

THE CRUCIAL IMPORTANCE OF THE EUROPEAN UNION AI ACT AS THE WORLD'S FIRST REGULATION ON ARTIFICIAL INTELLIGENCE

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Abstract

Artificial Intelligence (AI) is on everyone's lips because it's the technology that will shape the future of mankind for better or for worse. It is considered to be the newest technology that Computer Sciences offered humanity, but only the connoisseurs know that AI is not as new as it seems and that it has been used for more than 50 years in research and in governmental institutions. Because developers are making Artificial Intelligence grow stronger and stronger every day it became necessary to regulate it. The European Union was the first big power that took the bull from the horns and elaborated an act – The EU AI Act – that is trying to regulate AI technology. Regulating a domain that is in continuous change and evolution is a very hard thing to do, these rules must be adaptable along the way and changeable when needed.

Keywords: EU, AI, Act, Artificial Intelligence, European Union, Regulation

JEL Classification: K33

1. Introduction

Artificial Intelligence is considered to be a very important technology that has an enormous potential in changing the life of all the living creatures on this planet and on other planets if humans start to colonize the space. Its importance comes from the fact that it can be used to solve a very wide variety of problems.

We are using Artificial Intelligence every day and some of us don't even know it. From search engines to language translation software, from Internet of Things to online advertising and even cybersecurity, from self-driving vehicles to flying drones and to the manufacturing robots from the smart factories all this state-of-the-art technology uses AI to operate.

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Artificial Intelligence can revolutionize the following domains: healthcare, automobile industry, public transport systems, green and circular economy, machinery, farming, fashion, tourism, sales, production and services, energy, smart homes.

The most important thing is that Artificial Intelligence can and must be used in doing labours that are very hard or even impossible to be realised by human beings: mining, working in toxic environments, extinguishing fires, searching and rescue missions, exploring the space, exploring the oceans and other locations where is a harsh climate.

AI's results are influenced by the way the programmer designed it and what data he used as input. For example, in an application made for HR in order to choose the best candidate for a job if the developer uses as input data for the query the following attributes: white, male, single, between 30 - 40 years old, with bachelor's degree in chemistry AI will choose a candidate with these specifications. Even if the best candidate for this job may be a woman of 45 years old, married, with a master's degree in molecular chemistry.

A lot of people are afraid that Artificial Intelligence may take their jobs. That is a possibility in the near future. But in our opinion the real danger is the usage of AI in the military, in controlling the population, in spying and harming individuals, in the manipulation and stealing of elections and in the judiciary system.

We must never forget a very important thing: that AI (like every discovery in the scientific world) can be used in doing good things or in doing bad things. In order to prevent bad things to happen European Union, United States, China and all the other important global powers must regulate the Artificial Intelligence through their legislative assemblies.

The first time we heard about the need to regulate AI was in an interview with Elon Musk the CEO of Tesla that circulated on the Internet some years ago. On June 16th, 2023, at the Paris VivaTech event he reaffirmed his conviction that is necessary to take a „pause” on the development of Artificial Intelligence and that the AI sector needs to be regulated. Musk said that „there is a real danger for digital superintelligence having negative consequences” and that he is „in favour of AI regulation” (Aloisi et al., 2023).

Musk is not the only one that is sounding the alarm signal. Sam Altman the chief executive of OpenAI testified in Congress in May 2023 and said that is time for the legislative power to regulate and to start to put some limits on powerful AI systems. Altman declared that „If this technology goes wrong, it can go quite wrong,” claiming it could do „significant harm to the world”. Many of those who are concerned about the possibility that Artificial Intelligence can get out of control and do damage, including developers like Altman are urging lawmakers to regulate this domain (Downes and Levin, 2023).

On the other hand, Marc Andreessen (co-creator of the Mozilla Internet browser) claims that the big companies are using fear to push AI regulation in order to protect their economic interests. He says that big companies have the necessary resources to meet the requirements of AI regulations, while smaller companies and start-ups don't (<https://www.csis.org/blogs/strategic-technologies-blog/ai-regulation-coming-what-likely-outcome>).

2. Problem Statement

Some people are questioning the necessity of implementing regulation to this new revolutionary technology nicknamed AI. But they don't know the fact that Artificial Intelligence is not so new.

Some Artificial Intelligence technologies have been around for more than 50 years, but in the last decade AI developed at an incredible pace due to the advances in computing power, the availability of enormous quantities of data and new algorithms (<https://www.europarl.europa.eu/news/en/headlines/society/20200827STO85804/what-is-artificial-intelligence-and-how-is-it-used>).

European Union member states are at the forefront of the digital industry with a high-quality digital infrastructure that helps them designing top business-to-business applications. If EU institutions will be able to create an efficient regulatory framework for AI that protects the privacy and the freedom of the European citizens, European Union could become a global leader in the data economy and its applications (<https://www.europarl.europa.eu/news/en/headlines/priorities/artificial-intelligence-in-the-eu/20200918STO87404/artificial-intelligence-threats-and-opportunities>).

The EU's AI Act will apply to all European companies and also to all non-EU companies that are delivering AI technology and services in Europe. This act of crucial importance will set a precedent that will be followed soon by other countries (<https://www.csis.org/blogs/strategic-technologies-blog/ai-regulation-coming-what-likely-outcome>).

The problem is that the European law-makers must regulate AI in a very unique way making the rules adaptable along the way because Artificial Intelligence is a technology that is very likely to change rapidly and it has the power to spread widely throughout an area or in a group of people (<https://www.csis.org/blogs/strategic-technologies-blog/ai-regulation-coming-what-likely-outcome>).

To better understand the necessity of regulating Artificial Intelligence we must first of all give a definition of the term and afterwards show the operating principles of this technology. We also present the domains in which AI can make a difference without entering in detail.

The author Enamul Haque in his book „The Ultimate Modern Guide to Artificial Intelligence Including Machine Learning, Deep Learning, IoT, Data Science, Robotics, The Future of Jobs, Required Upskilling and Intelligent Industries” states that there isn’t a strict definition of AI (Haque, 2023, p. 31).

Haque explains that the term Artificial Intelligence is used in our days „for almost all advanced analytics solutions based on Machine Learning that automate decision-making”. The definition variates from researcher to researcher, but AI is defined in a general manner as „a concept or technology for artificially imitating the intellectual work performed by the human brain with a computer” or stated in a simple way: „the ability of a machine to mimic human reasoning”. John McCarthy explains that AI is „the science and engineering of making intelligent machines, especially intelligent computer programs” (Haque, 2023, p. 31).

Haque says that Artificial Intelligence can also be defined as:

- „Artificially created reality with intelligence.”
- „Artificially created system for intelligent behaviour.”
- „A system that simulates human brain activity to the limit.”
- „A new world of intelligence created artificially.”
- „A structured system for imitating, supporting and transcending the intellectual behaviour of people” (Haque, 2023, p. 31).

AI is used „to increase the efficiency of operations with intelligent processes or to replace human labour with automation completely”. Artificial Intelligence which is analytics based on Machine Learning is not a new discovered technology. Haque informs us that advanced analytics has been done in data-centric industries for a long time, but now we are using it in our daily life as technologies that we all use evolve rapidly (Haque, 2023, p. 31).

Haque states that AI is a scientific discipline which is composed from a collection of concepts, problems and methods for solving them. Artificial Intelligence is the subdivision of Computer Science that „deals with the automation of intelligent behaviour” (Haque, 2023, p. 32).

Jerry Kaplan in his book „Artificial Intelligence What Everyone Needs to Know” explains that machines are able to perform a lot of tasks that are impossible for human beings to do and these performances are perceived as displays of intelligence. Kaplan gives the following example: „a drug discovery program may propose a novel admixture by finding a previously unnoticed pattern of molecular arrangements in successful cancer treatment compounds” (Kaplan, 2016, p. 4).

In „Artificial Intelligence Foundations of Computational Agents” David L. Poole and Alan K. Mackworth state that AI is „the field that studies the synthesis and analysis of computational agents that act intelligently” (Poole and Mackworth, 2017, p. 3).

The authors explain that when an intelligent system is built the developers have to decide which „sources of intelligence” need to be programmed in and which can be learned, because it is impossible (at least for now) to build an agent that has no inputs and learns everything as it goes. But we must have in mind that the most „interesting and useful intelligent agents learn to improve their behaviour” (Poole and Mackworth, 2017, p. 7).

Bernard Marr in his book „Artificial Intelligence in Practice: How 50 Successful Companies Used AI and Machine Learning to Solve Problems” says that „AI is the most powerful technology available to mankind today and the biggest mistake anyone can make is to ignore it.” World leaders and business owners are sensing „the magnitude of opportunities” that Artificial Intelligence brings and also the risks of „being left behind” in the race of AI development (Marr and Ward, 2019, p. 2).

Marr defines Artificial Intelligence as being „the ability of computer systems or machines to display intelligent behaviour that allows them to act and learn autonomously.” In other words, the basic form of AI works in the following way: the data is taken, some calculation rules or algorithms are applied to the data and then decisions are made, or outcomes are predicted (Marr and Ward, 2019, p. 3).

The author explains that just like humans learn how to recognize a face with the help of their network of neurons from the brain in the same way Artificial Intelligence replicates this process with its artificial neural networks. But in using AI the machines are let to create the rules themselves instead of having developers programming the rules, just like human brain is learning from experience. This process is called machine learning (Marr and Ward, 2019, p. 4).

In machine learning Artificial Intelligence is trained by giving it large quantities of data, which the computer takes and then creates its own algorithm either independently or with the help of developers. When machine learning uses multiple layers of artificial neural networks in order to learn from training data and become more powerful it is called deep learning. Deep learning is responsible for the recent advances in AI like recognizing humans in images or videos or understanding and reproducing written text or spoken words learning (Marr and Ward, 2019, p. 5).

Just like humans learn and improve from personal experience the same way Artificial Intelligence „uses reinforcement learning algorithms to determine the ideal behaviour based upon feedback from the environment”. Reinforcement learning gives the ability to the machines (robots, drones, self-driving cars) to walk, fly or drive autonomously (Marr and Ward, 2019, p. 6).

There are three ways in which businesses can use AI:

- Customer service - „change the way they understand and interact with customers”,
- Smarter products and services - „offer more intelligent products and services”,

- Automate processes - „improve and automate business processes” (Marr and Ward, 2019, pp. 6-7).

Using Artificial Intelligence in business can lead to a business model refresh or even to a complete transformation of the business approach making it relevant for the fourth industrial revolution (Marr and Ward, 2019, p. 7).

The book written by Bernard Marr is very well documented and it gives a lot of examples and case studies that demonstrate the extended level of AI usage in today businesses: IT, industry, production of goods, services, food industry, financial services, healthcare, automotive, aerospace, manufacturing, and mass-media.

In his book „Artificial Intelligence A Primer” Harry Katzan Jr. says that Artificial Intelligence „is more concerned with intelligence in general and less involved with human thought in particular” (Katzan, 2023, p. 3).

The author stated that the developments of AI through the years tried to mirror natural systems, emphasizing on the most important senses humans have natural language, vision and locomotion (Katzan, 2023, p. 11).

Artificial Intelligence is seen by Vinod Chandra and Anand Hareendran as the most „rapidly growing field, which provides more and more insights into how to make the human life easy” (Chandra and Hareendran, 2020, p. xiii).

We presented briefly the definitions of AI, its base principles and the domains in which it can be utilised in order to „make human life easier”. Now we continue with the research questions that this article is trying to answer.

3. Research Questions/Aims of the research

The questions we would like to find answers for in this research paper are the following:

Is important to regulate artificial intelligence?

Can AI be regulated?

European Union through its institutions is capable of regulating artificial intelligence?

We believe the answer to all the above questions is affirmative.

The objective of this article is to demonstrate that regulating AI is imperative if we want not to have unpleasant surprises in the future. A super intelligence can be used in doing good things or in doing bad things depending on who is the individual that has the power of control over it. Another issue is the possibility that AI may become so powerful that it can develop a self-awareness and it can get out of control. European Union is the first world

power that initiates a legislative procedure meant to elaborate a regulation act for artificial intelligence. AI is too important and has the potential of becoming very powerful not to be regulated and above all to be regulated well.

4. Research Methods

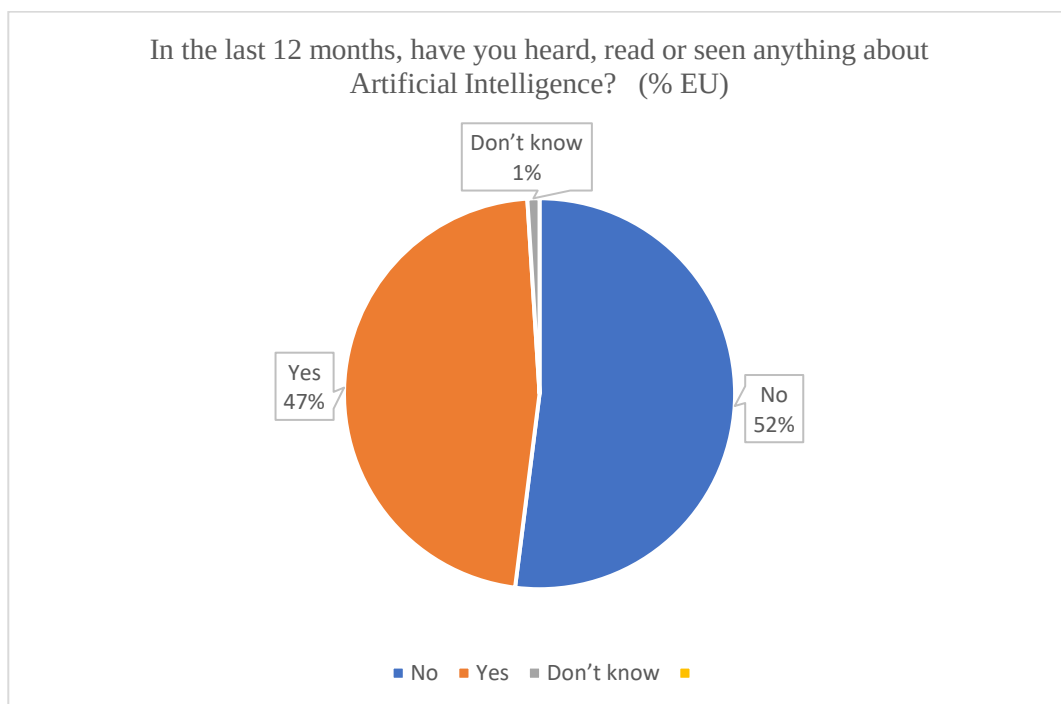
In this article we used mainly the qualitative method in order to obtain the extensive data about the importance and the necessity of regulating artificial intelligence. Quantitative analysis is also used, particularly with regard to statistical data. The techniques used here are a case study on the European Union AI Act, and the analysis of the theoretical works in the AI field.

5. Findings

The idea of the EU officials to regulate Artificial Intelligence didn't come from the thin air. This proposal is based on research studies and statistical data that show the opinion of the European Union citizens on AI and robots.

In May 2017 the European Commission has published a Eurobarometer survey presenting European citizens' opinions on the impact of digitisation and automation on daily life. The fieldwork was done in March 2017 and the Special Eurobarometer Report has a whole chapter – chapter IV that touches the subject of Artificial Intelligence and Robotics (<https://op.europa.eu/en/publication-detail/-/publication/ce5d5948-6778-11e7-b2f2-01aa75ed71a1/language-en>).

In March 2017 when the Eurobarometer survey was made European citizens had to answer the following question: „In the last 12 months, have you heard, read or seen anything about Artificial Intelligence?“ From the total number of respondents 52% said „No“, 47% said „Yes“ and 1% answered „Don't know“ (Special Eurobarometer 460 Attitudes towards the impact of digitisation and automation on daily life Report, March 2017, p. 55).



Base: All Respondents (N=27,901)

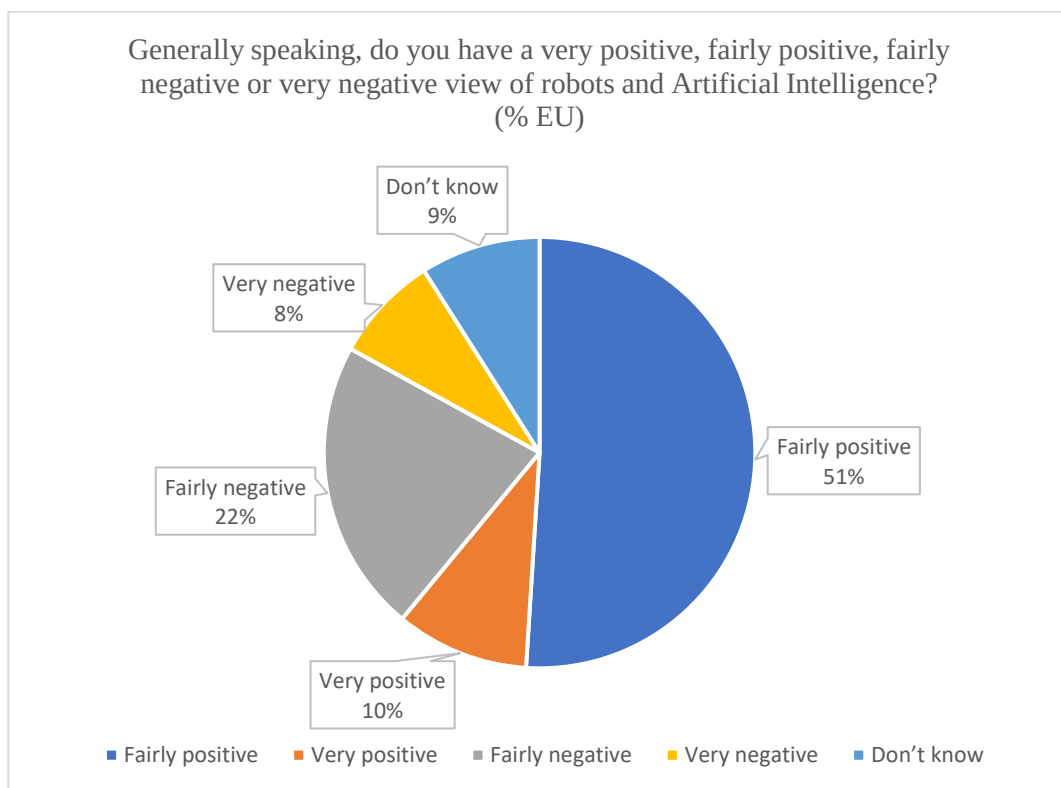
Graphic 1. European citizens' knowledge about Artificial Intelligence.³

Respondents residing in the countries from the Northern areas of the European Union are generally the most likely to have heard, read or seen something about AI in the last 12 months, while those who live in the states situated in the Eastern areas of the EU are generally the least likely to have done so (Special Eurobarometer 460 Attitudes towards the impact of digitisation and automation on daily life Report, March 2017, p. 56).

In terms of the attitude that European citizens have towards robots and AI it seems that the majority have a positive view about these revolutionary technologies.

At the question „Generally speaking, do you have a very positive, fairly positive, fairly negative or very negative view of robots and Artificial Intelligence?” the answers were the following: 51% responded „Fairly positive”, 10% - „Very positive”, 22% - „Fairly negative”, 8% - „Very negative”, 9% - „Don't know” (Special Eurobarometer 460 Attitudes towards the impact of digitisation and automation on daily life Report, March 2017, p. 59).

³ Source: Special Eurobarometer 460 Attitudes towards the impact of digitisation and automation on daily life Report, March 2017, p. 55.



Base: All Respondents (N=27,901)

Graphic 2. European citizens' views on robots and Artificial Intelligence.⁴

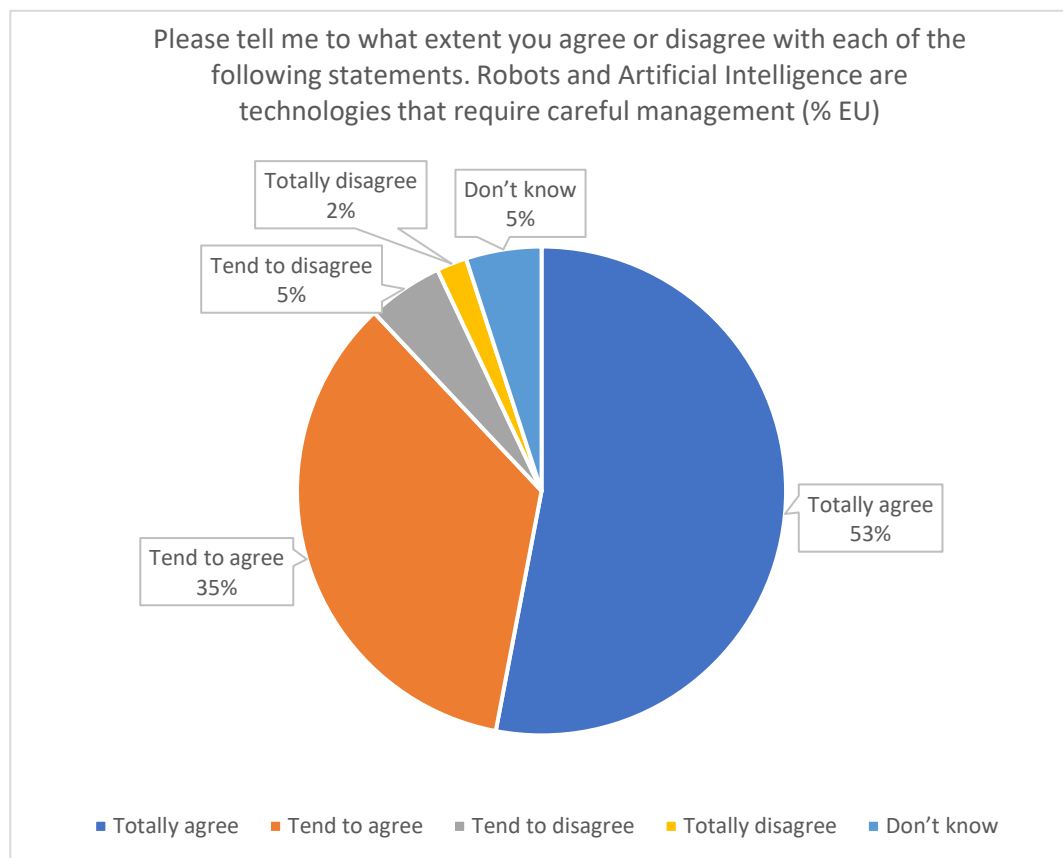
The North – East cleavage is maintaining, and the South is joining in this battle too. The citizens from the North have a positive view of robots and AI, and the countries that have a not so positive view about this technology are from the Southern and Eastern Europe (Special Eurobarometer 460 Attitudes towards the impact of digitisation and automation on daily life Report, March 2017, p. 59).

The answers given by the European citizens to the following question show the level of precaution they have when AI and robots are involved. The majority of the respondents (88%) agree that Artificial Intelligence and robots are technologies that require careful management (Special Eurobarometer 460 Attitudes towards the impact of digitisation and automation on daily life Report, March 2017, p. 62).

To the question „Please tell me to what extent you agree or disagree with each of the following statements. Robots and Artificial Intelligence are technologies that require

⁴ Source: Special Eurobarometer 460 Attitudes towards the impact of digitisation and automation on daily life Report, March 2017, p. 59.

careful management” 53% have responded that they „Totally agree”, 35% - „Tend to agree”, 5% - „Tend to disagree”, 2% said that they „Totally disagree” and 5% - „Don’t know” (Special Eurobarometer 460 Attitudes towards the impact of digitisation and automation on daily life Report, March 2017, p. 62).



Base: All Respondents (N=27,901)

Graphic 3. European citizens' opinions on the careful management of robots and Artificial Intelligence.⁵

At least three quarters of respondents from each of the Member States agree Artificial Intelligence and robots are technologies that require careful management. The numbers are the following: Netherlands – 96%, Greece – 94%, Sweden – 93%, Italy – 83%, Hungary – 80%, Romania – 75%. In almost all the EU countries a relative majority was formed that „Totally agrees” with the „careful management” of AI and robots (Special Eurobarometer

⁵ Source: Special Eurobarometer 460 Attitudes towards the impact of digitisation and automation on daily life Report, March 2017, p. 62.

460 Attitudes towards the impact of digitisation and automation on daily life Report, March 2017, p. 62).

This survey shows some interesting results. Respondents that have a positive view of Artificial Intelligence and robots are more likely to agree AI and robots are technologies that require careful management. The same tendency applies to the respondents that have read, heard or seen something about Artificial Intelligence in the last 12 months (Special Eurobarometer 460 Attitudes towards the impact of digitisation and automation on daily life Report, March 2017, p. 64).

We believe that this survey and especially the above-mentioned question is the starting point of the idea that AI needs to be regulated. This idea led to the birth of EU AI Act the first regulation on Artificial Intelligence.

European Commission's „Proposal for a Regulation of The European Parliament And Of The Council – Laying Down Harmonised Rules On Artificial Intelligence (Artificial Intelligence Act) And Amending Certain Union Legislative Acts” from 21 April 2021 establishes the following specific objectives:

- ensure that AI systems placed on the Union market and used are safe and respect existing law on fundamental rights and Union values;
- ensure legal certainty to facilitate investment and innovation in AI;
- enhance governance and effective enforcement of existing law on fundamental rights and safety requirements applicable to AI systems;
- facilitate the development of a single market for lawful, safe and trustworthy AI applications and prevent market fragmentation.” (European Commission's Proposal for a Regulation Of The European Parliament And Of The Council – Laying Down Harmonised Rules On Artificial Intelligence (Artificial Intelligence Act) And Amending Certain Union Legislative Acts, 2021, p. 3).

The proposal sets a robust but at the same time a flexible legal framework with mechanisms that enable it to be adapted in concordance with the evolution of the technology and the situations that will emerge in the future (European Commission's Proposal for a Regulation Of The European Parliament And Of The Council – Laying Down Harmonised Rules On Artificial Intelligence (Artificial Intelligence Act) And Amending Certain Union Legislative Acts, 2021, p. 3).

This legal framework is comprehensive in its regulatory choices especially in all the principle-based requirements that AI systems should comply with. It is thought to be „a proportionate regulatory system centred on a well-defined risk-based regulatory approach that does not create unnecessary restrictions to trade”. Where legal intervention takes place only in „those concrete situations where there is a justified cause for concern or where such concern can reasonably be anticipated in the near future” (European Commission's

Proposal for a Regulation Of The European Parliament And Of The Council – Laying Down Harmonised Rules On Artificial Intelligence (Artificial Intelligence Act) And Amending Certain Union Legislative Acts, 2021, p. 3).

The Commission's preferred option is a regulatory framework only for the high-risk AI systems, all providers of non-high-risk AI systems having the possibility to follow a code of conduct. It is stated that the requirements will concern the quality of data, documentation and traceability, provision of information and transparency, human oversight and robustness, accuracy and cybersecurity and would be obligatory for high-risk AI systems. And all the IT companies that may introduce codes of conduct for other Artificial Intelligence systems would do so voluntarily. The high-risk AI systems are listed and classified in the annexes of the Proposal (European Commission's Proposal for a Regulation Of The European Parliament And Of The Council – Laying Down Harmonised Rules On Artificial Intelligence (Artificial Intelligence Act) And Amending Certain Union Legislative Acts, 2021, p. 9).

The remarkable thing is that EU has the possibility to classify as high-risk AI technology all the foreign AI technology that may affect European citizens and can take some measures against it and even prohibit it. AI systems that have the capacity to distort human behaviour – to manipulate, to exploit and to use social control practices are forbidden. In EU the use of AI technologies for social scoring is prohibited (European Commission's Proposal for a Regulation of The European Parliament and Of The Council – Laying Down Harmonised Rules On Artificial Intelligence (Artificial Intelligence Act) And Amending Certain Union Legislative Acts, 2021, pp. 20-21).

Unfortunately, the AI Act won't regulate the Artificial Intelligence systems used in military purposes. Also, the AI systems used in law enforcement are in some specific situations excepted from the interdiction mentioned in the regulation. For example the use of „real-time“ remote biometric identification systems in public places is allowed when an individual or a group constitutes a real threat to society and only after it is obtained a specific authorisation by a judicial authority or by an independent administrative authority of a Member State (European Commission's Proposal for a Regulation Of The European Parliament And Of The Council – Laying Down Harmonised Rules On Artificial Intelligence (Artificial Intelligence Act) And Amending Certain Union Legislative Acts, 2021, pp. 20-23).

The regulation was made to ensure that the high-risk Artificial Intelligence systems don't pose a threat to EU interests or have a significant harmful impact on European citizens' health, safety or fundamental rights. All AI systems are classified as being of high-risk if they can have an adverse impact on the following fundamental rights: children's rights, „the right to human dignity, respect for private and family life, protection of personal data, freedom of expression and information, freedom of assembly and of association, and non-discrimination, consumer protection, workers' rights, rights of persons with disabilities,

right to an effective remedy and to a fair trial, right of defence and the presumption of innocence, right to good administration” (European Commission’s Proposal for a Regulation Of The European Parliament And Of The Council – Laying Down Harmonised Rules On Artificial Intelligence (Artificial Intelligence Act) And Amending Certain Union Legislative Acts, 2021, p. 24).

Artificial Intelligence systems used for the management and operation of critical infrastructure – road traffic and the supply of water, gas, heating and electricity – are classified as high-risk because their failure or malfunctioning can put at risk the life and health of large groups of people and can affect economic and social activities (European Commission’s Proposal for a Regulation Of The European Parliament And Of The Council – Laying Down Harmonised Rules On Artificial Intelligence (Artificial Intelligence Act) And Amending Certain Union Legislative Acts, 2021, p. 26).

AI systems that are also considered of high-risk are the ones which are used in education and in vocational training because if they are improperly designed and used may violate the right to education and training and can create discriminatory situations (European Commission’s Proposal for a Regulation Of The European Parliament And Of The Council – Laying Down Harmonised Rules On Artificial Intelligence (Artificial Intelligence Act) And Amending Certain Union Legislative Acts, 2021, p. 26).

Another high-risk Artificial Intelligence systems are the ones used in employment, workers management and access to self-employment because it is considered that they have the capacity to impact future career prospects and livelihoods of people (European Commission’s Proposal for a Regulation Of The European Parliament And Of The Council – Laying Down Harmonised Rules On Artificial Intelligence (Artificial Intelligence Act) And Amending Certain Union Legislative Acts, 2021, p. 26).

AI systems used to evaluate the credit score, or creditworthiness of citizens are also high-risk because „they determine those persons’ access to financial resources or essential services such as housing, electricity, and telecommunication services”. Another high-risk Artificial Intelligence systems are used in the emergency services to dispatch or establish the priority in the dispatching of emergency in first response services. They are extremely important because „they make decisions in very critical situations for the life and health of persons and their property” (European Commission’s Proposal for a Regulation Of The European Parliament And Of The Council – Laying Down Harmonised Rules On Artificial Intelligence (Artificial Intelligence Act) And Amending Certain Union Legislative Acts, 2021, p. 27).

High-risk AI systems are also used in law enforcement for prevention, detection, investigation and prosecution of criminal offences, migration, asylum and border control management, administration of justice and democratic processes (European Commission’s Proposal for a Regulation Of The European Parliament And Of The Council – Laying Down

Harmonised Rules On Artificial Intelligence (Artificial Intelligence Act) And Amending Certain Union Legislative Acts, 2021, pp. 28-29).

It is important for the EU to have information on how high-risk AI systems have been developed and how they perform through their lifecycle in order to verify compliance with the requirements under the Regulation. Such information must include „the general characteristics, capabilities and limitations of the system, algorithms, data, training, testing and validation processes used as well as documentation on the relevant risk management system” (European Commission’s Proposal for a Regulation of The European Parliament and Of The Council – Laying Down Harmonised Rules On Artificial Intelligence (Artificial Intelligence Act) And Amending Certain Union Legislative Acts, 2021, p. 30).

In our humble opinion the most important provision of this Regulation is the following: high-risk Artificial Intelligence systems should be designed and developed in such a way that humans must be able to oversee their functioning. The appropriate human oversight measures must be built into the AI system before it is put on the market and into service. These measures must guarantee that the AI system is „subject to in-built operational constraints that cannot be overridden by the system itself and is responsive to the human operator, and that the natural persons to whom human oversight has been assigned have the necessary competence, training and authority to carry out that role” (European Commission’s Proposal for a Regulation Of The European Parliament And Of The Council – Laying Down Harmonised Rules On Artificial Intelligence (Artificial Intelligence Act) And Amending Certain Union Legislative Acts, 2021, p. 30).

Another vital thing for the high-risk AI systems is their technical robustness and cybersecurity. These AI systems must be „resilient against risks connected to the limitations of the system (e.g. errors, faults, inconsistencies, unexpected situations) as well as against malicious actions that may compromise the security of the AI system and result in harmful or otherwise undesirable behaviour”. AI systems must be able to protect themselves and to reject cyberattacks that are trying to exploit their vulnerability (European Commission’s Proposal for a Regulation of The European Parliament and of The Council – Laying Down Harmonised Rules On Artificial Intelligence (Artificial Intelligence Act) And Amending Certain Union Legislative Acts, 2021, p. 30).

6. Conclusion

If we think about it the sole purpose of developing AI technology should be exactly the above mentioned desiderate: to make people's lives easier and more beautiful we should add. Unfortunately, not all humans are driven by positive principles and a powerful AI technology controlled by an individual or a group of people that want to have unlimited power over all humanity and all its resources can wreak havoc.

In order to prevent this to happen AI must be regulated at all costs. The first step in doing that was made by the European Union. We believe that EU's AI Act has the power to regulate Artificial Intelligence technologies because it is an innovative legal framework that has the distinct property to change and to adapt at the same time with the evolution of AI.

An important thing is that the foreign providers of AI technology must respect the AI Act requirements if they want to sell their products on the EU market and that means that European Union has the power to influence and to change the AI technologies by imposing its regulation.

The EU AI Act hasn't been adopted yet. The EU tripartite (Commission, Council and Parliament) must reach an agreement on the final text including the amendments, but it is expected to be adopted by the end of the year 2023 with a transition period for the final implementation and compliance.

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