.“

# From Affinity Diagram to Insight

Now, you have clusters or groups. You have sorted your data, but not made sense of it.

To create insights from it, you need to take it one level of abstraction further - and **start to interpret.**

„I force myself not too just communicate on What's App with my friends. I really do an effort to call. To spend time, even when apart. “

„It's about listening to someone, to care. No about the fastest way of communication.“

Digital communication tools aren't always the best way to communicate for her.

**WHY?**

Observation  
A private Instagram feed shared only with her boyfriend bridging the long-distance relationship

we which  
businesses have a What's App account and I can just write them there. Makes life so much easier.“

„I force myself not too just communicate on What's App with my friends. I really do an effort to call. To spend time, even when apart. “

„It's about listening to someone, to care. No about the fastest way of communication.“

Communication through technology feels too transactional and lacks emotionality in a friendship context.

Digital communication is too transactional and lacks emotionality in a friendship context.

Why?

Observation: A private Instagram feed shared only with her boyfriend bridging the long-distance relationship

„I can just write them there. Makes life so much easier.“

This is an insight.

„I force myself not too just communicate on What's App with my friends. I really do an effort to call. To spend time, even when apart. “

„It's about listening to someone, to care. No about the fastest way of communication.“

Communication through technology feels too transactional and lacks emotionality in a friendship context.

Communication based on technology

Digital communication is too transactional and lacks emotionality in a friendship context.

Why?

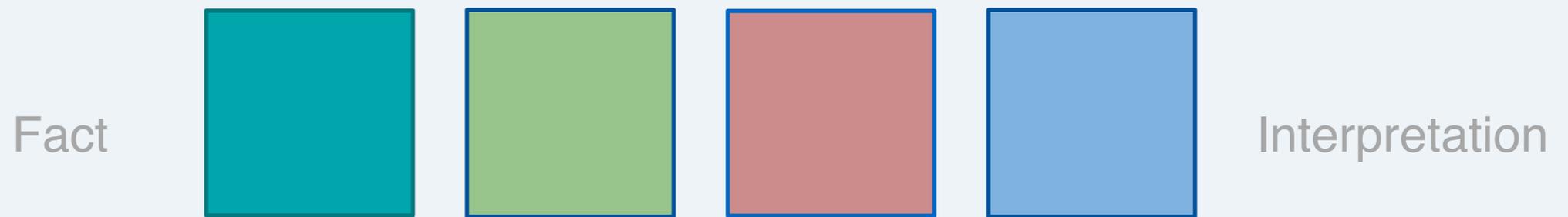
Observation: A private Instagram feed shared only with her boyfriend bridging the long-distance relationship

„I can just write them there. Makes life so much easier.“

This is an insight.

This isn't.

# Insights Generation



Insights Generation is where we start to interpret the findings - and bridge between research an articulation of user value and design capabilities.

# Insights

- Are framed as general truths, even if they only come from a small group of participants you met.
- Good insights often challenge norms and the expected.
- Insights are concise.

# Affinity Diagram

## Concept Development Affinity Diagram

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An affinity diagram helps to synthesize large amounts of data by finding relationships between ideas. The information is then gradually structured from the bottom up into meaningful groups. From there you can clearly "see" what you have, and then begin your analysis. When you work through the process of creating relationships and working backward from detailed information to broad themes, you get an insight you would not find otherwise.

### PROCESS

1. Brainstorm or use your recorded research data to identify needs, issues, interesting observations or quotes, processes or other aspects that are important to your topic or strike you
2. Record each finding on cards or post-it notes
3. Look for related findings
4. Sort notes or cards into groups until all cards have been used
5. Repeat this as many times as needed
6. Add labels to themes if appropriate. These labels should represent an insight that evolves from all the findings in the group
7. Draw connections between findings and themes

### HOW TO CLUSTER AND MODEL DATA

Everyone reads through the post-its and arranges them  
Everyone is allowed to re-order  
Group post-its into themes

RANDOM DATA



AFFINITY DIAGRAM



# BREAKOUT SESSION 1

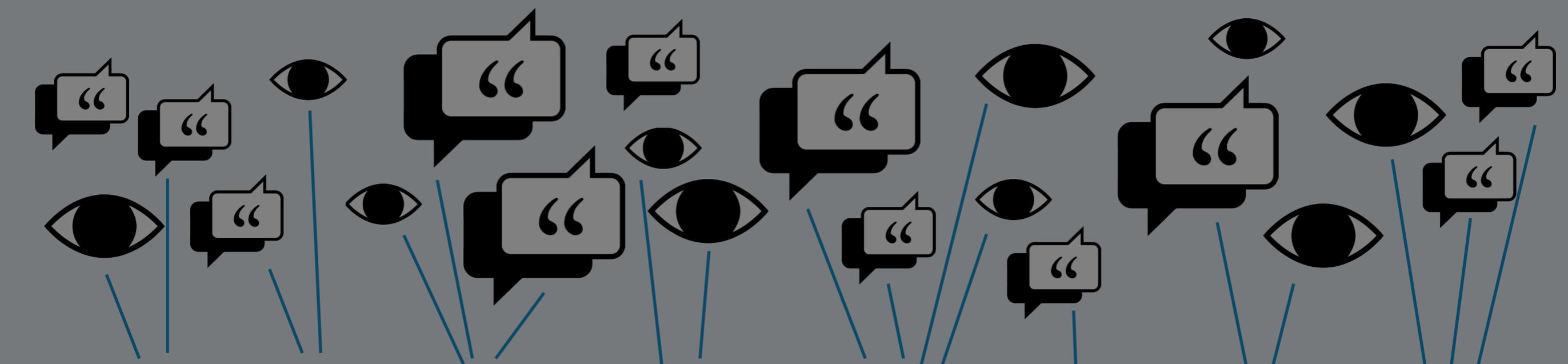
10:00-12:20

gather back at 13:20

How Might We...?

# How might we ...?

It is a way to translate insights from your research into opportunities.



I N S I G H T S

O P P O R T U N I T Y A R E A

I D E A S I D E A S

C O N C E P T

# How might we ...?

People often talk about the challenges they're facing by using language that can inhibit creativity instead of encouraging it.

# How might we ...?

Sentences like:

„How can we do this?“

or „How should we do that?“

# How might we ...?

Sentences like:

„How can we do this?“

or „How should we do that?“

Destroy creativity! Because they are  
implying judgment.

# How might we ...?

It starts with a simple question based on an insight you have found.

# How might we ...?



„I have to go to several supermarkets to get everything I need in an organic quality.“

# How might we ...?

Your insight: „Buying organic is not as convenient as regular food“



„I have to go to several supermarkets to get everything I need in an organic quality.“

# How might we ...?

„How might we design better food packaging?“

How might we ...?

How might we design better food packaging?

How might we help people to manage using up food before expiry?

# How might we ...?

How might we design better food packaging?

How might we help people to manage using up food before expiry?

How might we improve access to a broad range of organic food?

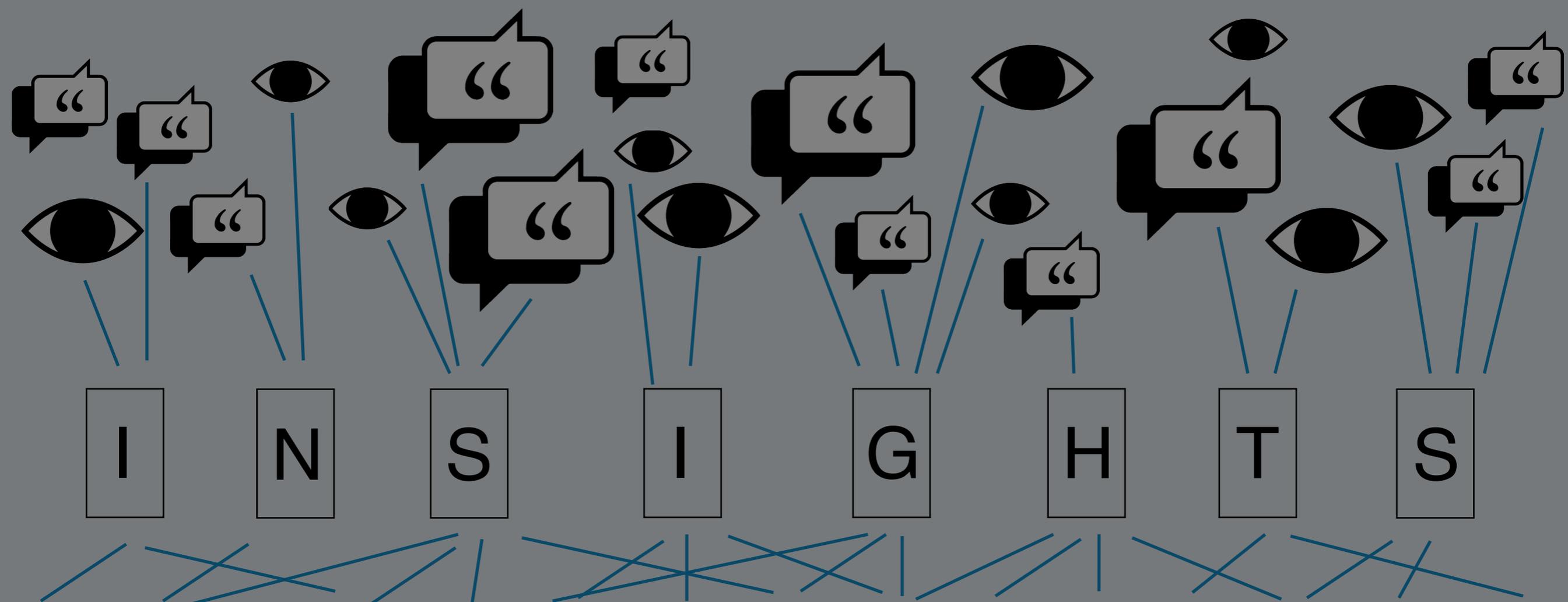
# How might we ...?

These are all fields to innovate in!

# How might we ...?

These are all fields to innovate in!

We call them „opportunity areas“.



O P P O R T U N I T Y A R E A

I D E A S I D E A S

CONCEPT



# How might we ...?

Each opportunity area can be filled with many ideas – the solutions to the challenges!

Challenge = HMW = Opportunity Area  
Solution = Idea

How might we ...?

How might we design better food packaging?

# How might we ...?

How might we design better food packaging?

... by investigating in bio-degradable plastics

# How might we ...?

How might we design better food packaging?

... by investigating in bio-degradable plastics

... by freezing milk and selling it in ice cube blocks

# How might we ...?

How might we design better food packaging?

... by investigating in bio-degradable plastics

... by freezing milk and selling it in ice cube blocks

... by offering a home delivery service

# How might we ...?

„How Might We“ translates user research findings and insights into opportunity areas as a first step towards ideas. It helps to create a broader perspective on a topic and challenge an insight in different ways first - before creating ideas.

# How might we ...?

## In summary

1. Take an insight from your research and use How Might We to tackle it.
2. Come up with as many HMWs you can come up with - always challenging your insight.
3. Start brainstorming on various ways of answering these questions.

# How might we ...?

## In summary

1. Take an insight from your research and use How Might We to tackle it.
2. Come up with as many HMWs you can come up with - always challenging your insight.
3. ~~Start brainstorming on various ways of answering these questions.~~  
Collect the ideas that come up during the process.

# How might we ...?

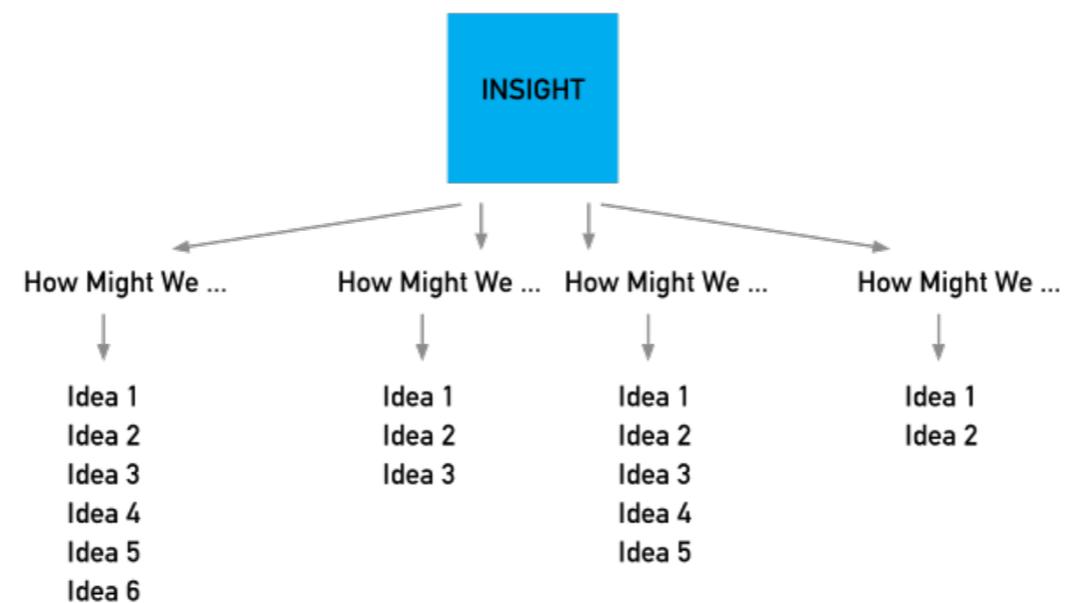
## Concept Development How Might We

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„How Might We“ translates user research findings and insights into opportunity areas as a first step towards ideas. It helps to create a broader perspective on a topic and challenge an insight in different ways first - before creating ideas.

### PROCESS

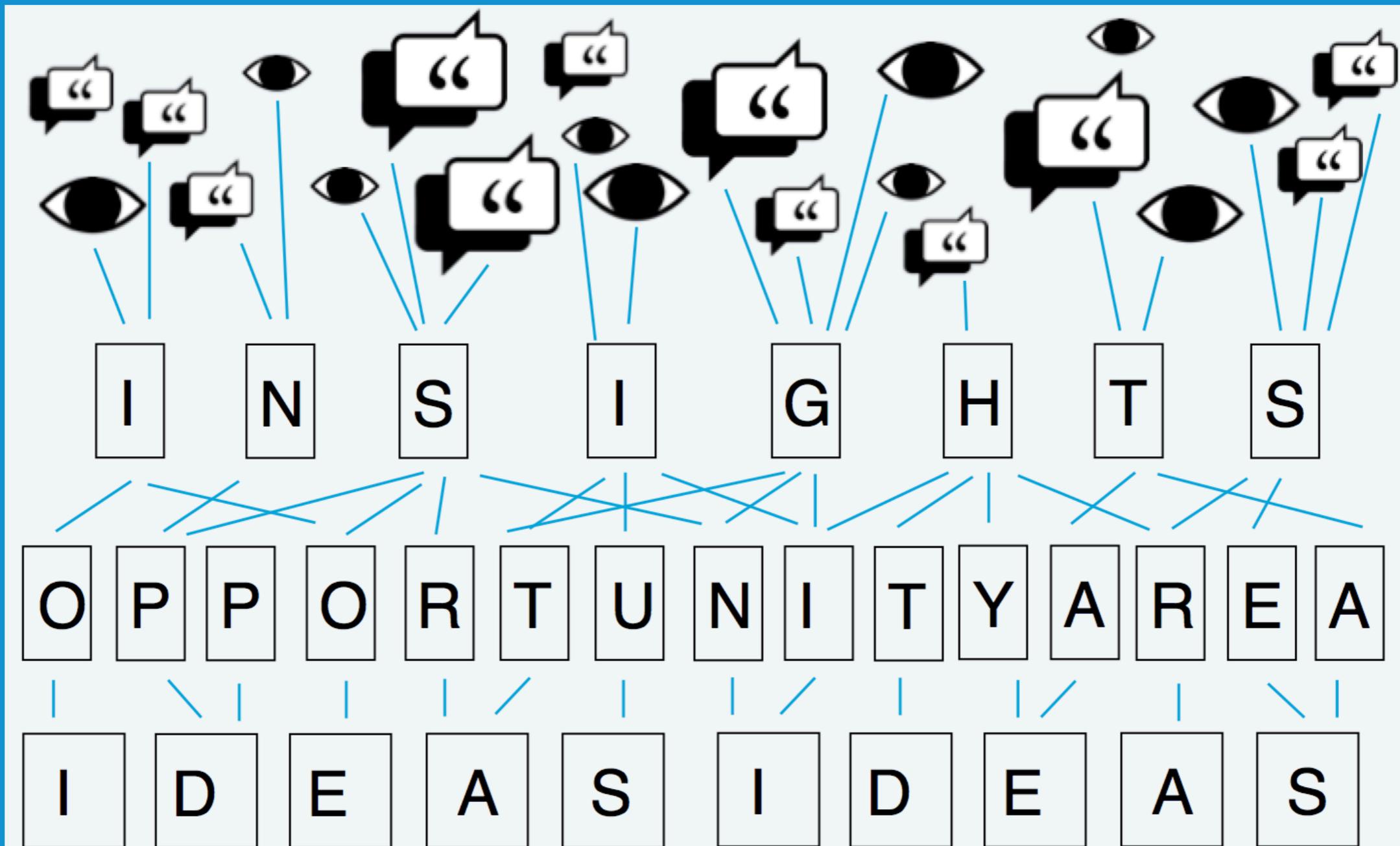
1. Take an insight from your research and use How Might We to tackle it.
2. Come up with as many HMWs you can come up with - always challenging your insight.
3. Start brainstorming on various ways of answering these questions.



# BREAKOUT SESSION 2

13:20 - 14:20

Now let's see the process of  
your work today



# Presentation

1. Take 5 mins to vote for your favorite HMW in your group.
2. Visualize and phrase it.
3. Describe the process of this idea: from research to insight, to HMW, to an idea you might have already had.

# Presentation

## Concept Development Presentation

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1. Please take 5 mins to vote for your favourite idea within the group - then give it a catchy title!

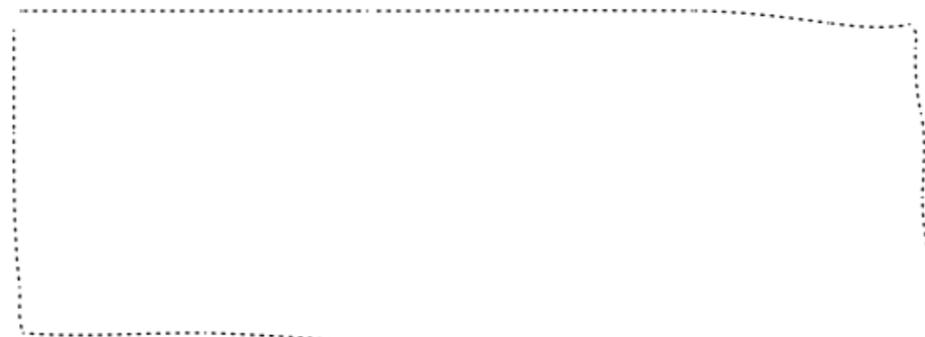
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2. Please write down the How Might We - question that led to your chosen favourite idea:

How Might We...

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3. What insight theme from your affinity diagram is this How Might We deriving from?



# BREAKOUT SESSION 3

14:20 - 14:50