

Leaders' Agenda

May 2018

Innovation and digital

The European Union has a competitive edge due to its high-quality basic and applied research. With only 7% of the world's population, Europe accounts for 20% of global R&D investment and around one third of all high-quality scientific publications. However, it is lagging behind other major economies in terms of innovation. There are three times fewer quality patent applications in the EU than in Japan; there is five times less venture capital than in the United States, and the number of fast-growing start-ups ("unicorns") is also five times lower; the EU's share of added value in high-tech manufacturing is half the South Korean average.

Over the coming years, technology-driven innovation will affect our lives at an ever-growing speed, with a new wave of innovation based on the converging of digital and physical technologies (e.g. digital manufacturing, genomics, the internet of things, Artificial Intelligence) and heavily relying on science, engineering, data and high capacity digital networks. The development of Artificial Intelligence in particular raises not only hopes (e.g. better healthcare, safer transport, more sustainable farming), but also ethical questions.

Deepening Europe's innovation capability, in particular as regards nurturing breakthrough and disruptive innovation, is fundamental to ensure economic success and preserve our societal values. While respecting the principle of subsidiarity, EU action is essential to help achieve the relevant critical mass for both the development and scaling-up of successful technologies.

The Commission has proposed to set up a European Innovation Council in the next Multiannual Financial Framework in order to streamline, rationalise and simplify existing schemes to select and fund breakthrough and disruptive technologies. Its ongoing pilot project provides experience and guidance. Likewise, the Commission has proposed a European approach on Artificial Intelligence and robotics in order to boost the European Union's competitiveness and ensure trust based on European values.

The EU can also support our universities and research institutions to become more entrepreneurial in generating ideas that translate into business; offer curricula that better match emerging business models; work more closely with enterprises; and help faster diffusion, reuse of, and access to, knowledge.

Low investment in innovation has also been a persistent weakness in Europe. It is imperative to make adequate public funding available, but the most striking gap is in private investment. Public resources must be used to attract and leverage a critical mass of private investments, but we also need to create ecosystems that allow innovation and entrepreneurship to thrive.

Data is an increasingly critical asset not only for innovation, business and growth, but above all for our daily lives. Building a European data economy is not only in our interest but is a necessity for our citizens. Ultimately, this means creating a single European space where non-personal data can flow freely. The Commission proposals on the gathering, sharing and efficient use of various kinds of data serve as a good basis.

But establishing an EU data economy is only possible if citizens' personal data are adequately protected. The Cambridge Analytica affair is a regrettable illustration of how personal data can be misused. The EU's General Data Protection Regulation, which will become applicable across the Union on 25 May 2018, constitutes a major step forward in protecting privacy and personal data and ensuring data sovereignty. Its ultimate success will depend on effective implementation. At the same time, an effective cybersecurity policy is a precondition for ensuring citizens' trust.

For our overall strategy towards a digital Europe to be effective, a major effort is needed on the main outstanding files before the end of this institutional cycle, as set out in the Presidency's report. Some of them are close to being finalised, such as the Audio-visual Media Services Directive and the Directive establishing the European Electronic Communications Code. Others, such as the Digital Content Directive, the Regulation on Cybersecurity Certification and the Regulation on European High Performance Computing are on the right track provided that the momentum is kept. The Copyright Regulation and the e-Privacy proposals require further work, including at the political level. And finally, there are new Commission proposals that need to be moved forward quickly, such as the Directive on Public Sector Information and the Regulation on promoting fairness and transparency for business users of online intermediation services.

Against this background, Leaders are invited to have an open debate on these issues, with a particular focus on:

- **What should be done at the EU level to support and boost breakthrough and disruptive innovation?**
- **How can the EU become a major player in the field of big data?**

There will be no written output from this debate. The European Council will return to the issue at its meeting in June 2018.