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A Comprehensive Anthology of Law – Ethics – Business

Edited by

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Introduction

David A. Frenkel

This book offers a selection of essays which shed light on various issues in the fields of law, ethics, and business.

The essays are mainly revised versions based on presentations at the International Conferences on Law, on Ethics and on Business, organised by the Athens Institute for Education and Research (ATINER) held in Athens, Greece, in 2022 and 2023. The essays in this volume have been selected after a process of blind-review on the basis of the reviewers' comments and the essays contribution to the ongoing discussion of the respective issues.

Scholars from across the world have proved their willingness to get together and discuss and talk about law, ethics, and business issues.

Traditional boundaries have become permeable. We live in a transparent, influenceable and pervious world. The responses of the legal systems, the ethics and the business world to current developments are of the great and serious challenges of our time. The authors of the essays collected for this anthology seek to analyse some of these challenges.

The book commences with **Massimo Bianchi**'s essay ***Network Analysis and Control System in Mega Projects. The Case of PICASP Erasmus Project.*** Network Analysis achieved some significant results in recent years thanks to advances in technology and in the approach to organisational networks. Less exciting were the results obtained with Mega Projects. These projects show high risk with regards to results, to the compliance of the budget and to the realisation of the entire project. This essay examines the proposal to transfer some results of network analysis to the performance monitoring of Mega Projects. Starting from the case of Erasmus PICASP Project for the creation of Pilot courses and new didactics for teachers training in cultural tourism for the development of Caspian Area, the essay proposes an evolutionary model of cycles of simplification and complexification of the networks control systems.

José Manuel Castillo López has authored the second essay ***An Economic Perspective of the Justice Digitalisation Process: The Questions of Efficiency and Equity***. The general problems of the Judicial Administrations in Europe are profound and diverse. But perhaps the most relevant and evident are the time delay in legal resolutions and the influence of economic conditions of users both regarding simple access to the Judicial Administration and in the very sense or result of different legal proceedings. The digitalisation process of the Judicial Administration is bringing with it perceivable changes in the efficiency of the system, deriving from better access to information on legal proceedings on the part of citizens, deemed on the whole to be positive and, deriving from it, improvements in the functioning of the economic model. Nevertheless, on the side of iniquity as regards access to justice and legal resolutions, the "inequality of arms", the available predictions and studies are inconclusive, putting forward, furthermore, serious concerns regarding the effect on legal guarantees and the right to honour and privacy of citizens. In this study, which is interdisciplinary in nature, the

author preferentially uses the perspective and instruments of the Economic Analysis of Law to address and substantiate the aforementioned questions.

The third is **Vladimir Orlov**'s essay ***Dispositivity in Russian Business Law***. The principle of dispositivity is developed based on the concept of party autonomy that is characteristic of civil law regulation that covers business activities and is realised through the application of, in addition to directly applicable imperative norms, dispositive norms that imply the freedom of the parties to perform (to acquire, realise and dispose of) their rights on their own discretion. Essentially important in realisation of the principle of dispositivity in the civil law are also initiative norms through the application of which the civil law relations emerge, change and cease. Related particularly to the contract and corporate law regulation in Russia, the traditional totality of the legislative law has been challenged in the pragmatic approach supported by the Russian highest judicial body. In particular, the favouring of the principle of dispositivity in respect to business law regulation, by the concentration of the valuation of the dispositivity of a legal norm in the sphere of successive control, instead of previous control, actually promotes the real freedom of business activities, and makes the regulation flexible. This is particularly important for small and family enterprises that are very common in Russia.

Maria Luisa Chiarella and **Manuela Borgese** have authored the fourth essay ***Data Act: New Rules about Fair Access to and use of Data.*** As stated in the essay, the constant increase in products connected to the Internet corresponds to an increase in the volume of data generated, the content of which represents a fundamental resource both for technological and economic evolution and with a high impact for businesses, citizens, and the public sector on the whole. This is the underlying motivation behind the approval of the new EU Regulation adopted on 27 November 2023 - the *Data Act* - which aims to create a European regulatory framework based on clear rules on data sharing, a fair and guided data economy in the European Union.

The author of the fifth essay ***An Examination of Proactive Intelligence-Led Policing through the Lens of Covert Surveillance in Serious Crime Investigation in Ireland*** is **Ger Coffey.** The author examines the powers and functions conferred by the Criminal Justice (Surveillance) 2009 Act to bolster the resources of the Ireland's National Police and Security Service to detect, investigate and apprehend suspects. The analysis encompasses the management and use of covert surveillance operations, procedural requirements for external 'authorisation' to carry out surveillance with judicial oversight, internal 'approval' to carry out surveillance without judicial oversight, and the use of tracking devices as less intrusive measures. While the focus of analysis is on police covert surveillance operations in Ireland, reference to international best practice and human rights standards emanating from the Irish superior courts and ECtHR jurisprudence will broaden the scope of analysis that is intended to be of interest to a wider readership.

Covid influence in Insolvency in Romania is the title of the sixth essay authored by **Lavinia-Olivia Iancu.** The Covid pandemic installed at the beginning of 2020 influenced the matter of insolvency. A series of measures were adopted to protect de debtors already insolvent on one hand, and new procedures were established on the other hand to ensure the ongoing insolvency proceedings. We can observe a special attention of the legislator in protecting legal person debtors

compared to natural person debtors. Although the pandemic deeply affected citizens, they did not access the insolvency procedure of the natural person. The Romanian legislator did not intervene in the modification of the legal text, although the doctrine claimed a complicated procedure, with generally unattractive and interpretable notions. Although a year has passed since the end of the state of alert in Romania, and the effects of the pandemic are still visible, the method of administering insolvency procedures that offers effective solutions implemented during Covid period has been preserved.

Elena Emilia Ştefan is the authoress of the seventh essay - ***News and Perspectives of Public Law***. Since the earliest classic division of law into public law and private law, envisioned by the 3rd century Roman legal expert Ulpian, interdisciplinarity as a fundamental feature of the law has currently become noteworthy. The recent exceptional pandemic situation that we have faced has revealed once more that reference to society can only be made by resorting not only to law but also to ethics and morals. Public authorities have often found themselves in the position of making administrative decisions for the population, objected by the great majority, as fundamental rights have been restricted for short periods of time. This essay addresses a current topic of interest, namely Considering interdisciplinarity, can we speak nowadays of a new public law? If so, what should we do with the old law? Should we discard it or rebuild it? The authoress answers herein by using research methods specific to law, in order to emphasise the conclusions according to which the measures for good administration carried out by public authorities must express both the letter of the law and the spirit of the law, taking the general interests of society into account.

Elena Emilia Ştefan has authored also the eighth essay **– *Climate Change - An Administrative Law Perspective.*** Given the astonishing speed at which society and nature are changing, the issue of climate change can no longer be analysed solely from a legal perspective, but also from an ethical one. It is important to address the phenomenon of climate change, as it has become so widespread in recent years that we are now witnessing litigation involving not only individuals and authorities but also states. The occasion for this analysis is the news in the media according to which, in Romania, in January 2023, the first action was brought before the contentious administrative court against the Romanian state for not adopting measures to combat climate change. The theme is topical and relevant for both legal professionals and private individuals. The scope of the study has been to investigate the extent to which ethical values, such as respect and responsibility, are intertwined with legal analysis of environmental issues and can help find a solution to mitigate damage caused by climate change.

Competition Law, Ethics and Corporate Social Responsibility is the title of the ninth essay authored by **Ioan Lazăr.** The author points out the importance of corporate social responsibility (CSR) activities that has increased in recent years. More undertakings active on different markets are becoming aware of the importance of improving labour policies, investing in safety training of employees, environmental protection, local community-related projects, volunteering, and charitable activities. The author analyses whether higher levels of competition will increase investments in CSR activities to create trustworthy firms that will survive even in economically harsh periods, or will otherwise reduce the aforementioned

types of investments and thereby facilitate the flourishing of anticompetitive practices on the market.

The tenth essay, ***Neurological Aspect of Ethics and Integrity: A Fundamental Compound Element of Law and Tax Compliance*** has been authored by **Emmanuel K Nartey.** The author examines the ethics and integrity approach to modelling the law and tax compliance process and investigates different factors that influence legal and governance systems in society. The approach of this essay is designed to briefly demonstrate how ethics and integrity in the law and tax compliance could lead to effective legal and governance systems. Ethics and integrity can be thought of as the infinite member of all legal rules and governance systems. The author conceives that the law and tax compliance does not stand alone. The extension of the law and tax compliance is ethics and integrity, or the extended part of moral conduct in society.

Emmanuel K Nartey is also the author of the eleventh essay ***Enforcing the Legal Principle of Duty of Care in Corporate Human Rights Violations and Environmental Damage Cases in Developing Countries.*** The author's view is that corporate accountability for human rights violations in international legal systems has proven to be a watershed, mainly because there are inadequacies in the existing accountability mechanisms as well as several other legal problems and factual obstacles that hinder the enforcement of human rights law and international criminal law. This is also attributed to the problematic issues that persist, particularly with respect to the following: corporate criminal liability, the extraterritorial application of law, the attribution of criminal actions to specific agents, the requirements of accountability, the difficulties of extraterritorial investigations, and obtaining sufficient evidence for human rights violations. The author examines corporate accountability in the concept of the principle of duty of care and analyses the definition of accountability, and discusses the mechanism and the components of accountability as well the legal concept of corporate accountability should include responsibility, answerability, blameworthiness, liability and sanctions.

Graeme Lockwood, Vandana Nath, and **Stephanie Caplan** are the authors of the twelth essay ***Religion and Belief Discrimination at Work: Legal Challenges in the UK.*** As stated by the authors, the UK continues to be more ethnically and religiously diverse. The inclusion of religion and belief within the UK Equality Law framework has been controversial since its inception in 2003. The authors examine the practical and legal complexities associated with religion or belief discrimination in the UK. Drawing on an analysis of religion and belief claims from 2003 onwards and using illustrative case law, the study highlights several thematic areas of litigation relevant to employers, potential claimants and legal advisors. The essay offers insights into the underdeveloped legal debates and variations in how tribunals and the courts have interpreted and applied the law.

The thirteen contribution is **Clément Labi**'s essay ***The Ethical Riddle of Executive Remuneration.*** Excessive executive remuneration causes public unease, debate, and very often legislative initiative. The author states that there could be actually good reasons for that. From times immemorial, betray the trust of a fellow and to take a decision as a judge in one's own cause, have been considered despicable. Those ethical concerns are so "etched in legal nature" that the principles of sanctioning corporate mismanagement and conflicted decision-

making have been considered parts of natural law. Such is not the case of the current (but not novel) concern with compensation "levels" irrespective of the merits of their earners, for which an ethical foundation is elusive.

The fourteen contribution is **Iulia Boghirnea**'s essay on ***Legislative Mechanisms of the European Union and of Transposition into the Romanian Legislation Concerning the Problem of Work-Life Balance for Parents and Caregivers - Sociological Aspects.*** In her essay she analyses the legal framework of the European Union regarding family leaves and flexible work formulas, measures that the Member States must take by transposing the Directive 2019/1158 of the European Parliament and the Council of Europe on work-life balance for parents and caregivers**.** The fact that this Directive replaces the notion of "reconciliation" with that of "balance", and the notion of "family life" with that of "private life of parents and caregivers" is a novelty. The Directive, which had to be transposed by all EU Member States by August 22, 2022, aims to promote and facilitate the reintegration of mothers into the labour market after the period of maternity leave and parental leave, but, in particular: fathers' right to paternity leave, parental leave, caregiver's leave and not least, flexible working arrangements for workers who are parents or caregivers. As for fathers' right to paternity leave, the EU legislator provides that it can be requested around the child's birth date, before or after birth and should be granted regardless of the marital or family status, as will be defined in the internal law of each state. The parental leave granted to fathers can be extended by one or two months, a period of time that cannot be transferred to the other parent. The right to this leave will be guaranteed, by law, to all workers who have parental responsibilities. The authoress analyses also how Romania transposed this Directive into its internal legislation.

ADR and Workplace Conflict - A Podcast Analysis: Nigeria, Britain and the US authored by **Chinwe Egbunike-Umegbolu** is the fifteen essay. As stated by the authoress, the decline of union representation and the introduction of legal incentives for workers to resolve individual employment disputes without resorting to the courts has unequivocally made Alternative Dispute Resolution (ADR) increasingly prominent in the British industrial relations landscape. The conciliation service offered by the Advisory Conciliation and Arbitration Service (ACAS) has been the most important sign and driver of this change. Although ADR has been encouraged in Western jurisdictions, particularly in the United Kingdom (UK) and in the United States (US), as a means to reduce time and litigation costs in relation to employment tribunal claims, the scarcity of scholarly publications, particularly on the benefits of utilising mediation or conciliation to settle workplace disputes is frankly unacceptable. On the other hand, as stated by the authoress, Nigerian workers or employees are not encouraged or have little or no awareness of resolving workplace disputes or conflicts via ADR. The authoress employs a comparative and podcast analysis of workplace disputes in Nigeria and Britain, focusing on the different patterns of settling Workplace Conflicts such as discrimination, bullying and harassment.

Marzia A. Coltri has authored the sixth essay - ***The Ethical Dilemma with Open AI ChatGPT: Is it Right or Wrong to Prohibit it?*** Digitalisation and innovation in learning and research are rapidly becoming crucial drivers of society's sustainable and progressive growth. AI's technological advancements and landscapes have significant strengths, and their diversity and quality have grown in

recent years. This has facilitated the impressive development of AI apps and software, such as ChatGPT, which has become popular around the world. It is an Open AI access to users in education to generate essays, song lyrics and stories. It is an AI language model that can understand and generate human-like responses to text inputs, making it a valuable tool for various economic and cultural applications. The authoress examines the ethical dilemma of banning ChatGPT. Using a range of argumentative examples as some possible ethical issues may arise in the use of AI-powered chatbots include concerns about data privacy, algorithmic bias, and the potential for chatbots to replace human interaction and support. Some of the main question are can OpenAI's cutting-edge technology and tools truly help corporate operations and institutions, and improve decision-making and can it also give students and researchers significant resources to help them develop their knowledge, critical thinking skills and understanding in a variety of fields? The authoress points out that on the one hand, allowing ChatGPT to operate freely could lead to unintended consequences, but it could also promote innovation in the field of AI. Ultimately, finding a balance between regulation and innovation is key to maximising the benefits of ChatGPT while minimising its potential harms.

The seventeenth contribution, ***Legal Developments as to "Cyber Grooming" Actions from the Lanzarote Convention to Now*** has been authored by **Merve Duysak.** According to statistics, internet users have been increasing rapidly, especially since the COVID 19 pandemic. Nowadays minor users, encouraged for educational purposes, are particularly often the target of cybercrimes. One such offense is approaching a child through information and communication technology for sexual purposes, known as cyber-grooming. Even though this is a new type of criminal behaviour, there are already international and national criminalisation norms in place to penalise it. The Lanzarote Convention is the first international legal document to refer to these actions as crimes. Aiming to protect children from sexual exploitation and sexual abuse, the Convention sets out some responsibilities to signatory States. Despite being one of the signatories of the Lanzarote Convention, the aforementioned acts are not considered a separate crime in Türkiye. This study seeks to make the issue visible and suggests providing measures to prevent the sexual exploitation of minors by taking the necessary legislative steps.

Viktoriia Hamaiunova is the authoress of the eighteenth essay ***Influence of Implicit and Visible Legal Cultures on Modernisation of Judicial Systems in European Countries.*** The functioning of the judicial system depends not only on the law in force, but also on its interpretation on a daily basis by both court officials and citizens, that is, the level of their legal culture. As In some national law systems of European states the general direction of visible and implicit culture coincides, the national deep level of legal values for the most part coincides with the adopted laws that are implicit and visible cultures are difficult to discern. The authoress points out that if the national deep level, which corresponds to the deep context of the culture and mentality of a given society, comes into conflict with the visible culture expressed in officially adopted laws and the official state ideology, two cultures are formed: visible culture and implicit culture. Unable to influence the decision of the government, people try to avoid direct conflict, however they follow their own rules developed by a narrower group of people, thereby strengthening the influence of implicit legal culture.

Jennel R. Cheng authored the nineteenth contribution ***The Philippines Readiness in Addressing Food Security by Minimizing the impact of Climate Change.*** The UN has declared that Climate Change is a long-term shift in weather pattern, that could be natural such as variations in the solar cycles. The 1987 Philippine Constitution states that The State shall protect and advance the right of the people to a balanced and healthful ecology in accord with the rhythm and harmony of nature. In 2020, the Paris Agreement, which is the pinnacle of international law on climate change, orchestrated global climate action over the coming decades. Countries agreed to limit global warming to well below 2ºC above preindustrial times, closer to 1.5ºC. In 2023, at the World Economic Forum, Climate Change has been one of the biggest economic factors playing a vital role globally. The author's view is that this means that aside from the global terrorist threat, Climate Change is now a global threat that raises a global concern that needs an urgent attention. As the author explains that in the Metaphysics perspective, this year will bring out more issues on climate change affecting the productivity of farmers specially in Q3 and Q4. Her concludes by stating that climate change affects the productivity of the people, as well as the food production which is a matter of concern for every world leader.

The author of the twentieth esssay ***The Imposition of Chemical Castration as a Sentencing Option for Sexual Offenders in South Africa: A Human Rights Perspective*** is **Dane Ally**. The author points out that *there has been a significant increase in sexual violence offences perpetrated by recidivist males in the Republic of South Africa. As a result, the social transformation sub-committee of the ruling political party, the African National Congress (ANC) recently repeated the call that chemical castration (also known as Anti-libidinal interventions) be introduced as a sentencing option for male sexual offenders. This response to the mentioned increase has been frowned upon by a male support group, known as the Million Men March Organisation (Million Men), situated in Polokwane, South Africa. They assert that such a sentencing option would fly in the face of the founding values of the Constitution of the Republic of South Africa, 1997 which seeks to enhance freedom, human dignity, and equality. In my discussion I shall adhere to a two-phased analysis, as described in a case of the Supreme Court to determine whether the proposed sentencing option would survive constitutional muster. During the first phase of the analysis, the author considers whether the proposed sentencing option constitutes a violation of the provisions of the Constitution. He argues that the suggested sentencing option does violate fundamental human rights protected in the Constitution. During the second phase of the assessment, he subjects the suggested sentencing option to a limitations clause analysis, to determine whether the proposed sentencing option would be deemed a 'reasonable and justifiable' limitation of the identified fundamental rights.*

The twenty first contribution ***The Full Enforcement of Socio-Economic Rights in Africa: a Dream or a Reality?*** has been authored by **Katlego Arnold Mashego**. Despite the adoption of the African Charter on Human and Peoples' Rights on 27 June 1981 in Nairobi, Kenya, to date, Africans' socio-economic rights are not fully or at all enforced. The author argues that Africa must take a new approach, a strategic one towards economic development in Africa and consequently the enforcement of socio-economic rights. He submits that several strategic approaches, such as development of new laws on the natural resources,

producing quality products and services, image related strategies which involve great marketing of Africa, its products, and services. He argues that there is a link between economic development and the enforcement of socio-economic rights. His view is that intra-African trade will enhance sustainable development and economic growth. He is of opinion that African countries should focus more on intra-African trade, which will accelerate sustainable economic development and consequently the enforcement of socio-economic rights. In return it will reduce poverty and better the lives of millions of Africans who are in dire need of socio-economic rights to be enforced due to the living conditions they are in.

An Analysis of South Africa's Constitutional and UNCRC-imposed Obligations to Achieve Children's Socio-Economic Rights: A Critique, authored by **Tshilidzi Knowles Khangala** is the twenty second contribution. As stated in her essay, in the Republic of South Africa, a significant proportion of the youth population experiences the distressing circumstance of living in poverty. The prevalence of HIV infection and the consequential mortality rates due to AIDS among caretakers have a detrimental effect on the well-being of children. *The* United Nations Convention on the Rights of the Child (UNCRC) encompasses social, economic, and cultural rights under its provisions. Following the ratification of the UNCRC in June 1995, South Africa is legally obligated to implement the articles pertaining to the rights of children. The contributor assesses the extent to which South Africa has adhered to its constitutional and UNCRC-mandated responsibilities and commitments in order to achieve the socioeconomic rights of children.

Yunbo Zhang is the author of the twenty third contribution ***The Study on the Effectiveness of Arbitration Clauses in International Commercial Arbitration – From the Perspective of Contract Non-Formation.*** In addition to the classical jurisprudence of private international law, common law, and international commercial arbitration, the study is based also on the customs of international commercial transactions, the contents of the cases, and conducts legal doctrinal analysis, comparative analysis, as well as case analysis. From different perspectives, these legal norms and issues reflect that the arbitration clause has considerable independence and can typically be established independently of the main contract. The author points out that the determination of the validity of the arbitration clause has its logic of the decision, and it should also apply the process of conclusion of the contract, which includes the conditions of the voluntary agreement of the parties, the process of invitation and negotiation, and the true intention of the parties.

The twenty fourth and final essay in this volume, ***The Ethics of Law: How US/UK Intervention in Iraq and Russia's Invasion of Ukraine Breach the Principle of Virtue and International Law***, has been authored, too, by **Emmanuel K Nartey.** The author states that the war in Iraq and the recent war in Ukraine symbolise the importance of resolving the crisis of international law and laws of war, and the problematic aspect of these wars stems from the misconception of aggression or the composition of aggression. The author’s view is that this falsity consists solely of the concept of aggression under international law, which has been abused, fragmented and confused. Therefore, this false idea of the concept of aggression under international law contributes to the development of modern conflicts. In an attempt to rationalise some of the fundamental failures in

international law and the United Nations Security Council (UNSC), the author seeks to examine whether the inclusion of ethics in the mechanism by which international law is implemented will be relatively useful. It explores whether ethical code can be incorporated into the mechanism by which international law is implemented, and if so, how can ethics enhance the existing rules and states' conduct. The essay is divided into four sections. The first tries to explain the fundamental principles of ethics, while the second views international law in the conception of subject matter application and practice. The third section looks at Russia's invasion of Ukraine and the UK/US invasion of Iraq, and the final one presents a philosophical conclusion on the subject matter.

Many of the debates analysed are ongoing and the policy, ideas and interpretation brought up in the essays will undoubtedly contribute to future debates. I hope the reader will find the collection of essays stimulating and insightful reading not only for those who are interested in a particular issue discussed but also to acquaint themselves with other current issues.

The views expressed in the essays in this volume are those of the authors and do not represent nor are they intended to represent the views of any other individual or body.

An Economic Perspective of the Justice Digitalisation Process: The Questions of Efficiency and Equity

By José Manuel Castillo López[*]

The general problems of the Judicial Administrations in Europe, and particularly in Spain, are profound and diverse, but perhaps the most relevant and evident are the time delay in legal resolutions and the influence of economic conditions of users both regarding simple access to the Judicial Administration and in the very sense or result of different legal proceedings. In fact, one of the most serious deficiencies of the Spanish public administration is the notable opacity or scarce transparency for citizens and, as a result of this, the high level of corruption and the unequally distributed benefits thereof. This situation is of course transferred to the Judicial Administration, judges, lawyers and procurators (formal representatives before the courts)[1] *via private proceedings.*

The digitalisation process of the Judicial Administration is bringing with it perceivable changes in the efficiency of the system, deriving from better access to information on legal proceedings on the part of citizens, deemed on the whole to be positive and, deriving from it, improvements in the functioning of the economic model. Nevertheless, on the side of iniquity as regards access to justice and legal resolutions, the "inequality of arms", the available predictions and studies are inconclusive, putting forward, furthermore, serious concerns regarding the effect on legal guarantees and the right to honour and privacy of citizens.

In this study, which is interdisciplinary in nature, I preferentially use the perspective and instruments of the Economic Analysis of Law to address and substantiate the aforementioned questions.

The processes of digitalisation and artificial intelligence are topics of scientific, professional and popular relevance, particularly in the Judicial Administration. They are in reality complex matters and in my judgement are not being produced with the required rigour, at least in the public and private professional Judicial Administration sphere, not even in the terms and denominations employed, nor in the correlative concepts they seek to reflect.

In this article, after briefly analysing the starting premise and presenting the institutional framework in which these processes and correlative debates are taking place, I shall put forward a taxonomic proposal. I shall then analyse the effects it has on the efficiency and equity of the legal system and with a general reflection on the role of algorithms and artificial intelligence in modern society. I shall end with the diverse challenges that are being considered and the preventions that should be put in place prior to the application of the innovations in question.

Keywords: *corruption; digitalisation; efficiency, equity, Judicial System*

1. Introduction

Before analysing the effects that the process of digitalisation, other modernisations, and technological innovations will presumably have on Judicial Administration proceedings in the immediate future, I present a summary of the main aspects of the current situation.

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1.1. *Current Situation of Judicial Administrations in Europe and Spain*

The World Justice Project (WJP)[2] has for half a century been publishing the Rule of Law Index in numerous countries, and it constitutes a tool in whose construction participate prestigious academics and researchers in over 17 disciplines, in other words, interdisciplinary in nature, and furthermore, representing over 100 countries.

The WJP Rule of Law Index calculates scores and classifications for 8 factors and 44 subfactors.

Table 1: World Justice Project. Rule of Law Index (2020): Spain

	Factor Score	Score Change	Regional Rank	Income Rank	Global Rank
Constraints on Government Powers	0.73	0.00	18/31	22/43	23/140
Absence of Corruption	0.73	0.00	16/31	23/43	23/140
Open Government	0.70	0.00	18/31	22/43	22/140
Fundamental Rights	0.79	-0.01	14/31	15/43	15/140
Order and Security	0.83	0.00	24/31	30/43	34/140
Regulatory Enforcement	0.70	-0.01	19/31	26/43	26/140
Civil Justice	0.66	-0.01	19/31	28/43	30/140
Criminal Justice	0.68	0.01	17/31	23/43	23/140

Source: World Justice Project (2023).

Taking into account the situation of 140 countries in the world in 2022, Spain occupies position 23/140 with a global index of 0.73, having undergone a slight improvement since the year 2015 when it occupied position 24/102 with a global index of 0.68.

This reduced improvement is positive in criminal justice and negative in fundamental rights, regulatory enforcement and civil justice.

However, if this current position of the Rule of Law in Spain is analysed along with the other countries of the European Union[3] (EU) it occupies position 15 out of 27, with its western surroundings (including EU, EFTA (European Free Trade Association) and North America) the quality of the legal system is not so positive, as it occupies position 18/31 and 23/43 among the world's richest countries.

1.2. *Situation of Justice in Spain.*

Justice resonates extensively in the Spanish Constitution of 1978, which is inevitable given that its historical development goes hand in hand with the birth of the State itself.

The situation can be summarised as follows:

[2] World Justice Project (2022).

[3] Council of Europe (2022):

A) Magnitudes of Justice in Spain

Table 2: Some Magnitudes of Justice in Spain (Per 100,000i)

Implemented judicial system budget (per 100,000i)		
	SPAIN	COEU
Population	47,344,649	447,000,000
GP Per capita (%)	0.37	0.30
Courts	87.90	64.50
Prosecution services	5.37	11.10
Legal aid	6.03	3.06

Source: Council of Europe (COEU) (2022).

Particularly noteworthy is the number of prosecutors per 100,000 inhabitants (5.37) which is lower than 50% in Spain compared to the COEU countries (11.10).

This circumstance once more confirms that the meaning of legal resolutions in Spain depends on citizens' level of income. In this case, the victim of a crime has more possibilities of being compensated if they have a high income level that permits the hiring of good lawyers and other professionals, whereas those with lower income levels must remain dependent on the discretion of the General Prosecutor's Office, the means at its disposal and, ultimately, the criteria and opportunity of the court appointed prosecutor.

Table 3: Human Resources of Judicial System.

	PROFESSIONAL JUDGE		NON-JUDGE-STAFF		PROSECUTOR		NON-PRESECUTOR-STAFF		LAWYER	
	SPAIN	COE Average	SPAIN	COE Average	SPAIN	COE Average	SPAIN	COE Average	SPAIN	COE Average
2020	11.24	17.6	102.69	56.13	5.37	11.1	4.82	15.22	303.54	134.51
2018	11.53	17.94	101.36	59.69	5.24	11.22	4.55	14.98	304.6	127.08
2016	11.53	17.63	105.71	59.3	5.31	10.86	4.48	14.6	305.3	120.25
2014	11.53	18.06	104.57	55.33	5.22	10.27	4.11	14.57	290.7	110.17
2012	11.2	17.41	97.26	54.46	5.31	10.44	5.21	14.56	285.5	112.56
2010	10.2	16.88	NA	61.05	5.24	9.83	4.19	12.94	272.3	102.03

Source: Council of Europe (2022).

Regarding the number of judges it is noteworthy that in 2020 and in a similar way to the previous years, the COEU average had 64% more judges than Spain per every 100,000 inhabitants and in non-judge personnel this figure was 180% lower.

In terms of prosecutors the number in Spain is 50% of the European average with non-prosecutor personnel being 30%.

However, what really stands out is that the number of lawyers in Spain is 2.26 times that of the COEU average, which largely explains the high levels of litigation in Spain. We are once again looking at a case of a *supply that creates its own demand*[4].

Table 4: Absolute Gross Salaries (Euros)

	Salary at Begining of Career		Salary at End of Career	
	SPAIN	COUE	SPAIN	COUE
Judge	51,946	46,159	130,654	90,287
Prosecutor	51,946	37,304	130,654	67,051

[4] See Castillo (2023).

Source: General Council of the Judiciary and own creation (2010-2022)

As of 2022 in Spain the salary of judges at the end of their careers stands at 130,654 euros, the same as for prosecutors, whereas the COEU figures are 90,287 euros for the salary of judges, which represents 69% of that of their Spanish colleagues, and European prosecutors have a salary of 67,051 euros, which represents 51% of that of prosecutors in Spain.

Currently Spanish Judges are, following a recent conflict for the same reason as the former *secretarios* or court registrars, now referred to as *letrados de la Administración de la Justica* (Judicial Administration Clerks), are planning a labour conflict demanding salary increases, which has extended to administrative non-judge/prosecutor personnel.

Table 5: Efficiency of Judicial System

	CLEARANCE RATES			DISPOSITION TIME (days)		
	1st Instance	2nd Instance	Higher Instance	1st Instance	2nd Instance	Higher Instance
Civil	86.3	116.9	74.7	468	227	888
Criminal	95.1	103	74.3	227	59	412
Administrative	99.5	94.1	88.8	406	452	350
Clearance Rate = (Resolved cases/Incoming cases) *100						
Incoming cases = all new cases at that instance within the year						

Source: General Council of the Judiciary and own creation (2010-2022).

The duration of legal proceedings together with their origin and result, that is, the economic capacity of the litigants, constitute the main deficiencies of the Spanish Judicial System.

The length of a civil claim for a sum that is needed for daily family life or the normal functioning of a small business, for example, of four and a half years, or the unfair dismissal of a civil servant, which can be resolved in 3 years and four months, plus lawyer and procurador[5] fees, are only in the reach of citizens with very high income levels.

In short, in order to achieve solid economic development, it is necessary to have an efficient judicial system.

Coase[6], in his pioneering and basic work of economic thinking "The Problem of Social Cost"[7] stated that for a market to operate efficiently there is a need for freedom of contract between economic agents and a body to revise the clauses of the contracts and guarantee compliance.

Later, Acemoglu & Johnson[8] added that property rights also protect citizens against abuses on the part of the government or powerful economic groups.

A prior question: How can the "efficiency" of justice be measured?

There are various ways of measuring the efficiency of justice: Judicial congestion rate (t), Pending cases (t-1), New cases (t)/Resolved cases (t).

It is the quotient where the numerator comprises the sum of pending cases at the beginning of the period and those registered during said period and where the denominator is cases resolved in said period.

[5] In Spain the figure of *procurador* is the formal representative before the courts for citizens involved in legal proceedings, for whom it is not possible to engage in formal communications with these legal institutions on their own behalf.

[6] Coase (1960).

[7] It was followed by others such as "The Institutional Structure of Production" (1992) by the same author, not forgetting other later ones (1992) and the works of North (1981), (1991) and (1994).

[8] Acemoglu & Johnson. (2005).

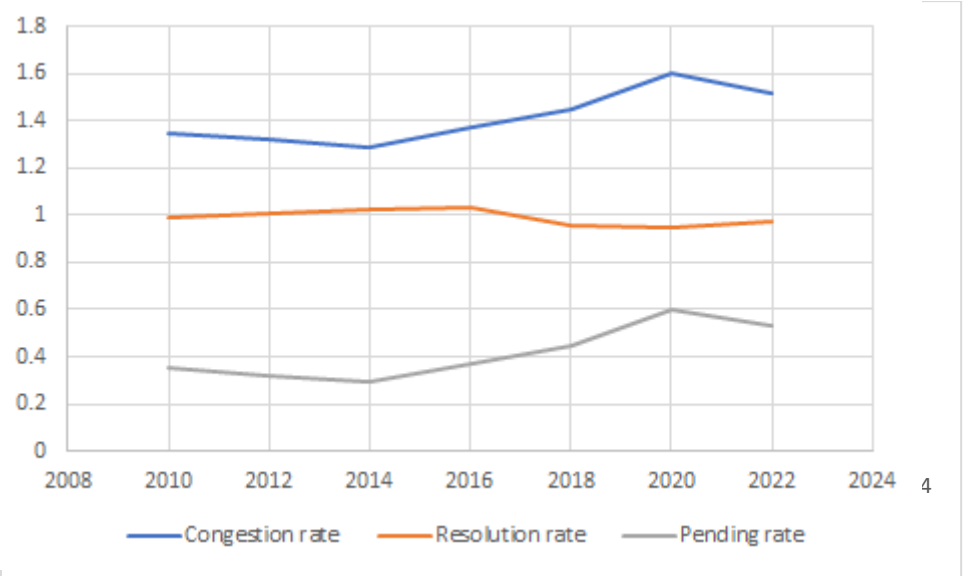
Resolution rate (t)=Resolved cases (t)/New cases (t). Quotient between the cases resolved and cases filed over a specific period.
Pendency rate (t)= Pending cases at the end (t)/ Resolved cases (t). It is the quotient between pending cases at the end of the period and those resolved in this period.

Table 6: Evolution of Key Indicators

	2010	2012	2014	2016	2018	2020	2022
Congestion rates	1.35	1.32	1.29	1.37	1.45	1.6	1.52
Resolution rates	0.99	1.01	1.02	1.03	0.96	0.95	0.97
Pending rates	0.35	0.32	0.29	0.37	0.45	0.6	0.53

Source: General Council of the Judiciary and own creation (2010-2022).

Graph 1: Evolution of Key Indicators.



The congestion rate is growing year on year despite the increase in means available to courts and the reduction in the number of claims filed, but the resolution period is increasing to a greater extent.

The resolution rate is stable.

The pendency rate is rising mainly due to the increase in resolution periods.

B) *The Opinion of Citizens, Professionals and Judges Themselves* Different institutions more related to the Judicial Administration in our geographical and institutional environment, such as the European Commission[9] and in Spain, such as the General Council of the Judiciary[10],

[9] European Commission (2023). https://spain.representation.ec.europa.eu/noticias-eventos/noticias-0/informe-sobre-el-estado-de-derecho-de-2022-la-comision-formula-recomendaciones-especificas-los-2022-07-13_es
[10] Consejo del Poder Judicial (2023): Justice datum to datum https://www.poderjudicial.es/cgpj/es/Temas/Estadistica-Judicial.es

professional bar associations and Metroscopia[11], but in particular the opinion of users on the barometers of the Sociological Research Centre (*CIS - Centro de Investigaciones Sociológicas*)[12] and the Ministry of Territorial Politics and Public Function (*Ministerio de Política Territorial y Función Pública*) present the Executive as the penultimate institution amongst the nine worst valued by citizens and in last place is, precisely, the Judicial Administration[13].

The majority of Spanish citizens have a mistrust of the judicial system and uphold that it is not independent, rather, the judges are subject to different types of pressure that modify their resolutions.

Particularly worthy of mention is the fact that a radically differing opinion than that stated by other citizens who are justice professionals regarding the functioning of the judicial system is precisely that held by the judges themselves. Amongst other assertions, 98% of judges consider they are "guardians and guarantors of the rights of citizens", 99% feel totally independent when making their decisions, despite 84% admitting that governments and those in their environment attempt to influence their decisions and, in particular, 72% of the judges interviewed recognised they felt pressured by the media.[14]

Attention may be drawn to the scarce number of responses that show disconformity with legal rulings (12.06%), regarding deficiencies in attention to citizens indicated by them (36.56%) and, above all, efficiency measured by the duration of proceedings and delay in obtaining due and definitive resolutions (53.69%) ("slow and late justice is not justice") and obscurantism for the affected party, finally, in the case of lawyers, lack of deontological behaviour (35.5%).

In general, the deficiencies of the judicial system in Spain generate inefficiency in the economic system but also social inequity given the existence of a large dose of uncertainty in the resolution of social conflicts and, in any case, with such conflicts being shown to be significantly influenced by the economic capacity of the litigants.

Given that the well-being of European and Spanish citizens is strongly influenced by access to and functioning of justice, the carrying out of reforms in this sphere is justified and recommended. The application of modern techniques in the management of the Judicial Administration will favour the reduction in periods of time employed in resolutions, improve the transparency of proceedings and the provision of systems that offer an alternative to traditional justice imparted by jurisdictional bodies.

I have, elsewhere, studied the possible effect of the provision of alternative systems to traditional justice[15], particularly mediation, and here I shall address the possible effects on the judicial system of the modernisation of the management of its administration, particularly digitalisation and artificial intelligence, in terms of efficiency, transparency and equity.

1.3. *The Problem of Judicial Corruption*

Spain has a high level of public corruption, which constitutes the main inconvenience in achieving an efficient assignment of public resources and fulfilling other constitutional mandates, in this regard, in matters of equity. Of the 180 countries evaluated by the organisation Transparency International, it occupies 35th place, situated on a par with other less developed countries such Botswana, Cape Verde and Saint Vincent and the Grenadines. In the EU it occupies 14th place out of 27 countries, slightly above Portugal and Lithuania.

[11] See Metroscopia (2023).
[12] Centro de Investigaciones Sociológicas (CIS). Various years.
[13] An extensive discussion on these topics can be seen in this same journal in Castillo (2023).
[14] Consejo General del Poder Judicial (2023).
[15] Castillo (2023).

Public and, in particular, judicial corruption is one of the main explanatory factors for the deficiencies of the Rule of Law in Spain and perhaps that which bears the most weighting amongst those that impede the abandonment of the lowest positions in the respective European rankings.

Corruption profoundly weakens the administration of justice as it generates a substantial impediment to the exercise of the right of people to an impartial trial and seriously reduces public trust in the judiciary.

Judicial corruption is, if possible, more serious than other types of public corruption because the action of the judicial system is the last resort available for citizens to obtain an adequate response from the Rule of Law, beyond of course frustration, detachment from institutions or even the search for individual solutions outside of the law.

Judicial corruption is the main reason for the conviction amongst citizens and particularly students (who because of our occupation see it confirmed on a daily basis), that there are other more effective and profitable procedures for achieving economic, professional or political objectives than systematic study or honest work.

The corruption of first instance judges is explained in the same way as other types of administrative corruption by *ex ante* profitability, nearby influences and, finally and where appropriate, they shall be tried by other judges. On the other hand, the corruption of the higher courts is related to their connection to political power and also, of course, to both its *ex ante* and *ex post* profitability.

Amongst the high number of complaints lodged by Spanish citizens before the European Commission reporting systemic corruption, particular of note are those that refer to the collusion of some judges with lobby firms representing lawyers and large companies and the proliferation of revolving doors via which judges who recently oversaw diverse proceedings now work for the accused.

There is a popular saying in Spain that a corrupt judge is like “a fox guarding the henhouse”.

This is despite the fact that article 14 of the Spanish Constitution stipulates that:

"All Spaniards are equal before the law, without discrimination on any ground such as birth, race, sex, religion, opinion or any other personal or social condition or circumstance”, but the reality is that for one reason or another in Spain there are more than 10,000 people are granted privilege.

In the case of Spanish judges, they enjoy double privilege, one legal and the other real. On the one hand, when a citizen considers a judge to have committed an offence, they have to hire and pay high fees to a lawyer and procurador and in the unlikely event that the complaint or lawsuit be admitted for processing, the proceedings will be plagued by difficulties and inconveniences to then finally be tried by a higher court intermediated by political power and even other judges. In summary, in Spain if a citizen feels attacked by a judge they have serious difficulties in simply exercise their rights. It is not easy to find a lawyer who wants to go against a judge, above all if their professional works coincide in the same territorial sphere.

The conviction of a judge in Spain, save for influence, reprisals or personal revenge by other judges or politicians, is pure fantasy. Despite the self-interested lack of official published data in this regard, between 1995 and 2018, only 1.55% of complaints or lawsuits against judges and prosecutors in Spain ended in a conviction. For other citizens the percentage of convictions is higher than 50%.

Regardless of the resistance of the affected groups that even marginalise and harass those who do not wish to participate in corrupt acts and even more so if they are complainants, it is highly useful from a social perspective to recognise the existence of judicial corruption. This is because nobody can live by hiding from reality but also because only through this recognition can mechanisms of prevention and repression be put in place.

From the point of view of the other operators in the judicial system, justice in Spain is extremely costly and as a result unequal, depending on the level of income of litigants. In reality, as in other orders in life, there are two types of justice, *one for the rich and one for the poor*.

Large companies, banks, institutions, white collar criminals, drug traffickers, etc. hire the best lawyers and thus, in part, achieve a high percentage of success in their legal proceedings. Market fees for these lawyers are prohibitive for the majority of the population and for this reason those lacking fortune, in the event they decide to initiate legal proceedings, must entrust their cases to duty lawyers who, save for a limited and manifest number of exceptions, are not found to be amongst the most prestigious and experienced.

Amongst others, practices almost medieval in nature such as compulsory membership, *la venia* (consent between lawyers), *la jura de cuentas* (fast payment guaranteed by law), the figure and role of the procurador etc. complicate formal and real access of citizens to the public service of Justice[16].

The figure of compulsory membership is in part responsible for this abomination. In reality there is no competitive legal services market. The figure of compulsory membership practically makes the private law sector a monopolistic company.

Table No. 3 reflects the fact that the number of lawyers in Spain is higher, in the same way as the growth thereof, than the European average. This excess supply of lawyers induces them to incentivise citizens to the increase in the demand for their services, creating as a result costly and interminable legal proceedings in order to supposedly resolve conflicts that, undoubtedly, could be dealt with more efficiently and fairly through other not strictly judicial procedures but this would clearly be in detriment to their fees.

Mora-Sanguineti and Garoupa[17] have found evidence that for each 1% increase in the number of lawyers, the rate of litigiousness grows by 1.4%. As a result, the increase in and excess supply of lawyers is not resolved with a reduction in the cost of their services, but with the creation of new judicial procedures.

On the other hand, the moral practice of the lawyer in Spain consists in complying with legal regulations, included in the code of ethics that comes from the compulsory professional membership, among others via the figure of professional secrecy that permits damage to be occasioned to others through the concealment of information and even directly cause unfair detriment to other parties unconnected to their clients.

The large majority of lawyers in Spain consider that morals are something that is basically related to their private lives, not the exercising of their profession.

A Catalan lawyer of great prestige in Spain and, especially among social groups, Loperena, with first-hand knowledge of this situation, has masterfully expressed it thus[18]:

> *One piece of advice: never go to hospital or court on your own initiative. If you have no other choice - when they take you on a stretcher, handcuffed or the law forces you to go, do so, but never cross their thresholds without having thought it through a thousand times. Because, although it is known where the entrance leads, the exit can lead you to the cemetery or jail. When you read this, many of you will wonder if lawyers who are competent, honest, decent fair and staunch defenders of the weakest still exist. Without wanting to sound corporatist, I can assure you that they do. Of course there are! During the 40 years that he practiced law, he met more than 100.*

Therefore, the main problems shown by Spanish justice are firstly corruption and, deriving in part from it, ineffectiveness, inefficiency and the inequity of the Judicial System, which constitute systemic characteristics.

The existence of an independent judicial system is a fundamental requirement for the viability of mixed economies. On the one hand, in order for transactions in the market to occur it is essential that there be property rights and fulfilment of obligations of the parties, with the guarantee of protection corresponding to the judicial administration. On the other hand, a social state is not possible

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[16] See Castillo (2023).
[17] Mora-Sanguineti. & Garoupa (2015).
[18] See Castillo (2023)

without the existence of an independent judiciary that guarantees the rights of citizens and operates as a safety net in the face of the excesses of the state.

2. Impact of Digitalisation and Artificial Intelligence on Society

The Human Rights Council on the Right to Freedom of Opinion and Expression, in particular Council Resolution 20/8 of 5 July 2012 and 26/13 of 26 June 2014, on the promotion, protection and enjoyment of human rights on the Internet:

> *Recognizes the global and open nature of the Internet as a driving force in accelerating progress towards development in its various forms, including in achieving the Sustainable Development Goals.*

The internet, and the technologies that have arisen around it, have fostered a digital revolution that is progressively modifying the daily life of people, along with the economy as a whole, but, is technology neutral?

In reality, errors frequently occur in many cases of technological innovations and the instruments via which they are put into practice. They tend to automatically be credited, without the slightest degree of critical analysis, with virtues such as truth, rigour, social improvements, etc. which in reality due to their very nature they lack.

Frequently, to justify the outcomes of certain economic and social processes that mere intuition can indicate as uncertain, highly dangerous or simply perverse, there is an attempt to present arguments such as: "it has been resolved via computer", that "an extremely sophisticated algorithm has been applied", that "the established protocol has been scrupulously followed" etc. as irrefutable proof that guarantees their veracity.

A number of forums defend the technique as a neutral act that lacks connections with ethical, political, social and environmental dimensions. But in reality the complex and even basic commands such as add, subtract, etc. and the technologies applied such as the abacus, the calculator, computers and so on are not neutral, mainly due to the main reason for their development and the use made of their results.

The promotion and funding of certain technical investigations, the effect regarding some of them of their dimensions and, above all, the use and applications thereof determine ways of economic, social and technological development and, as a result, the correlative social organisations and formations.

In my closest scientific sphere, economics, the existence of a gap between technology and humanism was closed centuries ago, even in terms of conventional economics, upon categorising visions of positive and normative economics as having been surpassed.

In the interrelationship of human beings with their environment and the different social dynamics, increasingly measured by technology, we can observe the "emerging complex systems", defined by the interaction of human and social activities with technology, and which it is not possible to explain in an exclusively mechanistic way.

2.1. ***Concept*s**

It has been a long time since Whorf, B.L. (1949),[19] and more recently, among others, Bueno, G.[20] demonstrated the connection between the different ways of naming, concepts and ways of thinking.

[19] Whorf (1971) at 249-262.
[20] For all see Bueno (2009).

A) Analogue and Digital Formats

To begin with, in regards to the denominations of "digital" versus "analogue" format, the Real Academia Española (RAE) contemplates various definitions for the term digital and the two most utilised are very likely *1) adj. Belonging or relating to the fingers and 2) adj. Said of a device or system: That creates, presents, transports or stores information via a combination of bits and 6) adj. Said of a handpicked appointment.*

I shall return to the first and sixth definitions further on, but now of course the reference for our object of study is definition 2.

Analogue is that based on the analogy: a connection of similarity between different elements. Analogue apparatus, in this framework, present information via a continual physical magnitude that is proportional to the value of the information itself. Analogue formats are paper, vinyl, film, videotape, cassette tape, etc.

In contrast to the paper format in which information has traditionally materialised, now the analogue signal is continuous and can record infinite values.

On their part, digital formats are magnetic disks, diskettes, optical disks, memory cards etc. The digital signal is discontinuous and can only record 0 or 1 values or states.

B) *Algorithms and Artificial Intelligence*

According to the RAE, an algorithm is an *ordered and finite group of operations that permits the solution to a problem to be found.*

An algorithm of medium complexity is, for example, the set of rules that develop the arithmetic operation of multiplication. Although of course others are more complex[21].

The RAE defines artificial intelligence as the *scientific discipline concerned with creating computer programs that execute operations comparable to those carried out by the human mind, such as learning or logical reasoning.*

Thus, neither the algorithm or artificial intelligence are the panacea or guarantee or anything. They are designed by humans, to which the results obtained from their application depend on their logical structure and the objectives of the subject who built them or the individual who ordered it. Therefore, the transparency of algorithms requires knowledge of their design but also their maintenance, the results obtained and, finally, their controls require an authority with technological competencies that guarantee their independence and correct functioning.

Thus, in my opinion, certain order must be applied to the concepts with the aim of substantiating our conclusions or analysing those of others with rigour.

2.2. ***Efficiency, Equity and Digitalisation***

The main unarguable benefit of the digitalisation process in economic activity comes from the efficiency of both private and social productive processes and even new business opportunities.

If 43.1% of the population in Africa and 93.4% in North America have internet access this betrays the fact that these digital divides are not collaborating towards reducing the economic and social inequalities in the world, quite the opposite.

[21] Logistic or linear regression, Instance based Algorithms such as k-Nearest Neighbor (k-NN), Decision Tree or Random Forest, Bayesian Algorithms such as Naive Bayes, Clustering Algorithms such as K-medians, Neural Network Algorithms such as XOR gate, Deep Learning Algorithms such as Convolutional Neural Networks, Dimensionality Reduction Algorithms such as Principal Component Analysis (PCA), Natural Language Processing (NLP) such as Text Generation with GPT-2, etc.

In Spain, the 2020 Survey on Information and Communication Technology Equipment and Usage in Households of the Statistics Institute of Spain (INE), shows that the access and penetration capacity of Information and Communication Technologies (ICT) in Spain is high: 95.4% of households have an internet connection and 81.4% of households dispose of some type of computer. Nevertheless, the differences are explicative: 26.6% of poor households lack any type of computer, double the figure for rich households.

The percentage of households lacking connectivity is low (4.6%) but the poorest tend to connect via mobile telephones. This lack of connectivity explains that just 43.1% of poor individuals have low or no digital skills whereas for non-poor individuals this percentage stands at 24.2%.

There is also a generational gap to which inactive individuals over the age of 65 show a lower usage percentage for new technologies than the active population and, finally, usage is lower in rural than in urban areas.

Regarding the specific aspect of the impact of gender, a growth in access to digital technologies is occurring on the part of women. However, the gap between men and women persists, mainly due to the different quality of internet access and secondly because of the manifestation of substantial differences regarding digital skills. These differences are lesser between young people and high level professionals but extremely prominent in women with low level skills.

There is a need, therefore, for a public action destined towards overcoming digital divides due to gender but, furthermore, the creation of new jobs due to the digitalisation processes of activities is greater in the case of men than it is for women[22].

Remote working undoubtedly favours the work-life balance possibilities of women with family responsibilities, thus helping to reduce the aforementioned difference but, in reality, it is a double edged sword because it can deprive them of the socialisation factor provided by an external work activity.

The scarce presence of women in the design and production of new technologies contributes to the fact that in general the field does not contemplate the gender perspective and, as a result, discourages the presence of women in the digital industry.

3. The Digitalisation of the Judicial Administration

The modernisation and digitalisation of the Judicial Administration will presumably give rise to personal and social benefits, particularly, by improving transparency and thus efficiency but, also, in specific circumstances, equity although it is unclear that this is the case for the latter.

3.1. *Impact of Digitalisation on the Efficiency of Justice*[23]

In this sphere it is necessary to point out that amongst the costs incurred and services obtained from the Judicial Administration, it is not only necessary to contemplate the strictly monetary magnitudes but also others that have no market price, such as the stigmatisation of the person being put on trial, the delays in legal rulings and even more so in the delays in enforcements of judgments, the stress provoked by the actions of civil servants and police in judicial proceedings in regards to the

[22] See Sáinz, Arrollo & Castaño (2022).

[23] Efficiency refers to the relationship between entries to the judicial system (personnel, equipment, energy, etc) and exits (judgments, rulings, etc), conventional economics refers to the relationship between input and output.

majority of citizens, etc. In short, it is essential to consider all costs and income both in terms of those that are public corresponding to the Administration and those of a private nature assumed by citizens, now referring to monetary and other not strictly monetary magnitudes.

The digital process will afford a greater social efficiency to the judicial system given that, amongst other reasons, it will even collaborate in reducing the problems of CO_2 emissions that are affecting climate change. It is therefore foreseeable that there will be a reduction or elimination of paper, the need for citizens and professionals to make fewer physical journeys, reducing the concentration of workers in office complexes, etc., helping to reduce the influence of the activity of the administration and of the judicial services on climate change.

The analysis of a good proportion of the abundant literature in this regard reveals that the public and even professional debates currently unfolding are too often approached extremely poorly. It may appear that the digitalisation of the Judicial Administration is highly novel, as if many courts had not been for a while now using the digitalisation of documents and even, in some, at least primary stages of algorithms or artificial intelligence, of course in their widest senses. In reality there are a considerable number of courts where paper has hardly been used for a number of years and which have programs and platforms that facilitate the information and telematic management of administrative procedures.

However, it is also the case that there are courts in which even today the desks of the public employees are covered with mountains of folders and documents and the court archives normally located in basements are dirty places with a chaos of boxes and papers stored without any sort of criterion.

Therefore, it would be more correct to speak about modernisation of the Judicial Administration via the employment of new management tools and procedures currently used in both other administrations and the private sector, amongst which of course are digitalisation and some initial levels of algorithms and, finally, artificial intelligence.

The digitalisation of the Judicial Administration in Spain constitutes a process already started quite a long time ago and that, of course, is not going to be completed or finalised immediately, regardless of how many regulations are published hastily ad hoc, given that innovation after innovation they reveal a lack of miracle making power.

3.2. *Impact of Digitalisation on the Equity of Justice*

The effects on equity in the development and results of legal proceedings of their modernisation and digitalisation in principle, particularly due to transparency, seemed it was going to be in a positive sense but it will not in reality occur thus. The inequality of arms and its translation to diverse legal rulings is one of the main inconveniences of our judicial systems and no reason appears to be on the horizon for this to change with the mechanisation and modernisation of their administrations.

Firstly, the most vulnerable will end up in a worse situation than before the initiation of the Justice digitalisation process. This group will have the same problems they had before, now added to which are the difficulties they face as regards using the new technologies, not to the mere possession thereof and, furthermore, predictably, the new difficulties for carrying out the necessary and traditional communications in person with the Judicial Administration.

Regarding equity and equality in justice, paradoxically they are not identical concepts. Equality is treating those who are unequal in the same way, whereas equity is treating those who are unequal in an unequal manner in order to reduce differences.

Amongst others, Article 9.2 of the Spanish constitution (CE - Constitución Española) is a precept that commits the action of public powers to enabling the achievement of substantial equal between individuals, independently of their social situation. (Constitutional Court Judgment [STC - Sentencia Tribunal Constitucional] 39/1986, 31 March).

For its part, Article 31.1 of the Spanish Constitution contemplates equity and not equality in tax matters. It does not stipulate that all Spanish citizens must bear the same fiscal load, rather, that everyone must pay an unequal amount according to their income and riches.

Despite being a question scarcely dealt with in scientific literature and completely ignored in the legal profession, in reality the majority of judicial systems are completely opaque for ordinary users. The obligatory intermediation of lawyers and procuradors constitute more often than desired the only justification of their interventions in legal proceedings. In a large number of cases of simple procedures a common objective of lawyers consists in concealing the avatars of the proceedings from the litigants, including the expertise or lack thereof shown by the lawyer and the procurador in their actions. Many lawyers use the argument of lack of legal knowledge on the part of the clients for not informing them and in the case of the procuradors because this opacity precisely constitutes the excuse for their professional action.[24]

In principle, the digitalisation of the judicial administration with one of its main instruments such as the electronic legal case file and its access both to professionals and citizens shall provide a considerable amount of transparency and efficiency to the judicial system. In the same vein, other information such as that deriving from the right to access judgments on the topic and issued by specific judges, the duration of proceedings in different courts and their effectiveness in the enforcement of judgments, archived cases, etc. shall permit citizens to make rational decisions.

In fact, the majority of economic models regarding law and other objects start out from the basis of perfect information, that is, that all operators know the working mechanisms and real and expected magnitudes of the proceedings. In these conditions, a significant proportion of well-informed litigants will seek alternative means to resolve their disputes.

In general for citizens the judicial system can be less costly and more accessible when the intervention of lawyers and, above all, procuradors, is not obligatory.

4. Preventions and Precautions:

4.1. *General approach*

When applying algorithms and artificial intelligence plans it is first necessary to consider and decide on various questions recommended by the available logic and experiences.

A) Requisites

The analysis of algorithms and of artificial intelligence in general can be very proliferous and technical, but to discover its impacts it is necessary to at least consider the following aspects:

-Are all the variables or at least the most relevant considered?

-How can it be guaranteed that the artificial intelligence and the algorithms that use the available data are correct?

-Where are the internal logic and the mathematical formulation of the algorithm made explicit?

-What happens if the results that are the consequence of the use of algorithms do not coincide with logic and particularly the subjective and experienced viewpoint of a judge?

The first conclusion is immediate: the artificial intelligence and algorithm systems should only be used if there are mechanisms available to control them and which guarantee the reliability of their results. The next is correlative: neither judges or lawyers or the majority of citizens are familiar with these materials.

[24] In a recent meeting of jurists and other professionals in which Dr Fernando Esteban Delarosa, a well-known senior Law Professor at the University of Granada, presented the current justice digitalisation process in Spain, a procurador from the Professional Association of Granada showed her indignation to the new legislation and asked why users were going to have access to the electronic case file when they had already been appointed a lawyer and procurador.

Predictive digital justice can only be implicated in orientations as regards lines of investigation, due precautions and controls with predictions, but never in judicial decisions. The latter must be based, of course, on the available objective data but also and above all on the subjective assessment of the judger of the most relevant data, the study of the environment and the application of the regulations.

B) Dangers

There must be a precautionary analysis and where appropriate elimination of actions that pose significant danger to:

-The protection of honour due to undue disseminating of the proceedings and dangers of remote statements: Non-observance of non-verbal language.
-Algorithms may contain serious errors or go against human rights
-Difficulties for vulnerable sectors of the population, elderly, disabled, etc. in accessing online communications
-The behaviour of individual humans cannot be reduced to a series of standardised variables specific to typical economic and social rationalities.
-There is a danger of government manipulation of judges via information and algorithm management and even the prediction of their resolutions and judgments.

4.2. *O**nline Communications and Oral Hearings***.

One of the great advantages that the digitalisation of the Judicial Administration is bringing with it is undoubtedly the access to the information of proceedings, in general, the ease of access to the electronic case file, the incorporation of new documents into the proceedings and even the undertaking of simple appearances on the part of litigants, of course with the due precautions.

It is foreseeable that administration costs are reduced significantly for legal operators, above all in terms of the reduction in journeys, paper, printing and, as a result, a reduction in social environmental costs.

This process also unquestionably brings with it a series of dangers that, left unmitigated, will cause problems to the equity of proceedings and legal guarantees.

For example:

-In this type of communication the principle of immediacy is harmed for a number of reasons.
-Communication via videoconference demands a number of precautions to verify both the authenticity of the person communicating and that their interventions are not obstructed or directed by individuals not authorised to do so. It is necessary to have a simultaneous and complete view of all participants, judges, court registrars, litigants, lawyers, procuradors.
-It does not permit the provision of documents to all participants simultaneously
-It does not permit communications between lawyer and client with the required confidentiality
-Information provided by non-verbal language of participants, etc. is lost.

And perhaps amongst the most worrying is

-The presence of the public online poses problems relating the right to privacy that are difficult to resolve, such as the dissemination of images of the proceedings

4.3. ***The application of Artificial Intelligence to a framework that is traditionally "not very intelligent".***

Here my contemplation, as a mere exercise, is not even the substitution of judges and lawyers with robots, although I must recognise that given the unfortunate actions in some cases the temptation arises to do so.

The complexity of the human mind, both in regards to diverse rationalities and to value judgements, disregards any attempt at substituting physical judges with machines.

However, it is true that the modernisation and mechanisation of the Judicial Administration may collaborate in making legal rulings easier and more reasoned. But in any case, there are various questions that must be considered and analysed.

The application of artificial intelligence to the Judicial Administration presents an added problem, that is, the application of artificial intelligence to an object that is "not very intelligent". From the beginning of their training in law faculties, judges receive habitual study material and learning methodology that is more memory based, that is, scarcely analytical, lacking any scientific rationality whatsoever.

The final product, in other words, the applicable legal judgments, are not constructed with scientific reasoning, but via a mere administrative hierarchy, to the extent that what is decided by higher courts has more weight that what first instance courts decide, with the latter even being annulled if they do not coincide with the former.

As the judges do not have an in-depth understanding of the case they are trying, particularly when they involve topic of complexity, in order to set the facts they must resort to experts in different matters, with the judgment subject to so-called reports. This inconvenience is so manifest that in numerous judgments it can clearly be observed that the judge does not enter into the crux of the matter, deriving the proceedings either to lateral or merely formal questions, because in reality they do not wish to show their ignorance or base the judgment solely on the opinion of an external third party.

To this difficulty we must add the complete lack of experience in the use and moreover ignorance of the basics of the new technologies, to which neither are they going to understand the methodologies of the reasoning and the evidence presented by the parties. In short, to the "arrogance of the ignorant" often exhibited by many judges we must now add the ensuing but guaranteed incomprehension of the technical environment or algorithms and artificial intelligence etc. in which legal proceedings are going to be carried out.

In summary, either it is necessary to urgently proceed to train judges in the scientific disciplines most applied to artificial intelligence, which is improbable, at least successfully, or there is an essential urgent need for the installation of an authority with technological competencies that guarantee the independence and correct working of the new proceedings.

4.4. *Artificial Intelligence and the Algorithmisation of Life and Justice: Solution or Problem?*

For a number of years now the professional and some general communications media have been awash with statements and predictions regarding the application of artificial intelligence. This topic is normally addressed as if it were a novelty occurrence and in the short term we are going to leave the administering of justice in the hands of robots.

In my opinion and as it has been demonstrated in other social processes, there is an information overload that exceeds individual capacity to assimilate and process, and which makes it difficult for citizens to be truly well informed.

Firstly, the modernisation processes relating to the management of the Judicial Administration, including digitalisation, as in other administrations and the private sector is not a novel question, be it for legal prescription or simple rationality, but neither is it going to culminate in a brief period because the situation is extremely unequal in the different administrations and countries and it will be a constant, long-term process.

Thus, this debate is unfolding with a lack of an intellectual dimension, beyond the ongoing innovation, in terms of its application to the administrations and finally its legal dimension.
Something else would be the substitution of the human intelligence of physical judges and other legal practitioners with robots fitted with the unfortunately named artificial intelligence, which is impossible at least in all of its magnitudes and perspectives.

A robot can have a series of algorithms installed by way of rational behaviours to the effects of a pattern fixed by its "creator". But individual human behaviour does not follow any pattern because it is plagued by value judgements, prejudices, ethical and political behaviours, legal and individual restrictions, etc. removed from typical, fixed and predictable behaviour.
Nonetheless, well directed robots can develop a series of basic mechanical tasks that can free up in judges the use of mental and physical resources necessary for their execution, which can allow them to focus on higher intellectual tasks.

To summarise, artificial intelligence is not capable of issuing FAIR judgments but may be of extremely valuable assistance to judges to issue them.

5. An Emerging Complex System?

There is an occurrence of frequent errors in the cases of sacralisation of some technical innovations and their instruments, to which they are automatically credited, without any critical analysis whatsoever, with virtues such as truth, rigour, social improvement, etc. which due to their very nature in reality they lack. Frequently, to justify the result of a process that intuition indicates as having an uncertain outcome, plagued with dangers or, directly as perverse, there is an attempt to present arguments such as: "it has been resolved via computer", that "an extremely sophisticated algorithm has been applied", that "the established protocol has been scrupulously followed" etc. are attempted to be presented as irrefutable proof of their veracity.

A number of forums defend the technique as a neutral act that lacks connections with ethical, political, social and environmental dimensions. But in reality the complex and even basic commands such as add, subtract, etc. and the technologies applied such as the abacus, the calculator, computers and so on are not neutral, mainly due to the reason for their development and the use made of their results.

The promotion and funding of certain technical investigations, the effect regarding some of them of their dimensions and, above all, the use and applications thereof determine ways of economic and technological development and, as a result, the correlative social organisations and formations.

In the closest scientific sphere, economics, the existence of a gap between technology and humanism was already closed even in conventional economics, upon categorising visions of positive and normative economics as having been surpassed.

In the interrelationship of humans with their environment and in different social dynamics, increasingly mediated by technology, we can observe "emerging complex systems", which cannot be explained in exclusively mechanical and functional terms. Some emerging complex systems are the result of the interaction of human and social activities with technology and cannot only be explained mechanically.

6. Postscript: more means for the Traditional Judicial Administration?

The problems expounded and the consequent dissatisfaction in citizens caused by congestion in the courts and the corresponding delay in obtaining definitive resolutions cannot be exclusively

pursued with means of supply aimed at the Judicial Administration, particularly via the increase of resources and improvement in its organisation. Without spurning away from the possibilities offered by this dimension, the greatest room for manoeuvre to be identified today is on the side of demand, that is, in the reduction in user numbers.

Therefore, the number of requests to access ordinary courts will substantially decrease with the development and establishment of alternative conflict resolution systems, less costly compared to the judicial process, based on different ways of bringing about agreements between parties.

The increase of conflicts and the election of the legal channel for their resolution is related to the bureaucratic empire that affects above all the operators of the Judicial Administration, who manage proceedings in a monopolistic way, lacking constitutional and social justification, as in the case of judges but also and, above all, lawyers and procuradors.

Judges and other judicial administrators are interested in inflating their departments and other areas of influence because their social value and monetary rewards depend on it. Moreover, in the case of lawyers it is more direct: their rewards depend on the number of legal proceedings in which they represent clients. In short, judges and lawyers are “suppliers who create their own demand”.

If the judicial process were afforded greater quantities of information and transparency towards users it would provide them with better knowledge and certainty regarding the result of their conflicts. In these conditions the number of requests to access the courts and the services of lawyers and procuradors would see a substantial reduction. The existence of alternative conflict resolution systems would also contribute to achieving this end, less costly compared to the judicial process, based on different ways of materialising agreements between parties.

7. Summary and Conclusions.

The Rule of Law in Spain compared with the other countries of the European Union (EU) currently occupies position 15 out of 27, but if we analyse the west in general (including EU, EFTA (European Free Trade Association) and North America) the quality of the legal system is not so positive, as it occupies position 18/31 and 23/43 among the world's richest countries.

One of the biggest problems of the Judicial Administration in Spain is the excessive delay of legal resolutions. The congestion rate is growing year upon year despite the increase in means at the disposal of courts and the decrease in the number of lawsuits filed, as the period for the definitive resolution of proceedings is increasing to a greater degree.

In the opinion of Spanish citizens, the deficiencies of the Legal System in Spain create inefficiency in the Economic System but also social inequity due to the existence of a large amount of uncertainty in the resolution of social conflicts and, in any case, these are significantly influenced by the economic capacity of litigants.

Therefore, the main problems shown by Spanish justice are firstly corruption and, deriving in part from it, ineffectiveness, inefficiency and the inequity of the Judicial System, which constitute systemic characteristics.

The foreseeable effects on the efficiency of the digitalisation process of the Judicial Administration will be positive as they will suppose fewer costs both for the Administration itself and for citizens; however, the consequences for equity are neither clear nor homogeneous. In general, it is predictable that the most negatively affected will be the poorest citizens, women and the elderly.

One of the great advantages that the digitalisation of the Judicial Administration is bringing with it is the transparency of administrative procedures, access to the information of the proceedings, and ease of access to the electronic case file on the part of professionals and citizens in general.

It is foreseeable that administration costs be reduced significantly for legal operators, above all in terms of the reduction in journeys, paper, printing and, as a result, the reduction in environmental and other social costs.

Although justice is not nor should it become a mere act of prediction, or a mathematical model that can lead to formulas, it is no less certain that the employment of AI for specific purposes may be extremely useful in all jurisdictional orders.

This process also unquestionably brings with it a series of dangers that, left unmitigated, will cause problems to the equity of proceedings and legal guarantees.

In summary, digital systems, algorithms, artificial intelligence and other technological innovations may bring efficiency benefits to citizens and the Judicial Administration but should only be used if there are mechanisms for their control and which guarantee their equity, the protection of honour and privacy, legal guarantee and reliability of results. The next is correlative: neither judges or lawyers or the majority of citizens are familiar with these materials.

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