From PhD to Innovator Day 1



An initiative of:



FALLING WALLS FOUNDATION With funding from the:



THIS PROGRAMME IS SUPPORTED BY:











Workshop setting









YES

Coaches

Partner

Young Entrepreneurs in Science



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









When to visit K1-Startup Service...

Engaging with a start-up service isn't just about launching a company, it's also about:

- Gaining valuable entrepreneurial skills
- Finding opportunities to collaborate with real start-ups – internships, projects, student jobs
- Test and validate your ideas in a low-risk, supportive environment
- Grow your network including founders, mentors, investors, and like-minded students
- Turn your thesis or research into real-world impact
- Explore future job opportunities









Our Services

- English-Friendly Workshops & Coaching: all key events are offered in English
- Personalized Guidance: our advisors offer multilingual, tailored support
- Individual Mentoring: match with experienced entrepreneurs and alumni networks
- Funding & Infrastructure Support: guidance on grants, free coworking space
- Network Access: introductions to industry partners, investors etc.





Upcoming Workshops



Career Canvas

Date & Time: 5 Novemer 2025, 09:00–17:00 (Johannisstraße 13, Auditorium "Zur Rosen")



Your Entrepreneurial Career – Session

Date & Time: 13 November 2025, 2 - 4 pm (online)



Next Steps & How to Get Involved

- 1. Register for the Workshops: see QR-Codes
 - 2. Join our Networking Events: sign up for an event or our peer meetups
 - 3. Schedule a 1:1 Consultation: tailored feedback on your startup idea
 - 4. Follow Us Online:
 K1-Gründungsservice on the University website and our Instagram and LinkedIn accounts







Contact



gruendungsservice@uni-jena.de



+49 3641 94021-20/-21



Kahlaische Str. 1 (1st floor) 07745 Jena





K1-Startup Service

https://uni-jena.de/gruendungsservice

International Startup Office

https://internationalstartupcampus.com







Your learning materials





• **Download link:** You will receive a download link for the handout and your certificate within 3–5 days after the workshop



• **Template:** Blank templates will be included



• **Photos:** If you want to document your results, please take photos after getting consent from you team

Workshop programme



Day 1

Morning

Entrepreneurship

Intro to Entrepreneurship

The Entrepreneurial Mindset

Startup Success and Failure

Your Innovation Skills

Afternoon

Meet the Role Models

Q&A with Role Models

Intro into Design Thinking

Day 2

Morning

Design Thinking

Understand & Observe: User Research

Define: Persona and How Might We

Afternoon

Design Thinking

Ideation and Brainstorming

Prototyping & Testing

Presentations

Today's agenda



Morning

- Check-in & Coffee Break
- Intro to Entrepreneurship
- Entrepreneurial Mindset
- Startup Success & Failure
- Your Innovation Skills

Afternoon

- Q&A with Role Models
- Intro into Design Thinking
- Check-out



It's coffee o' clock!



Learning goals



- Getting to know the concept of entre- and intrapreneurship
- Reflecting on your own potential entrepreneurial journey
- Exchange with and learn from young entrepreneurs



What is entrepreneurship?





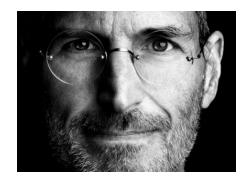
Skill in starting new businesses, especially when this involves seeing new opportunities.

Cambridge Dictionary

Types of entrepreneurship



Example 1 Start-up founder, Serial Entrepreneur



Steve JobsApple, NeXT, Pixar

Example 2
Founder and Serial
Entrepreneur



Oprah Winfrey
Harpo Productions,
OWN, O Magazine

Example 3 **Social Entrepreneurs**



Dr. Anja Bittner

"Was hab ich?"

Example 4

SME's, Hidden Champions

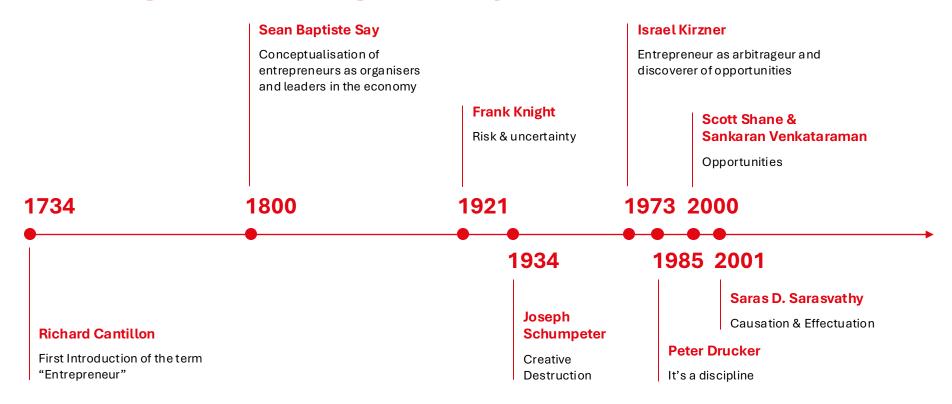
Mittelstand, Family Businesses



August, Franz, Theo & Bernhard Claas CLAAS

History of entrepreneurship theory





Creative destruction





"The function of entrepreneurs is to reform or revolutionize the pattern of production by exploiting an invention or, more generally, an untried technological possibility for producing a new commodity or producing an old one in a new way, by opening up a new source of supply of materials or a new outlet for products, by reorganizing an industry and so on."

Joseph Schumpeter

It's a discipline!





"It's not magic, it's not mysterious; and it has nothing to do with genes. It's a discipline and, like any other, it can be learned."

Peter Drucker

It's about opportunities!

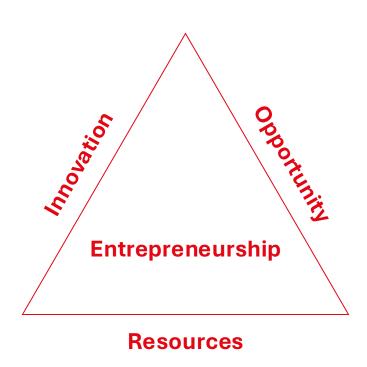




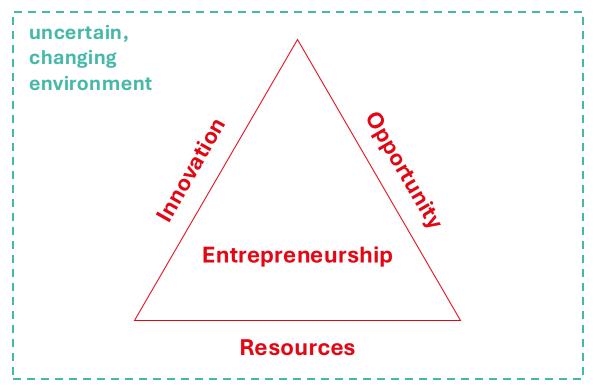
"... we define the field of entrepreneurship as the scholarly examination of how, by whom, and with what effects opportunities to create future goods and services are discovered, evaluated, and exploited."

Sankaran Venkataraman

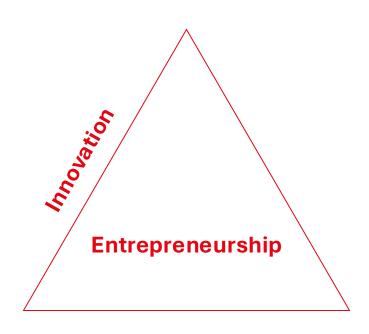












Innovation



Many views on entrepreneurship incorporate the idea that entrepreneuring is about the "creation of something new"







Invention

Innovation

Imitation

Innovation



Any thought, behavior or thing that is new because it is qualitatively different from existing forms

BARNETT, H. G. Innovation, 1953. The Basis of Cultural Change. New York: McGraw-Hill Book Company, p. 7

An idea, practice or object that is perceived as new

ROGERS, E. M. (1983). Diffusion of innovations. Third edition. New York. Free Press, p. 11

Invention + exploitation

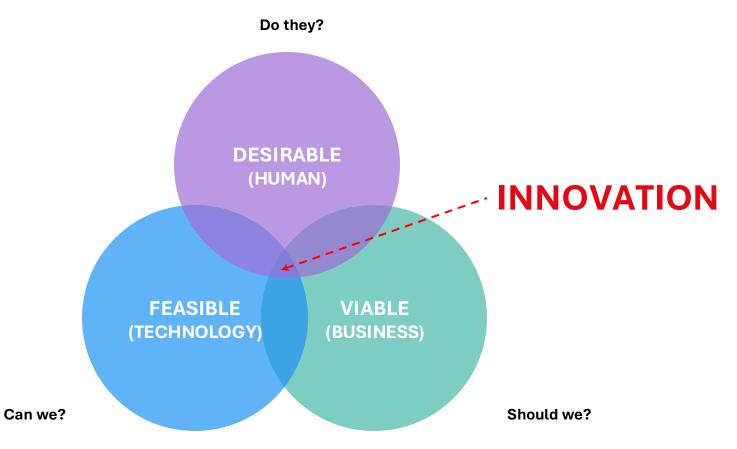
E.B. ROBERTS. (1988). "Managing invention and innovation," Research-technology management, Jan-Feb, p. 13

The synthesis of a market need with the means to achieve and produce a product to meet that need

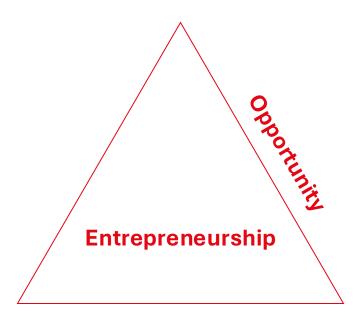
MOORE, W.L., TUSHMAN, M.L. (1982). Managing Innovation over the Product Life Cycle, in: TUSHMAN, M.L., MOORE, W.L. (Hrsg.): Readings in the Management of Innovation. Boston, p. 132.

Innovation



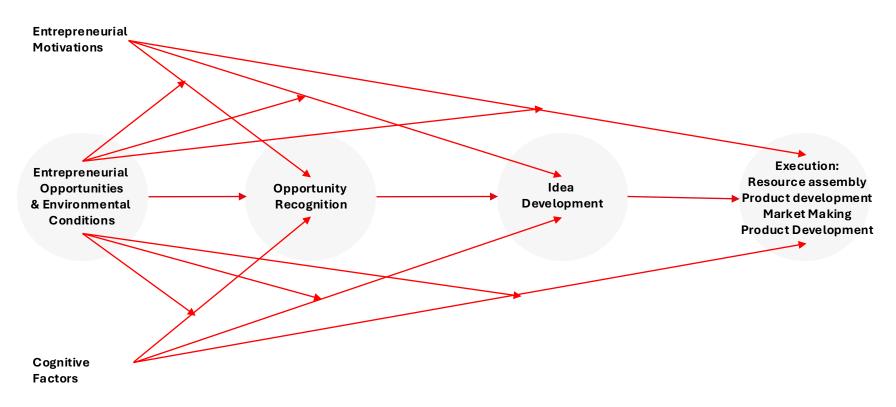






Opportunity





Opportunity



People can become entrepreneurially active for **completely different reasons**.

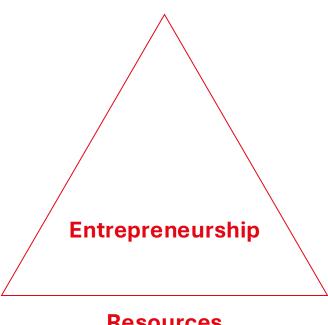


Opportunity-based activity



Necessity-based activity





Resources

Resources





Founder/Team







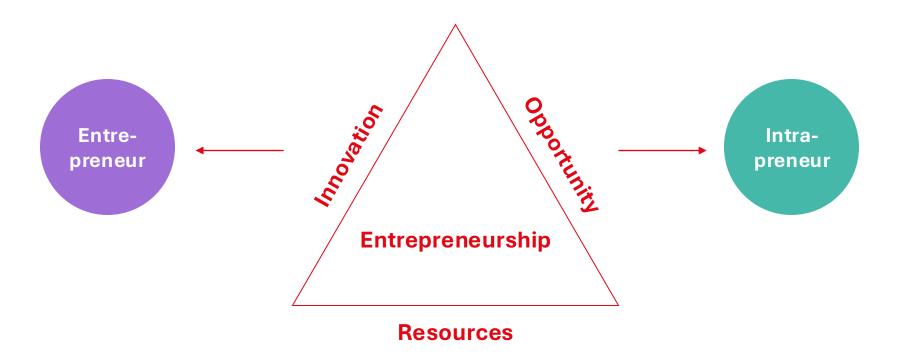
Network





Components of entrepreneurship





What is intrapreneurship?





The willingness or ability of people within a large company to take direct responsibility for turning ideas into profitable new products, services, businesses, etc.

Cambridge Dictionary

It's about the mindset



Entrepreneurship & Intrapreneurship:

Different environments, same mindset



Desire



START → INNOVATION

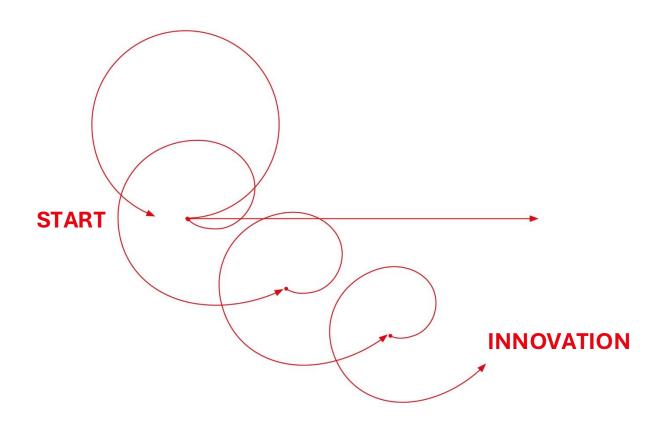
Reality





Iteration





Failure as part of the process...



In reality, failure is the normal case!

- the vast majority of startups fail
- Study results vary between **60% and 90%**

Reasons for failure





42% No market need



29% Ran out of cash



23% Not the right team

The journey of Milena Glimbovski

2012

Founded original unverpackt in Berlin

2018

Selected as entrepreneur of the year in Berlin 2023

Continues her journey as speaker and activist on climate topics

2015

After a burnout founded 'Ein guter Plan'

2022

Filed for insolvency for original unverpackt



Fail early and often... in a supportive context





Guarantees psychological safety



Rewards risks and trying new things



Doesn't punish mistakes



Creates a culture without blame



Let's discuss ...





What makes an entrepreneur?

Entrepreneurial skillset



PRODUCT-RELATED SKILLS

- Your expert knowledge!
- All the skills you need in order to build and produce your product

• ..



Entrepreneurial skillset



BUSINESS-RELATED SKILLS

- Business modelling
- Managing cash flow
- Sales experience
- Growth skills
- Organising things (getting stuff done)
- ...



Entrepreneurial skillset



COMMUNICATION-RELATED SKILLS

- Selling the vision
- Networking
- Critical thinking
- Team building
- ...



Learn constantly





"Be open to constructive criticism: listen carefully and don't get defensive about it. There is nothing more important than feedback on your lifelong learning journey."

Slim Chiha
Co-Founder of PROSION
& Young Entrepreneurs in Science Alumnus

Build networks





"For somebody who wants to become an entrepreneur, it is crucial to be proactive in order to build up a network outside your lab."

Nadine Diersch
Researcher-Entrepreneur at DZNE Magdeburg
& Young Entrepreneurs in Science Alumna

Work on what you love





"I get to do something I truly love, and I get paid to do that. There's nothing that's more compelling to me."

Asmelash Teka Hagdu

Co-Founder of Lesan & Young Entrepreneurs in Science Alumnus

As an entrepreneur ...



- You can make decisions on your own
- You can choose the team you are working with
- You can create a positive working culture for your team and your partners
- You learn constantly
- You can work on something you love

My entrepreneurial skillset



My entrepreneurial skillset



nagine if you were to start your own business tomorrow.	SKILLS I ALREADY HAVE.			
lease, fill in the skills you already possess, the skills ou would need, and what you have to do to develop any aissing skills for each category. O min	Product	Business	Communication	
	SKILLS I NEED Product	Business	Communication	
	I CAN DEVELOP THOSE M	ISSING SKILLS BY		
	Product	Business	Communication	

How it works ...

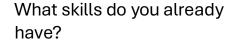




Solo work



Imagine that you were to start your own business tomorrow ...



What skills do you still need?

How could you develop those missing skills?



20 minutes

Share & discuss



How it works ...





Small teams



Pair up in teams of two or three and discuss with your group:



20 minutes

Strengths and skills you want to work on

How could you combine your strengths to found a company?

Key elements of an entrepreneurial mindset











Human-centred

Iterative approach

Early prototyping

Teamwork

Wrapping up ...





What insight/learning do you take away from this morning?



Lunch Break





Workshop programme



Day 1

Morning

Entrepreneurship

Intro to Entrepreneurship

The Entrepreneurial Mindset

Startup Success and Failure

Your Innovation Skills

Afternoon

Meet the Role Models

Q&A with Role Models

Intro Design Thinking

Day 2

Morning

Design Thinking

Understand & Observe: User Research

Define: Persona and How Might We

Afternoon

Design Thinking

Ideation and Brainstorming

Prototyping & Testing

Presentations



How wight we wake trash organication wake trash organication in the house easter & more for?



thow might we wake trash organization recycling look nicely of the hygienic?





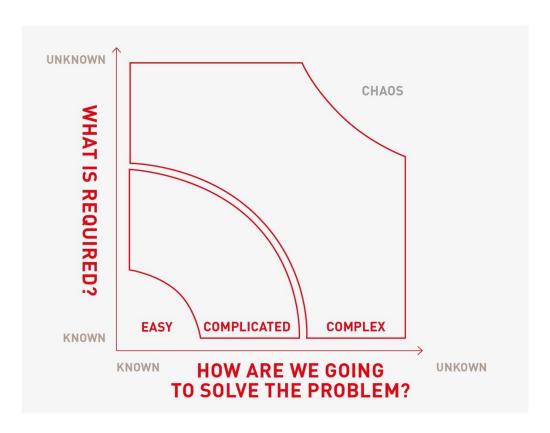
Learning Goals



- Introduction to the Design Thinking approach
- Interdiciplinary and agile teamwork
- Changing perspectives & build empathy

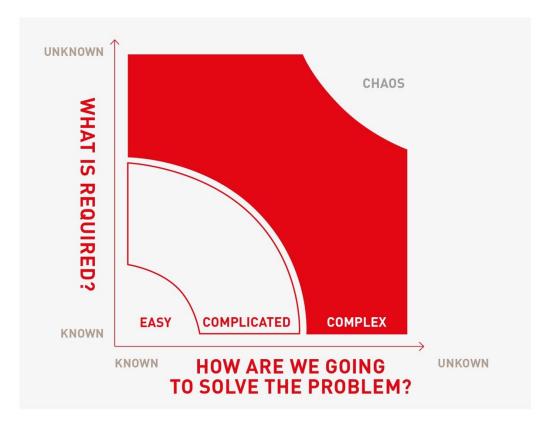
Work in Iterations





Work in Iterations





Work in Iterations









Design-Thinking

Lean Startup

SCRUM

What is Design Thinking?



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

Design Thinking pioneer



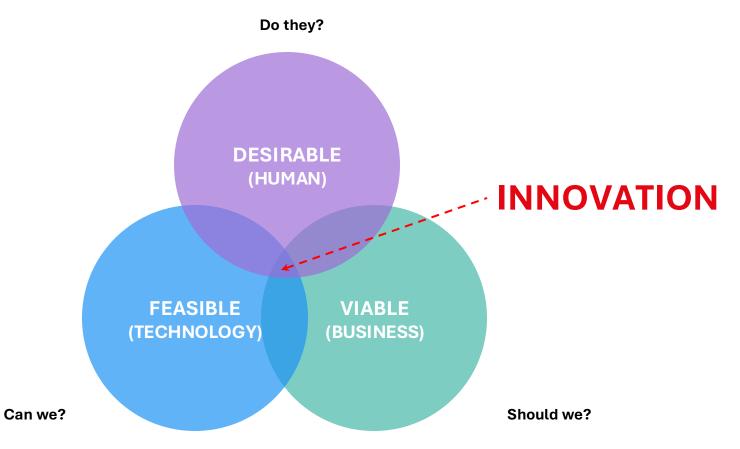


DAVID KELLY

- 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

Innovation





Design Thinking needs space ...





1. Timeboxing





2. Build on the ideas of others





3. Defer judgement





4. Listen actively





5. Stay on topic





6. Fail early and often



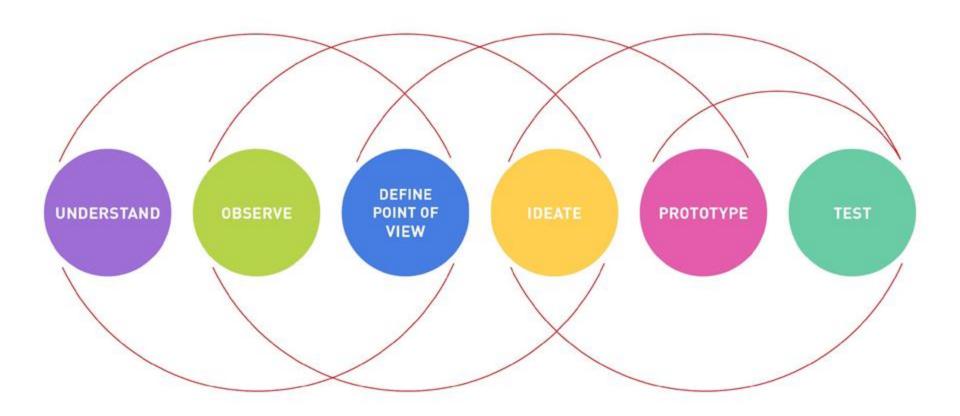
Design Thinking needs a team ...



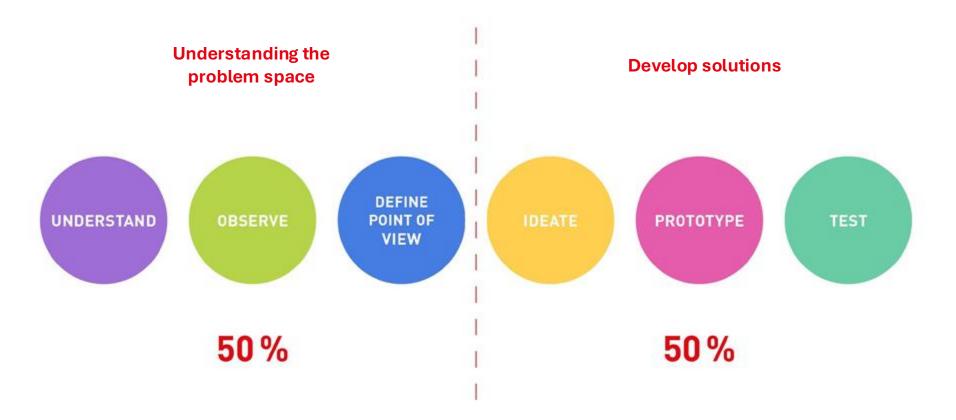
Design Thinking is a process ...



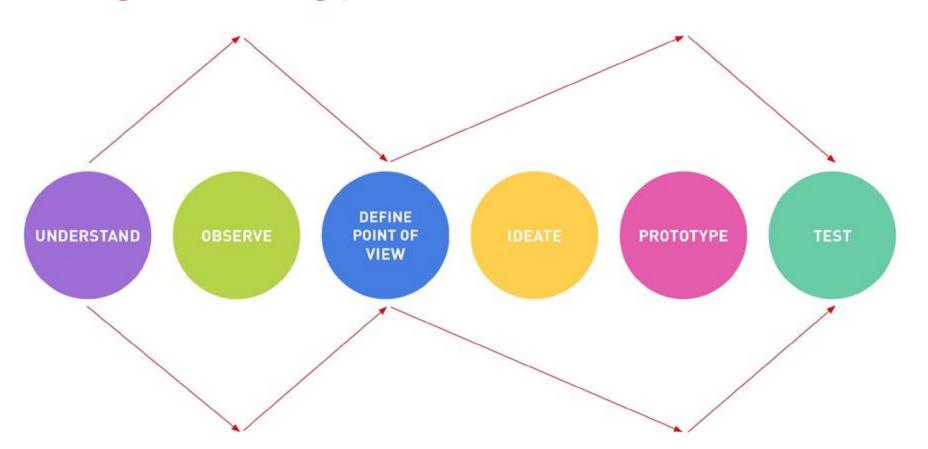






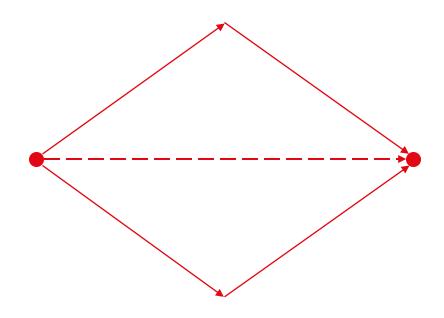






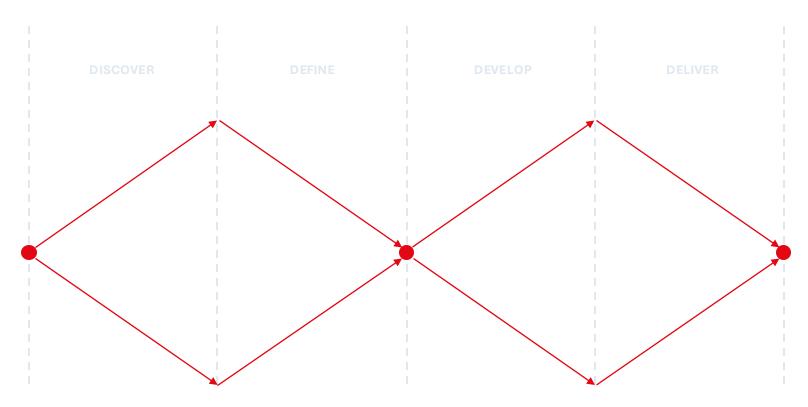
Divergent/convergent





Double diamond model





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





Building the teams



How it works ...









Get to know your team



10 min

Form diverse teams of 4-6 people.
This will be your team for tomorrow!

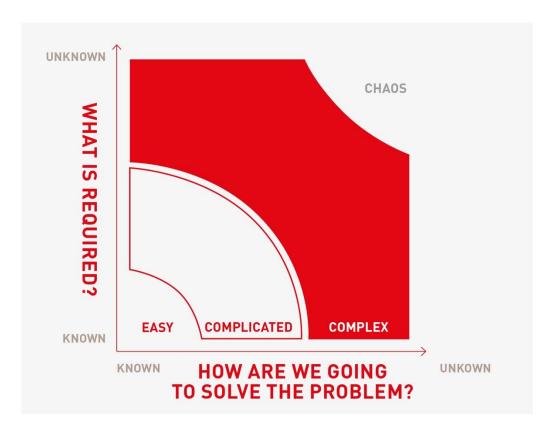
Pay attention to diversity:

background, gender, age, experience in Design Thinking ...

Find a creative team name

We remember...







How wight we wake trash organication wake trash organication in the house easter & more for?



thow might we wake trash organization recycling look nicely of the hygienic?





Design Thinking needs space ...



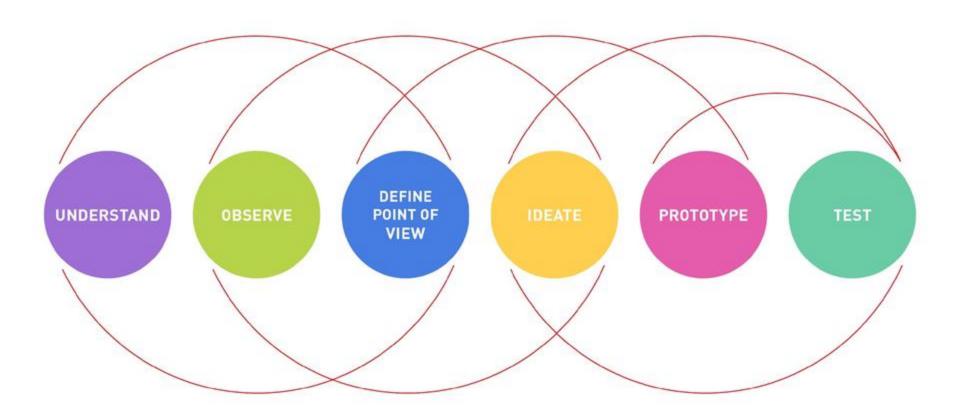
Design Thinking needs a team...



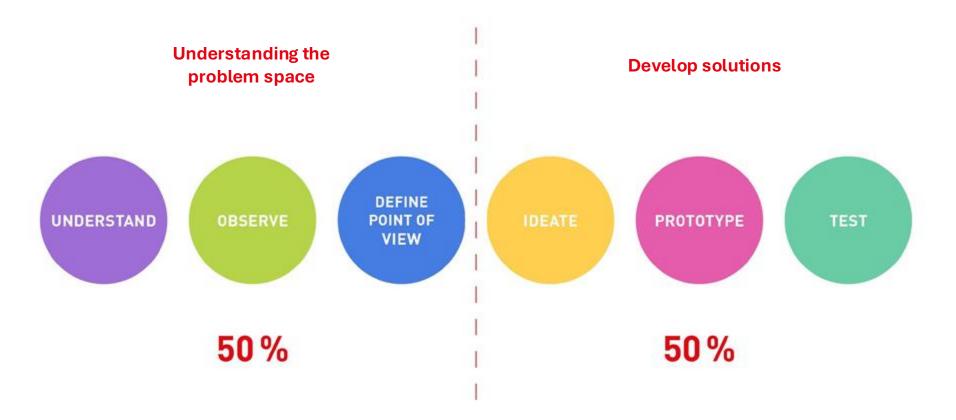
Design Thinking is a process ...



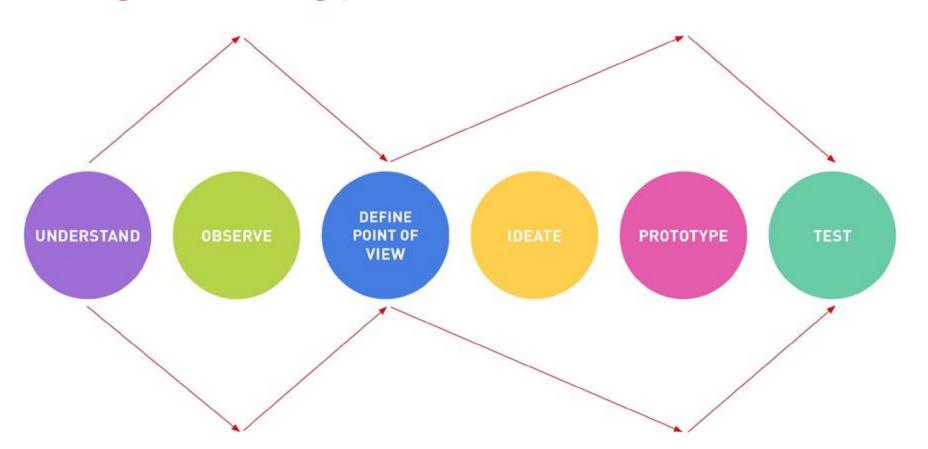












Heli Check-in



How it works ...







Share with your team ...



10 minutes

What am I feeling today?

What is preventing me to be here 100%?





Understand





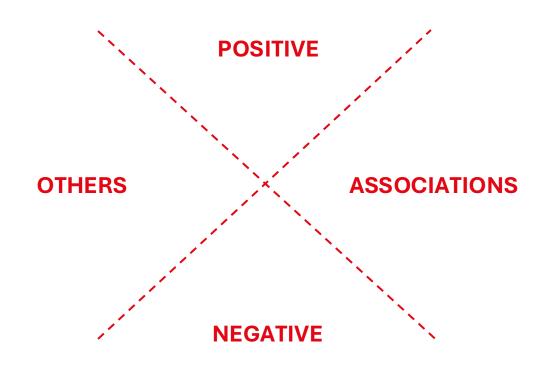
Dive into the topic

Share ideas and associations

Identify possible stakeholders

Mindmap





Sticky notes: Don't

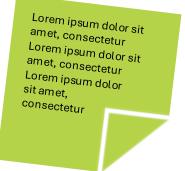




Don't write very small text



make bullet points

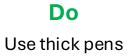


Don't overfill the note

Sticky notes: Do











Do be visual

Understanding the challenge



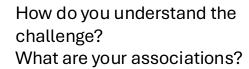




Solo Work



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



What are potential problems or pain points you find within the challenge?

What are good or bad experiences you can think of?



5 minutes







Share your notes...



10 minutes

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



Observe







Change perspectives

Build Empathy: Develop deeper understanding

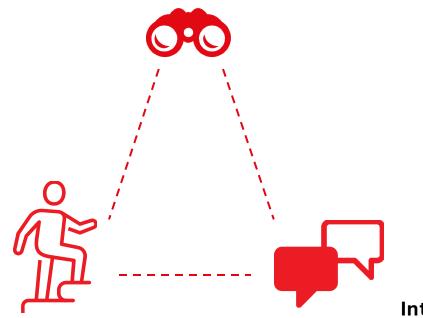
Question your own preconceptions

Understand users

Empathy



Observation



Self Experience

Interview

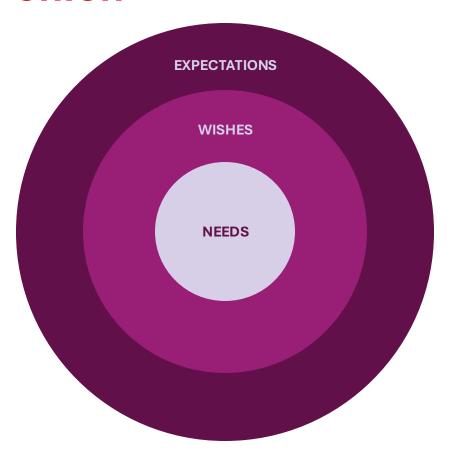






The "need" onion





Find questions



Interview Template



ep 1: Kick off your interview troduce yourself and build trust by sharing something rout yourself. Ask for specific experiences:		
troduce yourself and build trust by sharing something		
out yourself. 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?		
sould you tell me a story about a time menyou		
ep 2: Dig Deeper		
plore 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?		
could you text the why is important to you.		





Small teams



Find interview questions based on your team synchronisation:



10 minutes

- What are your most prominent hypotheses?
- What do you want to learn?

It's coffee o' clock!



Let's have a conversation!



Interview guidelines



Introduce yourself





80% Listening 20% Speaking

Dig for stories and emotions







Conversation at eye level



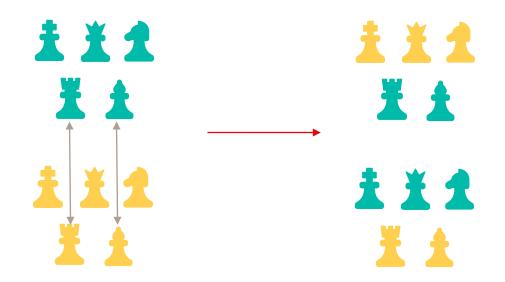
Ask short and open questions



Interviews



Split your team into 2 groups of 2-3 people. The subgroups will join another group for the interview.



Interviews



Each team should have

- The questions
- 1 interviewer
- 1–2 people that write down the learnings









Small teams



Interview each other!



20 min

2x 10 min

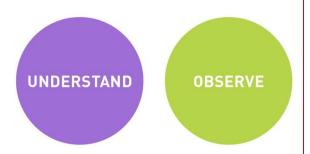
Split into groups and interview each other.

- Take turns for the interview.
- The first team starts with their questions.
 Don't forget to take notes on your findings!
- Rotate! Now, the other team will conduct the interview.



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!



What has been surprising to learn?

What is the need?



Share your interview results







Small teams



Share your interview results



5 min

In Subgroups:

Select the 3-5 most important quotes from your interviews. Write them down on large sticky notes!





Small teams



Share your interview results



15 min

Share the quotes with your whole team! Collect them on your board. Talk about it:

What is most interesting to you?

Create a persona



Create a persona



Make your interview insights tangible by creating personas.





















Persona





NAME, AGE

Naomí, 28

PERSONALITY

KEY DATA AND BIOGRAPHY

- · Works as a graphic designer in a mid-sized creative agency
- · Loves yoga, live music and traveling around Europe
- · Often on the go in the city, using public transport & shared workspaces
- · Values comfort & aesthetics in everyday experiences

Persona



NEEDS, DESIRES & MOTIVATIONS

- wants to find toilet quickly without stress
- desires clear information about availability, accessibility & cleanliness
- "I want to feel that this place was designed for humans not functions"

PROBLEMS & FRUSTRATIONS

- feels unsave in some public toilets
- payment systems or locked doors cause stress when in urgent need
- disgusted by sticky floors, overflowing bins & missing soap









Create a persona!

20 min

Create a persona with the (for you) most interesting need / desire / motivation.
Fill in the persona template.



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.

Persona



NEEDS, DESIRES & MOTIVATIONS

- wants to find toilet quickly without stress
- Desires clear information about availability, accessibility & cleanliness
- "I want to feel that this place was designed for humans not functions"

PROBLEMS & FRUSTRATIONS

- feels unsafe in some public toilets
- payment systems or locked doors cause stress when in urgent need
- disgusted by sticky floors, overflowing bins & missing soap





How Might We help Naomi feel as save and relaxed in a public toilet as in a yoga class?



NEEDS, DESIRES & MOTIVATIONS

- wants to find toilet quickly without stress
- Desires clear information about availability, accessibility & cleanliness
- "I want to feel that this place was designed for humans not functions"

PROBLEMS & FRUSTRATIONS

- feels unsafe in some public toilets
- payment systems or locked doors cause stress when in urgent need
- disgusted by sticky floors, overflowing bins & missing soap





How Might We make finding and accessing a public toilet less stressful when time is urgent?





How Might We redesign toilet payment and locking systems so she can enter quickly and without anxiety, even in urgent situations?

Develop brainstorming questions



How it works ...





Small teams



Develop brainstorming questions



10 min

Find How Might We questions for your persona.

Build them on your most powerful interview insights.

Select one out of the questions.

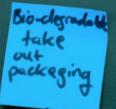


Lunch Break





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







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



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





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



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)

Step 3:

As a team add new ideas (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

Everyone shares 3 ideas with the team (4 min)

Step 3

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



Back to the future



Put yourself in a future world as it might look like in 100 years.



Super hero brainstorming



Put yourself into the shoes of a super hero.



Remember the sticky notes











Lorem ipsum dolor sit amet, consectetur Lorem ipsum dolor sit amet, consectetur Lorem ipsum dolor sit amet. consectetur



Remember ...



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

Brainstorming Session



How it works ...









Brainstorming Session

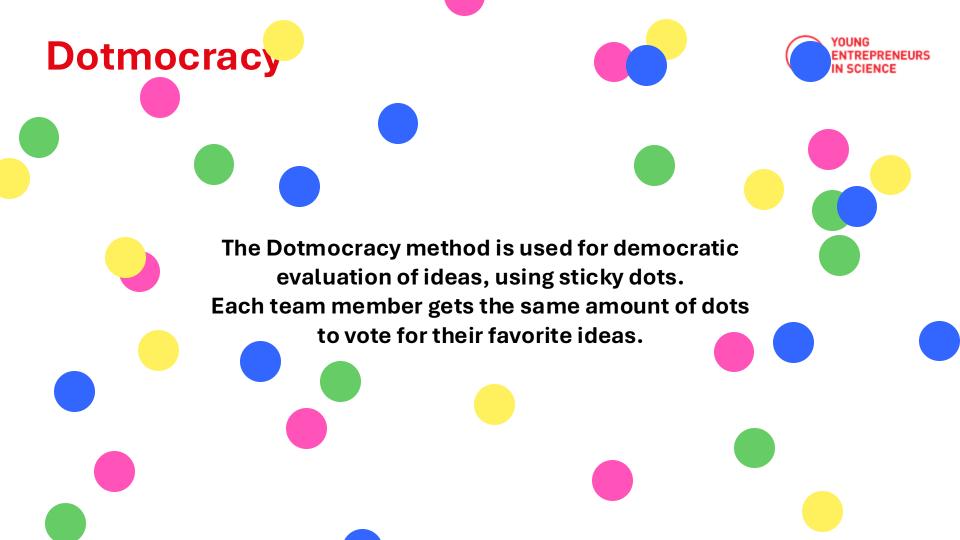


25 min

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

- Build on the ideas of others
- Defer judgement
- Listen actively
- Stay on topic
- Fail early and often







Prototype







Make idea tangible and testable

Think with your hands

Develop your idea further

Building the prototype



- The vague idea turns into more concrete shapes
- The team synchronises
- The idea gets tangible and therefore ready to be tested

Building the prototype





What?

Make the idea tangible



How?

Quick and dirty



Why?

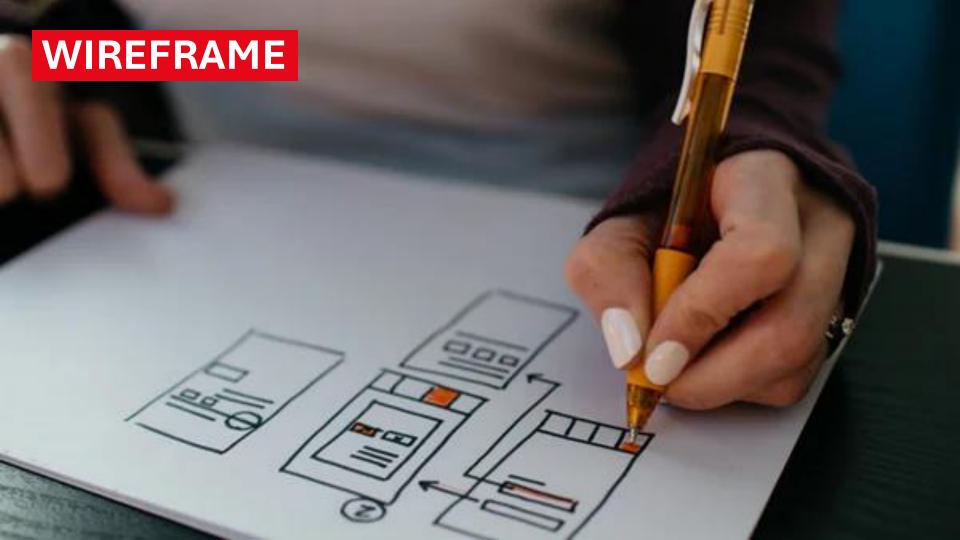
Understand and test

There are different kinds of prototypes ...











In summary ...



... think about what you want to test first.

Based on that, build the prototype as simple as possible.

Filter your ideas



How it works ...









Filter your ideas

10 min

Use the Dotmocracy method to find the best idea within your team. For each question, vote in a different colour.

- Favorite idea: Which idea are you most excited about?
- Degree of Novelty: Which idea is the most innovative one?
- Easy to implement: Which idea is the easiest to implement?

Build a prototype



How it works ...









Build your prototype

30 min

Together with your team, build a prototype.
You can ...

sketch

wireframe

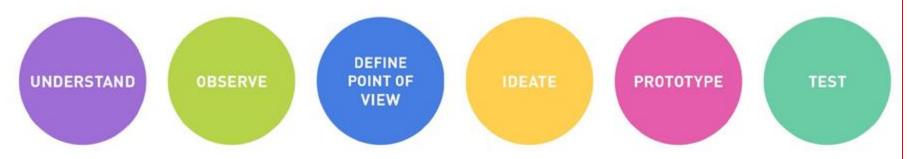
mockup

... and build with the material on the prototyping table!



Testing





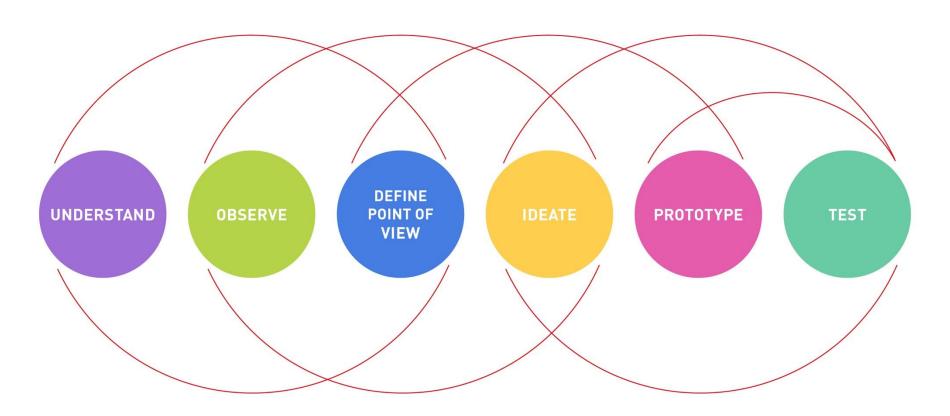
Get direct user feedback

Find your blind spots

Find the starting point for your next iteration

Design Thinking process





Prepare your test scenario



How it works ...









Prepare your test scenario

10 min

Discuss with your team.

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

Interview guidelines









80% Listening 20% Speaking

Dig for stories and emotions







Ask short and open questions



Ask "why"

Test, test, test!



Testing template



45 min	YOUR PROTOTYPE			
ep 1	CHALLENGE		PROTOTYPE	
ovide a short introduction: What is this about, what is to expected? c careful not to reveal anything that could affect your test sults. Refrain from explaining things too much. Instead, serve the subject closely – write down statements, estions, and behaviors.	INTRODUCTION			
estions, and behaviors. er testing, ask questions based on your observations and nplete your notes accordingly.	TEST SUBJECT			
	PERSONAL INFORMATION			
	I LIKE I WISH	NEW IDEAS	OPEN QUESTIONS	OBSERVATIONS

How it works ...









Test your prototype!

35 min

Go outside with your team to test your prototype.

- Remember the interview guidelines
- Take notes on your test template

Iterate and prepare your presentation



Presentations



PRESENTATION		YOUNG ENTREPRENEUR IN SCIENCE
Fill out the template with your findings from the testing nterviews in preparation of your presentation. 15 min	NEED Which need/problem do you address with your solution?	PROTOTYPE How does your solution work?
	TEST-LEARNING Which are the three central insights from your user testing?	NEXT STEPS Which would be the next steps in the iteration?

How it works ...











15 min

Together with your team:

- Gather your learnings
- Fill out the presentation template and prepare your presentation

How to give feedback



Feedback etiquette



Be sensitive!

- Keep in mind your varied cultural backgrounds
- Keep a sense of mutual respect
- Practice clear and constructive feedback

Feedback etiquette



Embrace feedback!

- Understand feedback as a learning opportunity
- Try not to defend yourself or explain too much
- Take notes!
- Practice listening with curiosity and openness

Feedback grid



I like	l wish
New ideas	Open questions

Presentations





3 min Presentation



2 min Feedback





Stay connected with the YES community



- Join our **LinkedIn group**
- Take part in other (Online-) **Workshops**



- Tell your peers and spread the word via social media
- Stay active in our Alumni-Community
- Keep learning from each other on your entrepreneurial journey



Boost your career with your YES experience



 Connect with YES and fellow participants on LinkedIn



- Share your YES certificate on Social Media
- Add YES to your trainings on LinkedIn and your CV
- ... and carry the entrepreneurial spirit further.



Top-Talents-Track



You've got a bold idea from your research - now what?

We are expanding our programme with the **Top-Talents-Track**, a three-month support programme for 20 highly qualified talents from our network. It combines workshops, individual coaching, peer-to-peer learning formats, and networking events.



Time for feedback!







Thank you!



Connect with us and each other via Social Media ...







LinkedIn Group



Instagram @sciencepreneurs



Newsletter

