AI Act and GDPR impact on European growth and competitiveness

Ioannis Pitas, Aristotle University of Thessaloniki

Panel topic

European Union was pioneer in introducing legislation and regulations in data and citizen protection, notably through the General Data Protection Regulation (GDPR) and AI Act. Furthermore, AI trustworthiness is a key element in Horizon Europe research and innovation. These initiatives will have great social and economic impact that has to be quantitatively assessed, so that a fine balance and the right mix of policies, regulations and technologies will protect citizens and social values, while boosting competitiveness, economic growth and wealth. Such solutions can be indeed beneficial for all: citizens, economy and societies.

Panelists

Dr. S. Scalzo, DG CNECT, European Commission

Emanuela Girardi, vice-president of the AI, Data and Robotics PPP

Prof. Ioannis Pitas, Aristotle University of Thessaloniki, Greece

Prof. Pieter Van Cleynenbreugel, Liège Competition and Innovation Institute (LCII), University of Liège, Belgium

Panellist statements to fuel e-symposium discussions

The delicate balance between regulating AI and fostering Innovation (Statement by E. Girardi, Pop AI)

Due to the disruptive impact on society, Artificial Intelligence is considered the strategic technology of the future. Almost all countries are developing AI strategies and investing significant resources to bring the benefits of AI into their society, while making sure that risks are managed and controlled. Europe is the first block in the world to propose an AI regulation to make sure that AI systems are used to improve people's lives and that there is no harm for their users.

I believe that it is important to regulate the utilisation of technologies to guarantee that human rights and European law are respected, at the same time, we should make sure that an excess in regulation does not limit innovation, European technology sovereignty, adoption of AI technologies by European companies, and utilisation of AI systems by European citizens.

The European industrial landscape is made up of 99% of SMEs, which are still working on the digitalisation process and are just starting to develop small AI projects. If the European Regulation will place too strict rules on the utilisation of AI systems, most of the SMEs, especially the microbusinesses, will not be able to comply with the proposed requirements and will risk not using AI systems at all.

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Balancing the need for regulation with the need for innovation is difficult and challenging, but an open multi-stakeholder discussion could highly improve the proposed regulation, in particular the current definition of AI, and promote the development of safe and trustworthy AI systems in Europe.

To promote the adoption of AI in Europe, a strong education programme is needed. The Digital Compass is a good starting point; however, each Member State needs to be aware of the importance of teaching its citizen how to use and manage AI technologies and make it a strategic priority of their political agenda. Citizens need to learn these skills to be able to actively participate in the new AI society and to use safely the AI systems.

Emanuela Girardi is the founder and president of Pop AI (Popular Artificial Intelligence), a non-profit association which aims to explain what artificial intelligence technologies are and what impact they have on daily life. She is a member of the group of artificial intelligence experts appointed by the Italian Ministry of Economic Development to develop the Italian national AI strategy and as such she has co-written the Italian AI strategy. Emanuela is a member of CLAIRE, the Confederation of Artificial Intelligence Research Laboratories in Europe, the largest community of scientists, researchers and technologists in artificial intelligence in the world. At CLAIRE, she is involved in the development of the Innovation Network and is the founder and coordinator of the task force on AI & COVID19.

Emanuela is a member of the Board of Directors of AIxIA, the Italian Association for Artificial Intelligence. She is a Member of the Board of Directors of ADRA, the European Association on AI, Data and Robotics, which works with the European Commission to implement Horizon Europe's 2021-2027 investment plan.

Emanuela holds a degree in Business Administration from the Luigi Bocconi University in Milan and a CEMS (Community of European Management Schools) Master's degree from the Université catholique de Louvain, Louvain la Neuve (Belgium).

She has lived, studied and worked in various European countries and the United States. In her early career she worked in high-tech sectors such as mobile telecommunications, broadband (FTTH, fiber optics at home), video streaming services. Subsequently, she became an entrepreneur, managing an Italian commercial company in the automotive sector where she committed herself to the introduction of new technologies and the digital transformation of the business.

Nature of knowledge and information (Statement by Prof. Ioannis Pitas, Aristotle University of Thessaloniki, Greece)

Knowledge and information form the basis of our knowledge society. Yet they have a volatile nature and multiple faces. Both of them are a result of complex societal processes, mostly evolving around science and technology. Yet a good part of information results from personal activities, e.g., in social media. They are

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ubiquitous: common knowledge is possessed by any society member. Furthermore, it is a right of every citizen to have access to knowledge and information, primarily through education and, later on, through mass media. In many societies, such access is available for free, to a certain extend.

Knowledge and information are owned by their producers. Intellectual property is protected by laws since industrial revolution, at least to a certain level. They are a commodity and have all related characteristics, e.g., they can be purchased/sold. They underly a big chunk of global economy and are themselves wealth, particularly in advanced societies.

Some of the above knowledge and information characteristics are inherently conflicting, e.g., the private property and their social value. Such conflicts were greatly exasperated in recent years, due their massive production (at least for data and information) by individuals. The first approach in their handling was of a 'wild west' nature: multinationals (notably, but not only, social media companies), plundered them without any respect to privacy and property issues. Many (but not all) advanced societies, notably EC and European states, reacted by enacting privacy and data/information/knowledge protection frameworks, e.g., through GDPR and European AI act. This way, citizens can be protected indeed though a series of primarily punitive measures. However, the same measures raise difficulties in data collection and processing that are much needed to produce knowledge and information and, in the end, social wealth and economic growth. Sometimes, data are irreversibly corrupted to protect privacy. E.g., future historians will be dismayed by TV broadcast blurring. In other cases, data are heavily under-used, even for good causes, e.g., scientific research. If this way of thinking prevails, then we may see just (but over-protecting and ultimately poor) societies, competing other ones that have much more laxed data protection regulations. Of course, there is hope that such measures will, at the end, not only boost social acceptance of data analysis, but will also boost an entire data protection knowhow and industry.

Overall, a fine balance and the right mix of policies can be debated that will protect citizens and social value of knowledge and information, while boosting competitiveness, economic growth and wealth. For example, reversible privacy-by-design data protection technologies can be developed that protect privacy now, without destroying the original data that can be used in the future or when/where privacy is not an issue anymore. Furthermore, blockchain-like technologies can be developed that allow full private data use by big corporations, while allowing owner renumeration, without diluting privacy, data security and data sovereignty.

Prof. Ioannis Pitas (IEEE fellow, IEEE Distinguished Lecturer, EURASIP fellow) received the Diploma and PhD degree in Electrical Engineering, both from the Aristotle University of Thessaloniki (AUTH), Greece. Since 1994, he has been a Professor at the Department of Informatics of AUTH and Director of the Artificial Intelligence and Information Analysis (AIIA) lab. He served as a Visiting Professor at several Universities.
His current interests are in the areas of computer vision, machine learning, autonomous systems, intelligent digital media, image/video processing, human-centred computing, affective computing, 3D imaging and biomedical imaging. He has published over 920

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papers, contributed in 45 books in his areas of interest and edited or (co-)authored another 11 books. He has also been member of the program committee of many scientific conferences and workshops. In the past he served as Associate Editor or co-Editor of 13 international journals and General or Technical Chair of 5 international conferences. He delivered 98 keynote/invited speeches worldwide. He co-organized 33 conferences and participated in technical committees of 291 conferences. He participated in 71 R&D projects, primarily funded by the European Union and is/was principal investigator in 43 such projects. Prof. Pitas lead the big European H2020 R&D project MULTIDRONE: https://multidrone.eu/. He is AUTH principal investigator in H2020 R&D projects Aerial Core and AI4Media. He was chair and initiator of the Autonomous Systems Initiative https://ieeeasi.signalprocessingsociety.org/. He leads International AI Doctoral Academy (AIDA) and is PI in Horizon2020 EU funded R&D projects AI4Media (1 of the 4 AI flagship projects in Europe) and AerialCore. He has 33600+ citations to his work and h-index 86+.

GDPR and the AI Act: towards enhanced by-design regulatory obligations? (Statement by Prof. Pieter Van Cleynenbreugel, Liège Competition and Innovation Institute (LCII), University of Liège, Belgium)

The European Union's willingness to regulate new technologies and to safeguard European Union (EU) fundamental rights and values in a changing world is laudable. However, the ways in which EU regulation seeks to tackle those issues raises important questions from an effectiveness point of view. In practice, both the GDPR and the AI Act essentially limit their regulatory endeavours to more or less enhanced 'notice and consent' regulatory regimes. Against the background of the impact big data and AI-supported algorithms (will) have on consumers and societies at large, questions can be raised nevertheless as to whether regulators should not think about more ambitious regulatory tools beyond simply enforcing – sometimes in an overly sanction-focused way – notice and consent requirements. A prima facie promising way to do so, it would seem, is the imposition, by means of general regulatory commands or suggestions, of by-design requirements compatible with fundamental values a society holds dear. Those requirements would require service providers to translate technical, but also more general legal requirements into algorithmic specifications. Those specifications would subsequently have to be programmed/coded into existing or newly developed algorithms. Leaving big data businesses in control of how they implement those requirements and ensuring some kind of control over those designs would be a way to avoid an overly intrusive regulatory intervention and would avoid the imposition of requirements that are difficult to control. Businesses themselves would have to demonstrate the steps they have taken and engage in a regulatory dialogue with the authorities charged with the oversight of those design requirements.

Those by-design regulatory obligations and enhanced collaborations between regulators and designers/developers thereby seem promising, and a real possibility. What is even more, EU law does not fundamentally close the door for such regulatory innovations. Within the GDPR, Article 25 proposes data processors to have a data protection by design regime in place. Certification

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mechanisms can be set up to validate that regime. The proposal for an AI Act goes in the same direction, at least by way of additional tool beyond notice and consent regulation.

At the same time, however, designing respect for fundamental values into technologies is still a scarcely used possibility in present EU regulation and could be enhanced in our opinion. The apparent limited taste for such regulatory experiments results from the fact that legal challenges can be raised against a more enhanced by-design regulatory approach. We nevertheless submit that those challenges are not insurmountable as such. To avoid them from blocking important reflections on how to regulate new technologies, it is essential to highlight that those legal challenges can be overcome relatively easily if sufficient political willingness to move forward can be found at EU level.

Pieter Van Cleynenbreugel is Professor of European Union law and Director of the Liège Competition and Innovation Institute (LCII) at the University of Liège, Belgium. He is also a visiting professor at Paris Dauphine University. He studied law at KU Leuven, Belgium (LL.B and LL.M, both summa cum laude) and at Harvard Law School (LL.M, Belgian American Educational Foundation and Fulbright Fellowships). As a Fellow of the Research Foundation Flanders (Fonds voor Wetenschappelijk Onderzoek -Vlaanderen (FWO)), he obtained his PhD in law at KU Leuven in 2013. From 2013-2016, Pieter was an assistant professor (universitair docent) at Leiden Law School, Leiden University, the Netherlands.

His research focuses on EU market regulation, in particular in relation to the internal market, EU administrative procedures and competition law. He is the author of multiple publications and monographs on that subject-matter, written in English, French and Dutch. He is currently the promotor of three research projects. The first project looks into the ways in which EU price regulation affects the digital economy (funded by the Fonds de Recherche Scientifique – FNRS, 2018-2022). The second zooms in on the possibilities and pitfalls of by-design regulation in the digital economy and is funded by the Actions de Recherches Concertées fund of the French-speaking Community of Belgium (2019-2023). That project is interdisciplinary in nature and set up a research collaboration between lawyers, economists and information scientists. The third project is a European Research Council (ERC) funded Starting Grant entitled EUDAIMONIA. That project looks into the ways in which national administrations have become embedded in EU regulatory ambitions, with a view to better understand which EU regulatory techniques may (not) work in the future (2021-2026).

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