

YOUR RESEARCH CANVAS



Learning goals

- Reflection about the potential of your **own research topic/idea**
- Assessing potential through **identifying users/stakeholders**
- Developing or extending **potential use cases** based on your research & network

Up for the challenge?



**Work with your
own research topic**



**MIRO
(Digital Whiteboard)**

Welcome to miro ...



← text



← sticky notes



← more functions,
like stickers and emojis



100%

navigation
map

zoom

Experience miro

SOLOWORK: YOUR RESEARCH CANVAS

CHECK-IN

Fill in the template using sticky notes.

5 minutes

Step 1

Take a sticky note and position it in the template frame.

Step 2

Write down your favorite animal.

Step 3

Change the size of the sticky note.

Step 4

Change the color of your sticky note.

Step 5

Change the shape of your sticky note.

THE JUNGLE OF ENTREPRENEURS

How it works ...



Solo work

Transfer to MIRO and find the Miro Experience board on the top



Warm up with MIRO



5 minutes

1. Take a sticky note and position it in the template frame
2. Write down your favourite animal
3. Change the size of the sticky note
4. Change the colour of your sticky note
5. Change the shape of your sticky note

Think big!



Imagine it's 2035.

Your research project has led to pioneering results with breakthrough solutions and will be featured as title page in the recent edition of Science Magazine.

What could be the headline of this magazine?



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How it works ...



Solo work

Everyone stays in main room

Go to MIRO board



Think big!

Imagine and collect on MIRO:

Claim one of the empty
Science Magazines and mark
it with your name

**Fill the title page with your
research vision**

Add pictures, symbols or
other visuals



7 min

7 min time for yourself

**We will call you back to the
screen**

Sharing ...



Raise your virtual hand or share in the chat!

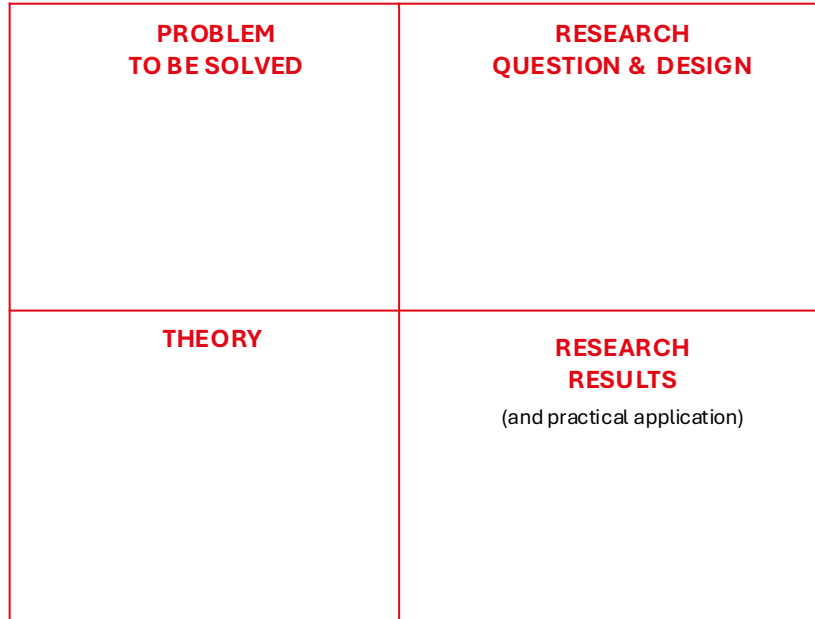
What is the headline of Science Magazine
featuring your research?

What breakthrough does your research offer to whom?

DEEP DIVE INTO YOUR RESEARCH



The research canvas



RESEARCH



USE CASE

The Research Canvas Example

Getting ahead of
Alzheimer's disease

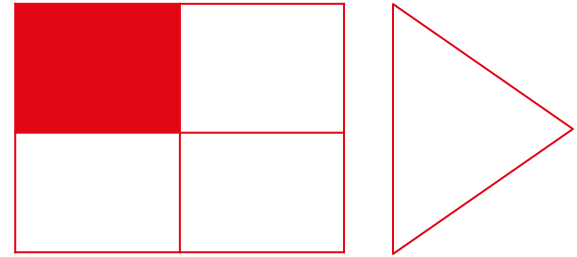


Problem to be solved

- What is your object/topic of research?
- What underlying problem or challenge are you addressing with your research?

EXAMPLE

So far, there is no efficient treatment available to cure Alzheimer's disease.
Thus, there is a need for an early diagnosis, when first changes in the brain occur.



**Problem to be
solved**

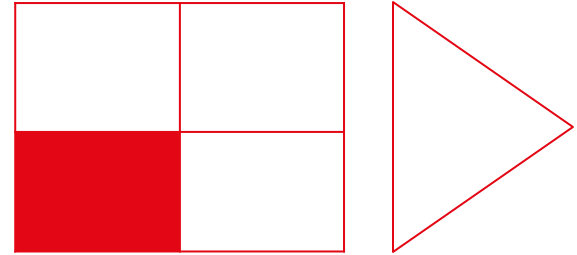


Theory

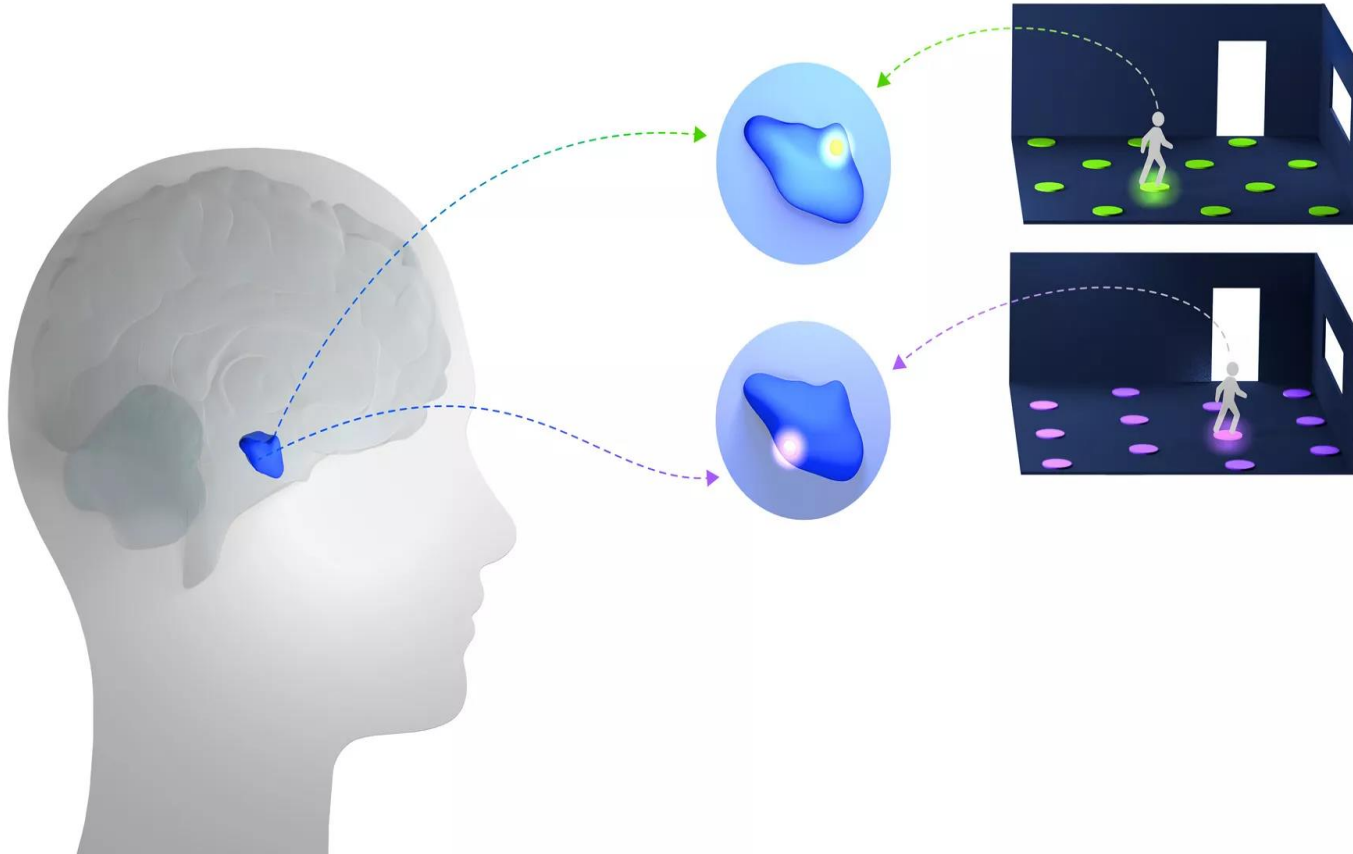
- What theoretical background underlies your research?
- Note the state-of-the-art highlights!

EXAMPLE

Protein accumulations in certain brain regions at the earliest stages of the disease.

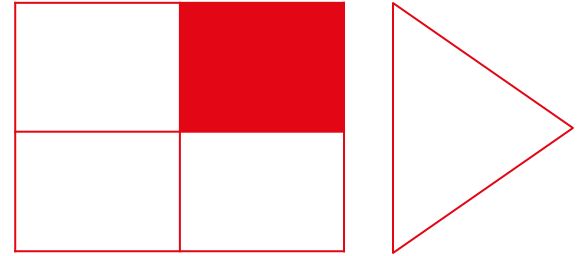


Theory



Research Question & Design

- What specific aspects of the problem/challenge are you researching?
- Note some details about your research setting! (qualitative vs. Quantitative, samples etc.)



EXAMPLE

Can our movement patterns during wayfinding in our surroundings be used to detect early changes/degeneration in the brain?

Research Question & Design



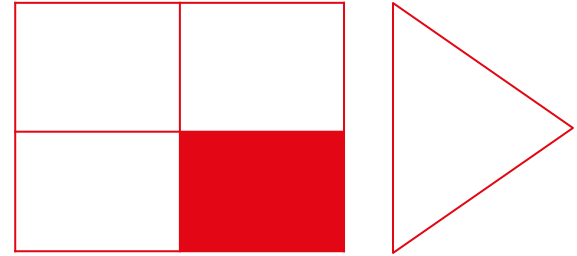
Research Results

(+practical applications)

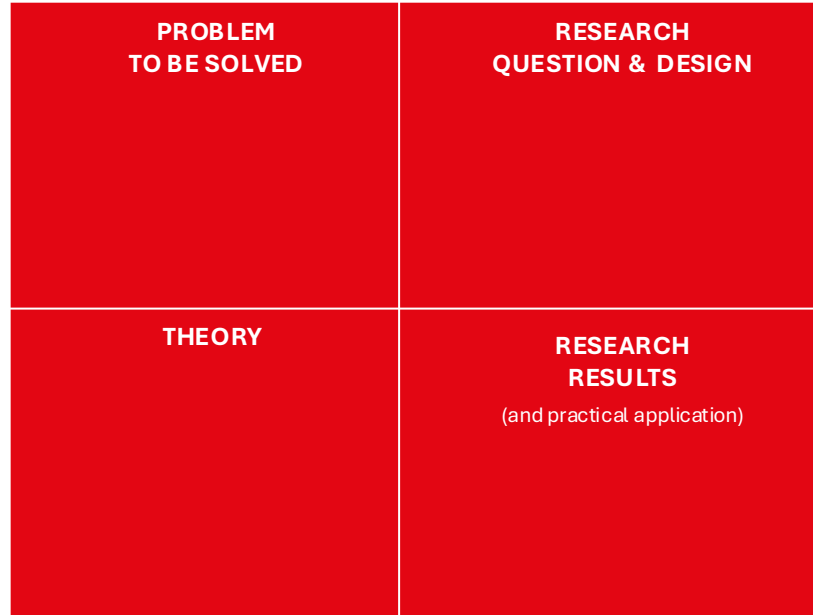
- What are your results so far?

EXAMPLE

Tracking GPS and sensor data from smartphones can be used to study movement patterns and related brain change



The research canvas



RESEARCH



USE CASE

How it works ...



Solo work

Everyone stays in main room
Go to MIRO board



The Research Canvas

Reflect and collect on MIRO:
Claim one of the empty
Research Canvases; mark it
with your name & topic

**Fill all the fields on the
LEFT side of the Canvas with
sticky notes**

Try to keep it short
and concise



15 min

15 min time for yourself

**We will call you back to
the screen**

Potential Product/ Service

What about our walking patterns? Why not use data from our smartphones to study our question?



The Research Canvas Example

Translating the research result into a product, together with a team of other experts such as software developers and business experts.





“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

Young Entrepreneurs in Science Alumna

FROM RESEARCH TO USE CASE



The image shows a hand-drawn diagram on a white surface, illustrating the process from research to use case. A hand is shown drawing on one of the screens with a pink marker. The diagram includes several hand-drawn mobile phone screens with various icons (phone, envelope, folder, etc.) and arrows indicating a flow or relationship between them. The background is a white surface with various colored sticky notes and markers.

What is a use case?



Raise your virtual hand or share in the chat!

What comes to your mind when you
think of users/use cases?

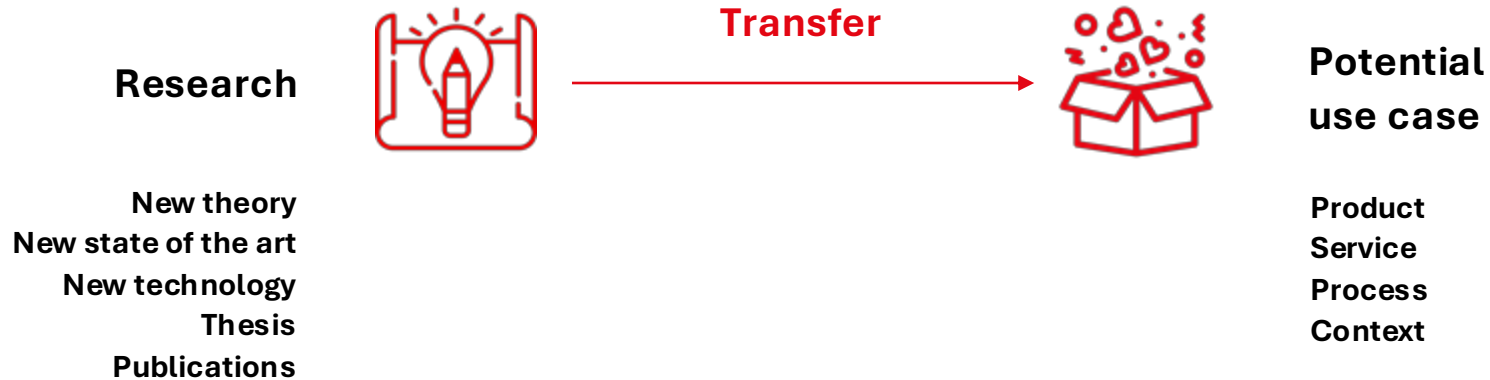
What is a use case?



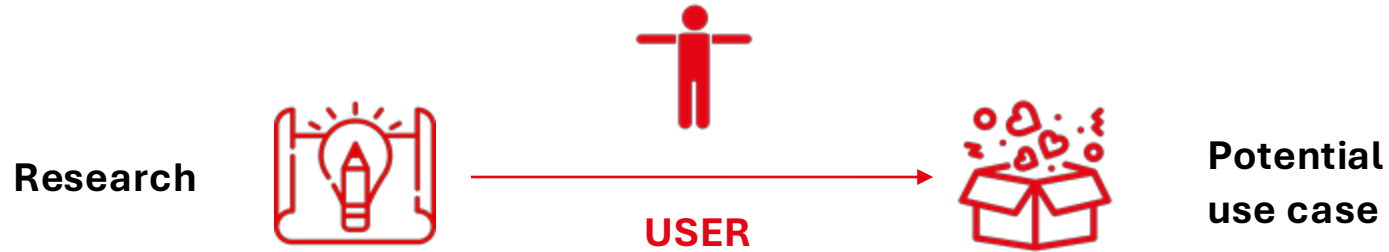
**“A specific situation in which a product/service/
solution can potentially be used.”**

Lawrence Chapman for PMA

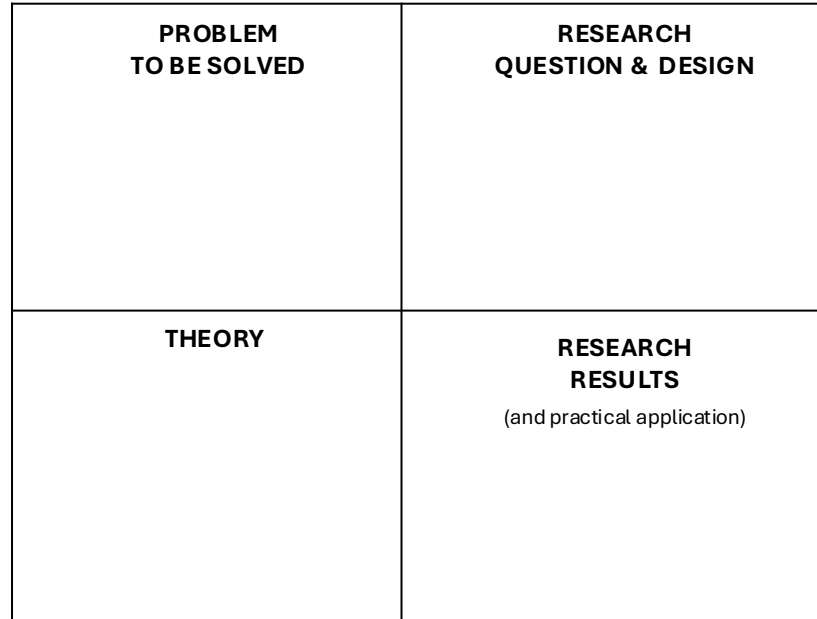
From research to use case



From research to use case



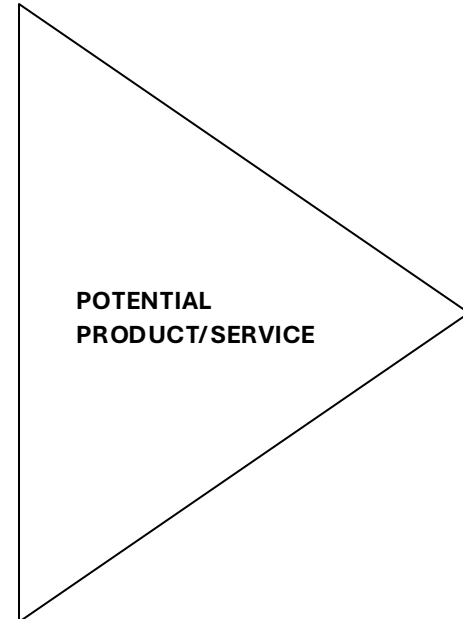
Identifying users



RESEARCH



USER



USE CASE

Identifying users

Stakeholder

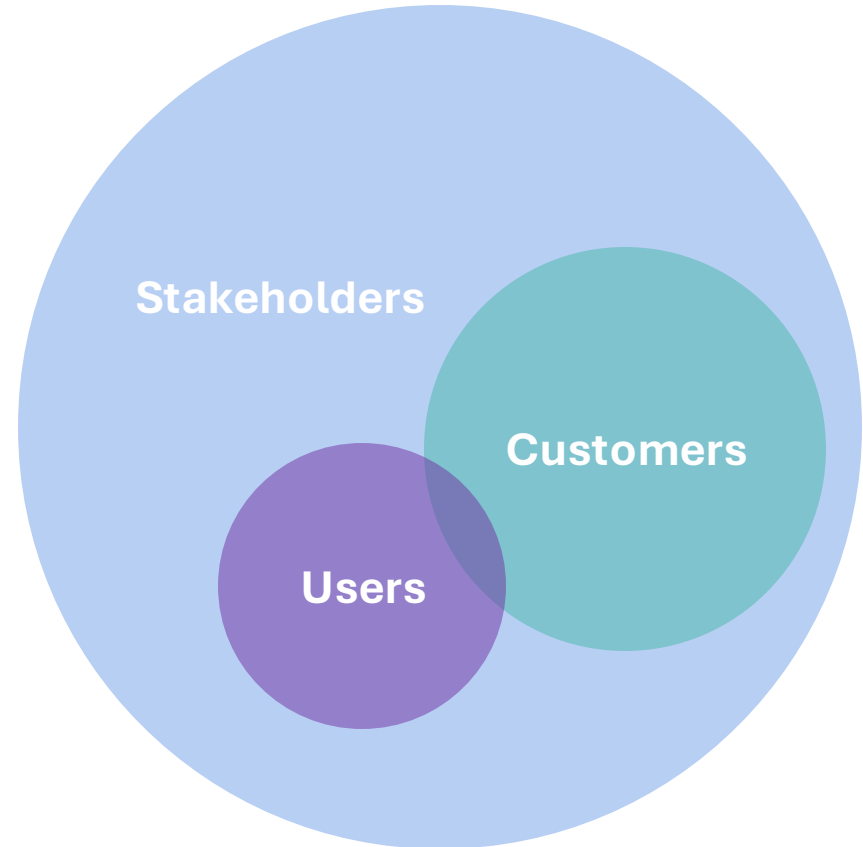
has an interest in, or is affected by
what a business does

Customer

is willing to pay for a product or
service that satisfies an unmet need

User (Beneficiary)

benefits from the value created by the
product or service (though they might
not be the one to pay for it)



Identifying users – example

Stakeholder

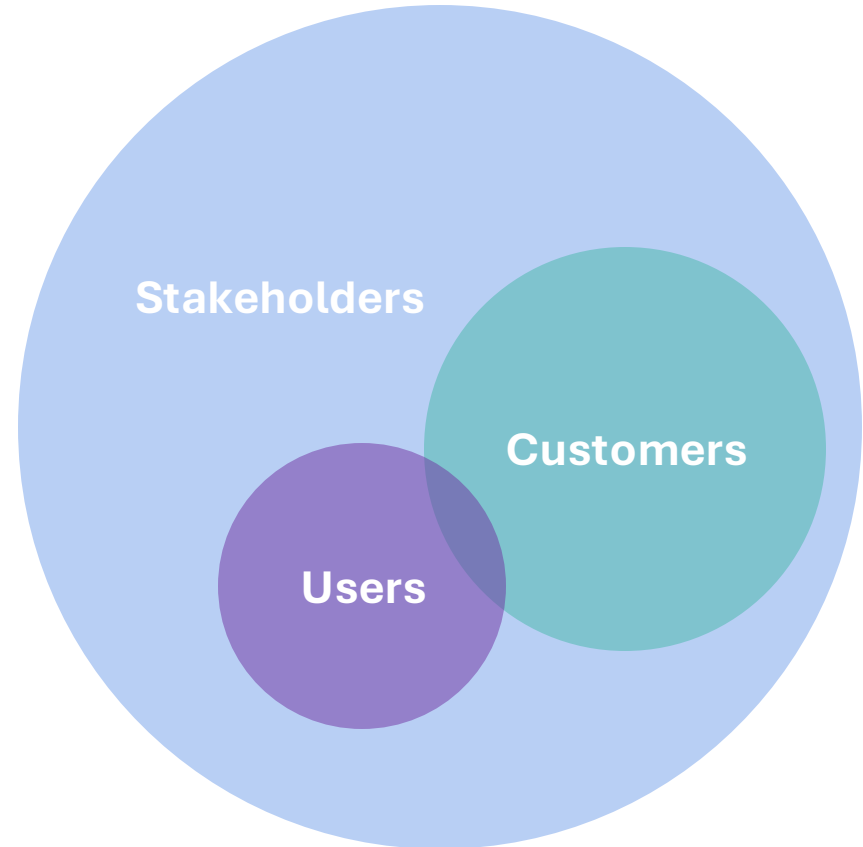
Society in General

Customer

**Health Care System
Medical Industry**

User (Beneficiary)

**Patients with subjective
cognitive decline**



From research to use case

PROBLEM TO BE SOLVED	RESEARCH QUESTION & DESIGN
THEORY	RESEARCH RESULTS (and practical application)

RESEARCH



USER



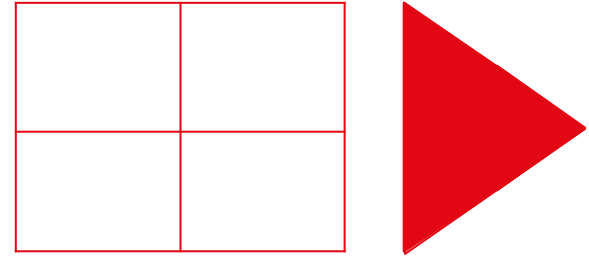
USE CASE

Potential use case

- In which context could your research find application?
- What is a problem you could solve in that field and who is having that problem?
- Can you build a new product/service around your research to solve their problem?

EXAMPLE

Smartphone App and state-of-the-art Machine Learning algorithms to classify individual movement patterns and to predict cognitive health status



Explore-app

EXPLORE

Task: Finding 5 Pols on campus



- walking
- map-viewing

GPS data logging

GPS & sensor data
(acceleration/gyroscope)
logging



Copyright: Nadine Diersch/DZNE



Younger Adult
Older Adult
Subjective Cognitive Decline

BRAINSTORM



How it works ...



Solo work

Everyone stays in main room
Go to MIRO board



Brainstorm

Reflect and collect in your
canvas on MIRO:

1. Who are your stakeholders?
Out of those: who are your
potential users that use your
product/service/process
(middle box)?
2. What could be use cases for
those users (right box)



10 min

10 min time for yourself

**We will call you back to the
screen**

From research to use case

Some questions to brainstorm

- In which contexts and for whom could your research be useful as well? Think out of the box!
- What would you do with your research if you had 1 billion Euro?
- With which add-ons or features could you extend and improve your research (idea)?



**Build on each
other's ideas**



How it works ...



Small teams

Digital Breakout Rooms

Go to MIRO board



Build on each other's ideas

Present your canvas to each other:

Ask & discuss questions

Brainstorm new ideas based on what you have understood



25 min

25 min in total –
8 min each canvas

Countdown for last 30sec

Automatic transfer back to main room

Next steps

- Build up a network
- Talk about your use case(s) with friends, family, colleagues > collect feedback
- Get professional support
- Train your entrepreneurial mindset
- Exchange with role models
- Take it step by step

