

# The role of digitization in the architecture of the judicial system in Romania, between sustainability and innovation

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## Abstract

Since we are at a turning point, i.e. the moment when traditional justice is being replaced easily, easily by digital justice, we considered it opportune to analyze the way in which the judicial system is being reformed, the implications that new technologies have on law, as well as the need adapting it to all the changes imposed by the evolution of society. This article does not aim to present a generalized and rigid picture, but represents our vision of how digitization is reflected in everyday life, as well as the challenges we have to face in this context. We are not too optimistic to say that we are lucky to live in an age of technology, where artificial intelligence intertwines with human reason, forming a duo destined to make our lives easier. Today, people are surrounded by technology, giving rise to a synergy that was hard to imagine at the beginning of this millennium. Technology, which a few decades ago was only present in science fiction films, has today reached everyone's reach, becoming an integral part of the everyday life of most people.

**Keywords:** digitization, judicial system, innovation, sustainability, advantages, risks.

## 1. Argument – warning: legal perspectives on technology are worrying, law at the confluence of two worlds: where to?

I woke up as I do every morning, a little after six o'clock. I was determined to write my article for the 11th Smart Cities International Conference (SCIC), December 7-8, 2023, organized by the Faculty of Public Administration, Smart-EDU Hub of the National University of Political Studies and Public Administration, but I didn't know which topic to choose since the distinguished organizers offered us almost ten panels. I start to get out of bed and my eyes fall on the bedside table where the pile of books to read has risen slightly. I don't like it when this happens because it means I'm going through a hectic period where I don't have much time left for reading. That is, exactly the madness that I have been experiencing lately. And just like that, I started browsing through a recent and substantial volume. This is a shocking book: "The Real Anthony Fauci, Bill Gates, Big Pharma and the Global War on Democracy" written by Robert F. Kennedy Jr., a book designed to show you the world for what it is: vile to the core. You just read and you can't believe what you read. You pinch yourself to make sure you're not dreaming. You even end up wanting to find proof that the author is fabulating. It just turns your whole worldview on its head. You can't believe there are such vile people. And what you find is not only that they exist, but that they are only the tip of a terrible evil system. And furthermore, why are absolutely all his actions blindly copied all over the world? [1]

For most of us, Fauci – this sinister figure – seems out of the picture now. This is because we were not connected to the realities there. It is to Robert Kennedy's credit that he has a

terrible memory and terrifying information. Every word in his book is effectively overwhelmed by evidence. What Fauci is doing now is nothing but the same criminal line he has been practicing since his youth. And his association with dubious characters, such as Bill Gates, is nothing more than a demonstration that the “law of attraction” between like-minded people works flawlessly. Did you know, for example, that Fauci has financial interests in Moderna? No, no one else knew that. Did you know that the CDC spent \$79 million in public money to develop Redemsivir? Gilead is the company that holds the patent for Remdesivir, and coincidentally, the Bill & Melinda Gates Foundation (BMGF) purchased over \$65 million worth of stock in this company before the company's stock market explosion. Can you imagine, however, the level of perplexity of these scoundrels when serious doctors and scientists came up with generic treatments for the so-called killer virus? They, the conspirators, had been planning the coup since 2009 to earn money ruthlessly. How do you feel when some idealists threaten to screw up your plan? What does it mean to treat with hydroxychloroquine when they had prepared for the “miracle treatment” a price more than 1000 times higher than the generics? Thus, a whole well-financed machine goes into action. Kennedy explains the nefarious way Fauci's criminal network was able to eliminate cheap treatments by falsifying scientific reports. For example, in the medical world it is already an axiom that hydroxychloroquine is toxic. Why? Simple: medical tests regarding its effectiveness have been criminally falsified. The patients on whom the “studies” were done were administered lethal doses of hydroxychloroquine. While the standard treatment prescribed doses of a maximum of 400 mg/day, Fauci's gang used in the so-called scientific studies doses of 1200 mg/day on day 1 and doses of 800 mg/day on the following days. No wonder patients died. In fact, they were deliberately killed to remove a cheap treatment. And this is murder!

As for deaths from the vaccine, to minimize the number, the CDC changed the methodology for counting deaths. Thus, death caused by the vaccine is considered to be only the death that occurred a maximum of two weeks after the administration of the second dose! To top it off, many of those who died from the vaccine swelled the ranks of the... COVID deaths from a “deficiency in reporting”. A few years ago, Bill Gates was explaining how he made more money from vaccines than from IT. That statement has disappeared from everywhere. It was simply deleted. Before I end, I recommend all those who love the truth to skim through Robert Kennedy Jr.'s book. Despite the fact that it is a tough book, it is a wealth of information that reveals the world in which we live. Good to know so we can see what's next. The Fauci case has a correspondent, of course, also in Romania, where the totally independent media or the opposing voices of the lying and criminal official narrative, have been placed on true blacklists by the local faucs and scumbags, with the aim of being eliminated from the public space. Government or other bribed media trusts para-governmental propaganda means, such as the Ro Vaccinare propaganda page, a so-called NGO Eurocommunication or even a “laboratory” that operates by infiltrating under the roof of the Romanian Academy, were part of the huge manipulation and disinformation machine and could now have of paying huge compensations for the public damages caused to those who revealed the truth about the Covid Affair. In this regard, we remind you of the Eurocomunicare scam, the NGO led by former “Era Socialista” employee Paul Dobrescu and some big mouth Alina Bârgăoanu, who obtained two million euros from the General Secretariat of the Government by direct entrustment for the “strategy of communication” of the Government regarding the failed

Covid vaccination campaign. Millions used to organize online conference calls, bribe propagandists and pandemic actors, commission fake polls and draw up fake blacklists of independent publications and personalities accused of “fake news”. Lawyers must do their job against mercenaries of the alien occult, traitors to nation and country. As for the author of these lines, I have no intention of stopping. The problem is that, if in a first phase I will most likely be able to bypass the censorship, in a later phase I probably won't be able to do it anymore. We will see then what can be done. Remember, however, that the worst stage of history begins in which, as a result of current technologies, absolutely all the sick ideals of the tyrants of the past can be implemented without the risk of failure. Any abuse, any injustice, any madness can now become a reality, and people will have only one option: to obey. Unfortunately for us, we are once again in the unfortunate boat of history, once again being denied the possibility of at least delaying the madness of the psychopaths who rule the world. How natural, how natural! I actually trembled because I understood the madness we are doing to ourselves. Everything is so simple, and we complicate it out of the desire to “clarify the simplicity”, ending up in a labyrinth from which we no longer understand anything. Without a doubt, “The Real Anthony Fauci, Bill Gates, Big Pharma and the Global War on Democracy” has the merit of making our escape from the labyrinth we are wandering through easier, connecting us to a spirituality forgotten today. I simply felt deeply struck by the truths I have read so far, and this makes the discovery of some stories even more surprising, like some unexpected illuminations in the fog we are wandering through. I end here the introduction of the study, encouraging you to discover the right path! Not before arguing why I chose this title and why exactly Antonio Fauci. Simply because technology and the legal system have entered a dangerous zone, and the legal outlook on technology is worrisome. Law is at the confluence of two worlds: sustainability and innovation where?

## **2. Accelerating innovation and its impact on the sustainability of the judicial system**

The insiders know that law represents a set of rules of conduct, which, in a society, regulate relationships between people (objective law). The term equally designates the prerogative, power or faculty recognized by civil law (subjective law). Thus, the present study is not only a set of reflections, some containing criticism, but also personal contributions of the authors produced by the transition – perhaps quite sudden – brought by digitization to traditional principles and practice, trying to make a contribution both in the theoretical sphere, but also in the practice of the subject addressed. A unitary approach leading to the guarantee of good justice and good governance, these being state obligations that must be received in a democratic society because justice and governance represent the most important public services under the spectrum of the dematerialization of traditional activities, through the effect of digitalization which can affect their sustainability. According to Wikipedia, sustainability is the ability to constantly exist. In the 21st century it generally refers to the ability of the biosphere and human civilization to coexist. It is also defined as the process of maintaining change in a balanced environment of homeostasis, where the exploitation of resources, the direction of investment, the direction of technological development and institutional change are all in harmony and enhance both current and future potential meet the needs and human aspirations [2], and Dex on line, states that it is a characteristic of an activity to be able to be carried out over a long period of time [3]. Since we are at a turning point, i.e. the moment when traditional justice is being replaced easily, easily by digital justice, we considered it opportune to analyze the way in which the judicial system is being

reformed, the implications that new technologies have on law, as well as the need adapting it to all the changes imposed by the evolution/involution of society. This article does not aim to present a generalized and rigid picture, but represents our vision of how digitization is reflected in everyday life, as well as the challenges we have to face in this context. I am not too optimistic that we can say that we are lucky to live in an age of technology, where artificial intelligence intertwines with human reason, forming a duo destined to make our lives easier. Today, people are surrounded by technology, giving rise to a synergy that was hard to imagine at the beginning of this millennium. Technology, which a few decades ago was only present in science fiction films, has today reached everyone's reach, becoming an integral part of the everyday life of most people.

Its emergence and rapid development led to the progress of society on multiple levels, but it also came with challenges and anxieties that began to sprout in our souls. As the process of technologization has expanded in countless directions, capturing every bit of our lives, people have had to adapt to new trends and evolve with new technologies. We have reached the point where the Internet and smart devices have taken on the role of being our best friends and helping us to solve the problems we face in our daily life more easily. We find digitization in everything that surrounds us, in all the fields and activities in which we take part. Thus, it was inevitable that the impact of new technologies would not spill over into the judicial system, bringing with it a series of benefits and challenges that all participants in the act of justice must face, including us, the lawyers. In what follows, I have proposed to initiate a journey in which the stations will be represented by the most important changes that reflect the impact of new technologies on the Romanian judicial system, analyzing at the same time how the legal system must keep up with them. [4]

To fully understand the implications of innovation, i.e. new technologies and the transformations they produce for the entire society, we must first understand what artificial intelligence means. “Artificial intelligence is one of the most profound concepts we work on as humanity, it's deeper than fire or electricity,” said Sundar Pichai – CEO of Alphabet at the 2020 annual meeting of the World Economic Forum in Davos, Switzerland . “I believe we are working on one of the most world-changing technologies our industry has ever seen. Our biggest investment is in the development of artificial intelligence and its integration into each of our products”, said Mark Zuckerberg – CEO of Meta, on the company blog (2023). As everyone already knows, Silicon Valley is considered the center of the world when it comes to developing the technologies of the future. Artificial intelligence has occupied a particularly important place in the research and development strategies of the most influential companies out there, and obviously not only. Top executives like the ones quoted, and many others, as we'll see throughout the article, have said that artificial intelligence forms the core of the operations of the companies they lead— it's the driving force behind their research and development strategies. As early as 2016, it was claimed that “we will soon move from a mobile-based world to an AI-based world”. The question that arises in this context is: what has generated the change and what is the nature of this continuous transformation? [5]

A possible answer would be astonishing: lived reality, what we used to see in science fiction movies is happening today with them, with us and everywhere. The man did not change,

but he found a friend with unsuspected powers. We pride ourselves on this harmless friend for the time being, hoping that he will not forget his demiurge, given that this “machine” undeniably surpasses us in calculation speeds, reactions and prognostications. What is happening and why has Artificial Intelligence become today an unprecedented technological landmark of paradigmatic change in all areas of life? AI is the epochal equivalent of the discovery of the steam engine, perhaps even more, a field in a major and irreversible evolution for mankind. This engine runs on intelligent algorithms that are there to learn by themselves, and that will eventually develop towards the boundaries of science fiction imagination. It is known that AI can analyze huge amounts of data and make decisions in fractions of seconds, which makes it even more valuable, sometimes unpredictable in fields such as medicine, finance, transportation and more. In medicine, for example, there are important indicators. AI x-rays and interprets with precision unimaginable to the human eye, using screening on any part of the human body, at any depth, identifying diseases that cannot be detected early on by any CT, MRI, etc. Simply put, AI research in medicine has been unexpectedly helping to diagnose, treat, as well as significantly reduce costs associated with the healthcare system, effortlessly, in a second, cheaply, and all can be prescribed on the screen a phone. From the first contacts with this field, we wondered why it would be important to understand such an area from the perspective of the development of the legal system. First, AI can be a great tool for those interested in analyzing the social behavior of individuals and social issues in general. For example, AI can be used to analyze data on discrimination, social inequality or poverty, help identify and understand the causes of these problems, and generate effective mathematical solutions. Also, AI can be used to monitor and evaluate the effectiveness of social interventions, which seems like another huge advantage, when using the right algorithms it learns to become self-taught, generating and regenerating better and better solutions. Knowledge and understanding of AI technologies helps the specialist develop the necessary skills to use intelligent tools in sociological research and practice, as well as in social work, providing additional career opportunities. In terms of data analysis, AI makes a difference when it comes to Big Data, regardless of size, impossible to quantify otherwise. Auto-generating an automated map of the data allows, subsequently, to quickly identify and understand the causes of the phenomena addressed and, obviously, a step with little effort to consolidate the best solutions. Another quality of this technology lies in possibility to make predictions, a way to identify the best decisions and develop prevention policies based on them. Complex processes of monitoring and evaluating public policies can be greatly facilitated when we use the path of AI tools. Another advantage is the speed of work, identifying the right patterns and measurable trends in big data about social behavior and social problems, providing valuable insights for researchers and practitioners. Last but not least, data personalization through AI can be successfully used in social interventions for people's individual needs, supporting the effectiveness of all research processes. All these advantages contribute to improving quality of life research by systematically identifying and visually understanding social problems, as well as by forecasting and developing effective interventions, and the list goes on. The important thing is to perceive the AI universe as a tool that makes our work easier on the one hand, and on the other hand gives us the chance to easily control the Big Data universe.

AI is already changing people's lives in society. From the perspective of the common man, we would only dwell on a few aspects, for example, in the case of work, AI can automate

a vast area of activities that are done manually, providing speed, quality, precision and efficiency in many industrial fields, but obviously, it can also have a negative impact on jobs, and here we don't have clear answers yet. Services can use a number of enhanced and personalized processes, such as health services, education, transportation, economy, etc. For example, in the medical field, in the case of diagnosis, AI can help doctors generate personalized treatment decisions. AI can monitor patients remotely, such as through computerized systems or by analyzing real-time data, monitoring the first signs of healing or worsening disease. We can see how a simple mask with specific sensors offers the possibility to accurately read the bio-chemical data produced by a patient's breath, keeping the doctor informed of any evolution of health indicators. Of course, not everything is perfect because depending on the quality of the programmed algorithms depends on the accuracy of these supercomputers to provide the right feedback or give errors. Everything revolves around the infinite possibilities of machine-learning and deep-learning programs, and from a communication perspective, AI can improve the way people communicate with each other, such as through virtual assistants or automated translations. [6]

In another key interpretation, that of security, AI can be an advantage or a great pitfall for security systems. Doors are opened by analyzing behavioral data or facial recognition. In the transportation industry, AI can be used to optimize delivery routes and improve logistics efficiency. In the field of energy, AI can be used to manage and optimize energy consumption saving money, and AI is already being used to monitor and prevent climate phenomena and prepare communities for emergencies. However, AI can also have negative effects, such as increasing inequality, discrimination, or increasing privacy and security concerns. Therefore, it is important to take steps to manage these unwanted effects and ensure a symbiosis between human and AI with as little damage as possible. In a stage conclusion, AI is a technology of the future that we already have with significant potential for everything from research, to innovation, to issues as diverse as business efficiency, improving health, and understanding human behavior and social interactions. In addition to all these benefits, researchers can learn and use algorithms, analyzing important data from social networks, such as posts on Facebook or Twitter in order to quickly and comprehensively understand how people react to certain events or how certain news or ideas spread. Let's not forget surveys and questionnaires that can be applied with the help of bots programmed to perform certain functions, saving time and money. Governments and most businesses today can learn quickly and at low cost how to adapt their products and services to consumer needs and trends. However, it is important to remember that AI is not a magic solution to all problems and that a responsible approach is required. AI opens a door for everyone. Next to us, someone is too fast and smart, and we might be lazy, but one day it can destroy or save us, we decide how we use it. [7] Let's choose the optimistic option and, in that hypothesis, analyze the digitalization of justice from the perspective of the demands of the law and the political desires.

### **3. Digitization of justice – between the requirements of the law and the desires of politicians or about telematic justice and computer justice**

#### ***3.1. Some terminological clarifications***

The existence, already, of some doctrinal concerns regarding the issue of the modernization of the judicial act and the use of new technologies in the judicial process makes it easier

for us to clarify some terms and expressions that appeared in the various studies and interventions of legal specialists in the online environment, positioning in favor of innovation in such a conservative field as that of justice, by introducing information and communication technologies. Innovation and recourse to these new technologies are necessary and natural, being closely related to the evolution of the social environment, the increased technologization of all social sectors and the rapid development of Artificial Intelligence. The introduction of the new, although it is obviously and instinctively met with reluctance, can neither be stopped nor temporarily limited (accepting the use of these technologies only in exceptional periods), because sooner or later we will inevitably realize its undeniable advantages.

The issue of AI, information and communication technologies and their benefits for the justice system could not be addressed in a complete manner without bringing ab initio into discussion, new concepts, such as telematic justice [8], computer justice, E-justice, more and more circulated and applied at the level of every modern state. These new concepts have as a binder a modern philosophy of justice, which puts the citizen and the quality of the justice act at the center of its concerns. [9] Since we have found that in the online environment various terms and various expressions are sometimes used as synonyms – telematic justice, IT justice, electronic justice, digitized justice – we believe that a clarification of their meaning is essential to avoid confusion and establish clear categories of analysis.

### ***3.2. Telematic justice***

Telematics is that scientific and technological discipline that analyzes and implements services and applications that use both computer and telecommunication systems, as a result of the union of both disciplines [10]. The term “telematics” is a compound term and comes from the fusion of the terms “telecommunications” (“tele” – prefix from the Greek *lb.* meaning “far”, or “remote”) and “informatics” (discipline that refers to the practice of processing information). The term “telematics” was first used by Simon Nora and Alain Minc in 1978 in the paper “The Computerization of the Society” [11]. Any type of communication via the Internet or via the global positioning system (e.g. sending an e-mail to another country) is considered a telematics application, which ensures the transmission long distance information. This term is used for a wide variety of commercial and non-commercial purposes and, very recently, in the judicial field.

The judiciary is the third pillar of the rule of law, being subordinated to principles such as equity, impartiality and independence. The nature and importance of the judicial system calls for special attention from public and private actors when the question arises of making structural and procedural changes, such as those determined by the introduction of new technologies in justice and the judicial system. Faced with numerous problems – rising legal costs, increased trial duration, difficult management of an ever-increasing number of cases – the judicial system has the choice between the following three main strategies:

- a) To increase the administrative staff and the number of judges. By doing so, they increase the costs of the legal act by increasing the salary costs with the related staff, providing the necessary infrastructure (offices, computers, etc.)

- b) To change the rules and procedures related to the realization of the act of justice. Such a strategy requires time and also additional costs, since the adoption of new legal provisions in the field or the modification of existing ones requires the completion of some preliminary stages that will culminate in the adoption and publication in the Official Gazette of Romania of the respective normative acts, the legislative process being cumbersome, “chronophagous” and not without errors [12].
- c) To make investments in information and communication technology (ICT).

The use of ICT is considered one of the key elements that could significantly improve the administration of justice. The rapid development of technology opens up new opportunities that were unthinkable a few years ago. Around the world, several statutory reforms have been introduced that allow the use and exchange of electronic data and documents within national judicial systems, as well as between them and supranational courts. The availability of web services, the possibility of consulting legislation and jurisprudence online, the use of electronic archiving, the electronic exchange of legal documents, are just a few examples that stimulate the judicial system to rethink and fundamentally change its organization and activity. ICT can be used to increase efficiency, access, timeliness, transparency and accountability, helping the judiciary to deliver quality services at low cost. “The use of the Internet can offer the chance to open the judicial system to the public, providing both general and specific information about its activities, thus also increasing legitimacy” [13].

Telematic justice is a contemporary construct that is based on a technological architecture that allows the remote execution (online) of some operations such as archiving documents, sending communications and notifications, consulting the status of proceedings using the online register, consulting files and jurisprudence and even making of remote judicial processes and procedures through online means of communication, operations that previously could only be carried out by physically visiting the headquarters of the judicial authorities involved. Telematic justice is not to be confused with electronic justice, electronic justice representing the proximate genre, because all other categories – telematic, computerized and digitized justice – presuppose the existence of an included electronic component [14].

Telematic justice is not to be confused with the concept of E-Justice, created by the European Commission. The development of E-Justice is seen at European level as a key element in the modernization of national judicial systems, and a standard in the realization of the national and European justice act. E-Justice is actually electronic justice that includes both easy and fast access to information of a legal nature, as well as the rapid transmission of documents and procedures, i.e. both telematic and IT justice, digitalization being the common element. Thus, since the creation of a judicial portal in civil and commercial matters in 2003, the Commission has supported the implementation of an atlas of justice in criminal and civil cases to enable practitioners to determine the appropriate judicial authorities in different parts of the EU. The Commission considers that the first objective of E-Justice is to increase the effectiveness of justice throughout Europe for its citizens and that the development of an electronic signature (E-signature) and an electronic identity



(E-identity) is a priority, which are extremely interesting from the point of view of the challenges to which the judicial system is subjected. Therefore, telematic justice is the concrete way by which the E-Justice standard is achieved. E-Justice is a European concept, while telematic justice represents a new way of organizing and carrying out justice worldwide.

### ***3.3. Computer justice***

Computer justice uses Artificial Intelligence (AI) as a decision-making factor in the act of justice and involves the use of AI algorithms at various stages of the judicial process. One of the applications of computer justice is the use of IT tools for criminal risk assessment (e.g. COMPAS – Correctional Offender Management Profiling for Alternative Sanctions, IORNS – Inventory of Offender Risk, Needs, and Strengths, OST – Offender Screening Tool, STRONG – Static Risk and Offender Needs Guide, etc.) of recidivism or violent behavior in order to provide logistical support to the judge who has to decide on preventive measures, the individualization of the punishment, the individualization of the execution of the punishment or conditional release in the case of accused/convicted persons [15]. These tools provide essential information to the judge by processing a significant amount of statistical data and classifying the defendant/convict into certain behavioral typologies. Although they also have shortcomings, being criticized for perpetuating discriminatory patterns (e.g. people of color have a statistically higher risk of recidivism than Caucasians) these electronic criminal risk assessment tools are widely used in the United States, Canada, Great Britain, France and in other countries, as they increase the degree of objectivity of the decision-making act. At the same time, computer justice also involves the use of artificial intelligence algorithms, as electronic judges or, as they were called in the media – “robot judges”, it is true, only on an experimental level at the moment and only for small civil cases importance.

### ***3.4. Digitized justice***

Telematic justice is not to be confused with digital justice either, because digital justice is a component of telematic justice, but also of computer justice. Digitized justice involves the use of artificial intelligence algorithms in the organization, management and implementation of justice operations, by transforming analog information into numerically coded information. Digitized justice includes both the communication between the actors involved in the act of justice via email/internet, as well as the storage of the resulting data and their processing in order to obtain relevant indexes that will then be used within the computer justice system (e.g. storage of court decisions and ordering according to of different categories – the court, territorial jurisdiction, material jurisdiction, pronounced solution, etc.). Although at first sight there is no difference between the terms informatics and digital/digitized, their association with certain categories can change their meaning. According to dexonline, to digitize is to convert analog signals into digital signals. Therefore, there is a difference between computer justice and digitized justice, computer meaning mathematically transposed information and, in common language, it is synonymous with IT (information technology – Information technology). [16] An IT justice or computer justice involves the use of information technology to achieve its goals. Digital justice is software-based and client-oriented. The digital transformation of justice is a strategic transformation in which litigants' preferences and behavior determine the

technological decisions of decision-makers regarding the organization of justice. The IT transformation of justice would entail “a complete overhaul of the organization's information systems (IT). IT transformation can involve changes in network architecture, hardware, software and the way data is stored and accessed”. Differences can therefore be identified between the IT transformation and the digital transformation of justice:

- IT transformation focuses on IT priorities, while digital transformation focuses on the priorities of litigants and agents involved in the delivery of justice.
- the IT transformation has a clear, well-defined end result (e.g. the introduction of software for the systematization of judicial solutions). Digital transformation is an ongoing process of better addressing changes over time and therefore does not have an end result [17]. In other words, digital transformation or digitization implies the continuous adoption of new, increasingly advanced digital technologies to improve procedures. Digitized justice involves the modernization or adoption of new technological systems, platforms and software solutions to meet the needs of the agents involved in the execution of the act of justice and the litigants, generating tangential benefits for the system, including more corrections, faster solutions, shorter response times , improved user experience, etc. [18].

#### **4. Digital responsibility, myth and truth**

##### ***4.1. Specific matters***

In order for new technologies to be favorably received by those on whom they have a daily impact (users of public services, consumers, patients, litigants, etc.), it has become necessary to develop a general law of algorithms, so that their function be exercised in accordance with the law. In other words, to build a robust and predictable AI norm that ensures imperative societal control over algorithms, we need to put law back at the center of the normative process. We have fundamental rights at the forefront of the hierarchy of norms of many states and international texts (that of human dignity, equality and non-discrimination, the right to private life, the right to the protection of personal data, the right to a fair trial and the presumption of innocence, etc.) , which are neither negotiable nor optional, unlike ethical goals or ideals. Therefore, it is time to give priority to the law, and the content of legal norms must be thought in the sense of a responsible and inclusive AI. Since it is necessary to regulate AI by law, an interdisciplinary approach is required, involving lawyers, mathematicians and computer scientists, to make it possible to integrate the particularities of AI into law. The highly complex methods of AI generate social risks, forcing the jurist to understand the technique when developing the rule and then when applying it [19], and the social acceptance of the use of algorithms is closely related to the attribution and distribution of responsibilities in case of damages . In the presence of self-learning AI systems, one of the main difficulties is defining a responsible framework relative to foreseeable social risks. Artificial intelligence is the culmination of a complex chain of activities, requiring the intervention of several categories of producers and operators; this means that tasks must be clearly distributed and tracked: the designer must know his legal and ethical constraints, transcribe related instructions into algorithmic code. It is therefore necessary to have appropriate legal regimes for the links of a whole chain of responsibility:

- the responsibility of the designer for damages caused by incorrect initial programming;
- responsibility for insufficient vigilance during the operation of the algorithmic tool;

- the user's responsibility for damages caused by manipulating the algorithmic tool;
- responsibility for damages caused by the functional autonomy with which the algorithm was endowed at the time of manufacture, which it developed during learning and throughout its operation, etc.

It is up to the law to alleviate the difficulties of tracing the chain of causation and to facilitate the designation of the debtor of the obligation to repair the damage, in order to avoid a dilution of responsibilities. Until recently, the classical rules of civil liability were able to meet the needs of the evolving society. Digital legal liability – combined with the revolution in mathematics and technologies, which directly affects transport, education, health, justice – is already implemented by resorting to the classic rules of civil liability (tort, non-contractual, contractual), administrative, criminal, disciplinary. However, the upheavals generated by digital technology in human activities (robotics, telemedicine, predictive justice, education, autonomous aircraft, drones, nanotechnologies, etc.), are such that the classic law of liability may fall into obsolescence. In the fields of privacy, protection of intellectual property (software, applications), loss or destruction of data, computer failures that paralyze large companies, cybercrime, complex issues arise in terms of civil, criminal and administrative liability, against the background of an unprecedented increase in damages digital of all kinds.

According to the classic distinction, liability can be contractual or tortious, depending on whether or not the AI system is designed/used within a contract. Tort liability regimes seem to suit AI systems by considering AI to be an incorporeal 'thing'. It is appreciated that, in particular, liability for defective products can be used as a basis, with some adaptations of the concepts of “product” or “defect”. However, the unpredictability and autonomy of some systems do not fit well with liability regimes for the “fact” of things, and human-machine interaction causes permanent adaptations of systems. The “thing” in question is more active and autonomous than in the cases traditionally covered by these liability regimes [20]. Hence, the relevance of an analogy with indirect liability for the act of others (for children and animals); but such an analogy is difficult to hold, in the absence of the living nature of systems. [21] Of course, liability for damage caused by things, especially in the case of defective products, can still be invoked, for a transitional period. It remains to be seen whether these rules will ensure, in the long term, a satisfactory legal balance, when the victim-claimant will encounter major difficulties in accessing various digital techniques to prove their causation with the damages suffered. Likewise, in the course of digital justice (predictive justice that anticipates and presents to lawyers the likelihood of judicial decisions, software that helps magistrates decide on the parole of convicts, etc.), new types of responsibilities could be envisaged, associated with damages specific to digital technology and new types of evidence, both in terms of court officials using these new techniques and in terms of the emergence of new “actors” (start-ups, IT specialists, robots which partially replace lawyers and magistrates). For example, in the matter of evidence, the digital traceability of all actions taken by the parties to a contract, influences the distribution of responsibilities in the case of interdependent activities that led to the harmful action, etc. [22] And all this under the conditions of responsibility whose ex ante and ex post connotations we try to discern further.

#### **4.2. *Ex ante liability***

In order to generate social trust in AI, accountability must exist *ex ante* ("conditions of admissibility") and *ex post* (after AI harm occurs) and in order to guarantee an accountable and inclusive framework for AI, *ex ante* accountability must be considered *ante*, that is, the application of the rules starting with the design of the systems, with the aim of minimizing or even avoiding the occurrence of damages. At the European level, in particular, two approaches regarding accountability have been outlined: a first approach focuses on the explainability and transparency of the decisions taken, by granting a right to an explanation, while a second one evaluates the socio-economic impact of the system to verify loyalty, explainability, audibility, accountability and accuracy. It is certain that many voices are raised in international doctrine to demand more transparency, explainability and loyalty (non-discrimination) of AI systems. [23]

From this perspective, the European Union grants natural persons the right not to be subject to a decision based solely on automatic processing, including profiling, which produces legal effects concerning the data subject or similarly affects him to a significant extent. Exceptions are provided [art. 22 para. (2)], accompanied by guarantees, related to the right to obtain human intervention, to express one's point of view, to challenge the decision (art. 22 para. 3) and to receive individual explanations. The data controller must also ensure control over the algorithmic processing and its developments, in order to be able to explain, in detail and in an intelligible form to the data subject, how the data processing has been carried out with regard to him. [24] Therefore, it is not possible to use algorithms capable of self-reviewing the rules they apply without the verification and validation of a human controller. In France, no decision with legal effects can have applicability without the participation of the human being in its process; however, in certain areas, fully automated decisions issued by a public administration are accepted (for example, for the calculation of taxes). As we can see, European legislators focus on the right to transparency and the explanation of algorithmic decisions. However, such rights take into account only part of the social risks and not sufficiently protects against systemic discrimination, in particular because the explanation is subsequent to the decision and therefore intervenes *ex post*. [25]

#### **4.3. *Ex post accountability – acceptable, justified and 'humanised'***

The second approach to *ex ante* responsibility promotes an algorithmic impact study that consists in evaluating, before the production of any automated decision-making system, its possible social impact and in determining the levels of exigency to minimize the risks, to ensure that there are no unforeseen biases in the data and other factors that could unfairly influence the results. The assessment should be reviewed regularly, and after the decision is made, the administration should provide a meaningful explanation to those affected as to how the decision was made and why it was made. Canadian citizens must have every opportunity to challenge the decision-making process. The administration must publish the source code, subject to classified data, as well as information about the effectiveness of the systems in achieving the objectives.

In this sense, researchers have identified several causes that will make it difficult to establish a liability system adequate to the disturbances generated by contemporary digital activity. Undoubtedly, the growing influence of GAFAMI (Google, Apple, Facebook,

Amazon, Microsoft, IBM) and BATX (Baidu, Alibaba, Tencent, Xiaomi), the players at the origin of this revolution, must be taken into account. This influence is likely to call into question the sovereignty of the state, the terms of normative regulation and judicial activity, tending to create a digital sovereignty. Large digital companies tend to create their own regulations – codes of conduct and codes of ethics; thus, the fear of establishing a parallel justice was born, especially since GAFAMI has countless technical means capable of programming new types of dispute resolution [26]. The evolution of digital responsibility tends to respond to immediate and eminently technical needs, at the expense of a human approach. However, technological changes must not harm the person, because technicality, no matter how objective and precise it may be, can become inhuman. In other words, the major risk that arises during the contemporary implementation of digital responsibility is its dehumanization.

The classical rules of responsibility, still applicable, will gradually be replaced by a special digital responsibility, which will develop progressively. We are therefore challenged to create an original construction of digital responsibility in the 21st century that is acceptable, justifiable and 'humanised'. To have legitimacy, any use of artificial intelligence and its associated techniques must be accompanied by a human guarantee, combined with a wider social responsibility. In this regard, the Montreal Declaration for a Responsible Development of AI stated, already from 2018, that if “a harm has been caused by an AI [artificial intelligence system] and the AI has been proven to be reliable and subject to normal use, it is not reasonable to blame the people involved in its development or use”. [27] Compensation for damages caused by an algorithmic risk would fall under the concept of a “national solidarity”, anchored on societal and collective foundations, rather than implying an unjustified individualistic responsibility of man. So it seems necessary to react with a broader social responsibility, leaving room for ethical reflection at different levels. For this, it is important that all interested parties can debate and be able to pronounce on the use of AI: citizens, economic actors (start-ups, digital giants), academics, public institutions (judicial, fiscal, social), encouraging reflection collective on the purposes of technology digital and related digital responsibilities. There are various procedures: either a group of experts prepares a project that they send to the interested parties, or the interested parties are consulted upstream, participating in debates, answering questionnaires, so that later the answers are processed by experts. Then, organizations empowered by public authorities and made up of representatives of all interested parties run a certification procedure, with the aim of attesting that the artificial intelligence is “trustworthy”. The new mechanisms of legal responsibility and the hypothesis of responsible AI will have to be thought of and realized on an international, global scale, no longer on a European level, given the internationalization of digital players, clouds, platforms managed mainly by digital giants such as GAFAMI and BATX. [28]

##### **5. Instead of conclusions, about the advantages and disadvantages of the digitization of the Romanian judicial system**

We are currently in a spring of artificial intelligence and only time will tell if this will lead to the realization of generalized intelligence. However, what is generally accepted and indisputable is the fact that the digitization of the Romanian judicial system represents the most important progress in artificial intelligence research in our country. This technology

will increase the efficiency, intelligence and responsiveness of every application, and the business environment movements around IT/AI startups seem to be the spearhead of all these initiatives. [29] Therefore, we can say that we have entered a new era, being justified in believing that technological changes will produce important changes in the judiciary in Romania. Considering the turning point where we are, namely the moment when traditional justice is being replaced easily, easily by digital justice, we considered it appropriate to present the advantages and disadvantages of the digitalization of the Romanian judicial system, and the analysis of this will be done in a future study independently. So, in a brief enunciative and non-exhaustive list, the advantages of E-Justice are:

1. Promotion of national and European synergies.
2. Access to justice for natural and legal persons in Europe, showing particular interest in:
  - Access to information: ignorance of the legislation of other member states is one of the major factors preventing people from asserting their rights in another EU state, by providing information to European citizens in their own language about judicial systems and procedures across the European Union .
  - Identification of the competent court. This reduces delays and minimizes the risk of cases being dismissed for material and territorial lack of jurisdiction, especially in cases with a cross-border component.
  - Access to the court with the help of the website that provides answers to the many and varied problems that a person involved in a judicial procedure may face: in which Member State the matter should be referred, the way to refer the court, the applicable law, the costs procedure (fees), enforcement of the court decision, etc.
  - Specific family law procedures: the harmonization of national laws and legal procedures makes it easier for European citizens to exercise their rights, even if they have lived in different EU countries, as well as financial claims procedures, in cases where there is a cross-border dimension to claims the payment.
3. More effective judicial cooperation, by creating electronic tools that should accompany the implementation of judicial cooperation instruments within the European Union.
4. Facilitating the use of videoconferencing. Although many acts adopted at European level allow the use of videoconferencing in judicial proceedings, the technology has not been fully exploited, for cultural, linguistic or technical reasons, despite the obvious advantages that the use of this means has in terms of costs, travel and flexibility.
5. Continuation of record interconnection. With the increased mobility of people and businesses across national borders, it is necessary to facilitate the access of suppliers, creditors, corporate partners and consumers to reliable information in order to increase transparency and legal certainty in all EU countries.
6. Enforcement of court decisions. Depending on existing national regulations, there are several tools that can be used to enforce court decisions. For example, the European Enforcement Order is a procedure that can be used for uncontested claims to facilitate cross-border recognition and enforcement of judgments.

7. Translation Assistance. The development of a true European judicial area is a major challenge. Legal proceedings are conducted almost exclusively in the national language, and the use of a foreign language is permitted only as an exception. [30] Despite the enthusiasm that we do not try to disguise, an objective approach to a research subject also requires the presentation of its negative aspects, more or less pregnant. Thus, despite the obvious advantages, the judicial system's embrace of the concepts of telematic and digitized justice exposes them to a set of risk factors associated with the development and implementation of means and tools that work on the basis of information technology [31], such as It would be:

- Deficiencies in the initial design phase and ongoing control of AI development. If the initial digital architecture of the system is poorly planned due to misperception or misinterpretation of requirements, the entire project can be at risk. The analysis of this risk factor reveals that the type of design/development team: internal or outsourced can also be of great importance. Then, the maintenance/maintenance model of the IT system used is also very important.
- Adequate training/training of users, general IT vision, technical skills of users are also risk factors regarding the effective digitalization of the judicial system. The solution for minimizing these risk factors is the trainings carried out by the design team with the users: judges, prosecutors and administrative staff and the use of a simplified computer language. At the same time, to meet the needs and expectations of users, the IT system design/development team includes a so-called “translator” for complex legal questions (for IT teams) and a “translator” for IT questions (for legal users).
- The introduction of information systems or, better said, the digitization of a structure or a (judicial) system, will determine the change of the system/structure itself. People in the judiciary must be aware of these changes and especially of their inevitability. To avoid shocks related to the use of new IT systems, potential users should constantly attend training sessions. With given that AI evolves and users tend to forget some of the previously learned skills, training/training should be conducted continuously, regularly (eg quarterly, annually, etc.), or when needed (eg when the interface changes or new software is introduced).

All these negative aspects can seem scary and cause dissatisfaction among users, especially for users whose technical skills and abilities were formed in the more distant past. Young users have always been the most enthusiastic supporters of change of any kind, as a rule. Continuous preparation, participation in training programs require time, and sometimes financial resources, however, a strategy for the digitalization of the justice system, effectively thought out in the medium and long term, could offer solutions to remove these shortcomings. One could consider, for example, a specialization of judges or administrative staff, introduce IT training courses at their specific vocational training institutes, or offer financial or non-financial rewards to people in the system who want to modernize the justice act. There are only a few suggestions that, after a brief reflection, I found appropriate to make. Obviously a group of specialists could identify many more, it just takes the will.

As a distinguished colleague pointed out, “regardless of whether we accept it or not, the innovations of progress will reach, encompass and even surpass including the execution of the act of justice, what we have to do is only to integrate faster or slower” [32]. Therefore, these intelligent systems called AI that have developed and will develop in the future with surprising speed, in all fields of activity, already have and will have a very large impact on social life.

Its development can help mankind to make society work administratively better, to diagnose and cure diseases, to increase life expectancy, to help people with disabilities, to understand everything better and faster, even to make new discoveries that they can apply more quickly thus taking humanity to another level of consciousness. We also believe that the warnings of specialists regarding the strength that AI can have and the dangers to which humanity can be exposed should not be ignored. To be constantly alert it is necessary that initial and continuous education, research be considered a priority in order to be able to keep up with the new technology which, let's not forget, can learn by itself at a speed far superior to the human being. Therefore, combining professional life with personal life is important for the harmonious development of the individual and implicitly of society in the context of the very rapid development of new technologies. Respect for private life, its protection, creates a balance in society, therefore, permanent attention must be paid to the legislative field and its continuous improvement in parallel with the very rapid development of technology. [33] Although we cannot talk about a general modernization, we believe that this digital reform will expand, in the short or medium term, to all courts in Romania.

Finally, in order not to place ourselves against the technological current, which will undoubtedly capture the legal world, we must change the rigid view that is widespread and embrace artificial intelligence and all the benefits that come with it. Although change can be seen as a great challenge, I believe that the future of the legal system will be reflected in a perfect synergy between artificial intelligence and human intelligence, and the durability and success of each will be directly related to how we manage to we adapt to these changes.

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