Artificial Intelligence for Europe

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Maximising benefits from AI

Economic impact ✓

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Contribution to societal challenges ✓ ✓

Healthcare

Energy efficiency
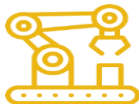
Road safety

Cybersecurity

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EU strengths

Excellent research centres

World-leading position in robotics and embedded systems

Strong business-to-business domain

Strong industrial and services sectors: automotive, healthcare, agrifood

Industrial data

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EU strategy for AI

A STRATEGY FOR EUROPE

| Boost technological and industrial capacity & AI uptake | Prepare for socio-economic changes | Ensure an appropriate ethical & legal framework |

AI FOR GOOD AND FOR ALL

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AI Coordinated plan highlights

- **Maximise investments through partnerships**
  - **National AI strategies**
  - **AI public-private partnership**
  - **AI scale-up fund to support startups and innovators in AI**
  - **Developing and connecting world-leading centres for AI and reference test sites**

- **Create European data spaces**
  - **Make data sharing across borders seamless (eg. common health database with anonymised data); support centre for data sharing to give practical advice**

- **Nurture talent, skills and life-long learning**
  - **Support advanced degrees in AI dedicated scholarships. support digital skills and lifelong learning ; retain and attract highly-skilled AI professionals in Europe (blue card)**

- **Develop ethical and trustworthy AI to create trust**
  - **Bring Europe's ethical approach to the global stage**

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THE EUROPEAN AI ALLIANCE

Joint reflection on the future of AI in Europe

Full mobilisation of all stakeholders needed: industry, academia, civil society

Supported by high-level expert group on AI and an online platform

Goal: Making it a reference platform for thinking and reflecting on AI

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

AI Watch

- Knowledge service to monitor development, uptake and impact of AI in the EU
  - AI definition and taxonomy
  - Investments in AI
  - AI ecosystem and indicators
  - AI technology watch
  - AI uptake
  - National initiatives and country profiles
  - Use of AI in public services

https://ec.europa.eu/knowledge4policy/ai-watch/

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EU investments in AI

2018-2020: €1.5 billion in = 70%+ of annual investment

R&D and excellence centers

AI-on-demand platform AI4EU.eu
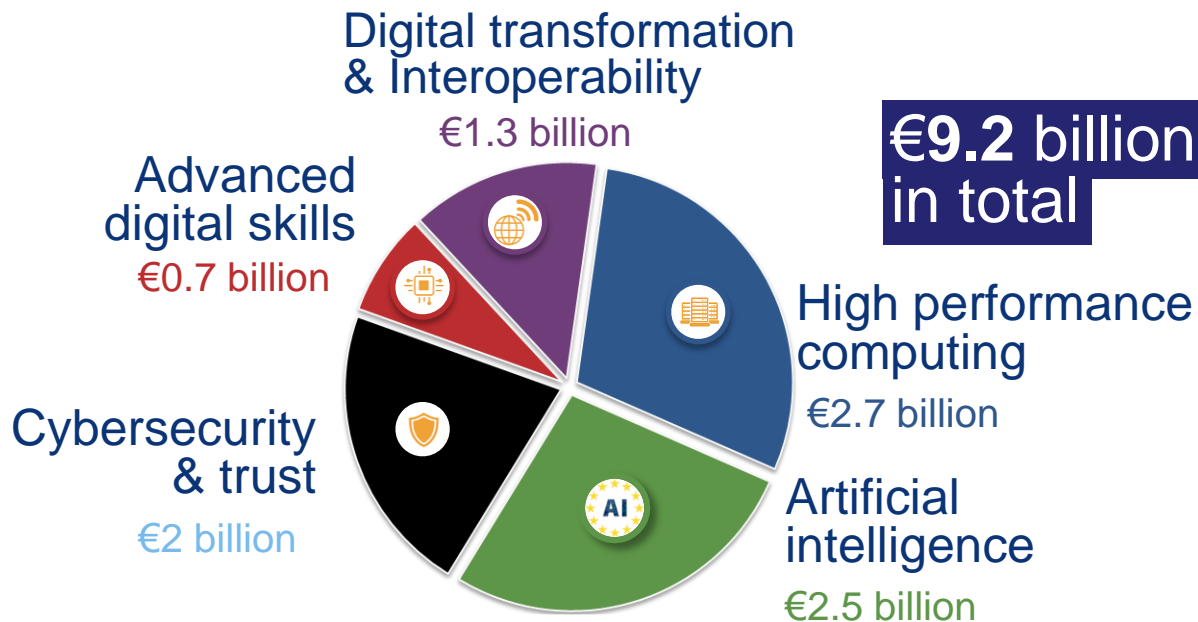
Digital Innovation Hubs

Industrial data platforms

Goal beyond 2020: Increasing investments from €4-5 billion / year today to €20 billion / year

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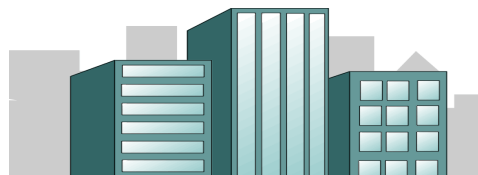
Digital Europe Programme

Digital transformation
& Interoperability

€1.3 billion

€9.2 billion
in total

Advanced
digital skills

€0.7 billion

High performance
computing

€2.7 billion

Cybersecurity
& trust

€2 billion

Artificial
intelligence

€2.5 billion

#EUBudget
#DigitalEurope

European
Commission | Digital
Single Market

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Preparing for socio-economic challenges

Anticipating changes in the labour market

Re-skilling the workforce, Attracting & retaining talent

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High-Level Expert Group on the Impact of the Digital Transformation on EU Labour Markets

- Potential social impacts (risks and opportunities) of digitisation, in particular the large-scale application of artificial intelligence, and the expected job losses and gains;

- Impact of digitisation on skills requirements;

- How to manage digitisation's impact on labour law and working conditions?

- How to use digitisation (in particular artificial intelligence) to make labour markets more inclusive?

- Impact of digitisation on income distribution and existing inequality and ways to respond to it;

- Defining ways to adapt social security systems to ensure a high level of social protection for all forms of employment;

- Evaluating mechanisms to adapt the tax and benefit system.

https://ec.europa.eu/digital-single-market/en/high-level-expert-group-impact-digital-transformation-eu-labour-markets

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Ethical and legal framework

High level group of experts

Ethical priorities by early 2019

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Some ethics guidelines dimensions

- Transparency and Accountability

- Robustness and Safety

- Data Governance and Privacy

- Diversity and Non-discrimination

- Human Autonomy and Oversight

- Societal and Environmental well-being

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Joining forces

All Member States, Norway and Swizerland signed the Declaration of cooperation on AI

Coordinated plan with Member States by end of 2018
Interaction with Member States via the
European platform on national initiatives to digitise industry

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AI-induced transformation of organisations

- Analytical, administrative and clerical jobs to be affected first?
- Organisations to become more collaborative and team oriented?
- More agile ways of working?
- Multidisciplinary teams?
- Organisations to be optimised for adaptability and learning in preparation of tech disruption? Culture of learning throughout organisation?

-> Define the objectives of using AI, make available proper dataset, redesign workflows

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Thank you