ONE4ALL PROJECT

Agile and modular cyber-physical technologies supported by data-driven digital tools to reinforce manufacturing resilience.

Funded by
the European Union

KEY FACTS

PARTNERS	10
COUNTRIES	6
MONTHS	48
BUDGET	6 MIO €

The vision

Project's steps to reinforce the resilience and flexibility of the manufacturing lines, through modular and reconfigurable technologies centred on humans and sustainability.

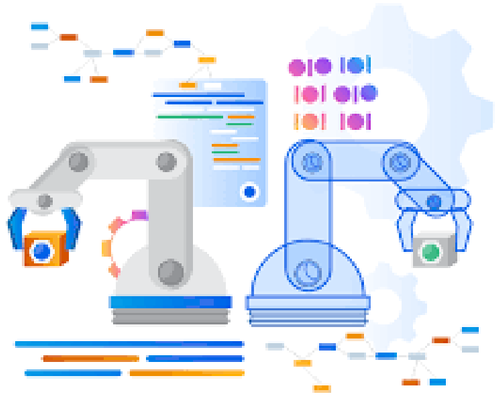
1 Development of **reconfigurable cyber-physical modules** of production, integrated with **breakthrough AI-based digital tools**

2 Ease the integration and understanding among the end-users, **promoting open-source protocols and humans' safety and upskilling**

3 Development of innovative **sustainability assessment tool**, integrated with technologies

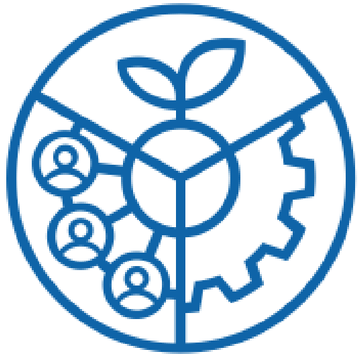
INNOVATION PILLARS

Data-driven Digital Twins



Distributed Decision Support System

Human and environmental centred approach



Secure and open-sourced intelligent orchestration platform

Reconfigurable cyber-physical production module

INNOVATION PILLARS

Data-driven Digital Twins

For this I5.0 technology, an adaptation is needed to surpass challenges such as frequently changing demands and complex manufacturing systems.

Distributed Decision Support System

Useful tool to tackle the optimisation of a wide variety of problems and support a novel workforce speeding up their adaptation period.

Human and environmental centred approach

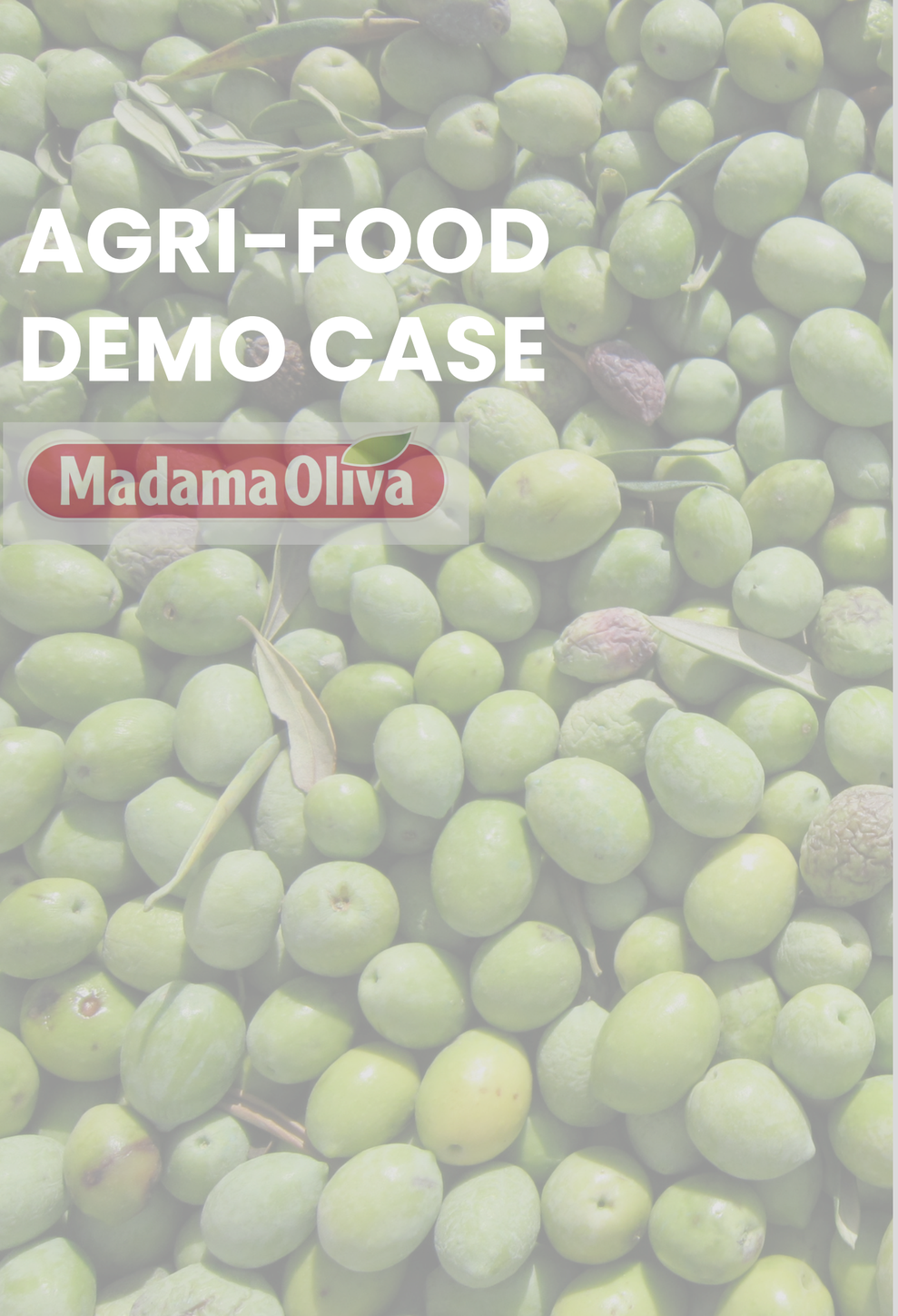
The technologies' development process will be integrated with workforce gaps and necessities. Moreover, the evolution of the technical, economic and environmental impact of project innovations will be evaluated.

Secure and open-sourced intelligent orchestration platform

To interconnect all ONE4ALL modules (digital and physical) and present the information gathered in real-time through user-friendly interfaces to improve the understanding among end-users

Reconfigurable cyber-physical production module

Development of plug-and-produce cobots, embedded with IIOT technologies.



AGRI-FOOD DEMO CASE

Madama Oliva

Madama Oliva is a **supplier of fresh tables olives** worldwide.
Their production supply chain consists of several stages, most of them performed manually, from the **olives reception** to their **packaging** and **palletization** for their further delivery to the consumers.

Innovative technologies implemented in:

- Raw materials sorting phase
- Distribution to the packaging machine

PHARMACEUTICAL DEMO CASE

InnoGlobal

InnoGlobal is a digital transformation company, focussed on the **pharmaceutical & life sciences industries**. Their process and applications laboratory provides a production technology demonstration, operator training and process research facility for **pharmaceutical** oral solid dose **production technologies**.

- Transportation & bin blending of dispensed raw materials
- Blend uniformity verification
- Loading & unloading product in fluid bed processor

ONE4ALL SOCIAL MEDIA

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the European Union