

ANALYSIS OF THE ISSUES RELATED TO THE LEGALIZATION OF ARTIFICIAL INTELLIGENCE, ITS USE IN LEGAL PROCEEDINGS, LEGAL CONSULTATION AND LAW ENFORCEMENT SYSTEM

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I. INTRODUCTION

Given the rapid progress of technologies and their deeper integration into our daily lives, the issue of legalizing artificial intelligence (AI) and its application in judicial proceedings, legal consultation, and law enforcement systems is gaining unprecedented relevance. The advancement of AI opens up new horizons of possibilities. However, it poses complex ethical, legal, and social challenges to society and

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lawmakers. This Article aims to explore the nuances of artificial intelligence legalization, its role and impact on the judicial system, legal consultation, and law enforcement, as well as to outline the potential benefits and risks it may bring.

In this Article, the Authors aim to approach the analysis with a particular focus on ensuring that technological progress serves the interests of all segments of society without excluding anyone through its evolution. The evolution and implementation of AI in the legal sphere have the potential not only to make legal services more accessible and efficient but also to raise questions about decision autonomy, process transparency, and personal data protection.

People are on the threshold of a new era where artificial intelligence can become not only a tool in the hands of lawyers but also an active participant in legal processes. It requires a technical understanding of the new technologies and a deep understanding of their impact on the fundamental principles of the law and justice.

II. LITERATURE REVIEW

In modern scientific discourse, the issue of integrating AI into the legal sphere is becoming particularly relevant, attracting the attention of researchers from various parts of the world. The Authors begin this overview with the study by Robert Walters and Marko Novak.⁶ The authors elucidate a wide range of AI applications in the legal field, including cybersecurity, data protection, and legal aspects.⁷ This study lays a solid foundation for understanding key issues related to AI in law and serves as a starting point for further analysis.⁸

Harry Surden⁹ continues this line of inquiry, focusing on the values underlying legal artificial intelligence. The author¹⁰ emphasizes the need to integrate ethical norms into the development and

⁶ Robert Walters & Marko Novak, *Artificial Intelligence and Law*, in CYBER SECURITY, ARTIFICIAL INTELLIGENCE, DATA PROTECTION & THE LAW (Pompeu Casanovas & Giovanni Sartor eds., 2021) at 39–69.

⁷ *Id.*

⁸ *Id.*

⁹ Harry Surden, *Values Embedded in Legal Artificial Intelligence*, 41 IEEE TECH. & SOC'Y MAG. 66 (2022), <https://ieeexplore.ieee.org/document/9731832>.

¹⁰ *Id.*

implementation of AI technologies in legal practice, which logically complements the theses of Walters and Novak,¹¹ expanding the discussion to moral dilemmas.

Themistoklis Tzimas¹² expands the discussion, highlighting the international legal and ethical challenges of AI. The author draws attention to the global aspects of AI legal regulation, which allows for a better understanding of the scale and complexity of the problem, bridging national and international approaches.¹³ Stela Mecaj¹⁴ analyzes the legal challenges associated with AI in detail, including questions of responsibility and regulation. The author emphasizes the need to adapt existing legal frameworks to the new realities arising from the development of AI technologies.¹⁵ This analysis is critically important for understanding how the law can

¹¹ Walters & Novak, *Artificial Intelligence and Law*.

¹² Themistoklis Tzimas, *Legal and Ethical Challenges of Artificial Intelligence from an International Law Perspective*, 46 SPRINGER NATURE (2021).

¹³ *Id.*

¹⁴ Stela Mecaj, *Artificial Intelligence and Legal Challenges*, 20 REVISTA OPINIÃO JURÍDICA (FORTALEZA) 180 (2022).

¹⁵ *Id.*

evolve to ensure fairness and efficiency in the digital era.

Sylwia Wojtczak¹⁶ makes an essential contribution by exploring the concept of the legal subjectivity of AI. The work reveals potential ways of attributing AI elements of subjectivity, which can radically change the legal paradigm and the interaction between humans and machines in a legal context.¹⁷ Stamatis Karnouskos¹⁸ develops the idea of symbiosis between AI and society through the lens of law, robotics, and social relations. This approach allows for a deeper exploration of the social consequences of AI implementation, particularly in the context of legal norms and human interaction.

Jennifer Cobbe and Jatinder Singh¹⁹ analyze AI as a service, focusing on legal responsibilities, obligations, and political challenges. Their research

¹⁶ Sylwia Wojtczak, *Endowing Artificial Intelligence with Legal Subjectivity*, 37 AI & SOC'Y 205 (2022).

¹⁷ *Id.*

¹⁸ Stamatis Karnouskos, *Symbiosis with Artificial Intelligence Via the Prism of Law, Robots, and Society*, 30 A.I. & L. 93 (2022).

¹⁹ Jennifer Cobbe & Jatinder Singh, *Artificial Intelligence as a Service: Legal Responsibilities, Liabilities, and Policy Challenges*, 42 COMPUT. L. & SEC. REV. (2021).

emphasizes the need to establish clear legal frameworks for managing AI services, anchoring the discussion around responsibility and regulation in the era of digitization.²⁰ It is essential to note the work of Stanley Greenstein,²¹ which focuses on preserving the rule of law in the AI era. The author examines how AI can impact traditional legal principles, requiring society to adapt to new conditions.²² This study is a logical continuation of the debate on legal challenges and ethics initiated by previous authors.²³

Riya Sil and Abhishek Roy²⁴ examine the application of AI in the Indian legal system, offering valuable insights into the specifics of AI implementation in the legal systems of specific countries. Their work allows for a deeper understanding of the potential of AI to enhance the efficiency and accessibility of justice using the example of India, complementing the global context

²⁰ *Id.*

²¹ Stanley Greenstein, *Preserving the Rule of Law in the Era of Artificial Intelligence (AI)*, 30 A.I. & L. 291 (2022).

²² *Id.*

²³ *Id.*

²⁴ Riya Sil & Abhishek Roy, *A Review on Applications of Artificial Intelligence over Indian Legal System*, 69 IETE J. RES. 6029 (2023).

described in previous studies.²⁵ Rafael Dean Brown²⁶ explores issues of property ownership and legal personality of artificial intelligence. This analysis is critically important for understanding how AI can be integrated into existing legal frameworks and what changes may be necessary to recognize AI as a legal entity.

Krystyna Nizioł²⁷ addresses challenges in consumer rights protection associated with AI development, especially in the financial services sector. This perspective allows for assessing the potential risks and benefits of AI implementation in terms of consumer protection, which is an essential aspect in the broader context of AI legal regulation. Anne-Sophie Martin and Steven Freeland²⁸ examine the emergence of AI in space activities, highlighting

²⁵ *Id.*

²⁶ Rafael Dean Brown, *Property Ownership and the Legal Personhood of Artificial Intelligence*, 30 INFO. & COMMUNIC'NS. TECH. L. 208 (2020).

²⁷ Krystyna Nizioł, *The Challenges of Consumer Protection Law Connected with the Development of Artificial Intelligence on the Example of Financial Services (Chosen Legal Aspects)*, 192 PROCEDIA COMPUT. SCI. 4103 (2021).

²⁸ Anne-Sophie Martin & Steven Freeland, *The Advent of Artificial Intelligence in Space Activities: New Legal Challenges*, 55 SPACE POL'Y (2021).

new legal challenges. This study expands the analysis horizons, indicating the need to develop international regulatory norms to regulate the use of AI in space.²⁹

Nithes Naik and colleagues³⁰ focus on the legal and ethical aspects of AI use in healthcare, emphasizing responsibility issues. This research is vital for understanding how AI can serve the good of medicine while maintaining ethical standards and legal responsibility.³¹ David Leslie *et al.*³² provide an introduction to artificial intelligence, human rights, democracy, and the rule of law, laying the groundwork for discussing the impact of AI on societal values and institutions. This work is a valuable resource for assessing the balance between innovation and ensuring human rights and freedoms.³³

²⁹ *Id.*

³⁰ Nithes Naik et al., *Legal and Ethical Consideration in Artificial Intelligence in Healthcare: Who Takes Responsibility?* 9 FRONTIERS IN SURGERY 266 (2022).

³¹ *Id.*

³² DAVID LESLIE, CHRISTOPHER BURR, MHAIRI AITKEN, JOSH COWLS, MICHAEL KATELL & MORGAN BRIGGS, *ARTIFICIAL INTELLIGENCE, HUMAN RIGHTS, DEMOCRACY, AND THE RULE OF LAW: A PRIMER* (2021), <https://arxiv.org/abs/2104.04147>.

³³ *Id.*

Łukasz Górski and Shashishekar Ramakrishna³⁴ explore the issues of explanatory artificial intelligence from lawyers' perspective. The authors point out the need to make AI more understandable and accessible to legal professionals.³⁵ This approach emphasizes the importance of transparency and accountability in the process of integrating AI into legal practice. The research by Hui Yan and John Zeleznikow³⁶ is worth noting. It focuses on the appropriate use of artificial intelligence in law, particularly on the responsibility of AI in legal decision-making processes.³⁷ This paper complements previous research by deepening the understanding of the complexity of legal aspects of AI applications.³⁸ The authors emphasize the need for clear rules and standards to ensure fairness and effectiveness in legal practice.³⁹

³⁴ Łukasz Górski & Shashishekar Ramakrishna, *Explainable Artificial Intelligence, Lawyer's Perspective*, EIGHTEENTH INTERNATIONAL CONFERENCE ON ARTIFICIAL INTELLIGENCE AND LAW 60 (2021).

³⁵ *Id.*

³⁶ Hui Yan & John Zeleznikow, *The Appropriate Use of Artificial Intelligence in Law: Investigating the Liability of Artificial Intelligence in Legal Decision-Making*, 3 ANU J. L. & TECH. (2022).

³⁷ *Id.*

³⁸ *Id.*

³⁹ *Id.*

Tambiama Madiega⁴⁰ offers an analysis of the European Parliament's draft law on artificial intelligence. This is a key document for understanding the future regulation of AI in Europe.⁴¹ This research is vital for assessing legislative efforts to create legal frameworks that address the wide range of challenges associated with AI use.⁴² The research by Maciej Jarota⁴³ is quite interesting. This study focuses on artificial intelligence and robotics in the EU concerning whether labor protection legislation should be amended.⁴⁴ The author highlights the need to adapt the regulatory framework to new challenges arising from technological development, emphasizing the importance of protecting workers in the digital age.⁴⁵

⁴⁰ TAMBIAAMA MADIEGA, ARTIFICIAL INTELLIGENCE ACT. EUROPEAN PARLIAMENT: EUROPEAN PARLIAMENTARY RESEARCH SERVICE (2021), [https://www.europarl.europa.eu/thinktank/en/document/EPRS_BRI\(2021\)698792](https://www.europarl.europa.eu/thinktank/en/document/EPRS_BRI(2021)698792).

⁴¹ *Id.*

⁴² *Id.*

⁴³ Maciej Jarota, *Artificial Intelligence and Robotization in the EU: Should We Change OHS Law?* 16 J. OCCUPATIONAL MED. & TOXICOLOGY 1 (2021).

⁴⁴ *Id.*

⁴⁵ *Id.*

The study by Serena Villata *et al.*⁴⁶ summarizes three decades of research on artificial intelligence in law. This paper has a particular focus on the last decade.⁴⁷ The authors reflect on the evolution of the discipline and identify key achievements and challenges, outlining future directions in the field of AI and law.⁴⁸ The research by Patricia Gomes De Almeida *et al.*⁴⁹ proposes frameworks for regulating artificial intelligence, emphasizing the need to develop an effective AI management system. The authors focus on the importance of ethical norms in AI regulation, highlighting the need for transparency and accountability in AI use.⁵⁰

The work of Natalie Smuha *et al.*⁵¹ responds to the European Commission's proposal for an AI act, discussing how the EU can achieve legally trusted AI.

⁴⁶ Serena Villata *et al.*, *Thirty Years of Artificial Intelligence and Law: The Third Decade*, 30 A.I. & L. 561 (2022).

⁴⁷ *Id.*

⁴⁸ *Id.*

⁴⁹ Patricia Gomes de Almeida, Carlos Denner dos Santos, & Josivania Silva Farias, *Artificial Intelligence Regulation: A Framework for Governance*, 23 ETHICS & INFO. TECH. 505 (2021).

⁵⁰ *Id.*

⁵¹ Natalie Smuha *et al.*, *How the EU Can Achieve Legally Trustworthy AI: A Response to the European Commission's Proposal for an Artificial Intelligence Act*, SSRN ELECTRONIC JOURNAL (2021).

The authors critically analyze the proposal, pointing out weaknesses in the draft law and suggesting ways to improve it.⁵² Lucia Zheng *et al.*⁵³ explore when pre-training helps to assess self-regulated learning for law. They analyzed a dataset of over 53,000 legal conclusions.⁵⁴ This work makes an essential contribution to understanding the potential of AI to support legal analysis and decision-making.⁵⁵

Rika Riyanti⁵⁶ examines the legal status of artificial intelligence-based medical insurance services. The author identifies challenges and opportunities for consumer protection.⁵⁷ This research underscores the importance of legal guarantees for consumers in the context of AI utilization in the insurance industry. Araz Taeihagh⁵⁸ analyzes AI

⁵² *Id.*

⁵³ Lucia Zheng *et al.*, *When Does Pretraining Help? Assessing Self-Supervised Learning for Law and the Casehold Dataset of 53,000+ Legal Holdings*, EIGHTEENTH INTERNATIONAL CONFERENCE ON ARTIFICIAL INTELLIGENCE AND LAW 159 (2021).

⁵⁴ *Id.*

⁵⁵ *Id.*

⁵⁶ Rika Riyanti, *Legal Status of Artificial Intelligence-Based Health Insurance Services: Challenges, Opportunities for Customer Protection*, 6 INT'L. J. HEALTH SCIS. (2023).

⁵⁷ *Id.*

⁵⁸ Araz Taeihagh, *Governance of Artificial Intelligence*, 40 POL'Y & SOC'Y 137 (2021).

governance, highlighting key aspects of global AI regulation. The author emphasizes the need for international coordination and cooperation for effective risk and opportunity management provided by AI.⁵⁹

Özlem Sogutlu⁶⁰ explores the legal status of artificial intelligence from the perspective of the legal status of robots in the context of contractual liability, pointing out historical parallels and contemporary challenges. This study makes a significant contribution to debates regarding the legal personality and liability of AI.⁶¹ Martin Ebers⁶² addresses the issue of AI accountability and EU consumer protection legislation. The author points to the need to adapt legal frameworks to new technological realities by examining existing legal norms and challenges arising from AI development.⁶³

⁵⁹ *Id.*

⁶⁰ Özlem Sogutlu, *The Legal Status of Artificial Intelligence from the Perspective of the Legal Status of the Slave in Terms of Contractual Liability*, 39 BANKA HUK. DERGISI, 277 (2023).

⁶¹ *Id.*

⁶² Martin Ebers, *Standardizing AI - The Case of the European Commission's Proposal for an Artificial Intelligence Act*, SSRN ELECTRONIC JOURNAL (2021).

⁶³ *Id.*

Esther Salmerón-Manzano⁶⁴ examines Legaltech and Lawtech from a global perspective. This research highlights the challenges and opportunities these technologies present to the legal industry.⁶⁵ The author underscores the importance of innovation in enhancing the accessibility and efficiency of legal services, aligning with the overarching theme of integrating AI into law.⁶⁶ Martin Miernicki and Irene Ng⁶⁷ discuss artificial intelligence and moral rights, expanding the discussion to the ethical aspects of AI usage. This paper is vital for understanding how AI can impact copyright and other related legal categories.⁶⁸

Richard A. Berk⁶⁹ investigates the application of artificial intelligence in crime forecasting and risk assessment in law enforcement activities. This research focuses on AI's potential to enhance law

⁶⁴ Esther Salmerón-Manzano, *Legaltech and Lawtech: Global Perspectives, Challenges, and Opportunities*, 10 LAWS 24 (2021).

⁶⁵ *Id.*

⁶⁶ *Id.*

⁶⁷ Martin Miernicki & Irene Ng, *Artificial Intelligence and Moral Rights*, 36 AI & SOC'Y 319 (2021).

⁶⁸ *Id.*

⁶⁹ Richard A. Berk, *Artificial Intelligence, Predictive Policing, and Risk Assessment for Law Enforcement*, 4 ANN. REV. CRIMINOLOGY 209 (2021).

enforcement agencies' effectiveness while emphasizing the importance of ethical and legal considerations.⁷⁰ Geoffrey Currie and K. Elizabeth Hawk⁷¹ analyze the moral and legal challenges of using AI in nuclear medicine. The authors highlight the specificity of this field and the need for careful regulation and control.⁷²

Paul Grimm *et al.*⁷³ examine artificial intelligence as evidence in judicial proceedings, contributing to the discussion on the legal nature and use of AI-generated data in legal practice. This research underscores the importance of transparency and verification of information obtained through AI in the context of judicial review.⁷⁴ Our attention is drawn to the study by Daniel Vale *et al.*⁷⁵ This study focuses on explaining “post-factum” in the context of artificial

⁷⁰ *Id.*

⁷¹ Geoffrey Currie & K. Elizabeth Hawk, *Ethical and Legal Challenges of Artificial Intelligence in Nuclear Medicine*, 51 SEMINARS NUCLEAR MED. 120 (2021).

⁷² *Id.*

⁷³ Paul Grimm, Maura Grossman & Gordon Cormack, *Artificial intelligence as evidence*, 19 NW. J. TECH. & INTELL. PROP. 9 (2021).

⁷⁴ *Id.*

⁷⁵ Daniel Vale, Ali El-Sharif, & Muhammed Ali, *Explainable Artificial Intelligence (XAI) Post-Hoc Explainability Methods: Risks and Limitations in Non-Discrimination Law*, 2 A.I. & ETHICS 815 (2022).

intelligence (AI) and its risks and limitations under anti-discrimination legislation.⁷⁶ The authors emphasize the importance of ensuring that AI systems are technically efficient, understandable, and fair from a legal perspective, helping to avoid discrimination.⁷⁷

The study by John-Stewart Gordon and Sven Nyholm⁷⁸ makes a significant contribution to the discussion on AI ethics. It provides a comprehensive overview of moral dilemmas associated with the development and implementation of AI. The authors examine various ethical issues, from accountability to autonomy, emphasizing the need for careful analysis and a balanced approach. Adrien Bibal *et al.*⁷⁹ explore the legal requirements for explainability in machine learning. This research highlights the importance of ensuring that machine learning algorithms are not only effective but also clear and understandable to users, especially in light of European regulations.

⁷⁶ *Id.*

⁷⁷ *Id.*

⁷⁸ John-Stewart Gordon & Sven Nyholm, *Ethics of Artificial Intelligence*, INTERNET ENCYCLOPEDIA OF PHILOSOPHY (2021).

⁷⁹ Adrien Bibal et al., *Legal Requirements on Explainability in Machine Learning*, 29 A.I. & L. 149 (2020).

Bernt Hugenholtz and Pedro Quintais⁸⁰ analyze whether EU copyright law protects results created with AI. This research reveals the complexity of defining authorship and originality in the context of artificially created intellectual property, emphasizing the need for adapting regulatory frameworks. George Maliha *et al.*⁸¹ discuss medical liability related to AI use. They investigate how the legal system can respond to challenges arising from AI integration into medical practice, particularly regarding responsibility and care standards.

Kristina Astromskė *et al.*⁸² examine ethical and legal challenges of informed consent in using AI in medical diagnostic consultations. The authors highlight the need for transparency and patient understanding regarding how AI is utilized in making

⁸⁰ Bernt Hugenholtz & Pedro Quintais, *Copyright and Artificial Creation: Does EU Copyright Law Protect AI-Assisted Output?* 52 IIC-INT'L. REV. INTEL. PROP. & COMPETITION L. 1190 (2021).

⁸¹ George Maliha, Sara Gerke, Glenn Cohen, & Ravi Parikh. *Artificial Intelligence and Liability in Medicine*, 99 MILBANK Q., 629–647 (2021).

⁸² Kristina Astromskė, Eimantas Peičius, & Paulius Astromskis, *Ethical and Legal Challenges of Informed Consent Applying Artificial Intelligence in Medical Diagnostic Consultations*, 36 AI & SOCIETY 509, 509–520 (2020).

medical decisions.⁸³ Utpal Chakraborty *et al.*⁸⁴ edited a collection dedicated to artificial intelligence and the fourth industrial revolution. This work provides a deep analysis of AI's impact on society and the economy.⁸⁵ Besides, the authors explore opportunities and challenges arising from the integration of new technologies.⁸⁶

Trevor Bench-Capon⁸⁷ underscores the need to preserve and develop “good old” artificial intelligence in law. The author emphasizes the value of classical approaches to AI in law for understanding and solving complex legal issues, stressing the importance of balancing new technologies with time-tested methods.⁸⁸

We paid our attention to the study by Jozef Andraško *et al.*⁸⁹ This paper examines regulatory

⁸³ *Id.*

⁸⁴ UTPAL CHAKRABORTY ET AL., *ARTIFICIAL INTELLIGENCE AND THE FOURTH INDUSTRIAL REVOLUTION* (2022).

⁸⁵ *Id.*

⁸⁶ *Id.*

⁸⁷ Trevor Bench-Capon, *The Need for Good Old Fashioned AI and Law*, 21 *JUSLETTER-IT* 23 (2020).

⁸⁸ *Id.*

⁸⁹ Jozef Andraško, Matúš Mesarčík, & Ondrej Hamulák, *The Regulatory Intersections between Artificial Intelligence, Data*

intersections between AI, data protection, and cybersecurity.⁹⁰ The authors illuminate challenges and opportunities for the EU legal framework.⁹¹ They emphasize the need for a comprehensive approach to regulating these areas to ensure adequate data protection and cybersecurity in the context of AI integration.⁹² Itziar Sobrino-García⁹³ analyzes risks and challenges associated with AI use in Spanish government administration through expert assessments. The study opens a discussion on potential problems and prospects of AI applications in the public sector.⁹⁴ It also highlights the importance of thorough analysis and regulation to minimize risks.⁹⁵

Filippo Santoni De Sio and Giulio Mecacci⁹⁶ discuss four “responsibility gaps” with AI,

Protection and Cyber Security: Challenges and Opportunities for the EU Legal Framework, 36 AI & SOC’Y. 623 (2021).

⁹⁰ *Id.*

⁹¹ *Id.*

⁹² *Id.*

⁹³ Itziar Sobrino-García, *Artificial intelligence risks and challenges in the Spanish public administration: An exploratory analysis through expert judgements*, 11 ADMIN. SCIS. 102 (2021).

⁹⁴ *Id.*

⁹⁵ *Id.*

⁹⁶ Filippo Santoni De Sio & Giulio Mecacci, *Four Responsibility Gaps with Artificial Intelligence: Why They Matter and How to Address Them*, 34 PHIL. & TECH. 1057 (2021).

emphasizing their significance and resolution paths. The authors analyze how these gaps affect responsible decision-making and propose approaches to address them, which are critical for the ethical integration of AI into society.⁹⁷ Hadar Jabotinsky and Roe Sarel⁹⁸ investigate ethical dilemmas associated with collaboration with AI. This work examines issues of authorship, responsibility, and morality in the context of human-AI collaboration, contributing to debates on the boundaries of creativity and intellectual property.⁹⁹

Bartosz Brożek *et al.*¹⁰⁰ revisit the “black box problem,” pointing out real and perceived challenges for automated legal decision-making. The authors discuss difficulties related to transparency and comprehensibility of decisions made by AI, which is crucial for trust and fairness in legal practice.¹⁰¹ Fausto

⁹⁷ *Id.*

⁹⁸ Hadar Jabotinsky & Roe Sarel. *Co-authoring with an AI? Ethical Dilemmas and Artificial Intelligence*, ARIZ. ST. L.J. (2023), FORTHCOMING), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4303959.

⁹⁹ *Id.*

¹⁰⁰ Bartosz Brożek et al., *The Black Box Problem Revisited. Real and Imaginary Challenges for Automated Legal Decision Making*, A.I. & L. 1 (2023).

¹⁰¹ *Id.*

Martin De Sanctis¹⁰² investigates the use of AI and innovations in Brazilian justice, providing an overview of the current state and potential of AI to enhance the efficiency and accessibility of justice in Brazil.

Martin Ebers¹⁰³ analyzes the standardization of AI using the European Commission's proposal for an AI act as an example. The study reveals the importance of developing unified standards to ensure the safety, ethics, and effectiveness of AI at the international level.¹⁰⁴ The authors point out key aspects that require attention in shaping global AI regulation.¹⁰⁵

Each of these studies adds new perspectives to the understanding of the complex interaction between AI, law, ethics, and society. They emphasize the need for constant analysis, adaptation, and regulation to cope with the rapid development of technology and its impact on various aspects of life.

¹⁰² Fausto Martin De Sanctis, *Artificial Intelligence and Innovation in Brazilian Justice*, 59 INT'L. ANNALS CRIMINOLOGY 1 (2021).

¹⁰³ Martin Ebers, *Liability for Artificial Intelligence and EU Consumer Law*, 12 J. INTELL. PROP., INFO. TECH. & ELEC. COM. L. 204 (2021), https://www.jipitec.eu/archive/issues/jipitec-12-2-2021/5289/ebers_pdf.pdf.

¹⁰⁴ *Id.*

¹⁰⁵ *Id.*

This Article aims to analyze the potential and challenges of AI application in the field of judicial proceedings, legal consultations, and law enforcement systems. This research seeks to assess how the integration of AI can contribute to the efficiency, fairness, and accessibility of justice, as well as to identify the main ethical and legal challenges arising from using these technologies.

III. METHODOLOGY

This research is based on a comprehensive approach that includes a systematic method, as well as analysis and synthesis. The systemic method is applied to study the interaction between various aspects of AI use in the legal sphere. This includes technological opportunities, legal frameworks, ethical principles, and social consequences. This method helps to evaluate AI as part of a more extensive system of legal practice. The analysis method is utilized to clarify various aspects of AI application in legal proceedings, consulting, and law enforcement systems. The synthesis method was employed to formulate overall

conclusions about the potential and challenges of AI in the legal field. As a result, the Authors have identified key trends and opportunities for practical application and outlined areas for further research.

IV. RESULTS

In jurisprudence, AI is already being applied for various purposes, such as analyzing legal documents, predicting court case outcomes, automating legal research, and even supporting judges in decision-making. This includes systems that can analyze large amounts of data, including precedents and legal norms, to provide recommendations for preventive measures.

One example of the use of AI in criminal justice is the COMPAS (Correctional Offender Management Profiling for Alternative Sanctions) software, which is used in some states in the USA to assess the risk of recidivism among offenders. This system is one of the most discussed examples of AI applications in criminal justice. Such a system sparks lively debates about its impact on the fairness and impartiality of judicial decisions. It was developed to assess the risk of

recidivism and assist in decision-making regarding preventive measures.

COMPAS uses machine learning algorithms to analyze a large amount of data about convicted persons, including information about previous crimes, personal characteristics, and social environment. Based on this analysis, the system generates a risk assessment for recidivism, which can influence judges' decisions regarding bail conditions, sentencing choices, or the development of rehabilitation programs.

The main problem in using COMPAS and similar systems is the risk of algorithmic bias. Studies have found that COMPAS tends to predict a higher risk of recidivism for African Americans compared to white offenders, raising concerns about racial bias. This problem underscores the importance of transparency and the ability to verify AI algorithms to ensure their fairness and impartiality.

China is one of the pioneers in integrating AI technologies into the judicial system. One of the most well-known examples is the establishment of “internet

courts” in cities such as Hangzhou, Beijing, and Guangzhou. These courts specialize in handling cases related to Internet transactions and other matters that can be efficiently resolved online. The use of the WeChat mobile application for submitting documents and conducting proceedings significantly simplifies the process for all participants and allows for judicial procedures to be carried out without the need for physical presence in court.

Internet courts in China use AI to assist in preliminary case analysis, evidence processing, and even certain procedural decisions. These technologies help reduce judges’ workloads and promote swift case resolution.

It is important to note that the implementation of AI in the judiciary also raises discussions about transparency, the accuracy of algorithms, and the protection of the rights of participants in the judicial process. Issues of confidentiality, ethics, and accountability for AI decisions are the subject of active debates in the legal community.

In light of advancing technology, the use of AI in justice is a double-edged sword. On one hand, AI promises increased efficiency and fairness. On the other hand, it raises new ethical and legal challenges. In this context, emphasis should be placed on ensuring equality, fairness, and human rights. Thus, it is necessary to deeply consider the impact of AI on the fundamental principles of our legal system.

First and foremost, it is necessary to ensure that the integration of AI into the judicial system does not undermine the fundamental principles of fairness and independence. The use of algorithmic decision-making must be transparent to ensure that no person falls victim to unnoticed biases or errors in software. Hence, AI systems applied in jurisprudence must be capable of explaining their decisions in terms understandable to human reasoning to allow for review and appeal.

Furthermore, ethical principles for algorithmic decision-making in the legal sphere must be developed and implemented. This includes creating mechanisms for detecting and correcting biases and ensuring equal

access to justice for all people regardless of their social, economic, or cultural backgrounds.

With the increasing influence of AI in various spheres of life, including the judiciary, an essential question of accountability arises for decisions made using or based on AI recommendations. This is particularly relevant in situations where such decisions directly impact the rights and freedoms of people. This includes their social status, financial standing, freedom, or even life.

Traditionally, in the legal system, responsibility for decision-making lies with people - judges, lawyers, and prosecutors. However, with the emergence of AI, which can analyze data, predict case outcomes, or even recommend certain judicial decisions, the question arises: who should be responsible in case of errors related to the operation of AI? Will it be the developer of the AI system, the legal entity using it, or the person making the final decision based on AI recommendations?

This issue requires careful consideration and the development of new legal frameworks and regulations

that can identify and allocate responsibility in cases of AI usage in the judiciary. Such frameworks should consider the need to protect the rights and freedoms of people and ensure that any mistakes or unlawful decisions are correctly accounted for. A key element here is AI algorithms' transparency and auditability to ensure fairness and objectivity in decision-making.

Transparency in using AI in the judiciary and ensuring the possibility of challenging its decisions are fundamental to maintaining citizens' trust in the judicial system. Every person has the right to understand the basis of decisions affecting their lives and to have the opportunity to challenge these decisions for review in case of error or injustice.

Therefore, the use of AI in the judiciary promises to increase efficiency and accessibility to justice. Still, it also requires us to be vigilant and committed to ensuring that the technology serves justice and protects all people's fundamental rights and freedoms. In this context, the embodiment of these principles is desirable and necessary for a future in which justice remains fair, accessible, and independent.

The application of AI in legal consultations opens up new opportunities for enhancing the efficiency, accessibility, and quality of legal services. AI can serve as a powerful tool for lawyers, providing them with access to advanced analytical capabilities and automation of routine tasks. Here are several key aspects illustrating the potential of AI application in legal consultations:

(i) Specifically, AI can automate the process of searching and analyzing legal documents, legislation, case law, and other sources. This reduces the time required for legal research and increases the accuracy of identifying relevant information, decreasing the risk of missing essential data.

(ii) AI can also be applied to analyze contracts and other legal documents, identifying potential risks, inconsistencies, or illegal terms. AI-based systems can offer recommendations for optimizing contract terms and better protecting the client's interests.

(iii) The development of chatbots using AI to provide initial legal assistance can significantly

increase the availability of legal services. Such bots can answer basic legal questions, assist with drafting simple legal documents, or even recommend further steps in resolving legal issues.

Given that AI can analyze large volumes of data to identify trends and patterns and predict the outcomes of legal cases, its use by lawyers allows for better assessment of case prospects, formulation of defense strategies, and advising clients on the most advantageous courses of action. However, the integration of AI into legal consultations raises essential ethical and legal questions, including those concerning data confidentiality, liability for errors, and ensuring the impartiality of algorithms. Clear rules and standards need to be developed to regulate the use of AI in legal practice. They provide the protection of the rights and interests of all participants in legal relationships.

The application of AI in legal consultations has the potential to radically transform the legal services sector, making them more efficient, accessible, and

high-quality. However, achieving these goals requires finding a balance between innovation and ensuring ethical standards in the use of advanced technologies.

AI is becoming increasingly important in the law enforcement system. It offers innovative solutions to enhance the efficiency, accuracy, and transparency of law enforcement procedures. The integration of AI into this field opens up new opportunities for combating crime, improving investigations, and ensuring public safety. Let the Authors consider several key directions that illustrate the potential application of AI in law enforcement.

First and foremost, it should be noted that AI can analyze vast amounts of data from various sources. This includes social networks, crime databases, video surveillance, etc. It enables law enforcement agencies to quickly identify patterns related to criminal activity, forecast potential threats, and respond to them promptly.

Facial recognition technologies developed based on AI can detect people in video materials from surveillance cameras or in photographs. This

significantly aids in the search for criminals, missing persons, and crime witnesses. However, the use of this technology also raises questions of confidentiality and the right to privacy.

Additionally, AI systems can analyze historical crime data to determine the places and times where the likelihood of crimes is highest. This allows law enforcement agencies to optimize resource allocation and focus efforts on preventive measures in the “hot spots.”

AI can automate many legal procedures related to law enforcement. They include processing applications and complaints, registering offenses, and even some aspects of the judicial process. As a result, law enforcement agencies can become more efficient and respond to citizens’ requests more quickly. AI can be an essential tool during investigations, helping to analyze evidence, model criminal events, and identify possible connections between different cases. AI can also be used to decode encrypted messages or analyze financial transactions that may indicate illegal activity.

However, there are certain ethical and legal challenges associated with the use of AI in law enforcement. They include the protection of personal data, the impartiality of algorithms, and liability for erroneous decisions. Appropriate legal frameworks should be developed to ensure the balanced use of AI, taking into account the need for efficiency and the need to protect the fundamental rights and freedoms of citizens.

The Authors believe that AI in the law enforcement system has the potential to radically improve the ability of law enforcement agencies to protect society and counteract crime. However, the achievement of these benefits requires a responsible approach to the implementation of technologies, attention to ethical aspects, and the development of a legal framework.

V. DISCUSSION

The use of AI in judiciary proceedings, legal consultations, and law enforcement raises many

debatable issues that would be worthwhile to delve into further.

The first point of contention is the balance between effectiveness and confidentiality in using AI for facial recognition. Advocates of using AI-based facial recognition systems in law enforcement argue that it significantly enhances the effectiveness of finding criminals, missing persons, and crime witnesses. This technology allows for the rapid analysis of large volumes of video data. It also facilitates the swift identification of people on a large scale. On the other hand, critics highlight the risks associated with privacy violations and potential abuse. They emphasize that the widespread use of AI for facial recognition could lead to the creation of a surveillance society, where every citizen's movement is recorded and analyzed without their consent or knowledge. In Authors' opinion, the key to this matter is finding a balance. It is essential to develop strict rules and mechanisms to control the use of facial recognition technologies to ensure the protection of personal data and privacy while not

forsaking the benefits these technologies can bring in combating crime.

The second point of contention is the use of AI to automate legal procedures. Supporters of automating legal procedures through AI argue that it can significantly reduce the workload on law enforcement agencies and the judicial system, simplify the procedures for filing applications and complaints, and increase the speed and accuracy of information processing. Meanwhile, their opponents fear that excessive reliance on AI could lead to the loss of the human element in justice. This is particularly crucial in cases requiring an individual approach and may reduce the quality of legal protection. The Authors believe that automation through AI should be considered as an auxiliary tool rather than a replacement for human participation in legal procedures. It is vital to ensure that automated systems are used to enhance efficiency while preserving the possibility of human review and intervention in critical cases.

The use of AI for predicting judicial decisions is also contentious. Supporters of using AI to predict the

outcomes of legal proceedings believe that it can help lawyers better prepare for cases and enable clients to make more informed decisions regarding their legal strategies. The critics, however, argue that reliance on AI predictions could lead to the standardization of justice and the disregard for the unique circumstances of each case, as well as distort the judicial process through possible errors in predictions. The Authors believe that predicting the outcomes of legal proceedings through AI should be viewed as a tool that can provide additional information for consideration, but no more than that. It is crucial to maintain an understanding that each case has its unique aspects that should be evaluated by judges or lawyers based on all available information.

VI. CONCLUSIONS

Artificial intelligence can significantly increase efficiency and accuracy in face recognition, crime prediction, data analysis, and automation of legal procedures. These innovations open gateways to faster and more impartial justice.

However, the application of AI is accompanied by ethical and legal challenges, in particular concerning confidentiality, impartiality, and accountability for decisions based on it. It is essential to develop mechanisms that ensure transparency and the possibility of reviewing AI decisions. Therefore, it is necessary to establish clear rules and regulations for the use of AI in the legal sphere to ensure the protection of fundamental rights and freedoms, as well as the responsible and ethical use of technology.

AI can potentially improve the accessibility and quality of legal services for a wide range of people, reduce the burden on the judicial system, and increase public safety through more efficient enforcement of the law. However, given challenges such as potential algorithmic bias and data privacy, further research should focus on improving AI algorithms to ensure their unbiasedness and protection of personal data.

Further research is recommended in the field of AI technology development that can be implemented in legal practice with minimal risks to human rights and

ensuring fairness and transparency of justice. The main areas for further research in this area should include:

- (i) the development of ethical standards for AI.
- (ii) analysis of the impact of AI on traditional legal practice.
- (iii) exploration of the potential of AI to address global legal challenges.

As a result, the legal community should join forces to develop and implement innovative and responsible approaches to using artificial intelligence. In this way, we will take advantage of the latest technologies and protect the fundamental rights and freedoms that form the basis of a fair society.