

Workshop

User Experience Design III

Day 4 - UX Tools & Methods

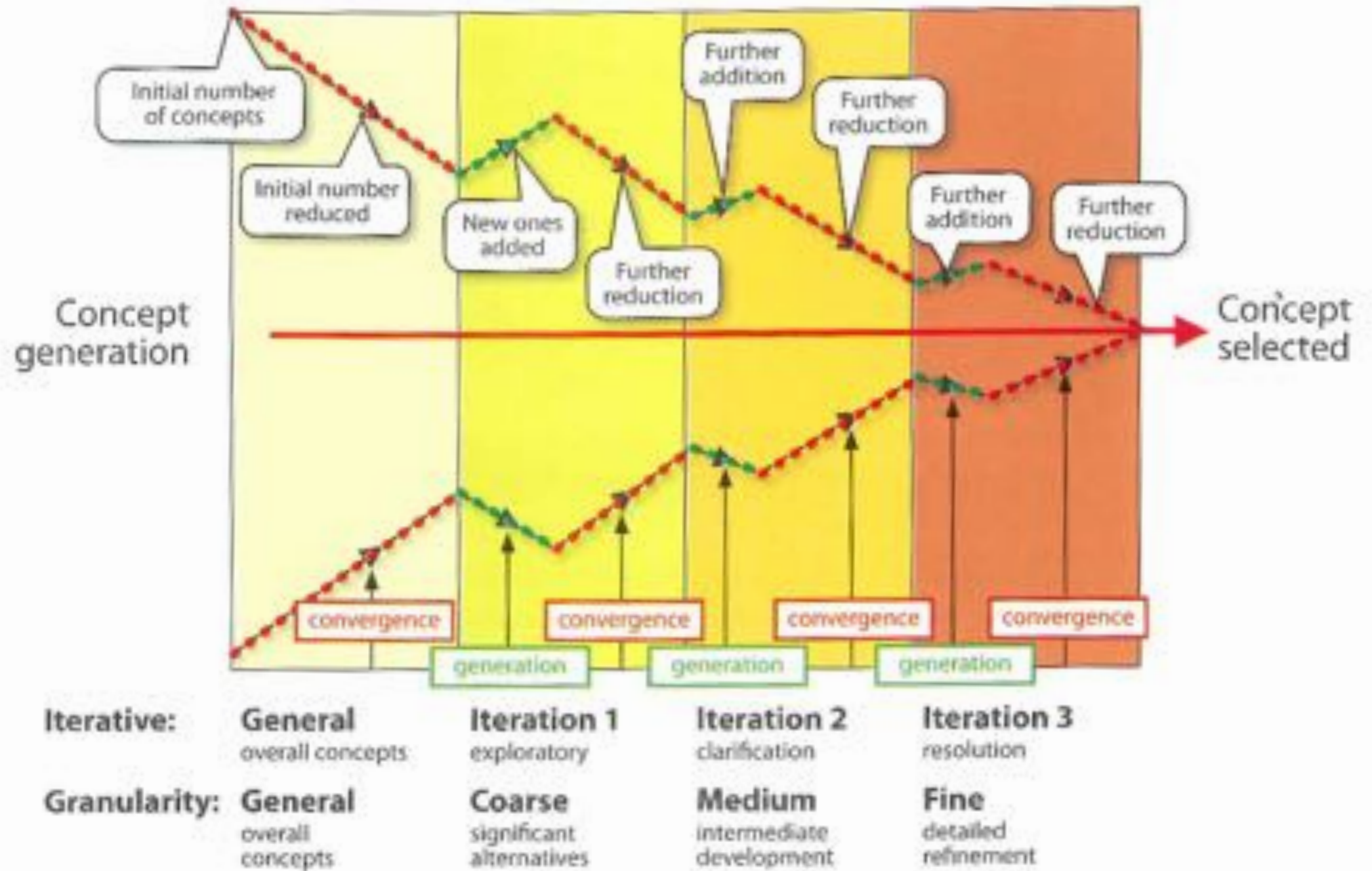
Session 1 - Affinity Diagram and HMWs

Lecturer: Alexander Wiethoff

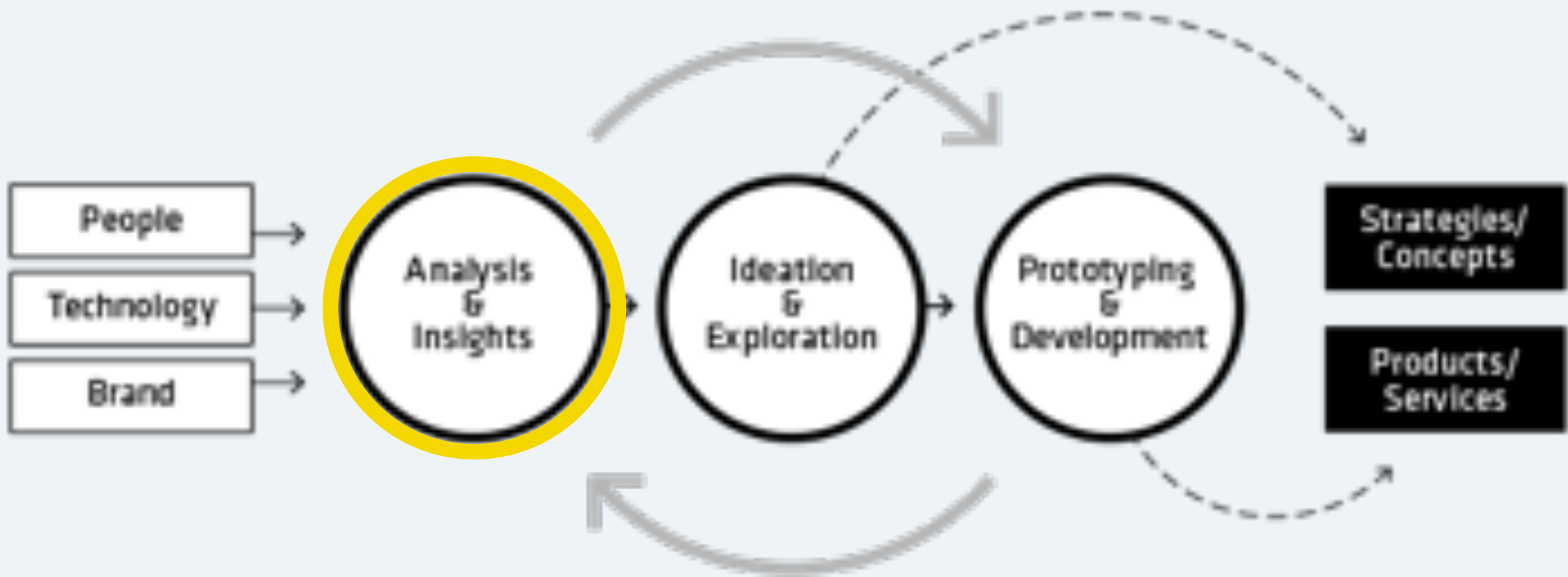
Tutorials and Organization: Fiona Draxler & Steeven Salazar

External Lecturers: Marin Zec (TUM)

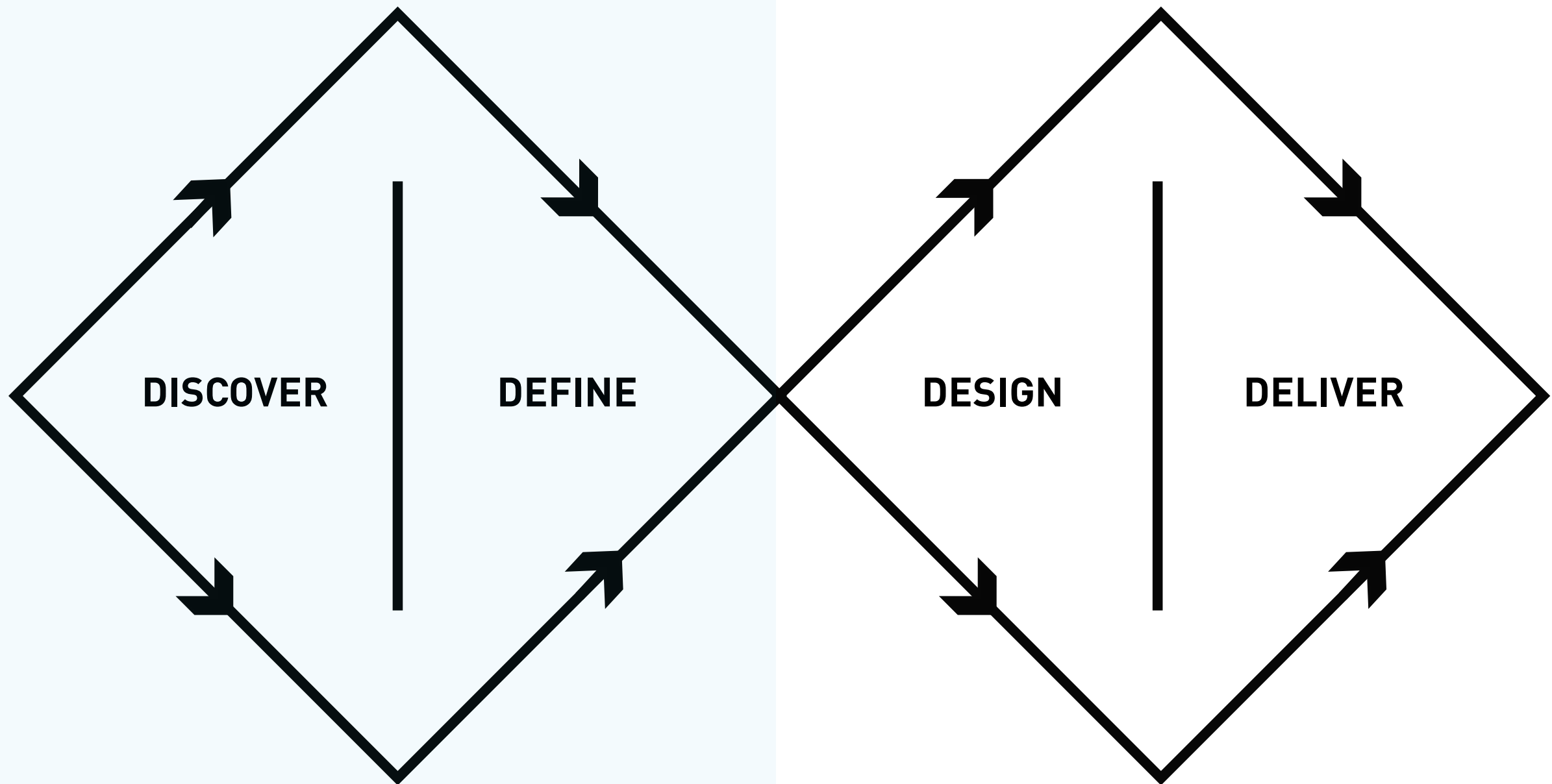




Human Centered Design - Process



Double Diamond



Why? and How?

source: [8]

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.

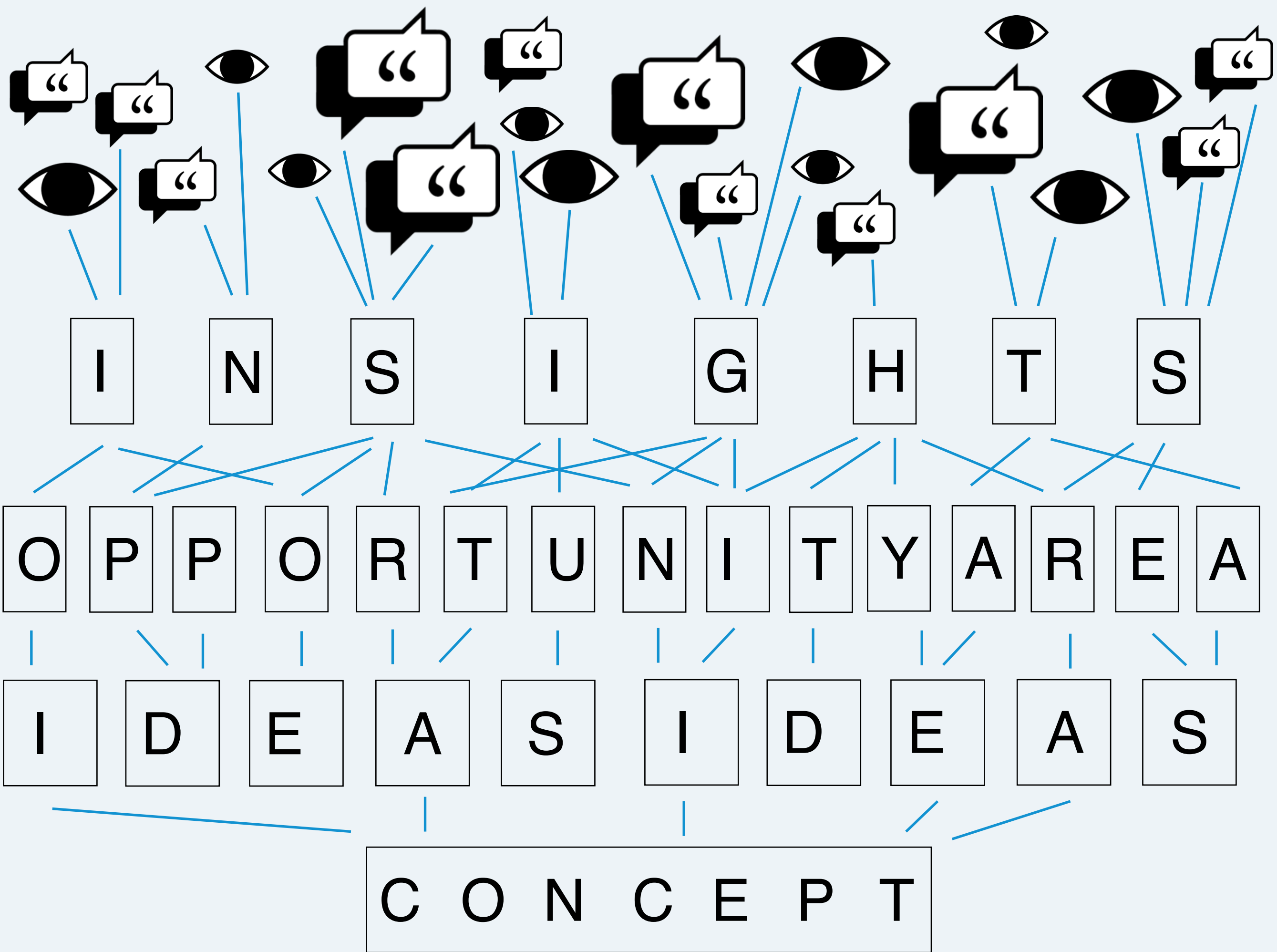
I saw this + I know this = **Insight**

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

Max QDA

The screenshot displays the Max QDA software interface, which is used for qualitative data analysis. The interface is divided into several main sections:

- Top Menu Bar:** Includes Home, Import, Codes, Variables, Analysis (highlighted), Mixed Methods, Visual Tools, Reports, Stats, and MAXDictio.
- Toolbar:** Contains various analysis tools such as Reset activations, Lexical Search, Complex Coding Query, Reset Coding Query, Compare Groups, Summary Grid, Summary Tables, Intercooder Agreement, Categorize Survey Data, Paraphrases, Twitter, Code Configurations, Code Frequencies, Code Coverage, and Free Memo.
- Document System:** A tree view on the left showing a hierarchy of documents. Under 'Indiana', there are sub-items like Kim, Vincent (selected), George, Jack, Kelly, and Grace. Other categories include Focus group, Websites & Literature, Twitter data, Video, and Images.
- Compare Groups:** A central panel showing a comparison of coded segments. It features a dot plot with categories like Key Quotes, Health, Partner, Emotions, Significantly Positive, Siblings, and Emotions. The plot shows the distribution of segments for each category across different document groups.
- Code System:** A tree view on the bottom left showing a hierarchy of codes. The 'YELLOW' code is selected. Other codes include How affected by crisis, Challenges, Day-to-Day Issues, Emotions, Education, Interests, Money and Financial Issues, Religion and Spirituality, Significantly Positive, and Interview Guide Topics.
- Retrieved Segments:** A panel on the bottom right showing the text segments retrieved from the documents. It includes segments for 'Health' and 'Home' with their respective questions and answers.





Affinity Diagram

Sort your collected data

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.“

collected interview data / quotes

„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

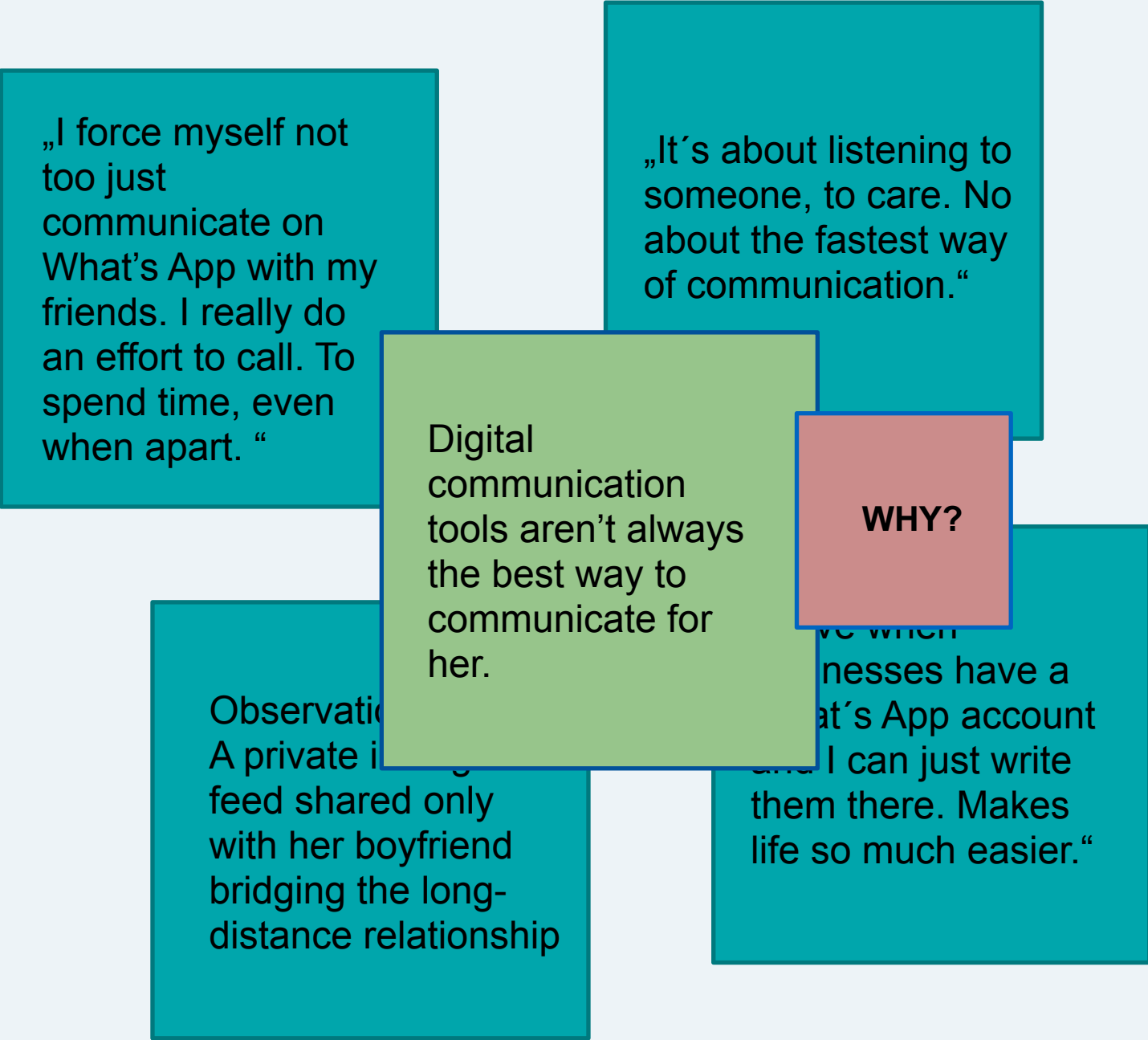
...ve when
...nesses have a
...at's App account
... and I can just write them there. Makes life so much easier.“

problem/opportunity statement

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.**



asking a question that leads to 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.

Y?

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

... have a top account
and 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 too the corner here

Y?

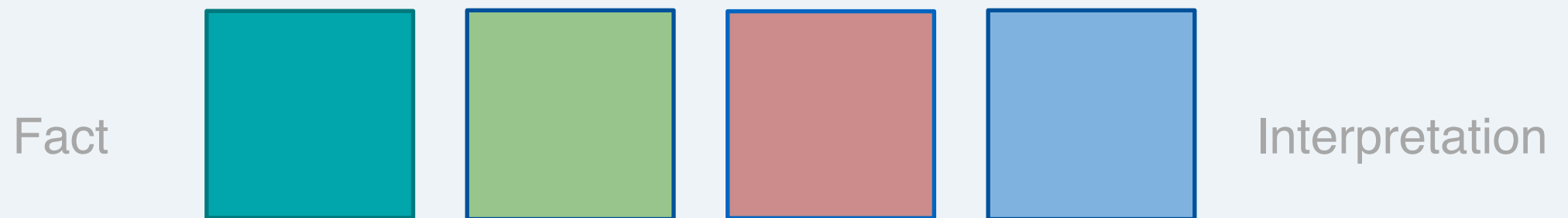
Observation
A private Instagram feed shared only with her boyfriend bridging the long-distance relationship

... have a top account
and 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

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



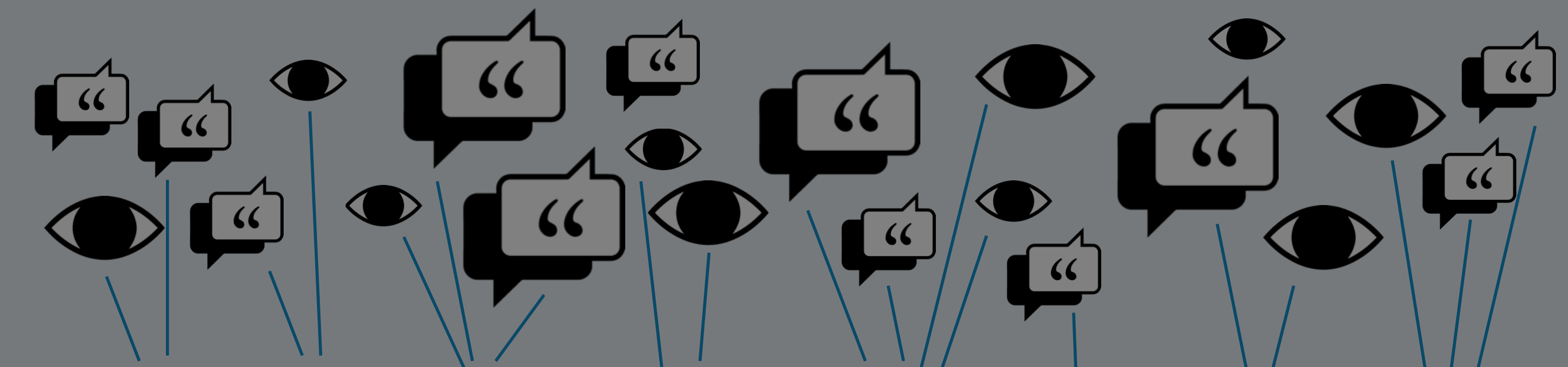
How Might We...?

How might we ...?

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

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?

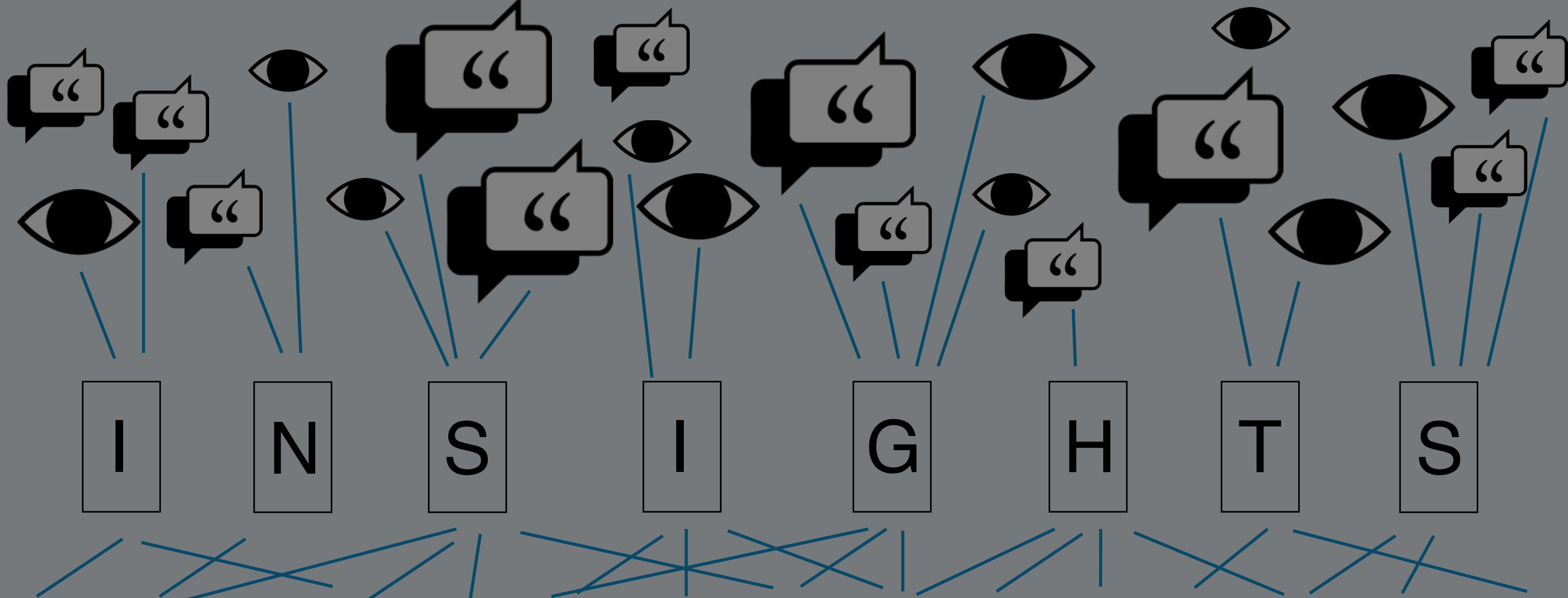
How might we ...?

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 ...?

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.

Breakout Session 1

10:00-15:30