

Visegrad 4 countries' thoughts on the Artificial Intelligence and maximising its benefits ahead of release of the European Commission's Communication on the topic

Artificial intelligence accompanies us in our work and everyday lives – we have safer cars, robots on production lines, modern medical equipment and improved safety on the Internet. Artificial intelligence is nothing new, as the discussions on the subject date back to the 1960s. However, in the last decade, there has been an unprecedented development reached in this field, thanks to increasing computer power, more data available, better algorithms and huge investments accompanied by a growing interest in this topic. Nowadays, AI-based systems can be found in a wide variety of applications from smartphones to stock exchanges. Technology begins to enter the areas where there was no or little need for it before – intelligent systems can recognise, for example, a dangerous situation, faces or emotional states. AI is a fact, and there is no turning back from it, although it is difficult to determine when the true breakthrough moment will occur and what impacts will AI ultimately have on the economy and society. We should be prepared in advance, in order to be able to address the rapid development of technology, so that we can make the most of the opportunities and avoid potential risks to the highest possible extent.

Forecasts say, for instance, that systems based on artificial intelligence used in autonomous transportation can substantially reduce the number of accidents and, as a result, reduce the number of fatalities. AI systems can contribute to achieving better and more accurate results in health diagnoses. Additionally, the implementation of simple robotics in companies may lead to noticeable savings, **not to mention the digitisation of industry and data-driven economy, where the use of AI solutions plays a significant role.** This is a very promising area for European start-ups, especially in the financial, judicial and health sectors. In fact, the challenge of making industrial data accessible for re-use in Europe is as much imminent as it is inevitable. AI is all about data-based innovation, after all. We may also be looking at supporting disruptive innovation. Artificial intelligence could strongly support the reform of public administration in decision-making too, e.g. in preparing regulatory impact assessment and thus create new demand.

Impacts of the AI development are not only related to industrial development as such, including new forms of business activity, but also have the **significant legal, social and ethical dimension.** While on the one hand, AI offers a huge potential, we are at the same time facing the threat that many professions may disappear or be radically modified within next decades. These challenges will require us to look deep into a number of areas which may seem distant from the purely technical side, such as social security systems or educational models including people's life-long learning approach, while facing the challenges of environment created by AI.

New business models are to be created and the use of machines in our work is likely to shorten our working hours. When contemplating these issues, a few questions immediately pop up. Does this mean that the retirement age will also be lowered? What about social security and, as a consequence, the payment of contributions to our society by fully automated companies? We also wish to emphasise that fundamental rights based on equality stay intact! Social engineering and rating experiments based on the new technologies including artificial intelligence in some leading countries are a troublesome sign for us. Such approach may not be implementable in Europe and should not be carried out at any cost.

The development of AI depends on access to information and data both for public and private sectors. Therefore, initiatives to collect data and making it accessible might be beneficial, as well as those intended to organise access for research units and business research and development and **build trusted ecosystem(s) and/or unified virtual data warehouse(s) for the development of AI technology**

for interested participants based on Open Data architecture. This implies the creation of smooth and simplified data collection and management programmes for educational research purposes to enable the development of AI in many domains: medical, financial, biological, energy, industrial, chemical or public sector, while in compliance with GDPR. **Such data warehouses might be pan-European initiatives launched on open standards, mutual recognition of certificates and transparent rules of interoperability.** Companies or businesses themselves could make their raw data available and share them with each other on a voluntary basis and to their mutual benefit in a trusted environment. The use of Open APIs should also be explored in relation to data sources. The creation of data warehouses for the development of AI requires, at EU as well as Member States level, a series of actions such as awareness raising to encourage data sharing in different sectors. Access to as much public data as possible, in a form of open data, should continue to be ensured. It is crucial to ensure that data warehouses are safe and confident.

We should keep in mind that AI research, development and its applications are a matter of global scale and key global stakeholders have already been deeply engaged in the emerging AI field. Having stated that, we have to acknowledge that a fierce global rivalry for digital leadership is ongoing and Europe, including V4 countries, and its companies are lagging behind. As the global competition is very intense in the field of artificial intelligence, it is necessary that the EU together with its Member States strengthen their commitment to the development and deployment of AI systems and applications in order to gain a leading and essential role in an international setting and support our companies in gaining the lead in this field. The ultimate goal is to **contribute to formulation of open, internationally recognised and enforceable standards for research, development and deployment of ethically designed AI-based systems and solutions** in order to maximise benefits for society and avoid or minimise the risks related thereto. As the innovative companies from all over Europe, including V4 companies, benefit from enhanced data access, we find these efforts truly important for the development of our economy.

The development and a continuing improvement of new methods for securing data (including anonymisation or classification of data) should contribute to lowering concerns with regards to access to data sets in which personal data are included. Therefore, **securing privacy and safety of data and developing effective methods to do so is of utmost importance and is a crucial aspect of building trust between users of data.**

Additionally, we need to deal with the legal and socioeconomic dilemmas, which remain unresolved for now: what is AI from a legal point of view? How do we resolve the issue of liability for the damage caused by AI? Who is entitled to copyright for a product made by artificial intelligence? Finally, there are also issues of broadly understood security and trust. Any action in this field must be considered carefully and implemented wisely in order to facilitate the development of innovative and globally competitive European entrepreneurs, while ensuring the security and well-being of citizens.

The potential of artificial intelligence is so great that we have to join forces to make European AI-based products become our European industrial specialisation, while making sure we overcome all related challenges. It is clear that any action with regards to the AI-based products requires collaboration between the relevant stakeholders, including skilled and trained staff in regulatory practices and technical AI experts. At this point in time, the **creation of uniform regulatory sandboxes at the EU level** seems to be beneficial, since testing and experimentation should always precede the introduction of any specific, legislative or non-legislative, action.¹ The main aim of this is to test first before taking

¹ We imagine these sandboxes as a digital virtual environment where interested parties from various sectors may experiment in data and algorithms with regards to their new products, services or other ideas. We foresee the sandboxing infrastructure as an integrated development environment (IDE) for quick prototyping and testing new code for digital services, along with set of procedures, processes and policies to enable their adoption and growth. The sandbox will unlock the potential of shared data by integrating data sets, data sources and APIs from other stakeholders, like enterprises and/or start-ups. The use of

any actions which may harm development of the innovations and innovative companies, including V4 companies.

Digitalisation as such, including the development of artificial intelligence, is a crucial component of enhancing European competitiveness. We need to bear this in mind while we develop new policies, as well as when we talk about **financing and funding**.

Given the specifics of the emerging technologies like AI, it is necessary that any action would be promptly implemented and dynamic enough to be capable of flexible adjustments. We would welcome the **EC guidelines** in this respect. Furthermore, work should be considered notably in the area of liability, taking into account the way recommendations, decisions and actions taken without human interaction along the entire value chain of data processing are happening. At some stage, it will also be extremely important to review public and private law addressing, *inter alia*, duties of the operators of AI-advanced robots to control them, for example by black box, and find a balance in fundamental rights, for example the right to work or the right to information.

The issue of AI also concerns open standards, which help create interoperability and free flow of data, which artificial intelligence requires in enormous quantities. In consequence, this creates a need for high computing power. **Cybersecurity issues, which definitely have to be addressed, are also hugely important.** We must therefore look at the issue of AI in its complexity.

We believe that all the questions related to AI should be addressed as broadly as possible in the near future, from an economic, social and security perspective. We want to see all stakeholders – European businesses, national and international governmental and non-governmental organisations, citizens and public administrations – involved in the discussion. It is only through an open, holistic and information-rich debate that we will be able to address the most pressing questions and design our approach towards this issue for the coming years. We are counting on the initiative of the European Commission. **It is crucial to set up a European forum for the debate on artificial intelligence (European AI Observatory) as soon as possible.** This may facilitate finding answers to the questions that arise and to design further development paths for the benefit of the citizens and industry of our united Europe, including social and economic impacts. At the same time, it may also identify the related risks and challenges to provide for the appropriate responses.

PRIORITIES:

1. As part of serious efforts to make **digitalisation a priority of the European Union beyond 2020**, issues related to the rapid development of artificial intelligence should be given a special consideration.
2. Innovation is data driven – we pledge for the **pan-European initiative on establishing an ambitious framework for opening up the data for innovation in order to speed up research, development and implementation of ethically designed AI based systems** which will be compatible with GDPR.

anonymised and simulated data, processed in a secure test environment, even on a group of selected volunteers and within a set timeframe, will result in making informed decisions by the regulator. The regulator can, on the other hand, observe where there may be a scope for taking actions based on empirical grounds and where there is no need for any intervention. Sandbox is then a mean for streamlining technology related decision of legislative processes and way to produce respective law based on facts, including self- and/or co-regulation.

3. We emphasise the necessity of **opening a debate about a proper funding mechanism**, taking into account the fact that the development of artificial intelligence is a crucial component of enhancing European competitiveness.
4. We strive for the creation of **uniform regulatory sandboxes** at the EU level that will support R&D in a few promising fields, like medicine, law, financial markets, services, production industry and automotive as well as agriculture, environment protection, water management or even food industry.
5. We acknowledge the **artificial intelligence can strongly support the reform of public administration in decision-making**, e.g. in preparing regulatory impact assessment, so its use should be further analysed and promoted.
6. In this respect we should not ignore the **importance of education and research** in general. We should strive to create an AI-supportive academic environment, by founding new AI-based and multidisciplinary programmes and strengthening the cooperation of the relevant academic and research institutions.
7. It is of a high importance to set up a **European AI Observatory** with all parties involved in AI activities.
8. **Cybersecurity** and trust issues have to be taken into consideration at all the time.
9. We call on the European Commission to **examine the impacts** that the applied AI solutions in industry may bring **to the EU labour force**.

We invite other Member States to join the non-paper to realise ambitious AI project for the future of the European Union.