European Commission - Press release

Artificial intelligence: Commission outlines a European approach to boost investment and set ethical guidelines

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Today the European Commission is presenting a series of measures to put artificial intelligence (AI) at the service of Europeans and boost Europe's competitiveness in this field.

The Commission is proposing a three-pronged approach to increase public and private investment in AI, prepare for socio-economic changes, and ensure an appropriate ethical and legal framework. This follows European leaders' call for a European approach on AI.

Vice-President for the Digital Single Market Andrus **Ansip** said: *"Just as the steam engine and electricity did in the past, AI is transforming our world. It presents new challenges that Europe should meet together in order for AI to succeed and work for everyone. We need to invest at least €20 billion by the end of 2020. The Commission is playing its part: today, we are giving a boost to researchers so that they can develop the next generation of AI technologies and applications, and to companies, so that they can embrace and incorporate them."*

Europe has world-class researchers, laboratories and start-ups in the field of AI. The EU is also strong in robotics and has world-leading transport, healthcare and manufacturing sectors that should adopt AI to remain competitive. However, fierce international competition requires coordinated action for the EU to be at the forefront of AI development.

Boosting financial support and encouraging uptake by public and private sectors

The EU (public and private sectors) should increase investments in AI research and innovation by at least €20 billion between now and the end of 2020. To support these efforts, the Commission is increasing its investment to €1.5 billion for the period 2018-2020 under the Horizon 2020 research and innovation programme. This investment is expected to trigger an additional €2.5 billion of funding from existing public-private partnerships, for example on big data and robotics. It will support the development of AI in key sectors, from transport to health; it will connect and strengthen AI research centres across Europe, and encourage testing and experimentation. The Commission will also support the development of an "AI-on-demand platform" that will provide access to relevant AI resources in the EU for all users.

Additionally, the European Fund for Strategic Investments will be mobilised to provide companies and start-ups with additional support to invest in AI. With the European Fund for Strategic Investments, the aim is to mobilise more than €500 million in total investments by 2020 across a range of key sectors.

The Commission will also continue to create an environment that stimulates investment. As data is the raw material for most AI technologies, the Commission is proposing legislation to open up more data for re-use and measures to make data sharing easier. This covers data from public utilities and the environment as well as research and health data.

Preparing for socio-economic changes brought about by AI

With the dawn of artificial intelligence, many jobs will be created, but others will disappear and most will be transformed. This is why the Commission is encouraging Member States to modernise their education and training systems and support labour market transitions, building on the European Pillar of Social Rights. The Commission will support business-education partnerships to attract and keep more AI talent in Europe, set up dedicated training schemes with financial support from the European Social Fund, and support digital skills, competencies in science, technology, engineering and mathematics (STEM), entrepreneurship and creativity. Proposals under the EU's next multiannual financial framework (2021-2027) will include strengthened support for training in advanced digital skills, including AI-specific expertise.

Ensuring an appropriate ethical and legal framework

As with any transformative technology, artificial intelligence may raise new ethical and legal questions, related to liability or potentially biased decision-making. New technologies should not mean new

values. The Commission will present ethical guidelines on AI development by the end of 2018, based on the EU's Charter of Fundamental Rights, taking into account principles such as data protection and transparency, and building on the work of the European Group on Ethics in Science and New Technologies. To help develop these guidelines, the Commission will bring together all relevant stakeholders in a European AI Alliance. By mid-2019 the Commission will also issue guidance on the interpretation of the Product Liability Directive in the light of technological developments, to ensure legal clarity for consumers and producers in case of defective products.

Next steps

As of today and following the Declaration of cooperation signed by 24 Member States and Norway on 10 April 2018, the Commission will start work with Member States to have a coordinated plan on AI by the end of the year. The main aim is to maximise the impact of investment at the EU and national levels, encourage cooperation across the EU, exchange best practices, and define the way forward together, so as to ensure the EU's global competitiveness in this sector. The Commission will also continue to invest in initiatives which are key for AI, including the development of more efficient electronic components and systems (such as chips specifically built to run AI operations), world-class high-performance computers, as well as flagship projects on quantum technologies and on the mapping of the human brain.

Background

Artificial intelligence (AI) is not science fiction; it is already part of our everyday lives, from using a virtual personal assistant to organise our day, to having our phones suggest songs we might like. Beyond making our lives easier, smart systems help us solve some of the world's biggest challenges: treating chronic diseases, fighting climate change, and anticipating cybersecurity threats. AI is one of the most strategic technologies of the 21st century.

Europe wants to be at the forefront of these developments – many recent breakthroughs in AI have come out of European labs. Around a quarter of all industrial and professional service robotics are being produced by European companies.

For More Information

Q&A on artificial intelligence

Factsheet on artificial intelligence

Useful links

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