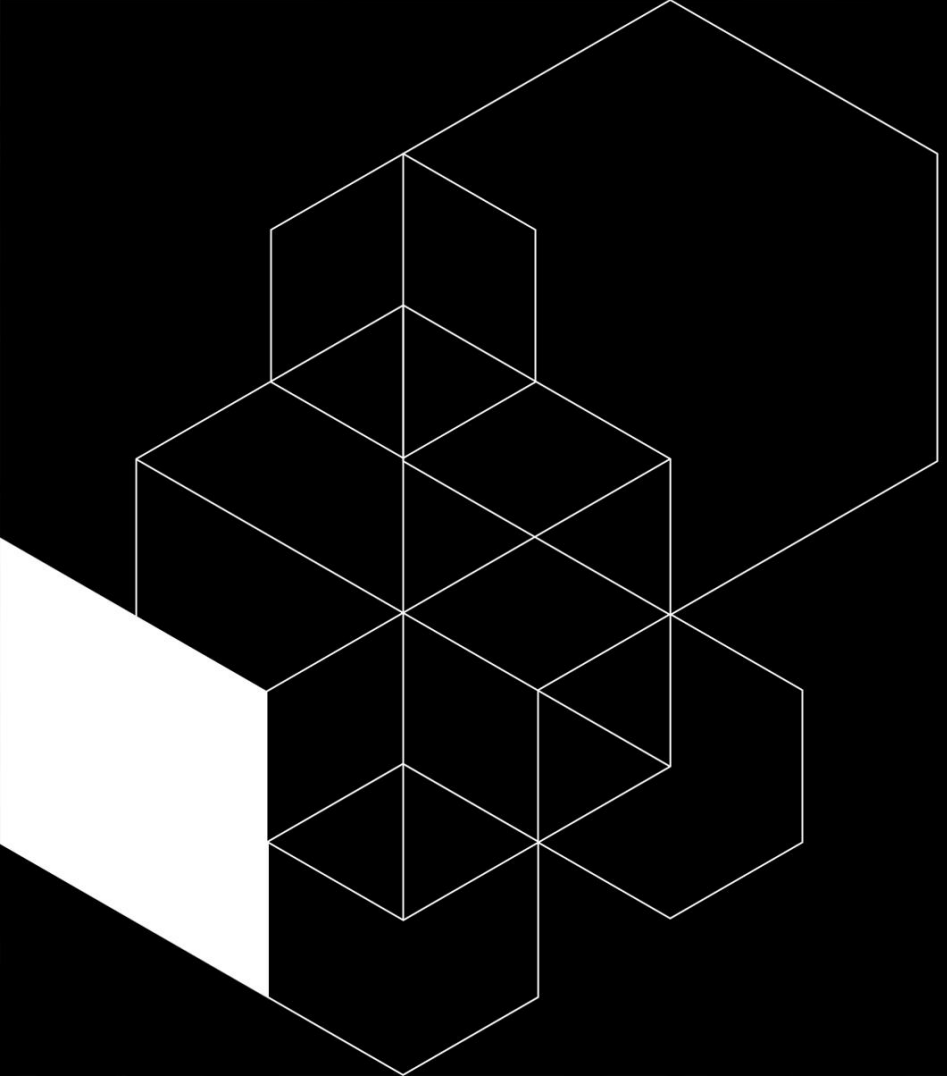


Demystifying the tech

What can possibly go wrong?

Catarina Batista & Laura Wirtavuori

CERN

Ideas

Science fiction and detection and imaging

What could possibly go wrong?

1) Life Inventory

Make a list of everyday things that come to your head. Add things that are also personal to you, like hobbies or areas of fascination:

- Breakfast
- Pets
- Cake
- Headphones
- Chips
- Theatre
- Singing
- Therapy
- ….

What could possibly go wrong?

2) Tech Inventory

Make a list of emerging or exciting technologies that you know about, include your assigned ATTRACT technologies as well:

- Nanotechnology
- Genetic Engineering
- Robotics
- 3D-printing
- AI
- Machine Learning
- HYLIGHT
- RandomPower
- …

3) Ideate

a) Choose one area of life from the first list.

b) Start matching one of your everyday life things with EACH technology, one by one.

5) Don’t skip any combination!

Once we have a list of inventions, we will create our story.

4) What could possibly go wrong?

- What are possible consequences of your invention or innovation?
- How might this go wrong?
- How might the effects of your tech cause conflict, upset the balance, or create a problem of some kind?

5) For whom does it go wrong?

- What is the impact of this technology on a real human being?
- For whom might the unexpected outcome cause the most interesting impact?
- Choose your **characters.**

Example

- Pets <-> nanotechnology = chips implanted to deliver constant medical care to pets from the inside.

    - What can go wrong… What if someone hacks the nanotech?
    - Someone hacks the medical chips implanted in the pets and tries to wipe out an entire species. They ask for a ransom… Who would pay? Who would *want* to pay it?

A creative exercise by Adam Marek (used with permission at IdeaSquare, CERN, Geneva, 8 November 2023. Please do not share further without permission of the creator.)

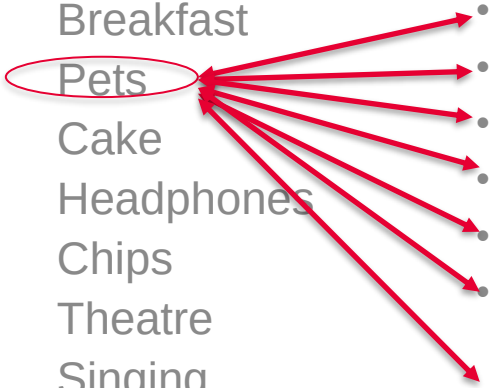
Summary

1) Life Inventory

- Breakfast
- Pets
- Cake
- Headphones
- Chips
- Theatre
- Singing
- Therapy
- ….

2) Tech Inventory

- Meta-hilight
- Hylight
- Microquad
- RandomPower
- Visir 2
- Nanotechnology
- Genetic Engineering
- ….



3. Ideate

4) Story

Choose one of the innovations – create a story around that

5) For whom does it go wrong? Who are the key characters?

Reflecting

In which scenarios did you apply the tech?

What was the most interesting one? The scariest one?

What were some of the assumptions you made about the tech? and the users?

How does this make you reflect about your own role in designing such solutions?

Break

We know how to...(30min)

- Try to understand the technology so well, that you could explain it to your grandparents or to a child.
  - What do the terms mean? What is the scale of the numbers? (try comparing it to something more understandable, analogies are your friends)
  - **The main goal is to write down sentences about what we "we know how to" do.**

Examples:

- We know how to…
  - see with extreme precision
  - detect 400 different colours
  - measure distance very accurately

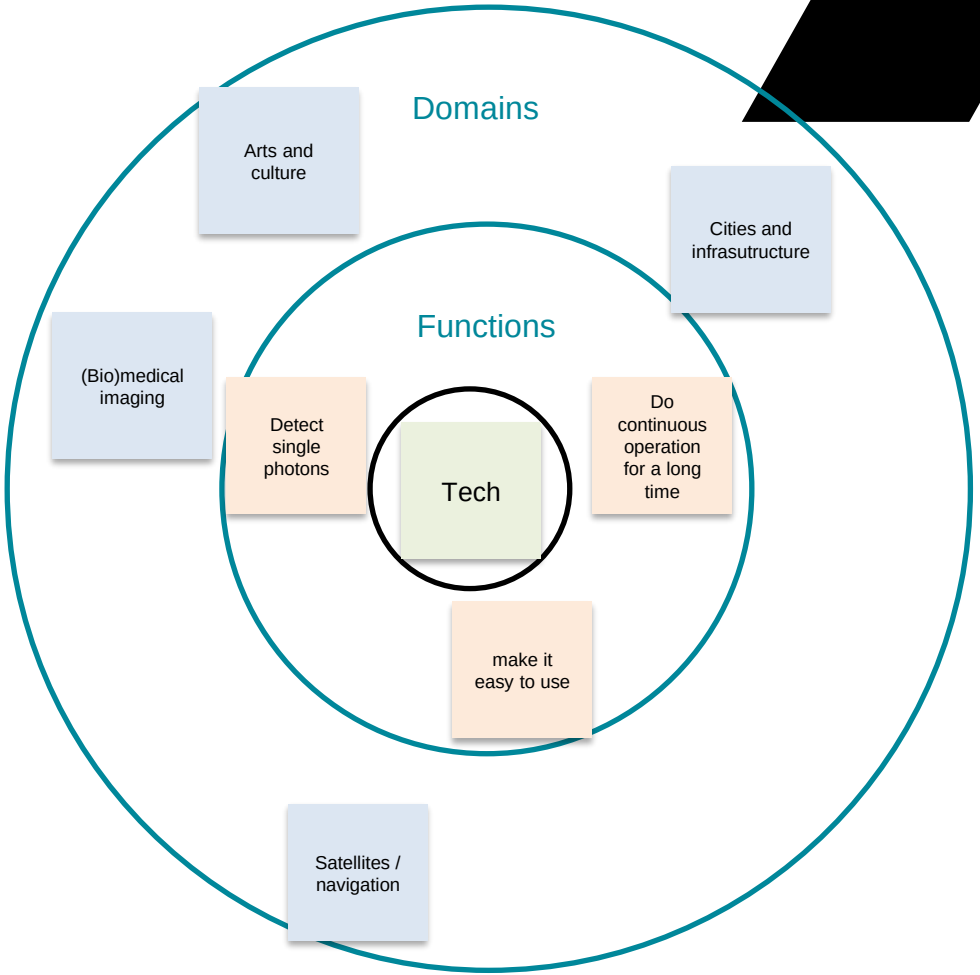
Disclaimer: Let's focus on what you are able to get done with the tech, not on how exactly it works!

If you don't understand something – ASK! ☺

Functions and domains (15min)

- Document the main functions you extracted.
- Ideate about possible domains that this technology could be used in.
  - Use the sessions from yesterday as inspiration!

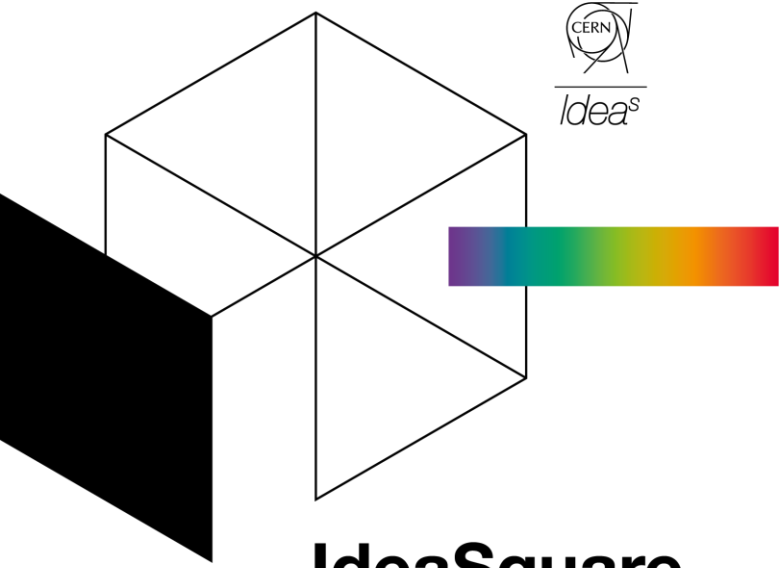
Presenting the unbundling (15min)



Assumption check & topics of interest (15min)

- What assumptions do you have about the technology?
- What questions still remain?
- What are some fields knowledge that might help you unlock a greater understanding about the tech and deconstruct your assumptions?

Make a short list of to be sent to the researchers and discussed over the week.



IdeaSquare
The innovation space at CERN

Thank you!