

ARTIFICIAL INTELLIGENCE AND LEGAL CHALLENGES

INTELIGENCIA ARTIFICIAL Y DESAFÍOS LEGALES

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1 Introduction. 2 What is artificial intelligence and its importance? 3 Evolution of artificial intelligence according to legal frameworks. 3.1. Legislative regulatory provisions in different countries. 4 Discussions on the legal personality of artificial intelligence. 5 Criminal law and artificial intelligence. 5.1 Can legal sanctions be applied to artificial intelligence? 6 Some of the future legal challenges of artificial intelligence. 7 Conclusions. References.

ABSTRACT

Objective: This paper is dedicated to Artificial Intelligence and it consists in identifying the role and functions performed by Artificial Intelligence by noting the innovations brought by the introduction of this technology. Artificial Intelligence seems to be the most successful achievement of scientists today. As a result of this development and widespread use have arisen discussions on the legal regulation of Artificial Intelligence.

Methodology: The main methodological approach applied is the normative approach. The paper will be based on the qualitative method, which consists of collecting and processing data in order to compare and interpret the provisions or policies that provide for artificial intelligence. The following research methods will be applied in this paper: research method, descriptive method, comparative and analytical method, interpretive analysis method and illustrative method.

Results: There is still no proper legislative framework on Artificial Intelligence. Despite not having a consolidated legal framework, states have made the first efforts in drafting legal acts and norms governing the field of Artificial Intelligence. From the concrete analysis of existing legislative acts in many countries, we conclude that the intention of the legislator in trying to regulate the field of Artificial Intelligence arises as a result of the disadvantages of

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using these technologies, their widespread use and ability to influence the way of the development of many processes.

Contributions: The article contributes to the theoretical treatment of Artificial Intelligence by arguing on the problems of its legal regulation.

Keywords: artificial intelligence; legislation; legal personality; legal responsibility; implementation.

RESUMEN

Objetivo: Este artículo está dedicado a la Inteligencia Artificial y consiste en identificar los roles y funciones que desempeña la Inteligencia Artificial al señalar las innovaciones que trajo la introducción de esta tecnología. La inteligencia artificial parece ser el logro más exitoso de los científicos en la actualidad. A raíz de este desarrollo y uso generalizado han surgido debates sobre la regulación legal de la Inteligencia Artificial.

Metodología: El principal enfoque metodológico aplicado es el enfoque normativo. El trabajo se basará en el método cualitativo, que consiste en recopilar y procesar datos con el fin de comparar e interpretar las disposiciones o políticas que prevén la inteligencia artificial. En este trabajo se aplicarán los siguientes métodos de investigación: método de investigación, método descriptivo, método comparativo y analítico, método de análisis interpretativo y método ilustrativo.

Resultados: Todavía no existe un marco legislativo adecuado sobre Inteligencia Artificial. A pesar de no contar con un marco legal consolidado, los estados han realizado los primeros esfuerzos en la redacción de actos jurídicos y normas que rigen el campo de la Inteligencia Artificial. Del análisis concreto de los actos legislativos existentes en muchos países, concluimos que la intención del legislador al tratar de regular el campo de la Inteligencia Artificial surge como consecuencia de las desventajas del uso de estas tecnologías, su uso generalizado y la capacidad de influir en la forma del desarrollo de muchos procesos.

Aportaciones: El artículo contribuye al tratamiento teórico de la Inteligencia Artificial argumentando sobre los problemas de su regulación jurídica.

Palabras clave: inteligencia artificial; legislación; personalidad jurídica; responsabilidad jurídica; implementación.

1 INTRODUCTION

Artificial Intelligence is the greatest development of technology that humanity is aware of, recognizing a number of benefits and advantages from its use. Aware of the stages of change that Artificial Intelligence has undergone and its widespread use, the opinion on

the legal regulation of the field is not unknown. Uncertainty lies in whether Artificial Intelligence will be conceived as an object or subject of law. In this paper, we have identified the first legislative efforts to regulate the field of Artificial Intelligence. By shifting the discussion to a legal level, it is necessary to clarify some of the key issues that arise. Artificial Intelligence itself poses a present and future challenge to the legal sphere.

The concept of Artificial Intelligence has changed over time. There is still no unified legal definition of AI, however, in different countries we find the first stages of the development of a proper legislative framework. The general spirit that characterizes these legislations is that of defining a relationship between the law and the limits of the application of Artificial Intelligence. The main legal, current and future challenges, which we have identified and addressed in this paper, consist in the analysis of ideas on the legal personality of the AI and the determination of civil and criminal liability in cases of damages caused by intelligent machinery in a way autonomous or by third parties, their users.

The methodology consists in the logical forms of the knowledge process and the possibility of their application in a certain science or in a certain scientific research. In this paper, the main methodological approach applied is the normative approach. The paper will be based on the qualitative method, which consists of collecting and processing data in order to compare and interpret the provisions or policies that provide for artificial intelligence. The following research methods will be applied in this paper: research method, descriptive method, comparative and analytical method, interpretive analysis method and illustrative method.

This paper is structured in several sections. Artificial intelligence and its importance are first addressed. To continue with the evolution of Artificial Intelligence according to legal frameworks and regulatory legislative provisions in different countries. Another important issue is the discussion about legal ideas and perspectives on legal personality and the evaluation of different opinions on the criminal liability of Artificial Intelligence. In conclusion, the future challenges that Artificial Intelligence presents to the legal system are identified, recommending possible solutions.

2 WHAT IS ARTIFICIAL INTELLIGENCE AND ITS IMPORTANCE?

Artificial Intelligence is defined as a broad branch of computer science which deals with the construction of “smart” machines, capable of performing tasks that typically require human intelligence (BUILTIN, 2021). So, with the term intelligence, in terms of Artificial Intelligence, we mean the performance of any of the following actions such as

planning, reasoning, problem solving, perception, representation of knowledge, creativity etc. (HEATH, 2021).

Artificial Intelligence means the creation and development of various computer systems, capable of performing tasks which would have to be performed by human intelligence. This means that through AI, science was able to ensure the elimination of mechanical processes through a “non-human” intelligence. Examples of Artificial Intelligence, applied in everyday life are seen among self-driving cars, navigation systems, computer or mobile programs that enable people to communicate through the use of the Internet, computer games, etc. (IRIZARRY-NONES; PALEPU; WALLACE, 2017, p. 5).

Putting Artificial Intelligence in efficiency represents one of the greatest achievements and developments of science today. Artificial Intelligence made it possible for machines to learn from experience, adapt to new inputs, and perform human-like tasks (SAS, 2021). From economics and law to technical terms, science has made it possible for Artificial Intelligence to be placed in the function of each field in order to perform multiple tasks. Such an Artificial Intelligence programming system represents levels of intelligence that have advanced by surpassing the human intellect (TEGMARK, 2021).

Artificial Intelligence is applied between pre-programmed mechanisms or machines. Also, since the machine performs operations based on a previous data entry, the AI makes it possible to solve complex problems between difficult calculations and the chances of errors are further reduced (DATAFLAIR TEAM, 2019).

3 EVOLUTION OF ARTIFICIAL INTELLIGENCE ACCORDING TO LEGAL FRAMEWORKS

Through the legal regulation of Artificial Intelligence, the aim is to create policies, regulations or legal acts which define concrete rules on the way of functioning, application and protection of AI. The need for legal regulation of Artificial Intelligence, in addition to the great development that this field has encountered, is also related to the need to control the consequences that this development can produce. Some researchers and technology leaders warn that Artificial Intelligence is on the way to turning robots into such a category that it will make it possible to subdue humanity if it does not destroy it (ETZIONI; ETZIONI, 2017).

The First International Conference on AI and Law was held in Boston in May 1987. (BENCH-CAPON; ARASZKIEWICZ; ASHLEY, 2012, p. 4). Although early work had been done on Artificial Intelligence and Law, the Conference can be seen as the first beginnings and birth of an AI and Law community. Due to its importance and

characteristics, the role that the Conference has played in the sector of AI and Law is irreplaceable. Each organized meeting serves as a platform for the unfolding of new ideas and practical work that researchers have done in developing the legal aspect for the regulation of Artificial Intelligence and beyond. Specifically, the proceedings of the Conference extend only to the aspect and legal regulation of Artificial Intelligence. Early work has been done towards the development of Artificial Intelligence, term definition and field regulation. Publications on what can be thought of as Artificial Intelligence and Law can be traced back to the early 1950s. (COENEN; BENCH-CAPON, 2017, p. 4). However, we specified that the beginnings of the AI legal community are marked by the International Conference, as cited above.

The main proceedings of the First International Conference focused on several key areas. Initially, a specific legal definition of the term “Artificial Intelligence” was discussed. Researchers also highlighted the idea of the need for legal acts and policy-making in the field of AI. However, the First Conference did not do much in terms of drafting the legal framework on Artificial Intelligence, mainly presenting projects proving the application of Artificial Intelligence in the Law, which means that the development of Artificial Intelligence already reflected its benefits in legal system, facilitating work in this sector, between enabling digital research and introducing a “case database”, which made it possible to quickly and efficiently search for detailed information or specific cases for academic research or legal argument. (BENCH-CAPON; ARASZKIEWICZ; ASHLEY, 2012, p. 9).

3.1 LEGISLATIVE REGULATORY PROVISIONS IN DIFFERENT COUNTRIES

The legal background of Artificial Intelligence remained unclear until recent years. Legal initiatives have been taken in South Korea to draft the Intelligent Robot Distribution Development and Promotion Act. (SOUTH KOREA, 2008). This act was introduced in 2008 and had as its main goal the promotion of policies of sustainable development of intelligent robots as well as their distribution laying the foundations for further (SOUTH KOREA, 2008). Although the initial act did not provide for a broad scope, South Korea turns out to have established some regulatory mechanisms in the field of Artificial Intelligence. The definition of Artificial Intelligence poses another problem of the field. Yet the Act referred to intelligent robots as mechanical devices, capable of perceiving the external environment for themselves, discerning circumstances, and moving voluntarily (SOUTH KOREA, 2008). Every five years, the government drafts a basic plan to ensure the achievement of the goals set out in the Act. (KARELOV, 2018, p. 46).

Through the Act in question, South Korea has provided concrete mechanisms for regulating the field. In addition to the basic plan¹ for achieving the objectives and goals set out in the Act, it provides for the establishment of a collegial body, the Policy Council for the Robot Industry, in the Ministry of Trade, Industry and Energy (SOUTH KOREA, 2008). The functions of the Council are expected to focus on drafting strategies and policies as well as consulting with stakeholders, technology agencies or companies, on policy making (SOUTH KOREA, 2008). The council would exercise its functions specifically only in relation to the field of Intelligent Robots, without involving other subjects of Artificial Intelligence. In terms of regulating the field, the Act has focused on defining an ethical status over intelligent robots. This status is regulated by the Charter on Intelligent Robotics (SOUTH KOREA, 2008).

The American continent is also “living” in the period of development of Artificial Intelligence. For the American legislator, the legal regulation of Artificial Intelligence is a challenge in itself. The focus of legislative efforts has always been on striking a balance between encouraging innovation and promoting development and protecting fundamental rights and freedoms (GREENE; HIGBEE; SCHLOSSBERG, 2020). “*National Strategic Plan on the Development and Research of Artificial Intelligence* (UNITED STATES, 2016) - The main goal of this plan is to set a series of objectives which promote research on AI, funded by the Federation, at governmental or extra-governmental level, at scientific academies (UNITED STATES, 2016, p. 3). The plan focuses on defining the strategies to be followed in order to guarantee the financing and development of Artificial Intelligence. Also, the Plan is based on the main assumption that supported by government funds, Artificial Intelligence will continue to grow in a unique and sophisticated way thus increasing the impact in various sectors such as employment, public safety, national security, etc. (UNITED STATES, 2016, p. 6).

Artificial Intelligence Initiative Act (UNITED STATES SENATE, 2019) - The primary purpose of the Act was to regulate Artificial Intelligence at the Federal level. Such a goal

¹ Article 5, paragraph 2 of the Act stipulates that: “Each basic plan shall include the following matters:

- Basic direction of development and distribution of intelligent robots;
- Medium and long term goals of development and distribution of intelligent robots;
- Issues related to the development of intelligent robots, the promotion of science related to them and the creation of a foundation for them;
- Issues related to the construction of infrastructure facilities necessary for the development and deployment of intelligent robots;
- Issues related to card practice on intelligent robot ethics.
- Issues related to the management of projects of central administrative agencies for intelligent robots;
- Other issues necessary for the development and deployment of intelligent robots”. (SOUTH KOREA, 2008, online).

aimed at unifying the practices followed by the states to regulate the field of research and development of AI. The bill is considered to include positive measures regarding the regulation of Artificial Intelligence by the US. The Artificial Intelligence Initiative Act is the most ambitious effort by Congress to advance the development of Artificial Intelligence in the United States (MCLAUGHLIN, 2020). Initially, the draft law defines the term “Artificial Intelligence” as a system that performs tasks under various and unpredictable circumstances without human supervision, or learns from experience and is exposed to data sets (UNITED STATES SENATE, 2019).

China is one of the countries with a high potential for the development of Artificial Intelligence. The technological development of this sector in China has gone to high levels as it is often considered a worthy competitor of the United States of America, being regarded as a potential leader in the international arena. The Chinese government considers IA an important component of the national strategy and plans to establish a legal regulatory system for Artificial Intelligence in the near future (NING; WU, 2020).

The Plan for the Development of the Next Generation of Artificial Intelligence (CHINA’S STATE COUNCIL, 2017) - The plan is an act of the Chinese government and declares China’s ambition to become the world leader in Artificial Intelligence by 2030, through the implementation of concrete strategies set out in the Plan. In terms of legal aspects, the Plan sanctions, inter alia, the aim of establishing a legal and regulatory framework around Artificial Intelligence as well as the establishment of ethical norms, a policy system and the formation of Artificial Intelligence security assessment or control capabilities (CHINA’S STATE COUNCIL, 2017, p. 5).

In terms of legislative positions in other states we can say that due to the evolution that Artificial Intelligence is experiencing, states today are undertaking numerous legal initiatives in an attempt to legally regulate the field. It is worth mentioning here the legal initiatives of France since 2016. Driven by the rapid vortex of the technological development movement, the French President considered necessary the initiative of ethical regulation of the field of Artificial Intelligence. As a result, a 2016 law was passed which gave the National Commission for Computer Technology and Civil Liberties the power to study the social and ethical behaviors of new digital technologies being produced (WASHINGTON, 2019). The need for a “control” was dictated by the authorities' fear of the negative consequences that the development and mass use of technology could bring, as they were located in a little-studied field. The commission presented a study in the form of a report (NATIONAL..., 2020) which addressed the most sensitive issues in the field.

Today, France has drafted a National Strategy (MOLTZAU, 2018) in order to promote the development of AI in the country. The strategy propagates France’s supremacy

in the field of Artificial Intelligence, hoping that among the numerous human resources² France would be able to return to a leading position of Artificial Intelligence. Among other things, the Strategy focuses on creating an ethical framework, supporting, but at the same time deepening the recommendations of the above-mentioned report.

4 DISCUSSIONS ON THE LEGAL PERSONALITY OF ARTIFICIAL INTELLIGENCE

The phrase “legal personality” means the ability of a subject of law to exercise rights and assume obligations, in a given legal system. When we mention legal personality, in the context of the law, what comes to mind are natural persons and legal persons as holders of this personality. In order to talk about the legal personality of Artificial Intelligence, the latter must meet certain criteria and go through several evaluation filters. The aspect of legal personality will be evaluated in relation to rights, obligations and legal responsibility. As for the ability of Artificial Intelligence to carry rights and take on obligations, we also addressed it in the preceding issue. If the AI were to be recognized as having full legal personality, then it could exercise ownership, enter into contracts, hold bank accounts, conduct legal proceedings or create, possess, purchase and sell intellectual property (SWINSON; SLATER; FOURACRE, 2020, p. 1). But along with these rights come responsibilities (SWINSON; SLATER; FOURACRE, 2020, p. 1).

Artificial Intelligence can not be categorized as a person within the meaning of the law. It is true that the creations of Artificial Intelligence are something that our legal system has never encountered before, they are neither property nor people (IMRAN, 2020). Many authors compare the legal situation of Artificial Intelligence today with those of the “quasi-person”³ that law once encountered. Many authors compare the legal situation of Artificial Intelligence today with those of the “quasi-person” that law once encountered. Referring to the legal personality of Artificial Intelligence, other jurists are of the opinion that as long as the discussion about the moral and ethical conduct of the AI makes sense, then the legal discussion on the recognition of the legal personality of Artificial Intelligence would also make sense (CHOPRA; WHITE, 2011, p. 4). Legal personality is an important step on the path to the full achievement of constitutional rights, because the moment the AI is recognized as a person, in the sense of the law, then the constitutional protection comes into play (WILLICK, 2021, p. 2).

² The term “human resources” refers to experts in the field and human knowledge.

³ “Quasi-person” - It is a term which was used in the context of the law to refer to those persons who were human beings, but in the sense of the law were not fully seen as such. So these people did not enjoy the same rights and responsibilities as the rest of society.

One of the rights and freedoms guaranteed in the Constitution is the right to free expression and opinion (ALBANIA, 2016, Article 22) In this case, the ambiguity lies in how this individual freedom will be manifested through AI. In the case of robots or any other device, freedom of thought does not appear to be totally independent. The problem becomes more complex when we treat SAIs capable of learning from their experience and making decisions independently, based on previous experience. Because of their ability to make decisions independently, systems-based technologies such as Machine Learning, Expert Systems or Neural Networks can no longer be treated as objects (CERKA; GRIGIENE; SIRBIKYTE, 2017, p. 2). However, the debate on the legal personality of Artificial Intelligence remains open, although the time has come for states to take action to regulate this area.

5 CRIMINAL LAW AND ARTIFICIAL INTELLIGENCE

When talking about the legal personality of Artificial Intelligence, the criminal responsibility of the latter is often discussed. By Artificial Intelligence criminal liability we mean the liability imposed on the AI at the time of the commission of a criminal offense by the latter. However, the question of whether or not Artificial Intelligence is criminally liable before the law has raised a great deal of debate. Among the legal arguments against the legal personality of Artificial Intelligence was the “inability” of AI to respond criminally before the law. But, in the case of Artificial Intelligence, even when the fact that an illegal action has been committed by the intelligence systems is proven, how does the latter stand in front of the definition of criminal responsibility?

We also noted that AI can not be considered a person, in the sense of the law, nor to wear the same rights or take on the same obligations. On the other hand, robots and Intelligence systems are being widely used by replacing man himself in many work processes. The most concrete example is that of the intelligent assistants found in our phones and who assist in the use of the mobile device or memorize the data and the activity that we perform between the phones.⁴ To analyze the *actus reus* element,⁵ it is necessary to identify the actors involved in the AI and its decision-making (CLAUSSEN-KARLSSON, 2017, p. 22). It is relatively simple to attribute an *actus reus* to an AI system (KINGSTON, 2016, p. 4). If a system takes an action that results in a criminal offense, or fails to take an action when it has the obligation to act, then the *actus reus* element of a criminal offense is

⁴ Apple mobile devices, for example, have an intelligent system installed that stores and assists in the use of the mobile phone by the user. This system is programmed to have verbal communication with the user, just like communication between people.

⁵ *actus reus* - in Latin, means the act or conduct unlawful in the commission of a criminal offense.

present (KINGSTON, 2016, p. 4). However, we must not forget that Artificial Intelligence operates on the basis of programming carried out in advance by its creator. This means that Artificial Intelligence can not perform any action that has not been “learned” before.

In the article “Criminal Liability of Artificial Intelligence Entities - from Scientific Fiction to Social Legal Control”, (HALLEVY, 2010) the author⁶ identifies three models of criminal liability. Seeking an explanation or orientation towards the creation of new criminal liability systems, dictated by the need for control over AI, Hallevy analyzes existing models by placing them later in the context of AI systems. The first model that Hallevy takes into analysis is that of the author through a third (perpetrator-via-another). This model applies in all those cases when the criminal offense is committed by an irresponsible person,⁷ within the meaning of the law, but who has been instigated in his actions by a criminally responsible entity. To better understand this model, the author has brought the example of criminal offenses committed by animals. In this case, if it is proven that the animal acts instigated by its owner, the latter will automatically be charged with criminal liability, according to the provisions made by law (RAHMAN; HABIBULA, 2020, p. 157).

The other model Hallevy mentions is that of natural-probable-consequence. According to this model, criminal liability arises in those cases when the programmer must take into account that the commission of the criminal offense is a possible consequence of the activation of the system and consequently do nothing to prevent this. This model implies the application of criminal liability again to the manufacturer of the AI if the entity plays the role of the physical perpetrator of a specific offense, but that offense was not planned, then the application of the liability model with natural-possible consequences may be more appropriate (HALLEVY, 2010, p. 193). The latest model of criminal liability is direct liability. As for the direct liability model, Hallevy argues that this model imposes direct liability on an AI system which has committed a criminal act. According to this logic, every Artificial Intelligence system is created for a specific purpose, the moment this purpose is proven or the AI no longer manages to act according to this purpose and we are facing a legal violation, the activation of the institute of criminal responsibility will be done the same as in humans. From the analysis of the three models mentioned above, I think

⁶ Gabriel Hallevy (1973), is a professor of criminal law at the largest law university in Israel. He is the author of many books and various legal articles on criminal law and Artificial Intelligence, which today are known and studied in many countries around the world.

⁷ Persons who in the sense of the law do not bear criminal responsibility are minors who have not reached the age of criminal responsibility or persons suffering from mental health diseases or carrying other qualities according to legal provisions.

that the author's suggestion⁸ for a combination of the three in determining criminal liability against the AI, would be more appropriate, as the cases that may be presented for solution are not similar and each circumstance will have to be analyzed specifically.

5.1 CAN LEGAL SANCTIONS BE APPLIED TO ARTIFICIAL INTELLIGENCE?

The analysis of the issue of Artificial Intelligence criminal liability can not be considered exhaustive without further evaluating the manner of punishment of an intelligent system, responsible for committing a crime. If state legislatures recognize and recognize criminal liability systems of AI systems, they can not be content with just that. Criminal liability is accompanied by the application of sanctions, simply put, the punishment of the culprit which in this case would be a technological system. Sanctions are aimed at rehabilitating those who commit a violation of the law, but in the case of Artificial Intelligence the application of sanctions can we say that it has the same purpose? The possibility of direct punishment of Artificial Intelligence is getting more and more attention both from the press and from legal scholars (ABBOTT; SARCH, 2020, p. 104). A study on people's credibility of the effectiveness of Artificial Intelligence punishment proved that people do not perceive that the application of sanctions against Artificial Intelligence fulfills its goals, except when it comes to reform (LIMA *et al.*, 2020, p. 6). Positive attitude towards reform shows that people see correcting the behavior of electronic agents as achievable. (LIMA *et al.*, 2020, p. 6).

Regarding the application of criminal sanctions against Artificial Intelligence, one of the main supporters of this theory is again Professor Gabriel Hallvey, who drew a parallel between the main criminal punishments known today by most of the legislation in the world and their application to intelligent systems. Characteristic of Hallvey's arguments is the fact that he always appears supportive of innovation and the creation of new opportunities. Regarding the punishment of AI, the professor emphasizes that if the criminal responsibility of these systems is felt, the need for punishment is inevitable. In his analysis⁹ and supported by many authors, it is argued that the most common penalties are applicable to AI entities (HALLEVY, 2010, p. 199). In the numerous list of cases that have been presented before the Courts in the world, it has happened that among them there have been cases when it had to be decided on the responsibility of Artificial Intelligence,

⁸ These models can be used in combination in order to create a complete image of criminal responsibility in the specific context of the involvement of the AI entity. None of the three models defines the other reciprocally.

⁹ Gabriel Hallvey's views on Artificial Intelligence and the application of criminal law have served as a reference point for the subsequent work of many authors in addressing similar issues.

born as a result of violation of a legal norm. Judicial practice seems to have represented the idea of innate liability to the service provider and user of Artificial Intelligence, when the latter is likely to have been involved in an activity that violates or violates the law (CURTIS; PLATTS, 2020).

6 SOME OF THE FUTURE LEGAL CHALLENGES OF ARTIFICIAL INTELLIGENCE

The main topic of discussion that arises in terms of Artificial Intelligence in relation to the law is that of the legal personality of the AI. Legal personality and legal regulation of the field of new digital technologies is one of the biggest legal challenges. Legal regulation of Artificial Intelligence remains one of the most important legal challenges for years to come. Challenges to legal doctrine would be more specific to find answers through remodeling the existing legal framework (ISLAM, 2018, p. 266). This means that if Artificial Intelligence becomes part of the legal system, the legal changes it will bring to the system are inevitable.

Another future challenge that remains open to the legislator is that of the legal personality and legal status of the AI. As Artificial Intelligence is being widely used in every sector of life, often replacing even the procedures performed by man, its legal regulation is becoming a necessity and necessity. To avoid such legal gaps, the EU parliament proposes that more complex robots have their own personality, which would give them a range of rights and obligations and apply in cases where robots make autonomous decisions or otherwise interact with third parties independently (IURICORN, 2019). However, such an approach remains in the assessment of states and still unresolved definitively.

The widespread use of technology has faced the law with another challenge which is that of data protection and guaranteeing cyber security. Not infrequently the technology is misused causing cyber attacks and misuse of data generated through AI. The more Artificial Intelligence is developed, the greater the risk to privacy and cyber security. Currently cybercrime and personal data are considered as sensitive topics and as such states have created a special legal framework in terms of guaranteeing a high level of protection. The United States of America (CYBERSECURITY..., 2018) and the European Union (Regulation 2019/881 of the European Union, 2019).

7 CONCLUSIONS

Artificial Intelligence is the most sophisticated and innovative form of technology today. Its development seems to aim at facilitating our daily lives through the simplification

of work and procedures performed mechanically by man. There are many definitions on the concept of Artificial Intelligence, however no unified and legal definition. Since the creation of the first computers, when the concept of Artificial Intelligence began to be encountered, and to this day the concept of forms and intelligent systems has changed dramatically. The term “Artificial Intelligence” means the ability to think independently, just like a human, but faster and more efficiently. Artificial Intelligence is based on technology and has the ability to perform those mechanical processes, which man would need more time and fatigue to perform, in a faster and more accurate way.

For years now, forms of AI have been used in various sectors in order to facilitate the way of life and the way of doing things for man. Man is clear about the benefits and benefits that the application of Artificial Intelligence brings and is constantly striving to improve new technologies to then place them in order to meet his needs. Artificial intelligence today is found everywhere, in all its forms of manifestation. However, in addition to the many advantages that intelligent systems have brought to our lives, we are aware that the use of Artificial Intelligence is also associated with major disadvantages. Different scholars have different opinions regarding the importance and impact of AI.

Over time, the concept of Artificial Intelligence has evolved. There is still no proper legislative framework on Artificial Intelligence, however the time has come for states to do something regarding the legal regulation of this field. Given the great development that technology and AI is undergoing, while appreciating its widespread use or impact in various fields, it can be said that the time has come for countries to move towards creating a proper legal framework AI regulators.

Despite not having a consolidated legal framework, states have made the first efforts in drafting legal acts and norms governing the field of Artificial Intelligence. From the concrete analysis of existing legislative acts in many countries, we conclude that the intention of the legislator in trying to regulate the field of Artificial Intelligence arises as a result of the disadvantages of using these technologies, their widespread use and ability to influence the way of the development of many processes. Another element that is noticed from the analysis of the legal norms presented in the thesis is that the adjustment made through them is minimal. No legal act regulates in detail and exhaustively the forms of Artificial Intelligence. These legislations are in the first stages towards establishing a proper regulatory framework in the field of Artificial Intelligence.

Another issue that arises on the basis of the legal personality of Artificial Intelligence is that of criminal liability and damages caused by autonomous Artificial Intelligence or its use by third parties. From the analysis of the possible legal personality and the way of functioning of the AI it is recommended that the most appropriate model of determining

the criminal responsibility would be that of the responsibility born to the person developing or programming the Artificial Intelligence through which the damage was done. The same logic would work in terms of civil liability arising at the time of causing a damage. Experience and practice have shown that Artificial Intelligence can not be considered completely reliable. This fact should serve as a warning sensor for states in strengthening legal regulations in order to prevent illegal acts and undesirable consequences between the application of AI. Many scholars recommend creating a system of punishment for intelligent systems that are “involved” in committing various legal violations. This can be a good way to prevent the negative effects that the use of AI may bring in the future.

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