

Welcome to our Train-the-Trainer program!



An initiative of:



**FALLING
WALLS
FOUNDATION**

With funding from the:



THIS PROGRAMME IS SUPPORTED BY:



Workshop setting



YES



Trainer



Partner

Young Entrepreneurs in Science



- opens up new career perspectives for young researchers
- part of the Falling Walls Foundation
- enabled by Federal Ministry of Research, Technology and Space



www.youngentrepreneursinscience.com

Startup workshop – overview



Day 1

Morning

Getting started

Check-in,
Introduction, Your
Role & Goal

Entrepreneurship for
PhDs & Postdocs

Introduction to Design
Thinking

Afternoon

Understanding the User

Introduction
to Design Thinking
Challenge

User Research –
Interviews

Unpacking Interview
Results

Day 2

Morning

Defining the User

Team Check-in

Persona & HMW

Ideation & Idea
Selection

Afternoon

Developing Solutions

Prototyping

Self-Reflection &
Transfer

Wrap-up & Next Steps

Today's agenda



Morning

Check-in

Getting Started

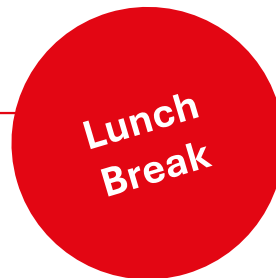
Introduction

Reflection about Roles & Goals

Entrepreneurship for PhDs & PostDocs
(World Café)

Innovation & Design Thinking

Lunch around 12:50 pm



Afternoon

Understanding the User

Warm-up & Teambuilding

Understanding the Challenge

User Research (Interviews with guests)

Unpacking Interview Results

Check-out

Your learning materials



- **Download link:** You will receive a download link for the handout within 3–5 days after the workshop



- **Photos:** We will take photos to document your results, please tell the team if you don't want your picture taken.

Your Personal Profile

Draw your...

- Name and Organization
- Your preferred pronouns
- Professional background
- Training Experience: What skills do you bring?
- Motivation for the Program
- Hobbies and personal interests



Check-In



Solo work

On your own:
Draw your profile

10 min



In teams of 4

Briefly introduce yourself and your profile.
As a team find one common fact that connects you.

15 min

[illegible]

The YES Program



There are **25,000** new doctorates per year in Germany. Less than 5% develop into innovations.

On the other hand, at the end of their doctorate researchers are often faced with the question: **What now?**



The YES Program



Our Vision

Sciencepreneurship is a driving force for transfer in science and promotes research with a social impact.

Enthusiasm for starting a business and entrepreneurial spirit are part of research culture in Germany.



The YES Program



YES empowers researchers by providing them with new career perspectives and awakening innovation potential in academia.

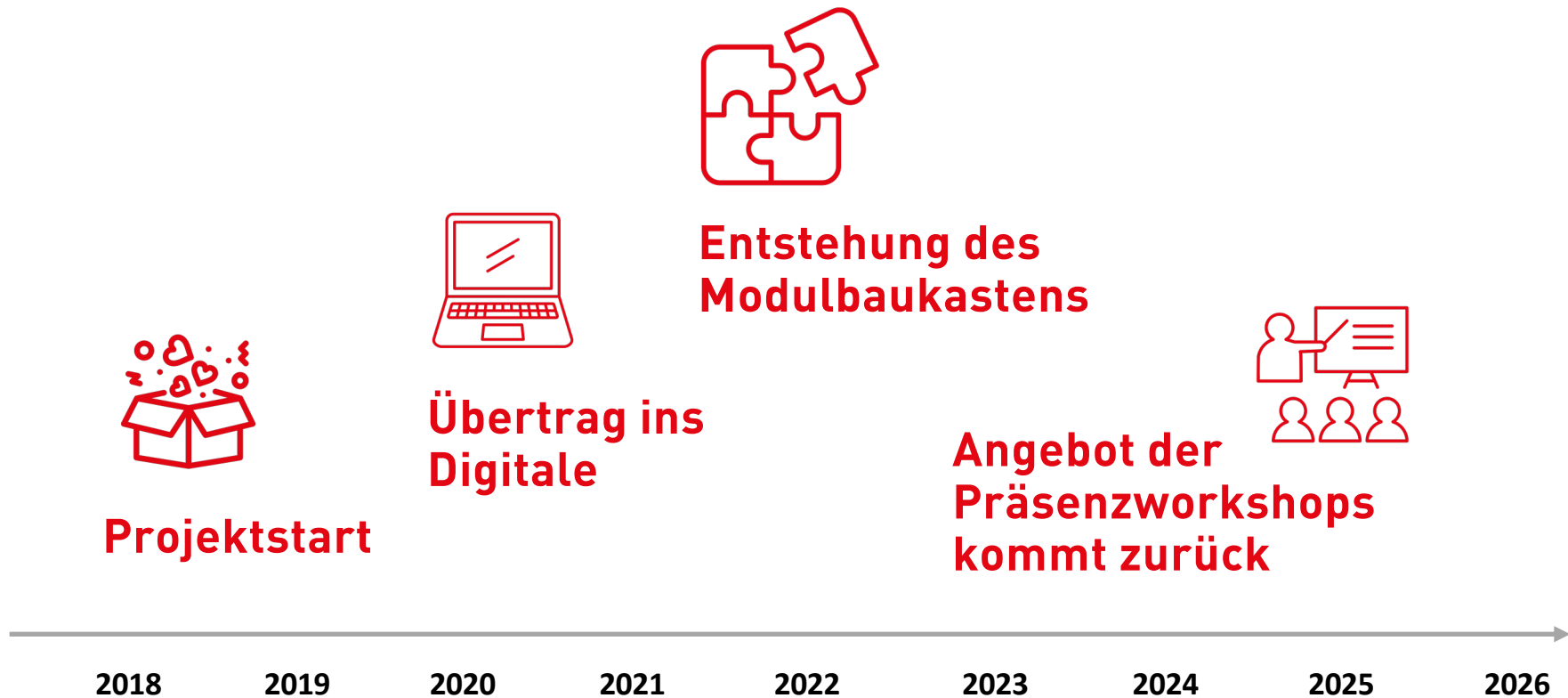


**Trainings &
Workshops**

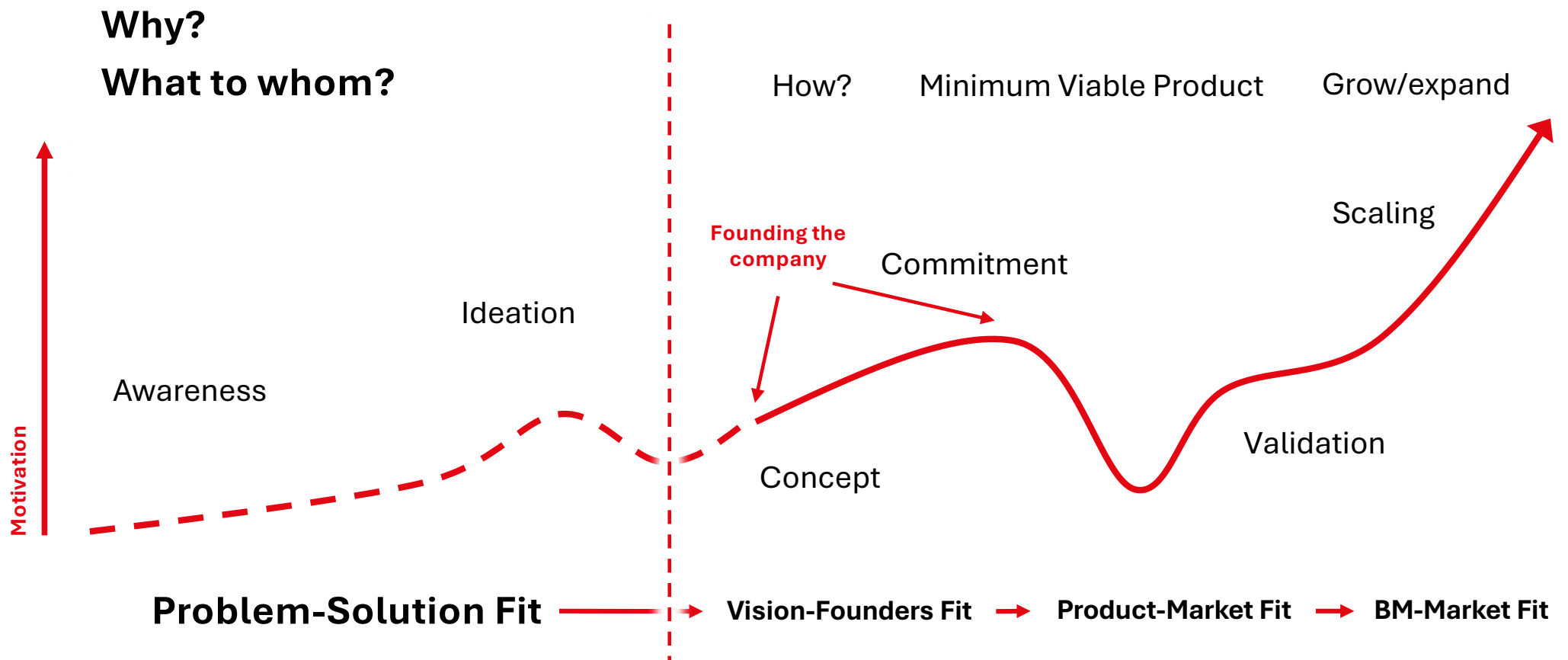


**Building a YES-certified
trainer network**

Entstehungsgeschichte



What our program covers



YES-Modules



CAREER & EMPOWERMENT



1. Your Entrepreneurial Career
2. Empathy for Innovators
3. Your Innovation Skills
4. Your Research Canvas
5. Social Entrepreneurship
6. Teamwork Essentials
7. Entrepreneurial Empowerment (Women*)
8. Discover your Resilience
9. Innovate for Impact
10. Navigating Conflict
11. **Coming soon:** Navigating Power Structures (Women*)

IDEAS & METHODS



1. Design Thinking Process 1-3
2. Ideation
3. Prototyping
4. Pitch Training
5. Future Thinking 1+2
6. Business Model Canvas 1-2
7. Impactful Storytelling

Our Goals



- To empower you as trainers to facilitate the YES-modules at your institution
- Establishing a YES-certified trainer network

Benefits



As certified YES-Trainers you can ...

- plan and facilitate your own workshop formats for PhDs, Postdocs and Masters based on the YES-Modules
- download and use all relevant workshop material (Powerpoint, Microtiming, Templates)
- network and exchange with other YES-Trainers
- secure and optimise the quality of your own workshop offers sustainably
- increase your ownership of what you offer to this target group

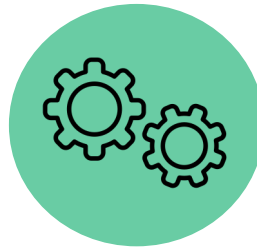
Train the Trainer: 3 levels

Personal



- Reflect your own role as a trainer
- Understand your personal motivation & goals
- Transfer of methods to individual context

Content & Methods



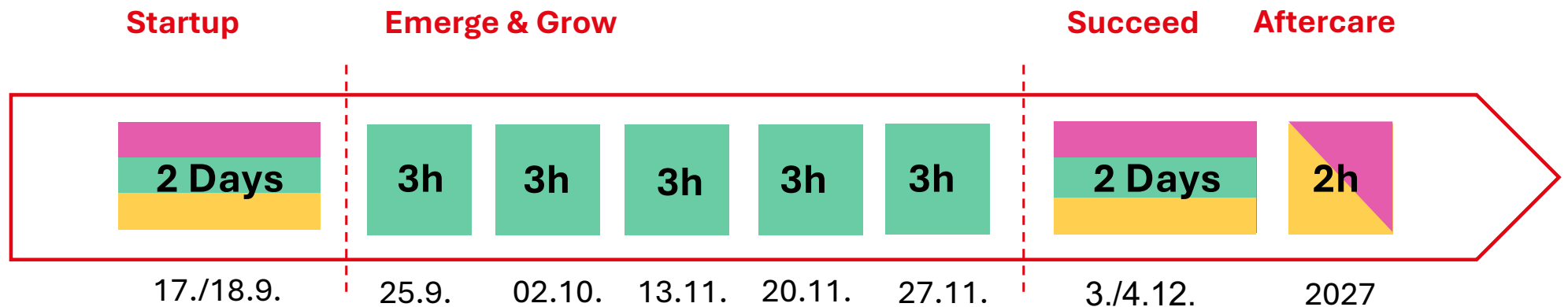
- Get to know YES-Modules
- Understand, try out and practice methods
- Focus: Design Thinking

Contextual



- Understand the target group „PhDs & Postdocs“
- Develop solutions that work for the target group

Our timeline



- Self reflection (personal)
- Methodological input & practice (methodological)
- Contextual challenge & exercises

Practical info



Workshop location & times

- Online meetings: Zoom (10am -1pm)
- Offline meetings: Berlin (9am-4/5pm)

Language

- Slides in English
- Conversations in German
- Facilitation in English/German

Certification requirements

- Signing the YES TtT terms & conditions
- Max. 8h of 47h can be missed
- Submission of online feedback questionnaires

Invitation to Job Shadowing!



EVENTS

SETTING ▾

PARTNERS ▾

Search

AUG

26
MON

Your Research Canvas

Online Workshop

26.08.2024 • 10 – 12.45 PM

Hochschule Hannover
Leibniz Universität Hannover
Medizinische Hochschule Hannover
Universität Vechta
Universität Osnabrück
Hochschule Osnabrück

Have you ever thought about the application potential of your own research? If not, this workshop is for you. You will reflect about user groups and the network of stakeholders that surround you and your research. Why could they



EVENTS

CURRICULUM >

ABOUT >

ALUMNI >

PARTNERS >

TRAINERS

CONTACT

FAQS

Different roles



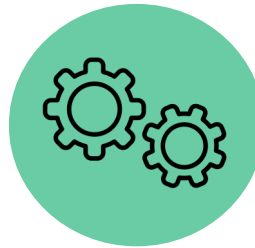
Train the Trainer: 3 levels

Personal



- Reflect your own role as a trainer
- Understand your personal motivation & goals when becoming a trainer
- Transfer of methods to individual context

Content & Methods



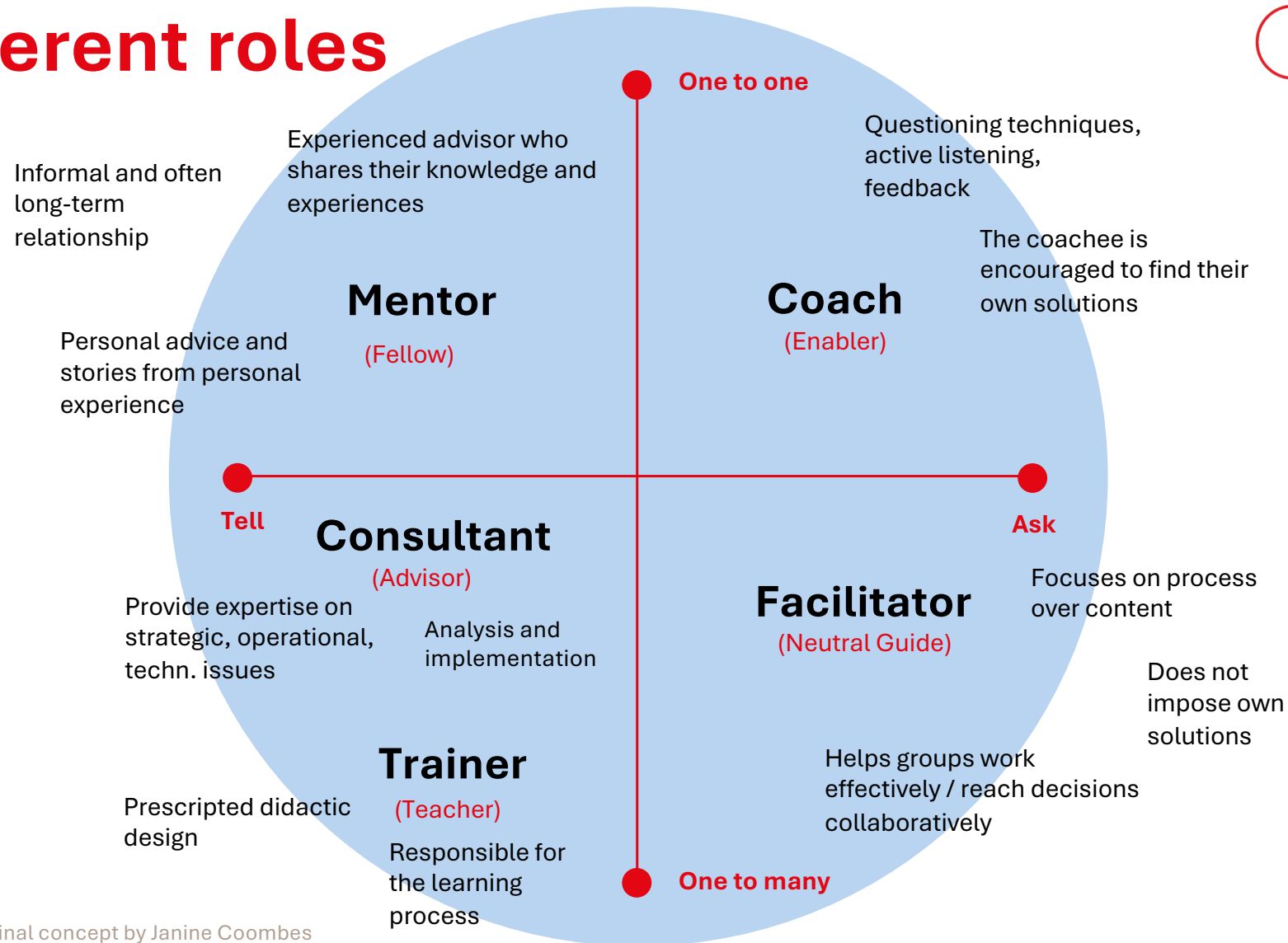
- Get to know YES-Modules
- Understand, try out and practice methods
- Focus: Design Thinking

Contextual

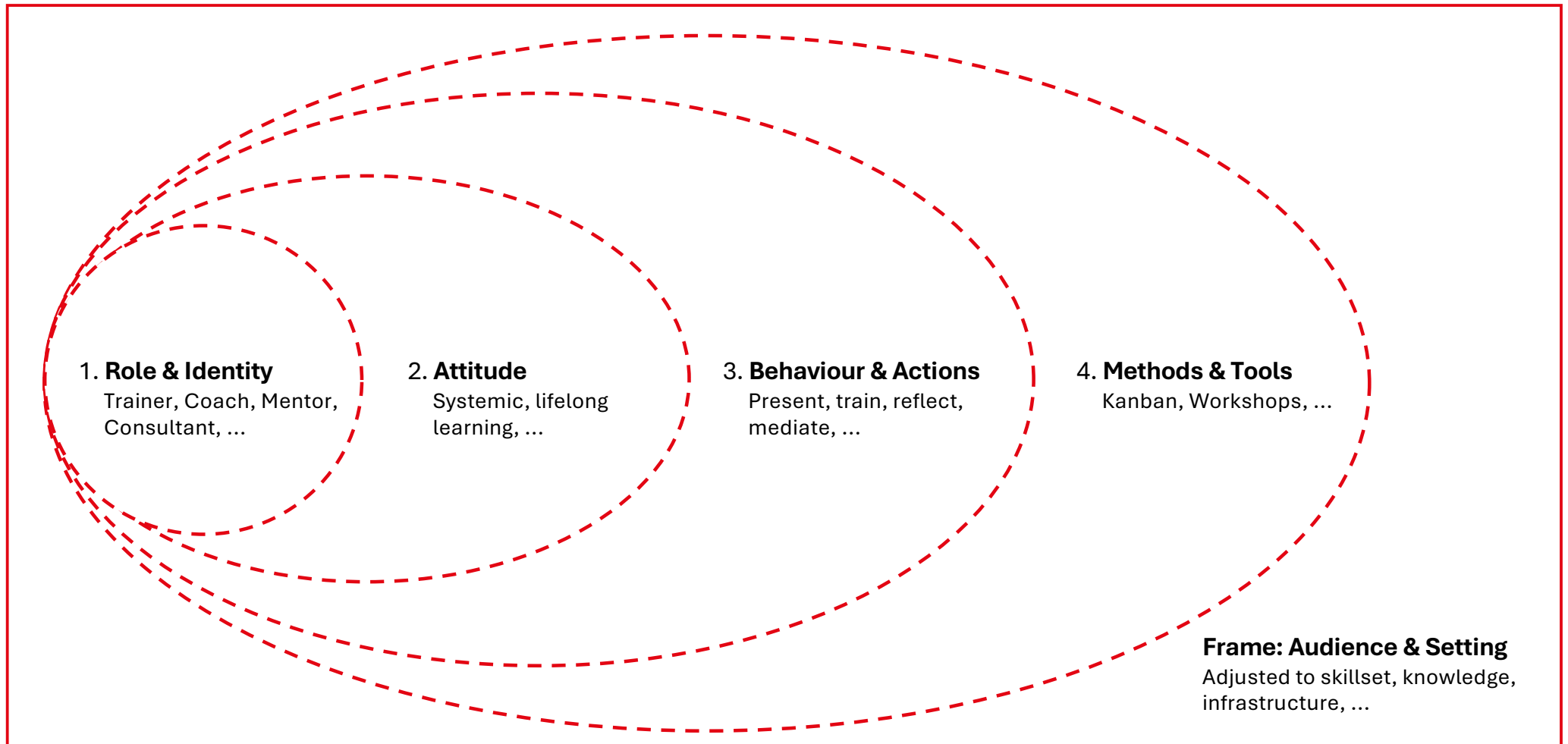


- Understand the target group „PhDs & Postdocs“
- Develop solutions that work for the target group

Different roles



Different layers of each role



Self-reflection



Everyone for themselves: think about and write down

- Which role(s) do you take on in your current job/position?
- Consider the different layers: What are you very conscious of? Which level have you not thought much about yet?
- Which layer would you like to develop throughout this training? What are your expectations?



10 minutes

Self reflection: your role(s)



SOLOWORK

SELF REFLECTION: YOUR ROLE(S)

Reflect on the questions below individually and note your answers in the template.
10 min

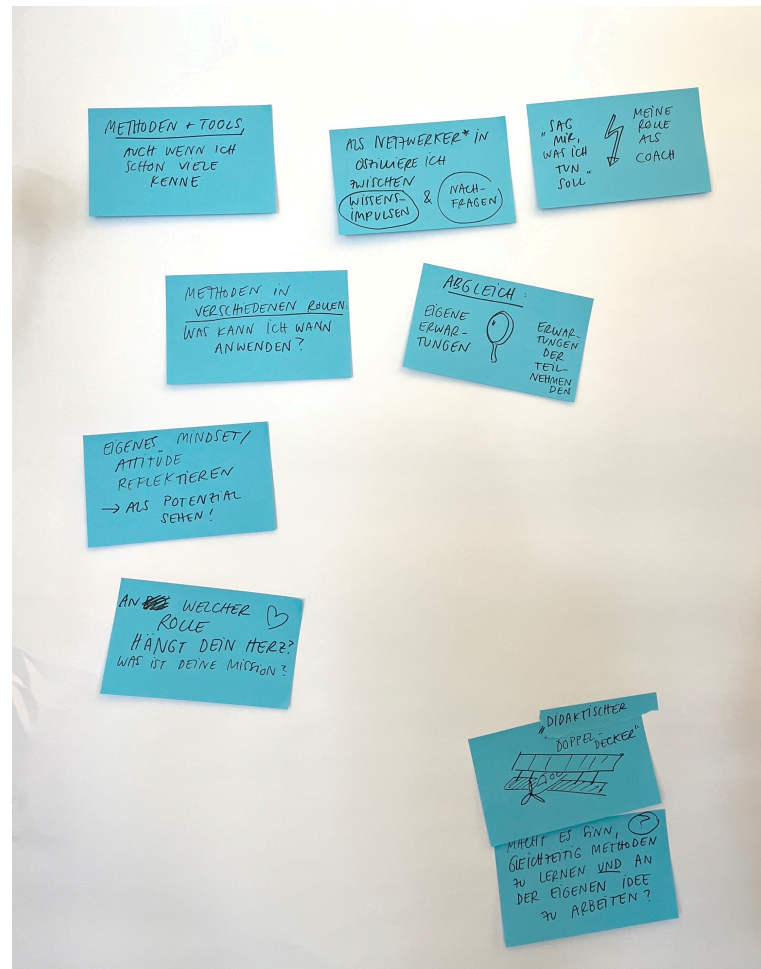
YOUNG ENTREPRENEURS
IN SCIENCE

WHICH ROLE(S) DO YOU TAKE ON IN YOUR CURRENT JOB/POSITION?

CONSIDER THE DIFFERENT LAYERS. WHAT ARE YOU VERY CONSCIOUS OF? WHICH LEVEL HAVE YOU NOT THOUGHT MUCH ABOUT YET?

WHICH LAYER WOULD YOU LIKE TO DEVELOP THROUGHOUT THIS TRAINING?

Layers we would like to develop



Our Perspective: Entrepreneurial thinking & acting

Agenda

DONNERSTAG, 17.9.

HERZLICH WILLKOMMEN!

9⁰⁰ ANKOMMEN, GEMEINSAMER EINSTIEG

10¹⁵ KAFFEPAUSE 

10³⁰ SELBSTREFLEXION: ROLLEN + EBENEN



11¹⁰ MINI - PAUSE

11²⁰ INTRO ENTREPRENEURSHIP

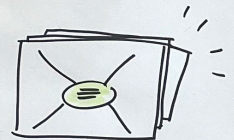
11⁴⁵ WORLD CAFÉ: PHD-PERSPEKTIVE



12³⁵ INTRO DESIGN THINKING

12⁵⁰ MITTAGSPAUSE (1 STUNDE)

13⁵⁰ UNDERSTAND-PHASE: MINDMAP



14³⁵ OBSERVE-PHASE: INTERVIEWS



15⁵⁵ KAFFEPAUSE

The entrepreneurial journey



unrealistic



rather realistic

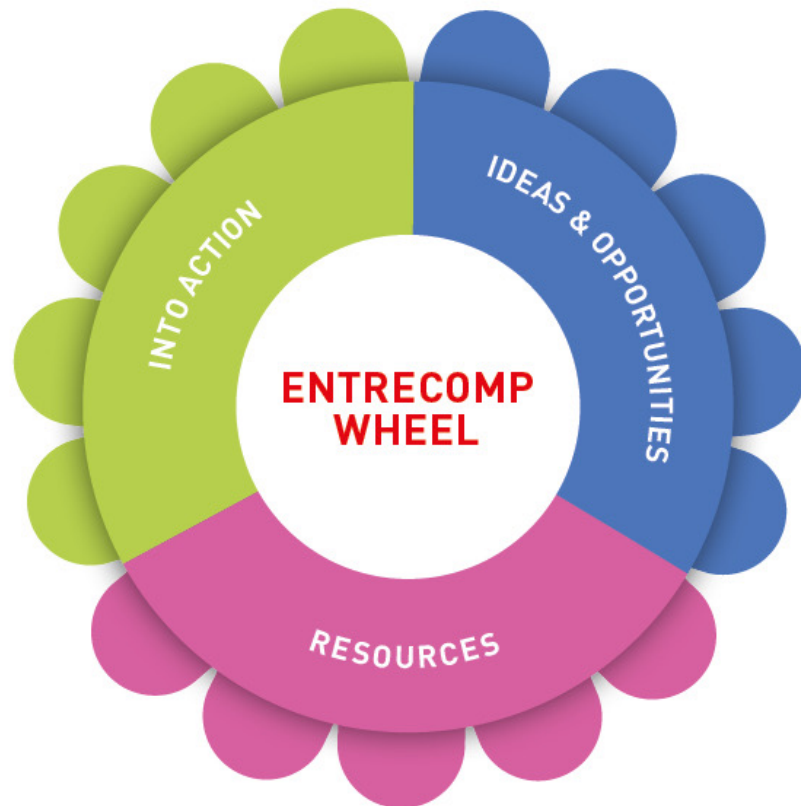
What is Entrepreneurship?



Skill in starting new businesses, especially when this involves seeing new opportunities.

Cambridge Dictionary

Skillset: EntreComp Wheel



- Tool to reflect on your personal development of entrepreneurial skills
- Developed by the Joint Research Centre (JRC) of the European Commission
- Made up of three competence areas: Ideas & Opportunities, Resources, Into Action
- Each area includes 5 competences

YES-Modules



CAREER & EMPOWERMENT



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2. Empathy for Innovators
3. **Your Innovation Skills**
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Promoting entrepreneurship



Why Promote Entrepreneurship?

(Umfrage Mentimeter)



“Karriereweg Gründung nicht Teil der Doktorandenausbildung.”

“Neue Karriereoption.”

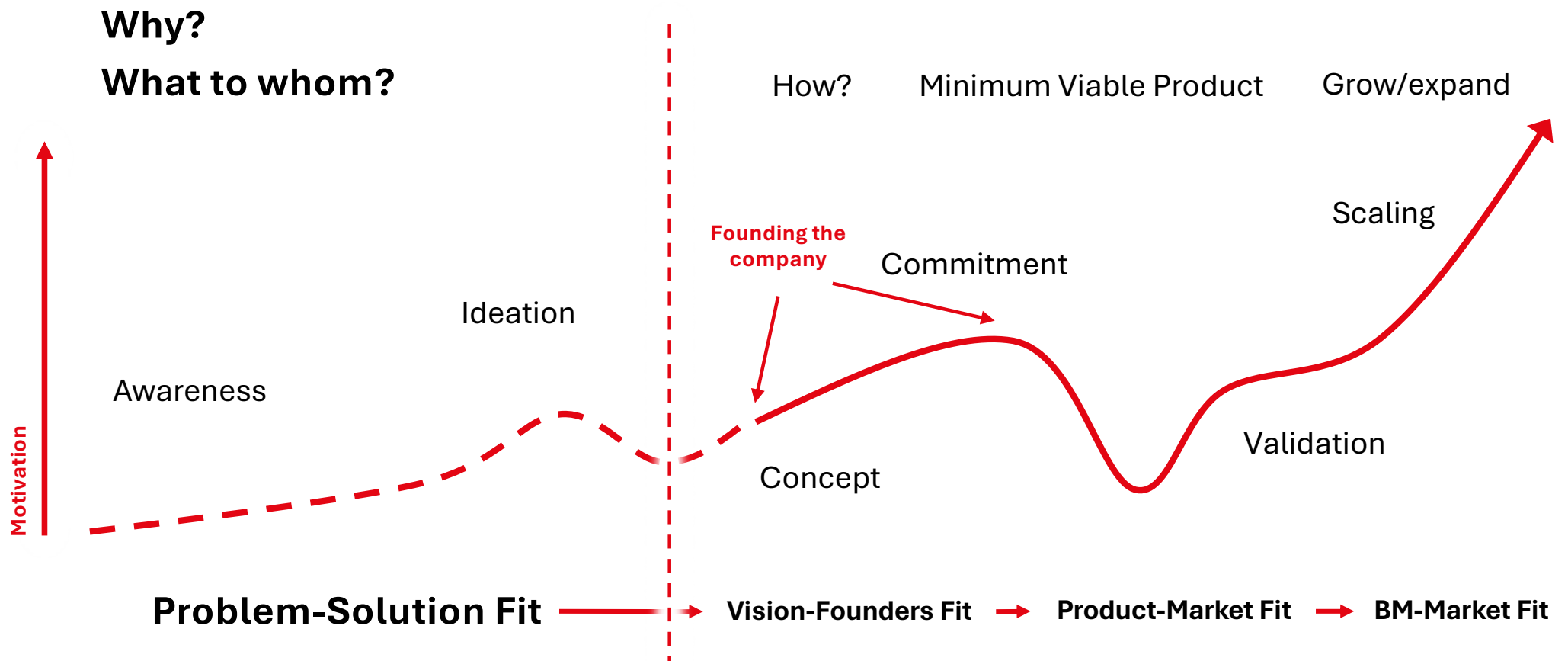
“Karrierewege außerhalb der Universität.”

“Quelle für Innovation.”

“Hohes Potenzial für Innovationstransfer in die Gesellschaft.”

“Die Karriereoption ist nicht bekannt.”

What our program covers



Promoting Entrepreneurship



We think...

Entrepreneurship is a **buzzword**

Scientists often have a very specific and **limited view** on their career possibilities

Entrepreneurial thinking and acting is a skill and mindset **that can be learned**

There are **overlaps & differences** in the mindset and skillset of scientists & entrepreneurs

So...



How can we clarify what it really means and offers?



How can we support PhDs & PostDocs to put their research & career into perspective?



How can we stimulate & teach this mindset and skillset?



How can we make PhDs & PostDocs aware of these overlaps & differences?

Promoting Entrepreneurship to..?



Master's Students, PhDs & PostDocs are scientists who...

...have (mostly) completed their studies & continue their research on a specific subject

...may have obtained or are obtaining a doctorate

...are working at a university or research institute on a temporary basis (up to 6 years)

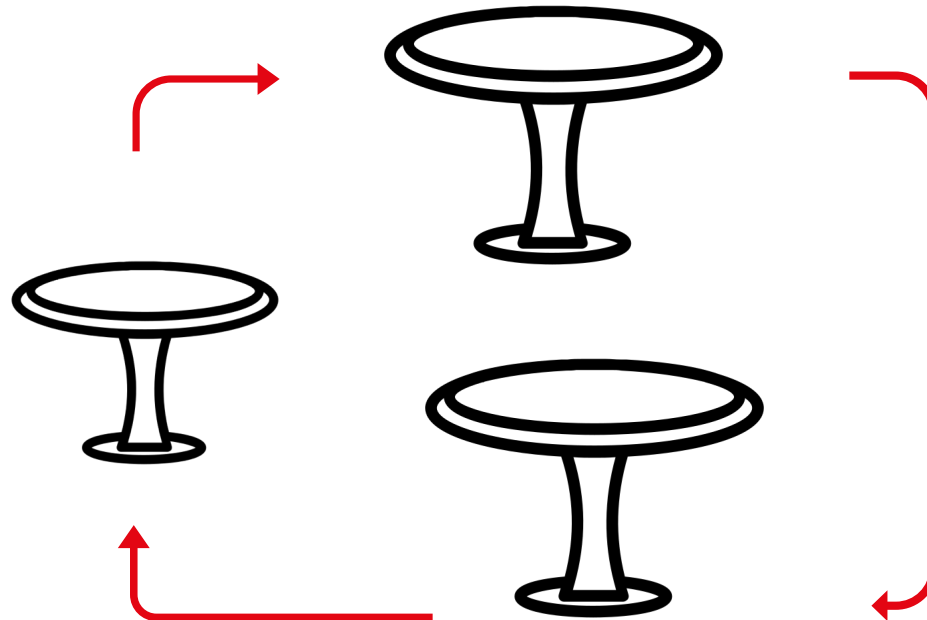
World Café



What discourages PhDs to consider an entrepreneurial career?

What motivates PhDs to become entrepreneurs?

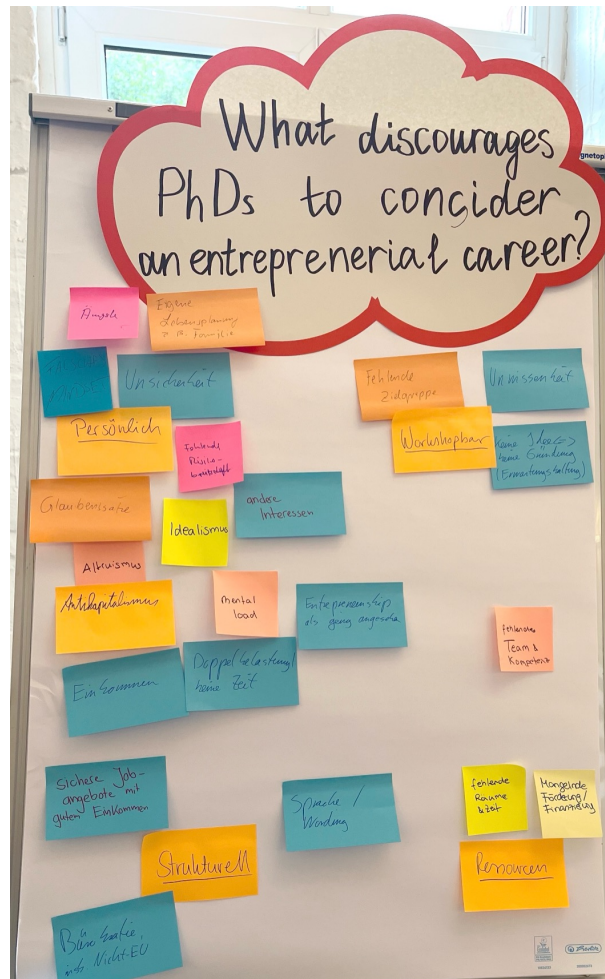
What do you already do or offer at your institution to promote an 'entrepreneurial mindset' for PhDs?



Results World Café



Results World Café



Getting to Know the Modules



YES-Modules



CAREER & EMPOWERMENT



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IDEAS & METHODS



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Innovation & Design Thinking

CHANGE

**Where ideas come
from ...**



Where ideas come from!



Design Thinking



What is Design Thinking?



- Design Thinking ≠ Design
- Is a holistic creativity approach
- Puts the human and their needs in center
- Works as a catalyst for innovation culture
- Is based on three components: process, team and space

Design Thinking pioneer



DAVID KELLY

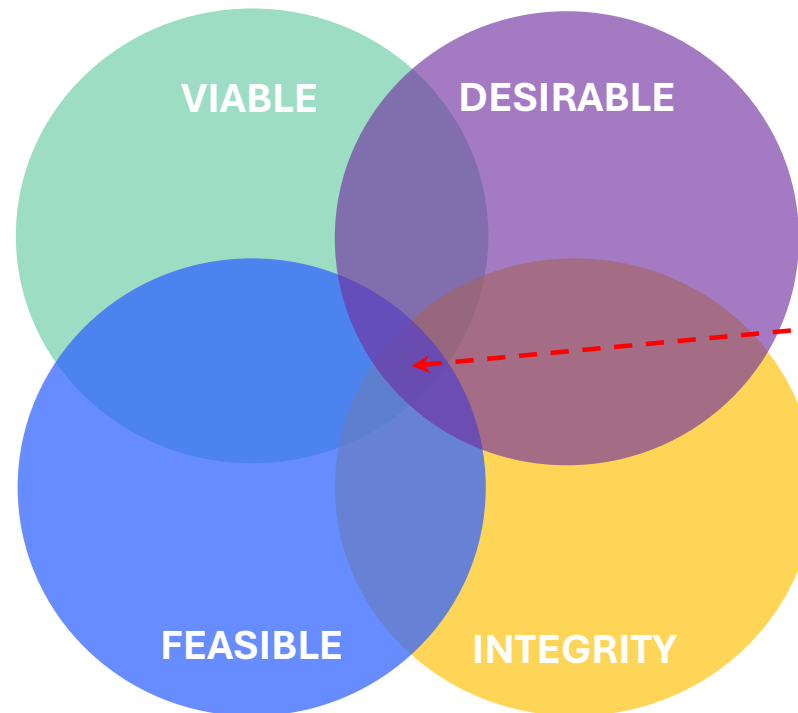
- Pioneer and name giver of the innovation approach Design Thinking
- Engineer, 2nd degree in product design
- Founder of the design studio IDEO
- Lecturer at Stanford University

Why does innovation need purpose?



What's the
business case?

Who wants it
and why?



INNOVATION

Can you make it
and deliver it?

What impact can you
create with your purpose?

Design Thinking needs space ...

YOUNG
ENTREPRENEURS
IN SCIENCE



Design Thinking guidelines

Timeboxing



Design Thinking guidelines

Build on the
ideas of others



Design Thinking guidelines

Defer
judgement



Design Thinking guidelines

Fail early
and often



Design Thinking needs a team...

YOUNG
ENTREPRENEURS
IN SCIENCE

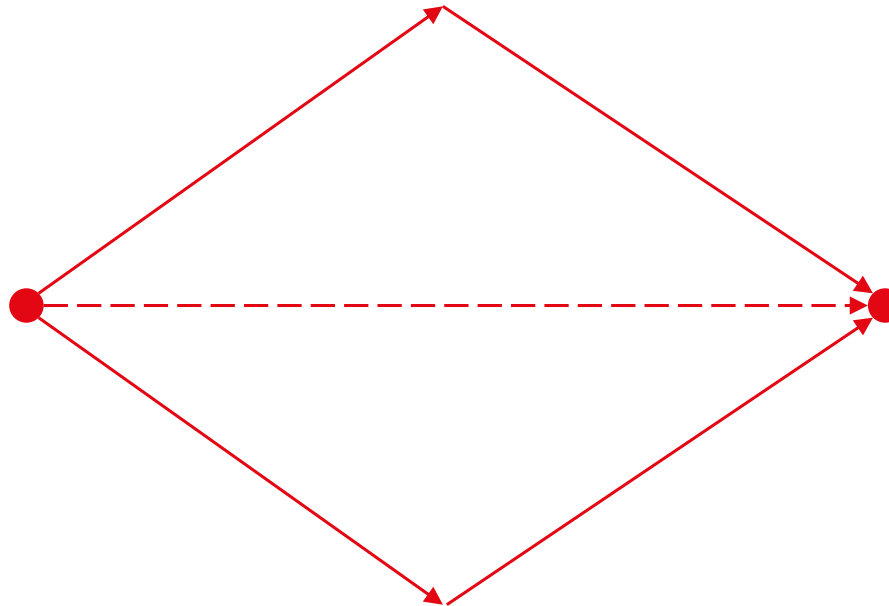


Design Thinking is a process ...

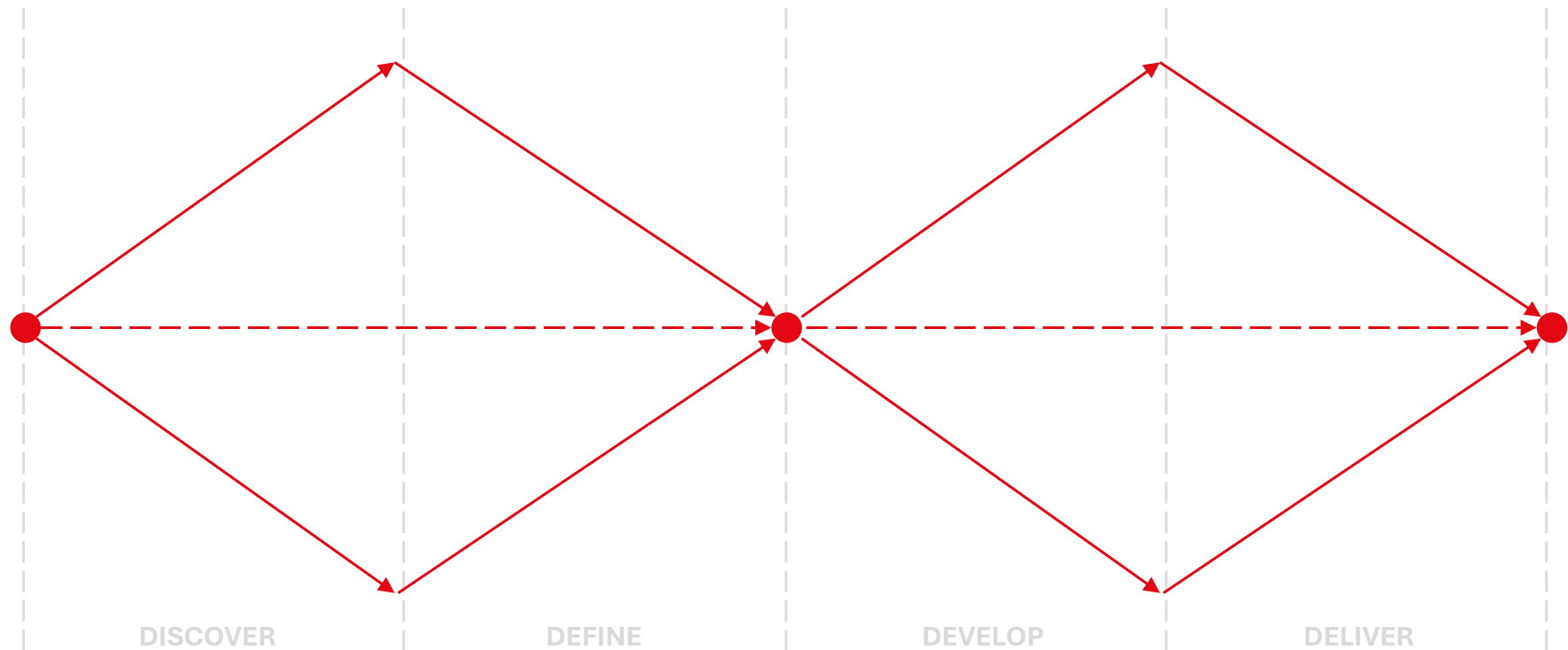
 YOUNG
ENTREPRENEURS
IN SCIENCE



Divergent/convergent

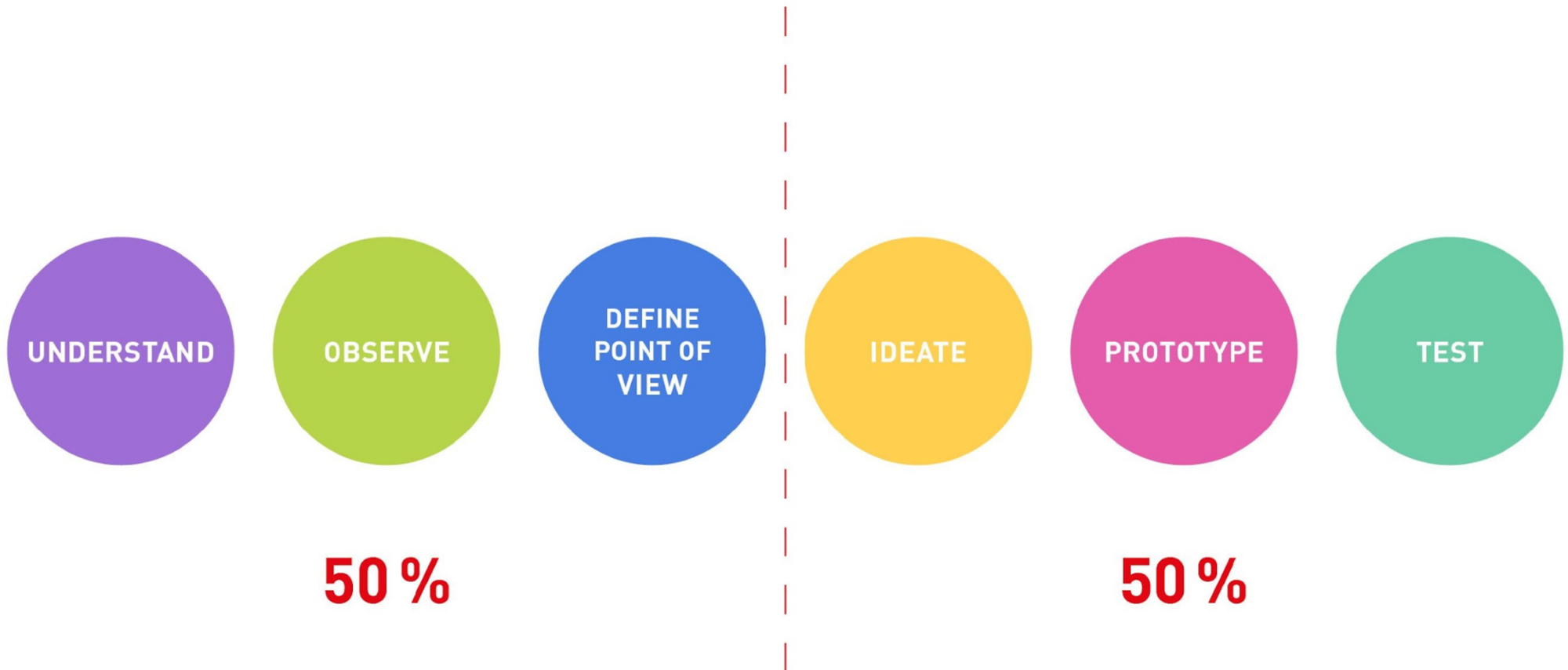


Double diamond model

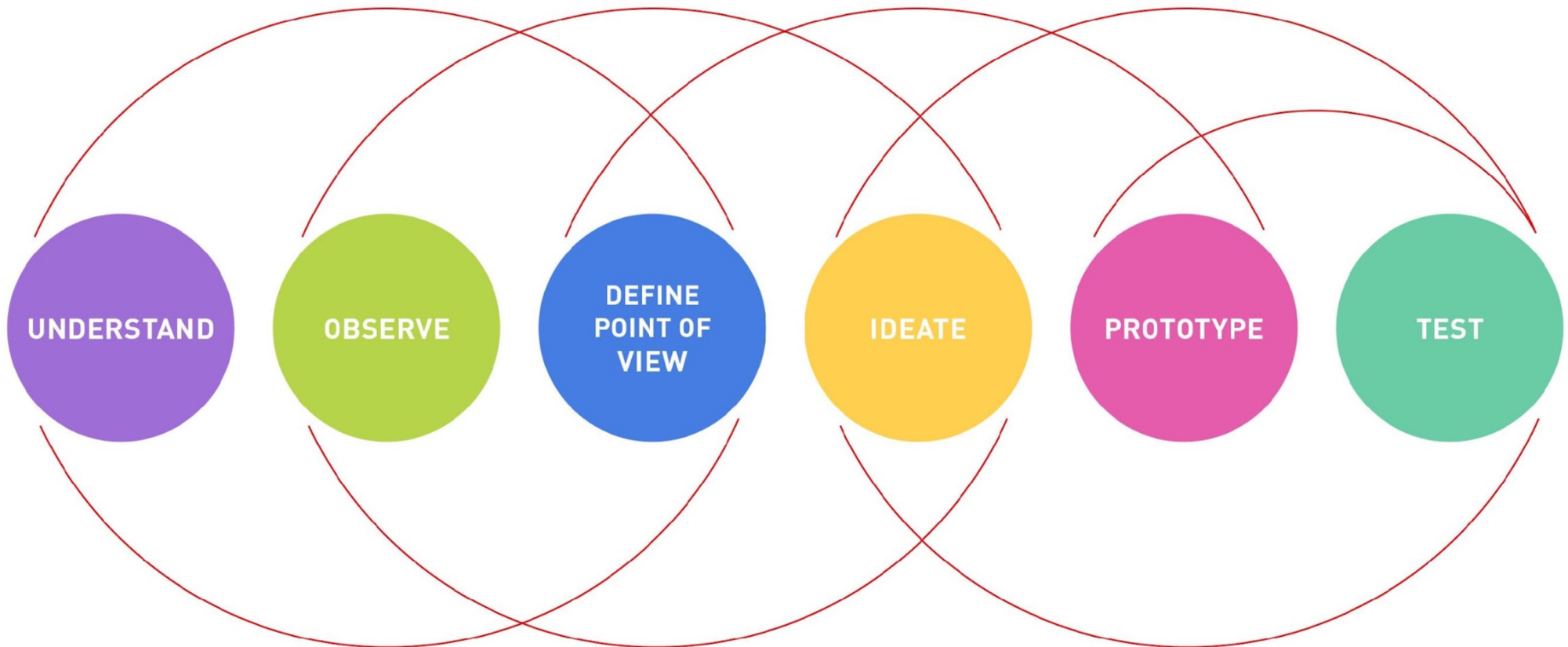


British Design Council. "Eleven lessons. A study of the design process".available at www.designcouncil.org.uk. Retrieved 9 November 2016.

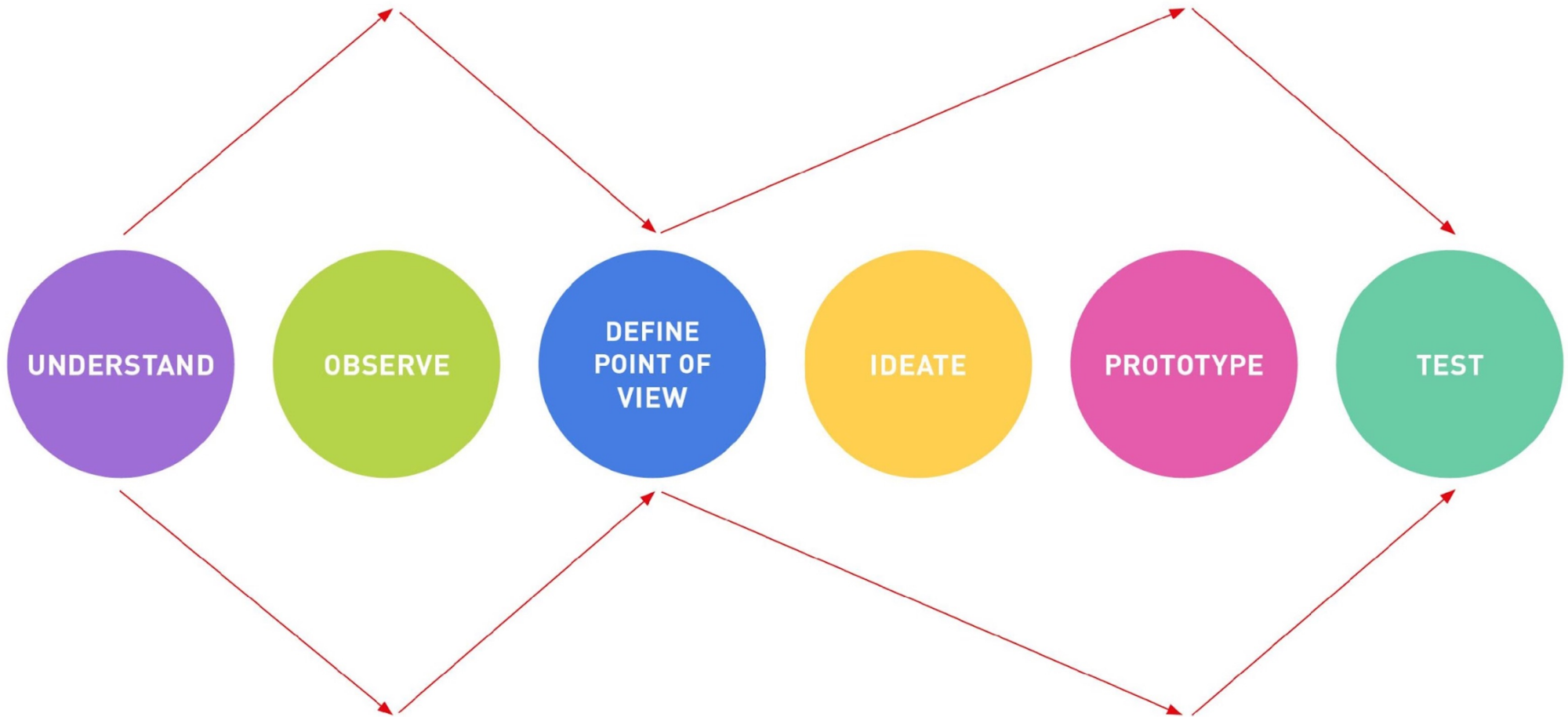
Design Thinking Process



Design Thinking Process



Design Thinking Process



LUNCH BREAK



LET'S DANCE!



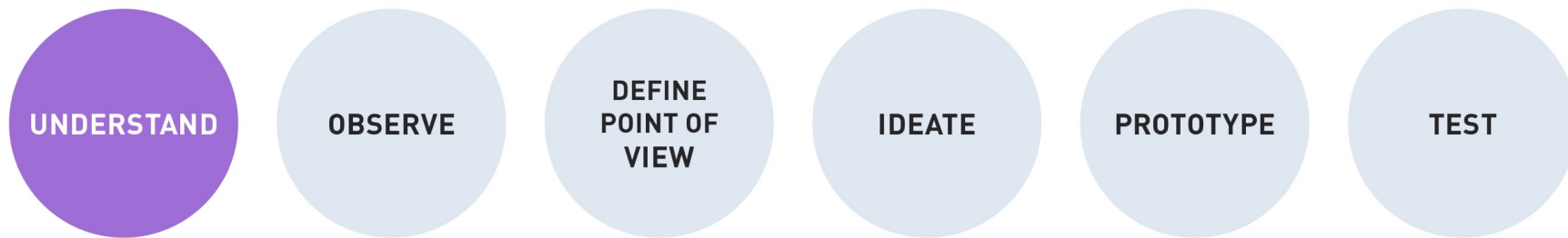
CHALLENGE

**Design a way to help PhDs
recognize opportunities
for turning their expertise
into impact.**

Understand

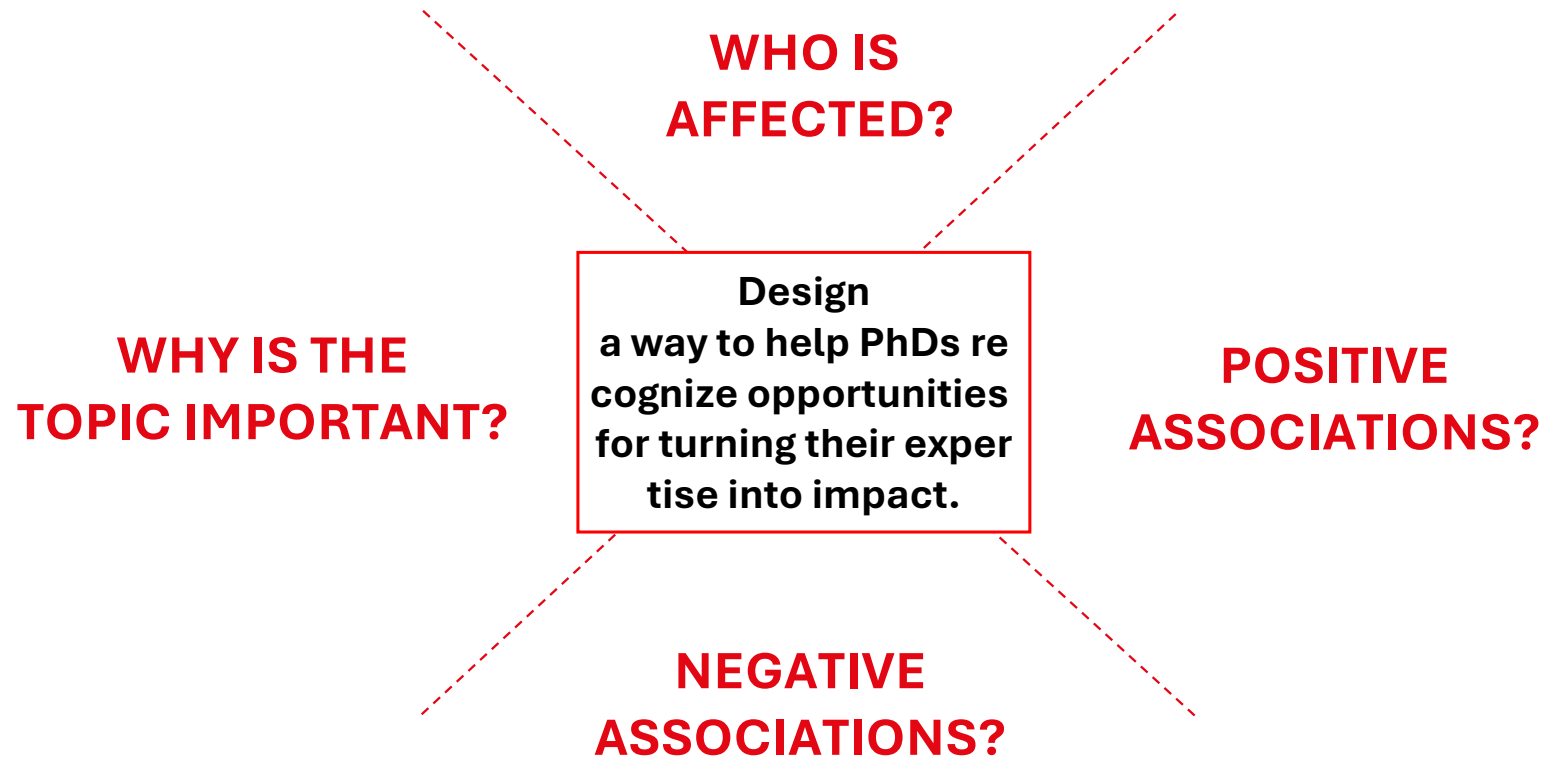


Understand

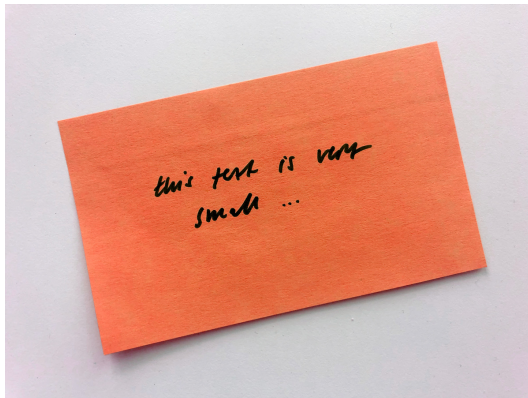


Synchronise team
Dive into the topic
Share ideas and associations

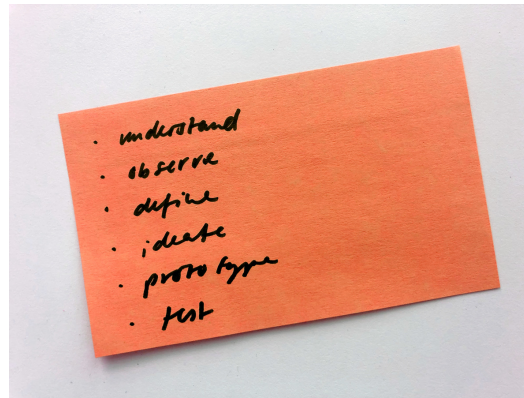
Mindmap



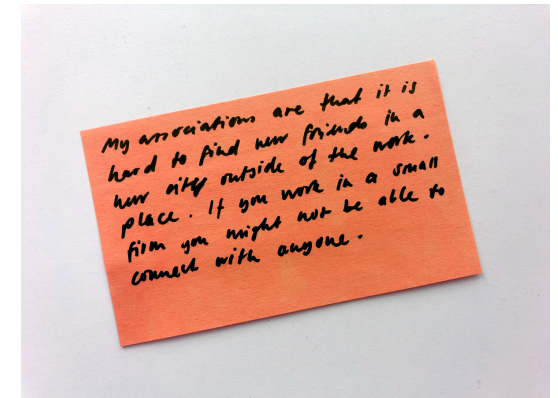
Sticky notes: Don'ts



DON'T: VERY SMALL TEXT



DON'T: BULLET POINTS



DON'T: TOO MUCH TEXT

Sticky notes: Dos



DO: USE THICK PENS



DO: 1 POST-IT = 1 IDEA



DO: BE VISUAL

Understanding the Challenge



How it works ...



4 Teams



Teambuilding

Create your team space

Select a team name

Select a time keeper



5 minutes

How it works ...



**Think about and answer these questions individually.
Write your thoughts on sticky notes.**

- Who is affected?
- Positive/negative associations?
- Why is the topic important?



5 minutes

How it works ...

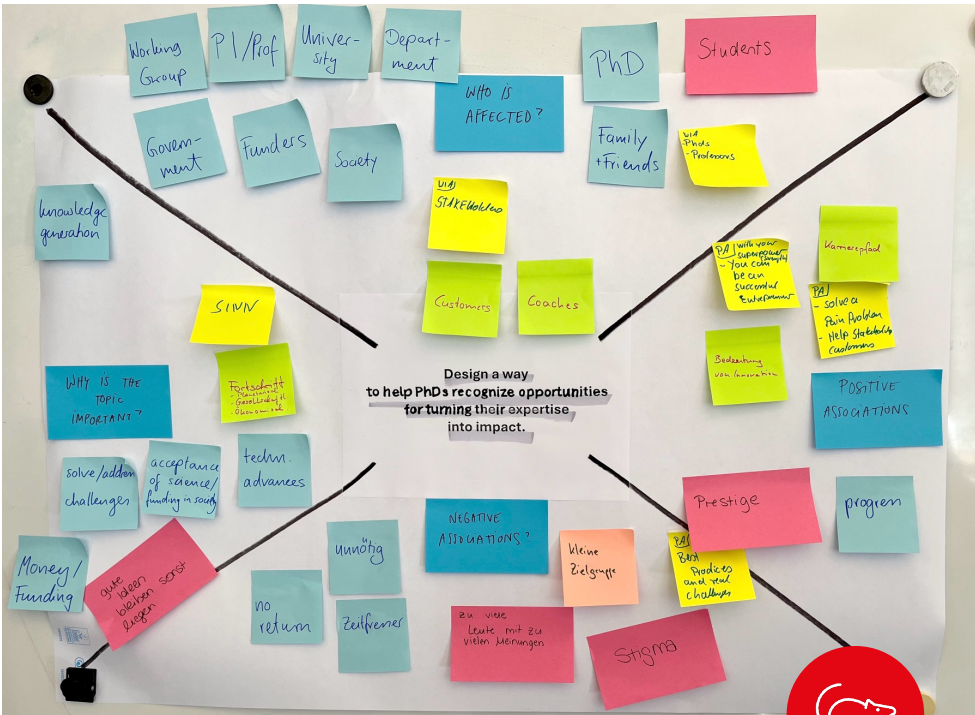


Share your notes with your group and put your sticky notes on the wall according to the mindmap.



10 minutes

RESULTS MINDMAP



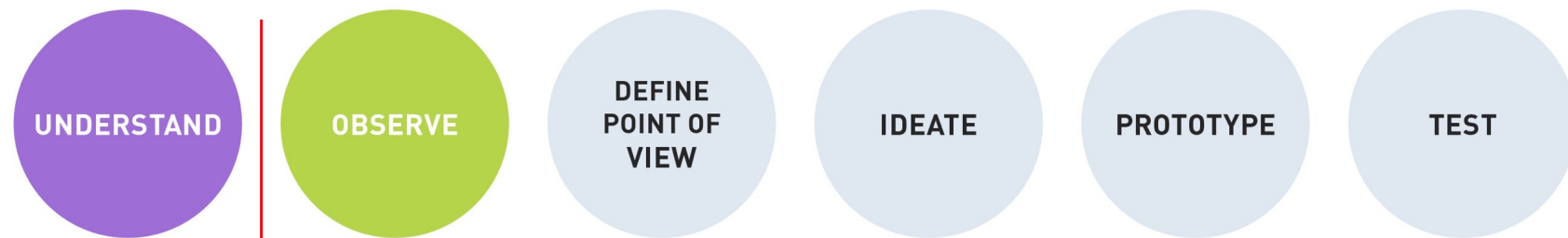
RESULTS MINDMAP



OBSERVE



Observe



Change perspectives & Understand user groups
Build Empathy: Develop deeper understanding
Question your own preconceptions

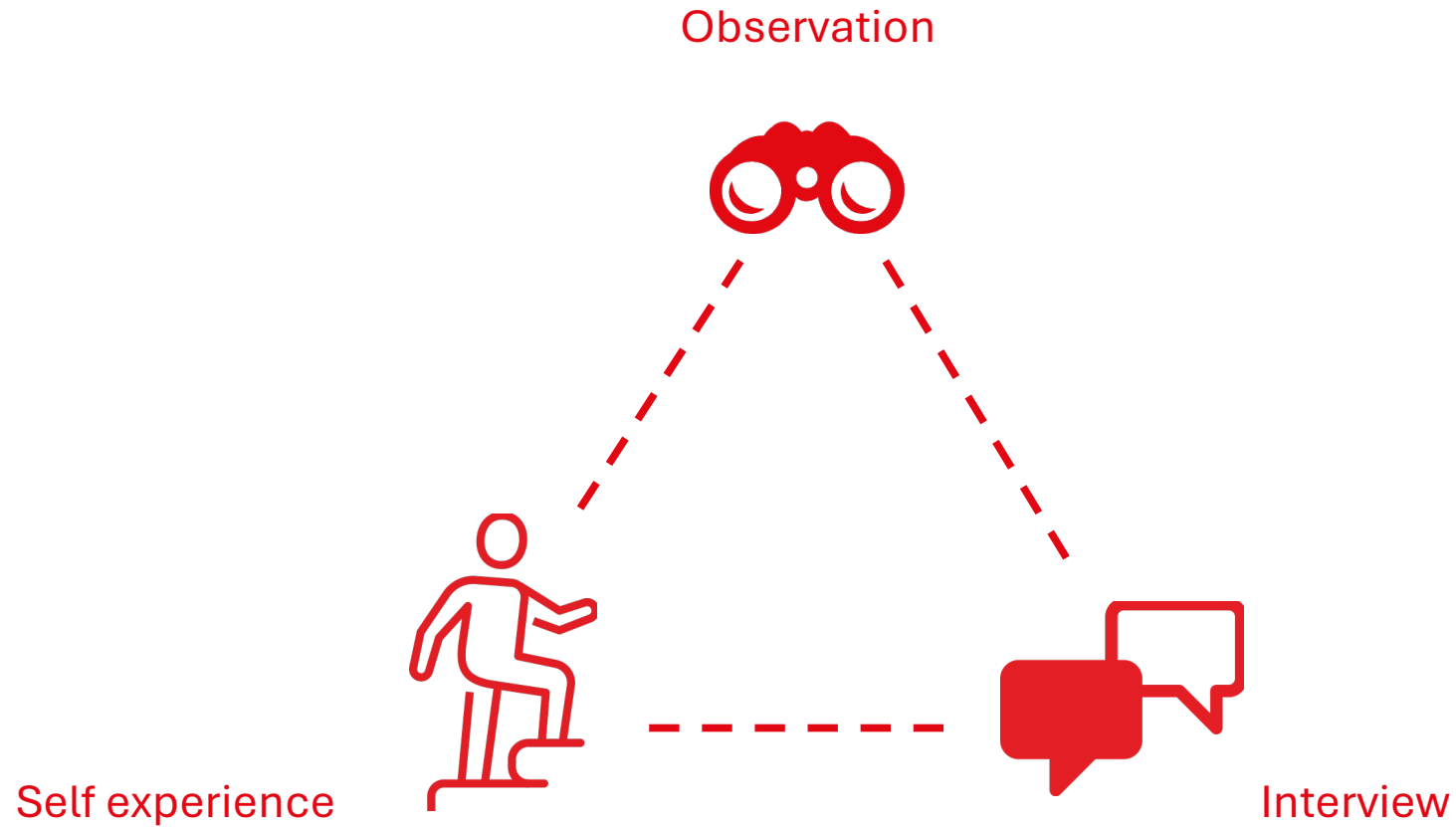
Who are these PHDs..?



...and what are their needs?

- in different research fields
- at different stages
- with different languages & cultures
- with different possibilities

Empathy



EMPATHY

WHAT DO YOU SEE?

Foto by Andrea Piacquadio via pexels.com

EMPATHY

**WHAT DO YOU
INTERPRET?**

Foto by Andrea Piacquadio via pexels.com

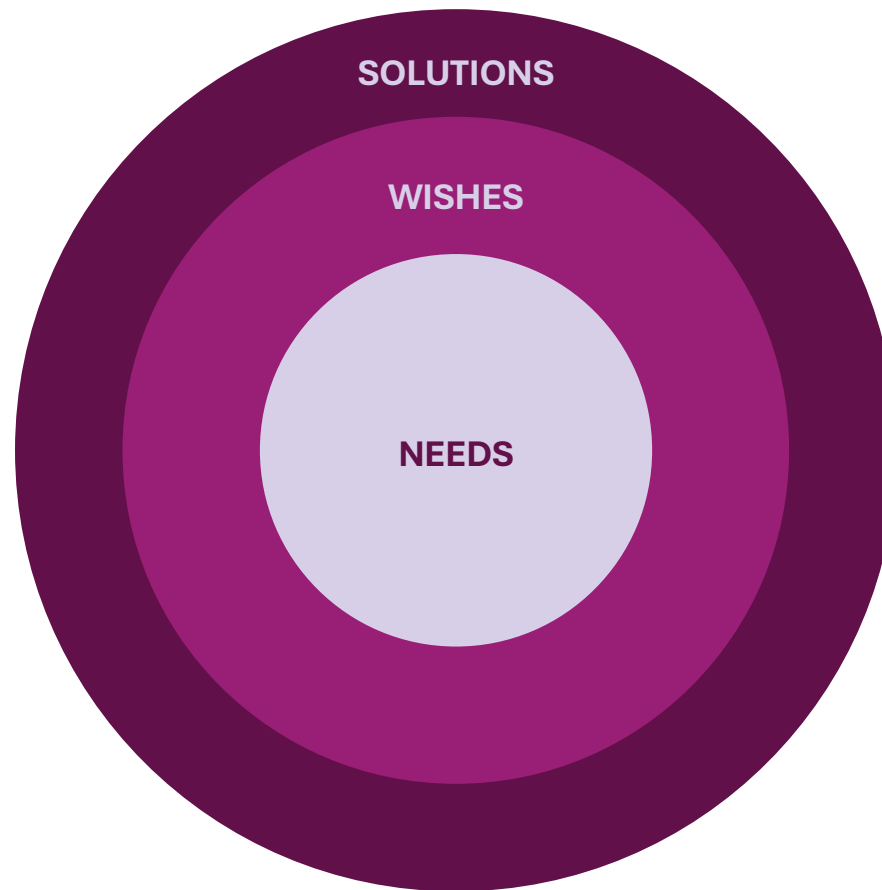


EMPATHY

**WHICH QUESTION
WOULD YOU LIKE
TO ASK NOW?**

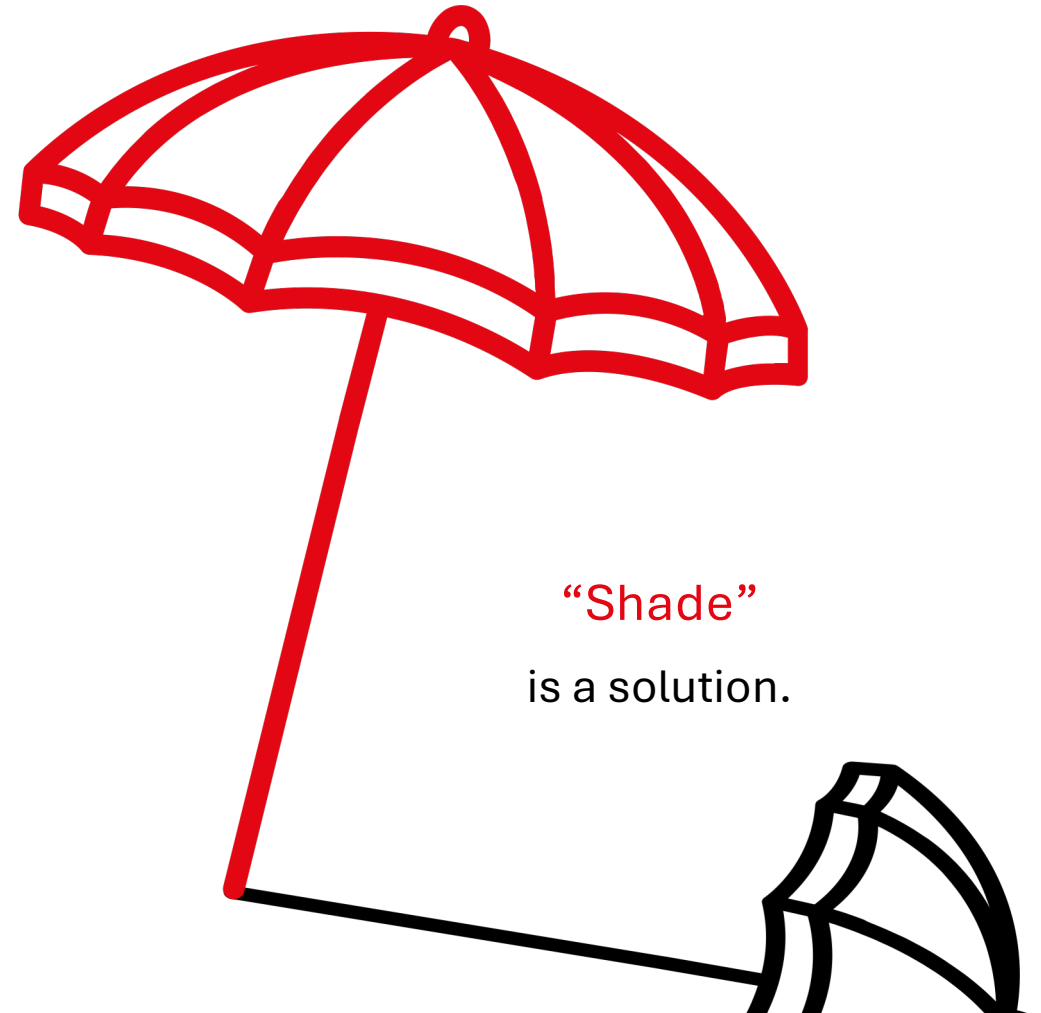
Foto by Andrea Piacquadio via pexels.com

The “need” onion



What is the need?

“Protect myself
against the sun”
is a need.



Empathy trap: Selective listening

We listen through our own filters:

- We hear what fits familiar patterns
- We translate challenges into solutions
- We edit out the system behind the individual



Empathy trap: Selective listening



In order to find new insights, ...

- look for moments of friction: When are your preconceptions being challenged?
- withstand open questions and unsolved problems
- zoom out – watch out for the context
- separate data from interpretation!



Quotes
Concrete situations
Decision moments

Interview guidelines

Introduce yourself



80% Listening
20% Speaking



Conversation
at eye level

Ask one short and
open question



Dig for stories and
emotions



Why?
Why?
Why?

INTERVIEW TEMPLATE



KICK OFF YOUR INTERVIEW

1. Introduce yourself.
2. Build trust: Share something about yourself.
3. Ask for specific experiences:
Can you tell me about the first time you ...?
What was your best/worst/craziest/most memorable experience with ...?
Could you tell me a story about a time when you ...?

DIG DEEPER

1. Explore emotions:
Why do you say that? Tell me more.
How did you feel at that moment?
Could you tell me why is ... important to you?

--	--

How it works ...



Find interview questions based on your team synchronisation:

- What do you want to learn from your „users“?
- 3-4 questions



10 minutes

Teamwork



Conduct the interview:

- Introduce yourself and the topic
- Ask one **open** and **specific** question at a time
- Search for stories and **emotions**
- **Write down quotes**



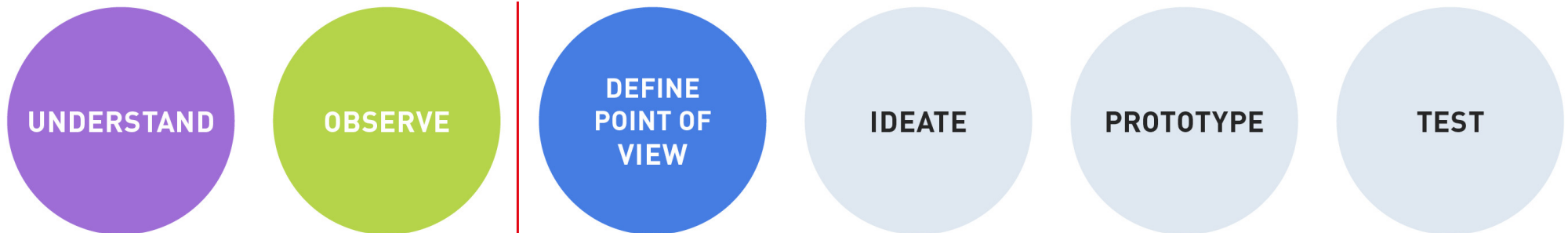
2 x 15 minutes

DEFINE

**YOUNG
ENTREPRENEURS
IN SCIENCE**



Define



Structure and synthesise user insights and findings

Search for strong problems and emotions

Don't find solutions yet, but focus on user need

Evaluate your interview insights ...



**Filter the most
interesting findings out of your
interview notes**



**Look for
strong emotions.
Needs? Pain Points?**



**What has been
surprising to learn?**

Share your Interview Results



How it works ...



Step 1: In pairs (5 min)

- Select the 3–5 most important findings (**quotes?**) and **write them down** on large sticky notes!

Step 2: Together (15 min)

- Collect them on your board.
- What is most interesting for you?



20 minutes

INTERVIEW INSIGHTS

Kompetenzen

„Ich will nochmal ein bisschen was run“

Flexibilität
(Familienplanung/
Lebenssituation)

Unabhängigkeit

Suchtbarkeit /
Anerkennung
(Unterstützung durch
Doktorvater)

Praxiserfahrung

- excitement
- power
- opportunity
- "economically worth it"
- Entrepreneurship ist These

no opportunities
but Long Nacht
der Wissenschaft
-DTouchpoints

How does my research
affect real life?

++
Supervisor
„Was willst du machen?“

Problem:
knappe Ressourcen ~~++~~ für
werbung

No one counts me
at Charité 'cause I'm
not doing clinical work,
I'm doing Forschung

Support
Geld Kommunikation
Netzwerk

[illegible]

Stabiles Einkommen

"Druck" - von der Klippe springen

Lebensumstände

- fehlende Zeit
- Team need

Verlust von Community

Keine Freiheit

Perspektivlosigkeit

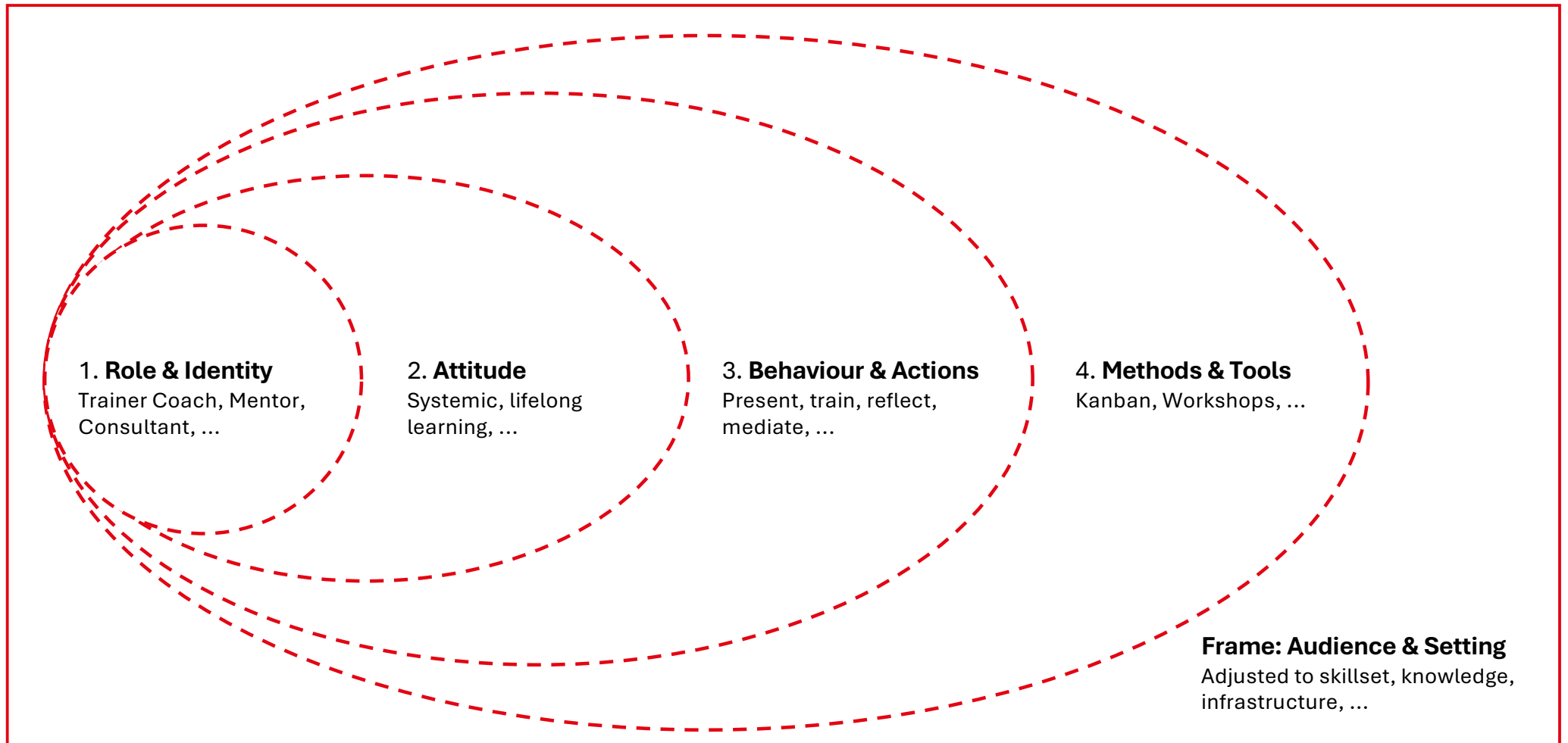
Handwritten notes on sticky notes:

- Stabiles Einkommen
- "Druck" - von der Klippe springen
- Lebensumstände
 - fehlende Zeit
 - Team need
- Verlust von Community
- Keine Freiheit
- Perspektivlosigkeit

Let's look at the Trainers' Perspective



What comes to your mind thinking back?



Startup workshop - overview



Day 1

MORNING Getting started

Check-in, Introduction, Your Role & Goal

Entrepreneurship for PhDs & Postdocs

Introduction to Design Thinking

AFTERNOON Understanding the User

Introduction to Design Thinking Challenge

User Research - Interviews

Unpacking Interview Results

Day 2

MORNING Defining the User

Team Check-in

Persona & HMW

Ideation & Idea Selection

AFTERNOON Developing Solutions

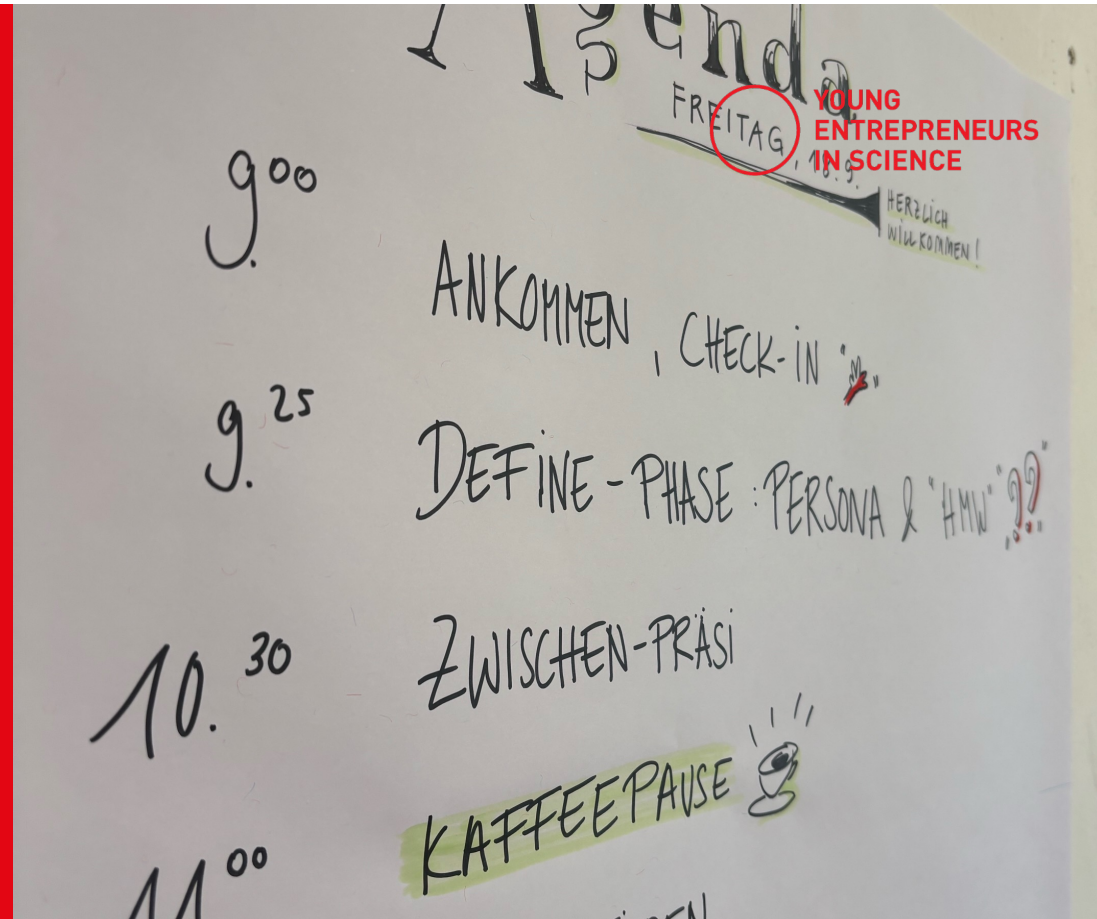
Prototyping

Self-Reflection & Transfer

Wrap-up & Next Steps

TRAIN-THE-TRAINER

DAY 2



An initiative of:



FALLING
WALLS
FOUNDATION

With funding from the:



Federal Ministry
of Research, Technology
and Space

THIS PROGRAMME IS SUPPORTED BY:



SARTORIUS

Today's agenda



Morning

- Check-in

Getting Started

- Teamwork: Persona & HMW-Frage
- Brainstorming Methods
- Teamwork: Ideation & Idea Selection

Afternoon

Understanding the User

- Teamwork: Prototyping
- Prototype Presentation
- Self-Reflection & Transfer
- Wrap-up, Next Steps & Feedback

- Check out

Check-in



Associative check-in



Pick one card...

- ... that resonates with how you feel right now
- share in your team how you are and why you chose your card
- collect open questions or insights you have had since yesterday – is there anything you would like to share or discuss?

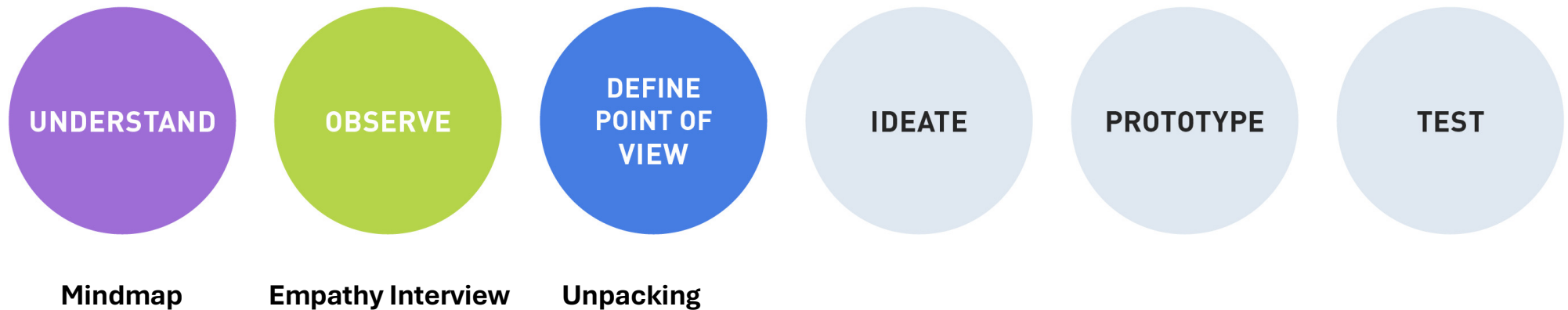


15 minutes

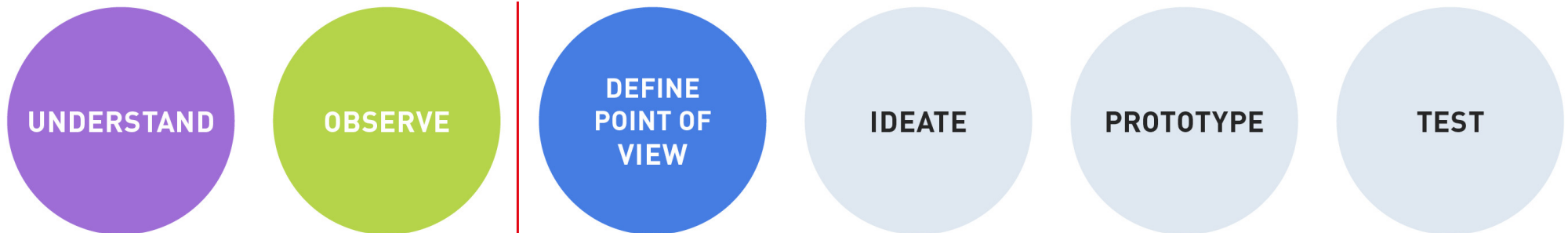
CHALLENGE

**Design a way to help PhDs
recognize opportunities
for turning their expertise
into impact.**

Review: Methods used so far



Define



Structure and synthesise user insights and findings

Search for strong problems and emotions

Don't find solutions yet, but focus on user need

Synthesise your results

1

Unpacking

2

Create a persona

3

**Find Brainstorming
Questions**

“How might we..?”

Persona



NAME, AGE

Naomi, 28, she / her

PERSONALITY

conservative	☐	☐	☐	☐	☒	open
carefree	☐	☐	☐	☒	☐	organized
introverted	☐	☒	☐	☐	☐	extroverted
competitive	☐	☐	☐	☐	☒	cooperative
self-confident	☐	☐	☐	☒	☐	vulnerable

KEY DATA AND BIOGRAPHY

- 3rd-year PhD candidate in Social Sciences
- Her research focuses on topics that are highly relevant to society.
- Most of her day-to-day work revolves around research, teaching and academic responsibilities.
- She is engaged in a local project on digital education.
- Most opportunities she encounters are connected to academia.

Persona



NEEDS, DESIRES & MOTIVATIONS

- She wants her work and expertise to have an impact beyond academic publications.
- She wants to understand where her expertise could be valuable.
- She would like to keep different options open for her future.
- She would like to exchange more casually and spontaneously with experienced people (without sticking to feedback structures at her university).

PROBLEMS & FRUSTRATIONS

- She doesn't see a clear career path for herself after obtaining her doctorate. Most people in her social circles pursue academic careers, so she has little exposure to other pathways and opportunities.
- She feels that academia is a closed system.
- While she enjoys being a specialist regarding her discipline, she is afraid her findings may collect dust inside the academic bubble.

How it works ...



TEAMWORK

Work together as a group.



PERSONA

Find a focus from the synthesis work yesterday (5 min)

Create a persona with the (for you) most interesting:

- needs & desires
- motivations
- **problems** & challenges

Fill in the persona sheet (25 min)



30 minutes

RESULTS PERSONA

PERSONA

Jane, 28
NAME + ALTER

CHARAKTER:

KONSERVATIV ☒ OFFEN
 UNBEKÜMMERT ☒ ORGANISIERT
 INTROVERTIERT ☒ EXTROV.
 KOMPETITIV ☒ KOOPERATIV
 SELBSTSICHER ☒ VERLETZLICH

BIOGRAPHIE

International
 Unterdänisch
 woprang
 Studium in
 UK
 Disziplinär
 (gegenwärtige
 Erwartung)

BEDÜRFNISSE, WÜNSCHE, MOTIVATIONEN

Kamer
 Anerkennung
 Intrinsische
 Motivation
 Rest gen
 Austausch
 mit anderen
 Kulturen
 gute
 Vorbereitung
 (Wunsch)
 Vorbild zu
 Rolemodels

PROBLEME, FRUSTRIERENDES

Bürokratie
 Fehlendes
 Netzwerk
 Zeitmangel
 Kulturelle
 Widerstände
 Diskriminierung

PERSONA

TOBIAS, 28
NAME + ALTER

CHARAKTER:

KONSERVATIV ☐ OFFEN
 UNBEKÜMMERT ☐ ORGANISIERT
 INTROVERTIERT ☐ EXTROV.
 KOMPETITIV ☐ KOOPERATIV
 SELBSTSICHER ☐ VERLETZLICH

BIOGRAPHIE

Wie würde es sich Tobias
 zu fast 10 Jahren gefangen
 erred to Tobias' own thing
 despite strong disagreement
 from his surroundings?
 Wie kam es, Tobias dass
 unternehmen, die von der
 Erwartungen nicht unterstützt
 Bisher zu sein?

Sein Eltern
 erwarteten, dass
 er Akademiker
 wäre...

"Expectations
 are to stay
 in research"

Seit Kindheit
 begeistert für
 Wissenschaft

BEDÜRFNISSE, WÜNSCHE, MOTIVATIONEN

Wunsch nach
 Unabhängigkeit
 Sicherheit,
 stabiler, kontinuierlicher

Selbst-
 Wirklichkeit

Freiraum
 neue Aufgaben

Zugehörigkeit

PROBLEME, FRUSTRIERENDES

Orientierungslos

Willy Research
 ist nicht konstruktiv
 Glaubenssätze

begrenzte Ressourcen
 wird, Liquidität,
 etc.

RESULTS PERSONA

PERSONA



LUIZA 31
NAME + ALTER

CHARAKTER:

KONSERVATIV	←	X	→	OFFEN
INTROVERTIERT	←	X	→	EXTROV.
UNBEKLÜMMT	←		→	ORGANISIERT
KOMPETITIV	←	X	→	KOOPERATIV
SELBSTSICHER	←	X	→	VERLETZLICH

BIOGRAFIE

- > Psychologin
- > lebt in Deutschland mit ihrer Mutter
- > hat Familie, hat keine Zeit
- > kann, spürt, dass es heavy ist

BEDÜRFNISSE, WÜNSCHE, MOTIVATIONEN

Luiza möchte eine eigene Company, muss Cash und seine Kompetenzen stärken

How might we empower Luiza to build a network outside academia?

Luiza möchte eine Ausrichtung der Arbeit erreichen

How might we help Luiza to develop more interdisciplinary research?

Luiza möchte mehr berufliche (Breadth)

PROBLEME + FRUSTRIERENDES

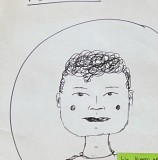
Luiza empfindet die low alt. Einkommens, dass wenig Selbstverwirklichung ermöglicht, die akademischen Welt

Luiza ist überfordert, nicht genug Ressourcen, die sie braucht in der Welt zu bekommen (Zeit/Geld), nicht zu wenig Ressourcen

Es ist sehr auf Unterstützung anderer Personen angewiesen

Aus diesem hat Luiza dabei helfen finanzielle Unterstützung zu bekommen

PERSONA



SHADAB 31
NAME + ALTER

CHARAKTER:

KONSERVATIV	←	8	→	OFFEN
INTROVERTIERT	←	8	→	ORGANISIERT
UNBEKLÜMMT	←	8	→	EXTROV.
KOMPETITIV	←	8	→	KOOPERATIV
SELBSTSICHER	←	8	→	VERLETZLICH

BIOGRAFIE

im letzten Jahr der Doktorandenbildung

in Doha auf geschäftlichen

Mutter in IS-Mechanismen

Informelle

Freiwillige Arbeit

eine Technik in Schule

BRUNNTUMS, WUNSCH, MOTIVATIONEN

Sicheres Einkommen

Sicheres Umfeld

Wünsche nach einem Home-Office & Familie aus dem Ausland

Lebensqualität

Impact schaffen

PROBLEME, FRUSTRIERENDES

Lebensumstände + fehlende Zeit + Team

Von der Klippe springen

Keine Persönlichkeit

Verlust von Community

How might we?

- HMW-Questions reframe the needs and problem areas into opportunities for design
- They suggest, that there is a solution for the users' challenge
- They open up a solution space by the chance to answer them in various different ways
- They are the launchpad for your brainstorming



Build them on your most powerful interview insights.

How might we?



How might we help/enable [persona]

to [need]

without/although/despite [problem]?

Persona



NAME, AGE

Naomi, 28, she / her

PERSONALITY

conservative	☐	☐	☐	☐	☒	open
carefree	☐	☐	☐	☒	☐	organized
introverted	☐	☒	☐	☐	☐	extroverted
competitive	☐	☐	☐	☐	☒	cooperative
self-confident	☐	☐	☐	☒	☐	vulnerable

KEY DATA AND BIOGRAPHY

- 3rd-year PhD candidate in Social Sciences
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- Most opportunities she encounters are connected to academia.

Persona



NEEDS, DESIRES & MOTIVATIONS

- She wants her work and expertise to have an impact beyond academic publications.
- She wants to understand where her expertise could be valuable.
- She would like to keep different options open for her future.
- She would like to exchange more casually and spontaneously with experienced people (without sticking to feedback structures at her university).

PROBLEMS & FRUSTRATIONS

- She doesn't see a clear career path for herself after obtaining her doctorate. Most people in her social circles pursue academic careers, so she has little exposure to other pathways and opportunities.
- She feels that academia is a closed system.
- While she enjoys being a specialist regarding her discipline, she is afraid her findings may collect dust inside the academic bubble.

How might we?



How might we...
support Naomi to think
out of the box when it comes
to recognize opportunities ?

How might we?



How might we...

help Naomi feel confident exploring
unfamiliar possibilities for her future?

How might we?



How might we...

help Naomi recognize where her
knowledge, skills and experiences
could create value?

How might we?



Minimise negative

Increase positive

Find comparable **s**ituation

Discover the opposite

Please pay attention...



- Is your “How might we?”- question formulated positively?
- Is your “How might we?”- question focussed but broad enough to leave open space for creative ideas?
- Does your “How might we?”- question address the problem but not offer a solution yet? (no technologies, methods, ...)

Teamwork



Develop brainstorming questions based on your most powerful interview insights.

Step 1: Write down 1 - 2 questions on your own (3 min)

- Define “How might we?”-questions for your persona.
- Build them on your most powerful interview insights.

Step 2: Share with the group and select 1 - 2 of your questions to brainstorm on. (12 min)



15 minutes

Presentation



Presentation of Persona & HMW question (3 min)



Feedback (2 min)

Teamwork



Refine your brainstorming question.

- Is your question formulated positively?
- Is it broad enough?
- Does it address the problem but not offer a solution yet?



10 minutes

RESULTS HOW MIGHT WE ...?



Wie können wir Tobias dabei unterstützen, sich von den Erwartungen seiner Wissenschaftl. Bubble zu lösen? und sein eigenes Ding zu machen?

Wie können wir Tobias die Vielfalt seiner beruflichen Möglichkeiten näher bringen?



How might we make Jane feel more confident and safe about becoming a (postdoc) entrepreneur?

How might we motivate Jane to develop her research towards an idea of impact?

How might we support Jane in pursuing her entrepreneurial career successfully?

How might we demonstrate the potential of an entrepreneurial career to Jane to a degree for goals and gain some recognition?



How might we enable Luisa to build a network outside academia?

Luisa möchte unabhängig und flexibel arbeiten

How might we help Luisa to achieve more independence/flexibility?

Luisa möchte mehr Unterstützung (finanziell)



How might we help Ilkerad feel connected & safe?

Wie können wir Ilkerad dabei helfen, ihn in eine Community zu integrieren, um sich mit anderen Forschenden über Zukunftsmöglichkeiten auszutauschen?

BIOGRAPHIE

IDEATE

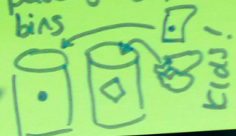
How might we show
the possibilities of
buying organic food
more affordable &
less time consuming

Bio-degradable
take
out
packaging

INFO APP
- APP WAY
- HOUR
- PLACE
- PACKAGE
- PRODUCT
- POSTER
- USE

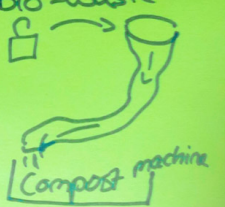
How might we
make trash organization
in the house
easier & more fun?

color-coding
system on
packaging
bins



How might we
make trash organization
recycling
look nicely & be
hygienic?

bio-waste

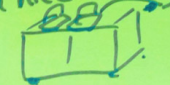


Bins
with
Motivation
quote

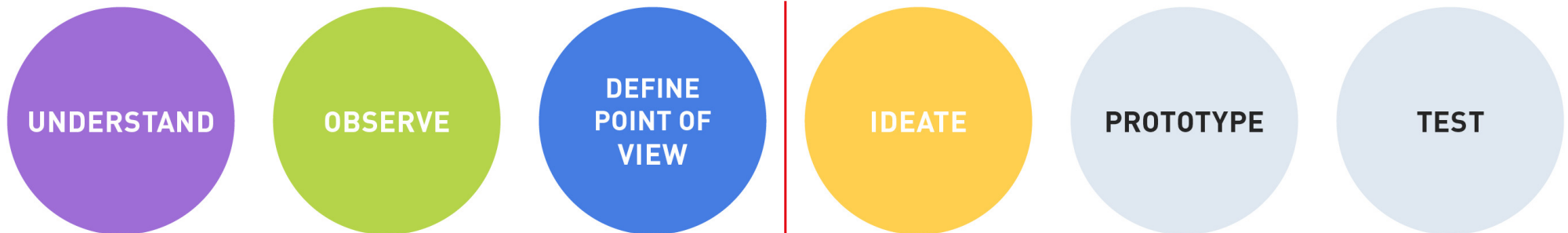
WASTE
LIFT



bin system
that is
movable, has
a nice design



Ideate



**Find various ideas & solutions
based on your HMW-Question**

**Use the multidisciplinary
thought power of your team**

**Be sure to divide idea
generation and idea selection**

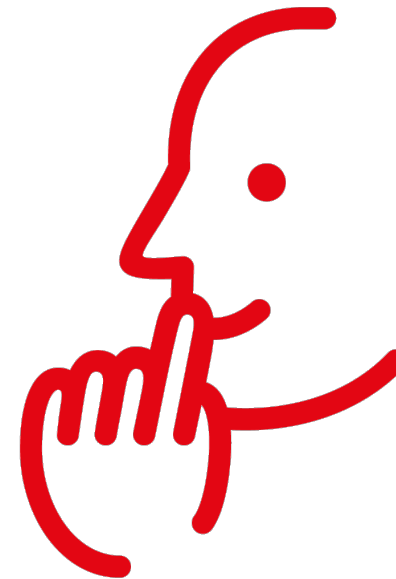
BRAINSTORMING METHODS



Silent brainstorm



Write as many different solutions as you can individually and silently.



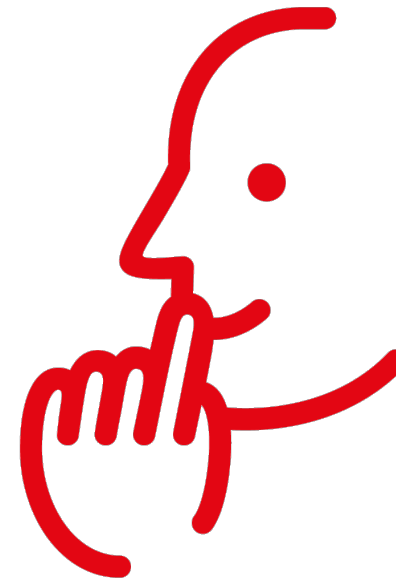
Silent brainstorm

Step 1:

Every team member writes down ideas
silently (3 min)

Step 2:

Everyone shares her:his 3 favorite ideas
with the team (4 min)



Anti / reverse

Reverse the problem or challenge by asking: “How could I possibly cause the problem?”



Anti / reverse

Step 1:

Individually write down ideas of how to make the solution worse (2 min)

Step 2:

Every one shares 3 ideas with the team (4 min)

Step 3:

As a team, reverse the negative ideas into positive ideas (4 min)



Hot potato

Step 1: Form a circle and define a 'Hot potato' (object). **1 min**

Step 2: Declare one person that notes down all ideas on sticky notes

Step 3: Start throwing the hot potato around – you can only throw it to the next person AFTER you've shared an idea. **4 min**

The potato is very hot so be quick :)

Step 4: Add all the ideas onto the board and build on them if a new idea comes up. **5 min**



Tischlauf

Step 1: Stand in a circle around a table (not too small)

Step 2: Place your whiteboard with space for your ideas on one end/side of the table

Step 3: Everyone takes a pen and a block of post-it's

Step 4: Start walking around the table with the whole group

Step 5: When you arrive at the board, add your idea on a sticky note on it and say it out loud. Do that for up to **5** minutes.

Step 6: Keep moving and adding ideas to the board.



Superhero brainstorm

Step 1:

Put yourself into the shoes of a superhero. Everyone chooses an individual superhero. **2 min**

Step 2:

Imagine: How would this superhero with their superpowers solve the problem at hand? Brainstorm ideas and add them to the board. **3 min**

Step 3:

Everyone shares their 3 favourite ideas to the board. **3 min**

Step 4:

As a team translate the ideas into realistic ideas. **4 min**



Remember ...

- Keep track of the time
- Keep it short
- Don't judge ("Yes, and ..." instead of "No, but ...")

SOLOWORK

BRAINSTORM METHODS

YOUNG ENTREPRENEURS IN SCIENCE

SILENT BRAINSTORM

1. Every team member writes down ideas silently (3 min)
2. Every one shares her/his 3 favorite ideas with the team (4 min)

ANTI / REVERSE

1. Individually write down ideas of how to make the solution worse (2 min)
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3. Everyone shares their 3 favourite ideas to the board (3 min)
4. As a team translate the ideas into realistic ideas (4 min)

How it works ...



**Together with your team, use the brainstorming methods.
Keep in mind the Design Thinking Guidelines:**

- Chose one HMW Question and put it on your board
- Start with a silent brainstorming
- Do the anti/reverse storming + 1 other method
- Cluster your ideas (if needed)
- **Track the time**



35 min

No need to select ideas yet!!

Filter your ideas



Dotmocracy



The Dotmocracy method is used for democratic evaluation of ideas, using sticky dots. Each team member gets the same amount of dots to vote for their favorite ideas.

How it works ...



Use Dotmocracy to find the best idea within your team. Use the dots to vote. Everyone gets 2 dots of each color.



Need-based: Which idea is addressing the need/problem of your **user** best?



Ease of implementation: Which idea is easiest to implement? Realistic for you to implement?

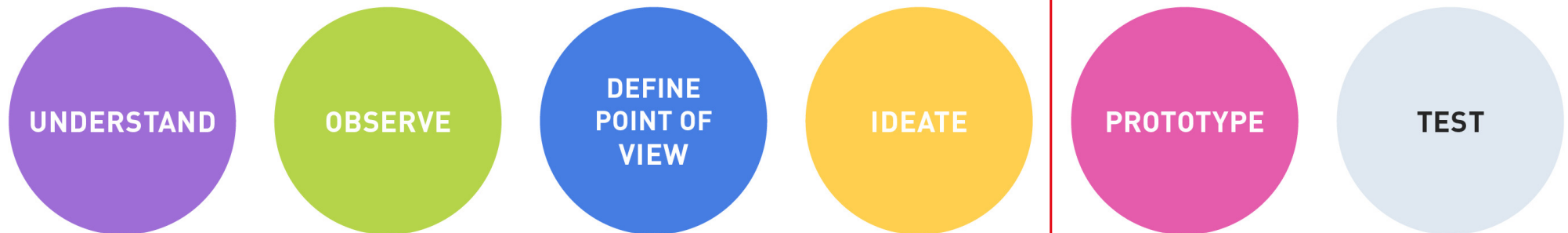


10 minutes

PROTOTYPE

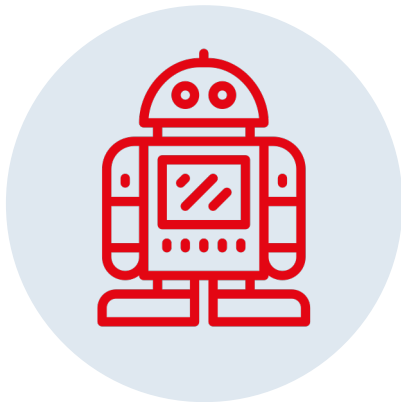


Prototype

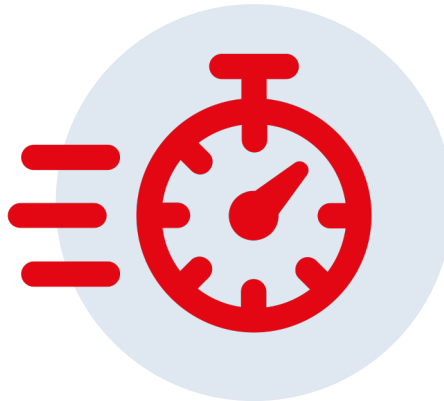


Make idea tangible and testable
Think with your hands
**Learn about your idea instead of
defending it**

Building the prototype



WHAT?
Make the idea
tangible



HOW?
Quick and dirty



WHY?
Understand
and test

**There are
different
kinds of
prototypes ...**



SKETCH



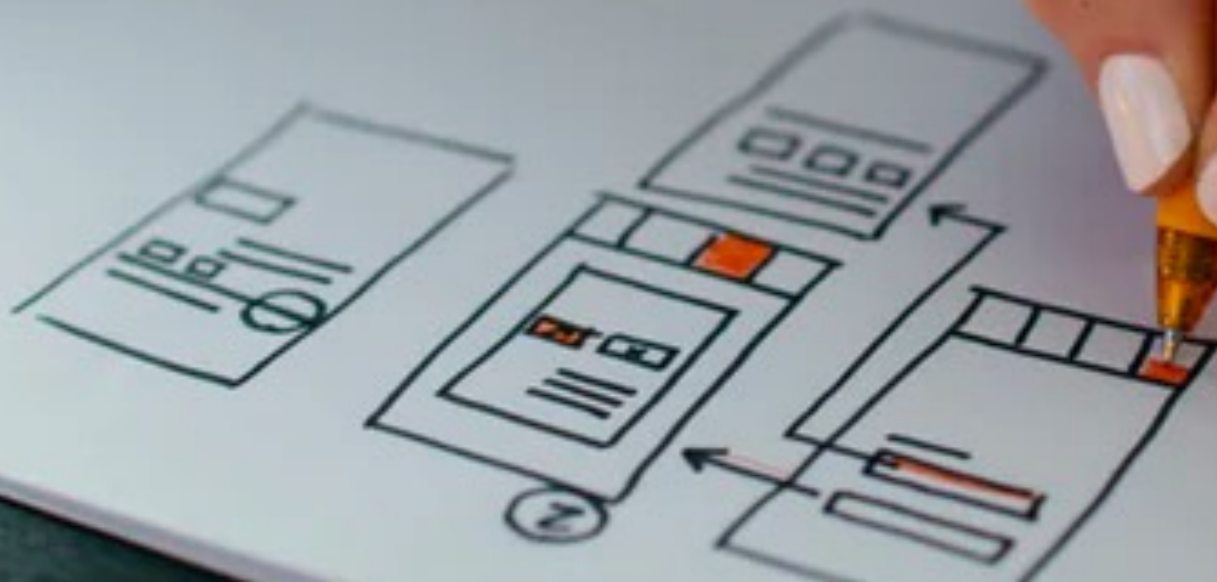
MOCK-UP



WIREFRAME



WIREFRAME



WIZZARD OF OZ



CRITICAL FUNCTION



In summary ...

... think about what you want to test first.
**Based on that, build the prototype as
simple as possible.**

Build a prototype



How it works



Together with your team, build a prototype and get ready to present it!

You can sketch, wireframe, mock up and build with the material on the prototyping table!



25 minutes

Presentation

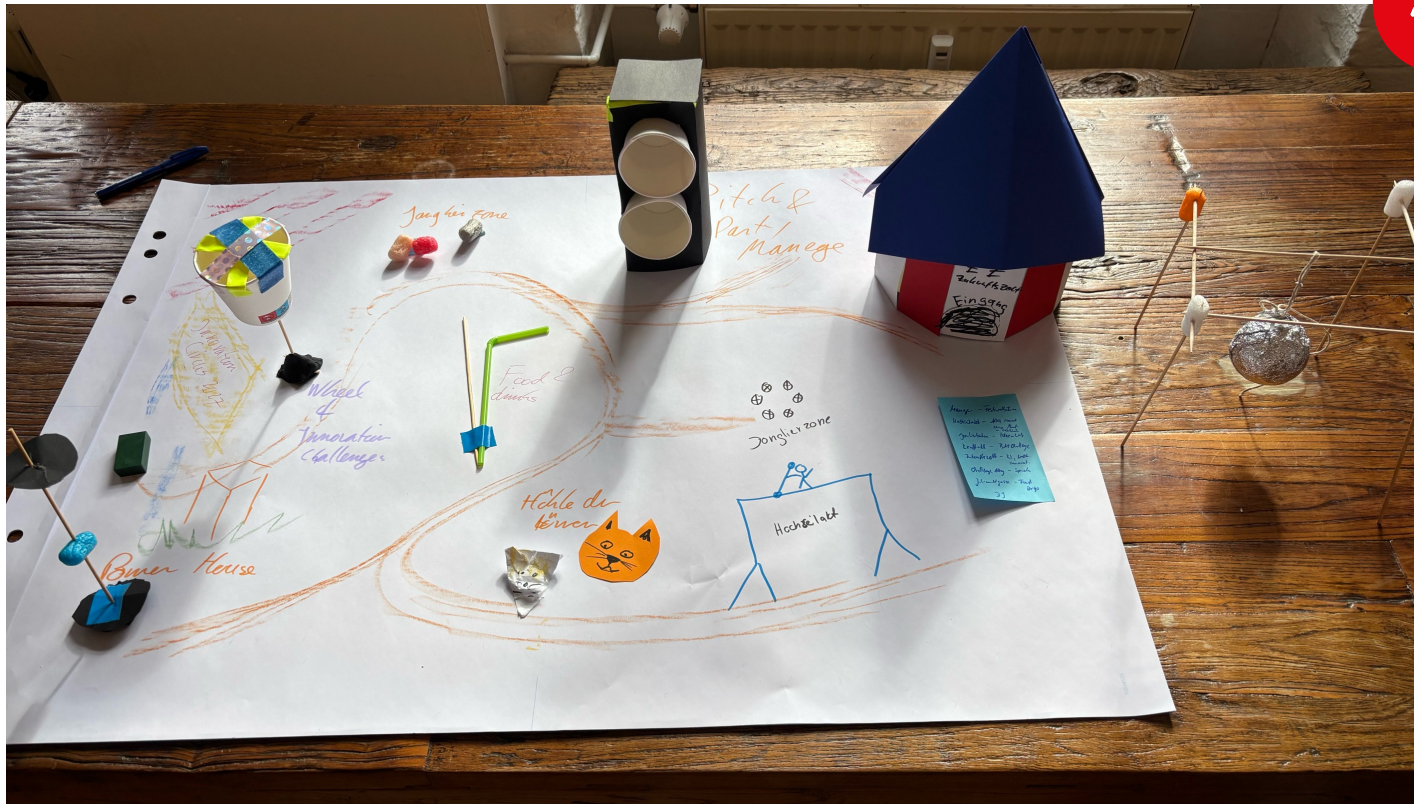


Presentation of Prototype (3 min)



Feedback (2 min)

RESULTS PROTOTYPE



RESULTS PROTOTYPE

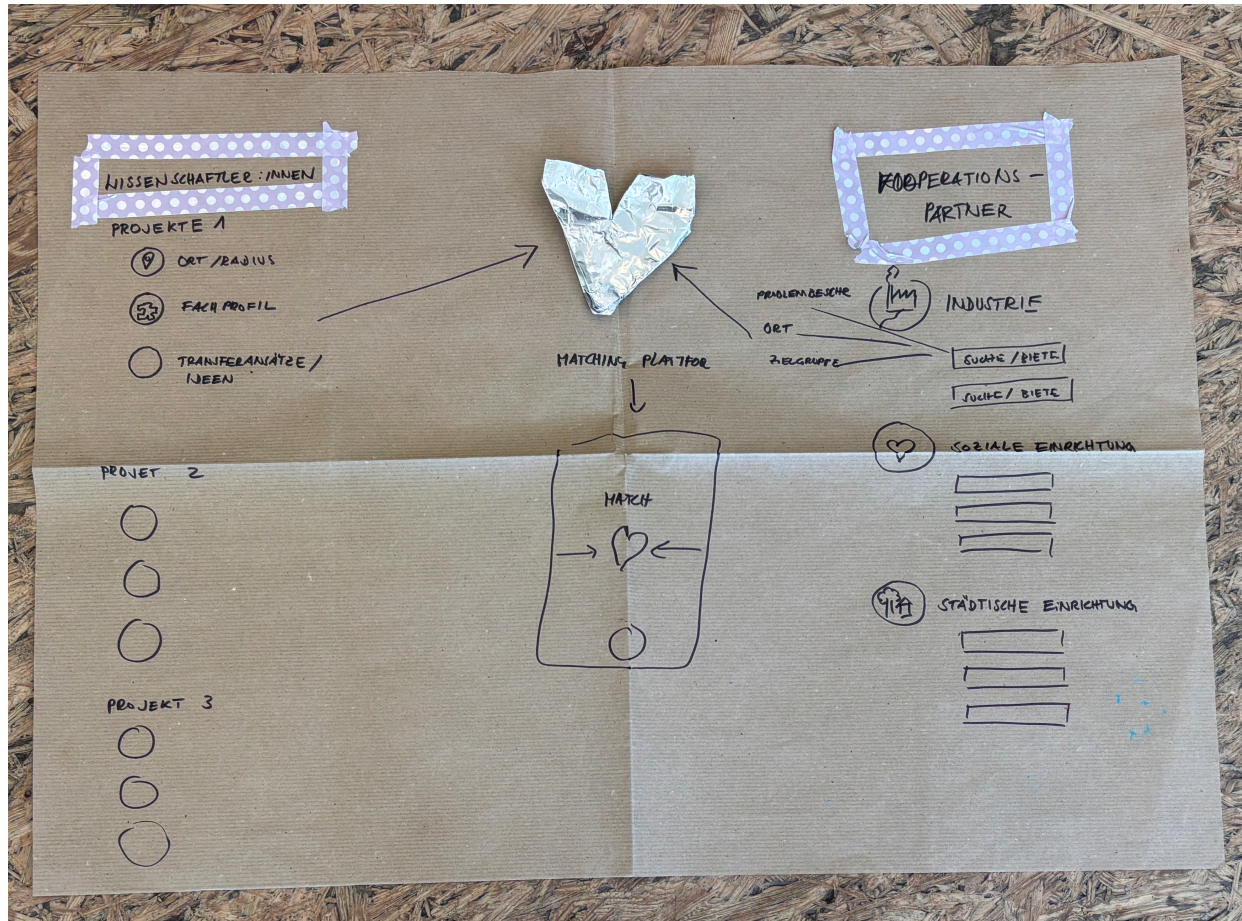


RESULTS PROTOTYPE

 YOUNG
ENTREPRENEURS
IN SCIENCE



RESULTS PROTOTYPE

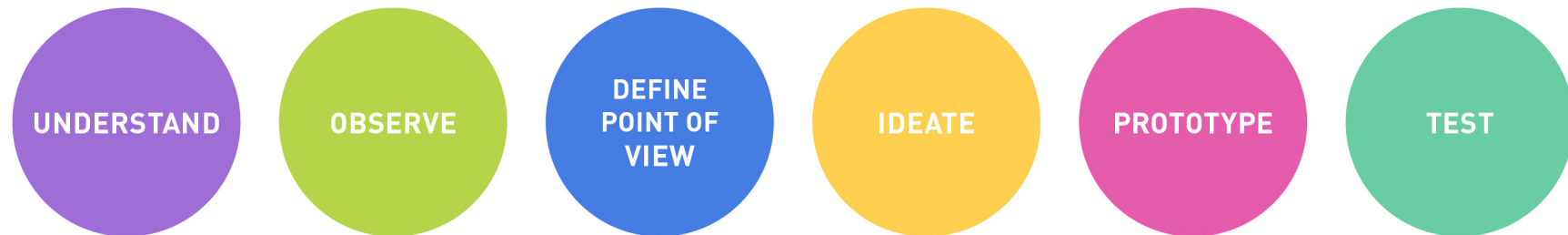


TEST

YOUNG
ENTREPRENEURS
IN SCIENCE



Testing



Get direct user feedback

Find your blind spots

**Find the starting point for
your next iteration**

Interview guidelines

Introduce yourself



80% Listening
20% Speaking

Dig for stories and
emotions



One at a time



Conversation
at eye level



Ask short and open
questions



Ask “why”

Until December ...



Think about and maybe discuss with your team before testing!

- *Who* do you need to test your idea with?
- *What* do you want to learn from your user?
- *Where* should you test your idea?

YES-Modules



CAREER & EMPOWERMENT



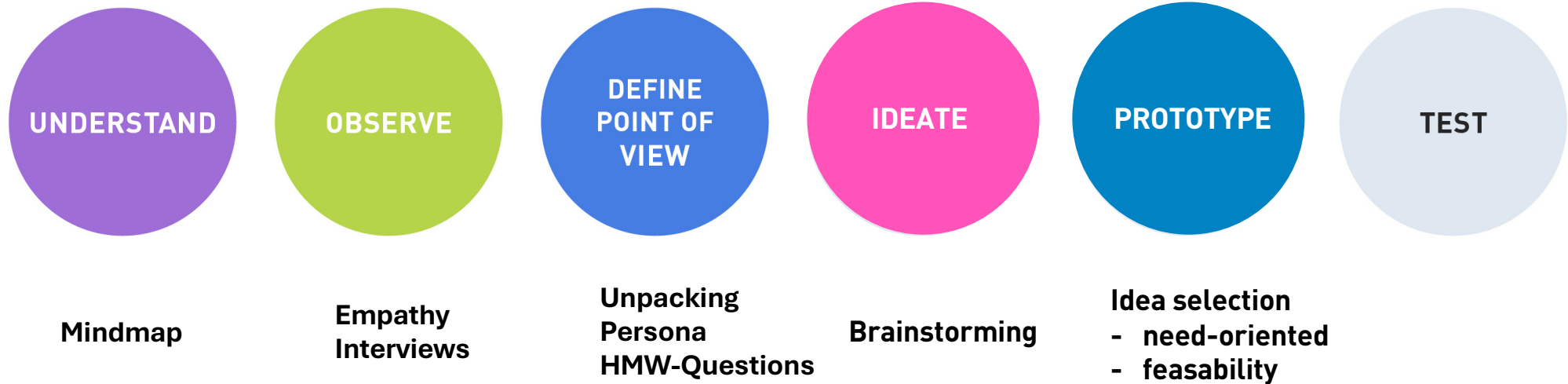
1. Your Entrepreneurial Career
- ☒ 2. Empathy for Innovators
3. Your Innovation Skills
4. Your Research Canvas
5. Social Entrepreneurship
6. Teamwork Essentials
7. Entrepreneurial Empowerment Journey
8. Discover your Resilience
9. Innovate for Impact
10. Navigating Conflict

IDEAS & METHODS



- ☒ 1. Design Thinking Process 1-3
- ☒ 2. Ideation
- ☒ 3. Prototyping
4. Pitch Training
5. Future Thinking 1+2
6. Business Model Canvas 1-2
7. Impactful Storytelling

Review: Methods used so far



Let's look at the Trainers' Perspective



Self reflection

SOLOWORK

SELF REFLECTION

YOUNG ENTREPRENEURS IN SCIENCE

Please reflect on the questions below individually and note your answers in the template.
10 min

WHAT IS TODAY'S MAIN TAKE-AWAY? WHAT CAN YOU IMPLEMENT IN YOUR DAILY WORK?

WHAT'S IMPORTANT WHEN PRESENTING & FACILITATING DESIGN THINKING FOR PHDS?



Practical info



Workshop location & times

- Online meetings: Zoom (10am -1pm)
- Offline meetings: Berlin (9am-4/5pm)

Certification requirements

- Signing the YES TtT terms & conditions
- Max. 8h of 47h can be missed
- Submission of online feedback questionnaires
- Read all of Ilaria's E-Mails! 😊

Language

- Slides in English
- Conversations in German
- Moderation in English/German

THE END

YOUNG
ENTREPRENEURS
IN SCIENCE

