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ARTIFICIAL INTELLIGENCE AND ITS LEGAL ETHICAL CHALLENGES: A SYSTEMATIC CRITICAL ANALYSIS

By Indranil Adhikary, Assistant Professor of Law, Seacom Skills University, Bolpur, West Bengal, India.

ABSTRACT

Particularly in fields like law, ethics, and human behaviour, the rapid development of artificial intelligence (AI) poses difficult problems that go beyond simple technical issues. The growing use of AI in India's many industries raises important concerns about how it may affect cultural norms, legal frameworks, and individual rights.

Al must revolutionize legal research, judicial administration, and predictive analysis in order to alter the legal sector. However, the use of AI in legal research has also sparked serious questions about algorithmic bias, ethical and transparency, constitutional morality, data privacy, copyright difficulties, and legal social concerns. Therefore, a constitutional, ethical, jurisprudential, legal, and socio-legal investigation of the link between Al and legal research in Indian jurisprudence is necessary. AI is like a buddy. Its operation is restricted to the data that is programmed into it in order to facilitate human tasks. It is devoid of human perception, reasoning, and cognitive functions. A number of issues are raised by machine-induced learning and functioning.

Keywords: Artificial Intelligence, Ethics, Socio legal Implications, Legal Frameworks, Privacy, Bias and Discrimination, Intellectual

1. INTRODUCTION

However, from a legal and moral standpoint, privacy encompasses more than merely handling personal data; it also refers to a person's capacity to manage their private life and uphold their dignity. Privacy shouldn't be sacrificed for the rapid and practical benefits of convenience and quickness. Determining whether a dataset used for machine learning was acquired directly or indirectly via violations of individual or collective privacy rights is crucial. In the context of deep learning, privacy is particularly crucial, even if it is a significant concern in fields including labor, transportation, technology, and healthcare. Furthermore, we shouldn't reduce our standards by allowing authorities to assess a person's social risk using predictive analytics, such as whether they are likely to commit further violent crimes or escape from jail. Since altering one's name and location is the only method to

avoid such a privacy infringement, our intellect would not be seen as creative. A just balance between freedom and authority is made possible by true human intellect.[1]

1.1. AI, or artificial intelligence:

The capacity of a digital machine to do activities that are usually associated with intelligent individuals is known as artificial intelligence (AI). The phrase is often used to characterize the endeavor to develop systems with human-like cognitive capacities, such as reasoning, meaning-finding, generalization, and experience-based learning. Since their creation in the 1940s, digital computers have been designed to carry out very difficult jobs with a high degree of proficiency, such playing chess or proving mathematical theorems. Despite continuous advancements in computer memory and processing speed, there are currently no programs that can fully replicate human adaptability in a variety of domains or in activities requiring a great deal of daily knowledge. Artificial intelligence, in its restricted form, is used in a variety of applications, including medical diagnosis, computer search engines, voice and handwriting recognition, and chatbots. However, some programs have attained the level of performance of human specialists in certain jobs. [2]

Artificial intelligence is defined by Black Law Dictionary as "software used to make computers and robots work better than humans."It is used in computer vision, robotics, human language processing, and new product development.
"The automation of activities that we associate with human thinking, activities such as decision-making, problem-solving, and learning," according to Bellman.
According to Kurzweil, it is "the art of creating machines that perform functions that require intelligence when performed by people."

"The science of making machines do things that would require intelligence if done by men," according to Marvine Minsky.

According to Avinash Kaushik, it "is an intelligent machine."

1.2. Intelligence: The term intelligence comes from the Latin "intelligere," which meaning "to understand." Different definitions of intelligence have been offered by different psychologists. Nonetheless, the majority of definitions emphasize that intelligence encompasses the capability for higher order cognitive processes, including abstract cognition, learning, and situational flexibility. One important idea for comprehending individual variations is intelligence. It is the culmination of a person's many skills, which can be quantified and distinguished in number, and it reflects their general conduct. In any population, the distribution of intelligence varies normally. It is an innate mental ability that grows and is molded by external circumstances. Along with the capacity to learn and solve challenging tasks and issues, intelligence also includes the ability to recognize correlations and discrepancies.

[1] Khan, A. A., Badshah, S., Liang, P., et.al Ethics of AI: A systematic literature review of principles and challenges. In Proceedings of the 26th international conference on evaluation and assessment in software engineering (pp. 383-392) (June 2022).

[2] D Majumdar and HK Chattopadhyay, Artificial intelligence and its impacts on the society, 306, Volume 6, Issue 5,2020

Intelligence Definitions

Weshler, David (1944):

"The total or global ability of a person to act with intention, think logically, and interact with his surroundings is intelligence."

Binet (1905):

"The capacity of an individual to guide his actions toward a purpose is intelligence. Piaget, Jean (1952):

"The capacity to adjust to one's environment is intelligence."

Wagon
"The ability to learn and adapt to relatively new and changing conditions is intelligence." Spearman (1923):

"The ability of an organism to adapt to an increasingly complex environment is intelligence."
1.3 Learning: Learning looks at how people interact with their surroundings, adjust, and develop via observation of others as well as classical and operant training. It's about the relationships we form and the actions we take—consciously or unconsciously—when we interact with the environment. Learning encompasses a range of subjects that describe how individuals learn and engage with their environment.
Artificial intelligence uses a variety of learning techniques. One specialized form draws inspiration from the functioning of the human brain. Layered "artificial neural networks" are used to process complicated data, including voice, photos, and videos.

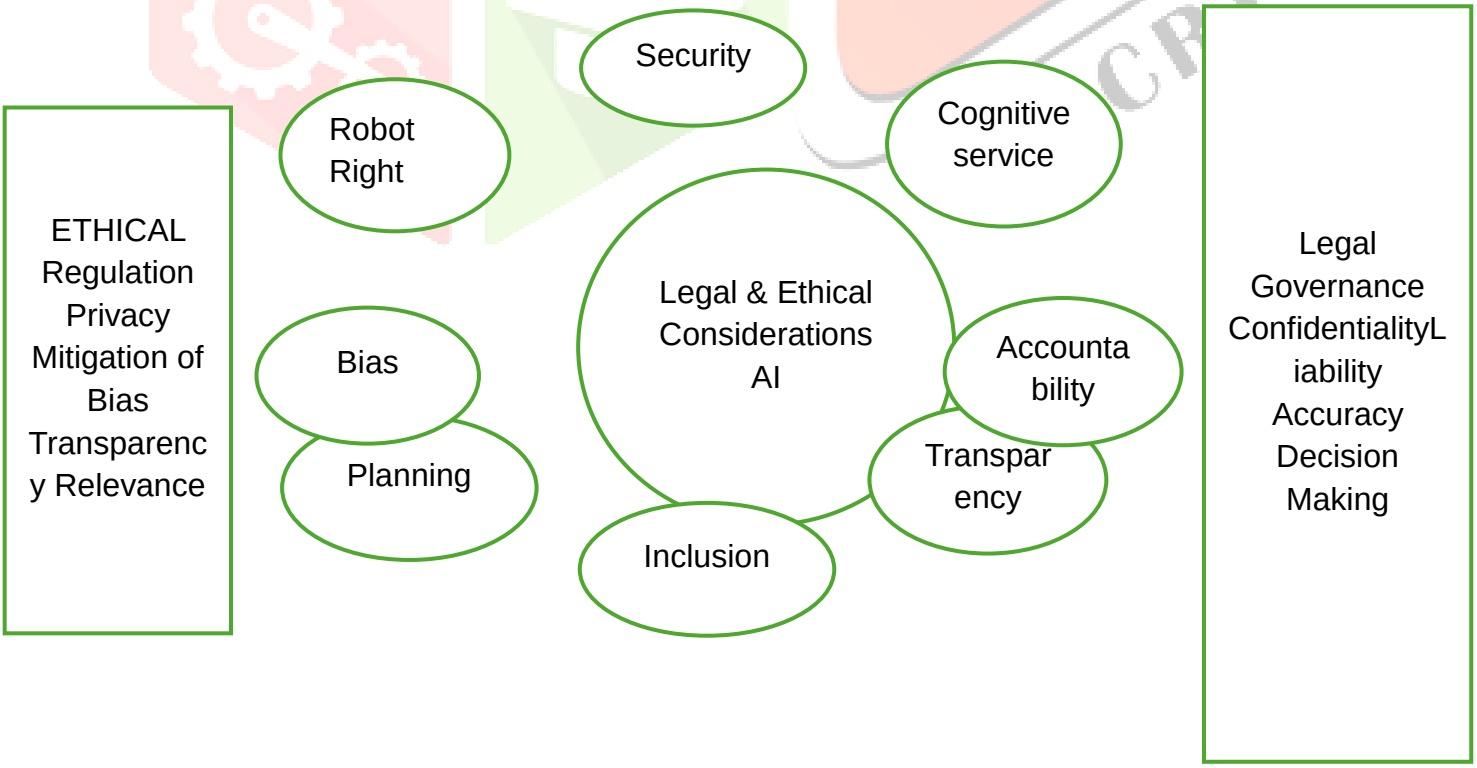
1.4 Law: Law is a profession or field of study that deals with the laws and customs. Authorities like the government and social institutions implement these regulations. To put it another way, laws serve as a means of controlling human conduct. Concepts like reason, justice, morality, order, and honesty are all part of society's viewpoints. Judges contribute to the definition of law by defining it as actions, policies, legislation, regulations, and guidelines. Court rules, judgments, decrees, court orders, and injunctions are all considered forms of law.
Written law, often via legislative acts, is the predominant form in European nations. The Declaration of the Rights of Man, which was influenced by Rousseau's "Contract Social," emphasizes the validity of laws and their function in expressing the collective will. European constitutions place a strong emphasis on how the law helps people practice their liberties and rights. Legal precedents and judicial interpretation are the foundation of common law regimes. These strategies are supported by international and European law, which guarantees that any limitations on rights follow the essence of those rights as outlined in the EU Charter of Fundamental Rights while also adhering to particular legislative obligations.
Depending on the region, period, and legal system in effect, the term "law" may signify. The phrase might be construed differently even within a same nation. Ordinary law is just one of several kinds of law, despite what some people may think. Different kinds and methods with varying

majorities are involved in legislative authority. There are several legal systems with various names, even though certain aspects are always the same. To guarantee a cogent and adaptable legal structure when laws change in neighboring countries, it is advised to use uniform language and align vocabulary for comprehending the sources of law and institutions. Differences are crucial in European legal systems. It is necessary to distinguish between many types, including constitutional law, natural law, general regulation, substantive regulation, special law, and formal law. Enabling acts and referendum laws are taken into account. The difference between federal law and federated law, or national law and regional law, is important in compound states. Extending Hans Kelsen's work is essential to comprehending these distinctions. According to the author, subject matter, hierarchy, and procedural context all contribute to variations in what constitutes "law," even among legislators.

1.5 Artificial Intelligence and Its Importance:

The development of "smart" machines capable of performing tasks that typically require human intelligence is the main focus of a large area in computer science known as artificial intelligence.[3]

In the context of AI, intelligence is defined as the ability to perform tasks such as planning, reasoning, problem solving, perception, knowledge representation, and creativity. The creation of diverse computer systems that can carry out tasks requiring human intellect is called artificial intelligence. This means that using a non-human form of intelligence has allowed science to eliminate the need for mechanical processes. Examples of artificial intelligence in practice include self-driving cars, navigation systems, internet-based communication apps, computer games, and more.AI has also made it possible to use it in various fields, such as economics, law, and technical terms, for a wide range of tasks. An example of AI programming is a system that demonstrates a level of intelligence surpassing human ability. AI enables machines or pre-programmed systems to solve complex problems by handling difficult computations and further reduces the chance of errors, as machines operate based on previously input data.

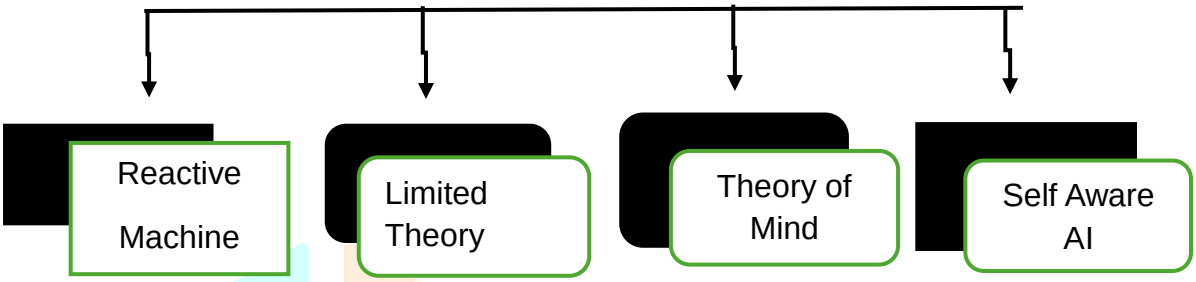


[3] Volkova, Anna A., Ethical and Legal Aspects of the Use of Artificial Intelligence in Scientific Research (May 27, 2025).

1.6.Artificial Intelligence and Its Types:

The main goal of artificial intelligence is to make robots more human-like. Therefore, the fundamental method for illustrating AI relies on its ability to replicate human-like behaviors. Artificial intelligence falls into two kinds, both of which are based on mimicking how the human brain functions. The "Based on Functionality" AI division gets requests based on their resemblance to the human mind and its ability to think and feel on its own. In the IT sector, the next representation technique—"Based on Capabilities" of AI in opposition to Human Intelligence—is dynamically unquestionable.

Type 1- Based on Functionality



1.6.1.1 Receptive Machine

They are the most significant and well-known kind of artificial intelligence.
They imitate human reactions to certain stimuli. However, scientists have recently found it difficult to apply the data they have collected to produce improved outcomes since this kind of AI lacks memory. Because of this, these AI systems are unable to prepare themselves in the same manner as other kinds.

1.6.1.2 Restricted Theory

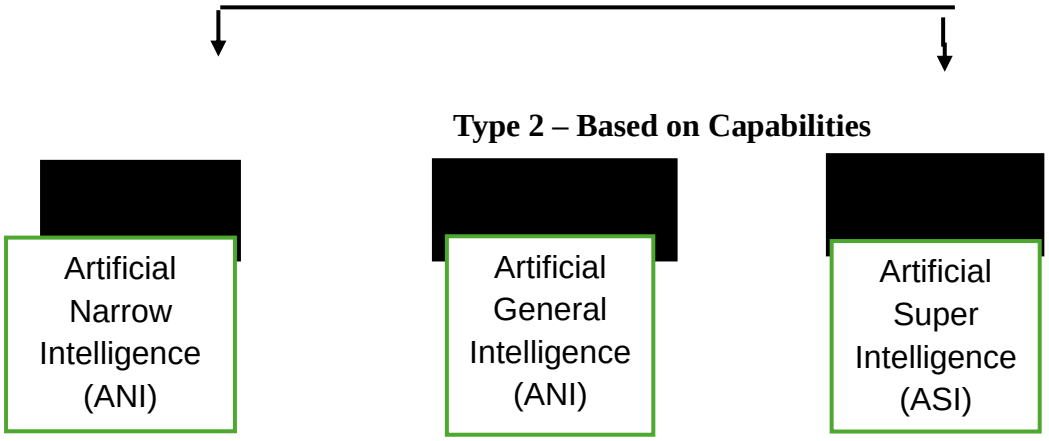
Apart from the capabilities of Reactive Machines, this kind of AI features memory functions that enable it to consult historical data to make better judgments in the future.
Most of the everyday apps that we come across fall into this category. The perspective model may be based on a substantial quantity of pre-existing data that is kept in the memory of these AI systems.

1.6.1.3 Mental Theory

These kinds of AI are still in the "Work in Progress" stage and are often created in research labs.
They will be able to drastically lessen the requirement for human traits like preferences, emotions, wants, and opinions once they are completely matured. Based on its comprehension of human personalities and inclinations, the AI will be able to adjust its replies.

1.6.1.4 Self-sufficient AI

The last kind of AI is this one.
Nowadays, it is usually shown in science fiction films and only exists in theory. These AI systems are able to feel their own emotions in addition to evoking and comprehending human emotions. Elon Musk and other AI skeptics are wary about this kind of AI. This warning is due to the possibility that if an AI goes into self-preservation mode, it may start to consider people as a possible danger and may actively or covertly try to eradicate people.



1.6.2.1. Artificial Narrow Intelligence (ANI): Every AI application that people use on a regular basis falls into this category. AI is only proficient in a few areas and is still far from being able to match human talents. It is incapable of thinking or seeing. AI systems that can carry out precise, well-defined activities similarly to humans are part of ANI. These robots struggle with difficult jobs because they are unable to do things that were not preprogrammed for them. This kind of AI combines limited memory with reactive AI. This category includes the sophisticated forecasts that people use with AI nowadays.

1.6.2.2 Artificial General Intelligence (AGI): AGI is capable of processing, learning, comprehending, and carrying out tasks in a manner similar to that of a human. These systems can perform a variety of tasks. They are more flexible and capable of reacting and improvising like humans when confronted with novel circumstances. Although there isn't yet a working example of this kind of AI, the topic has advanced significantly.

1.6.2.3. Artificial Super Intelligence (ASI): The creation of ASI is the primary objective of AI research. The most sophisticated kind of AI knowledge is thought to be ASI. It can complete any work because to its unmatched capacity for information processing, memory, and adaptation. The introduction of ASI has many scientists worried that it might result in the "Technological Singularity." This is a hypothetical situation in which human society undergoes a significant transition due to the pinnacle of creativity. The future becomes very difficult to forecast once a more sophisticated type of AI emerges. It will take some time to get there, however, since humans are still in the early phases of creating sophisticated AI. Supporters of AI may argue that humans are just now realizing the full potential of AI. The Technological Singularity is still a long way off for those who are skeptical about AI. In the future, it might be considered a danger to mankind.

1.7 Research Issue

• **The "Black Box" Issue:** Significant automated choices are made by AI models, particularly deep learning algorithms, without obvious, comprehensible reasoning. Determining legal duty, accountability, and the right to appeal is challenging due to this lack of openness.

• **Algorithmic Discrimination and Bias:** Artificial intelligence (AI) systems depend on past data that incorporates human prejudices. These institutions often exacerbate already-existing societal injustices by sustaining inequality in fields including criminal justice, employment, and healthcare.

• **Data Privacy and Consent:** Conventional data privacy rules are challenged when generative AI models are trained on massive volumes of scraped data.It prompts worries about improper use of personal data and unapproved monitoring.

• **Intellectual Property (IP) Rights:** SLRs often draw attention to legal concerns over whether AI-generated material violates copyrights already in place and if AI-generated works are eligible for patent protection.

• **Absence of Operational Frameworks:** Studies reveal that while high-level AI ethical concepts exist, there aren't any particular, industry-wide governance frameworks.

• **Jurisdictional Fragmentation:** Little is known about how various national and regional laws (like the EU AI Act vs local frameworks) impact the worldwide use of AI without impedinginnovation.

1.8 Thesis statement:

The incorporation of artificial intelligence into high-stakes decision-making seriously undermines conventional notions of moral accountability and legal and ethical duty, according to a thorough analysis of recent interdisciplinary research.

1.9RESEARCHMETHODOLOGY

This research is a doctrinal and analytical approach with technological aspect on socio legal ethics. It is mainly based on qualitative examination of systematic study of statutes, professional codes, case laws, digests and commentaries in physical libraries, and academic literary works, and works from online legal databases. Data collected from various primary and secondary sources of methods data collection.

2. HISTORY

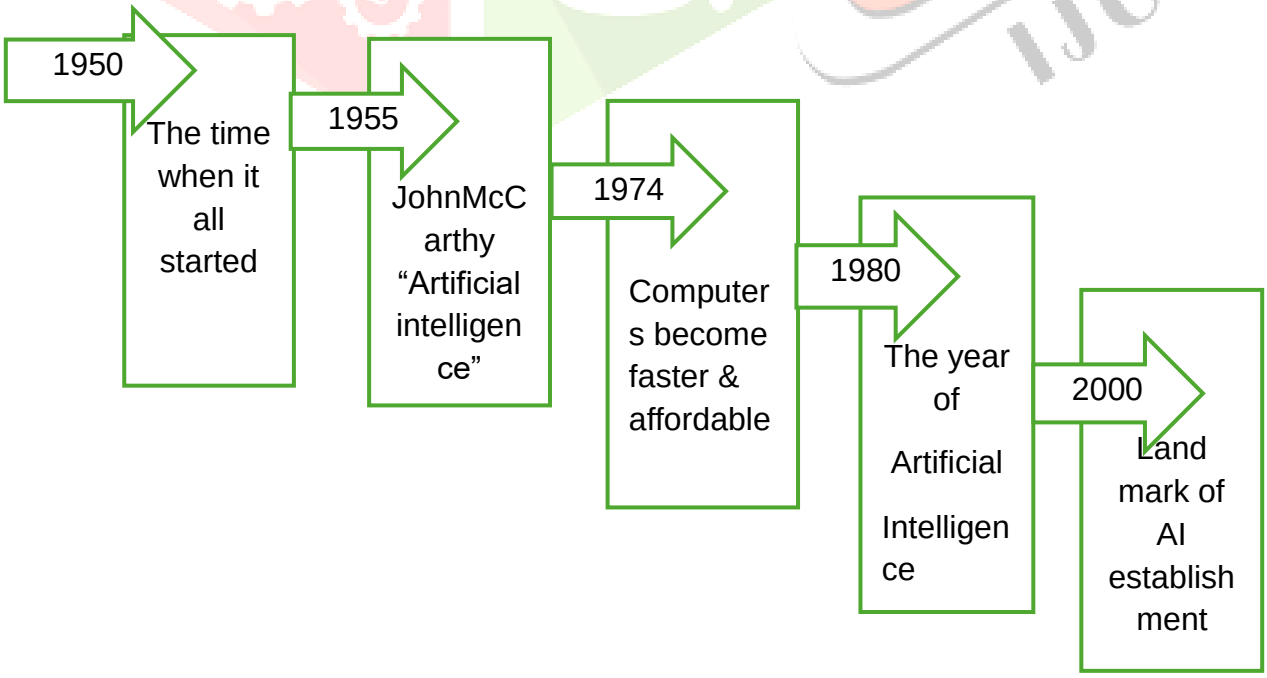
2.1 History: AI has progressed from science fiction to real-world applications. From the early work of British logician Alan Turing in the 1930s to advancements around the beginning of the twenty-first century, the history of artificial intelligence encompasses significant events and figures in the subject. AI is based on the concept of a machine having human-like cognitive capacity to learn, understand, and solve problems. The goal of AI research is to build intelligent computers that can mimic human cognitive processes. This road has been lengthy, with times of significant advancement, setbacks, and introspection. The process of creating computers that can mimic human intellect is essentially known as artificial intelligence. These computers are capable of learning, reasoning, and adapting while carrying out activities that often call for human intellect. A world of computer decision-making, picture recognition, and natural language understanding is possible with artificial intelligence. AI is the capacity of a computer-controlled robot or digital computer to carry out operations normally performed by intelligent entities. The phrase is often used to characterize the evolution of systems that possess human-like cognitive functions, such as the capacity for reasoning, meaning-finding, generalization, and experience-based learning.

At the Dartmouth Conference in 1956, John McCarthy coined the phrase "artificial intelligence." Three years after the concept was originally put forward, the first AI lab was founded in 1956. This marked the start of the AI research period. The earliest AI research facility was the MIT lab, which is still in operation today.

But the idea of AI, or machine learning, was thought of far earlier. The British logician and computer pioneer Alan Mathison Turing completed the first notable work in the area of artificial intelligence in the middle of the 20th century. Turing designed an abstract computing machine in 1935 that consists of an infinite memory and a scanner that reads and writes symbols by moving back and forth across

the memory, symbol by symbol. A collection of instructions in the form of symbols that are stored in the memory govern the scanner's operations. Turing was a top cryptanalyst at the Government Code and Cypher School at Bletchley Park, Buckinghamshire, England, during World War II. Until the conclusion of World War II in 1945, Turing was unable to concentrate on creating a stored program electronic computing machine. But he gave machine intelligence a lot of attention throughout the war. In 1947, Turing delivered one of the first public presentations about computer intelligence in London, stating that "the possibility of letting the machine alter its own instructions provides the mechanism for this" and that "what we want is a machine that can learn from experience." He presented many of the fundamental ideas of artificial intelligence in a study titled "Intelligent Machinery" in 1948. Nevertheless, many of his concepts were subsequently reimagined by others, and this article was never published. One of Turing's initial concepts, for example, was to train a network of artificial neurons to carry out certain tasks; this method is explained in the section on connectionism.

By developing a useful measure for computer intelligence known as the Turing test in 1950, Turing sidestepped the conventional argument about what intelligence is. Three people take part in the test: a computer, a human interrogator, and a human foil. By questioning the other two, the interrogator attempts to ascertain which is the computer. A keyboard and display screen are used for all communication. The computer may do all in its power to deceive the interrogator, and the interrogator can ask as many different and thorough questions as necessary. The interrogator must be able to accurately identify the computer with the aid of the foil. The roles of interrogator and foil are played by different persons, and the computer is regarded as an intelligent, thinking being if a significant portion of interrogators are unable to identify it apart from a human. The annual Loebner Prize competition was founded in 1991 by American benefactor Hugh Loebner. Nevertheless, no AI software has successfully completed an unmodified Turing test. Discussions on whether the requirements of the Turing test had been satisfied were rekindled in late 2022 with the introduction of the big language model Chat GPT. According to BuzzFeed data scientist Max Woolf, Chat GPT passed the Turing test in December 2022. However, other experts contend that Chat GPT did not pass a real Turing test since it often claims to be a language model



The earliest successful AI program was created in 1951 by Christopher Strachey, who later became the director of the Programming Research Group at the University of Oxford. Strachey’s program was designed to play checkers and ran on the Ferranti Mark I computer at the University of Manchester in

England. By the summer of 1952, this program was able to play a full game of checkers at a reasonable speed.

In 1952, there was also a significant milestone in machine learning.

A program called Shopper, developed by Anthony Oettinger at the University of Cambridge, was run on the EDSAC computer. Shopper's simulated world was a mall with eight shops. When asked to buy an item, Shopper would search randomly throughthe shops until it found the item. During this process, Shopper would remember a few of the items available in each shop, similar to how a human shopper might. The next time it was sent for the same or a similar item, Shopper would go directly to the correct shop. This type of learning is known as rote learning.

The first AI program in the United States was also a checkers program.

It was written in 1952 by Arthur Samuel for the prototype of the IBM 701. Samuel built upon the basics of Strachey's checkers program and expanded it over several years. In 1955, he introduced features that allowed the program to learn from its experiences. Samuel included mechanisms for both rote learning and generalization, which eventually enabled his program to win one game against a former Connecticut checkers champion in 1962.

2.3.The Relationship between AI and Law:

AI has the ability to improve the accessibility, efficiency, and fairness of judicial processes. But there are moral dilemmas and difficulties to take into account. The availability of vast quantities of data and the capacity of contemporary computers to handle it are the reasons for AI's success. AI has enormous potential in the legal industry, providing new avenues for both citizens and legal professionals to get justice. AI can be used in various ways in the legal industry. AI-powered research tools can quickly process vast legal datasets, providing lawyers with insights they wouldn't otherwise be able to gain. Another potential benefit of using AI is its ability to help with legal advice through chatbots and virtual assistants, making legal information more accessible. AI can automatically create legal documents, which saves time and money. Predictive analytics can help litigants and their attorneys make informed decisions regarding court outcomes. Online conflict resolution platforms could help boost the efficiency and availability of dispute resolution, with cheaper alternatives to the traditional judicial system. But as AI becomes increasingly prevalent in the legal field, it's crucial to exercise caution and keep an eye out for any possible roadblocks to this revolutionary technology.

Ensuring justice and minimizing prejudice in AI systems is the first significant problem.

Historical data, which may include social biases, is used to train these algorithms. If not corrected, these biases can persist and continue to perpetuate existing injustice in the justice system. Fairness and equality must be at the core of AI development, and continuous efforts must be made to find and remove prejudice in AI applications. The second one is opacity of AI decision making. In legal settings, individuals should be able to comprehend the reasoning behind AI systems' decision-making. To guarantee that AI systems are transparent and that anyone may contest AI-generated findings, engineers and legal experts must collaborate. AI technology is still in its infancy, but it needs to be accurate and transparent. In general, an AI model grows less visible the more accurate it is, and it

becomes more difficult to comprehend the more complicated it is. This happens because, in general, more complex models are more accurate.

Thirdly, it's about personal privacy and personal security.

The amount of personal information that is sensitive is often required for legal actions. Effective data protection measures need to be implemented to ensure that individuals' rights and privacy are preserved. Strong data security procedures must be established, and legal experts must carefully assess the ethical and legal ramifications of handling personal data. But this technology has not penetrated into many African countries. The African Union (AU) could also join forces with groups of countries to collectively acquire such technology, in order to reduce the associated costs.

The need to teach enough individuals to utilize such technology is another problem.

As AI's legal research ability and legal document automation grows, there are concerns that it could take over the role of a legal expert. However, AI should be seen as a tool to assist legal practitioners rather than as a replacement. AI can enhance the effectiveness of legal teams, reduce costs, and boost their ability to deliver informed legal advice.AI can help legal teams work more efficiently, save money, and provide better legal advice.

It's time for governments and legislative bodies to create clear and exact AI policies.

These rules should establish moral standards and norms for transparency and accountability for AI systems. Achieving the right balance between fostering innovation and protecting individuals' rights is a difficult task, and requires educating legislators and regulators on new technologies.

Increasing access to justice is one possible advantage of AI in the legal field.

People who might not have the means to hire a lawyer can access legal information with the help of AI technologies. Online conflict resolution can also be an affordable option to traditional litigation.However, it is essential that new technology diminishes previous inequities in access to justice and does not exacerbate them.

2.4 The impact of AI on the legal field:

2*.4.1 Legal Research and Document Review:* AI technologies can help lawyers save time by quickly scanning through numerous legal documents, case laws, and legislation. [4]

Predictive Analytics: AI systems can analyze past data to determine potential case outcomes, aiding lawyers in determining risk factors and developing strategies.

Analysis and Drafting of Contracts: AI can aid in contract analysis and even draft contracts, minimizing the risk of human error and fasten the legal process.

[4] Wang, J., Mao, W., & Wenjie, W. et.al. (2023). The Ethics of Artificial Intelligence: Sociopolitical and Legal Dimensions. Interdisciplinary Studies in Society, Law, and Politics, 28,2023

2.4.4: Judicial Decision-Making: Some courts are testing the use of AI to help decide sentences and bail, which use machine learning to assess the risk posed by defendants.

2.4.5 Dispute Resolution and Chatbots: AI-powered chatbots help individuals make complaints, learn about their legal rights, and handle minor legal matters.

While AI offers several advantages for the legal profession, it also poses intricate ethical and legal challenges that must be addressed to uphold justice and integrity in the legal system.

2.5 Indian View on AI and Indian Law

Despite the lack of a distinct AI legislation in India, a number of current laws indirectly address AI-related issues:

• ***2.5.1 Information Technology Act, 2000:*** Although it does not expressly mention AI, this legislation addresses cybersecurity, data protection, and cybercrime.

• ***2.5.2 Digital Personal Data Protection Act, 2023:*** This law focuses on safeguarding personal information, which is crucial for AI systems that utilize it.

• ***2.5.3 Consumer Protection Act, 2019:*** This legislation addresses unfair commercial practices and may be used to address consumer concerns pertaining to AI**.**

• ***2.5.4 The Patents Act of 1970 and the Copyright Act of 1957*** address intellectual property rights but do not acknowledge works or innovations produced by artificial intelligence.

3 ANALYSIS AND DISCUSSION:

3.1 Ethical Foundations Governing Artificial Intelligence in Law: The incorporation of AI in the legal field has resulted in significant advances in efficiency and accessibility.

However, the adoption of AI in the legal field cannot be without proper moral frameworks to ensure that the technology's progression doesn't undermine the core principles of justice. Policies are fair, transparent, accountable and respect and protect the rights of the individual. Thus, the use of AI needs to be guided by ethical principles that maintain public trust and the legitimacy of the legal system.

3.1.1 Principles of Legal Ethics and AI Governance:

3.1.1.1 Transparency: Transparency is an important ethical principle in AI Governance.

Judicial rulings must be clear and comprehensible, to ensure fairness and public confidence. Complicated algorithms are frequently needed for AI systems, and they might not be able to explain the decisions that are made in a clear way. No transparency makes it hard for those involved in a legal dispute and lawyers to dispute or validate automated decisions. In legal processes, AI systems must also be able to offer explanations so that the stakeholders can understand the reasoning behind the automated conclusions.

3.1.1.2 Accountability: The ability to hold on to the accountability for decisions taken with the aid of AI.

Traditional legal practice has judges, lawyers and officials making decisions. In the case of automated decision-making systems, however, it will make it difficult to determine who is liable for any failures.

The role of the developers, users, and regulators of AI needs to be clearly defined, otherwise, there are risks that AI systems are not being monitored.

3.1.1.3 Fairness and Non-Discrimination: Fairness is an integral part of legal justice.

AI systems should not reinforce any social or institutional biases that already exist. AI systems that are based on past law-making information that contains biased practices can generate unfair results. To ensure equal treatment under the law and safeguard the lives of marginalised communities, ethical governance of AI needs to be thoughtfully applied in relation to data quality and algorithm design.

3.1.1.4 Privacy and Data Protection: AI technologies rely heavily on data, such as personal and legal sensitive information.

There are concerns over unauthorized use, misuse, and data breaches with such data. Legal frameworks need to guarantee adherence to privacy regulations and safeguard sensitive data in AI applications. To preserve trust in AI-powered legal services, robust data protection systems are vital.

3.1.1.5 Human Oversight: The human role still plays an important role in decisions made by AI in legal contexts.

Although AI can assist with analyzing legal data and identifying patterns, the final decisions should be reviewed by humans. Human interpretation allows automated advances to be judged by social, moral and cultural considerations which would be beyond the reach of algorithmic systems.

The legal and ethical implications of Artificial Intelligence in the legal field are explored.Adverse aspects of AI in law are covered.

(3.2.1)Bias and discrimination in AI legal systems

One of the major ethical concerns with AI in law is the presence of bias.

AI algorithms are trained by looking to past data and if that data is skewed, then the AI system can reinforce and perpetuate inequalities.[5]

3.2.1.1 Causes of Bias in AI

The potential for historical data bias: AI models are trained on historical legal cases that can contain societal biases, discrimination, and systemic inequalities.

AI models could perpetuate this, if past decisions have been unfair to some groups.

Algorithmic Bias: AI systems might be biased if the developers fail to ensure fairness in design.

Selection Bias: If the information used in training AI models is not representative of the broader population, the models could produce results that are unfair or biased towards certain groups.

3.2.1.2. Lack of Transparency and Explain ability

AI systems, particularly those powered by deep learning, frequently operate as "black boxes" that it's hard to grasp how they come up with their decisions.

This opacity simplifies the task for certain in a legal context where foresight and reasoning must be clear and justifiable.

[5] Mrs. Elavarasi Kesavan, A Review on Ethical and Legal issues in Artificial Intelligence and Data Privacy, 96,International Journal of Innovations in Science Engineering and Management Vol.3, 2024

It is crucial that the way decisions are made using AI are explained and that the individuals impacted by the decisions (such as defendants, attorneys, and judges) are able to review and challenge the reasoning.

When AI is applied in legal contexts such as risk assessment, contract analysis, or sentencing, it must be transparent in its approach and the reasoning for the decision-making process.In legal applications such as sentencing, risk assessment, or contract analysis, it is necessary for all parties involved to know how the AI reaches its conclusions and the reasoning behind it in order for them to trust its use.

3.2.1.3. Legal Accountability: An AI system that makes a wrong decision or results in an unfair outcome must be known how and why, so as to be able to identify who is responsible.

Ensuring that the work is performed effectively. Issues of accountancy and liability.

Who holds responsibility is a question raised by artificial intelligence in the legal decision-making process.

It's challenging to determine who is responsible when an AI system provides incorrect legal counsel, recommends an unfair punishment, or misinterprets the law.Identifying liability is difficult when an AI system provides faulty legal advice, recommends an unfair sentence, or misinterprets the law.

Errors and Malfunctions: AI systems may experience errors, like programming problems or biased training data, and unexpected scenarios.

It is still a legal battle to establish who is to blame in such scenarios.

Ethical Responsibility: Legal practitioners have a responsibility to ensure that AI cannot replace human decision-making when dealing with justice issues.

3.2.1.4.Data Protection and Privacy Issues

Law firms rely on AI tools to manage vast amounts of confidential data, such as personal, financial, and criminal records.

The ethical issue of safeguarding these data and protecting privacy is significant.

Unauthorized Data Collection: AI tools can collect or store personal data without the proper consent from individuals.

Data Breaches: There is a risk of confidential information being breached, either due to cyberattacks against legal AI systems or because of their inability to prevent data breaches.

Mass surveillance: AI-based legal monitoring systems can be employed to create mass surveillance, potentially infringing upon individuals' right to privacy.

3.2.1.5.Possibility of infringing upon judicial discretion and human judgment:

• Lack of Personal Judgement: When judges and lawyers are beholden to the AI's recommendations and don’t make their own judgments, they may not be thinking in their own way.

Their decisions may be based on AI recommendations, which they may not have carefully reviewed or assessed.

Legal rulings involve moral reasoning, empathy and understanding advanced social situations which is why replacing human reasoning is limited in terms of ethics.

AI systems do not have emotional intelligence or ethical considerations. Thus, replacing the human judgment with fully automated systems poses significant ethical issues.

3.2.1.6.Professional Responsibility and Legal Practice Ethics:

AI is transforming the legal profession, including the roles of lawyers and judges.[6]

Lawyers now need to be familiar with digital tools and how to manage digital evidence. The judges are required to evaluate the recommendations made by AI but not to rely on it to make their own decision. There are a number of changes that necessitate new professional training and ethical standards.

Confidentiality and Client Data Protection: The legal profession has strict guidelines regarding the confidentiality of client information.

Using AI tools in legal services means handling client data through digital platforms, which can pose risks of cyber threats. Attorneys need to ensure the AI tools are compliant with confidentiality and data protection requirements.

3.3. Legal Developments and Policy Making in the Regulatory Sector.

3.3.1.Maintaining a balance of liability and accountability Balance of Liability and Accountability

There are several factors that can lead to errors or negative outcomes in AI systems that result in determining responsibility for such errors.

It is difficult to determine who is responsible for such errors. This responsibility is not clear and appears to fall to the developers, users or the organizations that are using the AI technology.

The role of the Developers is to build the algorithm, the role of Institutions is to deploy it and the role of Users is to utilize the output of it.

The responsibility for the operation of AI is shared between the parties, and the concept of accountability is complex. Any regulation should specify who is responsible for what in the use of AI.

3.3.2.Cross-border Regulatory Conflicts:

Differences in International AI Regulatory Standards: AI technologies are used in different countries, and regulations differ from country to country.

There are countries that prioritize innovation and growth in technology, and others that value data protection and human rights. Such disparities pose problems for legal institutions and technology operators trans-border.

Jurisdictional Challenges: The sharing of data across borders, and the legal service capabilities of AI, pose questions to be answered about applicable laws and which authority has jurisdiction to enforce them.

Legal liability is difficult to establish when AI systems are deployed across multiple jurisdictions and have conflicting regulations.

[6] Chandrachud D.Y., Chief Justice of India D.Y. Chandrachud caution on Artificial Intelligence 'risks', The Telegraph Online, https://www.telegraphindia.com/india/chief-justice-of-india-d-y-chandrachud-caution-onartificial-intelligence-risks/cid/2013180 Last visited (2026 May 18)

3.3.3.Compliance & Standardisation Problems:

Absence of a Standard Code of Ethics and Standards: There is no standardized code of ethics or technical standards for the use of AI in legal systems.

Without standardized protocols, there are inconsistencies in AI development and application. Standardisation is essential for automation-based legal processes to be reliable and fair.

3.4.Challenge in Auditing AI Systems: AI algorithms employ complex computing processes that are difficult to audit.

Ethical and legal standards are difficult to maintain for AI systems in relation to regulatory oversight. Despite the apparent lack of transparency in the ways algorithms are designed, built, and used, regulating them remains challenging.

The role of the judiciary and legal institutions in regulating AI is crucial. The judiciary and legal institutions play a pivotal role in AI regulation.

Judicial institutions are important to the governance of AI, both for their interpretation and supervision, and for policy development.

The increasing use of AI raises various disputes that involve the interpretation of the law, such as liability, violation of data protection laws, and algorithmic discrimination, which are now on the judicial agenda.

Judicial interpretation aids in setting legal guidelines for the use of AI.

AI Usage Guidelines in Courts: Several court systems are drafting guidelines for the use of AI in court management and decision-making.

The guidelines aim at promoting the ethical and responsible use of automated technologies.

Judicial Review of Automated Decision Systems: Courts have the power to review artificial intelligence decisions to ensure they meet constitutional and legal requirements.

Judicial oversight is needed to avoid being misused by automated technologies.

3.5.Recent Developments and Indian Case Studies:

Let's take a look at a few real cases in India to understand the practical problems with the law.

Copyright / Training Data Dispute:

In 2025, prominent Indian publications like Hindustan Times, The Indian Express and NDTV sued Open AI and others for using their content to train AI models without consent.

They say they believe the current copyright legislation is inadequate to the task of addressing AI's use of copyrighted material.

Data Privacy Rights:

India has not yet an AI Act of its own.[7]

AI regulation is mainly sectoral or takes a general approach to digital privacy and intermediary liability. Lack of legal accountability. Many institutions do not have the technical prowess to carry out comprehensive audits or to implement algorithmic accountability effectively.

3.6.Specific Objectives:

[7] Rocha, Cinara & Carvalho, João. Artificial Intelligence in the Judiciary: Uses and Threats.2023

1.To recognize key ethical issues about AI technologies.

2.To explore legal issues that may arise with the use of AI.

3.To give an overview of the current AI governance frameworks and regulations.

4. To investigate the effect of AI on privacy, accountability and human rights.

5.To recognize gaps in AI law and ethics research and future research questions.

3.7. Research Question:

1.What are the key ethical issues that arise with AI?

2.What are the legal issues with the use of AI systems?

3. What are the governmental and international organisation regulations for AI?

4.What gaps exist in currents literature organization regulating AI?

Result:

3.7.1. ANS: AI is revolutionizing the way we work, communicate and make decisions. AI systems are driving faster workflows, more personalized experiences, and real-time analytics in various industries, from healthcare to content creation.Whether in healthcare or content creation, AI systems are shaping faster workflows, more personalized experiences, and real-time insights across industries. However, as these technologies become more entrenched in everyday life, so do the moral issues associated with them.

The principles of bias and fairness in AI decision-making are discussed.The topic of bias and fairness in AI decision-making is covered.

AI systems are only as fair as the data they're trained on. Algorithms can be biased, and if they are grounded in the skewed data, then they can generate biased AI decision making and compound inequalities. Such ethical considerations are particularly significant for AI tools in areas such as hiring, lending, and facial recognition, which are used in high-pressure situations.

In most cases, the issue is linked to black-box models, which are complicated machine learning systems without transparency. Without being able to explain how an AI tool arrived at a decision, it's hard to imagine that anyone would be able to verify that this decision is ethical or even legal.

Solution:

Use diverse and representative datasets to train AI hiring tools to avoid bias on the basis of race, age, gender and disability

Implement explain ability features to enable recruiters to comprehend how the system rates or filters candidates

Have human judgment in AI-based hiring process to make sure evaluation is fair and correction of biased outcomes is possible.

Implement algorithmic systems with traceability for auditing and accountability of hiring decisions

3.7.2.2. Ethical concerns and algorithmic bias.Ethical concerns and algorithmic bias.

Algorithmic bias may lead to discrimination in various fields such as employment, loan qualification, and legal judgments.

AI systems are often opaque, and few give insight into the processes that guide their decisions. In India, there are guidelines in development from regulatory bodies to ensure fairness and explain ability, but there is still a lack of clear and enforceable standards.

3.7.2.3.Learn about Intellectual Property (IP) and Deepfakes.Understand Intellectual Property (IP) and Deepfakes.

The Copyright Act of India is not very robust when it comes to addressing the new challenges presented by AI-driven content.

Legislation is in progress to modernize definitions, and to strengthen the response to fake or manipulated media.

3.7.2.4. The regulatory framework and policy initiatives are established. The regulatory framework and policy initiatives are in place.

MeitY has formulated policies to steer the development of AI responsibly, with a focus on risk management, compliance, and supporting innovation.

Continuous input from various stakeholders is being collected to ensure policies are able to facilitate growth and to respect rights. As new rules and court decisions emerge, legal professionals need to stay up to date with these developments.

3.7.3.Answer: The primary approach to regulating AI is through binding policies and voluntary ethical guidelines by governments and international organizations. Policies tend to be application-focused, covering levels of risk, transparency of the algorithms, data security, and training programs for impacted workers.

Three main areas are related to the global AI regulatory environment:

3.7.3.1. International Organizations (Soft Law & Principles)

Global organisations do not have enforcement powers, but they establish international standards and frameworks that can impact national laws.

OECD has developed principles for trustworthy AI that focus on human-centered technologies and are regularly updated to keep up with AI developments.

UNESCO has made recommendations on artificial intelligence ethics that include the protection of individual rights and freedoms.

The Global Dialogue on AI Governance is an initiative by the United Nations to promote cooperation and shared principles.

The G7 have been the leaders of the Hiroshima AI Process, giving guidelines on how to minimise bias in data sets and how to be transparent.

3.7.3.2. National Governments (Binding Law and Mandates)

AI regulations vary across different countries, with some having dedicated legislation and others having specific provisions in other laws.

The EU Artificial Intelligence Act has been put in place, categorizing artificial intelligence systems by risk and limiting high-risk uses such as social scoring.

India has adopted a principles-based strategy with the India AI Mission, it aims for growth, innovation and control of AI systems within the country.

In the United States, Federal and State regulations are in place, and various agencies such as the FTC and DOJ are tasked with protecting fair practices.

The Chinese government places significant emphasis on state control and content regulation, with a strong emphasis on generative AI and deep fakes.[8]

The UK takes a 'bottom-up' approach, with existing regulators applying the principles of AI in different sectors without new laws.

3.7.3.3.Industry Standards and Compliance

In order to deal with various global regulations, organizations are increasingly adopting standards such as ISO 42001.

This model provides a way for businesses to manage AI systems ethically that can help them comply with different standards without stifling innovation.

3.7.4.The answer lies in the "policy gap" that's becoming a prominent issue in the current debate around the regulation of AI: the fact that different rules are taking longer to be developed and enforced, while they're being used at a much faster pace. Regulatory frameworks and institutions have been found to have certain weaknesses in dealing with AI. There are several places where regulatory measures and organisations are missing the mark in the management of AI.

3.7.4.1. The absence of standardized definitions.Lack of standardized definitions.

No Defined Concept: AI is not defined in a clear or uniform manner in legal and industry-specific contexts, creating confusion and compliance challenges.

Lack of clarity on the nature of an AI system makes it difficult for legislators and judges to interpret traditional laws, like consumer protection or intellectual property.

3.7.4.2.Ambiguity in Liability and Accountability

• The Gap: According to current literature, it is not clear what party should be held accountable for problems in the development chain of AI: the developer, the party using the AI or the end user.

The algorithms are often unpredictable and are referred to as "black boxes", which will make it hard to review decisions, and limit the ability of individuals to seek remedy when harm occurs, such as discrimination from AI.

3.7.4.3.Provide support for corporate literacy and internal deployment.

The Gap: many governance failures start at the executive level because there is a lack of understanding, not a lack of rules.

• Impact: Companies have a challenge implementing ethical standards, misidentifying risks and not establishing internal measures to protect AI deployment.

3.7.4.4.Socio-Economic and Environmental Impacts that were not considered

Overall, there is little focus on the long term impacts of using AI.

In particular, the absence of rules on:

Environmental Footprint: Energy and water intensive training and upkeep of AI models.

[8] Van Brakel, R. Legal, Ethical, and Social Issues of AI and Law Enforcement in Europe: The Case of Predictive Policing. In N. A. Smuha (Ed.), The Cambridge Handbook of the Law, Ethics and Policy of Artificial Intelligence 380. chapter, Cambridge: Cambridge University Press,2025

• Healthcare: AI for doctors' and healthcare workers' assistance.• Finance: AI and financial decision making.

Global Asymmetries: Power and wealth imbalances, where underrepresented developing countries are more vulnerable to the impacts of AI.

4.PROPOSAL FOR CHANGE:

4.1. AI technologies hold a tremendous promise for legal systems' enhanced potential. However, as these developments come, there needs to be sufficient protection of personal rights and public trust.

4.1.1.There is a need for responsible development of AI.The world needs responsible AI development.

• **4.1.1.1.Ethical principles for AI Design:** AI systems should be considered in an ethical context, keeping them open, fair, and accountable. Good development needs to be done in conjunction with legal practitioners, the policy makers and the technology developers.

• **4.1.1.2.Think Fairness and Inclusion:** AI technologies should be designed to be free of biases and promote diversity. Fair AI systems help to create equality for access to justice and mitigate marginalised groups' discrimination.

4.1.2.Policy Recommendations

Appropriate AI regulatory bodies can help improve regulations and enforcement of AI governance principles.

Routine Algorithm Audits can detect possible bias and adhere to ethical standards in AI systems.

Data Protection Laws are in the need of strengthening: Effective data protection laws are needed to ensure that sensitive data concerning the legal information is not misappropriated.

Training Legal Professionals in AI Literacy: Legal professionals need to be trained on AI literacy, and assess the legal advice provided by AI effectively.

4.2. The future of AI in the legal field. The role of Artificial Intelligence in the legal system.

4.2.1.AI in Judicial Administration: AI has the potential to be applied in a variety of ways in judicial administration in the future, such as in the fields of case management, dispute resolution, and research. AI has the potential to improve the legal process and create a more efficient and equitable justice system.

4.2.2.New Ethical Questions: The more sophisticated the capabilities of AI, the more can be created new ethical questions regarding autonomy, accountability and human rights. Continuous monitoring and policy tweaks will be key elements.

4.2.3.Potential for AI-Assisted Justice Delivery: Legal assistance to legal clients, who are not served by legal services, can be provided using digital channels with the help of AI. But there will still be human control needed to make sure of fairness and credibility.

5. CONCLUSION:

The legal profession is undergoing a transformation driven by AI, offering advantages like enhanced efficiency, precision, and accessibility.

The growth of its use, however, also raises ethical and regulatory concerns such as bias, lack of transparency and privacy issues, and accountability concerns. These challenges need to be addressed by robust and balanced law and regulations that enable innovation and respect ethical responsibility. With the proper application of open and transparent use of AI, bolstered regulatory frameworks, and international collaboration, society can ensure that the use of AI does not weaken the legal system, but

helps to reinforce it, without violating justice, fairness, and human rights. For law firms and legal professionals, it is a chance for research, consultation for clients, and influencing public policies. Staying ahead in this fast-changing industry is not just about complying with the regulations, it's about building a responsible and equitable digital future, too.

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