Künstliche Intelligenz aus der europäischen Perspektive: Der gemeinsame Weg zum Erfolg

Jahreskonferenz Plattform Lernende Systeme

Berlin, 3. Juli 2019

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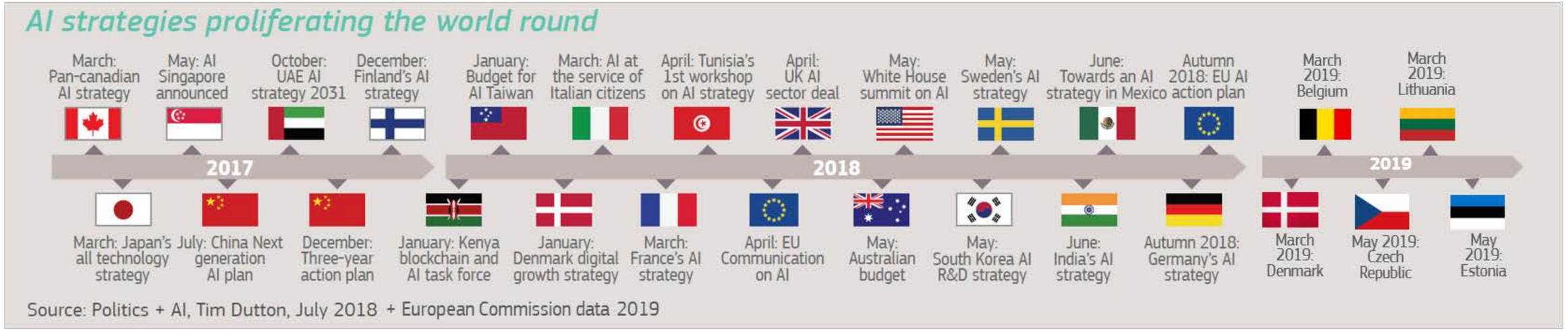
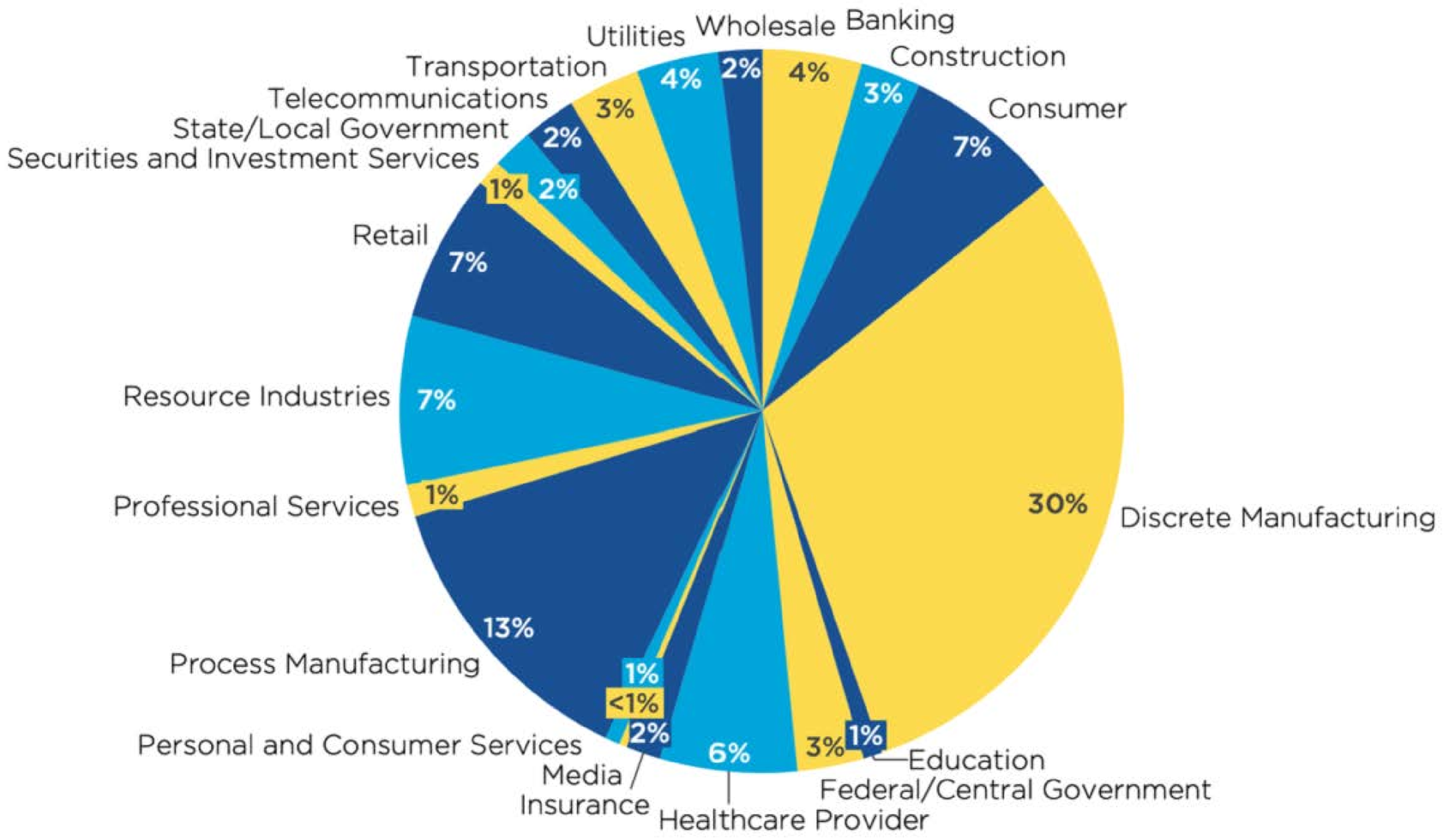
World interest in AI



AI Opportunities exist across sectors



Source:
Zillner, S., Bisset, D.,
García Robles,A., Hahn, T.,
Lafrenz, R., Liepert, B.,
and Curry, E. (eds) (2019)
"Strategic Research, Innovation and
Deployment Agenda for an AI PPP:
A focal point for collaboration on Artificial
Intelligence, Data and Robotics",
Brussels. BDVA – euRobotics

Expected distribution of financial investments in Artificial Intelligence systems, Robotics and Drones in Western Europe in 2019
Suning combined data from IDC Worldwide Semi-annual Artificial Intelligence Systems & Robotics and Drones Spending Guide -2018 H2)

EU strengths

Excellent research centres

World-leading position in robotics

Strong business-to-business domain

Strong industrial and services sectors: automotive, healthcare, agrifood

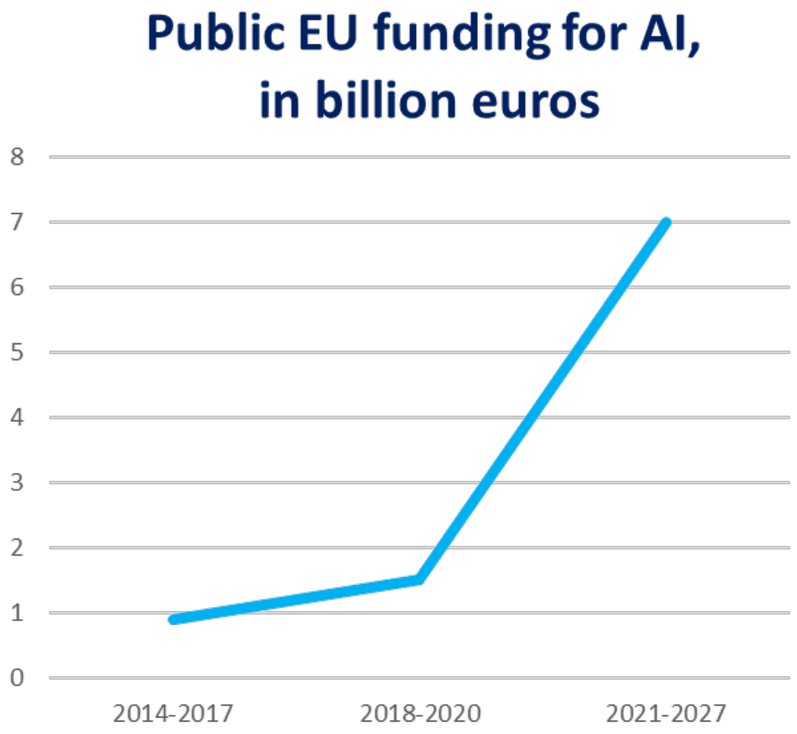
Industrial data

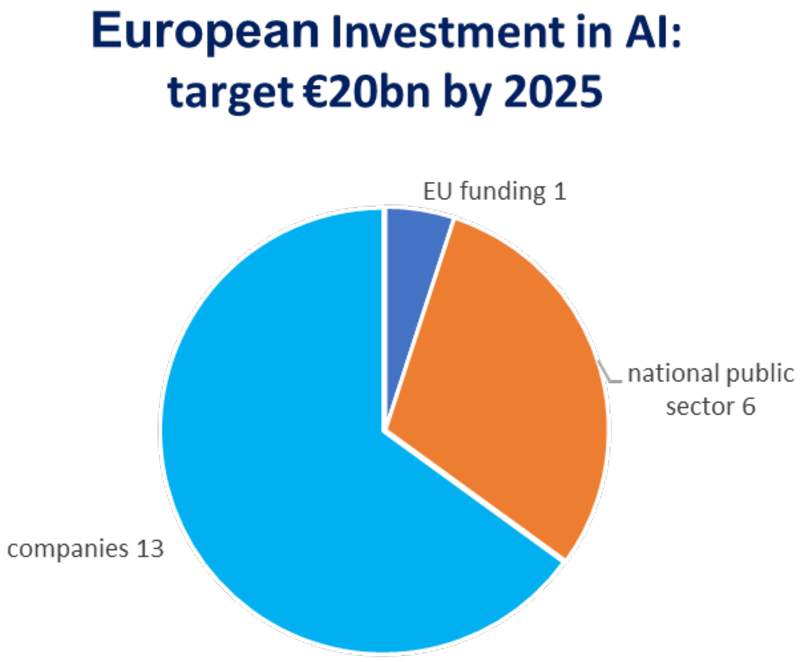
European approach

Forefront of AI: boost industrial capacity & investments → **EU Coordinated plan**

Human-centric & ethical → **High-level Expert Group**

EU Coordinated Plan: Increasing & optimising investments





EU Coordinated Plan: harnessing excellence

Networks of European AI research excellence centres

World-reference testing facilities

Fostering AI take-up through Digital Innovation Hubs

Attracting talent and stimulating life-long learning

A European Data Space

EU Investments until 2020 and beyond

BOOSTING EU'S TECHNOLOGICAL AND INDUSTRIAL CAPACITY: 2018 - 2020

€1.5 billion EC investments into AI in 2018-20

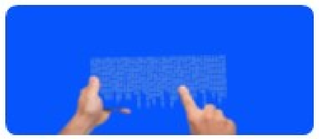
70% increase of annual investment

Basic and industrial research

AI-on-demand platform

Network of AI-focused Digital Innovation Hubs (DIHs)

Strengthening AI research excellence centres

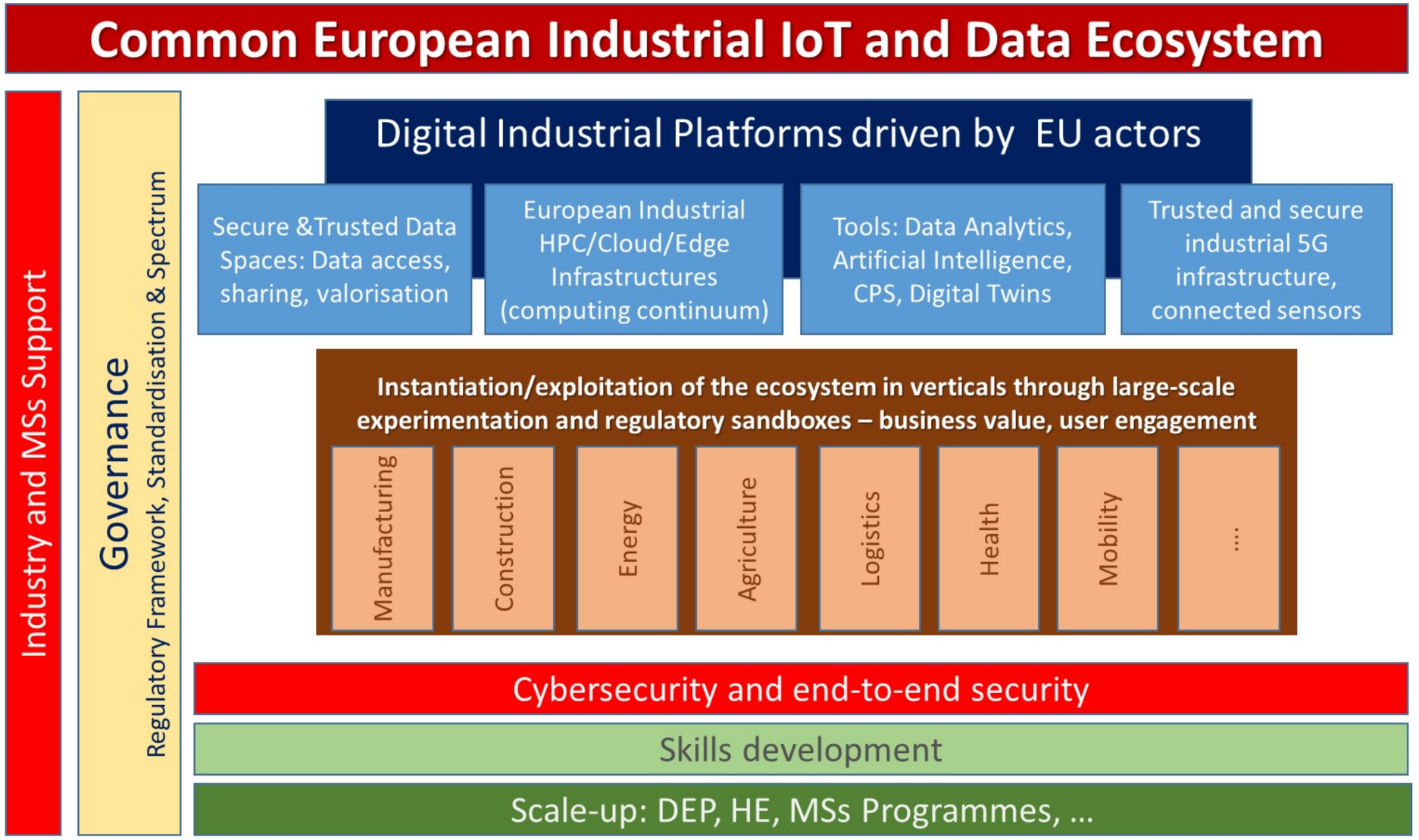


Setting up industrial data platforms

BOOSTING THE EU'S TECHNOLOGICAL AND INDUSTRIAL CAPACITY: BEYOND 2020

Increasing investments into AI
from €4-5 billion / year today
to €20 billion / year in the 2020s

Towards a European Industrial IoT, Data and AI Ecosystem



Developed in the context of the Strategic Forum on IPCEIs and Strategic Value Chains - June 2019 -

Ethics & regulatory framework: High-Level Expert Group

52 members from:

Industry

Academia

Civil society

Interaction with European AI Alliance

Broad multi-stakeholder platform counting over 2800 members to discuss AI policy in Europe

To produce

- AI Ethical Guidelines released 9 April 2019
- Policy & Investment Recommendations, to be presented on 26 June 2019

Ethics & regulatory framework: Key requirements

Principles based on fundamental rights: to be continuously implemented & evaluated

- Human agency and oversight
- Technical Robustness and safety
- Privacy and data governance
- Transparency
- Societal & environmental well-being
- Accountability
- Diversity, non-discrimination and fairness

Ethics & regulatory framework: Assessment list

Assessment list to operationalise the requirements

- Practical questions for each requirement
- Test through piloting process to collect feedback from all stakeholders (public & private sector)

Official launch of piloting: 26 June – Stakeholder event

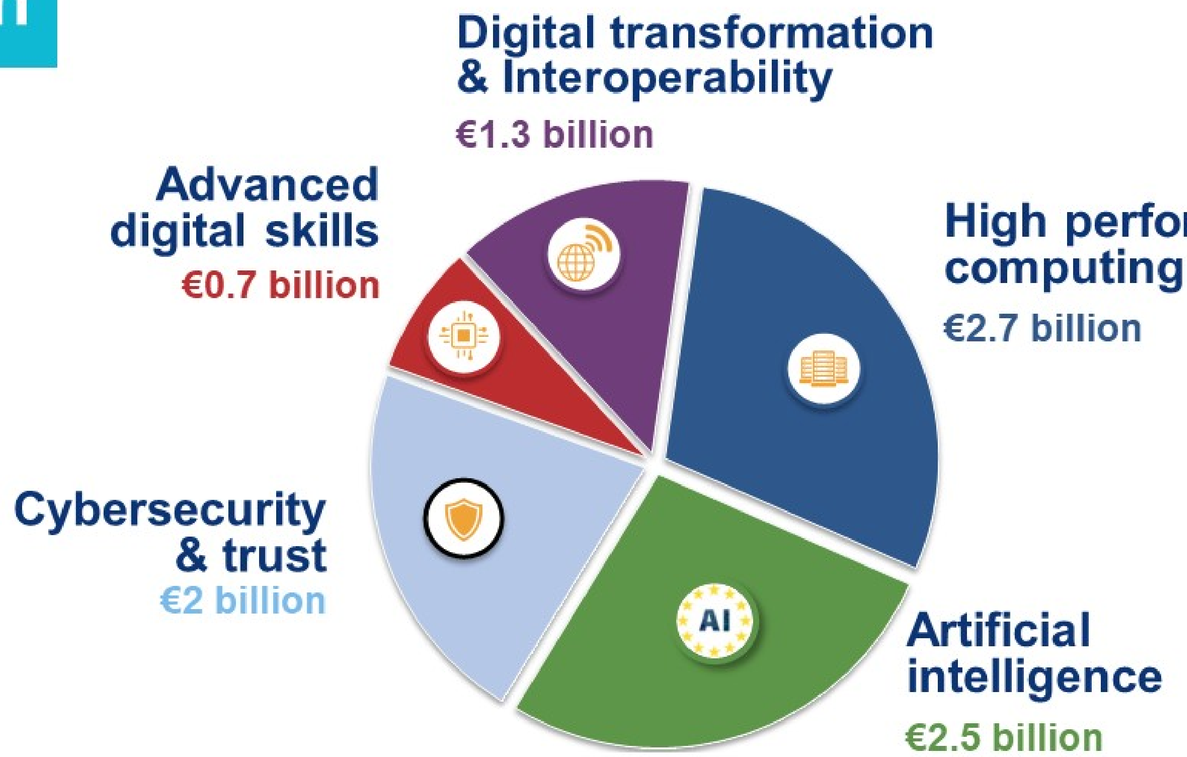
The Recommendations: Key Takeaways

1. Empower and protect **humans and society**
2. Take up a **tailored approach** to the AI market
3. Secure a **Single European Market** for Trustworthy AI
4. Enable AI ecosystems through **sectoral multi-stakeholder alliances**
5. Foster the European **data economy**
6. Exploit the multi-faceted role of the **public sector**
7. Strengthen and unite Europe's **research capabilities**
8. Nurture education to the **Fourth Power**
9. Adopt a **risk-based governance** approach to AI and ensure an appropriate regulatory framework
10. Stimulate an open and lucrative **investment environment**
11. Embrace a **holistic way of working**, combining a 10-year vision with a rolling action plan

European Commission

Digital Europe Programme

€9.2 billion in total



Proposal – subject to further negotiations by Council and EP

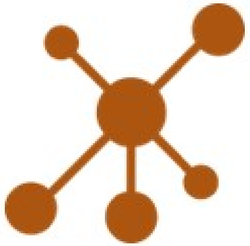
Support to Digital Innovation Hubs under the Digital Europe Programme

EU support for one DIH per region

Co-investment with Member States / Regions / private

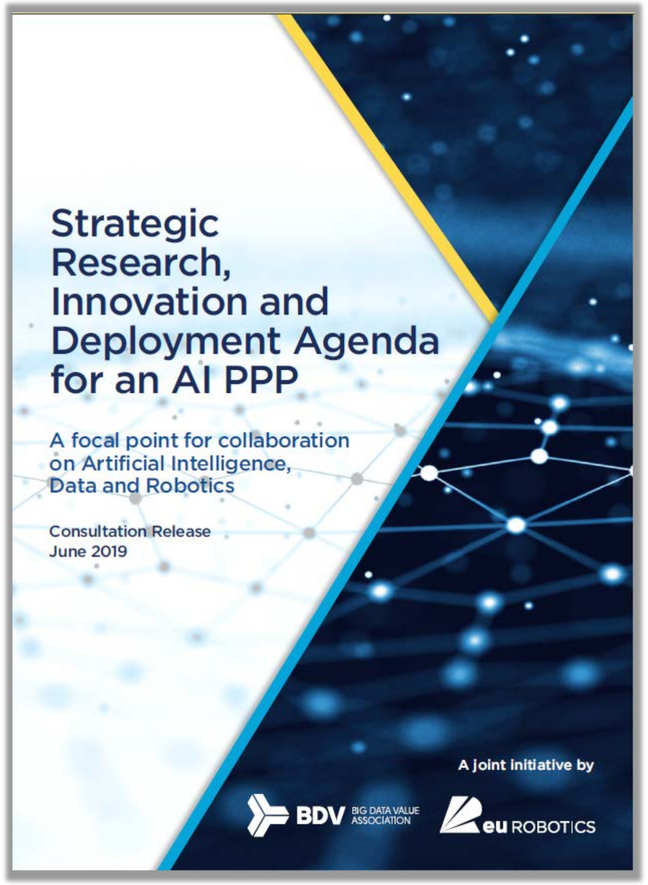
Focus on SMEs and public services

Focus on HPC, AI, Cybersecurity and Digital Skills



A strong European network of Digital Innovation Hubs

References



https://ec.europa.eu/digital-single-market/en/european-ai-alliance