SHAPING EUROPE'S DIGITAL FUTURE

AI ecosystem of excellence

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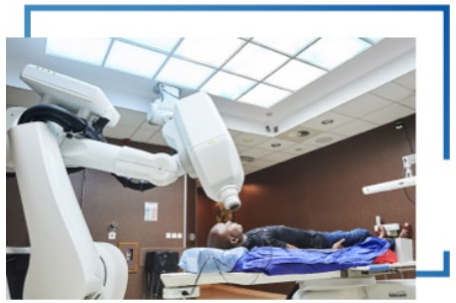
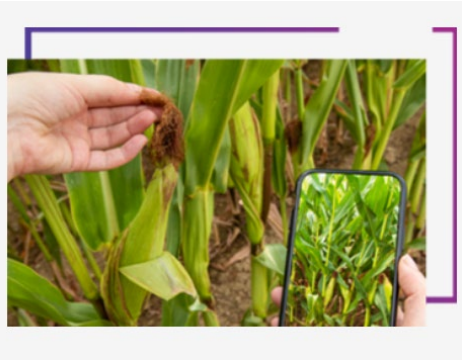
How does the EU see AI?





Baseline argument

AI is good …

- For people
- For business
- For the public interest

… but creates some risks

- People's safety
- For fundamental rights

An ecosystem of Trust and Excellence in AI (COM/2020/65)

✓ **Ensuring** compliance with **EU rules**, **fundamental rights** and **consumers' rights**

✓ **Making the EU a world-class hub for AI** and ensuring that **it can benefit people**

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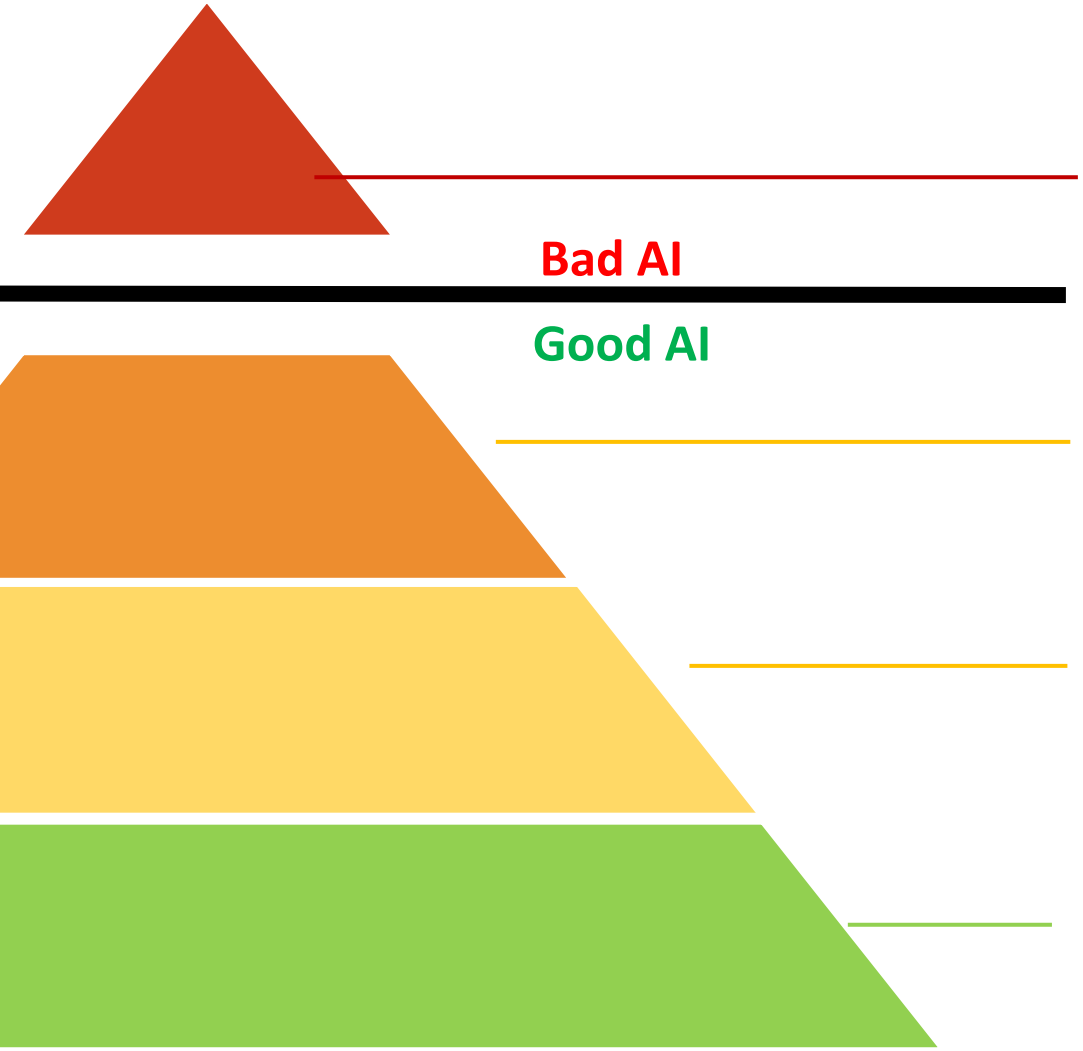
A risk-based approach to regulation



Unacceptable risk
e.g. soacil scoring

Prohibited

High risk
e.g. recruitment, medical devices

Permitted subject to compliance with AI requirements and ex-ante conformity assessment

AI with specific transparency requirements
'Impersonation' (bots)

Permitted but subject to information/transparency Obligations

Minimal or no risk

Permitted with no restrictions

Coordinated Plan on AI (2018, revised 2021)

Commission and EU Member States agree to:

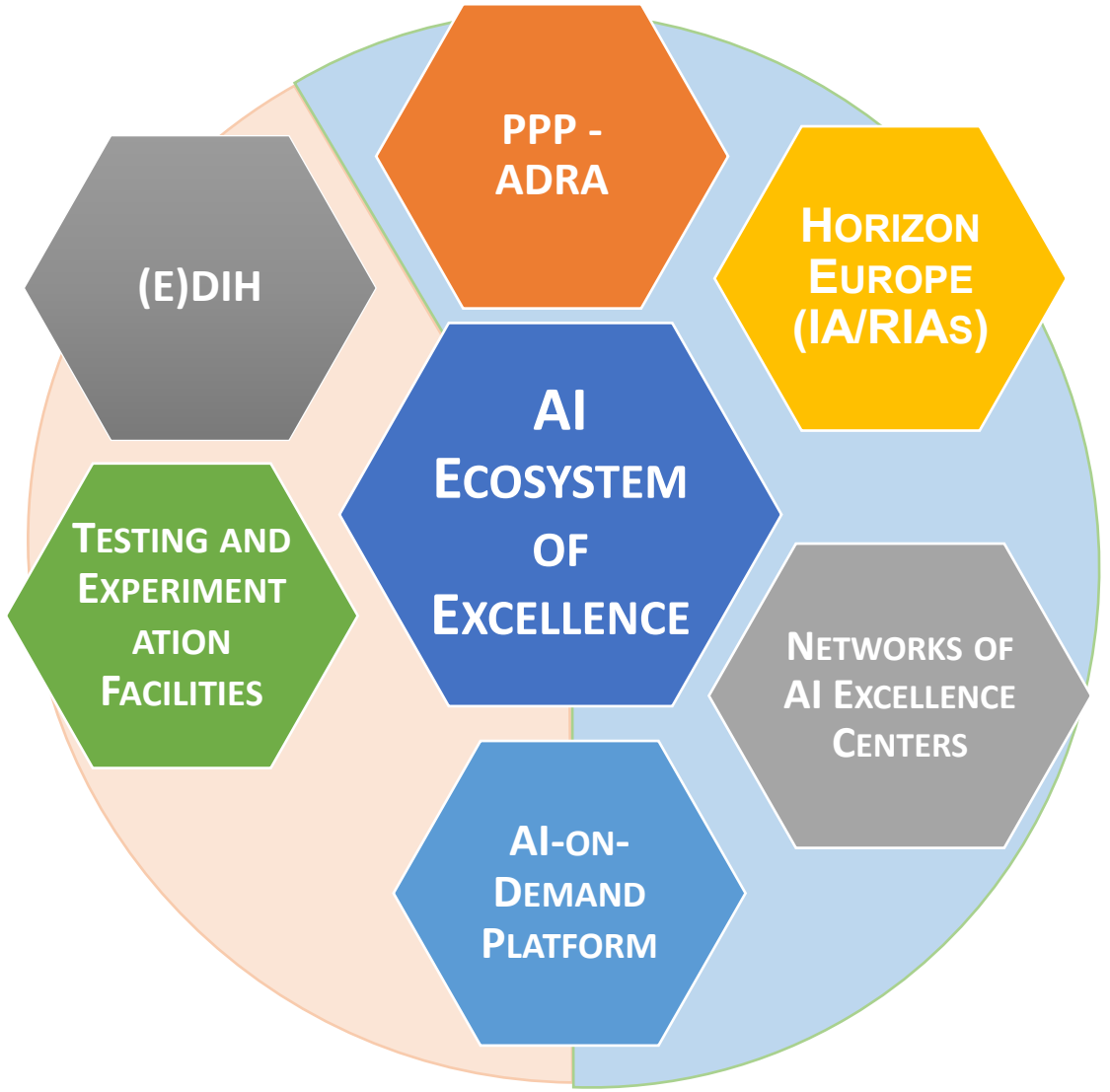
- **accelerate** investments in AI
- **act** on AI strategies for their timely implementation
- **align** AI policies EU-wide.

- Coordinated public efforts help leverage private investments

Digital Europe Programme	Build the **strategic digital capacities,** facilitate the wide deployment of digital technologies
Horizon Europe Programme	Support **research and innovation** for new knowledge and innovative solutions
Recovery and Resilience Facility	Support **Member States' investments and reforms** for recovery

Ecosystem of Excellence in AI:
From the Lab To the Market

Digital Europe



Horizon Europe

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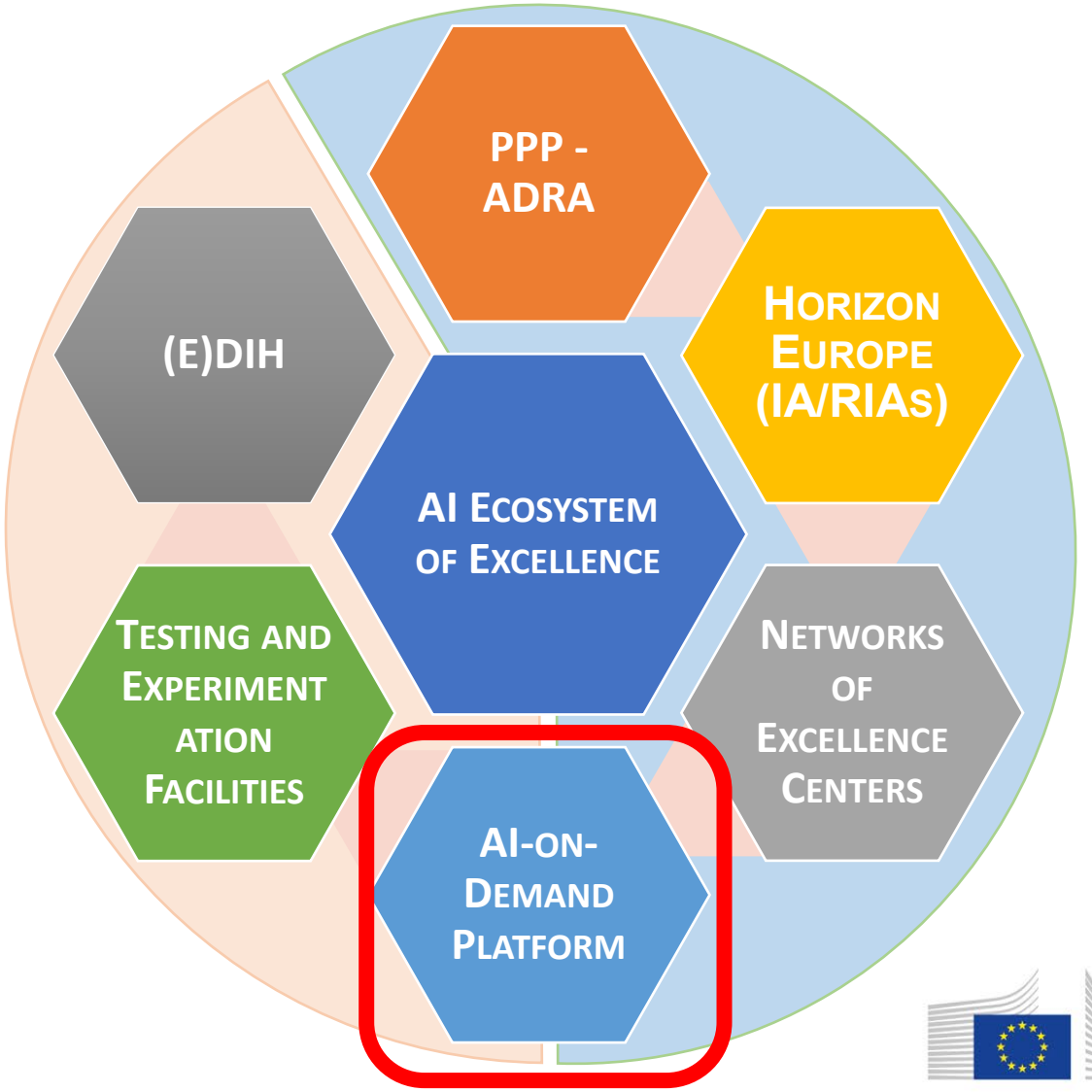
Ecosystem of Excellence in AI: From the Lab to the Market

OPPORTUNITIES FOR THE COMMUNITY



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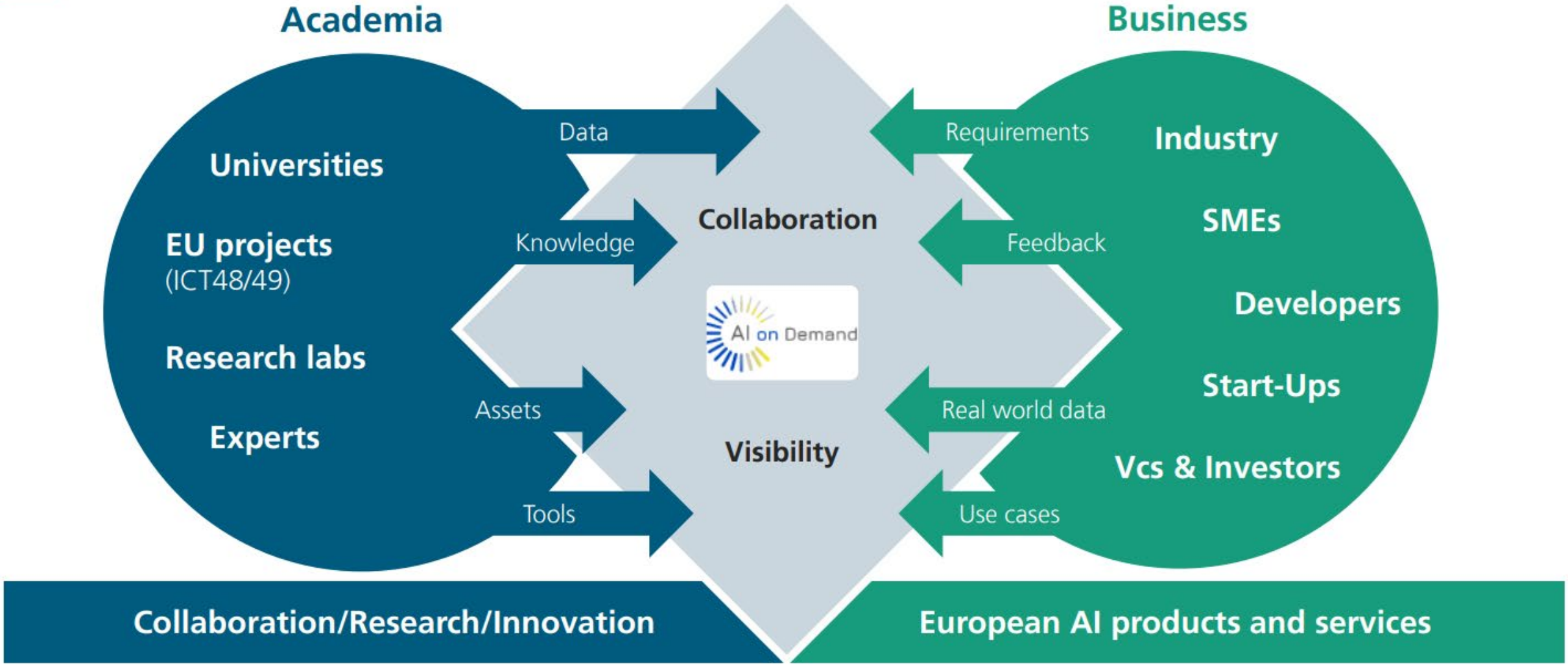
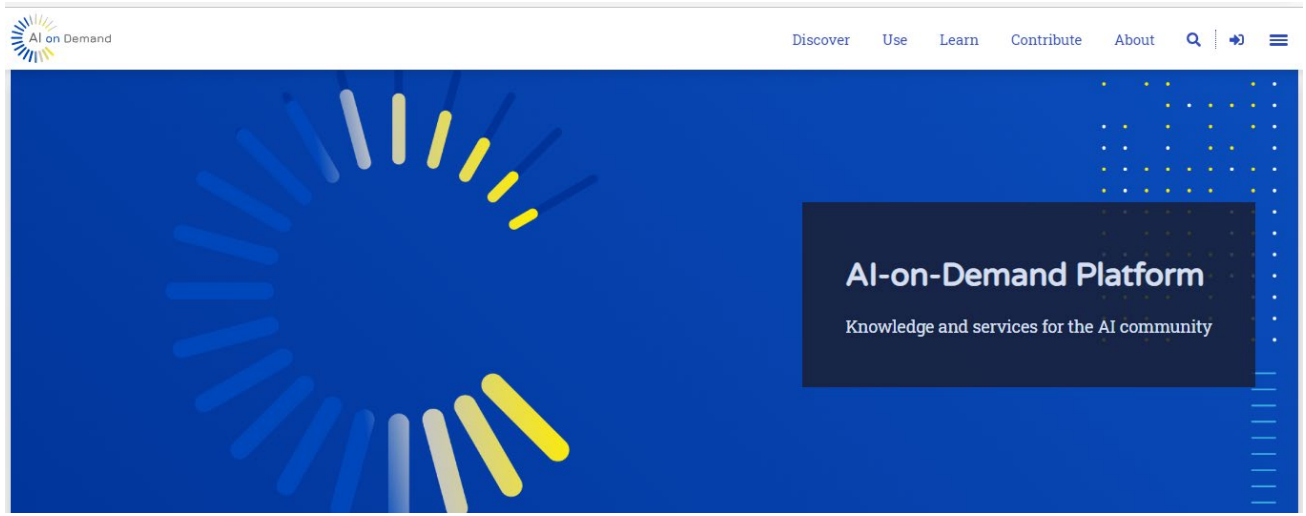
The European AI On-Demand Platform

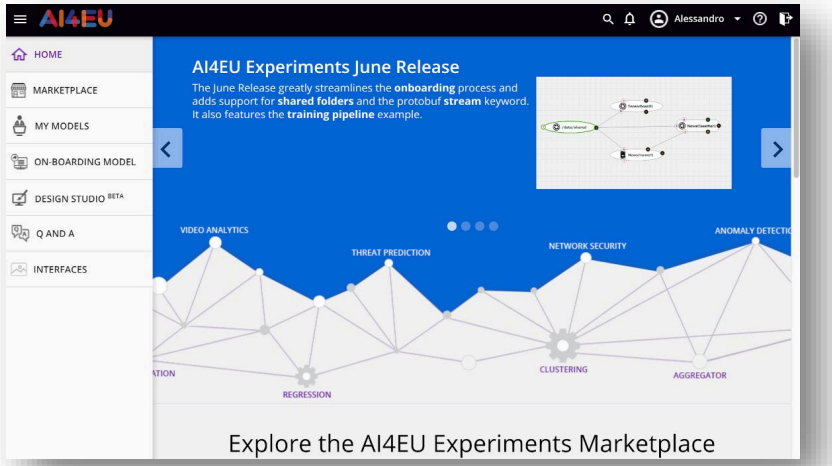
AIoDP as Bridge & Catalyst between the European AI research and industry



AI on Demand Platform - Main features



European AI assets portal



AI pipelines testing/experiments platform

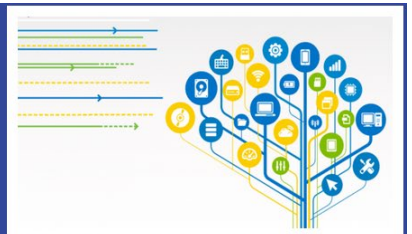
Matchmaking

Earth Observation

Energy Service

Planning Service

Cyber Physical systems


Digital Innovation Hubs

Horizontal and vertical services

https://www.ai4europe.eu

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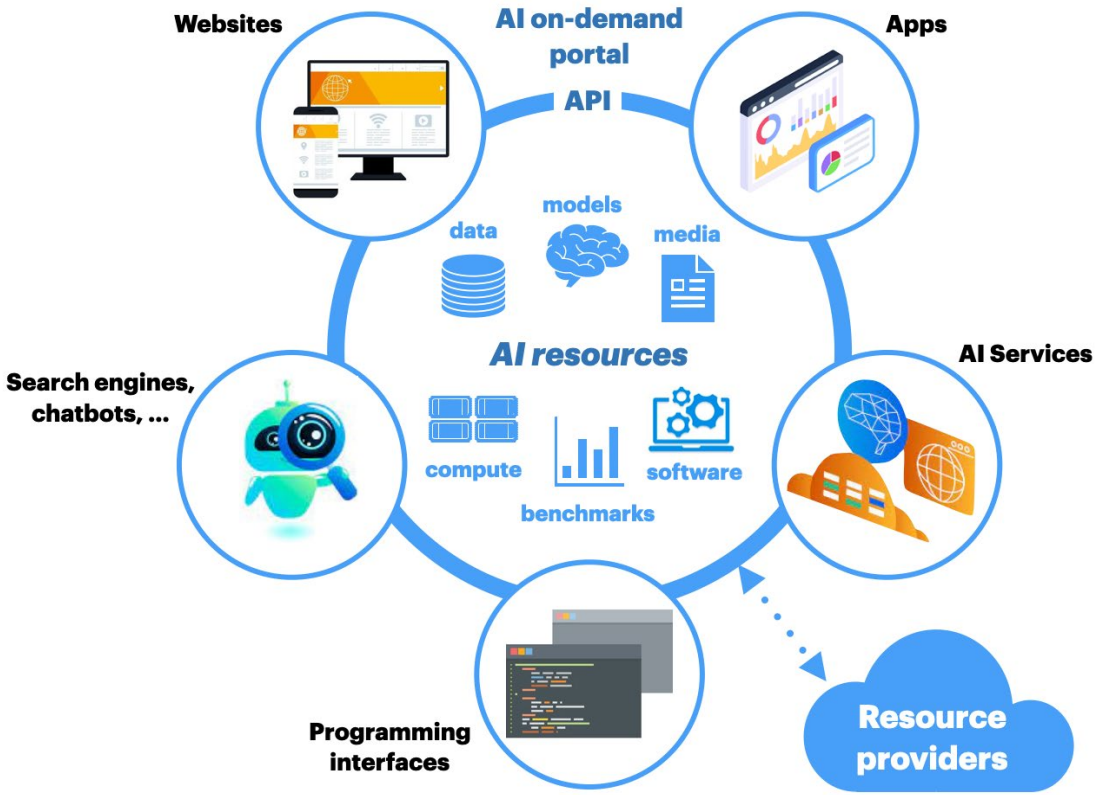
The concept of the AIoD platform @AI4Europe



- A **common API** will enable **sharing** existing research knowledge, **accelerate** the **access** to existing research, and **provide** an **environment** to build and use cutting edge new services.
- **showcasing SoA science & research** being developed by leading AI research centres and laboratories
- **The trustworthiness of resources and** the **ethical design of AI tools** will be embedded within the Platform's publication process

DIGITAL-2022-CLOUD-AI-03-AI-ON-DEMAND
Deployment of the AI-on-demand platform

DIGITAL EUROPE PROGRAMME

Objective: To develop and deploy the AI-on-demand platform, building on the results from the project implementing the AI-on-demand preparatory action

Type: Coordination and Support Action (CSA)

Size : EUR 28 Million
- Up to 15% FSTP (Financial Support to Third Parties) – up to 200k€/TP
- Duration: 48 Month

Participation: EU + EEA (! ARTICLE 12.6 restriction – entity controlled by non-eligible countries)

DIGITAL-2022-CLOUD-AI-03-AI-ON-DEMAND
Expected outcomes

Increased visibility to trustworthy innovations, in particular those made in Europe

Easy access to AI tools by public administrations and European industry (in particular SMEs)

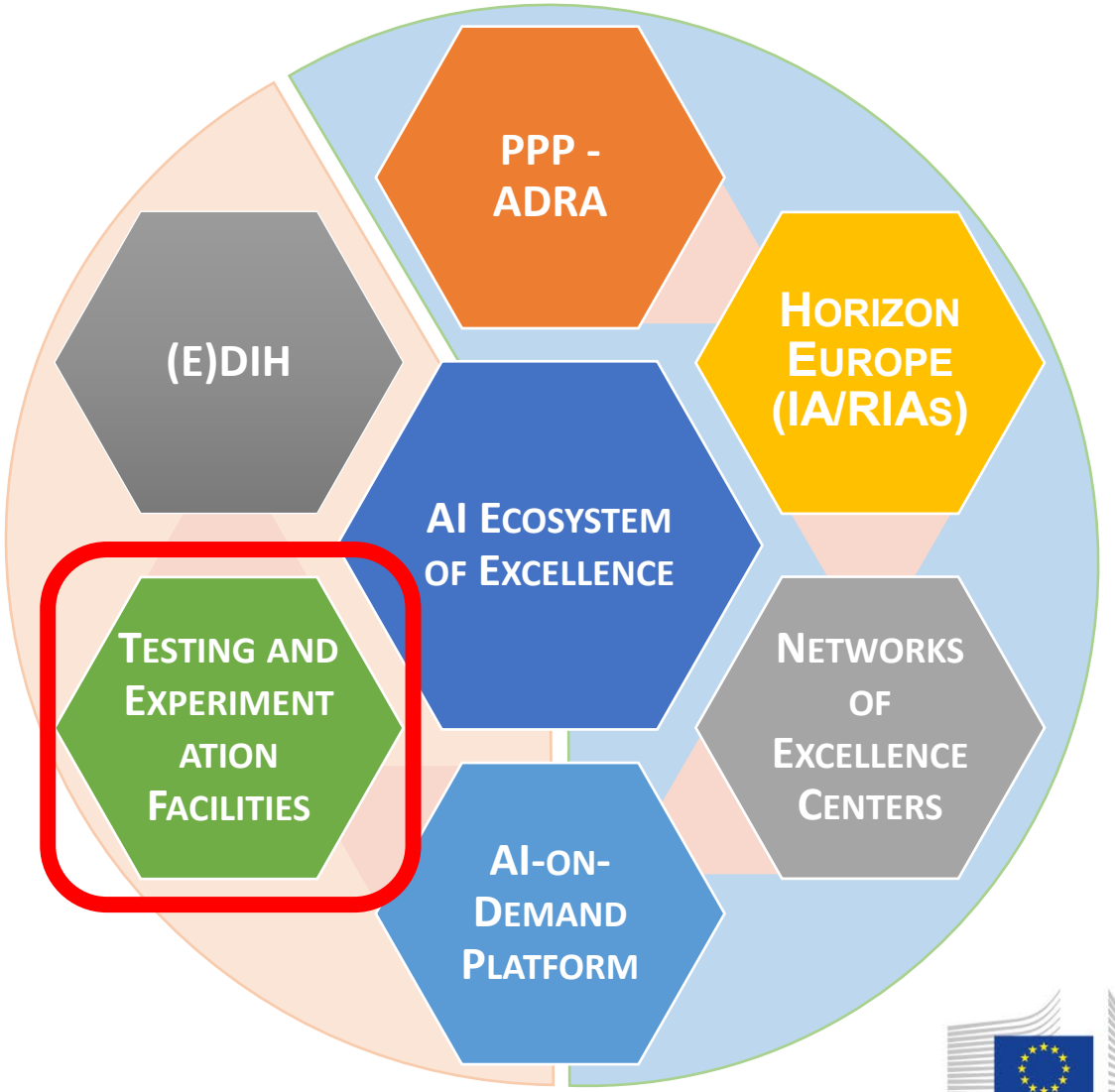
Action under Horizon Europe (AI4Europe) focuses on the AI research community
Action under Digital Europe will address the AI innovation community

DIGITAL-2022-CLOUD-AI-03-AI-ON-DEMAND
Scope

- Deploy the AI-on-demand platform building on existing projects
- Become the one-stop-shop to access AI resources in Europe
- Ensure interconnection and cooperation with other relevant actions
- Build a complete marketplace and a service layer for integration of trustworthy AI solutions
- Bring the latest AI tools and solutions to the level of industrial standard requirements
- Develop a solid support layer of integration services, addressing industry and public administration's needs.

Ecosystem of Excellence in AI: From the Lab To the Market

OPPORTUNITIES FOR THE COMMUNITY



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Ecosystem of Excellence in AI: Testing and Experimentation Facilities (TEFs)

- **220M€** co-investment with MS
- Support TEFs as **world-class reference technology infrastructures** at EU level **addressing gaps in the value chain**, from the lab, to the market
- Support **the deployment and uptake of trustworthy AI** and support the **implementation** of the AI Act
- Support for **European technology providers** of AI solutions to increase EU IP **assets in AI**

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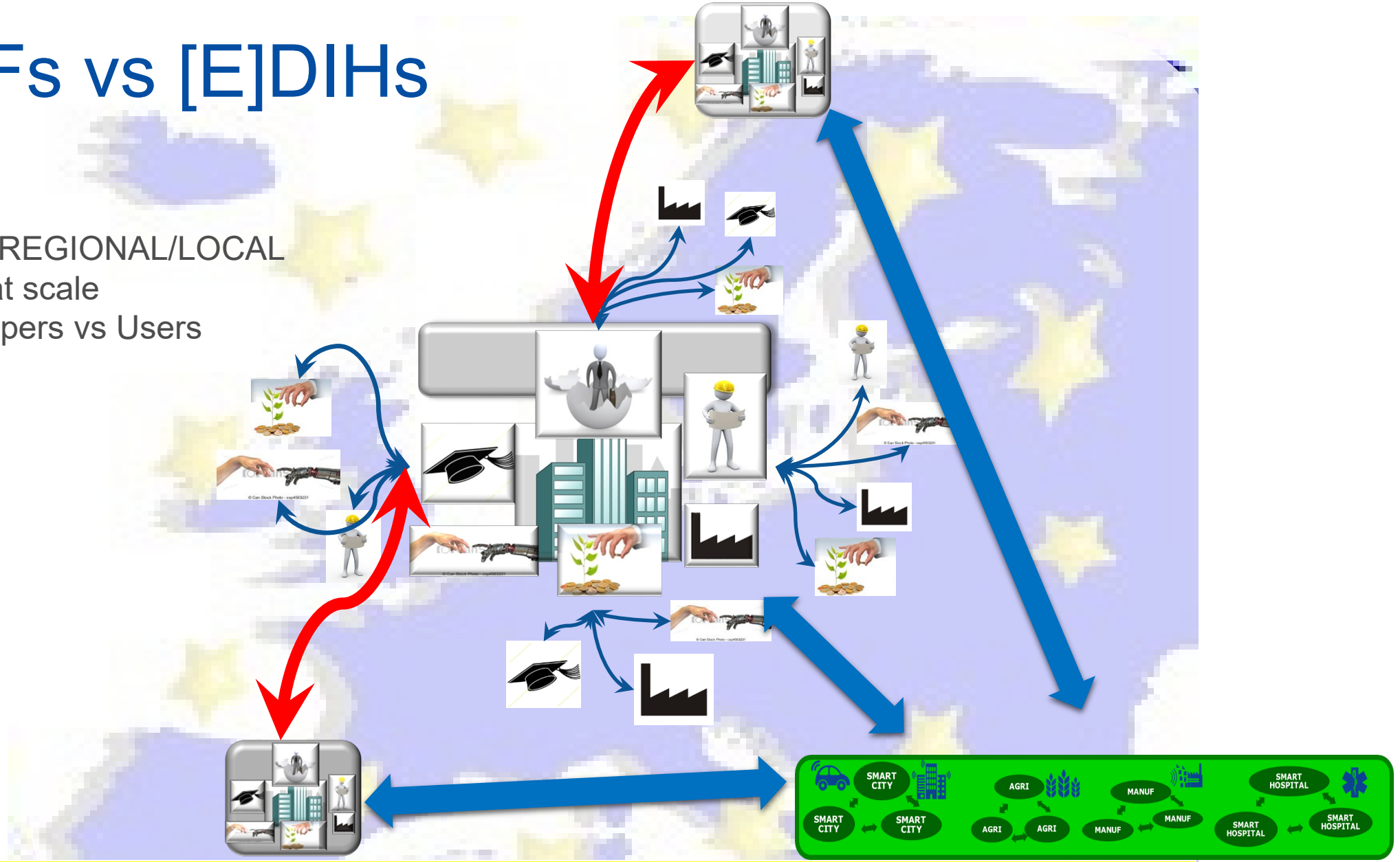
TEFs vs [E]DIHs

CENTRAL vs REGIONAL/LOCAL
In-depth test at scale
Users: Developers vs Users



REFERENCE TESTING AND EXPERIMENTATION FACILITIES
CENTRAL SHARED FACILITY

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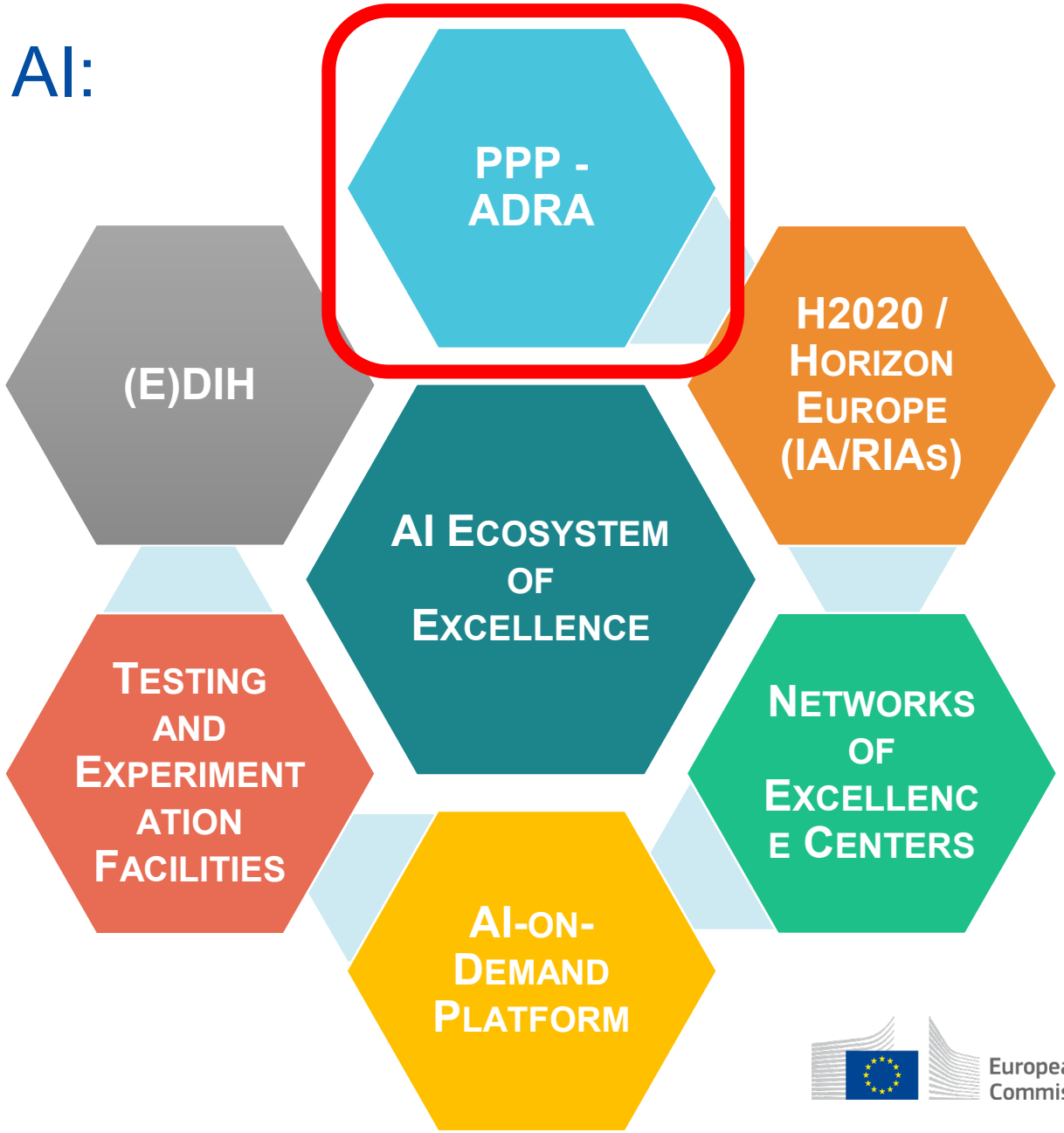
Ecosystem of Excellence in AI: From the Lab To the Market



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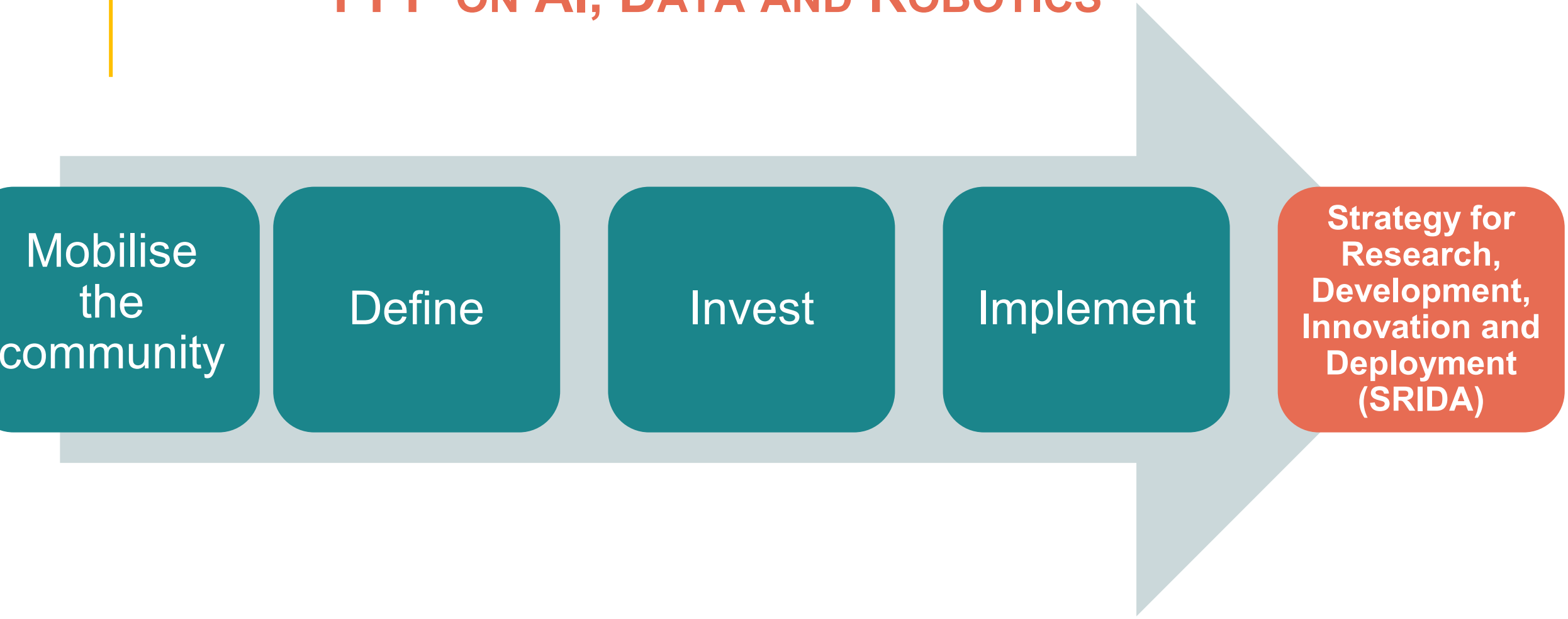
STRENGTHEN RESEARCH, INNOVATION AND DEPLOYMENT
PPP ON AI, DATA AND ROBOTICS



The AI Data Robotics Association

https://ai-data-robotics-partnership.eu/

https://adr-association.eu/

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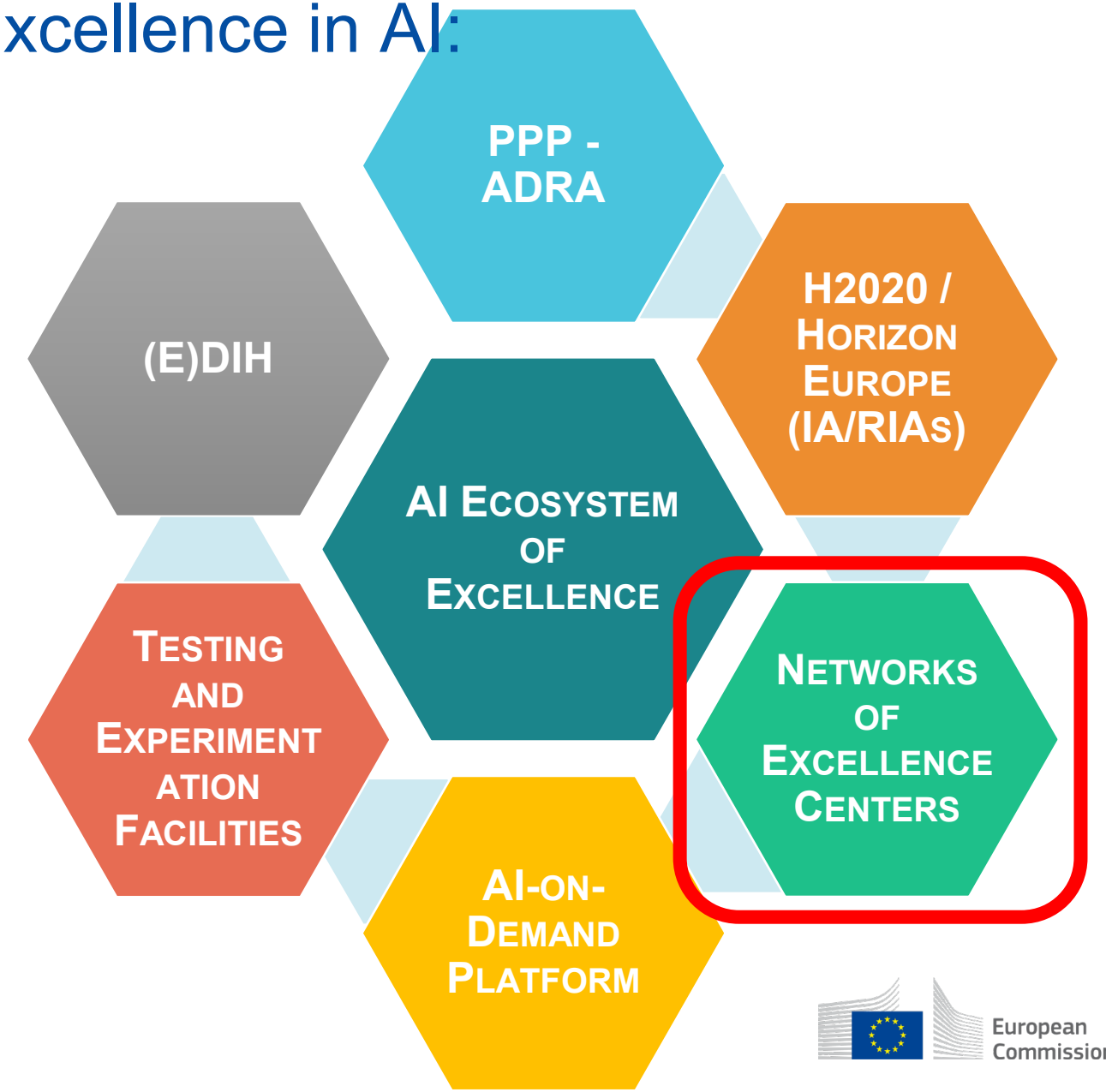
Role in the Ecosystem of Excellence in AI: "*From the Lab To the Market*"



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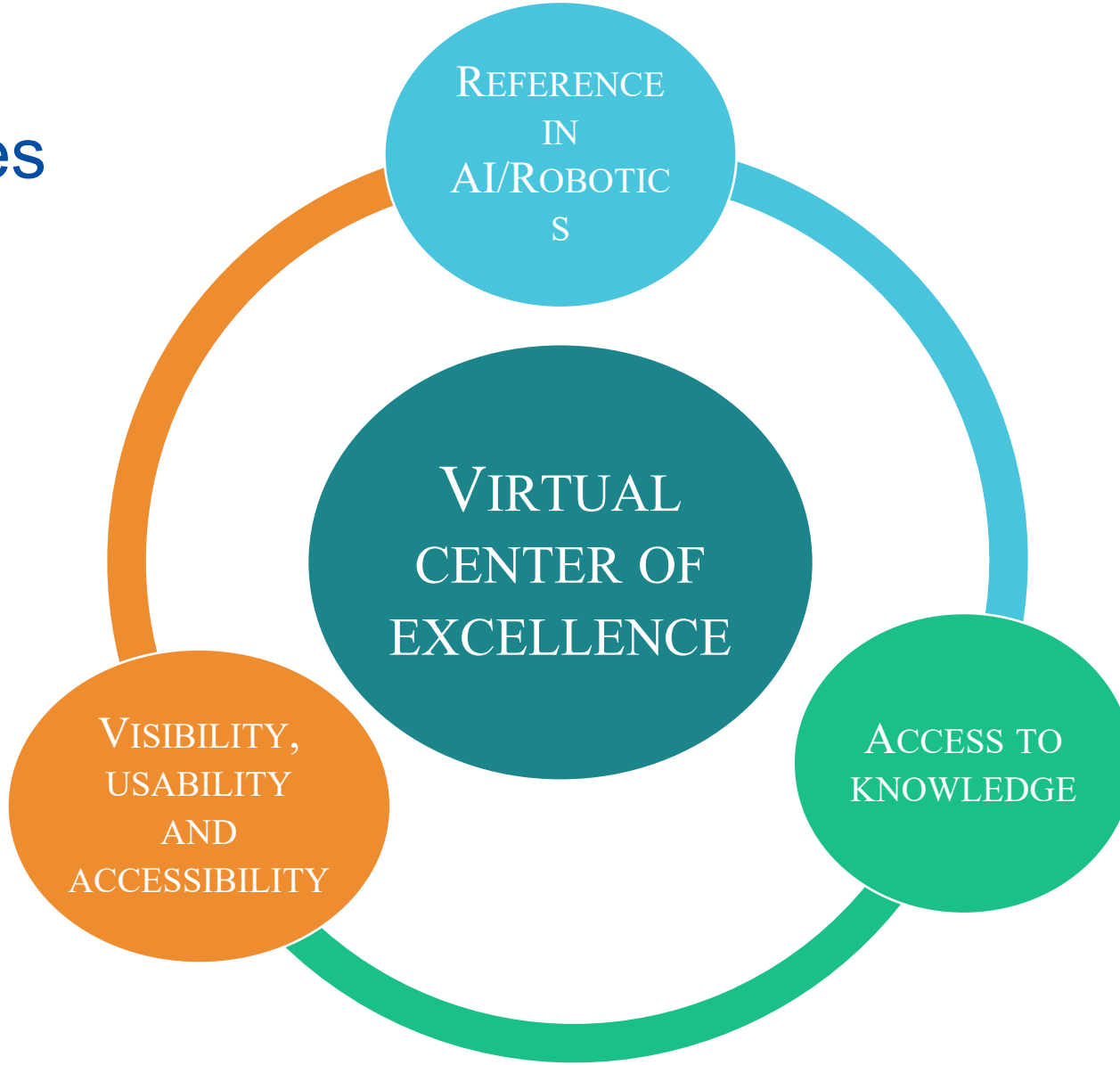
The Networks of Excellence centres: objectives

- Make Europe a research powerhouse for AI
- Increase Europe's attractiveness for scientists
- Ensure Europe's leadership in key strategic research topics
- Strengthen the AI-on-Demand platform with algorithms, tools



BRINGS ALL EUROPEAN TEAMS TO THE HIGHEST LEVEL OF EXCELLENCE

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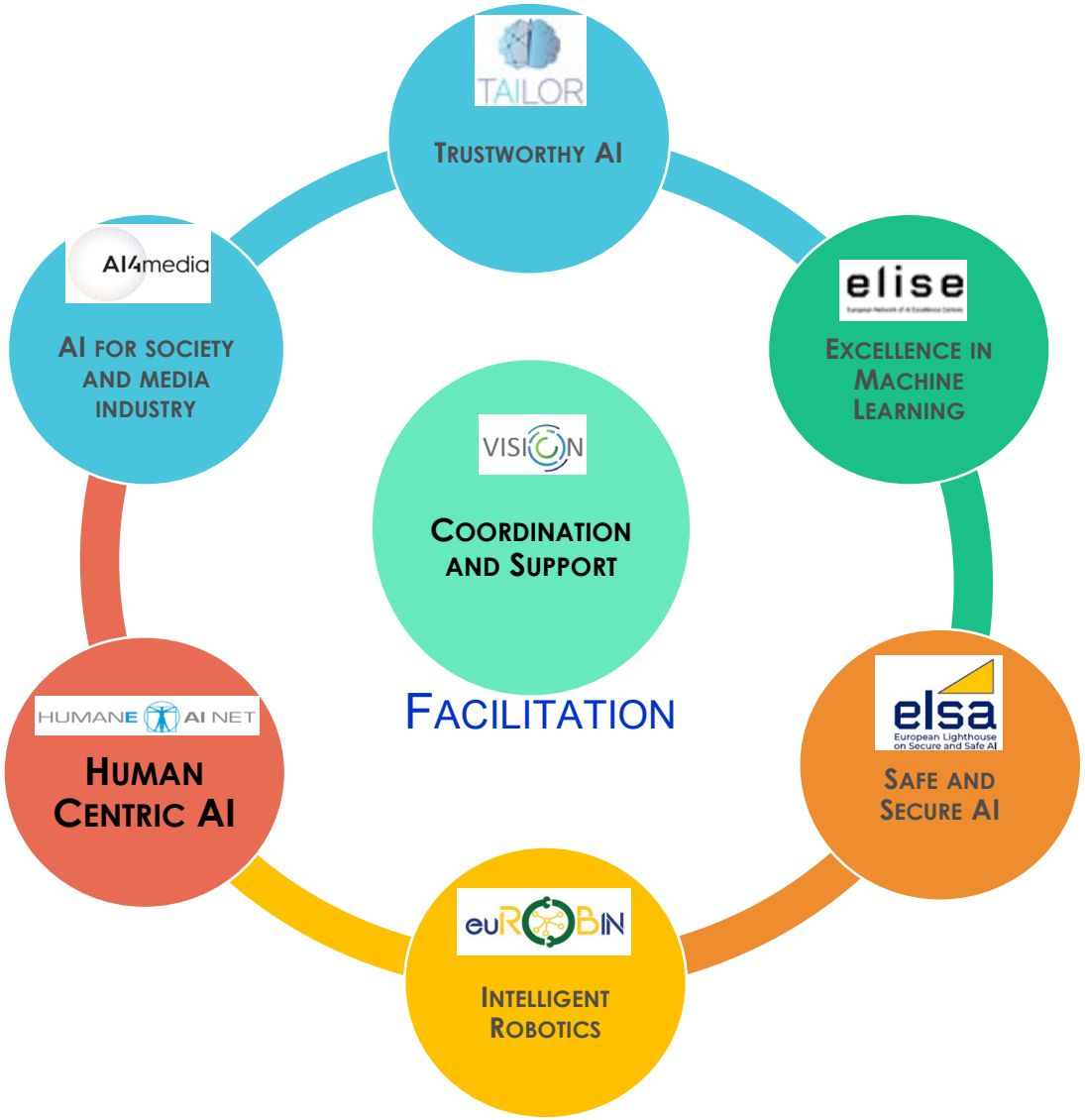
The Network of Excellence centres



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Importance of collaboration

- ***Diverse perspectives*** can lead to new ideas and approaches
- ***Access*** to **new resources** such as tools, technology, and expertise
- ***Faster innovation*** solve problems faster by bringing together different skillsets knowledge and lessons learnt
- ***Expanding your network*** opens new opportunities for partnerships, collaborations, and future projects.
- ***Improved decision-making*** by bringing in diverse perspectives and challenging *groupthink*, which can help avoid blind spots (and biases)

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Useful Links

- AI4Europe Drupal Portal: https://www.ai4europe.eu/
- AIoD Experiments + AI Playground: https://aiexp.ai4europe.eu/#/home
- Source Code AI Experiments + Tutorials: https://gitlab.eclipse.org/eclipse/graphene
- Youtube Playlist: https://www.youtube.com/playlist?list=PLL80pOdPsmF6s6P6i2vZNoJ2G0cccwTPa
- TEF:

https://digital-strategy.ec.europa.eu/en/activities/testing-and-experimentation-facilities

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Thank you