

The Storytelling Potential of Your Research



An initiative of:



FALLING WALLS FOUNDATION

With funding from the:



Federal Ministry
of Research, Technology
and Space

THIS PROGRAMME IS SUPPORTED BY:

SARTORIUS

MEET THE TEAM



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



Agenda

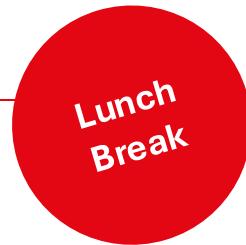


Part I

Research Canvas

Check-In

- Learn about the relevance of users and potential use cases
- Apply the Research Canvas to your own research
- Get creative by brainstorming potential use cases for your research topic



Part II

Storytelling

- Get to know the basics of storytelling and storytelling frameworks
- Create the protagonist of your story and define your impact
- Learn techniques of captivative storytelling
- Write and narrate your own story

Wrap-Up

Netiquette



-  Be respectful & constructive
-  Use AI responsibly: Use it to support the process, not to produce final results
-  Mute when not speaking
-  Be present: keep your camera on. Feel free to eat, drink, or stretch
-  Need help? Reach out to us via the chat if experiencing technical issues
-  React & engage: Use emojis or reactions to share feedback
-  Drop your questions or ideas in the chat – we're all here to learn together!

CHECK-IN



Check-in



1.



**Everybody, make a gesture
how you are feeling today!**

2.



**One after another:
Introduce yourself with your name,
location, and research topic.
Then, pass on the speaking ball to
somebody else.**

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

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

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



5 minutes

Welcome back



**Let us know, if you're with us:
Raise your emoji thumb!**

Think big!



Imagine it's 2030.

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?



Think big!

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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?



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**

Welcome back



**Let us know, if you're with us:
Raise your emoji thumb!**

Sharing ...



Raise your virtual hand or share in the chat!

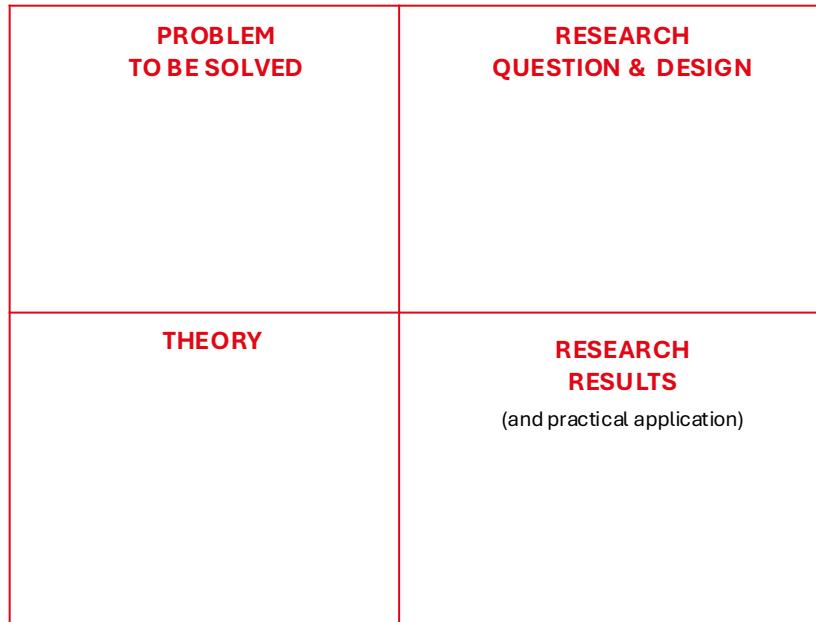
What is the headline of Science Magazine
featuring your research?

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**

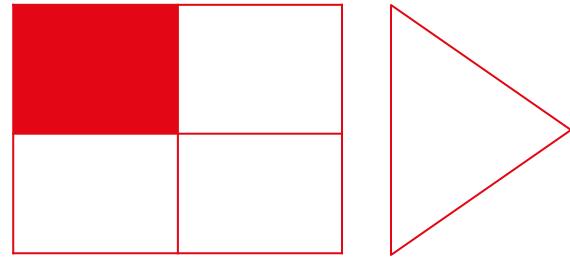


Problem to be solved

- 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

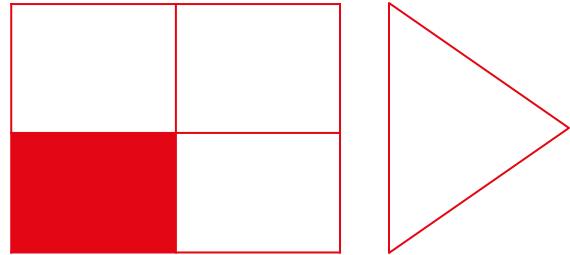


Theory

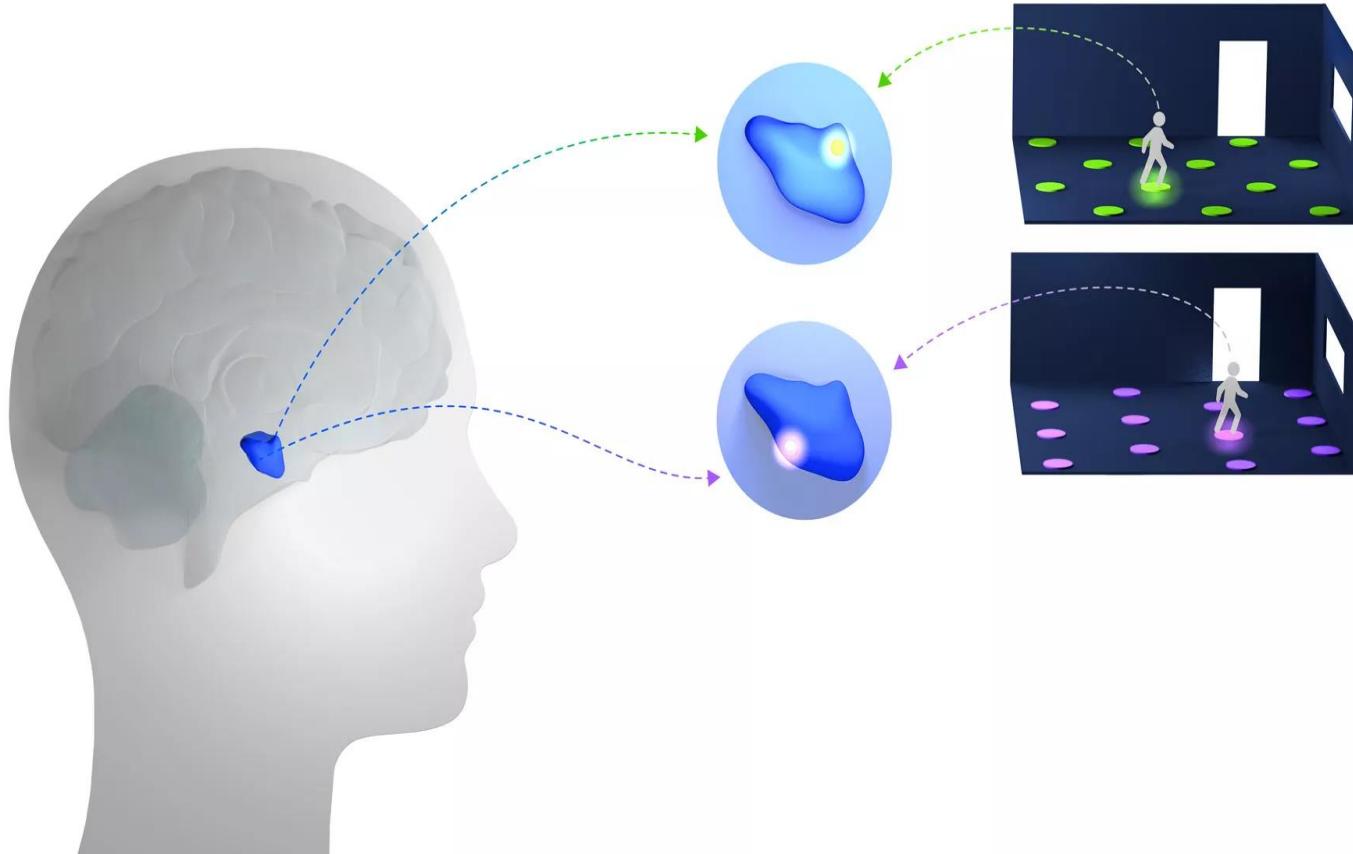
- What theoretical background underlies your research?
- Note the state-of-the-art highlights!

EXAMPLE

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

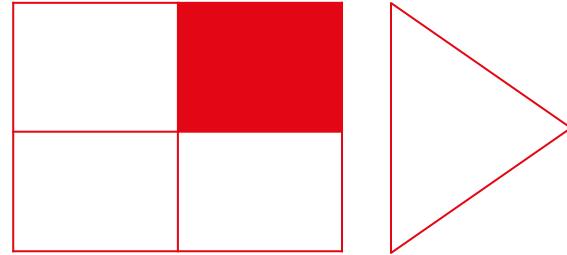


Theory



Research Question & Design

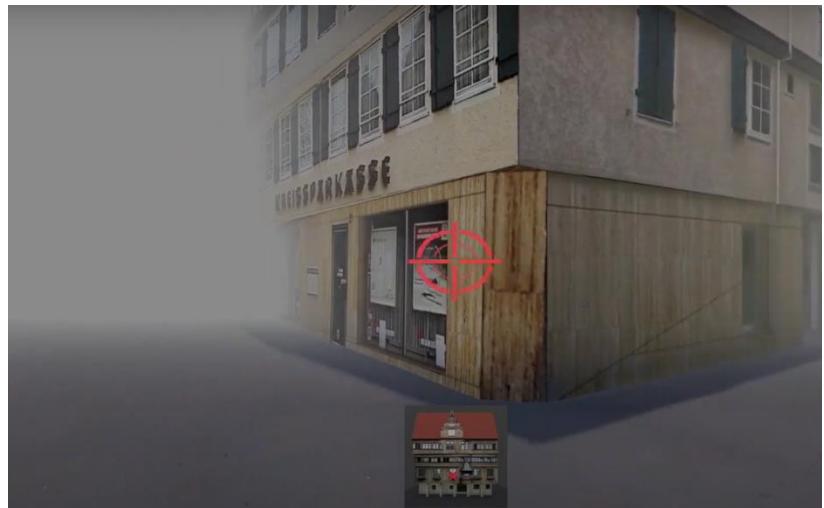
- What specific aspects of the problem/challenge are you researching?
- Note some details about your research setting! (qualitative vs. Quantitative, samples etc.)



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

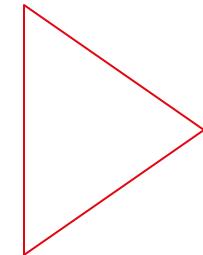
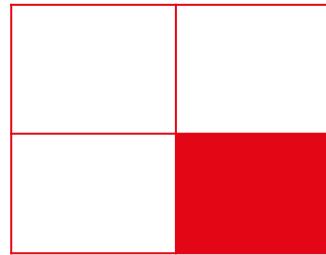
(+practical applications)



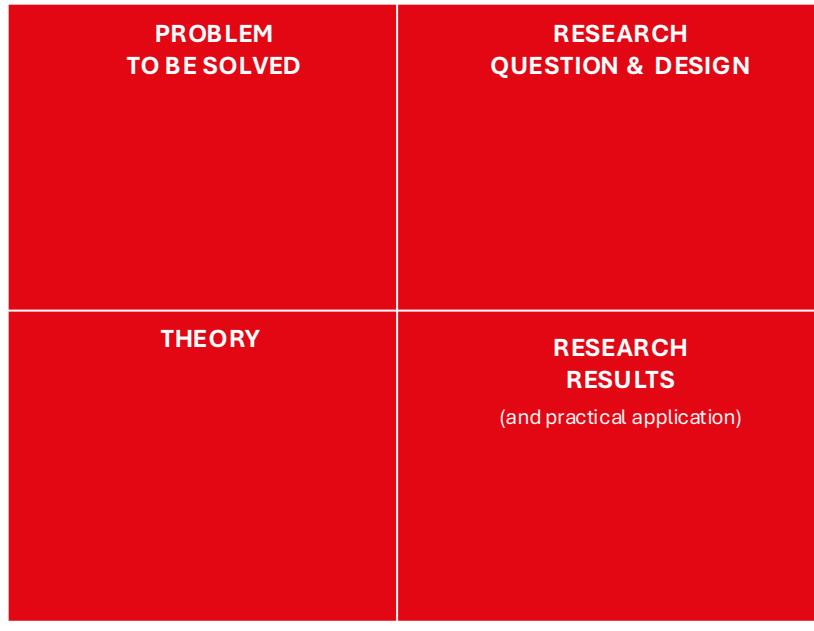
- What are your results so far?

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**

Welcome back



**Let us know, if you're with us:
Raise your emoji thumb!**

**It's coffee
o'clock!**



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



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?

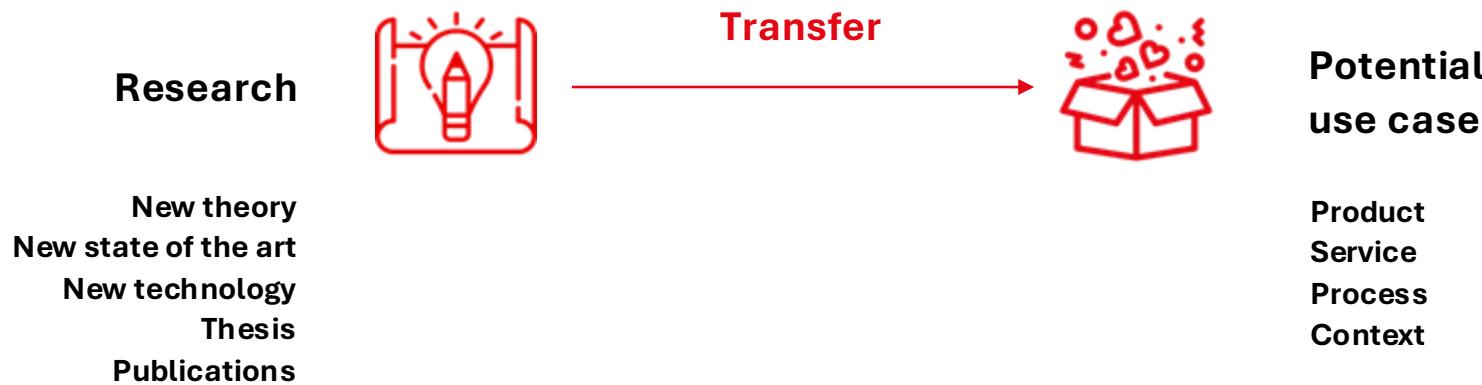
What is a use case?



**“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



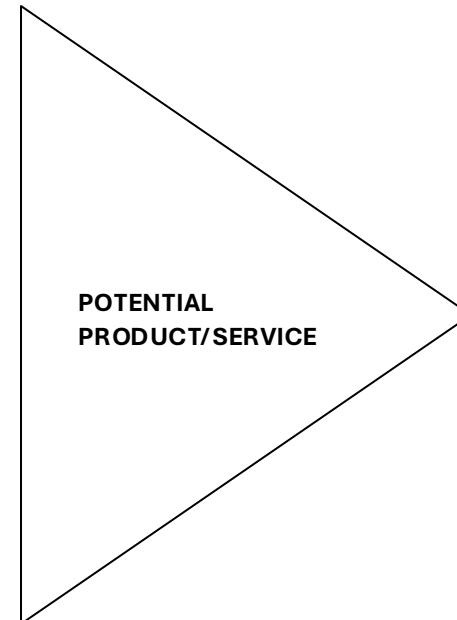
Identifying users

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

RESEARCH



USER



USE CASE

Identifying users

Stakeholder

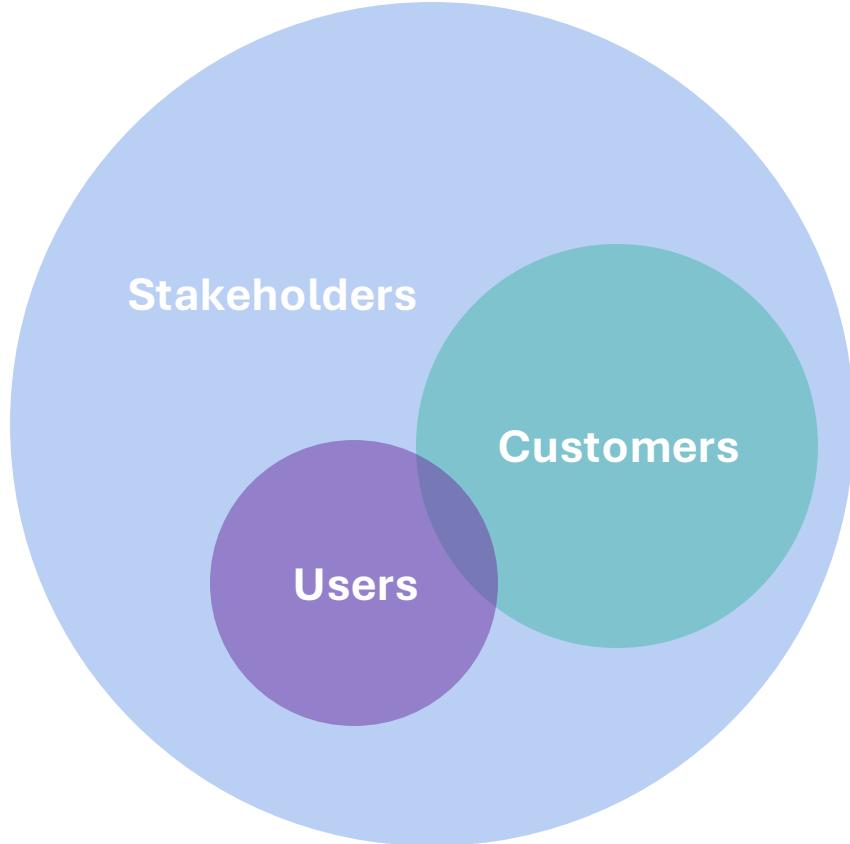
has an interest in, or is affected by what a business does

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)

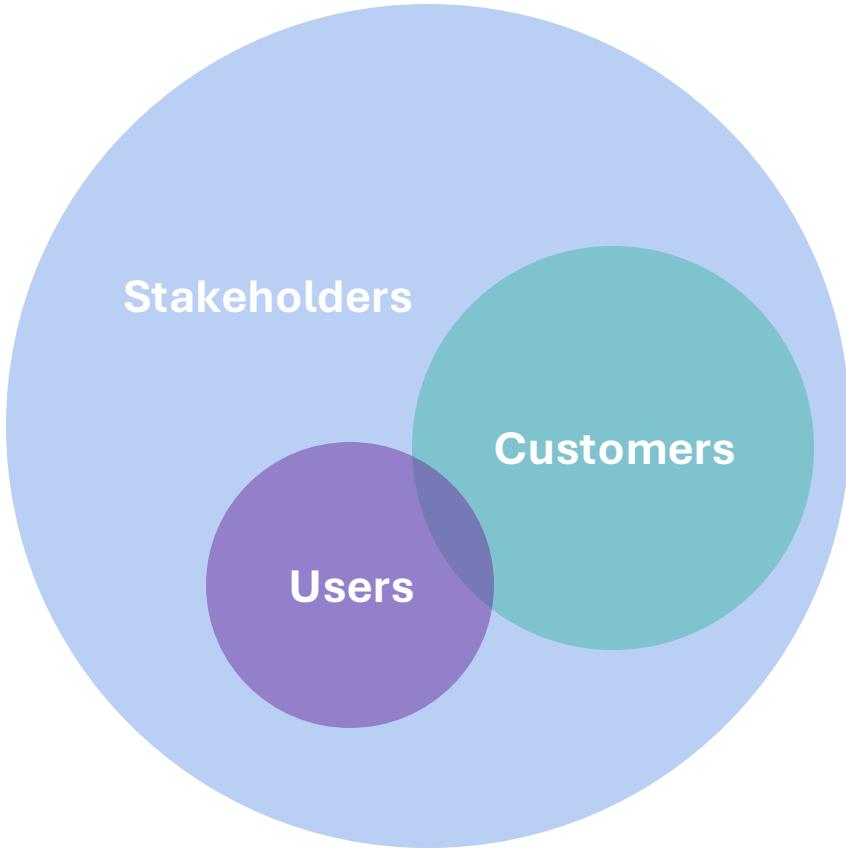


Identifying users – example

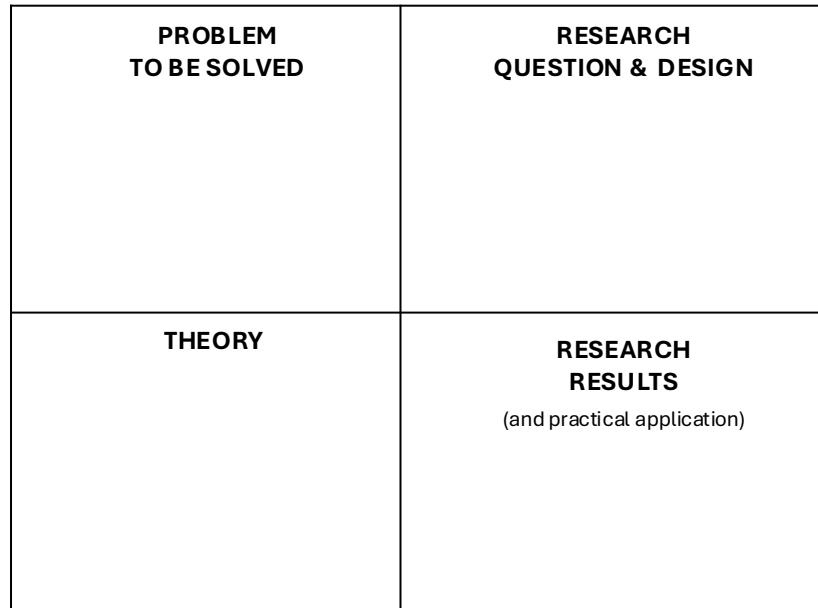
Stakeholder
Society in General

Customer
Health Care System
Medical Industry

User (Beneficiary)
Patients with subjective
cognitive decline



From research to use case



RESEARCH



USER



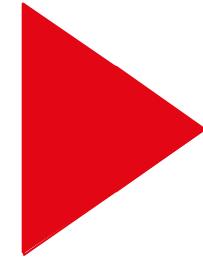
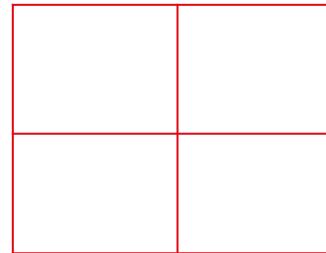
USE CASE

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 Pots on campus



- walking
- map-viewing

GPS data logging



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

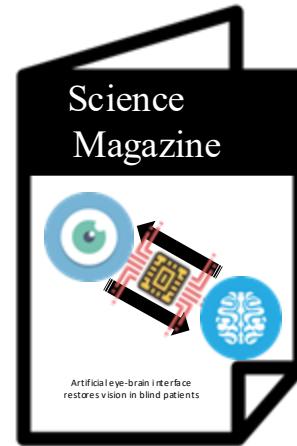
10 min time for yourself

**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)?



Welcome back



**Let us know, if you're with us:
Raise your emoji thumb!**

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

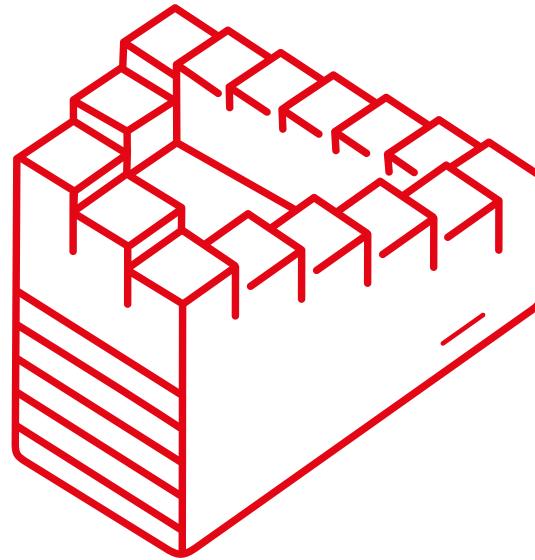
Welcome back



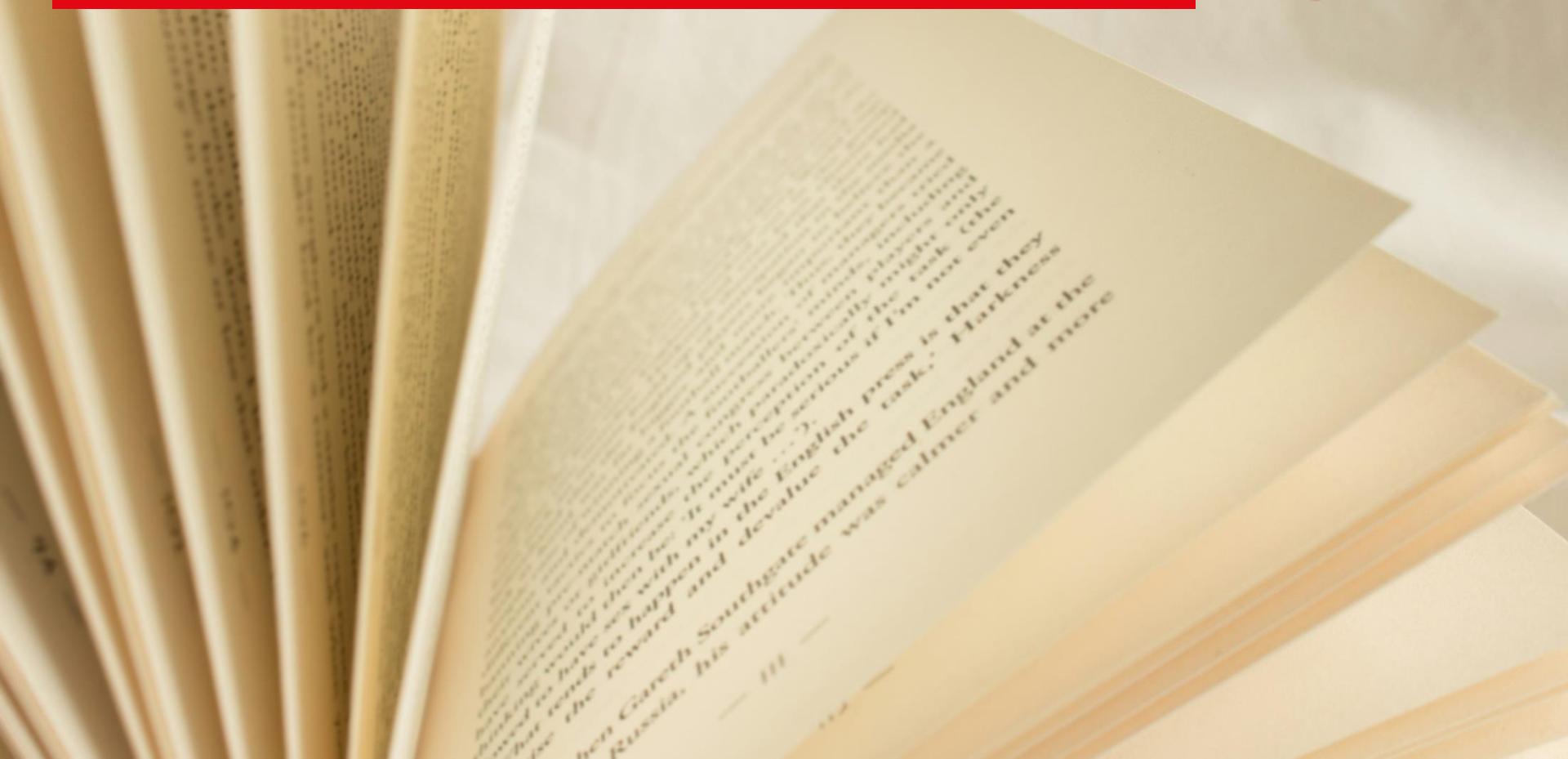
**Let us know, if you're with us:
Raise your emoji thumb!**

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



NEXT: STORYTELLING FOR IMPACT



Lunch Break



STORYTELLING FOR IMPACT



Today's Agenda



- The power of stories
- Exercise 1: Define your impact
- Exercise 2: Create your stories' protagonist
- Exercise 3: Create your 3-minutes story
- Exercise 4: Captivating Storytelling
- Share & Inspire
- Summary & Check-Out

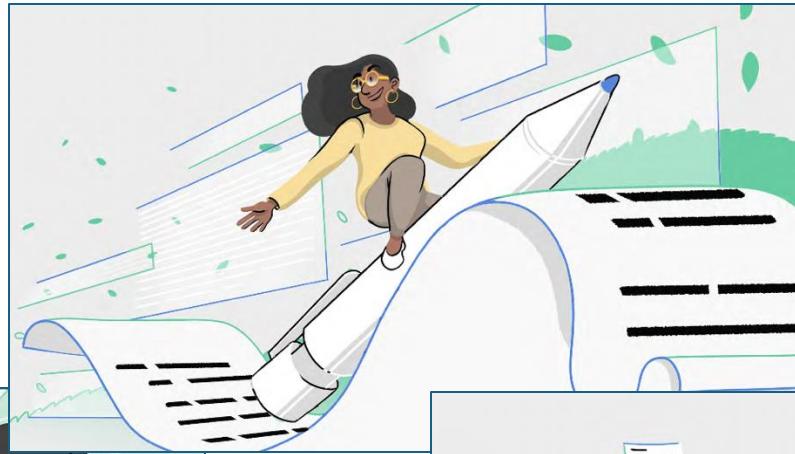
Learning goals



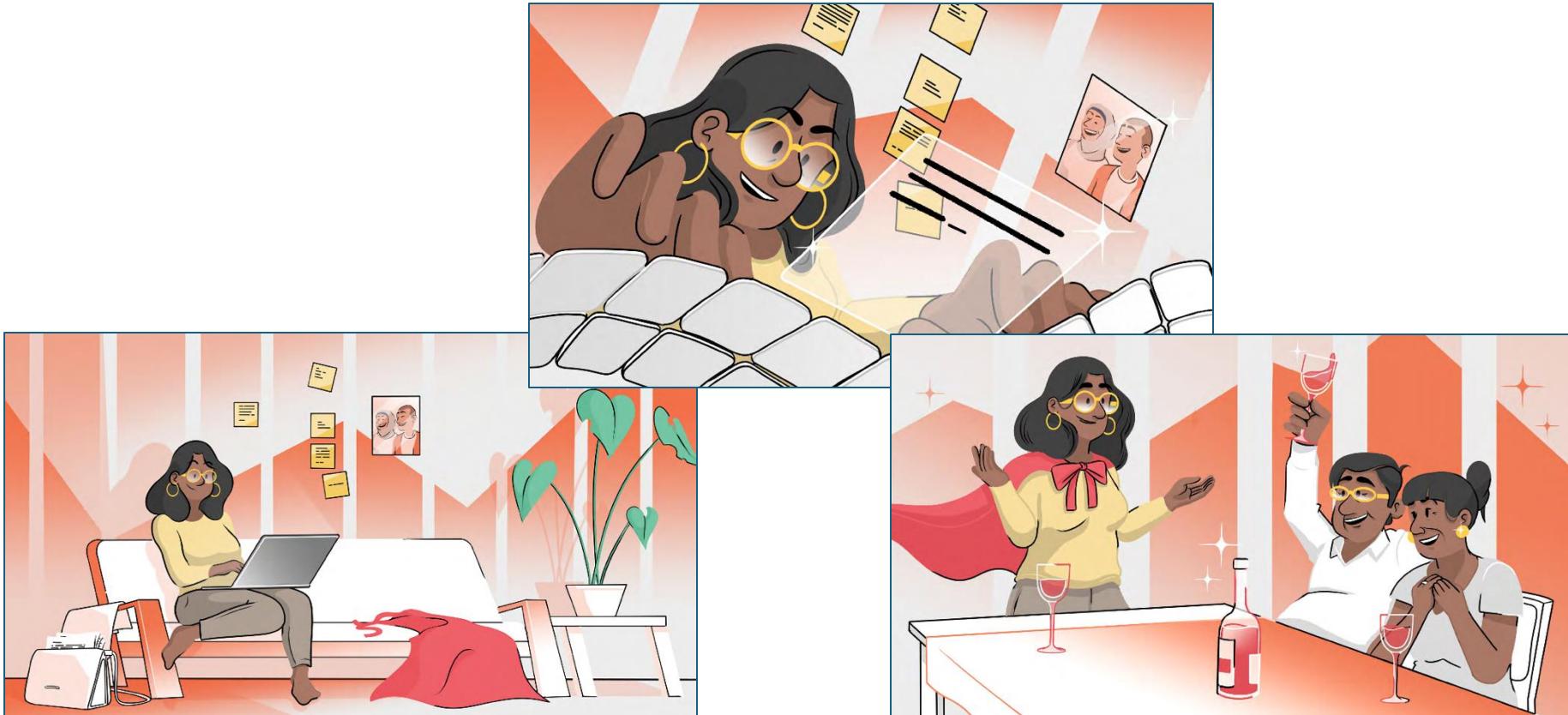
Learning goals



Learning goals



Learning goals



Learning goals



Define your own desired impact



Getting to know the power of storytelling and emotions in communicating your own scientific ideas



Conveying content in such a way that it sticks and creates an impact—even outside of science

Getting into telling stories



How it works ...



Solo work

By yourself



2 truths, 1 lie



2 min

**Come up with 3 short stories
about yourself.**

2 of them are true, 1 is a lie!

Write them down on a piece
of paper.

How it works ...



Teamwork



2 truths, 1 lie



10 min

Team of 3

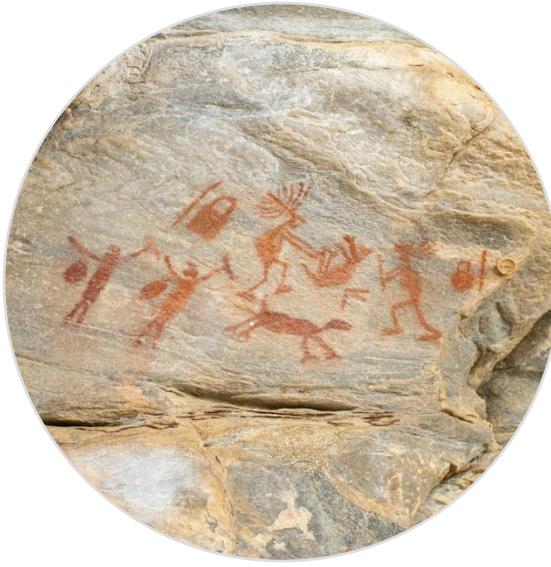
Take turns:

- First person shares the 3 facts about him-/herself and the other 2 guess which one is the lie
- Take turns until everyone has shared.
- Take care of microtiming!

The power of stories



The origins of storytelling



A story is a “primal form of human communication”.

Dieter Georg Herbst
(Lecturer at the Leipzig School of Medicine)

Why we developed stories

Unlike the neanderthal, the sapiens had quickly developed complex language and was able to convey abstract concepts, beliefs, and myths.

These stories helped the sapiens to collaborate in large groups, coordinate activities and share common goals and beliefs.



Storytelling in the now



The way stories work



We remember stories 22 times better than data.

Study led by **Jennifer Aaker**,
Stanford Graduate School of Business (2013)

The way stories work



Storytelling and impact



- It is rousing stories that motivate and drive people forward
- When we hear a rousing story, a spark is ignited in us
- We are inspired and fascinated, for some people, this spark turns into a fire
- Driven by it, they change the world



“The most powerful person in the world is the storyteller. The storyteller sets the vision, values and agenda of an entire generation that is to come.”

Steve Jobs

Storytelling and your research



If you want to get your ideas out into the world, inspire others with your vision, and create impact. Then storytelling is a very important tool for you as a researcher.



That's why today we want to focus less on generating a new start-up idea and more on the craft of storytelling!

Before we start



Welcome to miro ...



← text

← sticky notes

← more functions, like stickers
and emojis

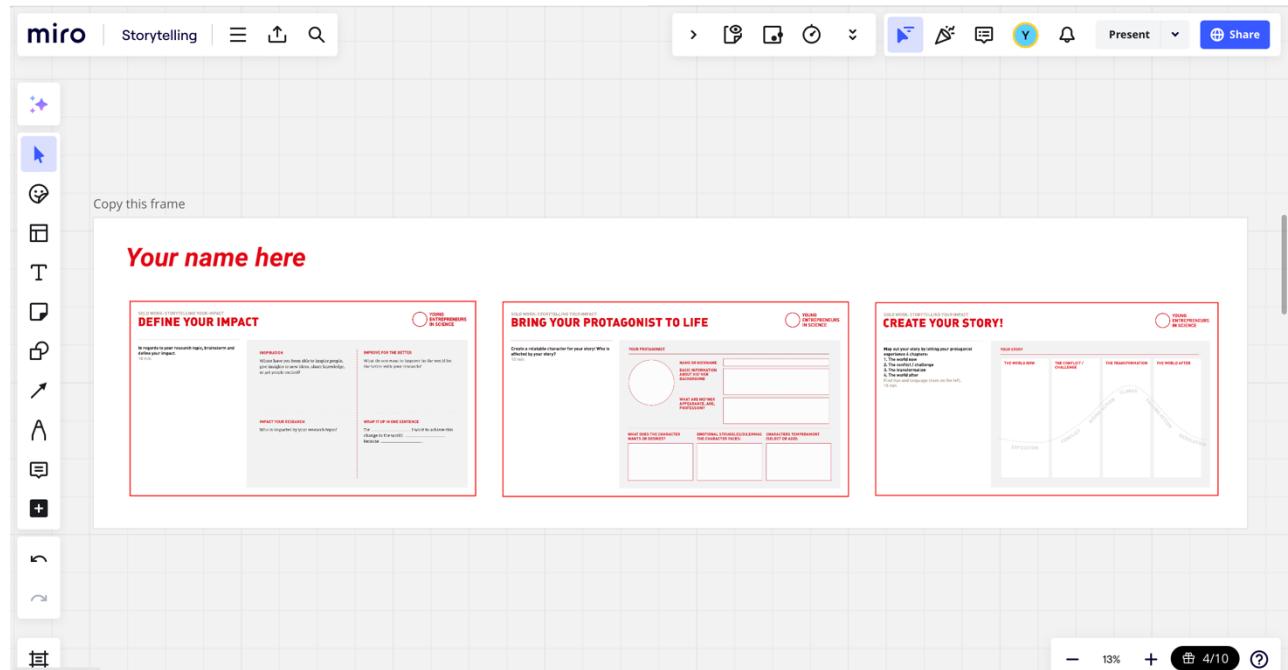
navigation
map

zoom

Find your Workspace



1. Find a workspace.
2. Write down your name.
3. If you have time:
Drag&Drop an icon to
visually mark your
template



The image shows a Miro workspace titled 'Storytelling' with a red header. The main area contains three templates for 'Storytelling' and 'Young Entrepreneurs in Science'.

- Template 1: Define Your Impact**

It includes sections for 'IMPACT', 'IMPACT RESEARCH', and 'IMPACT STATEMENT'.
- Template 2: Bring Your Protagonist to Life**

It includes sections for 'PROTAGONIST', 'PROTAGONIST RESEARCH', and 'PROTAGONIST STATEMENT'.
- Template 3: Create Your Story!**

It includes sections for 'STORY', 'STORY RESEARCH', and 'STORY STATEMENT'.

The workspace features a sidebar with various icons for drawing, text, shapes, and more. The bottom right corner shows a navigation bar with zoom controls and a page number '4/10'.

EXERCISE

Define your impact



How it works ...



Solo work

Use the first template

Step 1: Define your impact



Define your impact



15 min

In regard to your research topic, brainstorm:

Where have you been able to inspire?

What do you want to improve in the world
for the better with your research?

Who is impacted by your research topic?

Wrap it up in one sentence:

For ... I want to achieve this change in
the world: ... because

Miroboard: Preview



SOLO WORK: STORYTELLING YOUR IMPACT

DEFINE YOUR IMPACT

In regards to your research topic, brainstorm and define your impact.

15 min



INSPIRATION

Where have you been able to inspire people, give insights to new ideas, share knowledge, or get people excited?

IMPROVE FOR THE BETTER

What do you want to improve in the world for the better with your research?

IMPACT YOUR RESEARCH

Who is impacted by your research topic?

WRAP IT UP IN ONE SENTENCE

For _____ I want to achieve this change in the world: _____ because _____.

Welcome back

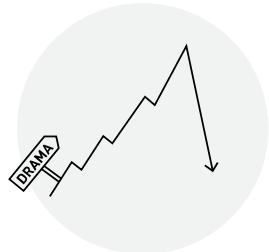


**Let us know, if you're with us:
Raise your emoji thumb!**

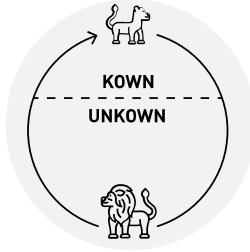
The Storytelling Framework



Different storytelling frameworks



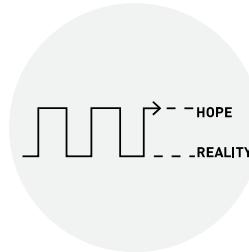
The Mountain



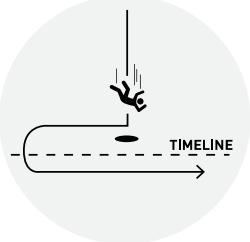
Monomyth



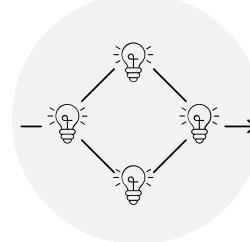
Nested Loops



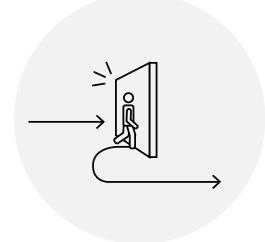
Sparklines



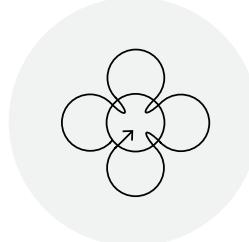
In Medias Res



Converging Ideas

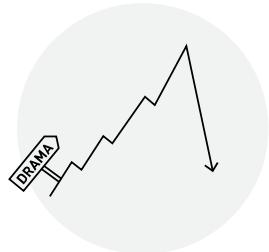


False Start

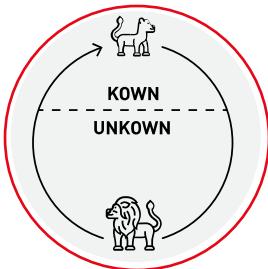


Petal Structure

Different storytelling frameworks



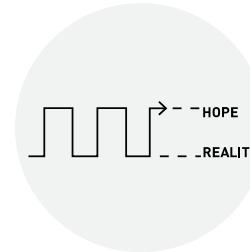
The Mountain



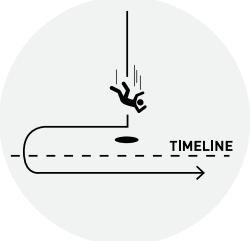
Monomyth



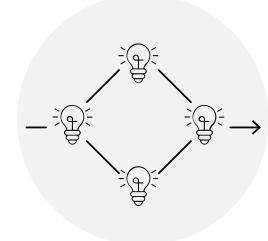
Nested Loops



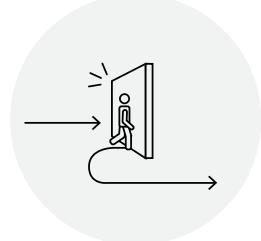
Sparklines



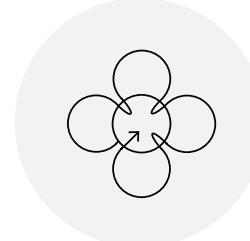
In Medias Res



Converging Ideas

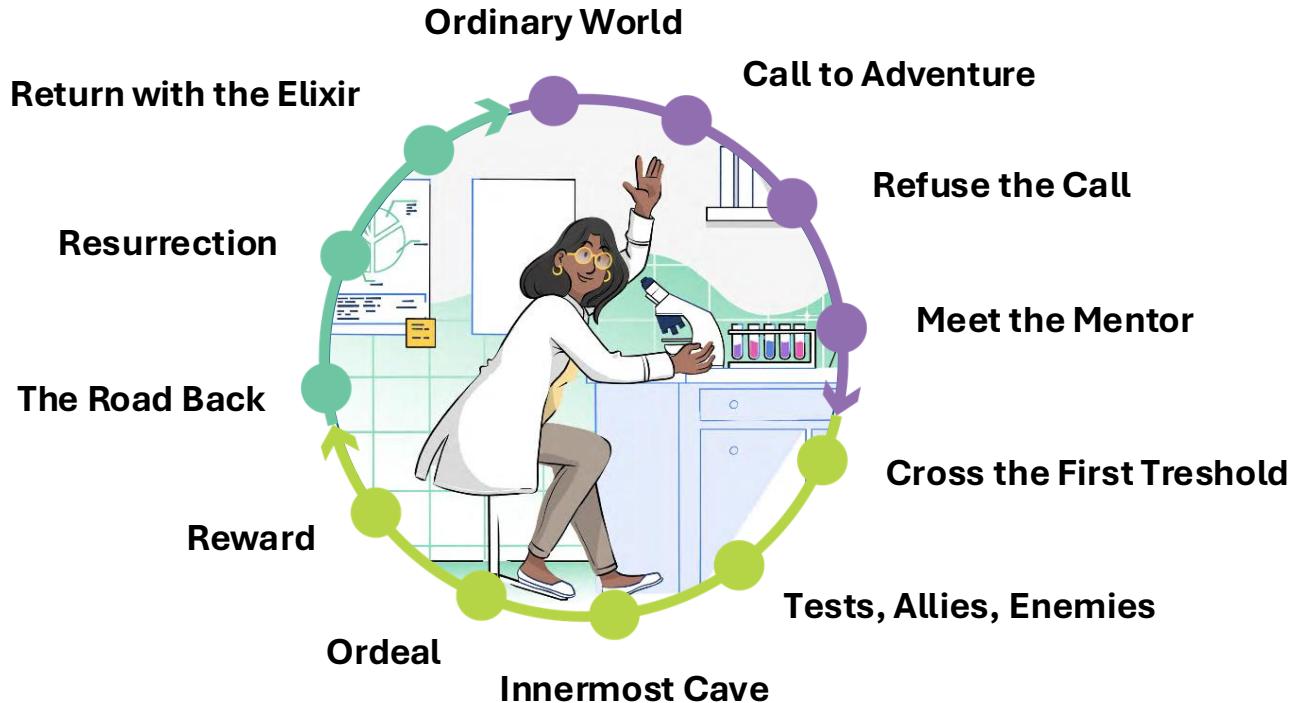


False Start



Petal Structure

Elements of the hero's journey



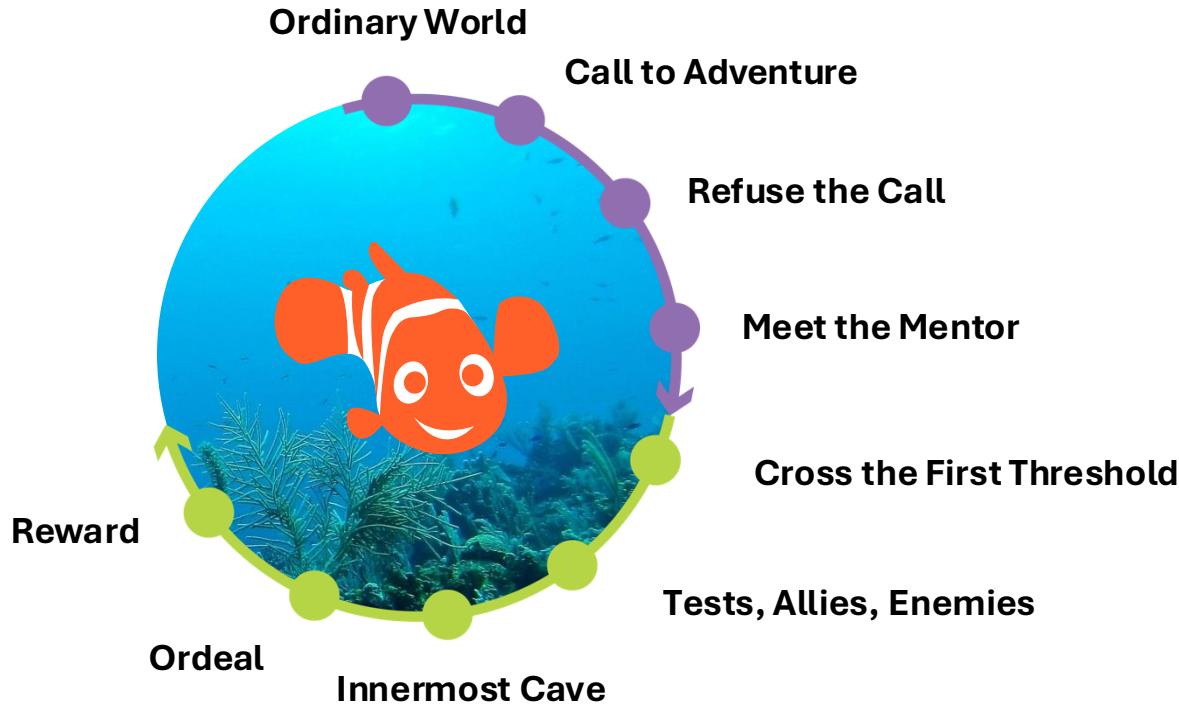
An example: Nemo



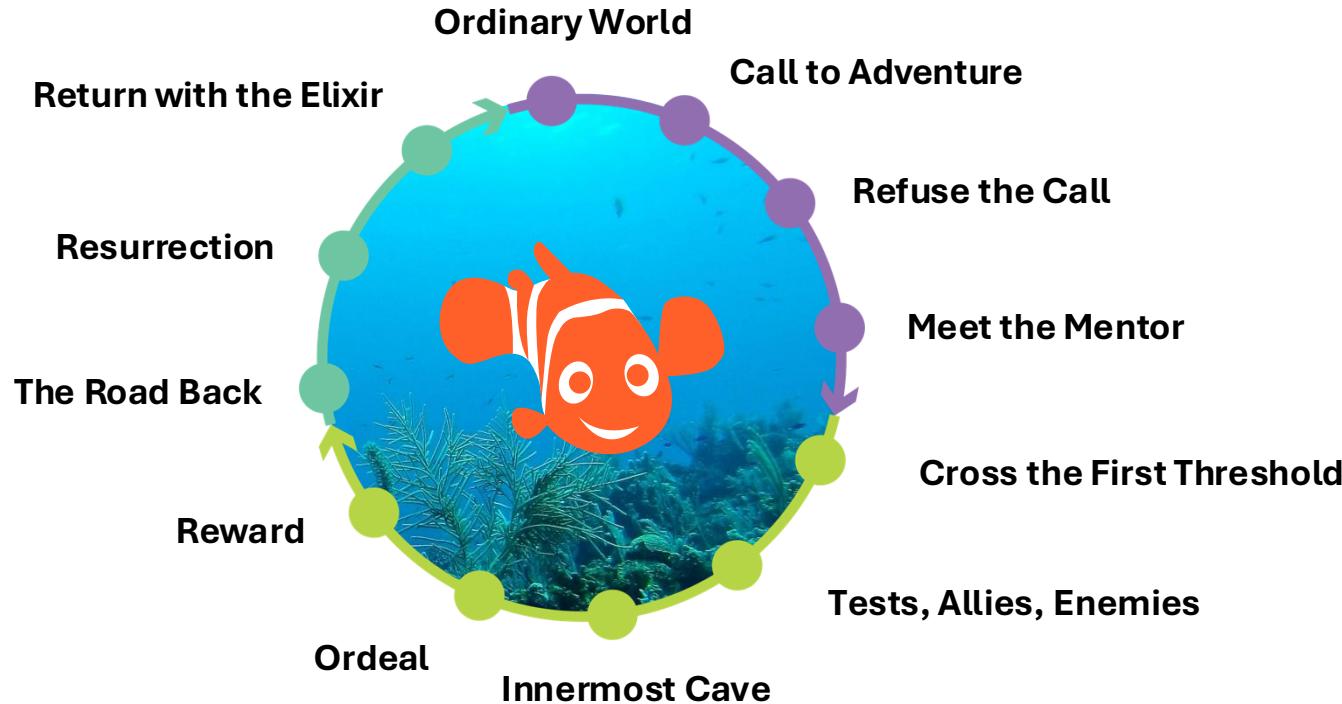
An example: Nemo



An example: Nemo



An example: Nemo

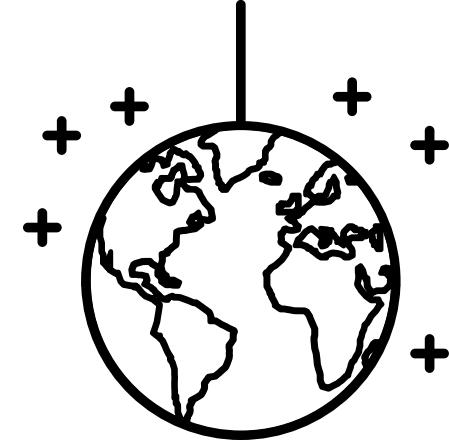
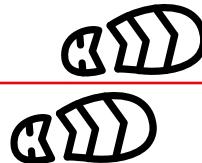


Your impact



World A

Ordinary world
(as of today)



World B

World with the impact
you have made

Creating a story



CHAPTER 1

THE WORLD NOW

CHAPTER 2

THE CONFLICT / CHALLENGE

CHAPTER 3

THE TRANSFORMATION

CHAPTER 4

THE WORLD AFTER

EXPOSITION

CONFLICT

RISING ACTION

CLIMAX

FALLING ACTION

RESOLUTION

EXERCISE

Create the protagonist of your story



Protagonist: An example

YOUR IMPACT: Freeing the ocean from plastic



ocean biologist



fisherman:woman



Turtle

How it works ...



Solo work

Use the second template

Step 2: Bring your protagonist



Create a relatable character

Who is affected by your problem?

Come up with a character.

Bring it to life by enriching it with information (template).

Give it a name/nickname and a look.
Be visual.

Give a first clue about the Problem to be solved (impact).



10 min

Miroboard: Preview



SOLO WORK: STORYTELLING YOUR IMPACT

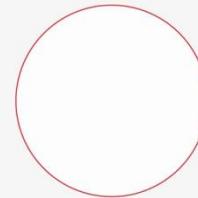
BRING YOUR PROTAGONIST TO LIFE



Create a relatable character for your story! Who is affected by your story?

10 min

YOUR PROTAGONIST



NAME OR NICKNAME

BASIC INFORMATION
ABOUT HIS*HER
BACKGROUND

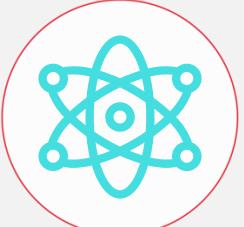
WHAT ARE HIS*HER
APPEARANCE, AGE,
PROFESSION?

WHAT DOES THE CHARACTER
WANTS OR DESIRES?

EMOTIONAL STRUGGLES/DILEMMAS
THE CHARACTER FACES:

CHARACTERS TEMPERAMENT
(SELECT OR ADD):

Template: Example

| YOUR PROTAGONIST | | |
|---|--|---|
|  | NAME OR NICKNAME BASIC INFORMATION ABOUT HIS*HER BACKGROUND | Niva She is an atom. |
| WHAT ARE HIS*HER APPEARANCE, AGE, PROFESSION? | Age unknown, appears as a shy and introvert being. Somewhat cuter than the appearance at the image here. | |
| WHAT DOES THE CHARACTER WANTS OR DESIRES? | EMOTIONAL STRUGGLES/DILEMMAS THE CHARACTER FACES: | CHARACTERS TEMPERAMENT (SELECT OR ADD): |
| Wants to be important and achieve something. | Isn't confident and rather hesitant because of her weaknesses. | Introverted, curious, pessimistic, enthusiastic |

Welcome back



**Let us know, if you're with us:
Raise your emoji thumb!**

**It's coffee
o'clock!**



Welcome back



**Let us know, if you're with us:
Raise your emoji thumb!**

EXERCISE

Create your story



Creating your story



CHAPTER 1 THE WORLD NOW

EXPOSITION

Come up with **short and tangible description** of the world your protagonist lives in.

CONFLICT

RISING ACTION

CLIMAX

FALLING ACTION

RESOLUTION

Creating your story



CHAPTER 1 THE WORLD NOW

EXPOSITION

Come up with **short and tangible description** of the world your protagonist lives in.

CHAPTER 2 THE CONFLICT / CHALLENGE

CONFLICT

A conflict arises!
Describe the **challenge your protagonist is facing** using an illustrative situation.
How is she/he emotionally reacting to it?

RISING ACTION

CLIMAX

FALLING ACTION

RESOLUTION

Creating your story



CHAPTER 1 THE WORLD NOW

EXPOSITION

Come up with **short and tangible description** of the world your protagonist lives in.

CHAPTER 2 THE CONFLICT / CHALLENGE

CONFLICT

A conflict arises! Describe the **challenge your protagonist is facing** using an illustrative situation. How is she/he emotionally reacting to it?

CHAPTER 3 THE TRANSFORMATION

How is the challenge **solved for your protagonist**? Describe how you help the character to achieve their goals.

RISING ACTION

CLIMAX

FALLING ACTION

RESOLUTION

Creating your story



CHAPTER 1 THE WORLD NOW

EXPOSITION

Come up with **short and tangible description** of the world your protagonist lives in.

CHAPTER 2 THE CONFLICT / CHALLENGE

CONFLICT

A conflict arises! Describe the **challenge your protagonist is facing** using an illustrative situation. How is she/he emotionally reacting to it?

RISING ACTION

CLIMAX

FALLING ACTION

CHAPTER 3 THE TRANSFORMATION

How is the challenge **solved for your protagonist**? Describe how you help the character to achieve their goals.

CHAPTER 4 THE WORLD AFTER

RESOLUTION

Towards the end of the story, highlight how now **your protagonists' world has changed for the better** (your impact).

Creating your story

CHAPTER 1 THE WORLD NOW



CHAPTER 2 THE CONFLICT / CHALLENGE



CHAPTER 3 THE TRANSFORMATION



CHAPTER 4 THE WORLD AFTER



CLIMAX

RISING ACTION

FALLING ACTION

How to make your audience care



Create situations where the **audience can empathize** with the character's experiences. Make their challenges and reactions **relatable to real-life situations.**



Use descriptive language to convey their **emotional state**, such as body language, facial expressions, and tone of voice.



Use **key emotional moments** in the character's journey, such as **moments of joy, sorrow, anger, love, or fear.**



Use simple language. Imagine reading your story to a child.

EXERCISE

How to come up with a story



How it works ...



Solo work



Create your 3-minute story



15 min

Use the third template

Step 3: Create your story!

Map out your story by letting your protagonist experience 4 chapters:

- The world now
- The conflict / challenge
- The transformation
- The world after
- Find tips and language clues on the right.

Miroboard: Preview



SOLO WORK: STORYTELLING YOUR IMPACT

CREATE YOUR STORY!

Map out your story by letting your protagonist experience 4 chapters:

1. The world now
2. The conflict / challenge
3. The transformation
4. The world after

You could start your story like this:
Once upon a time there was....

Find tips and language clues in the tip box.
15 min

YOUR STORY

THE WORLD NOW

THE CONFLICT /
CHALLENGE

THE TRANSFORMATION

THE WORLD AFTER



Welcome back



**Let us know, if you're with us:
Raise your emoji thumb!**

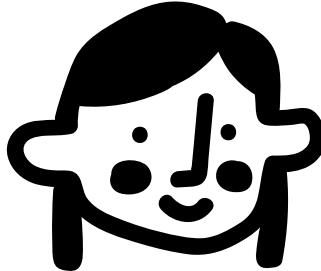
EXERCISE

Captivating Storytelling



Let's tell that story!

Exercise: Stop and go



A

A starts telling their story.

A then describes the scene in more detail, like a screenshot. Use adjectives!

A continues the story.

Incorporate new insights from the exercise into your own story.

When **B** feels like they want more context regarding the scene: "Stop".

When **B** feels like the context is described enough: "Go".

Again, when Person **B** feels like they want more context regarding the scene: "Stop".



B

How it works ...



Teamwork

In pairs of two



Let's tell that story!

Do 2 rounds of the “Stop and Go“-exercise.

7 min: Round 1

Person A tells a story and
Person B says Stop/Go

7 min: Round 2

Switch.

6 min: Both

Incorporate new insights from the
exercise into your own story.



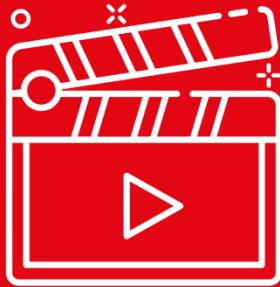
20 min

Welcome back



**Let us know, if you're with us:
Raise your emoji thumb!**

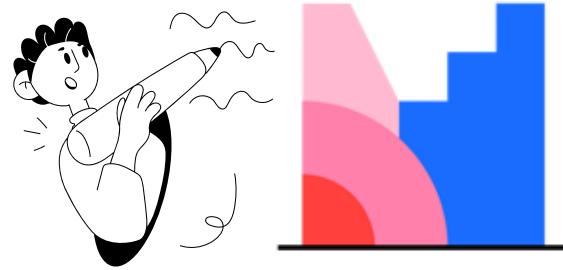
Let's hear your stories!



Any questions?



Time for feedback!



**Please, follow the link in the
chat window.**

Wrapping up!



I like, I wish, I take away...

Sharing



**Are there any comments, thoughts or questions
you would like to share?
Raise your hand.**

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



Time for feedback!



Thank you!



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



LinkedIn
Page



LinkedIn
Group



Instagram
@sciencepreneurs



Newsletter

THE END

