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The influence of artificial intelligence on the law

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Abstract:

The digital world is characterized by a vast array of data, documents, and legal materials, which are safeguarded and preserved through modern applications and technologies. Artificial intelligence plays a crucial role in this process, featuring numerous intelligent applications that facilitate operations within the legal field, particularly in legal professions and judicial systems. This has led to a fundamental transformation, marked by the emergence of digital justice, remote litigation, and the adoption of electronic trials, all of which contribute to the efficient and swift execution of judicial tasks.

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Introduction:

Artificial intelligence is regarded as the foremost technological advancement of our time, permeating various sectors and levels of society, the field of investment is one of the most important fields that rely on artificial intelligence technologies (Qasir Aisha, 2023). In the legal domain, it is deemed crucial and indispensable due to its significant and efficient function in elucidating a perspective and reaching a proactive determination concerning the probable results of legal disputes with precision, thoroughness, and remarkable expediency. Furthermore, it plays a vital role in offering guidance and counsel to legal practitioners, thereby enhancing their understanding of litigation processes and strategies (Dhaif Allah Zainab B. D., 2023).Artificial intelligence also plays an important role in judicial systems, as it has proven its ability to enhance the efficiency of these systems by adopting digital justice platforms that accelerate the pace of litigation procedures and shorten the time and effort of litigants, which positively reflects on the protection of citizens' basic rights and freedoms, and their sense of satisfaction and confidence in the actions issued by the judicial authority. On this basis, the following problem can be raised: What legal effects does artificial intelligence have in the area of legal sciences?

To answer this problem, we divide the research into the following points:

1. The nature of artificial intelligence and law
2. The impact of artificial intelligence on legal professions.
3. The future of artificial intelligence in the field of law.
4. The impact of A.I on the Transparency in Judiciary
5. Challenges of artificial intelligence in legal work.

1- The Definition and nature of artificial intelligence.

The concept of artificial intelligence is regarded as a contemporary and revitalized notion that encompasses various definitions, both linguistic and technical. It finds application across numerous domains, with legal sciences being one of the most significant. The characteristics and uses of artificial intelligence vary depending on the specific fields in which it is implemented.

1-1- Definition of artificial intelligence in the field of law

There are many definitions that reveal the basic concepts of artificial intelligence based on the linguistic and technical definition:

1-1-1 The linguistic definition of artificial intelligence:

Artificial intelligence consists of two words, firstly, intelligence, which means deep thinking in areas that are known for change and renewal, and which require adaptation to the various variables in society (Dhaif Allah Zainab B. D., Law and Artificial Intelligence,, 2023), while artificial means manufacturing, derived from the word industry, which includes producing the needs that humans

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lack, and this is to distinguish it from the things that exist and are born naturally, as humans rely on human intelligence in order to manufacture smart and automated applications that make life easier for humans in various fields (hadja, 2024) (AsmaaBellita, 2022).

1-1-2- The technical definition of artificial intelligence:

Computer science is a discipline that focuses on the development of intelligent programs and applications capable of addressing various challenges. It encompasses the simulation of human cognitive processes and the provision of analytical solutions to problems. Esteemed scholars in the field, such as Marvin Lee Minsky, recognize it as the creation of computer programs designed to perform tasks that are typically executed proficiently by humans. (Dhaif Allah Zainab B. D., Law and Artificial Intelligence, 2023)

Dan.w.Patterson defined it as a type of branch of computer science, which is concerned with studying and creating computer systems that include some types of intelligence, and these applications work to solve problems and understand languages that require intelligence to understand them (Daif Allah Zainab B. D.), Based on these definitions, it is noted that artificial intelligence is defined as the development of computers to invent organizations and applications through which human intelligence (Al-Asyuti), can be assisted in many fields to facilitate medical, military, educational transactions, and even in the field of law, also artificial intelligence is regarded as a proactive inferential capability for predicting the most likely outcomes of legal cases, playing a significant role in identifying and formulating the most precise legal strategies for determining litigation funding (https://iamaeg.net/ar/publications/articles).

1-2- The legal nature of artificial intelligence in law

Artificial intelligence emerges as a significant outcome of the information revolution. Its defining feature is the capacity to swiftly analyze data and perform research, thereby assisting legal practitioners in formulating precise and thorough legal strategies. Nonetheless, the efficacy of this technology is contingent upon the breadth of the database containing the legal documents and materials it utilizes. Furthermore, it has demonstrated remarkable efficiency and speed in handling routine and repetitive tasks, including the review of contracts, documents, and conducting legal research (Drabel, 2022).

To determine the legal nature of artificial intelligence, the legal foundations on which the opinion rejecting legal recognition of the legal personality of artificial intelligence relied must be presented, on the one hand, and the motives and reasons specific to those supporting the idea of recognizing the legal personality of this new category.

1-2-1-The opposing viewpoint regarding the legal personality of artificial intelligence.

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The opposing and rejecting opinion of the idea of the legal personality of artificial intelligence is based on many motives, the most important of which are the following:

- The difficulty of recognizing the legal personality of artificial intelligence as one of the means of assisting the intelligence of the ordinary natural person, due to its danger and due to the consequences that result from the issue of recognizing the legal personality.

-It is not possible to classify artificial intelligence within a natural or legal person, and jurisprudence considers it merely an aid to facilitate life for people (HamdiAmhamedSaadAmhamed, 2021).

1-2-2 The perspective that supports the concept of legal personality for artificial intelligence.

Artificial intelligence currently has superior and extraordinary capabilities that rival the intelligence of a natural person, especially the intelligence of robots and machines that can make decisions, and thus legal personality can be recognized.- Legal personality is granted to a natural person and a legal person who is not considered a human being, and therefore it can be granted to artificial intelligence by granting the legal form and status to the actions issued by it (Daif Allah Zainab B. D.).

2- The impact of artificial intelligence on legal professions.

Intelligent applications enhance the efficiency of legal professionals, enabling them to execute their responsibilities with optimal precision and rapidity. This is particularly evident in law firms and organizations that prioritize the integration of artificial intelligence. Such technology aids lawyers and researchers in conducting thorough due diligence by gathering essential information, verifying and confirming facts, and conducting comprehensive assessments of prior case decisions. This ultimately allows for the provision of accurate and effective legal advice and services to clients.

2-1-The influence of artificial intelligence on the legal system.

Artificial intelligence significantly contributes to the judicial system by providing applications and programs that assist legal professionals and researchers in their efforts to search, analyze, and interpret information. Furthermore, it alleviates the workload of the judicial system through the implementation of innovative judicial technologies, such as electronic monitoring devices and tracking systems under judicial oversight. These advancements not only support judicial authorities but also safeguard fundamental rights and freedoms (AsmaaBellita, 2022).Despite these advances in the courtroom, it is difficult to imagine that AI could replace lawyers and judges, because the unique human ability

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to create empathy for both jurors and judges is indispensable in trial deliberations. (-https://iamaeg.net/ar/publications/articles/)

2-2-The impact of artificial intelligence on lawyers

Artificial intelligence has demonstrated its ability to guide and enlighten lawyers and legal advisors on the best ways and means to conduct negotiations to reach a solution to a specific dispute accurately and quickly and save the time allocated to investigating and collecting the necessary information about a specific case, as artificial intelligence addresses the challenges facing legal professionals and researchers in the field of collecting evidence, proof and evidence, which forces them to rely on artificial intelligence in order to reduce the time that lawyers spend conducting legal research due to its speed in analyzing data and documents accurately and comprehensively (the-impact-of-artificial-intelligence-on-the-legal-profession-and-the-judiciary).

- The implementation of artificial intelligence in the legal profession enhances efficiency and conserves time, enabling lawyers to concentrate on more intricate and strategic responsibilities. Furthermore, artificial intelligence is crucial in the documentation and management of large datasets, as advanced algorithms proficiently analyze extensive legal databases, extracting vital insights that bolster legal arguments. This capability significantly reduces the time required for legal research, thereby improving its quality and precision. Additionally, the application of artificial intelligence in routine tasks minimizes human errors and accelerates processes, allowing legal professionals to focus on their primary duties and improve client interactions, ultimately leading to increased effectiveness and productivity in a shorter timeframe.

AI intelligently manages documents, storing and organizing legal documents such as contracts and case files, enhancing automatic classification and accurate search functions to facilitate access to documents. This system is integrated with programs such as Microsoft Office, providing a unified way to manage legal documents. AI also helps in the proper management and storage of information, which facilitates the process of evaluating litigation procedures and analyzing cases with an accurate analysis that helps in the process of identifying judicial precedents (Taher Abu Al-Eid, 2023).

3-The future of artificial intelligence in the field of law

The anticipated role of artificial intelligence within the legal sector is projected to grow significantly in the future, particularly at the convergence of AI technologies and emerging innovations such as”Block chain” (Côme BERBAIN). This integration presents new opportunities for secure and transparent legal transactions. The term "Blockchain," derived from "block chain," is recognized by the World Economic Forum as one of the ten most crucial modern technologies and a key component of the Fourth Industrial Revolution, which has fundamentally

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transformed the operations of governments, public administrations, the private sector, and civil society. As an emerging technology, blockchain collaborates with other advancements, including artificial intelligence (AI), the Internet of Things (IoT), and machine learning (ML), to enhance public service delivery. It serves as an effective and optimal tool for identity management within the government sector, thereby mitigating issues of corruption, forgery, and fraud. This technology employs an encryption system that ensures the authenticity and security of both administrative and general information (Shahrazad, 2022).

Blockchain has evolved through three primary phases, starting with its application to encrypted digital currencies, referred to as Blockchain 1.0. It then progressed to Blockchain 2.0, marking a significant advancement in the realm of artificial intelligence. During this phase, a new variant known as Ethereum emerged in 2013, introducing innovative functionalities, most notably in the area of smart contracts.

As for the current stage, which is considered one of the most important stages and is called Blockchain 3.0, which began in 2018, it expanded the scope of its applications, the most important of which are: health, governance, education and smart management in order to add a digital character to all fields, which transforms society from a traditional society to an electronic society within the framework of governance, management and smart cities (Ben Mohamed Hoda, 2020), which is positively reflected in the legal and judicial professions, especially the profession of a lawyer, especially the increase in specialization that is positively reflected in advanced skills in other fields such as predictive analytics and data science.

4-The impact of A.I on the Transparency in Judiciary

The A.I can play an important role in the work of judges and litigators to assess how an algorithm reached its verdict; what evidence it considered and how it weighted it; and to what extent this evidence reflects the circumstances of the case. This in turn raises due process concerns that could undermine the fairness of the judgment and the perceived legitimacy of the judicial system (Rober R. H., 2023).

Burrell's analysis of algorithmic opacity helps us illustrate these concerns. She identifies three variants of it: intentional, arising from corporate or state secrecy; technical, due to the complex nature of AI; and intrinsic, stemming from the fundamental differences in human and algorithmic cognition. Intentional opacity often emerges from proprietary or legal privacy concerns. Governments may outsource the construction or operation of these algorithms to private companies. These "private, profit-maximizing entities, operating under minimal

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transparency obligations", understandably seek to restrict the public dissemination of their trade secrets. They will insist on contractual terms that prevent further disclosure of the algorithms by the government. (Rober, AI, JUDGES AND JUDGEMENT:, 2023)

Existing intellectual property rights clearly serve as a major barrier to algorithmic transparency. They limit the auditability of AI, which prevents the external assessment of this technology needed to help guard against the biases described above.

There are an accountability deficit. Instead, confidentiality provisions ensure the private sector vendors that develop this software acquire near-monopolistic control on information about the technological, ethical, social, and political implications of AI justice, with no responsibility to facilitate public discussion. Concerns overdue process – despite the Wisconsin Supreme Court's findings – persist. Questions about what kinds of public information and access democratic governance requires remain, too.

The argument for open-source software in AI judicial decision-making is thus a compelling one. We ought to know what algorithms judiciaries use, how they work, and what their effects on those whose lives it influences are, and yet there are countervailing arguments that complicate this matter; Mandating transparency may make it more difficult for governments to attract the most capable private sector vendors. (Rober, AI, JUDGES AND JUDGEMENT:, 2023)

The degree of aversion to AI in the courtroom seems to depend on how the technology is used – that is, on the nature and extent of judicial reliance on AI at different stages of adjudication. Using algorithms during information acquisition is generally perceived as fairer; trust in AI-led information analysis, decision selection, and decision implementation is lower.

This is not surprising. There are concerns over the accuracy, thoroughness, and reliability of AI verdicts, much of which stems from the absence of interpretable decisions; these concerns bear less on

5-Challenges of artificial intelligence in legal work

Despite the many benefits of artificial intelligence in the field of law, relying on it imposes many challenges, which we will discuss below:

A- Quality and availability of legal data

Artificial intelligence systems in the legal field require high-quality and abundant data to function effectively. The challenge lies in the complexity and disorganization of legal data, which complicates the processes of collection and processing, potentially adversely affecting the performance and training of AI models.

B-Legal interpretation and context

Legal issues require careful interpretation and a deep understanding of the legal context of events, information, and legal reasoning, which poses a challenge to intelligent systems that may struggle to navigate the complexities of legal language, limiting their ability to provide legal analysis and advice that is appropriate to the specific and intended legal context.

C- Bias and fairness

Bias in data presentation can result in skewed outcomes from artificial intelligence algorithms. Consequently, such bias may lead to unfair and inaccurate conclusions and decisions. Therefore, the implementation of these applications

and programs necessitates the development of intelligent systems that consider diversity and inclusivity to provide equitable and impartial solutions for all parties involved (Al-Eid, 2023).

D-The safeguarding of privacy and confidentiality in data.

Legal practice encompasses the handling of sensitive and confidential information. The integration of artificial intelligence technologies necessitates rigorous compliance with data privacy and confidentiality standards, which in turn demands the creation of sophisticated systems equipped with robust security measures to safeguard the confidentiality of legal data and shield it from potential external or internal risks.

E-Ethical and professional responsibility

The legal and judicial professions require high ethical and professional standards, and therefore the integration of smart technology tools into them raises questions about professional responsibility and accountability, especially with regard to delegating legal tasks to automated systems and the ethical implications of their decisions.

H-Adapting to changing laws and regulations.

The utilization of AI in the legal domain faces the significant challenge of consistently adapting to the dynamic nature of laws, regulations, and norms. This demands ongoing updates and the capability to learn and evolve in alignment with these developments.

Conclusion

The integration of artificial intelligence within the legal sciences has generated significant apprehension, as it poses the potential to supplant certain professionals in their roles. While the implementation of technological programs in the legal domain has yielded beneficial outcomes, it may also hinder the safeguarding of fundamental rights and freedoms if adequate legal frameworks are not established. These frameworks must align with the evolving legislative and regulatory landscape as determined by the relevant authorities, including legislative, executive, and judicial bodies. Ultimately, it can be concluded that artificial intelligence represents one of the most recent technological advancements embraced across various sectors, and its notable progress within the legal field has positively influenced the professional growth of legal practitioners.

-Artificial intelligence saves effort and time in order to achieve legal goals, especially with regard to protecting fundamental rights and freedoms.

-Artificial intelligence and Block chain provide legal effectiveness for legal actions issued by the administration, and therefore legal mechanisms must be

provided that seek to rely on them in a professional and more technical and professional manner.

Among the recommendations that can be included in this area are:

-The need for the legislative authority to study the issue of determining the legal nature of artificial intelligence and the technologies it relies on, especially with regard to recognizing the legal personality of artificial intelligence or not.

-Modifying domestic laws and regulations to align with global technological advancements, while striving to implement these changes within the legal framework, taking into account the prevailing political, economic, and social circumstances.

-Establishing systems and software solutions that ensure legal safeguards for information and data reliant on artificial intelligence during their storage phase.

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