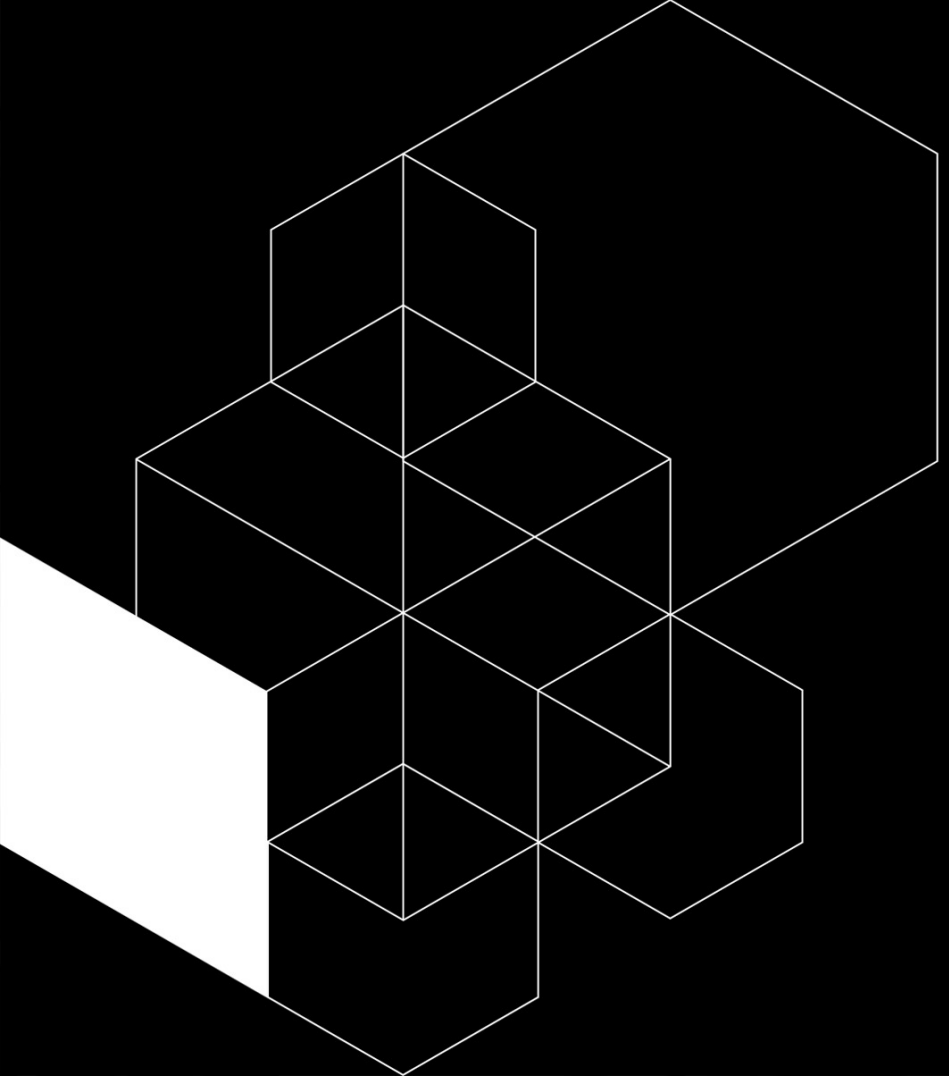


# Upping our game

**Working towards being an outstanding 1st class service provider at CERN**

**Catarina Batista & Ole Werner**

CERN

Ideas

# Agenda

- Welcome
- Defining an ideal collaboration
- Sailing our boat
- **Coffee break**
- How can we get better?
- Bringing it to life
- Present and feedback
- Reflection and next steps

Photo by Aron Visuals on Unsplash

# The CREW at IdeaSquare

**Alexia Yiannouli**
Communications

**Laura Wirtavuori**
Edu programmes

**Ole Werner**
Edu Programmes

**Dina Zimmermann**
Prototyping

**Markus Nordberg**
Fixing things

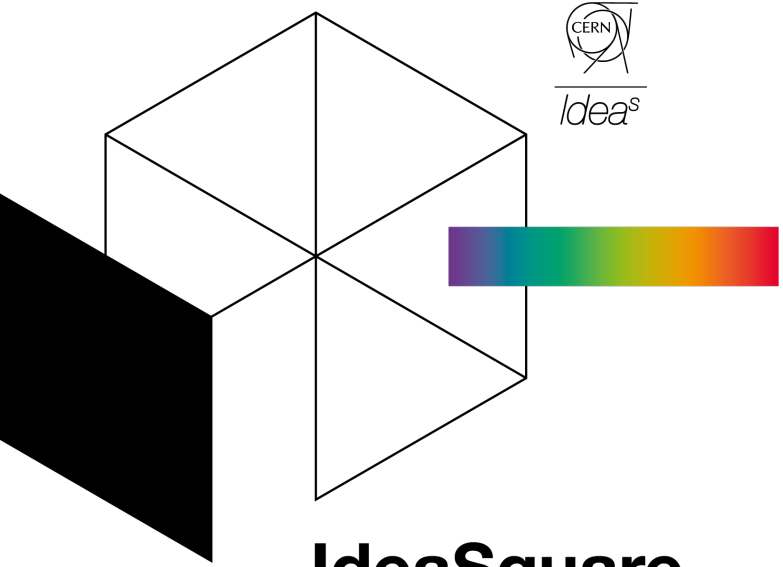
**Pablo Garcia Tello**
The bear from Mowgli

**Laëtitia Pedroso**
Events

**Catarina Batista**
Edu programmes

**Jimmy Poulaillon**
Communications

**Tuuli Utriainen**
Cosmic collaborator



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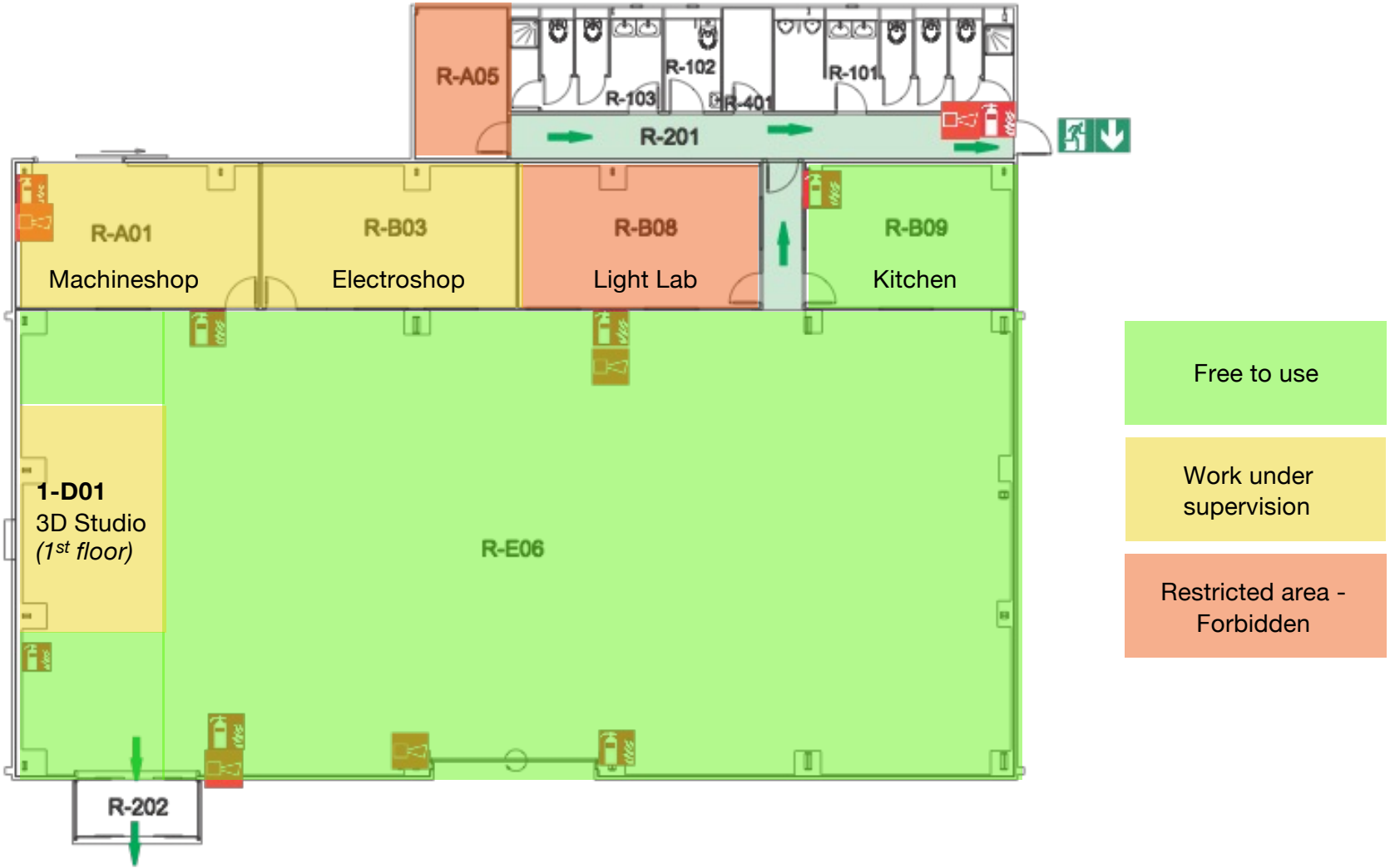
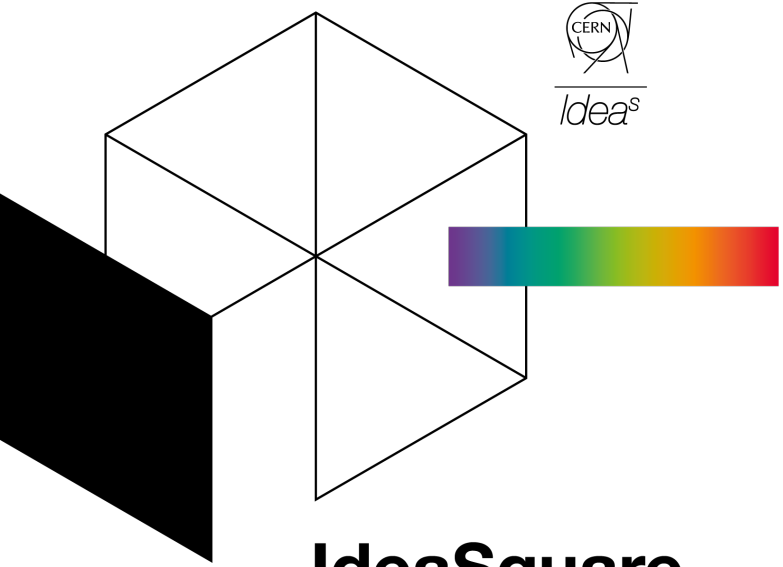
The innovation space at CERN

# General building safety rules


R-A05
R-103
R-102
R-401
R-101
R-201
R-A01
Machineshop
R-B03
Electroshop
R-B08
Light Lab
R-B09
Kitchen
1-D01
3D Studio
(1st floor)
R-E06
R-202
Free to use
Work under supervision
Restricted area - Forbidden



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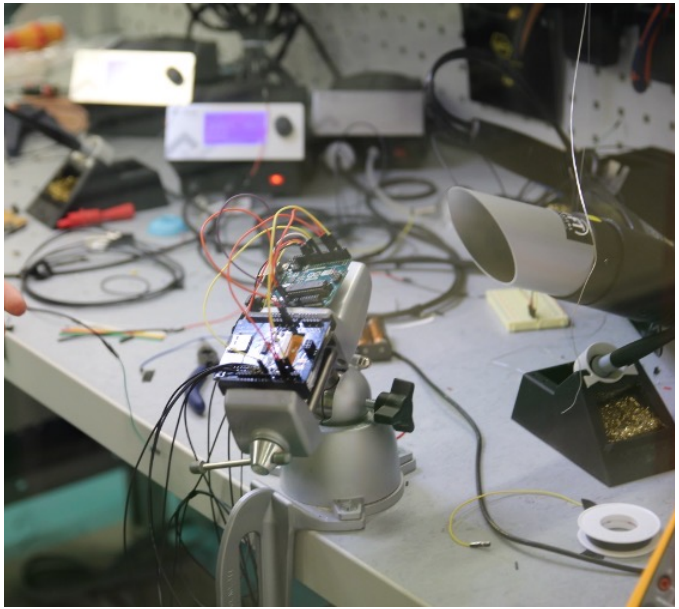
# Workshops and laboratories safety

# Workshop Safety



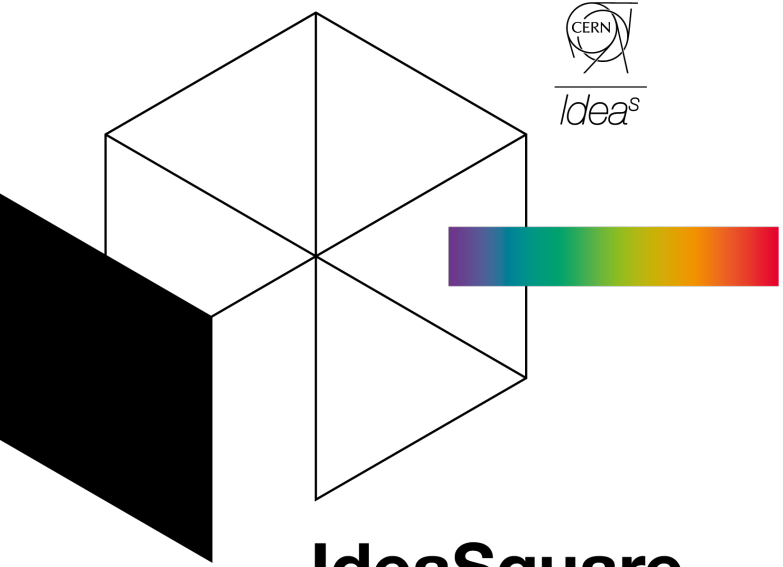
*You are allowed to modify things, you are not allowed to modify yourself.*

*- Jami Sarnikorpi*

- Handheld tools? OK
- Electrically powered tools? Check with **Jami**
- Do not work alone

Don’t know how something works? Ask!

Make sure to unplug electrical equipment when you are not using it. This is especially important for the glue guns.



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# Emergency evacuation procedure

# In case of emergency

While evacuating, always **go away from the danger!**

**Do NOT return** to collect your belongings

**Walk quickly and calmly** to your building's designated **assembly point** or as advised by an Emergency Guide or Fire Brigade personnel

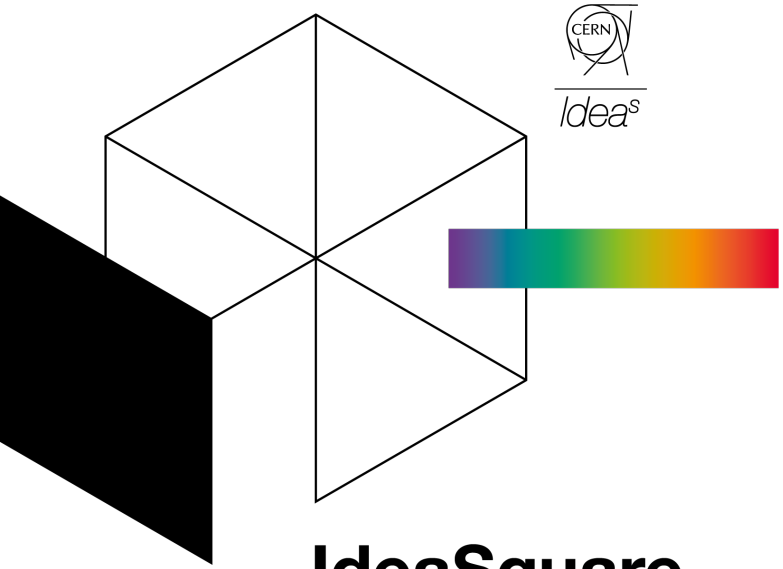
**Wait at the assembly point until counted and released** by the TSO/DSO or the Fire Brigade.

Give to the Fire Brigade all the information they need! **+41 22 767 44 44**

# Keeping places tidy

- Please, please:
  - Bring all coffee cups, plates, dishes to kitchen, and put them inside the dish washer.
  - Clean more than you mess to fight the enemy called entropy.
  - Help collaboratively to clean up the space at the end of the day.

Ideas
THINK. DO. COLLABORATE.




IdeaSquare
The innovation space at CERN

# IdeaSquare

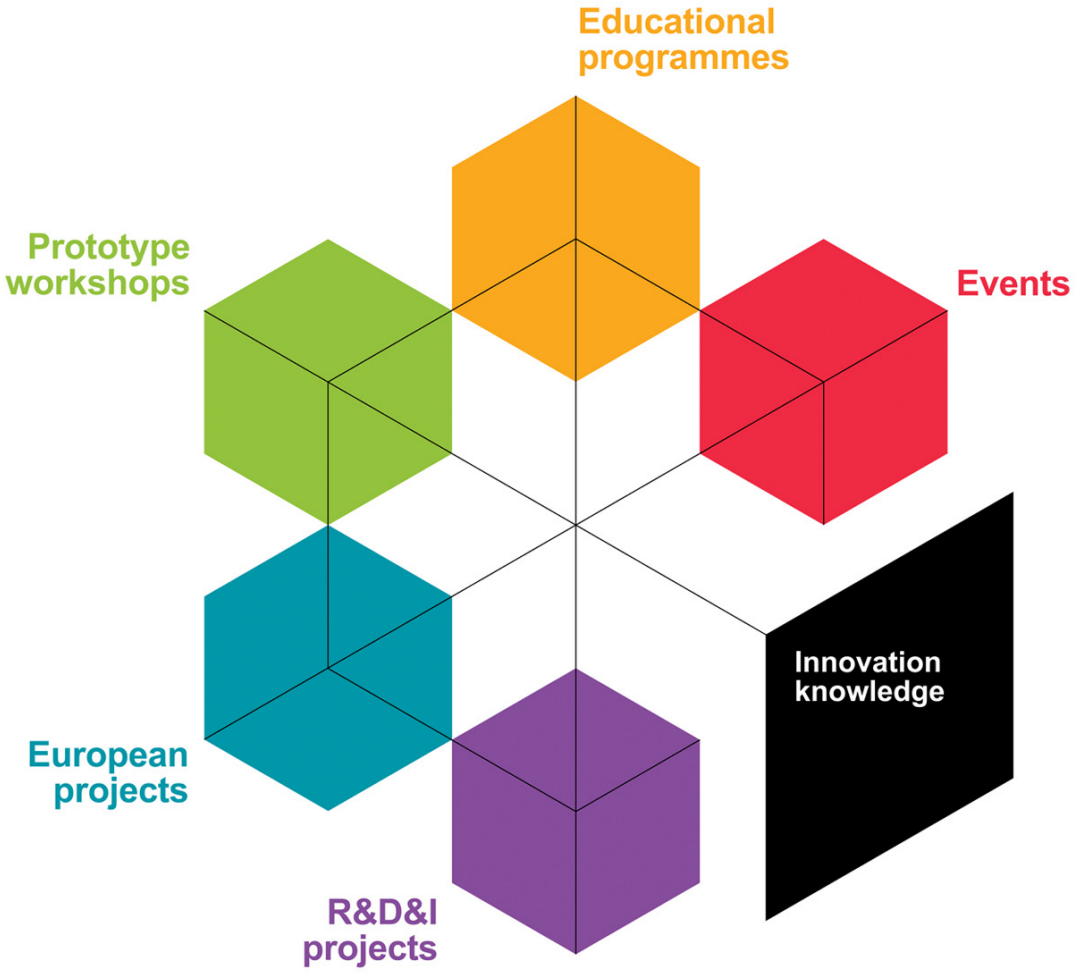
Systematizing serendipity

# IdeaSquare

**The Innovation Space at CERN**

- Collaborative methodologies;
- Access to CERN expertise;
- Cross-connectivity to ideate solutions for the future of humankind.

A place where people have the licence to dream.



# Why IdeaSquare?

We believe that for **fundamental change** to be made, we need **more than traditional** innovation **methods and mindsets.**

We enable students and innovators to **imagine a future** worth fighting for, and we give them the **tools and confidence** to start building that future.

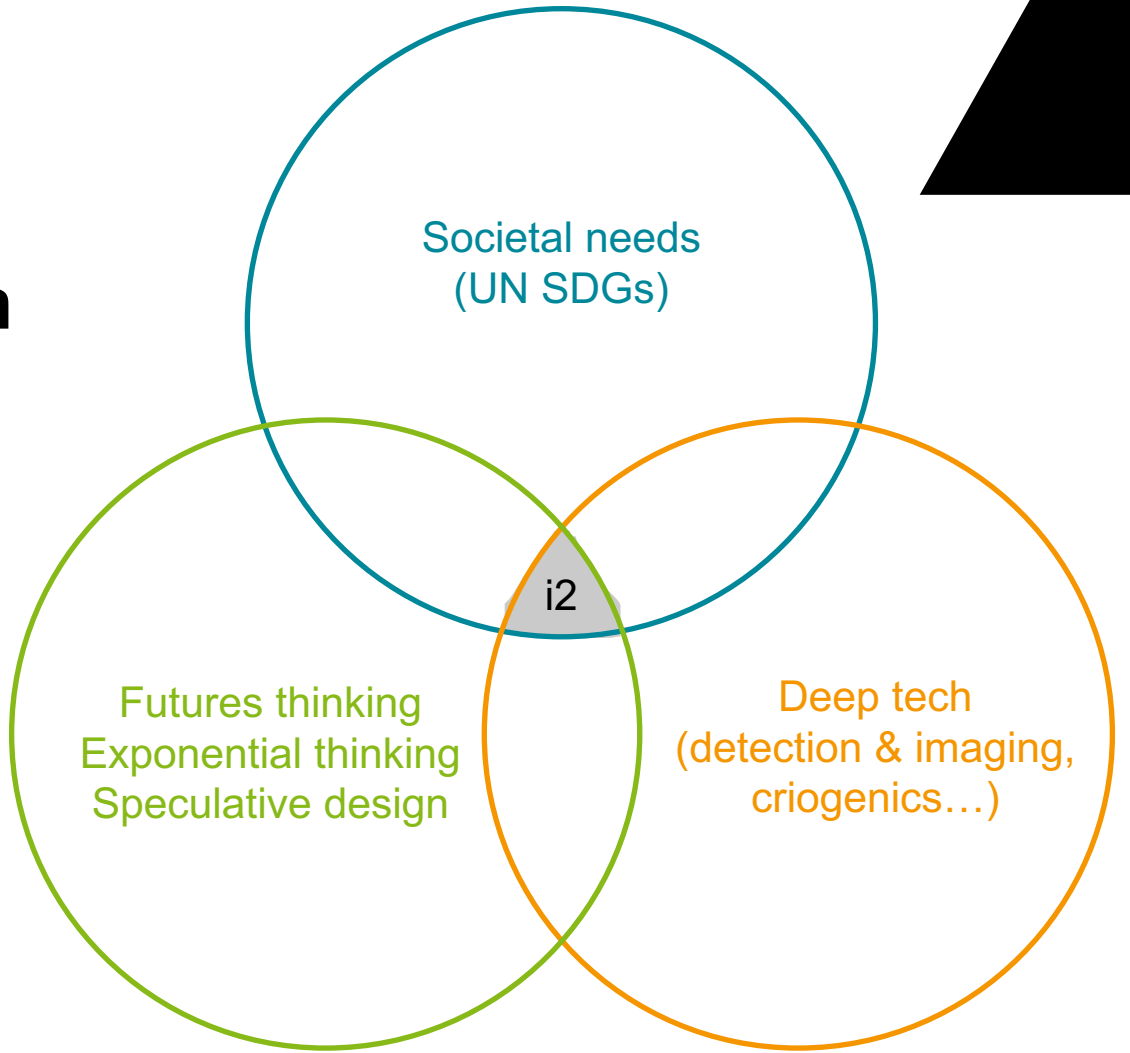
# Educational programmes

# Challenge Based Innovation (CBI)

Photo by Claudia Marcelloni

- **+22** active program collaborations;
- Universities from **8 different countries;**
- **Design Thinking** methods to solve global challenges, intersected with **deep tech**;
- **UN Sustainable Development Goals** as a lens in the process;
- **Multidisciplinary teams** of students: business, design, engineering, social sciences…
- CERN researchers who act as technological coaches.

# Intersecting societal challenges with deep tech



# European projects

ATTRACT

Developing breakthrough technologies
for science and society

# Absorbing and reducing the risk to the market

Public funding

Private investment

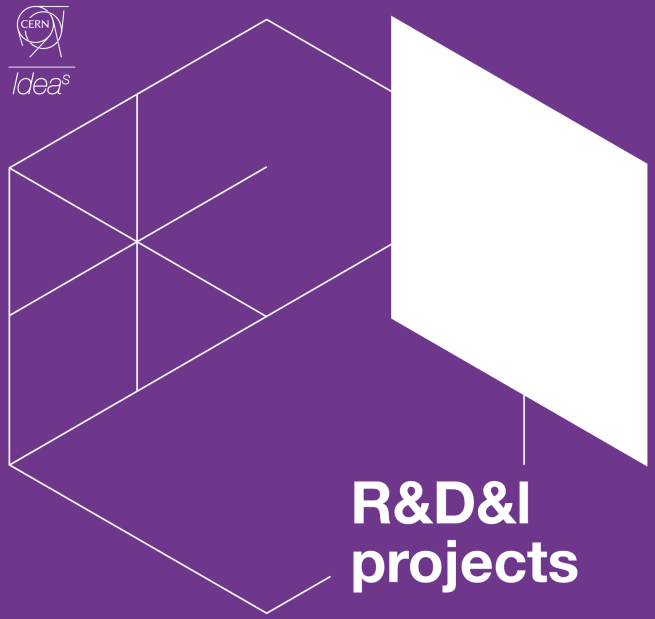
**From ideas to prototypes**

ATTRACT phase 1
Risk absorption

**From prototypes to pre-market products**

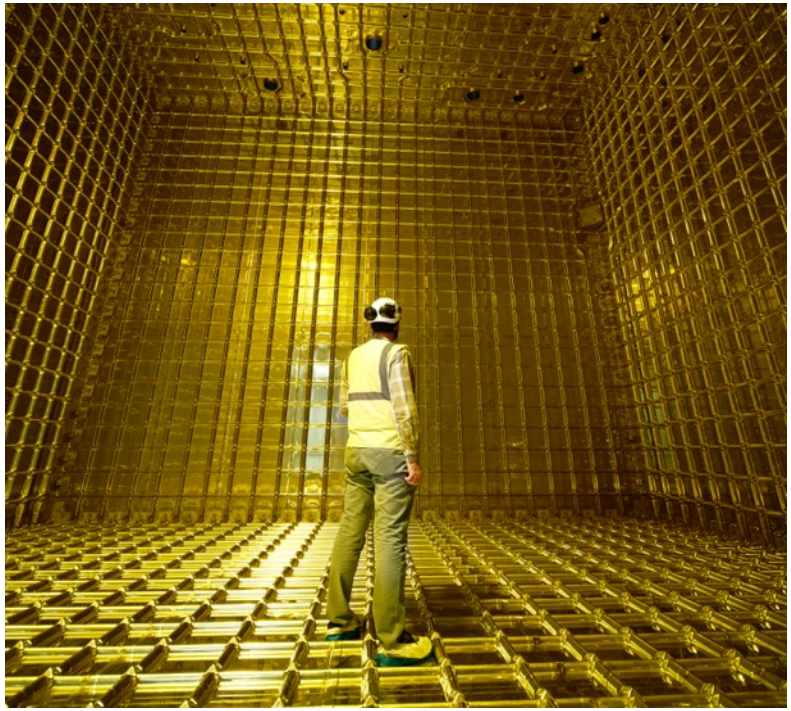
ATTRACT phase 2
Risk mitigation

**From pre-market products to solutions**



# R&D&I projects

# Neutrino Platform

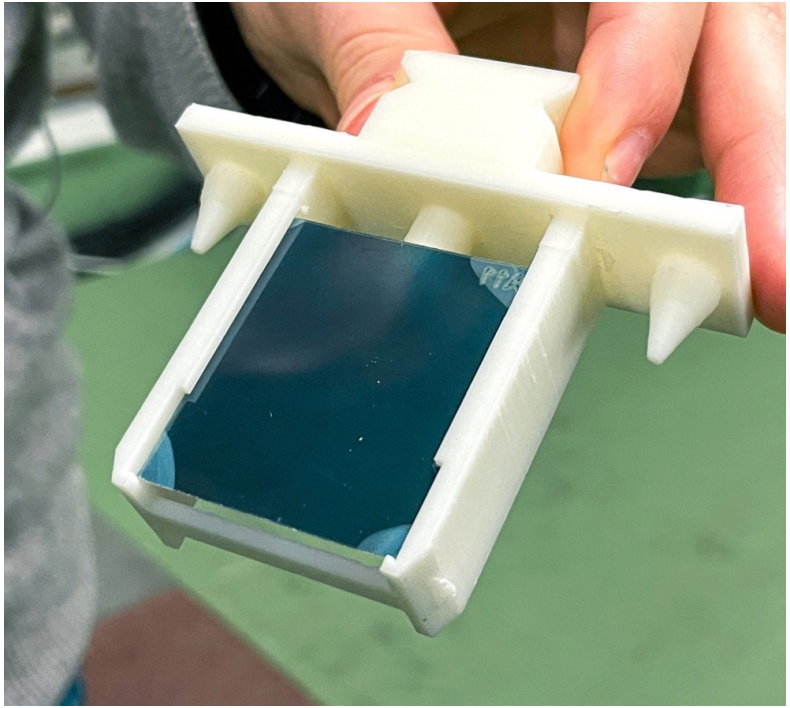


- Neutrino Platform (CENF) fosters fundamental research in the field of Neutrino Accelerator Physics
- CENF supports generic detector, neutrino beams R&D and large detector prototypes or demonstrators. It gives  technical, financial and logistics support to approved projects
- CERN & IdeaSquare provides a facility for R&D on future technologies (HW and SW) and partner in several neutrino research programs, ICARUS, PROTODUNE, DUNE, hosting developments on their cryostats, as well as Fraser at CERN.

# Events

Hackathon for the visually impaired for the development of the CERN Exhibitions

# Prototype workshops



CLEAR Experiment -
https://home.cern/science/accelerators/clear AND
https://pkorysko.web.cern.ch/C-Robot.html

- CLEAR primary focus is on general accelerator R&D and component studies for existing and possible future machines
- Prototyping and validation of accelerator components, and studies of high-gradient acceleration methods.
- Radiation hardness of electronic components for space and high-energy physics;
- Dosimetry for medical applications (cancer therapy).

# Warming up

# Let’s think about what we’re doing

# What does an ”ideal collaboration” between Business and Development teams mean to you?

Collect a few characteristics that represent a great collaboration to you.

What would be some of the values, behaviours or processes that enable a good collaboration?

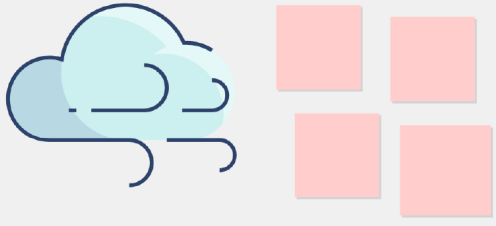
> for e.g: things get processed quickly, communication is transparent, interface is friendly, constructive feedback is given and received…

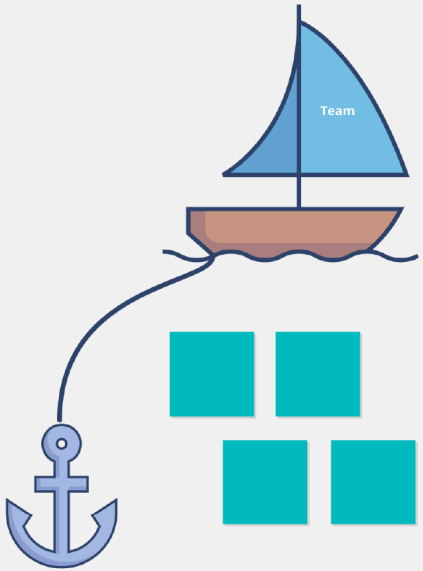
Think of 3 points individually, note down these features on sticky notes and place them on the whiteboard.

# Octopus Clustering

## Wind

What is pushing us forward?



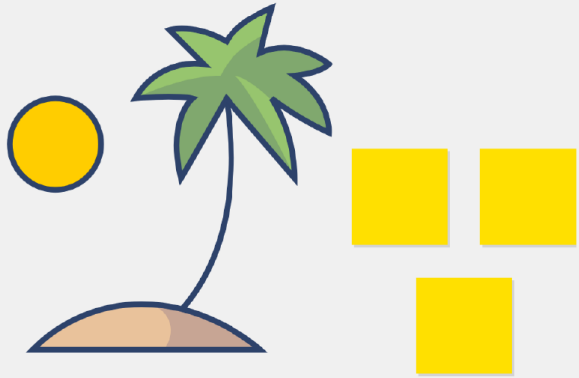



## Anchors

What is holding us back?

## Island

What are we working towards?



https://conceptboard.com/blog/sailboat-retrospective-template-and-guide/

# Defining your destination

Look at the island you have chosen as a team and align on what is the overarching topic that can be identified from there.

Find commonalities inside your island (this should be already evident from the cluster).

How would you name your destination? Describe the environment there.

E.g: Documentation Paradise - where all information is written in stone and shared.

7 min

# Sailing away

You have probably identified a few features that qualify as your “island“, i.e., where you aspire to be.

What are some current processes and behaviours that might be hindering you? And which ones are propelling you forward?

20 min

# Coffee Break

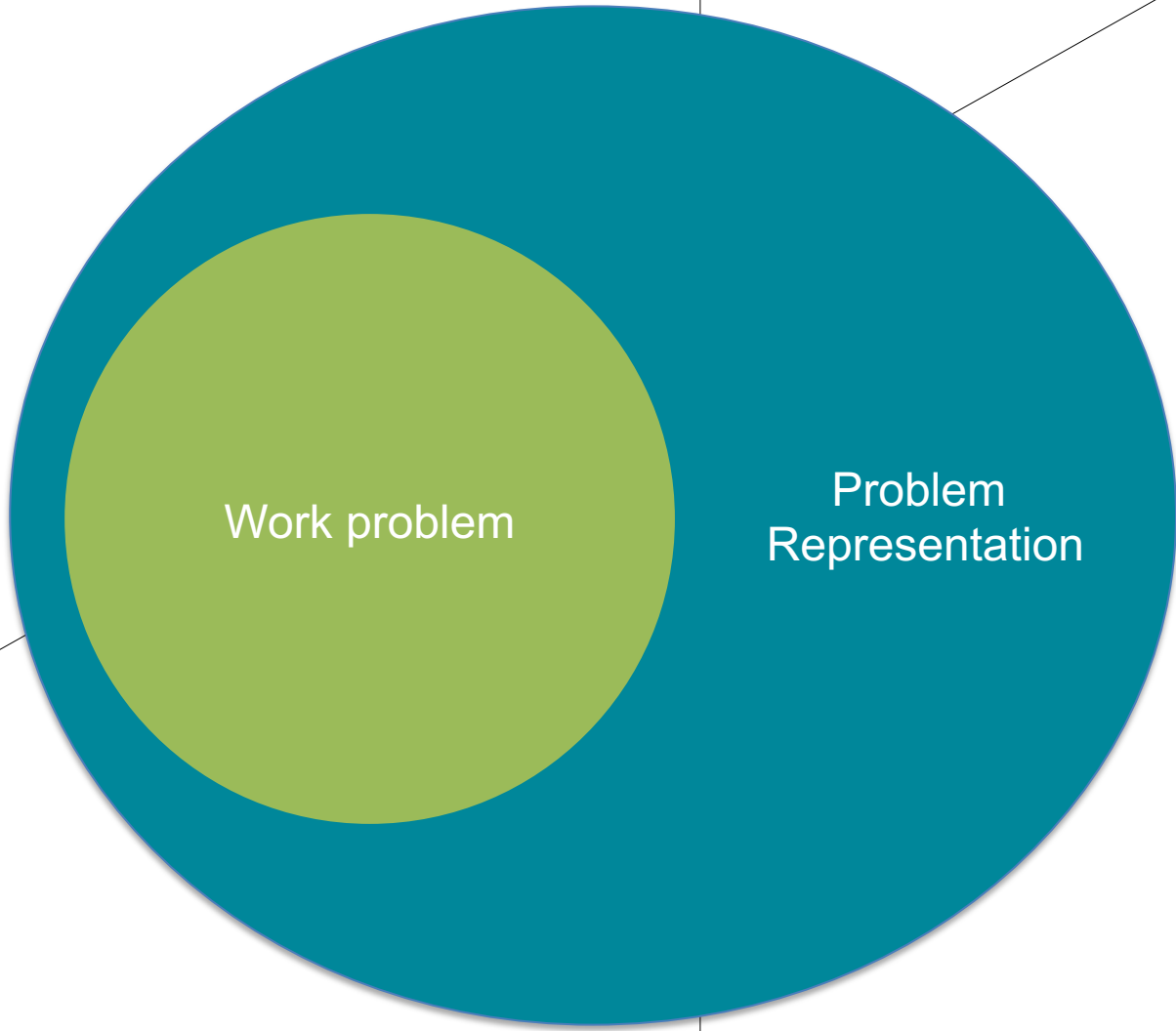
# Upping our game

taking a new perspective into what we do and thinking of how to get better

“To improve is to change; to be perfect is to change often.”

**Winston Churchill**

**It is not about solving the problem right, but <u>solving the right problem!</u>**



# How might we…? - Examples

**Problem**

Users aren't aware of our product offerings.

**How might we…**

How might we increase awareness of the full product offerings?

# How might we…? - Examples

| | |
|---|---|
| **Problem** | Communication between product teams is slow. |
| **How might we…** | How might we make communication between product teams effortless? |

# Lift up your anchors!

1. **Prioritize 1-2 main anchors** that you have identified.

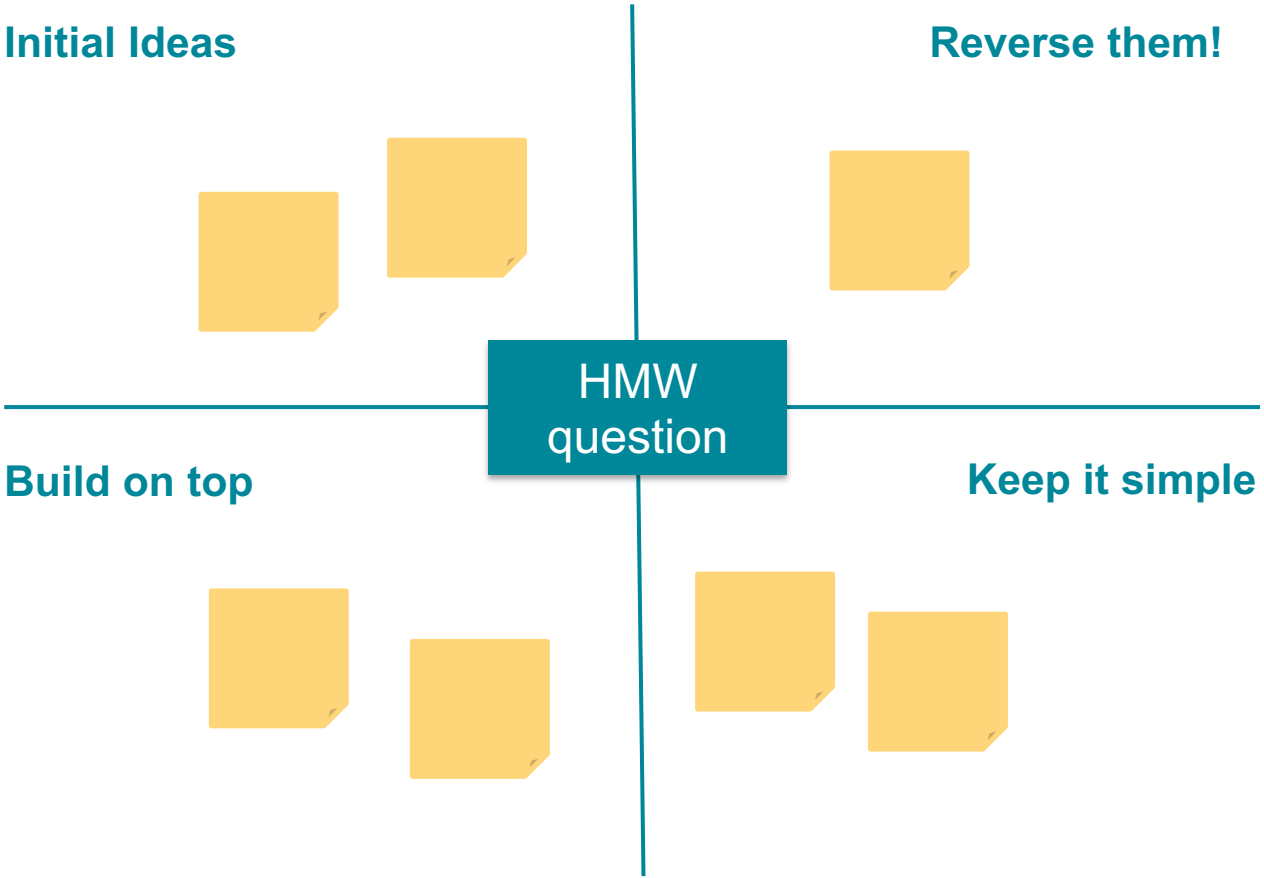
2. Let's **transform** them into **"How might we…"** questions.

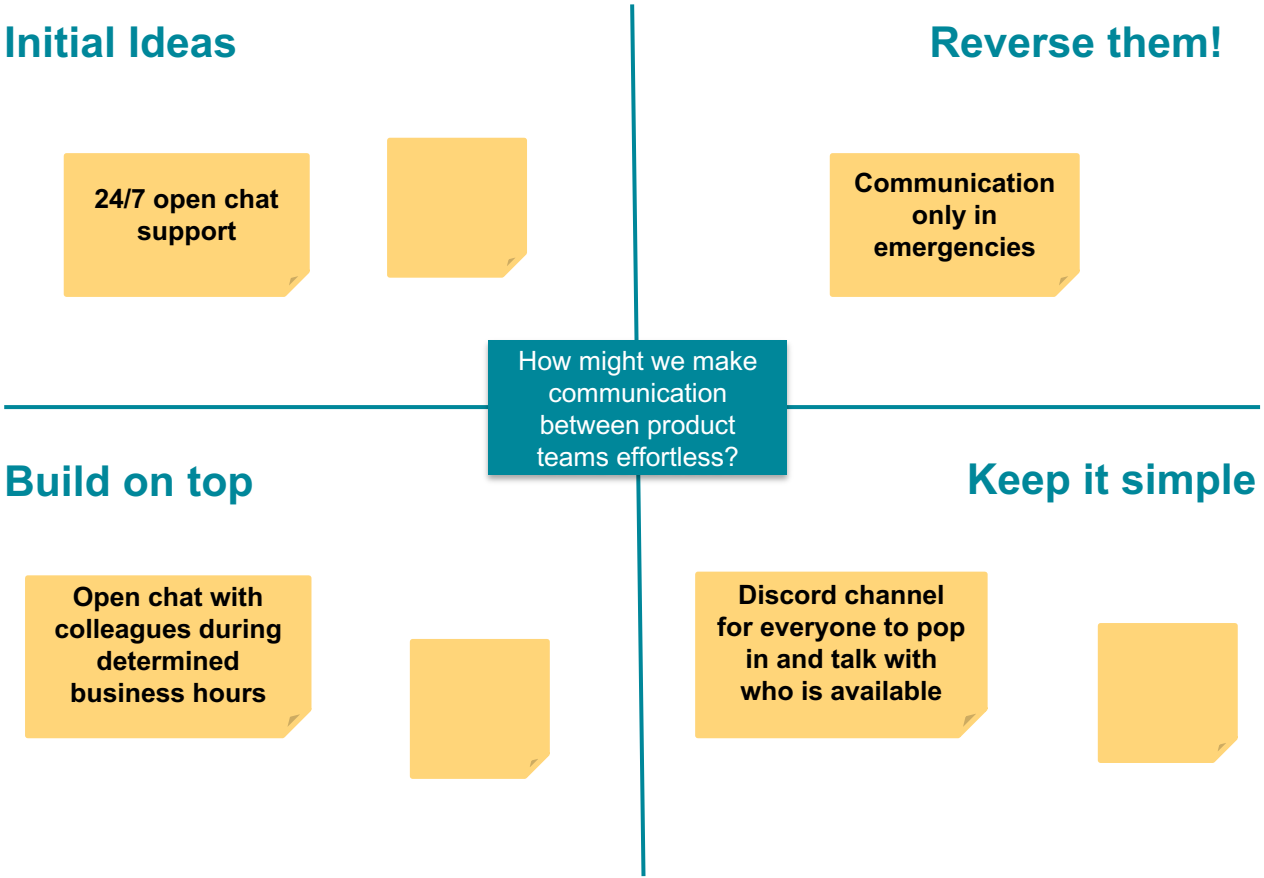
These questions help us identify opportunities for design and should be broad enough to allow us to explore multiple solutions.

> E.g: backend interface is choppy -> How might we make our backend structure more dynamic and accesible to all team members?

3. **Align on one** HMW to focus on.

# Yes and… yes but…


Initial Ideas
Reverse them!
HMW question
Build on top
Keep it simple


Initial Ideas
Reverse them!
24/7 open chat support
Communication only in emergencies
How might we make communication between product teams effortless?
Build on top
Keep it simple
Open chat with colleagues during determined business hours
Discord channel for everyone to pop in and talk with who is available

# Opening paths to your imagination

1. **Pick one “How might we”** question.
   This will be the starting ground for your ideas.

2. **Brainwrite** about it.

3. **Select one** idea to take forward

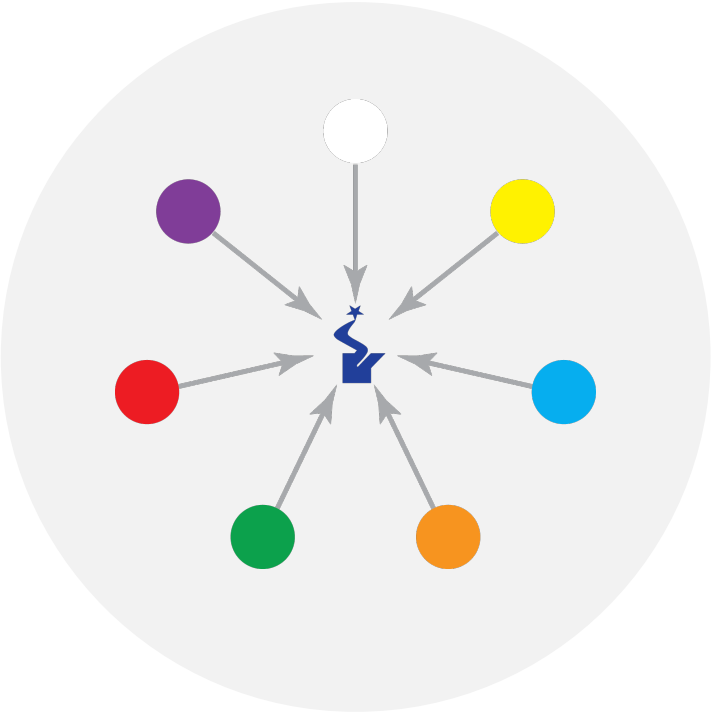
# Bring it to life

# Why?

- Communication
  - Internal
  - External
- Ideation – build to think!
- Testing
  - Assumptions
  - Functions
  - Problem description
- Joy of (co-)creation

# Why?

## Team dynamics



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# Planning our next steps

## Next week

## Next year

## Next decade

# Time to act it out!

# Giving feedback to the ideas

**I like…**

**I wish…**

**I wonder…**

3min presentation + 2min feedback

# Taking action

# Prioritizing one idea

**Most feasible**

**Most desirable**

**Most radical**

# Next steps as a work group

| Next week | Next year | Next decade |
| --- | --- | --- |
| | | |

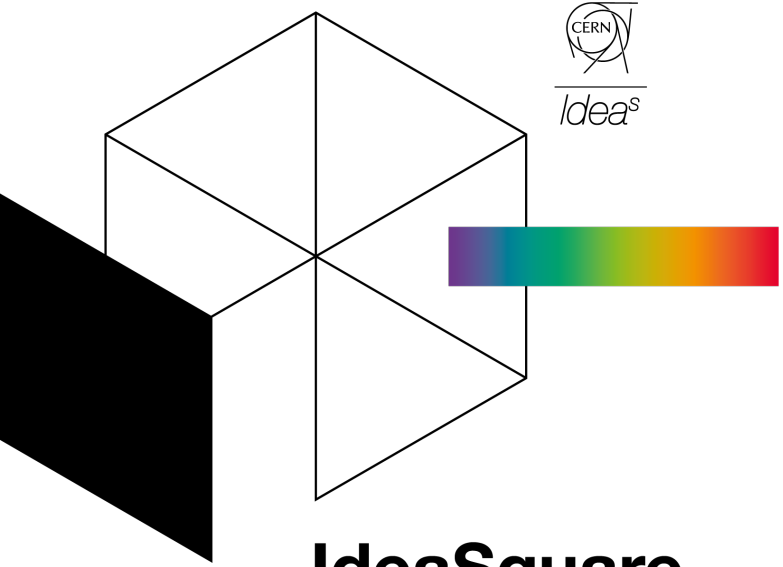
# Reflection

# Reflecting on your experience today

I learned…

I liked…

I wish…



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# Thank you!

**Catarina Batista**

catarina.batista@cern.ch