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ARTIFICIAL INTELLIGENCE (AI) ACTIVITIES IN LEGAL PRACTICES

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ABSTRACT

This study extensively explores the opportunities presented by the integration of artificial intelligence (AI) in legal practices, the challenges encountered, and the ethical issues that emerge in this process. AI technologies offer unique advantages to legal professionals across a broad spectrum, from lawyering activities to forensic enforcement applications and judicial activities. These advantages include innovative applications such as rapid analysis of large data sets, decision support systems, and prediction of case outcomes. However, the use of AI in the legal field also raises significant issues such as algorithmic transparency, biases in data sets, accountability, and responsibility. The research provides strategic recommendations on how AI technologies can be effectively integrated into legal practice while assessing the impact of AI applications on judicial processes and individuals' fundamental rights. Specifically, it focuses on the legal framework and ethical principles of AI-supported decision-making processes. The study discusses the steps needed to increase transparency during the development and use of algorithms, reduce biases, and strengthen justice. In conclusion, this research focuses on the ethical, legal, and political frameworks that will shape the applications of AI in the legal field; it develops management strategies and policy recommendations necessary for the fair, transparent, and accountable management of AI technologies. Within this framework, it presents a vision on how AI can transform judicial systems and the long-term effects of this transformation on legal processes, professional practices, and social justice.

Keywords: Artificial intelligence and judiciary, algorithmic decision-making, AI applications in law, AI in judicial processes.

INTRODUCTION

The integration of Artificial Intelligence (AI) into the legal sector marks a pivotal moment in the evolution of jurisprudence, offering unprecedented opportunities to enhance the efficiency, accessibility, and precision of legal processes. As AI technologies, such as machine learning, natural language processing, and predictive analytics, become increasingly sophisticated, their application within the legal realm—from automating document analysis to aiding in decision-making and predicting case outcomes—promises to revolutionize traditional legal practices. This transformative potential extends beyond mere procedural enhancements, suggesting a fundamental shift in how legal services are delivered, how justice is administered, and how legal professionals interact with the vast corpus of legal knowledge.

The allure of AI in the legal field lies in its ability to process and analyze data at a scale and speed unattainable by human practitioners. For instance, AI-powered tools can swiftly sift through thousands of case files, legal documents, and precedents to assist in legal research, case preparation, and strategy formulation. Such capabilities not only reduce the time and financial costs associated with legal proceedings but also increase the predictability and consistency of legal outcomes, potentially leading to a more equitable justice system. Furthermore, AI applications in legal practice hold the promise of democratizing legal assistance—making it more accessible to individuals and communities who might otherwise be excluded from the legal system due to economic or social barriers.

However, the integration of AI into the legal sector is accompanied by a host of ethical, legal, and societal challenges that must be critically examined. One of the most pressing concerns is the opacity of AI decision-making processes, often referred to as the "black box" phenomenon, where the rationale behind AI-generated recommendations or decisions is not easily discernible. This lack of transparency raises significant issues regarding accountability, particularly when AI tools influence legal judgments or outcomes. Additionally, the reliance on historical data to train AI models introduces the risk of perpetuating existing biases present within that data, potentially leading to unfair or discriminatory legal practices.

Moreover, the deployment of AI within the legal domain raises fundamental questions about the role of human judgment in the administration of justice. While AI can assist in legal analysis and procedural tasks, the nuanced understanding of law, ethics, and justice that human practitioners bring to legal decision-making cannot be fully replicated by algorithms (Kan, 2024a). Thus, the challenge lies in balancing the efficiency and analytical capabilities of AI with the need for empathy, ethical consideration, and moral reasoning inherent in legal judgments (Kan, 2024b).

Addressing these challenges requires a concerted effort from legal practitioners, technologists, ethicists, and policymakers to develop robust ethical guidelines, regulatory frameworks, and transparency mechanisms for AI applications in the legal field. This effort should aim to ensure that AI technologies are used responsibly, with a clear understanding of their limitations and impacts on the principles of justice and equity.

In light of these considerations, this paper aims to provide a comprehensive analysis of the implications of AI's integration into the legal system. It explores the potential benefits of AI in enhancing legal processes, the ethical dilemmas and challenges posed by AI technologies, and the broader societal implications of AI-driven legal practices. Through this exploration, the paper seeks to contribute to the ongoing discourse on the optimal balance between leveraging AI's transformative potential in the legal sector and preserving the fundamental human values that underpin the pursuit of justice. By offering insights, analyses, and recommendations, this paper aims to guide the responsible and ethical integration of AI technologies within the legal domain, ensuring that the march towards technological advancement does not come at the expense of the core principles of law and justice.

BACKGROUND

In today's context, artificial intelligence technology has begun to be utilized in the field of law, with related legislation and case law programs being developed. The advantages brought by this technology have led to improvements in both convenience and continuity in the lives of those defined as legal professionals. When looking at similar applications around the world, legal technologies capable of making decisions once deemed impossible are rapidly becoming a part of our lives. According to a study conducted in the USA, investments in the capabilities and opportunities of artificial intelligence technology saw a remarkable increase of 713% in 2018, drawing significant attention (Cohen, 2019).

The speed of this technological development and change in judicial activities also raises several questions in the legal field. One of the primary concerns is whether judicial activities will be conducted by non-natural intelligence. Moreover, there is research into whether judges equipped with artificial intelligence technology could change or eliminate biases, which are considered inherent to human nature, alongside the advantages in terms of time management and the unlimited memory and processing capabilities of these technological systems, potentially making judicial activities comparable to one another (Morison, 2019:2).

The use of artificial intelligence technology in legal processes is being explored in lawyering activities, law enforcement practices, and judicial applications.

The Use of Artificial Intelligence Technology in Legal Practice Activities

Examples of the advantages provided by artificial intelligence technology to the position of advocacy worldwide can be listed in a very diverse manner. Among the best examples are the global legal artificial intelligence technology-producing companies developed by the US such as IBM, Opentext, Veritone, and LawGeex, which is developed by an Israeli company. Particularly, LawGeex has been recognized as a smart contract review platform through the use of elements of artificial intelligence technology. Its success in this area was demonstrated in a mutual study conducted with lawyers. In this study, the confidentiality agreement (NDA), one of the most actively used contracts, was examined by both LawGeex and 20 corporate lawyers for potential risk factors.

A new 153-paragraph contract, previously unanalyzed, was reviewed by both LawGeex and the lawyers. LawGeex achieved a 94% accuracy rate in these analyses within 26 seconds, while the compared group of lawyers remained at an 85% accuracy rate after 92 minutes (Artificial Intelligence More Accurate Than Lawyers for Reviewing Contracts, New Study Reveals, 2023).

One of the first foundational steps in the development of auxiliary artificial intelligence technology products to be used while performing legal duties was made by IBM, based in the USA. Developed and activated by IBM, Ross has been recorded as the world's first lawyer with artificial intelligence technology. This AI is used by one of the best law firms in America and globally, providing the human element performing legal duties with the desired data flow through its scanning feature (Artificial Intelligence, n.d.).

Applications of artificial intelligence technology like Lex Machina and Ravel Law serve as examples of software applications in determining procedural strategies based on the outcome of a case or trial, decisions made by the judiciary, or precedents set by the case's judge in judicial activities (İçer & Buluz, 2019).

Developed jointly by Harvard University's Law School and Computer Science departments in 2012, Ravel Law aids lawyers by aggregating procedural objectives such as predicting possible decisions for an ongoing case or identifying relevant statutes in the case's law (Ravel Law: Unraveling Justice Through Big Data, n.d.).

Initially serving only intellectual property law, Lex Machina has evolved into a platform capable of performing legal analytics and guiding legal professionals on legal strategies. It offers analyses on the jurisdiction analysis of the dispute, reporting past experiences of the parties' representatives, predicting possible completion times at every stage of the trial, and identifying methods to win the case, all within a very short time (Lex Machina, 2015).

Artificial intelligence technology also maintains its presence in the legal field as a technology capable of making assumptions and predictions. An algorithm developed by the University of Washington in 2004 was able to predict the decisions of supreme court cases over the past years with a 75% accuracy rate, whereas expert predictions on the same decisions showed a decrease to a 59% rate (Lex Machina, 2015).

The biggest example of prediction-based development in artificial intelligence technology is Premonition, which owns the world's largest lawsuit database. It can analyze all kinds of possibilities and probabilities in a case, matching the case's type, duration, and potential outcome with the judge, thus presenting insights into the defense counsel's success ("Premonition," n.d.).

ARYA, an artificial intelligence application developed by a company operating under the name Kodex Bilişim in our country, exemplifies prediction technology. It is known to analyze cases being heard in the Supreme Court and predict their outcomes with more than 90% accuracy (Türkiye'deki Yargıtay Davalarını Doğru Tahmin Eden Yapay Zekâ Geliştirildi, n.d.). Another prediction technology product developed in our country, Hukuk Work software, can analyze and resolve a dispute based on the law ("Hukuk Work," n.d.). Turklex software continues

to function by automatically creating a case file for litigation, analyzing all possibilities at the decision stage, and reaching a conclusion ("TurkLex," n.d.).

Beyond serving as auxiliary software for judicial activities, artificial intelligence technologies also offer conveniences for ordinary people to access legal information. The DoNotPay application, actively used in England and New York, provides users with the right to contest their parking tickets within seconds ("Robot Hâkim ve Bazı Yapay Zekâlı Hukukçular," n.d.). Experts developing artificial intelligence technologies and individuals from the judiciary in Australia have launched the Split-Up application, which predicts the outcomes of property disputes seen in family and personal law ("Robot Hâkim ve Bazı Yapay Zekâlı Hukukçular," n.d.).

The Use of Artificial Intelligence in Forensic Law Enforcement Services

Countries possessing artificial intelligence technology continue to implement this technology within forensic law enforcement activities. In this context, giving priority to security aspects and identifying risk factors are crucial for crime prevention, which has accelerated the use of artificial intelligence technology.

For instance, the Durham Police organization in England has tested a system created using artificial intelligence technology elements called "harm assessment risk" to analyze the potential threat a detained suspect might pose to society and to decide on detention or release. The system's operational principle is designed to reach a conclusion by analyzing factors such as findings obtained over certain years and the gender of the suspect. This software, tested over two years, has successfully predicted a 98% low probability of the suspect committing a crime.

The founders of this system have stated that they tried to minimize the possibility of artificial intelligence making errors, and their primary goal was to prevent suspects who pose a danger from being released (UK police are using AI to inform custodial decisions – but it could be discriminating against the poor, n.d.).

The West Midlands Police force in England has led the development of software that allows for a virtual examination of a crime scene even after it has been physically cleared. This was achieved by mapping the crime scene with developed 3D scanners and then quickly measuring the dimensions of the scene to model it based on these data. This software solved the problem of misleading digital images, allowing for more accurate analyses and providing the opportunity to re-examine the crime scene after all evidence had been removed (Suç Kestirimi (Crime Prediction), n.d.).

One of the most striking steps in this area has been taken by the People's Republic of China. China has introduced artificial intelligence technology that scans big cities, crowded streets, and all human-populated areas through cameras with special software, analyzing a person's propensity for crime, skill in committing crimes, and all behavioral patterns related to crime (Çin yapay zekâlı yüz tarama teknolojisi ile suçlu yakalıyor, n.d.).

The Use of Artificial Intelligence in Judicial Activities As a result of developing artificial intelligence technologies, programs, or applications with smart software are now more accessible and functional. The use of this technology in current judicial activities shows that artificial intelligence serves more as an auxiliary function than a primary element (Expandig Access to Remedies Through E-Court Initiatives, n.d.).

One of the most controversial examples is the Internet Court in Beijing, the capital of the People's Republic of China. This artificial intelligence-based software example accepts applications from Chinese citizens for crimes committed over the internet and related issues. The artificial intelligence module in the judge position performs activities that can be considered simple operations (Çin'de Mahkemelerde '' Yapay Zekâ Yargıç'' Dönemi, n.d.). The highest level that artificial intelligence in judicial activities can reach is, of course, robot judges. The use of artificial intelligence tools in judicial activities offers many advantages. However, it is important to note that humans cannot control this extraordinary flow of data, quantities, and logical stages. This raises concerns about the reliability of decisions made by robot judges. Recent studies by data scientists have found that artificial intelligence technologies are not truly fair and objective. This is due to the artificial intelligence's strict adherence to the definition of "success" given by its designer and its disregard for important variables in the concrete case.

According to Article 217/1 of the Code of Criminal Procedure, "The judge can base his decision only on evidence brought to and discussed in the court. This evidence is freely assessed by the judge's conscientious belief." The issue of the artificial intelligence judge's conscientious belief is contentious.

It is desired to see that in a criminal trial forming society, the judge fights for their conscientious belief and, most importantly, can justify it. The transparency of trials, except in exceptional cases provided by law, and the citizen's ability to follow the trial transparently at any time, indicate this. In such a case, the artificial intelligence judge's detachment from the concept of societal conscience would mean that it does not feel responsible for establishing social justice and peace. This will be one of the main reasons for the societal disapproval of artificial intelligence judges. The judge's conscientious belief, being a moral phenomenon, is not entirely independent of evidence. The judge reaches a free conscience belief by examining the evidence, so the judge's conscientious belief cannot be considered independently of the evidence in the concrete case.

Similar issues arise regarding the judge's discretion. An artificial intelligence judge can analyze information similar to the information given to it accurately and usefully. Because machine learning to discover patterns and make effective generalizations may not be sufficient based on the size of the example cases given to it previously (Sourdin, 2018). In other words, if the artificial intelligence judge cannot find a similarity or connection between the concrete case and the data given to it, it will not be able to exercise discretion in the specific case. This requires a new learning pattern far beyond the capability given by machine learning. Essentially, what is expected from a robot judge is to have insight like a human judge. Currently, the lack of this insight in artificial intelligence judges makes it seem impossible for them to serve as judges in criminal trials (İçer & Buluz, 2019). The judicial activity, along with evidence collection and judgment, is a whole (Dülger, n.d.).

The institution of proof has a relative nature, and the most important is the existence of a conscientious belief system for the free evaluation of evidence by the judge. For example, discretionary mitigation reasons mentioned in the second paragraph of Article 62 of the Turkish Penal Code, such as "the perpetrator's past, social relations, behaviors after the crime and during the trial process, and the possible effects of the punishment on the perpetrator's future," cannot be applied by a robot judge. Even if these discretionary mitigation reasons could somehow be determined algorithmically, the robot judge would still need to justify which discretionary mitigation reason it prefers in a reasoned decision. The human judge's conscientious belief also includes whether they are convinced, making it unclear how a principle independent of conscience and will, such as "in doubt, the benefit goes to the defendant," a fundamental principle of criminal procedure law, would be applied by a robot judge (Dülger, n.d.).

Considering the current capabilities of artificial intelligence technologies, they can serve as skilled assistants in collecting and evaluating evidence for the human element conducting the judicial activity. In this respect, the contribution of entities with artificial intelligence to the judicial system shows similarities with the institution of expert witness. The considerations of the expert witness institution are not considered evidence but serve as a means to illuminate the evidence (Deng, n.d.).

Implementation of this Application and Introduction of New Software Components for Decision Consistency Checks

With the implementation of this application, new software components have been added to the system to ensure the exit control of decisions given in parallel. The addition of these components aims to create an application that not only controls the exit of decisions but also includes elements that can analyze, digitalize judicial activities, and manage and develop them. In this application, artificial intelligence performs predictive artificial intelligence application activities. Through this system, complaints and hearing records uploaded to the electronic environment can find other similar reference files as a result of analyses. About forty million judicial decisions have been uploaded into the software and analyzed by artificial intelligence, allowing for the possibility of comparing new cases with old ones. Subsequently, if disputes of the same type match, analysis of the case records can produce results (Deng, n.d.: 226).

Estonia, one of the first states to grant decision-making authority to its processor, will be able to adjudicate through the "Robot Judge" implemented within its Ministry of Justice for compensation cases worth less than 7,000 euros. The working principle of this artificial intelligence is to present a decision that can be contested by a real person judge, based on documents and related information uploaded to the system by the parties involved in the case (Park, n.d.). This artificial intelligence technology works entirely result-oriented, similarly to the human brain, by communicating with some software systems.

This situation brings about some security concerns regarding how artificial intelligence has decision-making will. According to expert opinions, artificial intelligence should have an ethical black box for control, and laws should

be regulated in judicial systems for artificial intelligence^305. The Artificial Intelligence Act (AI) that the European Union is working on aims to create a single market for safe and reliable applications to overcome this security problem (İçer & Buluz, 2019).

The use of artificial intelligence in criminal procedure law will be examined in detail through COMPAS, one of the main risk analysis tools aimed at processing data presented to it and predicting crimes.

Correctional Offender Management Profiling for Alternative Sanctions (COMPAS) Algorithm

Artificial intelligence significantly affects decision processes in criminal procedures. Algorithms and artificial intelligence are used in various decision-making processes in criminal procedures, such as identifying the suspect's identity, collecting evidence related to the crime, predicting the suspect or defendant's future behavior, and selecting the most appropriate rehabilitation program or sanction for the defendant.

An algorithm can be defined differently. In computer science, the classic definition is a computing procedure that takes a value or set of values as input and produces a set of values as output. In other words, an algorithm is described as a path designed to solve a specific problem or achieve a specific goal by following step by step. Thus, an algorithm can be considered part of a process to solve a computing problem. In this context, the COMPAS algorithm, which calculates the risk of recidivism for the defendant, will be evaluated, taking into account the Loomis decision.

COMPAS algorithm significantly impacts decision-making processes within criminal procedures. It is utilized in various aspects such as identifying suspects, collecting evidence, predicting future behaviors, and determining suitable rehabilitation programs or sanctions for defendants. In computer science, an algorithm is defined as a computational procedure that takes inputs and generates outputs, essentially providing a step-by-step solution to a specific problem.

COMPAS, initially developed in 1998 and utilized in states like Wisconsin, California, and Florida, calculates the risk of recidivism for defendants based on several criminological factors. These factors include age, gender, education, family background, criminal history, relationships, employment status, and substance abuse. The algorithm assigns a score ranging from 1 to 10 to indicate the risk level, with higher scores corresponding to greater risks of reoffending. Judges use these scores to make decisions regarding detention or release, with the COMPAS software boasting a 61% accuracy rate in predicting recidivism.

The COMPAS assessment comprises 137 questions, considering both dynamic (current) and static (historical) risk factors. These questions cover various behavioral and psychological aspects to assess the potential for reoffending. Developed by Van Voorhis, Wright, Salisbury, and Bauman, COMPAS continues to be a significant tool in aiding judicial decision-making processes (Kırkpatrick, 2017).

The COMPAS algorithm incorporates a total of forty-three scales, including four high-level scales and seventeen scales specifically designed for women's risk and needs assessment (WRNA), among which is the General Recidivism Scale. This assessment predicts the risk of a released offender committing a new crime by considering various factors such as past criminal records, substance abuse history, and indicators of juvenile delinquency. Another crucial scale is the Violent Recidivism Scale, which forecasts the risk of engaging in violent crimes post-release, taking into account factors like history of violence, non-compliance, educational or professional issues, and age at first offense. Additionally, the Pretrial Release Risk Scale evaluates the potential for fleeing or re-offending if the suspect or defendant is released pending trial, while the Release Scale aids in pretrial procedures, and the Violent Recidivism Scale and General Recidivism Scale assist in triaging probation decisions.

The Loomis case, which centered around the use of the COMPAS algorithm to assess the risk of recidivism, garnered significant attention. Defendant Eric Loomis faced charges for unauthorized use of a vehicle and fleeing from law enforcement. The Wisconsin Supreme Court considered the COMPAS score alongside Loomis's criminal history, resulting in a high-risk designation and a six-year prison sentence. Loomis contested the algorithm's use, arguing that it violated his right to a fair trial and perpetuated gender and racial discrimination due to the algorithm's opaque nature. The refusal of Northpointe, the company behind COMPAS, to disclose its proprietary algorithm further fueled the controversy. Despite Loomis's appeal, the United States Supreme Court declined to hear the case in 2017.

Critics like Eckhouse and others have denounced the decision to treat COMPAS as a trade secret, asserting that it hinders transparency and undermines defendants' ability to challenge algorithmic decisions. They argue that private companies involved in the criminal justice system should be subject to the same transparency standards as governmental institutions (Eckhouse et al., 2019). From our perspective, the lack of transparency surrounding the algorithm's criteria and decision-making process disrupts the principle of equality of arms, which aims to ensure a fair balance between the prosecution and defense. Just as judges are expected to provide reasoning for their decisions, algorithms used in legal contexts should be subject to scrutiny and evaluation to uphold principles of fairness and justice (Carlson, 2017).

Eckhouse et al (2019: 16) criticize the decision regarding the treatment of the COMPAS tool as a trade secret because it prevents judges, defendants, and researchers from examining the algorithms and evaluating the output it generates. Carlson also argues that it is incorrect for private companies in the criminal justice system to protect their commercial interests, and they should be subject to the same transparency requirements as other government institutions. In our opinion, the lack of an opportunity for the defendant to contest the criteria and decision-making process of the algorithm disrupts the balance of the principle of equality of arms in favor of the defense. The principle of equality of arms aims to balance the rights of the suspect and defendant with the powers of the prosecutor, ensuring that the suspect and defendant are not disadvantaged against the prosecutor. Just as it is problematic for a judge not to provide the reasoning for a decision, it is equally

problematic for an algorithm not to disclose its decision-making logic. Since the decision-making process of the algorithm is largely secretive and invisible, it becomes difficult to question its validity.

However, risk assessment tools are continuously evolving, and changing conditions may necessitate their readjustment to ensure accurate outcomes. According to the principle of equality of arms, such tools should be testable and debatable. When the defendant, prosecutor, judge, court, or society overlooks how the algorithms used to determine a defendant's legal status and freedom make decisions, the outcome will not be fair.

CONCLUSION

The development of modern technologies has a significant impact on every field intertwined with human activity, and the legal field is no exception to this transformation. The entry of artificial intelligence technologies into sensitive areas like law brings to light the ethical and justice-related issues inherent in the algorithms behind these technologies. The main problem encountered when using artificial intelligence technologies in the judiciary is the lack of transparency. In some cases, companies that produce algorithms like COMPAS keep their algorithms secret. Even without the secrecy of algorithms, the current problems associated with intertwined systems and machine learning models persist (Eckhouse et al., 2019).

Another issue is the problem of legality. Typically, the laws clearly define who has judicial authority. The judicial function is carried out by independent judges. But who will be responsible for the decisions made by systems equipped with artificial intelligence technology? The state, the software developer, or the artificial intelligence entity itself? At this stage, it should be noted that an entity equipped with artificial intelligence technology lacks a sense of responsibility because the fact that entities equipped with artificial intelligence cannot make moral evaluations is indisputable. These and similar evaluations require the use of human-specific humane and moral discretions, which cannot be made through solely mathematical interpretation methods. Therefore, evaluations made through algorithms of artificial intelligence could lead to dangers of conviction or protective measures based on probabilities (Carlson, 2017).

Similarly, according to Turkish Penal Code (TPC) Article 61, "No one can be punished or subjected to security measures for an act that is not considered a crime under the law in force at the time it was committed," and TPC Article 62, "In the presence of discretionary reasons that would mitigate the penalty in favor of the perpetrator, the aggravated life imprisonment penalty shall be replaced with life imprisonment; life imprisonment with twenty-five years imprisonment. Other penalties can be reduced by up to one-sixth," conditions such as unjust provocation and self-defense cannot be interpreted by artificial intelligence algorithms. Situations like the perpetrator's remorse or the potential effects of the penalty on the perpetrator's future require moral evaluation. Hence, interpreting the principle of "humaneness," one of the most fundamental principles of criminal law by artificial intelligence, is not possible at least at the current level of development.

With the production and utilization of artificial intelligence entities for various purposes, the possibility of negative outcomes from interactions they enter into with their kind or with humans is increasingly likely. As such, entities equipped with artificial intelligence can violate values within the framework of personal rights such as life, bodily integrity, health condition, privacy of private life, personal data, honor, and dignity due to their autonomous decisions and actions, as well as cause moral and material damages as a result of ethical and economic errors.

For example, the termination of the right to life by autonomous decisions of an entity equipped with artificial intelligence technology, especially in military use, or causing harm to bodily integrity, has been an important issue in recent years. The same risk is applicable to automotive artificial intelligence technologies, as stated in the section on negligence liability, due to wrong decisions made by autonomous vehicles, i.e., driverless cars, leading to traffic accidents.

In summary, even though environmental, economic, and social factors increasingly benefit from artificial intelligence technologies today, evaluating the risk factors alongside the advantages of sustainable artificial intelligence applications is crucial. This is because, contrary to societal development and changes, the disadvantages of artificial intelligence will increase as much as its advantages. Additionally, the systems offered by artificial intelligence technologies will always need access to large datasets on a universal level and the necessary system infrastructure for their use. Therefore, developing new methods to evaluate the impact of new artificial intelligence systems on efficiency, ethics, transparency, and sustainability is essential.

RECOMMENDATION

Based on the discussion surrounding the challenges and implications of implementing artificial intelligence (AI) in legal systems, several recommendations can be made to navigate these complexities effectively. These suggestions aim to enhance the ethical use, transparency, and accountability of AI technologies within the judicial context:

Develop Ethical Guidelines for AI in Legal Systems

Establish comprehensive ethical guidelines for the development and application of AI technologies in the legal field. These guidelines should address issues of fairness, transparency, and privacy, ensuring that AI applications respect the fundamental principles of justice.

Ensure Transparency of AI Algorithms

Mandate the disclosure of AI algorithms, methodologies, and decision-making processes used in legal contexts. This transparency will allow for the scrutiny and evaluation of AI technologies by legal professionals, researchers, and the public, ensuring that AI decisions are understandable and justifiable.

Implement Legal Frameworks for AI Accountability

Create legal frameworks that clearly define the accountability and liability of AI systems, their developers, and users within the legal system. These frameworks should address who is responsible for the outcomes of AI decisions and under what circumstances.

Promote Public and Professional Education on AI

Encourage the education of legal professionals, judges, and the general public on AI technologies and their implications for the legal system. This education should aim to demystify AI, promote informed discussions, and facilitate the ethical integration of AI into legal practices.

Facilitate Access to AI Technologies

Ensure equitable access to AI technologies for all stakeholders in the legal system, including defendants, plaintiffs, lawyers, and judges. This access will help level the playing field and ensure that the benefits of AI are shared broadly.

Encourage Independent Auditing of AI Systems

Support the independent auditing of AI systems used in legal contexts to assess their accuracy, fairness, and impact on human rights. Independent reviews can help identify biases, errors, or other issues that need to be addressed.

Foster Multidisciplinary Collaboration

Promote collaboration among computer scientists, legal professionals, ethicists, and other stakeholders in the development and evaluation of AI technologies for legal applications. This interdisciplinary approach can ensure that AI technologies are designed with a deep understanding of legal principles and societal needs.

Implement Adaptive Regulatory Frameworks

Develop adaptive regulatory frameworks that can evolve with the rapid advancements in AI technology. These frameworks should be flexible enough to accommodate new developments while ensuring the protection of fundamental legal rights and principles.

Prioritize Human Oversight

Ensure that AI technologies in the legal system are always subject to meaningful human oversight. This oversight is crucial for interpreting AI recommendations within the broader context of legal reasoning, ethical considerations, and societal values.

Support Research on AI's Impact

Fund and support research on the impact of AI technologies on the legal system, focusing on long-term effects on justice, equity, and the legal profession. This research can inform policy decisions and the future development of AI technologies in the legal field.

Implementing these recommendations can help address the challenges posed by AI in the legal system, ensuring that these technologies are used in ways that enhance justice, fairness, and efficiency while respecting ethical standards and human rights.

Ethics Statement

"This article complies with the journal's writing rules, publication principles, research and publication ethics rules, and journal ethics rules. The author bears responsibility for any violations related to the article." Since this article was conducted through document analysis, one of the qualitative research methods, it does not require ethical board approval.

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