



Design thinking and Future Thinking

Trieste, 30 November 2022

«Design Thinking is more than a set of tools. It's a mindset. A cultural shift.»

Risto Lahdesmaki, CEO at Idean



Why is it important to know what it is?

Because in any job you will be involved that has to do with **innovation**, you'll meet DESIGN THINKING. Almost every innovative company in the world uses some form of it.



Design Thinking is a MINDSET

It represents an approach that analyzes **complex problems** to identify and test **creative** and **human-centered solutions**

DESIGN THINKING: WHAT PROBLEMS DOES IT DEAL WITH

Petrol warning light



I know what the problem/solution is



I apply the solution



An expert is able to recognize the problem/find the solution



Analytical thinking



**The problem is not defined
The solution is unknown**



Design Thinking

DESIGN THINKING APPROACH

DT is a CREATIVE problem-solving MINDSET, used to solve COMPLEX PROBLEMS.

Its peculiarity is the human-centered approach

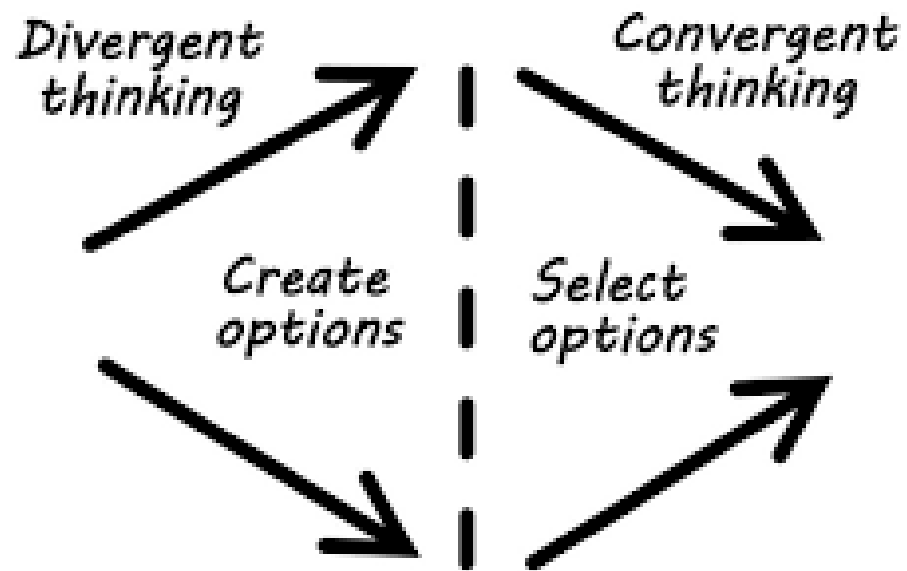
IT FOCUSES ON THE PERSON

It uses tools and techniques of EMPATHY useful for getting to know the customer's needs in depth



«DIVERGENT» AND «CONVERGENT» THINKING

HACKATHON

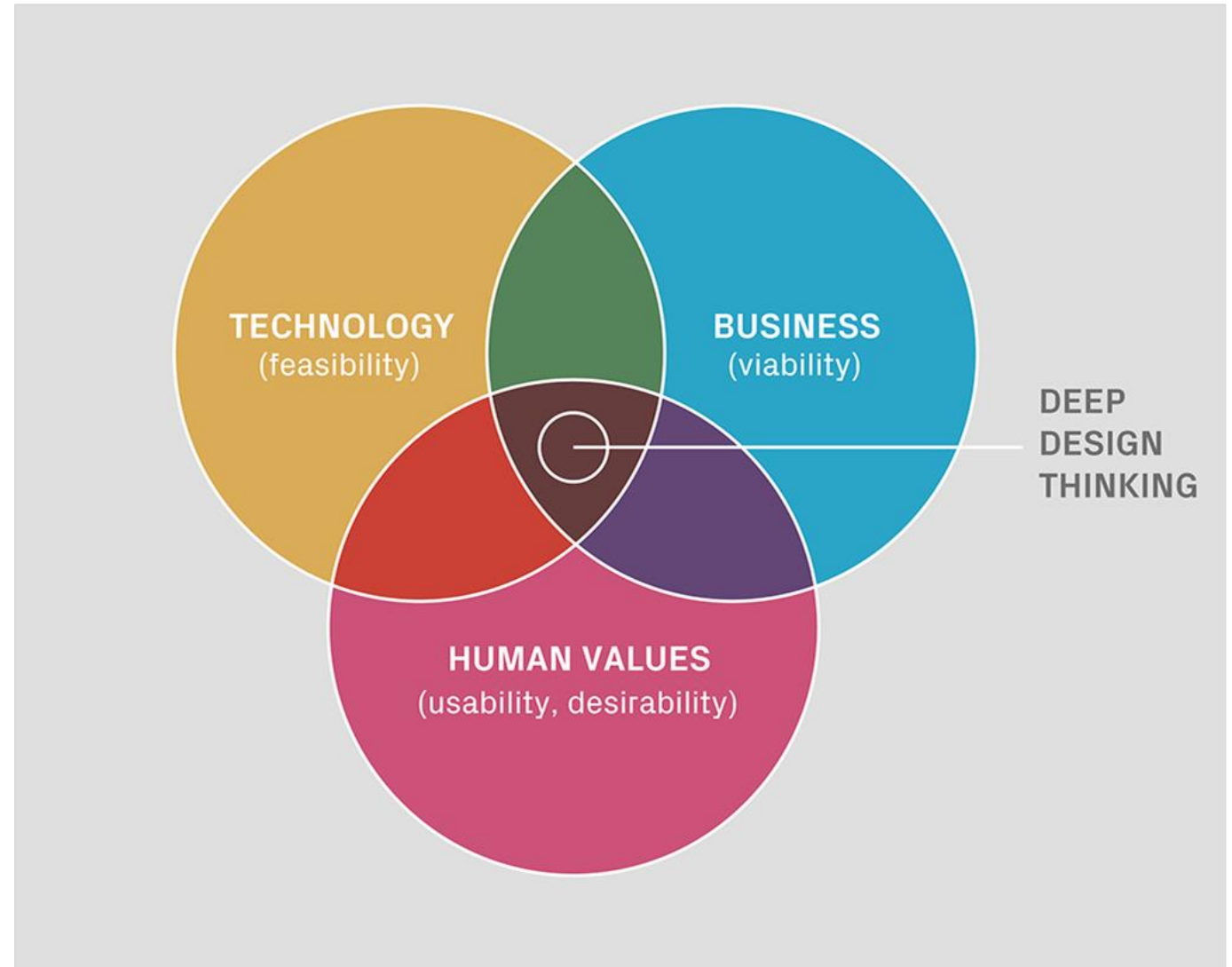


LOGIC



Design Thinking is focused on the **human perspective** of the “problem”. “It relies on [designer] tools to integrate people's needs, technological opportunities, and requirements necessary for a successful business.”

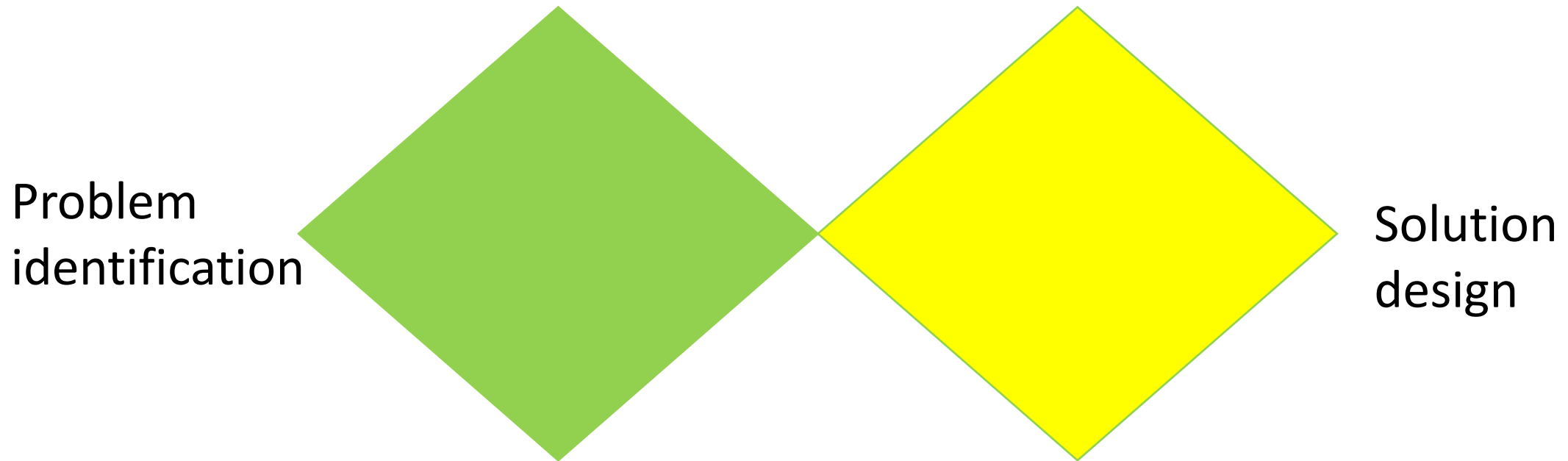
TIM BROWN, CEO @ IDEO



THE STANDARD PROCESS



DESIGN THINKING: THE «DOUBLE DIAMOND» PROCESS

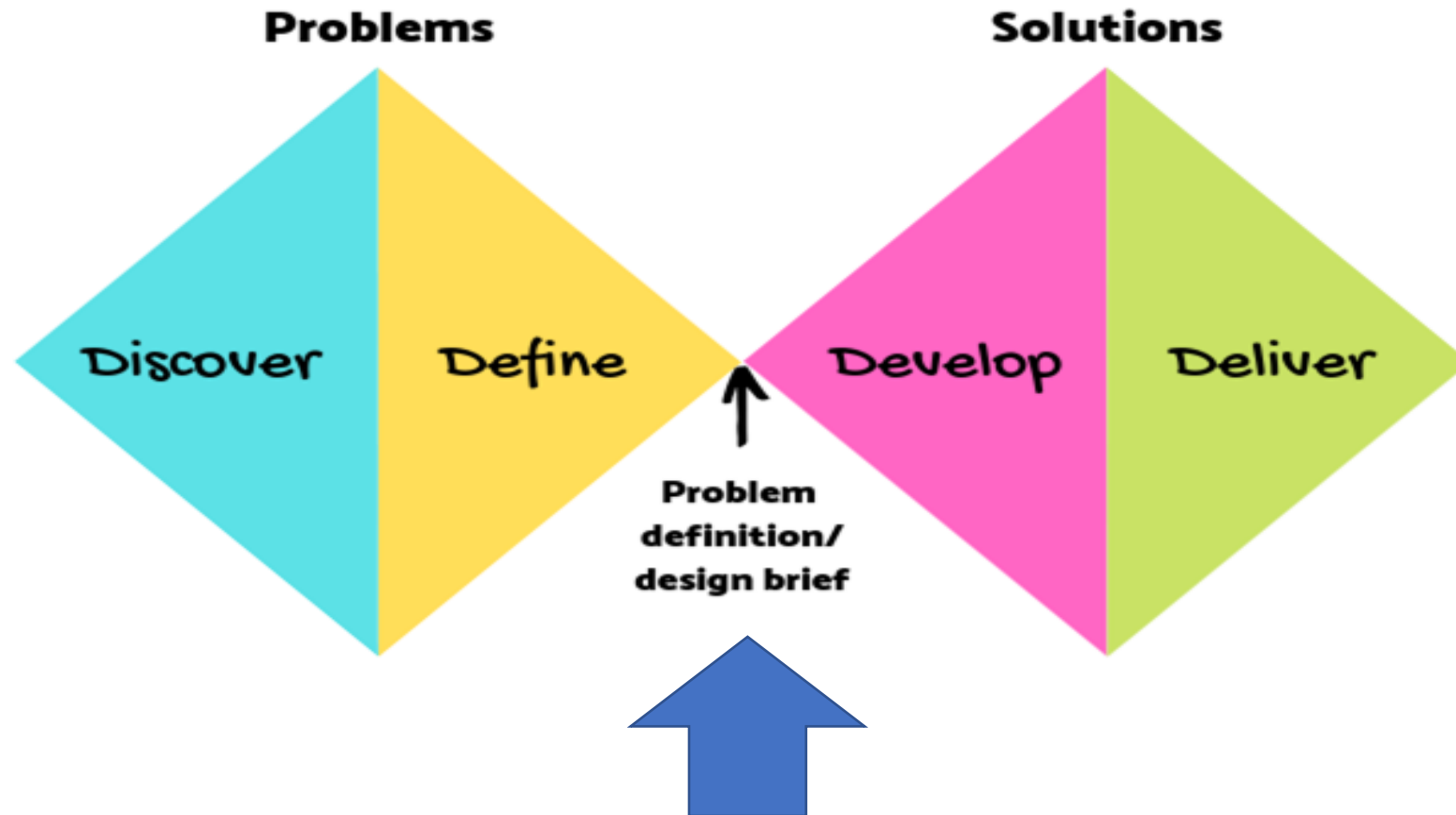


Exploration | Definition | Ideation | Implementation

Double Diamond, Design council

DESIGN THINKING: CLASS 4.0 HACKATHON

HACKATHON



during the December 7th hackathon,
this will be your starting point

DESIGN THINKING: CLASS 4.0 HACKATHON

HACKATHON



Blue Growth
EUSAIR



Connecting the Region
EUSAIR

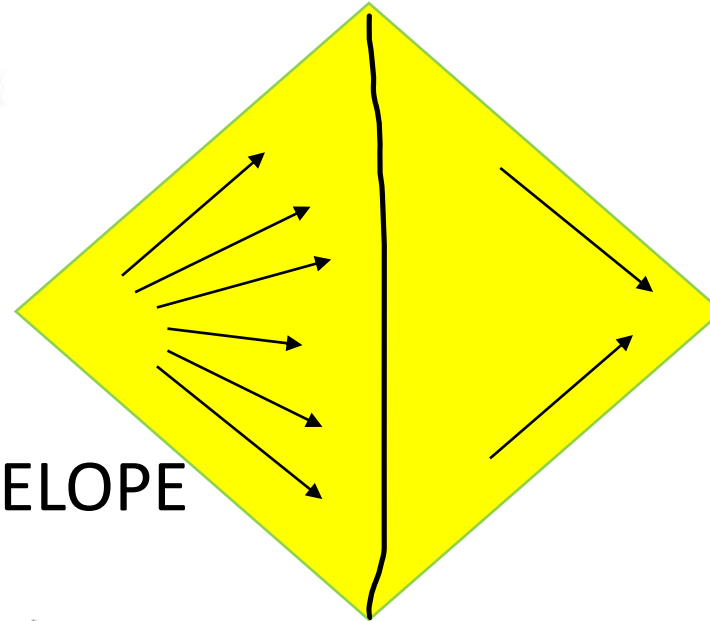


Environmental Quality
EUSAIR



Sustainable Tourism
EUSAIR

DELIVER



DEVELOPE

interreg Italy - Croatia CLASS4.0

CROSS-BORDER HACKATHON: towards the EUSAIR priorities

PROJECT NAME
ACRONYM | Extended title

PROJECT AXIS
One of the 4 EUSAIR Axis

DESCRIPTION
Problem you aim to solve in brief (use keywords)

MAIN OUTCOMES
Your solution in brief
Target groups that may benefit from your solution

PROJECT PARTNERS

LP Name | City
PP1 Name | City
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PP8 Name | City

European Regional Development Fund

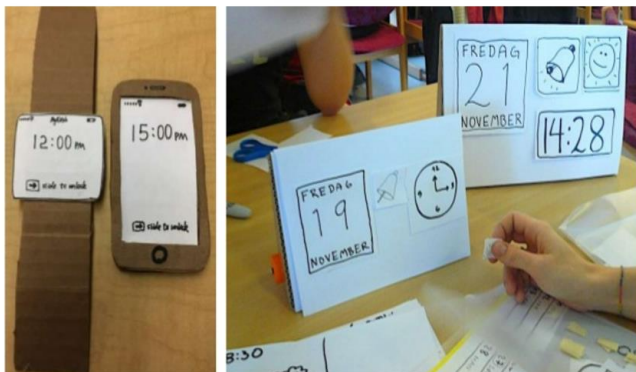
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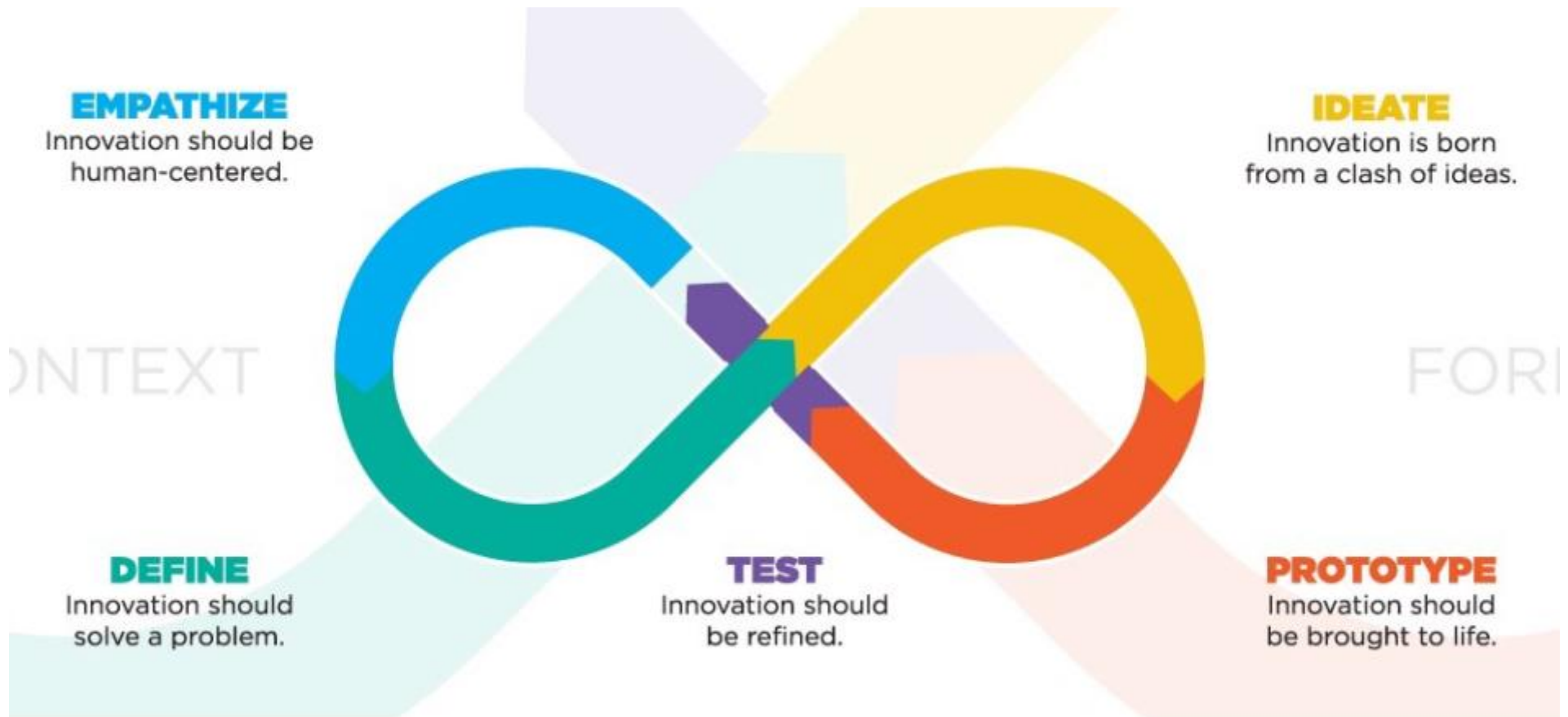
DESIGN THINKING: HOW DO YOU WORK WITH IT?

CREATIVITY and GENERATION of IDEAS
(thanks for example to brain-storming
techniques)

Rapid EXPERIMENTATION of ideas through
the creation of FAST PROTOTYPING



DESIGN THINKING... THE 5 STEPS



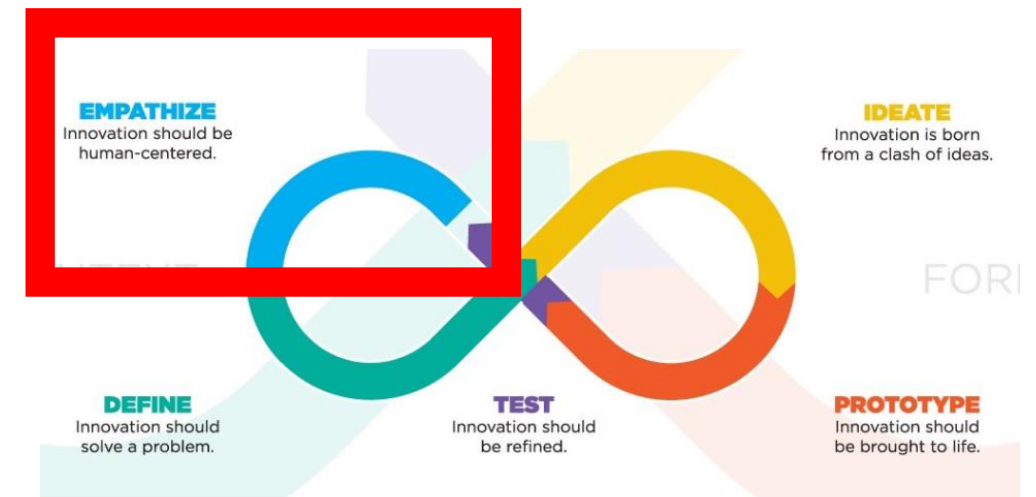
STEP 1 DESIGN THINKING: EMPATHISE

The first stage is to gain an **empathic understanding of the problem** you are trying to solve.

Empathizing means **seeing the problem with the eyes of the end user**.

Tools such as interviews to understand motivations and needs, and observations in the context of use can be useful.

Empathy allows design thinkers **to set aside their assumptions** about the world to gain insights into users and their needs.

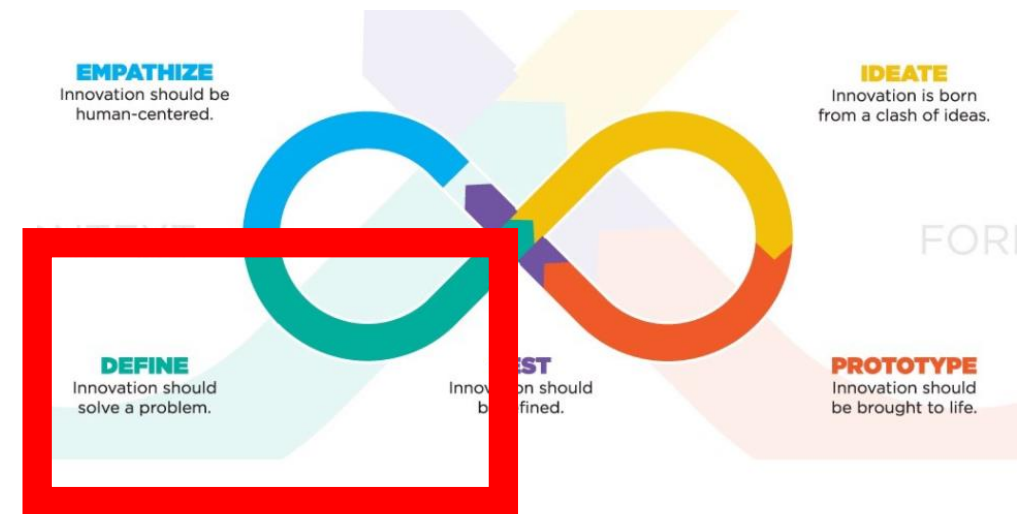


STEP 2 DESIGN THINKING: DEFINE

After collecting and ordering the information gathered from the previous phase, it is time to Define the problem.

According to the DT, **the problem must be defined from the point of view of the user** (their problems, needs, challenges ...).

In this phase we begin to outline the characteristics, functions and any other element that will allow us to solve the identified problem.



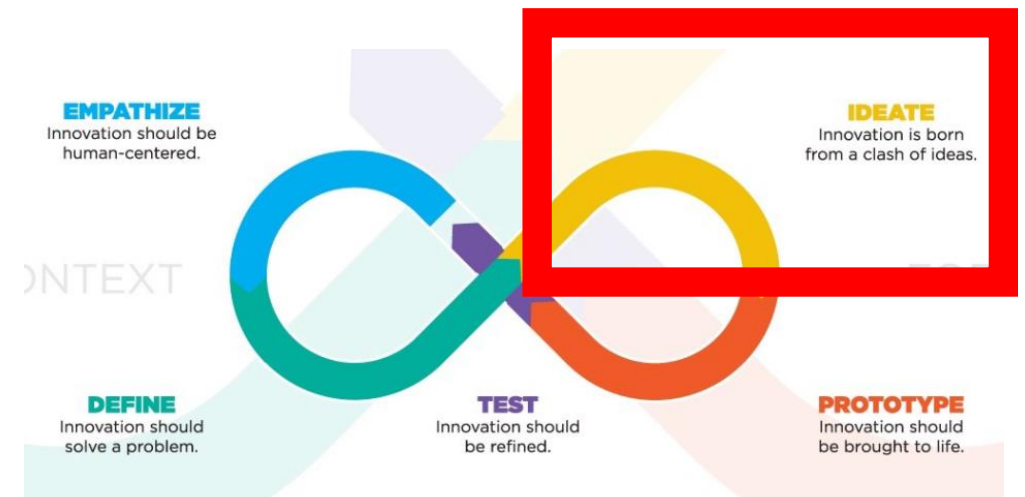
STEP 3 DESIGN THINKING: IDEATE

HACKATHON

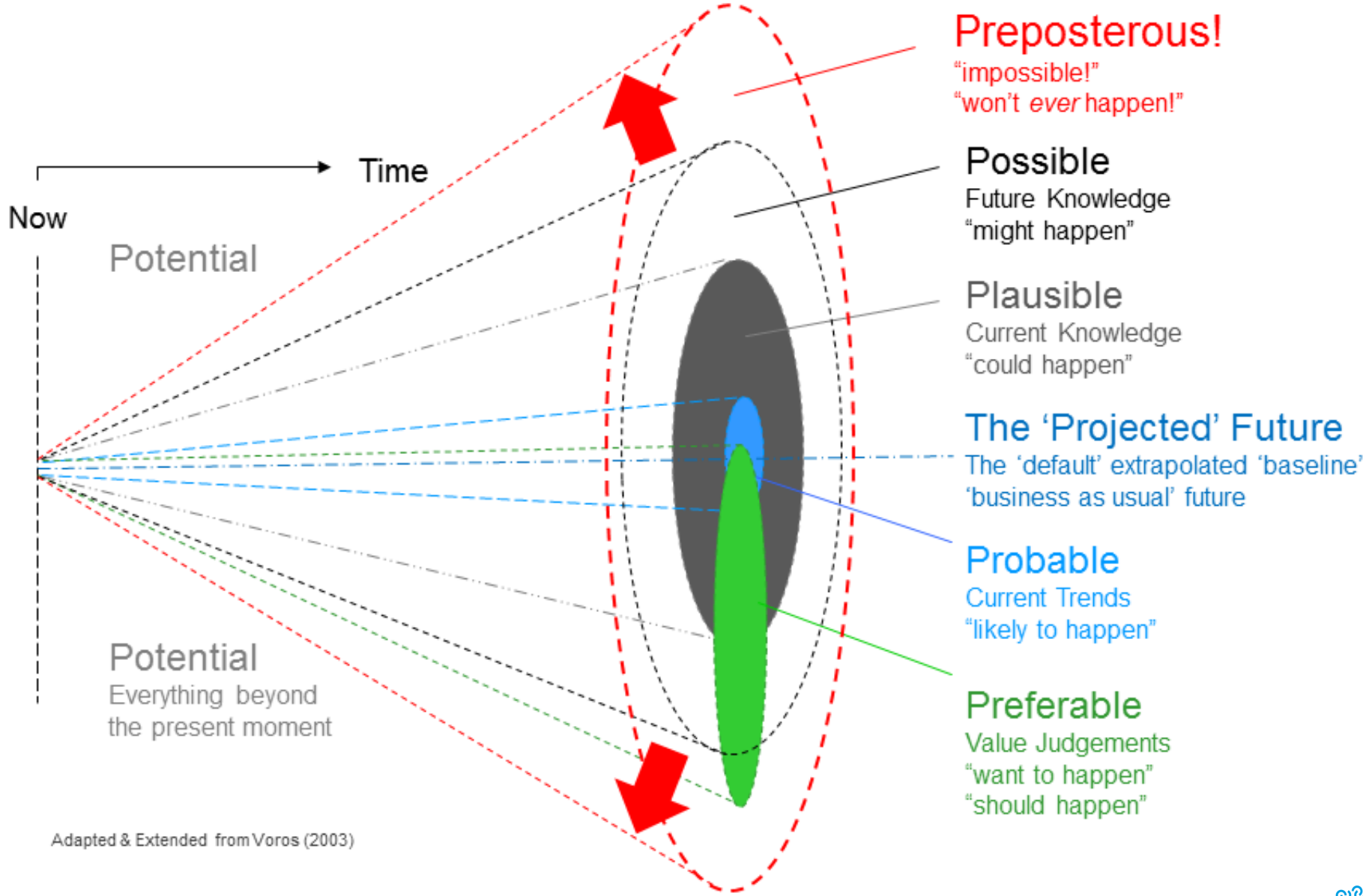
It's time to "think outside the box" to identify new solutions. This phase is dedicated to idea generation and is the most creative phase.

You have to **collect as many ideas as possible** that seek solutions to the insights and the problem that emerged in the previous part.

It also requires getting out of one's context, looking at trends, looking for influences from other sectors, **considering different scenarios...**



FUTURE SCENARIOS: CONE OF VOROS

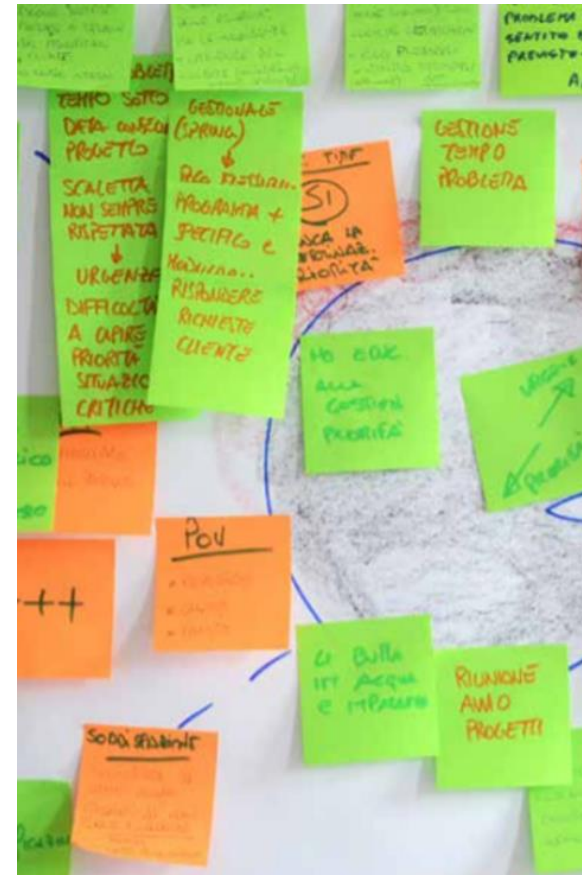


Adapted & Extended from Voros (2003)

STEP 3 DESIGN THINKING: IDEATE

The more ideas are generated in the initial phase, the greater the chances of finding the best solution.

The use of ideation techniques such as e.g. **Brainstorming, Brainwriting, FUTURE THINKING** ... can be useful for identifying and seeing the problem from different points of view and ideating alternative solutions.



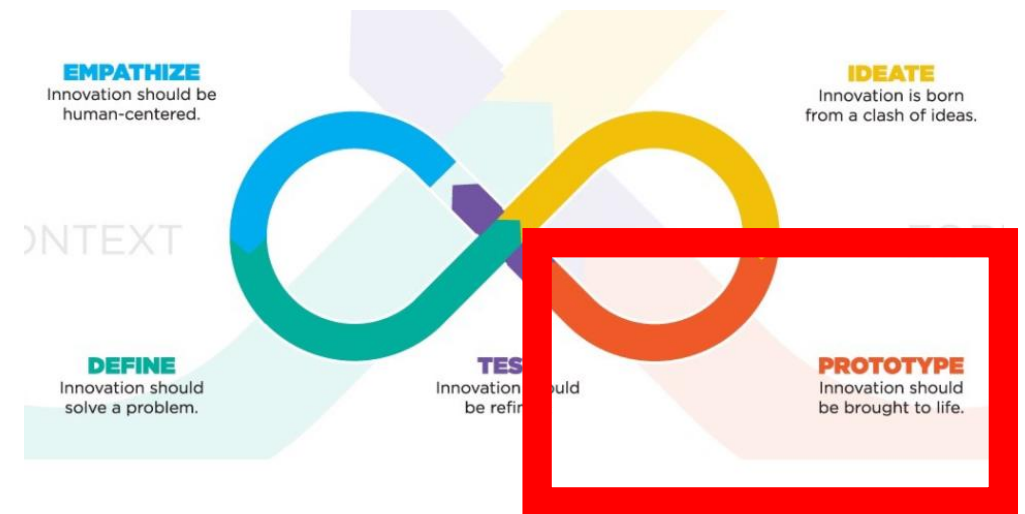
STEP 4 DESIGN THINKING: PROTOTYPE

Give shape to your idea, make it visible, usable, ...

It's about using the simplest materials to have an object, an interface, a **Customer Experience** to share with our end users

These prototypes, even if crude, allow you to review the generated solutions, change them, adapt them, improve them, even if they are rejected.

Better to understand right away that it doesn't work before large investments.....



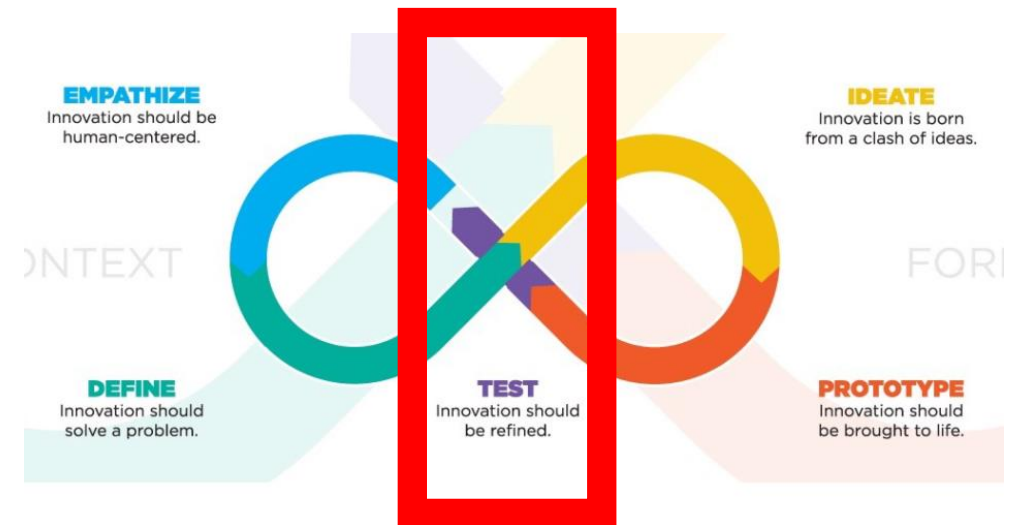
STEP 5 DESIGN THINKING: TEST

After having created a prototype, it must be carefully tested, in order to highlight its limits and defects.

The test must be conducted by simulating the user experience.

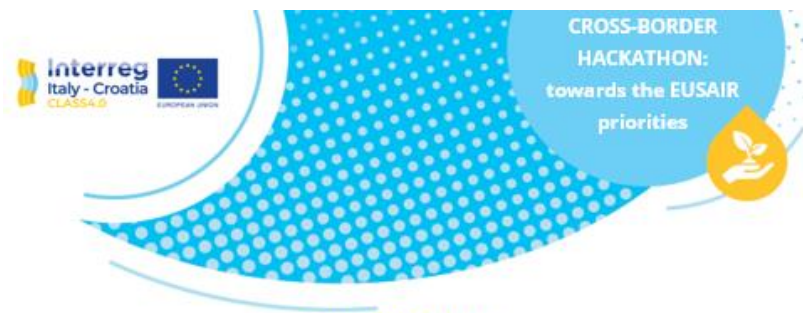
Perhaps there are other problems that the solution is applicable to....

After the testing phase, the process can restart to redefine the problem or a part of it, to gather more information on the context of use...



YOUR OUTCOME

HACKATHON



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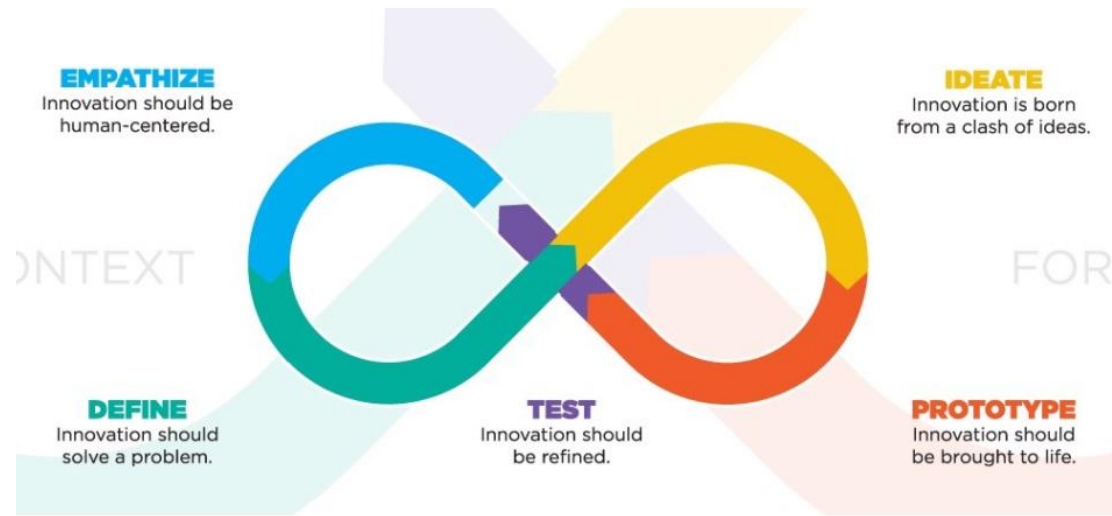
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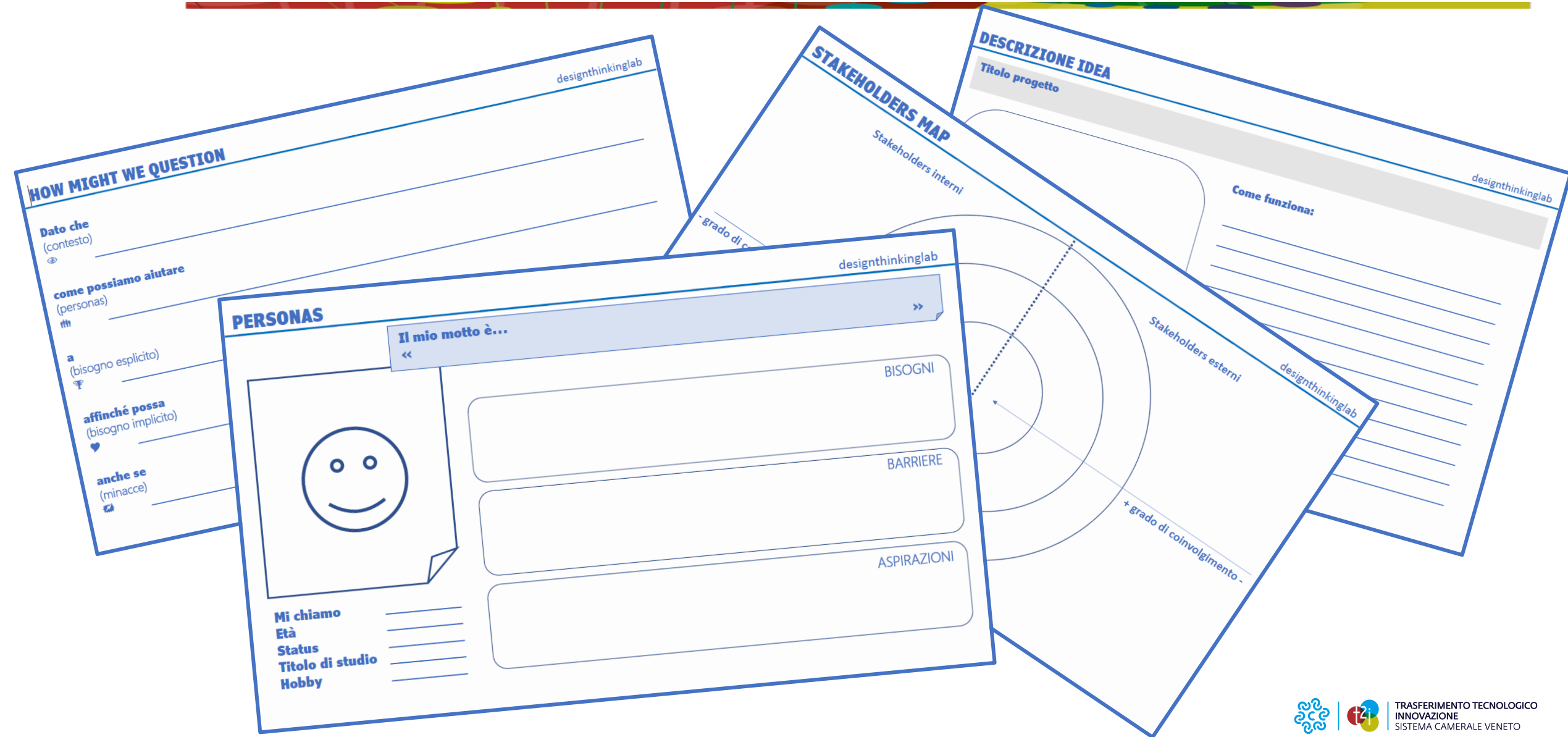
DESIGN THINKING... THE TOOLS



An important thing to understand is that **design thinking is not a rigid pattern**, it's a mindset.

It can be combined with multiple exercises that we can choose, according to context, preferences... **The tools are flexible.**

DESIGN THINKING: EXAMPLES OF TOOLS



ATTITUDES THAT CAN BOOST CREATIVITY

HACKATHON



Empathy



Optimism



Embrace Ambiguity



Make It



Learn From Failure



Iterate, ITERATE



Creative Confidence

DESIGN THINKING: APPLICABILITY, EFFECTS

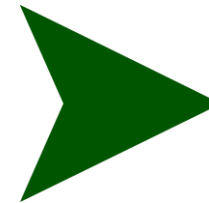


Problem Framing: ability to identify, select and address the right problem

Stakeholders engagement: involvement of all internal and external stakeholders

Activators engagement: to engage Activators within the organization

KPIs: define measurable and consistent result indicators



Implementation of a shared innovation process

Organization culture change

«If I had asked my customers what they wanted, they would have answered: a faster horse»

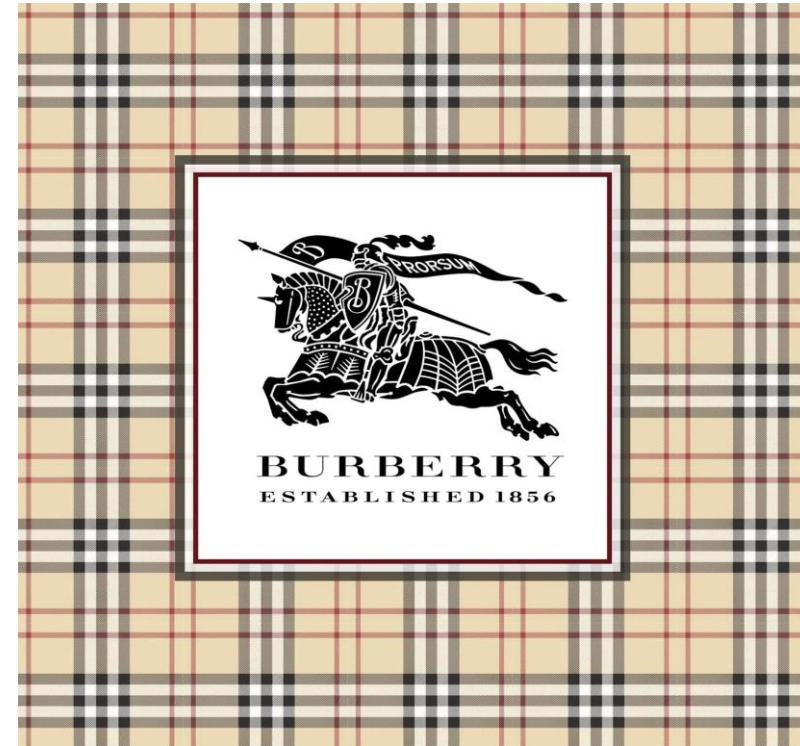
Henry Ford



DESIGN THINKING: EXAMPLE OF EMPATHY AND STRATEGIC IDEATION!



DESIGN THINKING: EXAMPLE OF EMPATHY AND STRATEGIC IDEATION!



LET'S PUT IT INTO PRACTICE

HACKATHON

At the Hackathon, it will be your turn!

You'll work in **TEAMS**

Objective of the challenge is the realization of a **project idea**,



interreg
Italy - Croatia

CROSS-BORDER HACKATHON:
towards the EUSAIR priorities

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The project idea is **based on the needs and expectations of the stakeholders** to contribute with active inputs to the **EUSAIR strategy**.

It will be used the Design Thinking methodology and the Future Thinking approach to widen the exploration of the topic and the possible solutions.

Thank you!

Chiara Remundos

Enrico Segantin

Jessica Caovilla

Marco Galanti



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