



INTERNATIONAL LAW
JOURNAL

**WHITE BLACK
LEGAL LAW
JOURNAL
ISSN: 2581-
8503**

Peer - Reviewed & Refereed Journal

The Law Journal strives to provide a platform for discussion of International as well as National Developments in the Field of Law.

WWW.WHITEBLACKLEGAL.CO.IN

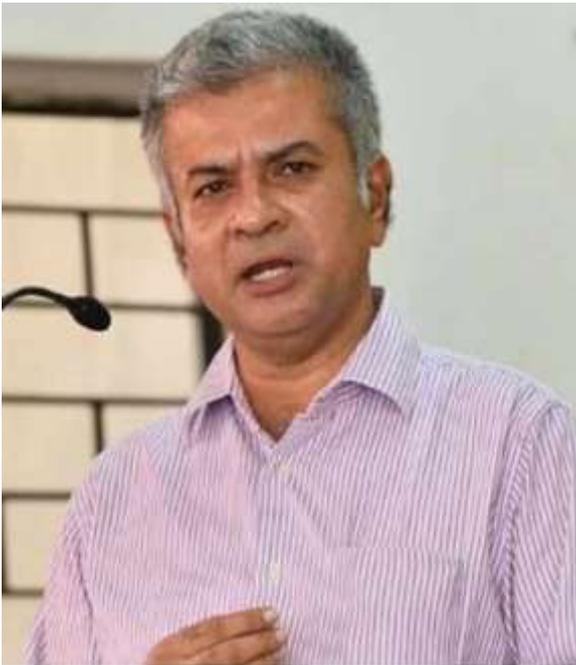
DISCLAIMER

No part of this publication may be reproduced or copied in any form by any means without prior written permission of Editor-in-chief of White Black Legal – The Law Journal. The Editorial Team of White Black Legal holds the copyright to all articles contributed to this publication. The views expressed in this publication are purely personal opinions of the authors and do not reflect the views of the Editorial Team of White Black Legal. Though all efforts are made to ensure the accuracy and correctness of the information published, White Black Legal shall not be responsible for any errors caused due to oversight or otherwise.

WHITE BLACK
LEGAL

EDITORIAL **TEAM**

Raju Narayana Swamy (IAS) Indian Administrative Service **officer**

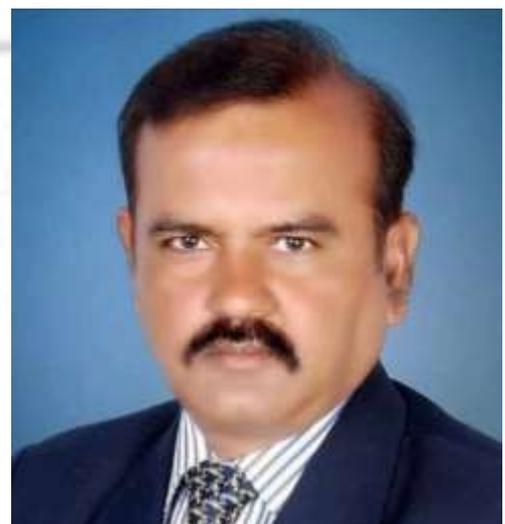


a professional
Procurement from the World Bank.

Dr. Raju Narayana Swamy popularly known as Kerala's Anti-Corruption Crusader is the All India Topper of the 1991 batch of the IAS and is currently posted as Principal Secretary to the Government of Kerala. He has earned many accolades as he hit against the political-bureaucrat corruption nexus in India. Dr Swamy holds a B.Tech in Computer Science and Engineering from the IIT Madras and a Ph. D. in Cyber Law from Gujarat National Law University. He also has an LLM (Pro) (with specialization in IPR) as well as three PG Diplomas from the National Law University, Delhi- one in Urban Environmental Management and Law, another in Environmental Law and Policy and a third one in Tourism and Environmental Law. He also holds a post-graduate diploma in IPR from the National Law School, Bengaluru and diploma in Public

Dr. R. K. Upadhyay

Dr. R. K. Upadhyay is Registrar, University of Kota (Raj.), Dr Upadhyay obtained LLB , LLM degrees from Banaras Hindu University & Phd from university of Kota.He has succesfully completed UGC sponsored M.R.P for the work in the ares of the various prisoners reforms in the state of the Rajasthan.



Senior Editor

Dr. Neha Mishra



Dr. Neha Mishra is Associate Professor & Associate Dean (Scholarships) in Jindal Global Law School, OP Jindal Global University. She was awarded both her PhD degree and Associate Professor & Associate Dean M.A.; LL.B. (University of Delhi); LL.M.; Ph.D. (NLSIU, Bangalore) LLM from National Law School of India University, Bengaluru; she did her LL.B. from Faculty of Law, Delhi University as well as M.A. and B.A. from Hindu College and DCAC from DU respectively. Neha has been a Visiting Fellow, School of Social Work, Michigan State University, 2016 and invited speaker Panelist at Global Conference, Whitney R. Harris World Law Institute, Washington University in St.Louis, 2015.

Ms. Sumiti Ahuja

Ms. Sumiti Ahuja, Assistant Professor, Faculty of Law, University of Delhi,

Ms. Sumiti Ahuja completed her LL.M. from the Indian Law Institute with specialization in Criminal Law and Corporate Law, and has over nine years of teaching experience. She has done her LL.B. from the Faculty of Law, University of Delhi. She is currently pursuing Ph.D. in the area of Forensics and Law. Prior to joining the teaching profession, she has worked as Research Assistant for projects funded by different agencies of Govt. of India. She has developed various audio-video teaching modules under UGC e-PG Pathshala programme in the area of Criminology, under the aegis of an MHRD Project. Her areas of interest are Criminal Law, Law of Evidence, Interpretation of Statutes, and Clinical Legal Education.



Dr. Navtika Singh Nautiyal

Dr. Navtika Singh Nautiyal presently working as an Assistant Professor in School of law, Forensic Justice and Policy studies at National Forensic Sciences University, Gandhinagar, Gujarat. She has 9 years of Teaching and Research Experience. She has completed her Philosophy of Doctorate in 'Intercountry adoption laws from Uttranchal University, Dehradun' and LLM from Indian Law Institute, New Delhi.



Dr. Rinu Saraswat

Associate Professor at School of Law, Apex University, Jaipur, M.A, LL.M, Ph.D,

Dr. Rinu have 5 yrs of teaching experience in renowned institutions like Jagannath University and Apex University. Participated in more than 20 national and international seminars and conferences and 5 workshops and training programmes.

Dr. Nitesh Saraswat

E.MBA, LL.M, Ph.D, PGDSAPM

Currently working as Assistant Professor at Law Centre II, Faculty of Law, University of Delhi. Dr. Nitesh have 14 years of Teaching, Administrative and research experience in Renowned Institutions like Amity University, Tata Institute of Social Sciences, Jai Narain Vyas University Jodhpur, Jagannath University and Nirma University.

More than 25 Publications in renowned National and International Journals and has authored a Text book on Cr.P.C and Juvenile Delinquency law.



Subhrajit Chanda

BBA. LL.B. (Hons.) (Amity University, Rajasthan); LL. M. (UPES, Dehradun) (Nottingham Trent University, UK); Ph.D. Candidate (G.D. Goenka University)

Subhrajit did his LL.M. in Sports Law, from Nottingham Trent University of United Kingdoms, with international scholarship provided by university; he has also completed another LL.M. in Energy Law from University of Petroleum and Energy Studies, India. He did his B.B.A.LL.B. (Hons.) focussing on International Trade Law.

ABOUT US

WHITE BLACK LEGAL is an open access, peer-reviewed and refereed journal provided dedicated to express views on topical legal issues, thereby generating a cross current of ideas on emerging matters. This platform shall also ignite the initiative and desire of young law students to contribute in the field of law. The erudite response of legal luminaries shall be solicited to enable readers to explore challenges that lie before law makers, lawyers and the society at large, in the event of the ever changing social, economic and technological scenario.

With this thought, we hereby present to you

EMERGING USE OF ARTIFICIAL INTELLIGENCE AND ITS LEGAL IMPLICATIONS

AUTHORED BY - PROF MONICA CHAWLA & MS BALJEET KAUR

ABSTRACT

Without substantial automation, individuals cannot manage the complexity of operations and the scale of information to be utilized to secure cyberspace. Nonetheless, technology and software with traditional fixed implementations are difficult to build in order to successfully safeguard against security threats. This condition can be dealt with using machine simplicity and learning methods in AI. The year 2022 brought AI into the mainstream through widespread familiarity with applications of Generative Pre-Training Transformer. The most popular application is Open AI's Chat GPT. The widespread fascination with Chat GPT made it synonymous with AI in the minds of most consumers. This research paper refer to the different ways AI can be embedded in the legal practice to assist the work of lawyers. As AI continues to be integrated into legal practice, this research paper considers legal and ethical concerns related to the integrity of the legal system, the duties of lawyers, protection of the rights of clients, etc. The aim of this paper is to evaluate the use and abuse of artificial intelligence (AI) in relation to cybercrimes, to examine whether India's current legal system is adequate to combat cybercrime in the context of AI technology, and to present a brief study of the Data Privacy Bill.

Keywords

Artificial Intelligence, Cyber Application, Cybersecurity, Smart Technology, Privacy

“Cybercriminals have always been early adopters of the latest technology and AI is no different.”

- Martin Roesler

I. INTRODUCTION

Artificial Intelligence (AI) is a branch of computer science and engineering that focuses on developing devices and programmes that are capable of carrying out operations that ordinarily call for human intellect, such as comprehending natural language, identifying objects, and forming judgements. As per the Investopedia, Artificial Intelligence (AI) is defined as the simulation of human intelligence by software-coded heuristics.¹ Advancements in Artificial Intelligence (AI) technologies have led to changes in the way we carry out personal and work activities. The legal profession is no exception to this transformation. The use of smart virtual assistants and other types of AI tools is raising questions that are reshaping the legal profession. Legal practitioners are increasingly utilizing various types of AI and data analytics tools and smart virtual assistants to enhance their work efficiency, streamline tasks, and improve client services.²

In the age of rapid technological advancement, the legal I profession is not exempt from the transformative power of artificial intelligence. With the advent of AI personal assistants, such as those powered by Harvey AI, lawyers are experiencing a revolution in how they approach their work.³

The goal of those tools is to assist lawyers in managing their workload more efficiently, improving client services, and enabling them to focus on higher-level legal tasks that require human expertise, resulting in the transformation of legal tasks – from legal research and review, to contract management and the prediction of litigation outcomes. The virtual assistants based on machine learning (ML) and natural language processing (NLP) are increasingly being used in advanced legal markets to assist lawyers in at least seven areas of work:

1. *Legal research and e-discovery*, software enables a vast number of documents to be surveyed. These tools can quickly retrieve relevant case law, statutes, regulations, and legal articles to support attorneys in building strong legal arguments and staying up to date with legal developments. Many lawyers mentioned the use of AI for brainstorming legal drafting and pathways. Publishing companies, like LexisNexis, Law Notion, Harvey, Westlaw, Bard AI, Midjourney, many more have huge databases of

¹ <https://www.investopedia.com/terms/a/artificial-intelligence-ai.asp> (Visited on July, 7 2024)

² Daniel Linna and Wendy Muchman, *Ethical Obligations to Protect Client Data when Building Artificial Intelligence Tools: Wigmore Meets AI*, (American Bar Association, 2020)

³ Ajay Chaudhary, 'The Role of AI Personal Assistants in the Future of Law', *Counsel, Punjab and Haryana Bar Council Law Journal*, Issue, Q3 2023

information including laws and regulations in multiple jurisdictions.

2. *Legal advice and expertise automation*, to provide self-help for clients who can find answers automatically - requiring lawyers to step in only at a later stage. It can be used to develop intelligent legal consultation products such as intelligent legal Question & Answer bots, which can answer users' legal questions faster and more accurately and provide more efficient and convenient legal consultation services.
3. *Predictive legal analysis*, one of the biggest areas of opportunity for generative AI in legal work is information assimilation and predictive analysis. AI algorithms can examine past data to foresee case outcomes, litigation trends, and prospective threats. AI predictive tools is also available for free to judges, which raises the question of whether it is now legal malpractice for lawyers not to use such a tool before filing legal papers with the court.
4. *Document automation*, an immediate advantage of AI is that of improving the efficiency of legal work by way of automation. They can automate repetitive and time-consuming operations like document review, contract analysis and generating legal documents, saving time, and reducing the risk of errors. For instance, ChatGPT can assist in writing legal documents such as contracts and it is also used for legal translation. Grammarly, a free writing AI assistant is mostly used by lawyers to correct grammatical and language errors in emails and memos. Spell book, contract reviews within Microsoft Word. It uses GPT-4 to review and suggest language for contracts and legal documents, within Microsoft Word, with features specifically built for law, like contract drafting, for example, drafting Intellectual Property provisions, missing clause review, directed draft, and find conflicting terms, and creating contract summaries for emails.
5. *Information and marketing*, AI as a powerful marketing tool which could consider a target client and create data all the way down to what is the type of tone that recipient would want in their email. Some virtual assistants can perform general research tasks, helping lawyers to gather information on industries, market trends, and potential expert witnesses.
6. *Case management*, are also useful for routine work such as filing and sorting out files, for case management and as personal assistants for scheduling client meetings and hearings. It helps lawyers to manage their schedules by coordinating appointments, setting reminders for court dates and deadlines, sending notifications about upcoming tasks, manage client files, track billable hours, generate invoices, etc.

7. *Legal review*, a smart virtual assistant or other types of AI solutions can also be used for legal reviews, reading and summarising documents, disclosure efficiency, and for finding patterns, discrepancies, and pertinent data in legal documents, improving the accuracy of legal analysis and decision-making. AI tools to review vast amounts of legal documents where in the past they would hire law students or college students to review them, necessitating their signing of confidentiality agreements.

OBJECTIVES

- To outline the problems that legal professionals will face for using AI in the near future.
- To highlight the extensive use of legal AI and the aid it provides in researching.
- To emphasis on the infringement on the right to privacy.

HYPOTHESIS

- The extensive use of artificial intelligence though effective and efficient, will lead to unemployment.
- Artificial Intelligence will supplement legal professionals in future rather than systematizing them.
- Artificial Intelligence in legal research has made it more user-friendly and has increased transparency.

II. LEGAL AND ETHICAL CHALLENGES ARISING FROM USE OF AI IN LAW PRACTICE

Adoption of AI has opened a floodgate of issues and challenges from legal perspective. The use of AI in legal practice raises various legal and ethical issues. Legal and ethical concerns, based on our research and interviews, can be grouped into:⁴

1. *Accuracy and accountability*: The use of AI tools in legal practice raises accuracy and liability issues - to what extent would lawyers be liable when they use AI solutions to address client needs and a problem occurs. AI systems can make errors or provide incorrect information, which could have serious consequences in legal matters. AI systems might generate legal interpretations or conclusions that deviate from established legal norms, potentially leading to incorrect advice or actions. It is difficult

⁴ Irene Pietropaoli, *Use of Artificial Intelligence in Legal Practice*, (British Institute of International and Comparative Law, London 2023)

to trace the responsibility of the algorithm and the responsibility of the person when the decision is made by an AI system. This can involve issues of professional responsibility and accountability.

2. *Transparency, trust, communication, and duty of competent representation:* The complexity resulting from the influence of AI on the legal profession is also reshaping the relationship between lawyers and clients. The duty of lawyers to provide clear information and not to mislead their clients, may prove challenging when using AI tools. This is because the way in which AI is used in the work of lawyers also influences the liability of legal advisors and their professional obligations towards their clients. The current digital literacy of lawyers may be limited and, in any event, even experts have difficulty tracing how an AI system has taken a decision due to the ‘black box’ problem: the workings of AI algorithms can be complex and opaque. This lack of transparency and difficulty in accountability in AI applications may jeopardise the values protected by due process of law. Widespread adoption of AI in the legal industry requires gaining the trust and acceptance of legal professionals, clients, and the broader society. Addressing concerns about AI’s reliability, transparency, and potential biases are crucial for fostering trust and ensuring the successful integration of AI technologies.⁵
3. *Lack of human judgment and interpretation:* Legal practice often requires nuanced judgment and interpretation. Relying on AI systems could result in a lack of human insight, empathy, and contextual understanding. The introduction of AI into the legal profession may instigate a transformation of the public perception and trust. Clients who are being exposed to automated legal advice may ultimately lose confidence and trust in the legal profession. In addition, AI does not yet make good use of creative thinking, which is one of the criteria for a good lawyer. AI is not yet capable of walking into a courtroom and reading the room.
4. *Privacy, data protection, conflict of interests, and duty of confidentiality:* Integrating AI technologies into legal practice also raises challenges related to privacy, confidentiality, and compliance with data protection laws. AI often requires access to sensitive legal data and documents. The global cybercrime treaty could authorize sharing personal data with law enforcement in other countries including biometric information and datasets with the aim of training AI.

⁵ N Sheeba, “Artificial intelligences effects on the legal sector transforming legal practice,” *Vol. II, Journal*, 2023.

5. *Insufficiency of comprehensive AI specific legislation:* Present scenario, India lacks dedicated legislation that specifically caters to AI. While certain provisions within existing laws like Information Technology Act, 2000, Copy Right Amendment rules 2021, Digital Personal Data Protection Act, 2023, touch upon AI related aspects, nonetheless, they do not comprehensively address the unique challenges and complexities posed by AI technologies. There is no specific domestic legislation governing usage of robots, artificial intelligence, and algorithms in India.
6. *Jurisdictional issue:* AI crimes are committed on computer systems and networks athwart the sphere. Even if the practice of encoding, crypto currencies, the dark web or cloud storage may lead to data loss, they also pose major snags for legal administration in locating criminals, their setup, or electronic evidence. It is challenging to decide who is in charge of steering investigations as this encompasses deceitful jurisdictional issues. Global treaty may help in addressing the issue but its adoption at domestic front is still a concern in 2024 by that time cyber criminals would have created havoc with use of AI.

III. EXISTING LEGAL FRAMEWORK TO DEAL WITH AI AND CYBERCRIME IN INDIA

Artificial intelligence presents big opportunities and potential risks for countries around the globe, and India is no exception. In the last several years, India has introduced initiatives and guidelines for the responsible development and deployment of AI technologies, but there are currently no specific laws regulating AI in India.

➤ **Information and Technology Act 2000**

Any communication via device or computer resource with mala fide (intention) of cheating to personate, is a punishable offence.⁶ Such offender sentenced for imprisonment up to three years and/or fined up to rupee one lakh.

Taking, publishing, or sending someone's photographs in the media, deep fake crimes is violation of the right to privacy and it is a punishable offence which carries a maximum sentence of three years in prison or a maximum fine of rupee two lakh.⁷

⁶ Information Technology Act, Sec. 66D

⁷ *Ibid*, Sec. 66E

The current regulatory landscape of the IT Act 2000 includes Intermediary Guidelines and Digital Media Ethics Code; Sensitive Personal Data or Information (SPDI) Rules; Certifying Authorities Rules; Indian Computer Emergency Response Team (CERT) and Cyber Appellate Tribunal. However, these tend to be insufficient when it concerns the regulation of new-age technologies.

➤ **Copyright Act 1957 with Amendment Rules 2021**

When it comes to training Artificial Intelligence models, though, the use of copyrighted materials is fair game. That is because of a fair use law that permits the use of copyrighted material under certain circumstances without needing the permission of the owner. Copyright in India is governed by the Copyright Act of 1957, which grants protection to the author or creator of a work. If we contemplate a few provisions of the Act, the Copyright Act asserts that in the case of a literary or dramatic work, the author is the person who creates the work.⁸ For literary works, which is computer generated the Copyright Act identifies the person who caused the work by computer, as author.⁹ Nonetheless, when it comes to AI-generated works, the Copyright Act doesn't specify anything, however, if we try to interpret the existing provision i.e., the Copyright Act, 1957 defines 'author' as 'the person who causes the work to be created'. This provision can be broadly interpreted to include individuals who provide the necessary data or instructions to an AI system, resulting in the creation of computer-generated work. The Copyright Act also covers copyright ownership, stating that the author should be the 'first owner' of the copyright in a work.¹⁰ According to the aforementioned sections, the first owner of the copyright for an AI-generated work shall be deemed to be the person who generates the work by giving input or instructions. Therefore, these sections acknowledge the contribution of people who provide data to AI tools or give them instructions, recognizing them as the creators of the final material.

These legal precedents emphasize that a work's creator must be a natural person and that only natural people or legal organizations to which copyright has been assigned are eligible to receive copyright protection.¹¹ The conditions of use of AI tools like ChatGPT, which explicitly declare the user's accountability and ownership of the created material, serve to

⁸ *Thiagarajan Kumararaja v. M/s Capital Film Works and Anr*, 2013 (2) LW 115

⁹ Copyright Act 1957, Sec. 2 (d) (vi).

¹⁰ *Ibid*, Sec. 17

¹¹ *Rupendra Kashyap v. Jiwan Publishing House*, 1996 (38) DRJ 81

further support this view. Consequently, despite the involvement of AI in the content creation process, the primary authorship and ownership of the work continue to reside with human creators who generate the work by giving input or instructions to AI. There is a list of acts that are deemed copyright violations such as unauthorized replication, distribution, or modification of a work protected by copyright. This means that if the author of AI-generated work copies, reproduces, or distributes, through which some infringement of copyright occurs they may be liable for copyright infringement.¹² The person whose copyright has been infringed has the right to seek remedies, such as damages, injunctions, or other relief, to protect their intellectual property and hold the infringing parties accountable.¹³

➤ **Digital Personal Data Protection Act, 2023**

In the year 2022, the Indian government proposed the enactment of the Digital Personal Data Protection Act that would give a global and coeval legal framework for evolution of digital ecosystem in India. Therefore, the Government of India also recently enacted a new privacy law, the Digital Personal Data Protection Act, 2023, which it can leverage to address some of the privacy concerns concerning AI platforms. The intention behind the Digital Personal Data Protection Act, 2023 is laudable and this legislation will be revamping technology sector regulations of India. The Digital Personal Data Protection Act, 2023 will promote the growth of digital economy in India, and address the challenges which new-age technologies bring with them like data privacy and cyber security. Indubitably, it will be one of the most landmark legislations in the jurisprudence of the country as it will protect the freedom of expression and the fundamental rights of citizens on social media platforms. Along with enhancing privacy, online safety, and security, it will also safeguard data of citizen. It will foster innovation and growth of new-age technologies which will be beneficial in education, health, and administration. The Digital Personal Data Protection Act, 2023 will work in conjunction with other related laws and policies, including the Digital Personal Data Protection Act, Digital India Act Rules, National Data Governance Policy, and amendments to the Indian Penal Code for Cyber Crimes.

It is interesting to understand how building this recommended legislation plays out in the coming potential. The main objective of Digital Personal Data Protection Act is:

- To articulate evolvable rules that is consistent with the changing trends in technologies

¹² *Ibid*, Sec. 51

¹³ *Ibid*, Sec. 55

and can be updated according to the needs of the country's digital infrastructure.

- To propose an easily accessible adjudicatory mechanism for online civil and criminal offenses.
- To deliver timely remedies to citizens, resolve cyber disputes, and enforce the rule of law on the internet.
- To stipulate a legislative framework keeping overarching governing principles in mind to ensure compliance.

Nevertheless, there are various kinds of challenges ahead in the implementation of the Digital Personal Data Protection Act, 2023 we are elaborated as follows:

- The regulations of the Act may place a significant burden on businesses, particularly small and medium-sized enterprises (SMEs).
- Critics contended that certain provisions of the act may grant excessive surveillance powers to the government, potentially compromising privacy rights. Robust safeguards should be incorporated to protect against abuse of power and violations of privacy.
- The approach of Act is to data localization is a point of contention. While localization can enhance data protection and security, it may also disrupt cross-border data flows, impacting global businesses that rely on efficient data transfers.
- The review of the safe harbor principle for online platforms could potentially impact freedom of expression. Ensuring that the act doesn't curb this fundamental right is a delicate task.

To align with global standards, the Digital Personal Data Protection Act, 2023 has been moderately modelled off (EU) Regulation and data protection laws of Singapore and Australia. The Act is applicable to digital personal data, including non-digital data that is consequently digitised. The Act affirms extraterritorial reach, as it is applicable to the processing of digital personal data outside Indian Territory, if such processing is connected with any activity related to the subscription of goods or services to Data Principals within territorial jurisdiction of country. The impact of the Digital Personal Data Protection Act, 2023 will depend on how well it will be put into practice, making sure it is not too hard to follow, respecting privacy of the citizens, and encouraging new ideas and businesses.

➤ **AIRAWAT (AI Research, Analytics and knowledge Assimilation Platform)**

AIRAWAT will be a cloud platform for Big Data Analytics and Assimilation, with a large, power-optimised AI Computing infrastructure using advanced AI processing. The proposed

Infrastructure will be equipped with facilities for world's leading machine learning including deep learning, high performance high throughput supercomputing, infrastructure to store, process, simulate and analyse big data sets like images, video, text, sound, speech. AIRAWAT will support advancement of AI-based developments in image recognition, speech recognition, natural language processing for research, development etc. The AI supercomputer AIRAWAT' is installed at C-DAC, Pune. The system is installed under National Program on AI by the Government of India.

*“We need to make Artificial Intelligence in India and Artificial Intelligence work for India”
– Prime Minister Shri Narendra Modi's vision “AI FOR ALL”.*

➤ **Decentralized Autonomous Organization (DAO)**

Decentralized Autonomous Organizations, also known as DAOs, are being used as an alternative way to organize and manage an organization or even a company. In recent years, decentralized autonomous organizations (DAOs), entities that use blockchains, digital assets and related technologies to direct resources, coordinate activities and make decisions, have experienced explosive growth. DAOs attempt to decentralize the operation of firms and other collective entities by making functional and financial information transparent and empowering token-holding members to propose, vote on and enact changes.¹⁴ DAOs attempt to decentralize the operation of firms and other collective entities by making functional and financial information transparent and empowering token-holding members to propose, vote on and enact changes. Although there have been several attempts at initiating a DAO on the blockchain, the first DAO that attracted widespread attention is a 2016 venture capital fund confusingly called 'TheDAO'. Despite the short-life of the experiment, TheDAO has inspired a variety of new DAOs (e.g., MolochDAO, MetaCartel), including several platforms aimed at facilitating DAO deployment with a DAO-as-a-service model, such as Aragon, DAOstack, Colony or DAOhaus. Most of these include the following distinctive characteristics:

- DAOs enable people to coordinate and self-govern themselves online.¹⁵
- A DAO source code is installed in a blockchain with smart contract abilities like Ethereum—questionably always a public blockchain. Since these rules are defined

¹⁴ Hassan, Samer, Primavera De Filippi, 'Decentralized Autonomous Organization', *Internet Policy Review*, vol. 10, no. 2, (2021)

¹⁵ M.Singh and S. Kim, S, 'Blockchain technology for decentralized autonomous organizations,' *In Advances in Computers*, Vol. 115, pp. 119 (2019)

using smart contracts, they are self-executed independently of the will of the parties.

- Since they rely on a blockchain, DAOs inherit some of its properties, such as transparency, cryptographic security, and decentralisation.
- The DAO governance should remain independent from central control.¹⁶

However, DAOs currently face unclear legal status because the concept emerged merely lately and thus has not yet been regulated. As DAOs have not been defined at a legal level, existing laws have no definition or regulations which clearly outline the responsibilities and obligations that DAOs must fulfil. Therefore, DAOs still face uncertainty regarding several legal issues, such as paying taxes and signing legal contracts. There could also be limitations in implementing future legal rules through code as these rules – known as wet code – can often be ambiguous. Implementing such practices into smart contracts may prove challenging as the rules typically coded into a smart contract are clear and explicit, leaving little room for subjective interpretation. In conclusion, due mainly to being in the early stages of their evolution, DAOs still face several barriers which may limit their potential. As was the case in the failure of ‘The DAO’, these challenges can sometimes have significant consequences. If existing challenges are resolved, new types of DAOs will continue to emerge, and they may play a more significant role in future.

IV. PRIVACY-LAW ASPECTS OF ARTIFICIAL INTELLIGENCE

“We cannot avoid the question of using AI in court adjudication. The integration of AI in modern processes, including court proceedings, raises complex ethical, legal, and practical considerations that demand a thorough examination. The use of AI in court adjudication presents both opportunities and challenges that warrant nuanced deliberation.”¹⁷

The adoption of Artificial Intelligence (AI) technology has the potential to provide numerous benefits to society. However, there are also several potential harms and unintended risks which may arise, if the technology is not assessed adequately. The deployment of various AI systems has raised concerns about their potential negative impact on constitutional values enshrined in the Indian Constitution. Privacy is considered a fundamental human right, and data protection laws exist to guard that right. In particular, the adoption of AI principles would have to strictly

¹⁶ R. Beck, ‘Beyond bitcoin: The rise of blockchain world,’ *Computer*, Vol.51 Issue 2, P.57, (2018)

¹⁷ Chief Justice of India D.Y. Chandrachud at a conference on ‘Technology and Judicial Dialogue’, (New Delhi, 2024)

comply with the standards of right to privacy. For instance, the right to privacy has been interpreted by the Supreme Court of India in the case of *Justice K.S. Puttaswamy vs. Union of India* to broadly include autonomy, choice, and control in the context of informational privacy.¹⁸

With AI, data collection, gathering a lot of personal information if ends up being in the possession of some unwanted person/hacker, it might be misused. Hence, protecting the security and privacy of sensitive data is essential for the ethical creation and utilization of AI. There are privacy implications around the use of data by AI systems and data protection considerations that arise from this use. There are two broad aspects to think about in terms of the privacy implications from the use of data by AI systems. Firstly, AI systems must comply with the legal frameworks for data protection; however, there are concerns around whether existing data protection frameworks can adequately address the privacy and data protection concerns raised by the deployment of AI systems. Secondly, given that AI systems can be used to re-identify anonymised data, the mere anonymization of data for the training of AI systems may not provide adequate levels of protection for the privacy of an individual.¹⁹

Personal data can be misused in a number of ways if it is not kept private or if people don't have the ability to control how their information is used *viz*; Criminals can use personal data to defraud or harass users; entities may sell personal data to advertisers or other outside parties without user consent, which can result in users receiving unwanted marketing or advertising; when a activities of person are tracked and monitored; this may restrict their ability to express themselves freely, especially under repressive governments. Massive quantities of private information, including surfing histories and shopping patterns, are collected about people by AI systems. Predictive models and tailored marketing campaigns may be created using this data. Moreover, it may be used to determine an eligibility of person for jobs, insurance, and loan prospects. A serious breach of privacy may result from the improper application of this dataset. When utilising Artificial Intelligence systems that gather and handle personal data, lawyers and legal departments must exercise caution.

¹⁸ *K.S. Puttaswamy v. Union of India*, AIR 2018 SC (SUPP) 1841

¹⁹ Linnet Taylor, Luciano Floridi, and Bart van der Sloot, 'Introduction: A New Perspective on Privacy', Group Privacy: New Challenges of Data Technologies (*Philosophical Studies Series, Vol. 126, Springer, Oxford 2017*)

V. THE FUTURE OF ARTIFICIAL INTELLIGENCE IN CRIMINAL JUSTICE

Every day holds the potential for new AI applications in criminal justice, paving the way for future possibilities to assist in the criminal justice system and ultimately improve public safety. Video analytics for integrated facial recognition, the detection of individuals in multiple locations via closed-circuit television or across multiple cameras, and object and activity detection could prevent crimes through movement and pattern analysis, recognize crimes in progress, and help investigators identify suspects. With technology such as cameras, video, and social media generating massive volumes of data, AI could detect crimes that would otherwise go undetected and help ensure greater public safety by investigating potential criminal activity, thus increasing community confidence in law enforcement and the criminal justice system. AI also has the potential to assist the nation's crime laboratories in areas such as complex DNA mixture analysis. Pattern analysis of data could be used to disrupt, degrade, and prosecute crimes and criminal enterprises. Algorithms could also help prevent victims and potential offenders from falling into criminal pursuits and assist criminal justice professionals in safeguarding the public in ways never before imagined. AI technology also has the potential to provide law enforcement with situational awareness and context, thus aiding in police well-being due to better informed responses to possibly dangerous situations. Technology that includes robotics and drones could also perform public safety surveillance, be integrated into overall public safety systems, and provide a safe alternative to putting police and the public in harm's way. Robotics and drones could also perform recovery, provide valuable intelligence, and augment criminal justice professionals in ways not yet contrived. By using AI and predictive policing analytics integrated with computer-aided response and live public safety video enterprises, law enforcement will be better able to respond to incidents, prevent threats, stage interventions, divert resources, and investigate and analyze criminal activity. AI is also capable of analyzing large volumes of criminal justice-related records to predict potential criminal recidivism. AI has the potential to be a permanent part of our criminal justice ecosystem, providing investigative assistance and allowing criminal justice professionals to better maintain public safety.²⁰

²⁰ Christopher Rigano, "Using Artificial Intelligence to Address Criminal Justice Needs," NIJ Journal 280, January 2019, [https:// www.nij.gov/journals/280/Pages/using-artificialintelligence-to-address-criminal-justice-needs.aspx](https://www.nij.gov/journals/280/Pages/using-artificialintelligence-to-address-criminal-justice-needs.aspx). (Visited on 13, July, 2024)

VI. INDIAN JUDICIARY

Since 2021, the Supreme Court has been using an AI-controlled tool designed to process information and make it available to judges for decisions. The tool that is used by the Supreme Court of India is SUVAS (Supreme Court Vidhik Anuvaad Software) which translates legal papers from English into vernacular languages and vice versa. However, it does not participate in the decision-making process.

In the case of *Jaswinder Singh v. State of Punjab*,²¹ the Punjab & Haryana High Court rejected a bail petition due to allegations from the prosecution that the petitioner was involved in a brutal fatal assault. The presiding judge requested input from ChatGPT to gain a wider perspective on the granting of bail when cruelty is involved. However, it is important to note that this reference to ChatGPT does not express an opinion on the case's merits, and the trial court will not consider these comments. The reference was solely intended to provide a broader understanding of bail jurisprudence when cruelty is a factor.

The Manipur High Court set a remarkable instance by using AI (artificial intelligence) chatbot, ChatGPT, and Google to do research after the govt. failed to furnish the court with the requisite information pertaining to the service rules of village defence force (VDF) personnel.²²

VII. CONCLUSION AND SUGGESTIONS

In the summary, the effect that artificial intelligence has or will have in the legal field is examined in the paper. Lawyers are increasingly utilizing various types of AI and data analytics tools to enhance their work efficiency, streamline tasks, and improve client services. India's unique challenges and aspirations, combined with the advancement in AI, and a desire to assume leadership in this nascent technology means India's approach towards AI strategy has to be balanced for both local needs and greater good. The use of AI in legal practice, however, brings about various legal and ethical issues. The changes brought by the use of AI tools impact the foundational principles of the duties governing the legal profession, and the rights of clients and citizens as discussed before. The use of AI in legal practice, however, brings about various legal and ethical issues. The changes brought by the use of AI tools impact the foundational principles of the duties governing the legal profession, and the rights of clients and citizens.

²¹ Punjab & Haryana High Court, 2023

²² *Md Zakir Hussain v. State of Manipur*, WP(C) No. 70 of 2023

Some suggestions and recommendations can be summarised as:

- I. The AI should be used for augmentation and not automation in the law field because the cases need human interpretation.
- II. There is a need of legal definition of AI, it is essential to establish the legal personality of AI.
- III. Since privacy is a fundamental right, certain rules to regulate the usage of data possessed by an AI entity should be framed as part of the Personal Data Protection laws in India.
- IV. To answer the question on liability, a strict liability scheme that holds the producer or manufacturer of the product liable for harm, regardless of the fault, might be an approach to consider.
- V. Law provides for the processing of personal data, including digital media, by either a natural person or a public or private legal entity, for the purpose of protecting a person's fundamental rights of freedom, privacy, and free development of personality.
- VI. The predictions made by the AI regarding any judgement should not be completely relied on.

