EU FOOD SAFETY FORUM

2-3.12.2025

Rome

WHO AM I? LONG STORY SHORT ☺

- Background in International Relations
- **EU Project Manager** at APRE (Agency for the Promotion of European Research)
- Turning ideas into added societal and economic value
- Collaborative R&I projects at the intersection of **novel enabling technologies**, **green transition**, **digitalization** and **responsible innovation**
- Meaningful impacts across diverse sectors
- Stakeholder engagement, co-creation, outreach, knowledge transfer, mutual learning + policy-oriented approach

FORGING → Industry-academia Forum to Uncover the Potential of Emerging Enabling Technologies
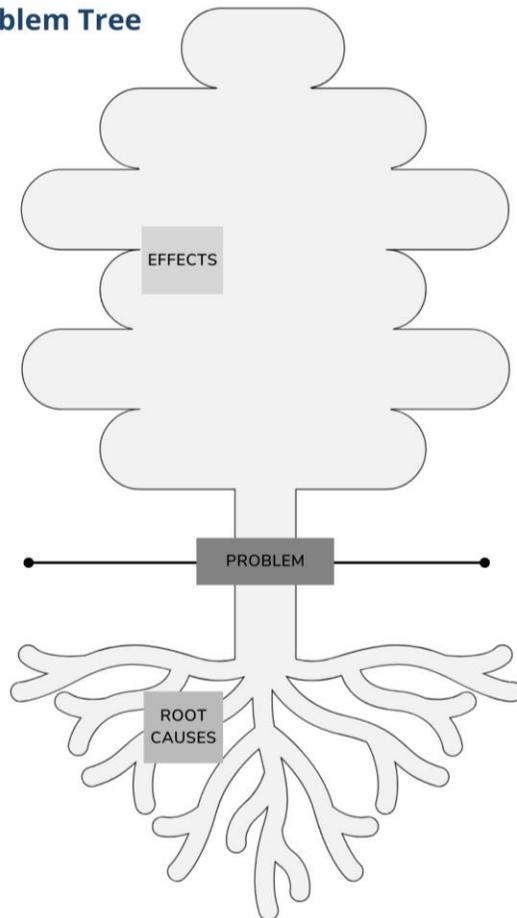
- Supports the Digital and Green Transitions through **Value-Sensitive innovation**, attentive to the environment and to societal needs

- Explores how novel technologies of Industry 5.0 can be deployed in support of a more **human-centred and sustainable future**

- Gathers experts from the **quadruple helix** to integrate different perspectives in the development of new technological solutions from the earlies stages

- **ARTIFICIAL INTELLIGENCE**

- **CYBER-SAFE DATA TECHNOLOGIES**

- **HUMAN-MACHINE INTERACTION TECHNOLOGIES**

- **DIGITAL TWINS AND SIMULATION TECHNOLOGIES**

- **BIO-INSPIRED TECHNOLOGIES AND SMART MATERIALS**

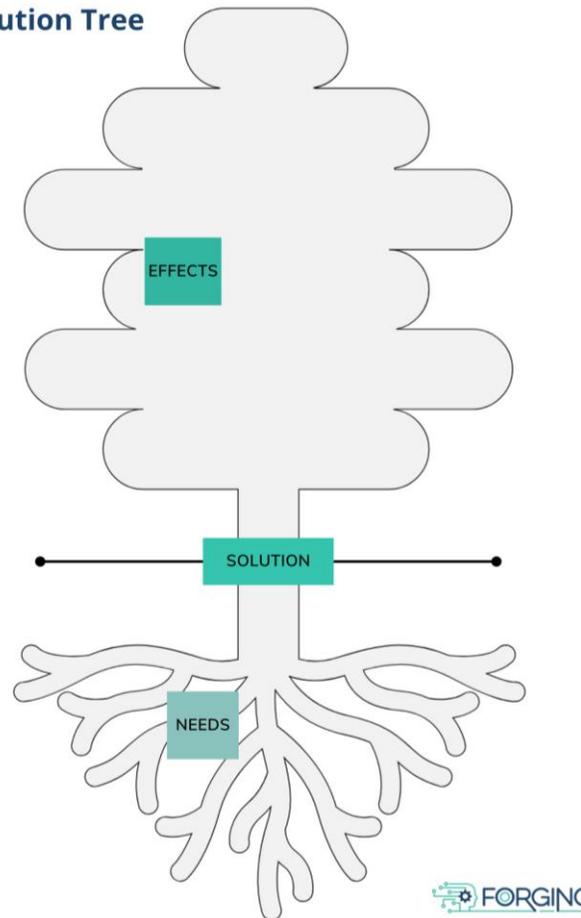- **TECHNOLOGIES FOR ENERGY EFFICIENCY**

The FORGING Co-creation Methodology

- Enables the **co-design of use-cases** for emerging enabling technologies of Industry 5.0 in a multidisciplinary perspective

- Allows for the integration of a **human-centric approach** from the earliest stages of tech development, ensuring that innovative technological solutions are designed with human needs, societal trust and environmental sustainability at their core

- Rationale → **technology needs to be serving human beings**, not the other way around

- **20+** tech use-cases co-created, **10+** sectors covered, **130+** EU experts engaged

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Problem Tree

EFFECTS

PROBLEM

ROOT CAUSES

Solution Tree

EFFECTS

SOLUTION

NEEDS

FORGING

STEP 1

- Identification of one main **problem** affecting the focus sector

- Reflection on root causes and main effects

- Translation of the root causes into sector-specific needs

- Exploration of a concrete **solution** to take further in the exercise in relation to the identified need

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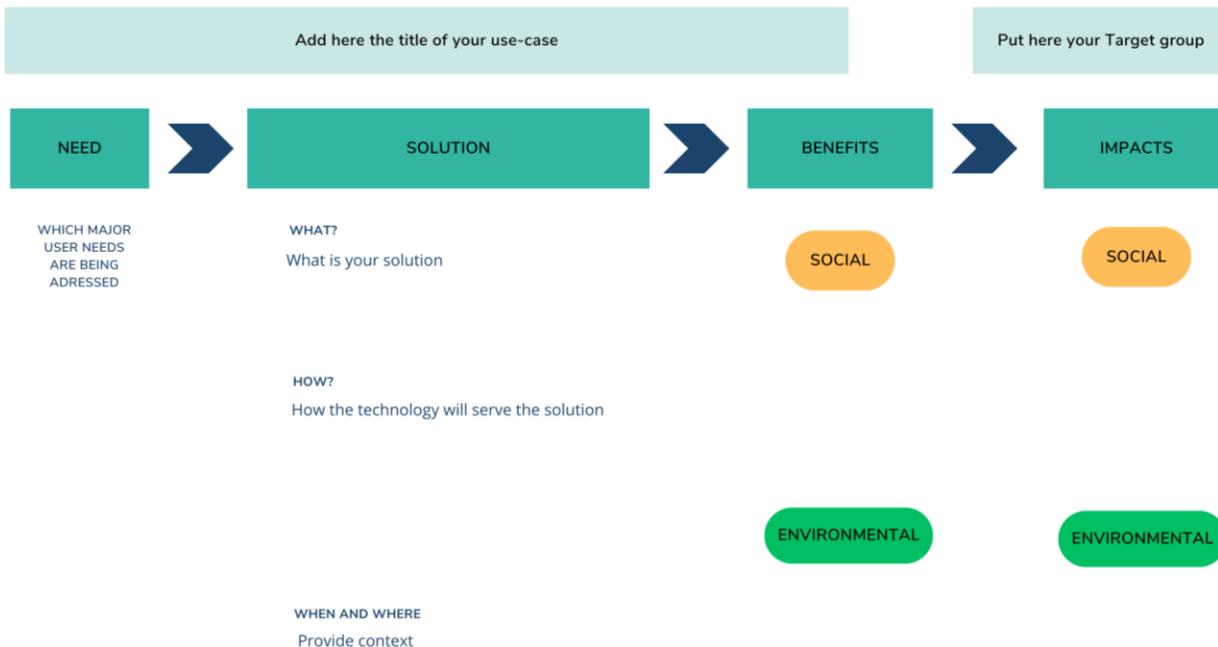
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FRAME YOUR IDEA

KEY SECTOR	MAIN PROBLEM	PROPOSED SOLUTION	VALUE PROPOSITIONS	MATCH NEED AND TECHNOLOGY
Which is the sector?	What is the main problem we would like to address?	What is the solution we envisage?	What value do we deliver to the end-users?	Does one of the proposed technologies have the potential to meet this need? Why? How?

KEY ACTORS
Who are our actors affected by the problem?

KEY RESOURCES
What key resources do our value propositions require?

FEASIBILITY VS RESTRICTIONS AND LIMITATIONS
What can prevent us from solving these problems and supporting people in these situations?

FORGING

STEP 2

- Outlining the **main features** of the envisaged solution

- Detailing main feasibility limits, resources needed, value proposition, main actors involved in the development of the envisaged solution

- Selection of the most suitable technology from the FORGING portfolio of "most promising" technologies of Industry 5.0 (to develop the solution)

- Use-case ready for the last step

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USE-CASE

Add here the title of your use-case

Put here your Target group

| NEED | SOLUTION | BENEFITS | IMPACTS |

WHICH MAJOR USER NEEDS ARE BEING ADRESSED

WHAT?
What is your solution

HOW?
How the technology will serve the solution

WHEN AND WHERE
Provide context

SOCIAL

SOCIAL

ENVIRONMENTAL

ENVIRONMENTAL

STEP 3

- Assessing the broader **social and environmental impacts** of what they designed

- Reflecting on both the intended benefits *and* the possible risks or unintended social and environmental effects of the proposed solution

- Supported by facilitation tools like the FORGING *Perspective Cards*, bringing multiple stakeholder viewpoints to the table

This methodology
and other unique tools for
Industry 5.0 professionals
are available in the
FORGING Toolbox and Playbook

THANK TO ALL

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