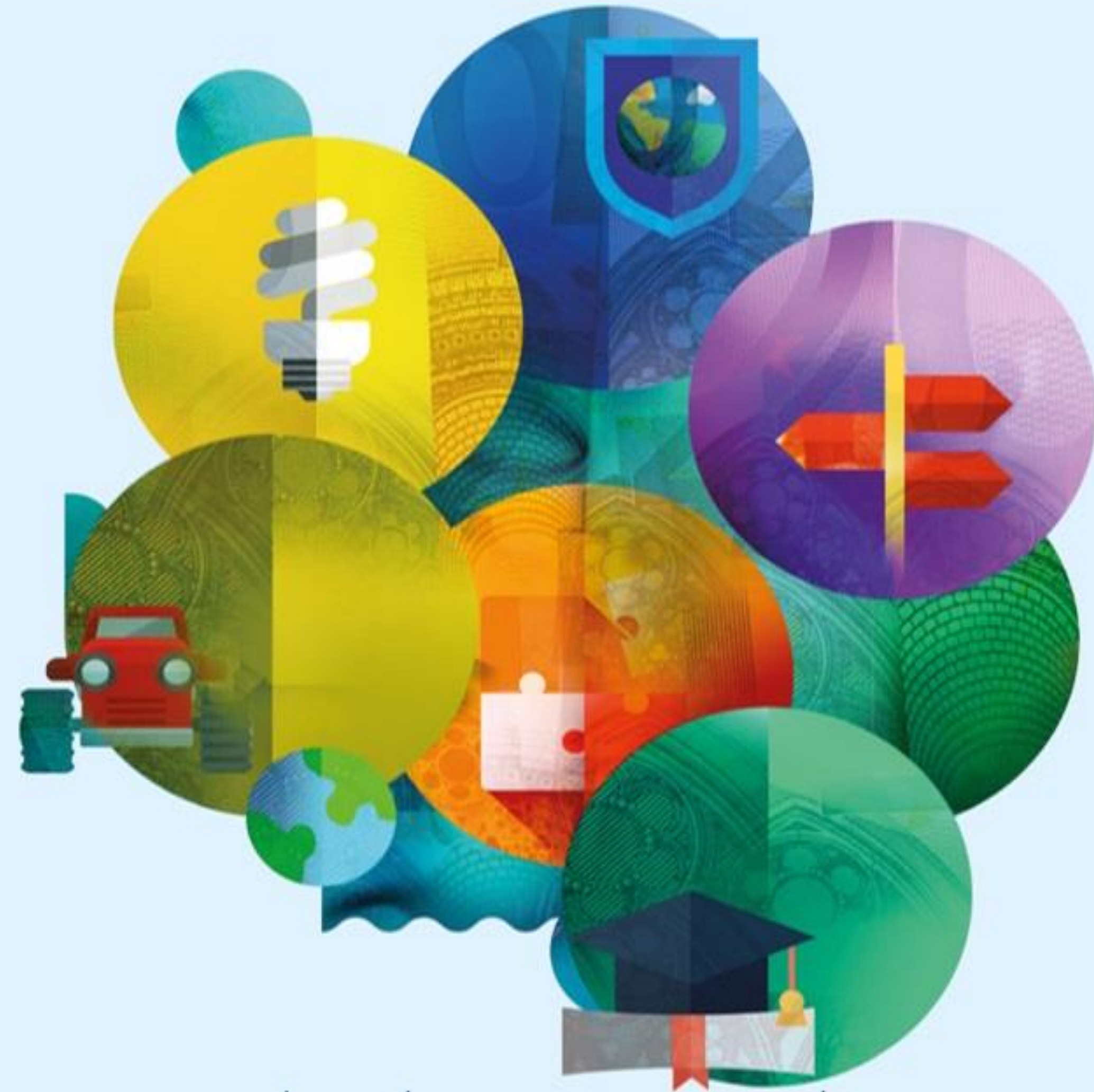# Towards Business Ecosystems

Manufacturing Performance Days

Tampere, 5 June 2019

**Dr. Max Lemke
CONNECT A2 - Digitising Industry
European Commission – CONNECT
max.lemke@ec.europa.eu**

The Digital Europe Programme is currently
under negotiation with Council and Parliament

Some Key Industrial Policy Issues

- Strong competition of world regions and systems
  - European co-operation more important than ever before
  - Exploit economy of scale and large home market

- Many Member States call for a European industrial policy
  - Industry 2030 High Level Group
  - Sovereignty – Strategic Value chains – IPCEIs HLG
  - Europe to match size and strengths of competitors
  - Foreign Direct Investments

- 2019/20 is an important period:
  → European elections - new Commission
  → New Programming Period 2021 – 27 under preparation
  → Finnish and German EU Presidencies

Digitising European Industry Strategy (launched 2016)

- An EU approach for Broad Value Creation
- SMEs are at the core
- Digital Single Market is a pre-condition
- A European Approach to AI
- Leadership in Digital Industrial Platforms
- New programming cycle:
  Digital Europe (new), InvestEU,
  Horizon Europe, ERDF

European Commission

COM(2018) 237/2 –25 April 2018
Artificial Intelligence for Europe

Make AI accessible "on-demand"
Take up through DIHs

Build Europe's technological and
industrial capacity in AI
AI research excellence centres
Testing facilities

HLG, Stakeholder Forum
High-level Expert Group
European AI Alliance

Digital innovations for all: Digital Innovation Hubs

Strengthening leadership through partnerships & industrial platforms

European platform of national initiatives on digitising industry

A regulatory framework fit for the digital age

Preparing Europeans for the digital future

Socio-economic changes: Build
skills and pro-actively address
jobs

Ethical and legal framework,
e.g. liability & access to data

COM(2018) 795 – 7 December 2018
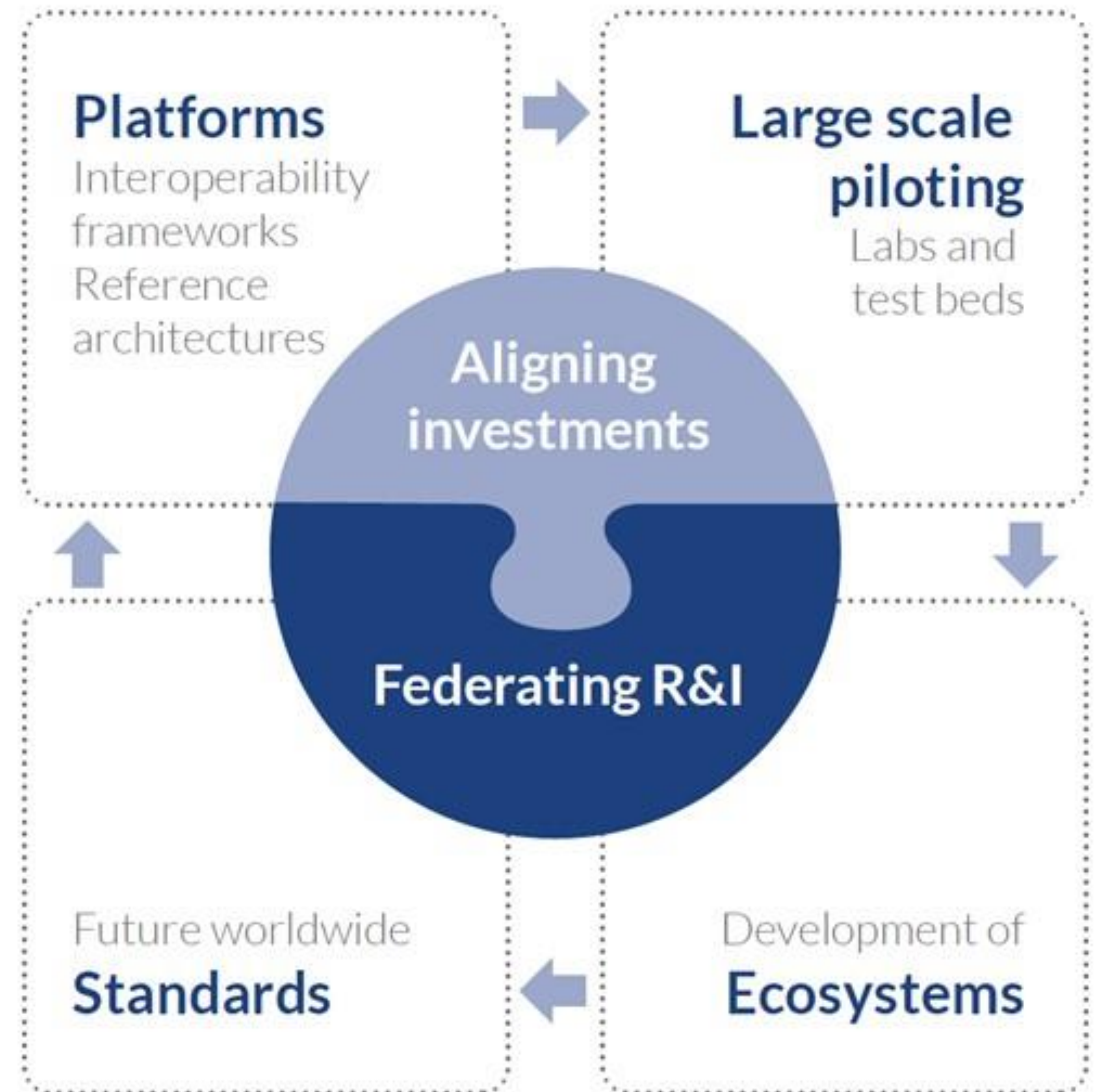**Co-ordinated plan on Artificial Intelligence**
COM(2019)168 – 9 April 2019 Digital Day 3
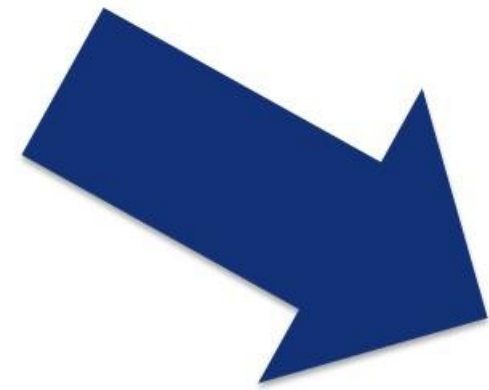**High Level Expert Group on AI: AI Ethics Guidelines**
Brussels - 26 June 2019
Stakeholder Assembly of the AI Alliance

- In the Digital age, platforms are needed to access ecosystems

- Collaboration is the new competitive advantage

- Need for (new) business models for multi-sided marketplaces

- In Europe's key industrial sectors, European actors must be in the lead

- Data is the fuel of the next generation of digital advances

- One size does not fit all – but too many platforms lead to fragmentation
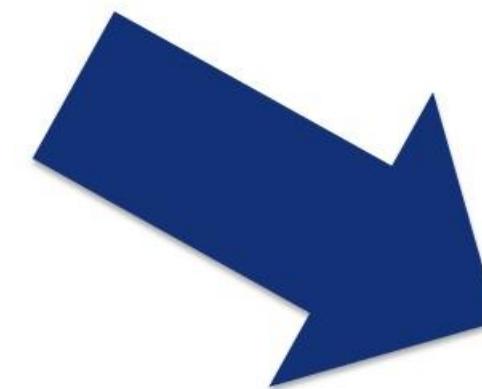
Platforms
Interoperability frameworks
Reference architectures

Large scale piloting
Labs and test beds

Aligning investments

Federating R&I

Future worldwide **Standards**

Development of **Ecosystems**

European Commission

2016
- Collaborative manufacturing and logistics plus factory automation
- Multi-sided markets
- 53 M€, 10 Research and Innovation Actions

2018
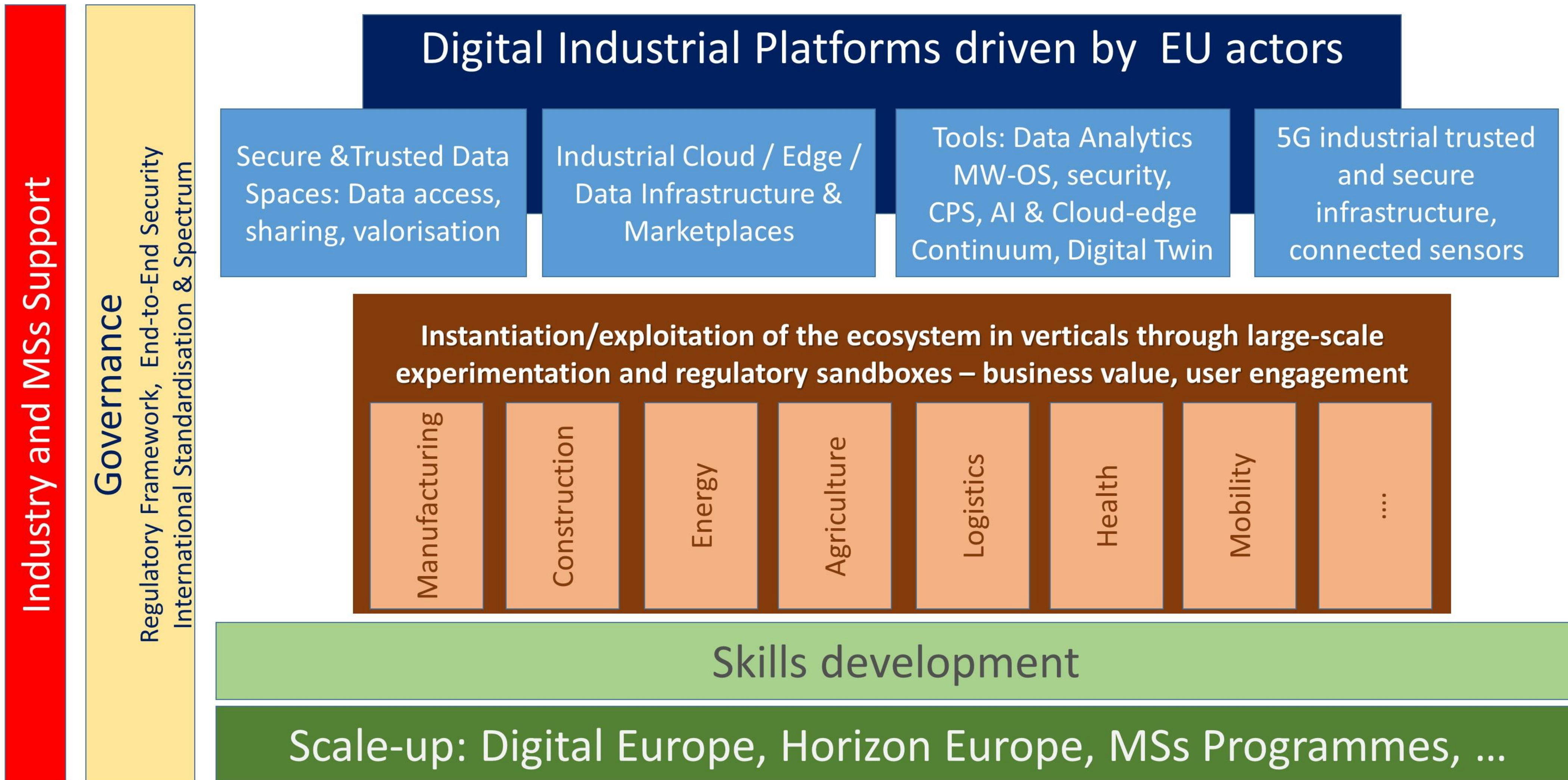- Consolidation from 2016 and cooperation with national initiatives
- Agile value networks; Zero-defects manufacturing
- DEI Focus Area: Platforms & Pilots
- 48 M€, 3 Innovation Actions

2019
- Further Consolidation
- Human factor; Sustainable value networks
- Market picking up b2b platforms:
  → Increased attention for user requirements
  → Federation of platforms
- 47 M€, Innovation Actions

Common European Industrial IoT and Data Ecosystem

Industry and MSs Support

Governance
Regulatory Framework, End-to-End Security
International Standardisation & Spectrum

Digital Industrial Platforms driven by EU actors

Secure &Trusted Data Spaces: Data access, sharing, valorisation

Industrial Cloud / Edge / Data Infrastructure & Marketplaces

Tools: Data Analytics MW-OS, security, CPS, AI & Cloud-edge Continuum, Digital Twin

5G industrial trusted and secure infrastructure, connected sensors

Instantiation/exploitation of the ecosystem in verticals through large-scale experimentation and regulatory sandboxes – business value, user engagement

- Manufacturing
- Construction
- Energy
- Agriculture
- Logistics
- Health
- Mobility
- …

Skills development

Scale-up: Digital Europe, Horizon Europe, MSs Programmes, …

- **Digitising European Industry**
  https://ec.europa.eu/digital-single-market/en/policies/digitising-european-industry

- **Artificial Intelligence**
  https://ec.europa.eu/digital-single-market/en/artificial-intelligence

- **Strategic Value Chains**
  http://s3platform.jrc.ec.europa.eu/-/european-commission-announces-the-key-strategic-value-chains?inheritRedirect=true