

Europe's Place at the Digital Frontline

To boost its geopolitical position, the EU is working on 'digital sovereignty'

BY MARIYA GABRIEL

The acceleration of the digital transformation will profoundly affect economics, politics, security and international affairs. To turn it into an opportunity and ensure that it is to the benefit of the people, we need a human-centric digital space in Europe. This includes technology that works for people, a fair and competitive economy, and most importantly an open, democratic and sustainable society that is equipped with digital competencies.

To achieve this, the European Commission works towards closing the digital skills gap among Europeans and give citizens better control over their data.

To enhance its technological edge, the European Union supports the creation of technologies as core drivers of companies' development: 20 per cent of the Recovery Plan for Europe, a €1.8 trillion stimulus package, are dedicated to the digital transformation of the EU and the European Innovation Council supports innovation with a budget of €10.1 billion. EU funding also helped BioNTech, the European pioneer for COVID-19 vaccines, to develop highly digitalized and automated manufacturing technologies.

Its scientific leadership, global regulatory influence, global leading companies and healthy start-up landscape will further boost Europe's geopolitical position when it comes to innovation and new technologies.

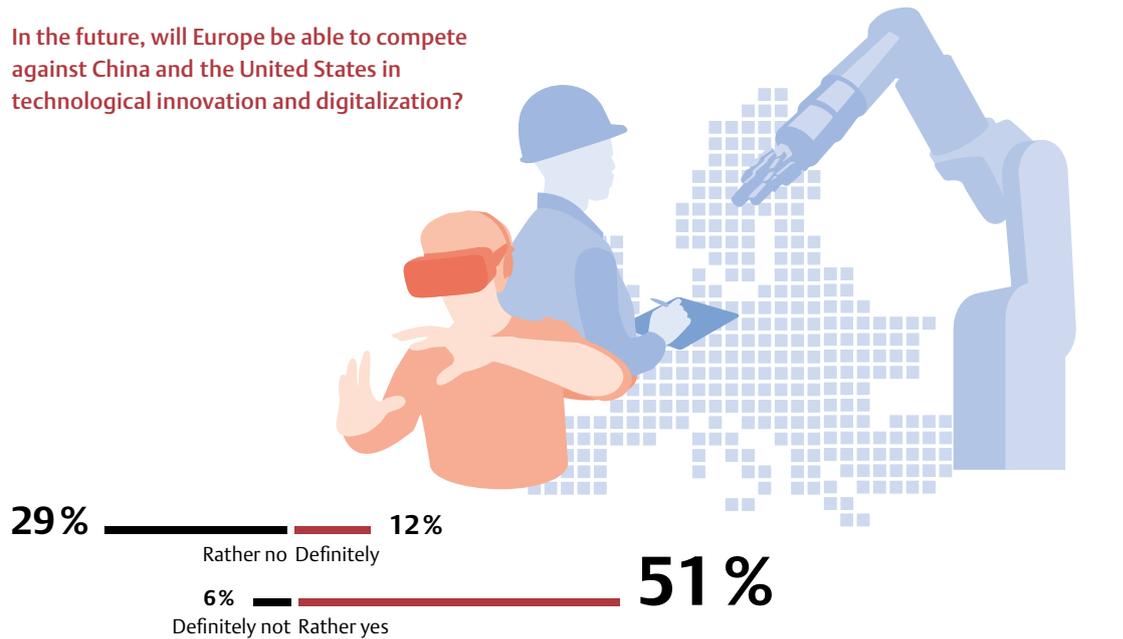
One key industry that has economic but also geopolitical implications for Europe is artificial intelligence (AI). The EU ranks third globally with 13 per cent of all active economic players involved in AI (after the United States with 31 per cent and China with 26 per cent), and accounts for 17 per cent of worldwide provision of AI services based on existing AI solutions, such as integrating existing chatbots into corporate IT infrastructures. Robotics is another example of an industry that plays a key role in the transformation of our societies and economies. Combined with AI it can have a disruptive effect on transport for example, when embedded into autonomous vehicles. It also offers numerous opportunities, such as the re-shoring of previously offshored production processes.

With players in AI, the EU ranks third globally

However, robotics and AI systems need large amounts of data to be trained and to function properly. This can also lead to challenges, such as job substitution and infringements of fundamental rights.

It is important for the EU to remain at the forefront of scientific and industrial research if we want to shape the way emerging technologies are used and regulated, to set ground rules based on European values of trust and to maintain digital

In the future, will Europe be able to compete against China and the United States in technological innovation and digitalization?



sovereignty. Just as the General Data Protection Regulation set a precedent in the world, the goal of the European Artificial Intelligence Act is to be the first regulatory framework based on European values becoming the standard reference for future frameworks in the rest of the world. To ensure that AI systems used in the EU are safe and ethical, the European Commission has proposed a system to categorize their risk from unacceptable and therefore banned (that is, facial recognition in public spaces) to low and therefore allowed.

Currently Germany, France and Spain are in the lead, accounting for 44 per cent of EU players in AI. A more balanced distribution is key to ensure that member states benefit equally from the digital transformation, and that players engage with each other in sharing technical expertise. This could also help to breach the digital divide across urban and rural areas as well as increase the number of AI-related activities.

Without well-functioning local and regional innovation ecosystems, we will not be able to achieve a strong EU, capable of funding the next wave of breakthrough innovations and diffusing

them quickly and broadly to create jobs and revenues across Europe. Without ambitious EU instruments and a better connection between demand and supply of innovation that goes beyond local, regional or national boundaries, the potential of local actors will remain underdeveloped and limited. Innovation is also not only developed by researchers but increasingly by entrepreneurs and end users. Connecting all these actors matters more than ever.

An innovation ecosystem that is inclusive and cohesive

One of our key tasks is to reverse the innovation divide of the market and boost Europe's digital performance. Only then can we foster a truly European innovation ecosystem that is fit for purpose, inclusive and cohesive, and from which citizens, businesses and industries everywhere in Europe can benefit.

MARIYA GABRIEL

is European commissioner for innovation, research, culture, education and youth.