

Commissioner Gabriel's remarks at the Bruegel Annual Meetings 2018

Good morning ladies and gentlemen,

It is a great pleasure for me to be here with you today to discuss the future of Europe's Digital Economy and Society Strategy.

It is now very common to say that digital technologies already impact almost everything we do. The reality is that it will most certainly continue to do so even more. Algorithms based on data gathering and processing will inform our choices, provide for personalised services in all domains and will be the source of considerable productivity gains.

George Westerman a digital expert of the Massachusetts Institute of Technology once said: *"When digital transformation is done right, it's like a caterpillar turning into a butterfly, but when done wrong, all you have is a really fast caterpillar."*

This image reflects the nature of the change which is at play:

- Our future is about a deep and ever accelerating transformation, perhaps even more significant than the first industrial revolution three centuries ago.
- But it comes with a challenge: the success of the transformation is not certain. Of course we can neither stop innovation nor the digital revolution, but we may miss the whole picture: the society that will be built on it.

And here, I would like to make a very important point: our focus should not be on technology but on people: either we will build **human-centred digital ecosystems based on people and values**, or we are simply going to fall.

In our vision, there is a certain number of challenges we need to face:

The first challenge is to make Europe a digital champion. In this technological revolution, size matters a lot and, so far, Europe is still not punching its weight on digital.

Historically, industrial revolutions have spread from Europe to the rest of the world. This time, however, Europe is not at the centre of the digital revolution.

Of course, we have excellent academic institutions, a top-notch manufacturing industry and globally leading companies in crucial areas such as Internet of Things and robotics.

But the reality is that the World Wide Web and most digital ecosystems are being led by American – and increasingly Chinese – tech giants. The number of EU companies in the global top-15 companies by market capitalisation is

currently zero and if you consider the top 200 online platforms, only 4% come from the EU.

I will not enter in the detail of why the US is dominating so much, but it is clear that it does come from a set of strategical decisions, taken six decades ago, with Defense Advanced Research Projects Agency or the Apollo program and by assertive industrial defence and civil policies were then set up to support the development of American technology companies. Most strategic innovation, on which digital is now relying – the internet itself, microchips, or GPS – have been developed thanks to these programmes.

And here comes a very important point: the fact that today's centres of power and decision of internet are dominantly located in the Silicon Valley and in China is not neutral, and does impact importantly on our capacity to make societal choices.

We also all know that being in the periphery of innovation brings very concrete negative consequences: less prosperity and innovation, a worst access to finance for our companies including small and medium-sized enterprises, hence less capacity to attract brain. All this is impacting the long-term sustainability of our welfare state.

In such context, Europe has no choice but to step-up significantly its budgetary effort and to design policies that will ensure its technological leadership, autonomy and technological sovereignty on digital.

This is one challenge that this Commission has started to address notably through the Digital Single Market, the European Fund for Strategic Investments and the Capital Markets Union.

A truly integrated European Digital Single Market is clearly a pre-condition to enable our digital sector to compete. In the last few years, we have made close to 60 initiatives, amongst which 29 legislative proposals on data flows, cybersecurity, copyright consumer protection, telecom regulation or online platforms.

And the good news is that the Digital Single Market is becoming a reality with concrete progresses, such as the end of unjustified geoblocking, simplification of value-added tax rules for startups and small and medium-sized enterprises, the end of roaming charges, and the free flow of data.

It is crucial, now, that co-legislators agree on the remaining 12 negotiations on the table.

To regain digital leadership, we have to urgently scale up public investments on the European level, especially where the EU is a position to make investments that no single member state can do.

This is why the Commission has proposed, a digital programme to support the digital transformation of our economy and society, as part and parcel of its Multi-Annual Financial Framework proposal.

With an allocation of €9 billion, the Digital Europe Programme is the EU's

first digital programme. It focuses on five areas: high-performance computing, artificial intelligence, cybersecurity and trust, digital skills, **and ensuring a wide use of digital technologies across the economy and society.**

It is crucial that national governments support this program. This is a necessary first step, on which we will have to build to develop our leadership in digital in the years to come.

The second challenge relates to the focus on European citizens.

Indeed, we must ensure that our citizens are equipped to reap the benefits of digital, while being protected against the new risks of the digital life.

Again, long-term structural changes will affect all dimensions of our welfare state from education, health system, and pension to unemployment.

In contrast to previous waves of industrial revolution, the automation of labour through artificial intelligence will most significantly affect all types of jobs, including skilled white-collar middle-class workers. The effects on Europe's middle class are already visible, with an increase of market-led inequalities by 5%, between 2007 and 2013.

In this context, Europe's strong tradition of social protection and continuous dialogue with social partners has to be up-held and adapted to the digital era.

One key focus of our digital strategy is on digital skills.

Today, 90% of jobs require basic digital skills, but one third of the European labour force is lacking such skills. The 350,000 open vacancies for information and communication technology specialists in Europe show that the European digital transformation is slowed down by the lack of adequately skilled employees.

If we want to lead in the digital era, a skilled labour force is indispensable as will require facilitating lifelong learning, fostering the representation of female population, and integrating the teaching of digital skills in their schools' curricula.

In particular, the European Commission is supporting the development of digital skills by fostering public-private cooperation in the form of the Digital Skills and Jobs Coalition. A budget of €700 million for advanced digital skills is proposed for the period 2021-2027 as part of the Digital Europe programme.

Let me also mention two very concrete initiatives.

The Digital Opportunity Traineeship scheme aims at offering students and recent graduates the possibility to get a monthly €500 contribution to their salary as trainee, in areas such as big data or machine learning. The scheme started operating this spring and the first traineeships have recently begun. It will last until 2020 and benefit to 6000 trainees and the companies they

will work for.

Second, we organise every year the EU Code Week, which is instrumental to draw attention to the need of understanding how coding works in order to better grasp the functioning of our digital societies themselves. Last year, about 1.2 million Europeans attended an EU Code Week event, and I have made it my objective that by 2020, 50% of schools in Europe participate in it, in particular those located in countries, where such trainings are not yet mandatory.

The third challenge is about ensuring that our digital society remains fully in line with our fundamental values:

As Tsetan Todorov wrote: *"There is no Europe without enlightenment and there is no enlightenment without Europe."*

This was true three centuries ago, and this is still true in the 21st century. The digital society offers new opportunities to be faithful to the promises of Rousseau, Locke, Spinoza, and to ensure that our digital future is still based on rationality and sciences, on faith in progress, on people's autonomy, and on the respect of fundamental rights.

Translating these acquis of enlightenment has very straight-forward and concrete consequences on the type of human-centric digital ecosystems that we need to foster. Let me stress a few of them.

This is, firstly, about leveraging digital to **empower users** with freedom of choice online, and full control on the use of their data. Building on the General Data Protection Regulation framework, the tech ecosystem needs to develop the technologies to allow individuals to be fully in charge of their personal data. In the future internet, people should have full transparency on the use of their data in areas as diverse as health, democracy, environment, or mobility. This is essential to unleash the power of data both economically and socially.

This empowerment should be based on an internet reflecting **our ethical choices**. In this respect, you are all aware of the ethical questions that artificial intelligence raises. These questions need to be addressed. Here again the Commission is leading the way globally with the AI Alliance, and High-Level Expert Group on artificial intelligence, which will deliver draft guidelines on the ethical development and use of artificial intelligence by the end of this year.

Empowerment comes also with **trust** in the information that circulates online: this means notably appropriate mechanisms guaranteeing and checking the authenticity of the information on the internet. As announced in the Communication on tackling online disinformation, we are accelerating the deployment of new technologies to tackle disinformation: reputation tools, blockchain-based mechanisms to ensure the integrity and the traceability of content.

Thus, the **principle of fairness** and our **fundamental rights** should be

respected online as they are offline; I already mentioned privacy protection, but it is also true for intellectual property, security, freedom of speech or of religion. This is why, we are so attentive to making sure intellectual property is protected as a fundamental right: authors, who have invested in artistic creation have to be rewarded for this investment. Fighting for fundamental rights is also the aim of the work on removing terrorist content from the internet and on making sure that the internet is a safe place for children in our SaferInternet4EU campaign.

In all these fields, a vigilant monitoring of online ecosystems is needed and in particular of online platform behaviours. We have not only to ensure fairness and competition, such as through the Commission's Online Platform initiative and the creation of the platform observatory, but also protect our society from business models that are unacceptable, making sure that cases like 'Facebook – Cambridge Analytica' don't happen again.

Finally, a human-centric internet should reflect **openness, diversity and inclusiveness**. The internet should allow all citizens to interact and to take part in the online society. This is notably why we aim at net neutrality and our efforts to equip remoted areas.

Ladies and gentlemen,

Embracing the digital revolution is a huge task that brings us back to very fundamental issues about the future we want to shape.

In my introduction, I have developed on how Europe is presenting a very comprehensive and bold alternative, clearly different from China, and from the US's approach. In this perspective, many of our partners throughout the world, who are seeking to find a balance between innovation, economic and social fairness and universal values, are very interested by this European approach.

However, success will require a collective effort from all of us, think tanks, business, unions, academics, representatives and executives based on a common vision of our Europe's digital future centred on our citizens and based on our European values.

History teaches us that there is no challenge that Europe cannot overcome when it decides to address it.

I count on all of you to join us in this endeavour.

I thank you for your attention and wish you fruitful debates.