The Present State of Artificial Intelligence in the Indian Legal System and its Monitoring

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Abstract: Artificial intelligence has grown to be an essential element of many companies, including the legal sector. It is critical to guarantee that AI is used safely and responsibly throughout the country, and the actions of the Indian government and business organisations are an excellent place to start. As AI becomes more integrated into the legal system and different sectors, various legislative frameworks controlling its application and use in India has been emerging. It becomes essential to understand India's legal framework for AI governance and monitoring. The study focuses on the numerous legal and regulatory frameworks in India that govern the development and application of AI. It also covers several national laws, guidelines, and regulations emphasising responsible and ethical AI implementation along with identification of countries that are encouraging regulators and law makers to implement AI Regulations.

Keywords: Artificial Intelligence, Legal System, Legal Framework, Governance.

1. INTRODUCTION

"Artificial intelligence" uses computers and machines to replicate the ability to solve problems and make decisions of the human mind, according to IBM. Artificial Intelligence has emerged almost as one of the widely discussed technological breakthroughs in recent years. Its diverse applications have transformed a variety of industries. (IBM Cloud Education, 2020) Many companies, including the judicial system, now rely on artificial intelligence. It has become an increasingly common option among judges and attorneys due to its ability to analyse massive amounts of data and offer insights. AI has been used in a variety of legal services in India, including contract assessment and legal research. The use of Artificial Intelligence in the Indian judicial system, on the other hand, is still in its early stages, with numerous problems and

potential ahead. The current level of AI in the Indian legal system is marked by limited research and development, insufficient infrastructure, and a lack of awareness among legal professionals and the general public. Justice DY Chandrachud recently introduced a paperless bench in the Orissa High Court. The Orissa High Court Is Leading the Way in Judiciary Digitization., incorporating hybrid hearing systems and paperless, digitisation of records, e-filing of cases, and, to the greatest extent practicable, eliminating the use of paper. (Ashutosh Mishra, 2022) With the potential to increase efficiency, accuracy, and access to justice, artificial intelligence has become an increasingly attractive instrument in the Indian legal system. However, great power comes with great responsibility, and the use of AI presents substantial problems and hazards, particularly in terms of transparency, accountability, and justice. The current condition of AI in the Indian legal system necessitates more monitoring and regulation, with a focus on building a legal framework that addresses AI's ethical and rights-based implications. The current study investigates India's existing regulatory framework, as well as its monitoring and control in the Indian legal system. Various government and non-governmental organisations monitor the development and application of AI infrastructure in India.

Review of Litrature
Vidushi Marda 2018, The author of the research defends that when establishing policy, the technological constraints of AI systems should be considered, and the societal and ethical considerations that arise as a result of such restrictions might be incorporated into what policy procedures look for to accomplish. It explores three main stages of implementing ML (Machine Learning) (the most widely used subset of AI techniques) to provide a framework for such talks. the data, model and application stage. It is developed in the context of India's current artificial intelligence policy landscape, and it applies the proposed framework to the country's existing sectoral problems. It focuses on potential risks coming from data-driven judgements in an attempt to influence the country's current political discussions. Given the complexities of addressing the concerns raised by AI systems, it is critical that future AI discourse, policymaking, and legislation be affected equally by many disciplines. Throughout the process, they must be ethically, legally, technically, and philosophically knowledgeable. The rate of development is rapid, the nature of development is unclear, and the consequences of development are significant and, in many cases, irreversible. AI will not work if processes are developed first, then technology is implemented, and finally the implications are discussed.. (Marda, 2018)

Ricardo Francisco Reier Forradellas and Luis Miguel Garay Gallastegui 2021, The author of the research discusses how cognitive techniques that imitate human behaviour and thought are enhancing analytical models to increase sales, customer engagement, and operational efficiency. While a legal framework is required to regulate digital advances, it should not stifle digital disruption. Artificial Intelligence and computerised transformation will be essential components of different applications that will necessitate uniform regulations and alignment with the new reality. A regulatory framework is required to steer businesses through the digital transformation process. Guidelines should be established to ensure global market competitiveness while also being clear and enforceable. Some systems, such as those employed in vital infrastructure, are considered high-risk, while others, such as argumentized machine,

emotion recognition systems, and spammer filters, should be observed as well. (Reier Forradellas & Garay Gallastegui, 2021) Sardor Yusupov 2022, Human labour talents, motivation, and acceptance, according to the author, are crucial for the genuine success of such projects in enterprises as well as entire transportation systems and networks. This section introduces the underlying conditions, recent advances, and regulatory needs in the field of automation and robotics. This could be an opportunity to have an open discussion about what types of rules are needed to ensure human confidence and motivation in robots and AI breakthroughs while not inhibiting the economic development of the logistics, distribution, and inventory control sectors.(Yusupov, 2022)
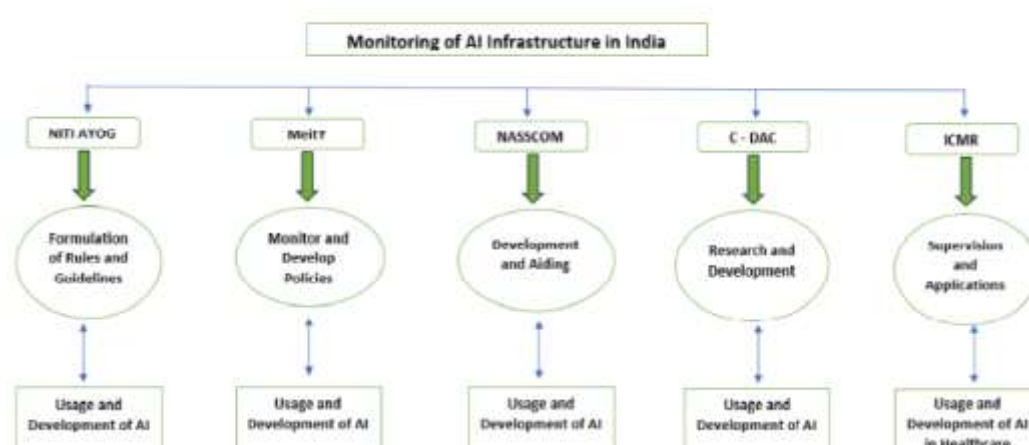
Objectives of the Study:
To examine the legal framework of artificial intelligence in India.
To comprehend national and international laws, norms, and regulations governing the implementation and application of artificial intelligence.

2. METHODOLOGY

The current review is based on secondary sources of data and its examination. Articles, journals, news sources, websites, and other secondary data sources were used to collect data for this study in order to come with final conclusions.

Prominent Organisations Engaging In Ai Infrastructure Monitoring In India:

NITI Aayog: The National Institution for Transforming India (NITI Aayog) is the Indian government's policy research institution. It is in charge of formulating rules and guidelines for the usage and deployment of artificial intelligence in India. The strategy plan coined the phrase "AI for All" to serve as the guiding principle for future AI design, development, and deployment in India. This plan included ensuring the safe and appropriate use of AI. The National Strategy on Artificial Intelligence (NSAI) was announced by NITI Aayog in 2018 to ensure the safe and responsible usage of AI in five public sectors. The initial application case for investigating the Responsible application of Artificial Intelligence (RAI) concepts and

operationalisation techniques has been facial recognition technology (FRT). machine learning, Big Data analytics, deep learning, natural language processing and neural networks are examples of recent AI developments. AI ethics and the safe and responsible application of AI are increasingly at the forefront of the technological revolution. Facial Recognition Technology (FRT) is a generic term for several technologies that use visual imagery (pictures/videos) to identify or track individuals. (Aayog, 2022)

Ministry of Electronics and Information Technology (MeitY): MeitY develops and oversees policies for the development of India's information technology and electronics trade, including Artificial Intelligence infrastructure. the ministry is in charge of developing laws and standards for the development of India's information technology and electronics sectors. This ministry is responsible for laying down the foundations for artificial intelligence in the country and monitoring the progress of these programmes nationwide. The Ministry is in charge of information technology policies, digital transaction promotion, assistance to other departments in promoting E-governance, cyber laws, semiconductor manufacturing, bridging the digital divide, IT standardisation, software promotion/export council, and unique identification authority of India. They also promote IT education, human management, and the development of the hardware/software industries.

National Association of Software and Services Companies (NASSCOM): NASSCOM is a non - governmental organisation that represents India's software and services industries. It is active in the development of AI infrastructure in India, as well as aiding AI start-ups and businesses. Artificial intelligence is now affecting every aspect of life in unforeseen ways. As the globe confronted the unprecedented COVID-19 crisis, India claimed a 45 percent increase in AI usage among businesses and organisations (Sudipta Ghosh & Raman Bhushan, 2020), The crisis has provided India with a rare opportunity to innovate, overcome some of the fundamental difficulties associated with AI adoption, and use AI responsibly (according to a report published by PwC). Because of the country's growing embrace of AI, it is developing as a hub for creative and transformative AI solutions and investments. To bring these undiscovered possibilities to light, NASSCOM launched the AI Gamechangers programme last year to promote and support AI use in India, which highlighted 300+ candidates' creative and impactful ideas.

Centre for Development of Advanced Computing (C-DAC): C-DAC is a Ministry of Electronics and Information Technology research and development organisation. It participates in the expansion of Artificial Intelligence innovation and offers training and support to AI start-ups and businesses. C-DAC with its expertise on Advanced Modern Computing, is well placed to build an efficient and secure Ecosystem that provides services around multiple disciplines. C-DAC's primary mission is research and development, with an emphasis on the design, development, and deployment of sophisticated information technology (IT) solutions.
These organisations collaborate to monitor and oversee AI infrastructure development and deployment in India, with the goal of developing responsible and ethical usage of AI technology.

Indian Council of Medical Research (ICMR): ICMR is apex body in india for biomedical research promotion and coordination. It is in-charge of supervising the application of AI in medical management in India. Recently, the ICMR issued ethical recommendations for the use of AI in wellness or healthcare. The goal is to provide an ethical framework for the development, deployment, and use of artificial intelligence systems in the field of medical sciences that will protect data while also benefiting humanity. (ICMR Releases Ethical Guidelines for AI Usage in Healthcare - The Hindu, n.d.)

The Indian Council of Medical Research (ICMR) has issued the country's first Ethical Guidelines for the Application of Artificial Intelligence in Biomedical Research and Healthcare, with the goal of establishing "an ethics framework that can assist in the development, deployment, and adoption of AI-based solutions" in the aforementioned sectors. They intend to do so by making "AI-assisted platforms available for the benefit of the greatest number of common people with the highest precision and safety possible," as well as tackling developing ethical challenges in biological research and healthcare delivery. The report will be updated as needed by the Department of Health Research and the ICMR Artificial Intelligence Cell in Delhi. These rules contain sections on ethical principles, guiding principles for stakeholders, an ethics review mechanism, AI governance, and conscious involvement, which were established through extensive talks with experts and ethicists. ("Indian Council of Medical Research," 2022)

Source: Bar and Bench

Major Laws, Rules, Regulations and Legal Framework Related to Artificial Intelligence in India:
Information Technology (Reasonable Security Practices and Procedures and Sensitive Personal Data or Information) Rules, 2011: Companies are required to develop optimal safety practises and processes to protect sensitive personal details, including data processed using AI, under the Information Technology (IT) (Reasonable Security Practises and processes and diplomatic Personal Information or Data) Rules, 2011. The law addresses sensitive personal data and information, specifying what constitutes sensitive data and information. It also establishes standards and processes for body corporates to follow when managing such information, such as getting consent prior to collecting and establishing clear privacy policies. (Authority & Delhi, 2020)

National AI Committees: The Ministry of Electronics and Information Technology (MeitY) established four committees in 2018 to advance AI and strengthen its framework, namely:
Committee on platforms and data for AI: the major attention of this committee is to develop models/platform/frameworks for integrated work.
Committee on leveraging AI for developing national missions in key sectors
Committee on Mapping Technological capabilities, Key policy enablers required across sectors, Skilling and Re-skilling, Research and Development
Committee on Cyber Security, Safety, Legal and Ethical issues.

Indian Copyright Act, 1957: Since the 1970s, computer-generated art has received a lot of attention. The majority of these computer-generated artworks rely largely on the software developer who provides input for the piece. However, technological progress has progressed artificial intelligence to the point where it can understand and produce results/outputs without the need for human participation. The primary issue presented in this regard is the protection of work generated by artificial intelligence. With the current restrictions of Indian intellectual property laws, particularly copyright, it appears difficult to extend copyright protection to works created by artificial intelligence. AI works are classified as "works created by AI with human interference" or "works created by AI without any human interference.". The Indian Copyright Act of 1957 protects intellectual property rights in software and AI technology. (Lucy Rana, 2019)

Personal Data Protection Bill, 2019: The twenty-first century saw the emergence of various innovations in technology, the full significance of which has yet to be realised. Artificial intelligence (AI) applications in a variety of fields, the Internet of Things (IoT), blockchain technology, and many more emerging technologies are examples. Wearables, smart home devices, machine learning prediction tools, and facial recognition technology are a few examples. However, the use of these emerging technologies is inextricably related to the processing of huge amounts of data. This is obvious in devices with built-in sensors that gather and analyse data in real time, as well as machine or deep learning algorithms that require massive data collections for development and deployment. This increasing use of data processing and its application by AI and IoT technologies raises severe issues regarding informational privacy on a massive scale. (Somayajula, 2022) The Personal Data Protection Bill, 2019, is a proposed law that intends to protect individuals' privacy and govern personal data processing in India. The measure incorporates AI-related clauses and compels businesses to offer explanations for automated decision-making.

Guidelines for Responsible AI: The NITI Aayog Guidelines for Responsible AI give a structure for the responsible and ethical usage of Artificial Intelligence in India as stated in the prominent organisations engaging in Artificial Intelligence infrastructure monitoring. These legislative frameworks mentioned above objective to upgrade the ethical and responsible use of Artificial Intelligence in India, as well as to ensure that Artificial Intelligence embedded technologies are created and utilised in a consern that safeguards persons privacy and rights. Companies and individuals must be aware of these regulatory frameworks and follow them in order to avoid legal penalties and maintain ethical AI practises.

Top Countries on Track in Developing the Artificial Intelligence Legal Framework

Brazil: In early October 2021, Brazilian lawmakers effectively enacted the law outlining legal guidelines for artificial intelligence. The bill establishes the framework for creating and deploying AI in the country while maintaining transparency in the public sector. It also highlights the importance of "adoption of regulatory instruments that promote innovation." However, there are challenges surrounding the development of AI in Brazil, as noted in the bill, such as a shortage of resources and potential tax costs on businesses. With an emphasis on transparency in AI development, the bill specifies that operating systems shall be exposed through an AI agent, who will monitor the technology's operation and development.

European Union: The European Union (EU) is a political and economic union comprised of 27 European countries. The European Union Commission introduced new policies and programmes in April 2021 with the goal of making Europe the global centre for reliable Artificial Intelligence. The combination of the first-ever AI legal framework and a new Coordinated Plan with Member States will protect people's and enterprises' safety and basic rights while also fostering AI use, investment, and innovation across the EU. Once approved by the European Parliament and the Member States, the Regulations will be directly applicable throughout the EU. Meanwhile, the Commission will continue to work with Member States to implement the goals of the Coordinated Plan.

United Kingdom (UK): In its national policy for artificial intelligence, unveiled in September 2021, the UK government said that it has not yet adopted blanket AI-specific regulations. Politicians in the country have chosen a sector-led approach to AI regulation. This may change after the UK's Office for Artificial Intelligence issues its white paper on overseeing and regulating AI in early 2022.

United States (US): The United States adopts a 'light' approach to artificial intelligence rules. The five main federal financial authorities in the United States issued a request for information on how banks use AI in late March 2021, implying that new guidance for the banking sector is on the way. Only a few weeks later, the US Federal Trade Commission (FTC) issued an exceptionally rigorous set of recommendations on "truth, fairness, and equity" in artificial intelligence (AI), broadly defining unfairness, and therefore the illegal use of AI, as any conduct that "causes more harm than good." These changes have created ample opportunity for the United States to explore such federal rules and regulations.

Canada: The recommendations for regulating AI in Canada take a "rights-based" approach. Following a public consultation in early 2020, the Office of the Privacy Commissioner of Canada (OPC) issued suggestions for regulating AI in a way that promotes both innovation and responsible development. Among the primary recommendations is that the Personal Information Protection and Electronic Documents Act (PIPEDA) be amended to enable the use of personal information for new purposes while establishing confidentiality as a human rights and a vital component for the employ of other basic human rights. (Mehra, 2021)

Further Legal, Ethical and Regulatory Considerations:

(O'Sullivan et al., 2019)	AI responsibility is divided into three categories for autonomous surgical robots and AI they are: 1) accountability, 2) liability, and 3) culpability.
(Baranov et al., 2020)	It is critical to identify directions for the development of a legislative framework for the regulation of current new technologies and digital processes.
(Bikeev et al., 2019)	To meet the needs of AI systems, it will be necessary to create a unique criminal justice system that is distinct from the established anthropocentric paradigm in both its goals and purview.
(Fournier-Tombs, 2021)	The UN should regulate AI to reduce threats and increase public confidence, showing its leadership on a global issue.
(Smuha, 2021)	Regulators must take appropriate measures to ensure Artificial Intelligence is designed, developed and used in a trustworthy manner to minimise its risks and ensure its acceptance by society. This requires tailored policies and a holistic regulatory approach to address the diverse challenges of AI applications.
(Yara et al., 2021)	The application of AI arises a wide range of psychological, legal, philosophical, and ethical concerns. It is critical to create Codes of Conduct for their use at the same time in order to prevent and reduce the dangers of technology abuse.
(de Almeida et al., 2021)	Because of the advanced nature of technology and its consequences for social standards, there is a clear need for Artificial Intelligence to be governed. However, even in countries with strong regulatory institutions, the introduction of AI-enabled gadgets does not ensure the same level of safety.

3. CONCLUSION

In the Indian legal system, artificial intelligence (AI) is still in its early phases, instead it has enormous future potential to provide accuracy, effectiveness, and access the to fairness. However, the current status of Artificial Intelligence in the Indian legal system is marked by a lack of research and development, inadequate infrastructure, and a lack of understanding among legal professionals and the general public. Various government and non-governmental organisations are supervising AI infrastructure development and deployment in India to ensure its safe and ethical use. Among these entities are NITI Aayog, the MeitY, the NASSCOM, and the Centre for Development of Advanced Computing (C-DAC). The National Strategy on Artificial Intelligence (NSAI) was developed by NITI Aayog to ensure the safe and responsible use of AI, while MeitY is in charge of creating the groundwork for AI in the country and monitoring the development of these programmes across the country. C-DAC undertakes AI research and development, whereas NASSCOM assists AI start-ups and corporations. More monitoring and control, however, are required, with a focus on creating a legal framework that can tackle the ethical and societal aspects of Artificial Intelligence.

4. REFERENCES

1. de Almeida, P. G. R., dos Santos, C. D., & Farias, J. S. (2021). Artificial Intelligence Regulation: a framework for governance. Ethics and Information Technology, 23(3), 505–525. https://doi.org/10.1007/s10676-021-09593-z

2. Baranov, P. P., Mamychev, A. Y., Plotnikov, A. A., Voronov, D. Y., & Voronova, E. M. (2020). Problems of Legal Regulation of Robotics and Artificial Intelligence from the Psychological Perspective. Propósitos y Representaciones, 8(2), 511. https://doi.org/10.20511/pyr2020.v8n2.511

3. Yara, O., Brazheyev, A., Golovko, L., & Bashkatova, V. (2021). Legal regulation of the use of artificial intelligence: problems and development prospects. European Journal of Sustainable Development, 10(1), 281–289. https://doi.org/10.14207/ejsd.2021.v10n1p281

4. View of Legal Regulation of the Use of Artificial Intelligence: Problems and Development Prospects. (n.d.). Retrieved May 25, 2023, from http://www.ecsdev.org/ojs/index.php/ejsd/article/view/1170/1153

5. O'Sullivan, S., Nevejans, N., Allen, C., Blyth, A., Leonard, S., Pagallo, U., Holzinger, K., Holzinger, A., Sajid, M. I., & Ashrafian, H. (2019). Legal, regulatory, and ethical frameworks for development of standards in artificial intelligence (AI) and autonomous robotic surgery. In International Journal of Medical Robotics and Computer Assisted Surgery (Vol. 15, Issue 1, p. e1968). John Wiley & Sons, Ltd. https://doi.org/10.1002/rcs.1968

6. Marda, V. (2018). Artificial intelligence policy in India: A framework for engaging the limits of data-driven decision-making. Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences, 376(2133). https://doi.org/10.1098/rsta.2018.0087

7. Reier Forradellas, R. F., & Garay Gallastegui, L. M. (2021). Digital Transformation and Artificial Intelligence Applied to Business: Legal Regulations, Economic Impact and Perspective. Laws, 10(3), 70. https://doi.org/10.3390/laws10030070

8. Lucy Rana. (2019). India: Artificial Intelligence And Copyright – The Authorship. Monadaq. https://www.mondaq.com/india/copyright/876800/artificial-intelligence-and-copyright--the-authorship

9. Mehra, S. (2021). These 5 countries are championing the grey area of AI regulations. INDIAI. https://indiaai.gov.in/article/these-5-countries-are-championing-the-grey-area-of-ai-regulations

10. Authority, P. B. Y., & Delhi, N. E. W. (2020). THE GAZETTE OF INDIA : EXTRAORDINARY [PART II—SEC. 3(i)]. 2020(142), 16–30. https://upload.indiacode.nic.in/showfile?actid=AC_CEN_45_76_00001_200021_1517807324077&type=rule&filename=GSR313E_10511(1)_0.pdf

11. Somayajula, D. (2022). Privacy concerns with emerging technology and their redressal through PDP Bill. Bar and Bench. https://www.barandbench.com/columns/privacy-concerns-emerging-technology-their-redressal-through-pdp-bill

12. Sudipta Ghosh, & Raman Bhushan. (2020). AI: An opportunity amidst a crisis. PWC Survey Report, December. https://www.pwc.in/assets/pdfs/data-and-analytics/ai-an-opportunity-amidst-a-crisis.pdf

13. Indian Council of Medical Research. (2022). In The Grants Register 2023 (pp. 562–563). https://doi.org/10.1057/978-1-349-96053-8_644

14. ICMR releases ethical guidelines for AI usage in healthcare - The Hindu. (n.d.). Retrieved May 14, 2023, from https://www.thehindu.com/sci-tech/health/icmr-releases-the-countrys-first-ethical-guidelines-for-application-of-ai-in-biomedical-research-and-healthcare/article66657158.ece

15. Ashutosh Mishra. (2022). The Orissa High Court is Leading the Way in Digitising the Judiciary. 18/02/2022. https://thewire.in/law/the-orissa-high-court-is-leading-the-way-in-digitising-the-judiciary

16. Aayog, N. (2022). Adopting the Framework: A Use Case Approach on Facial Recognition Technology RESPONSIBLE AI #AIForAll. November. https://www.niti.gov.in/sites/default/files/2022-11/Ai_for_All_2022_02112022_0.pdf

17. Kauffman, M. E., & Soares, M. N. (2020). AI in legal services: new trends in AI-enabled legal services. Service Oriented Computing and Applications, 14(4), 223–226. https://doi.org/10.1007/S11761-020-00305-X/METRICS

18. Bikeev, I., Kabanov, P., Begishev, I., & Khisamova, Z. (2019). Criminological risks and legal aspects of artificial intelligence implementation. ACM International Conference Proceeding Series. https://doi.org/10.1145/3371425.3371476

19. IBM Cloud Education. (2020). What is Artificial Intelligence (AI)? | IBM. In IBM Cloud Education. https://www.ibm.com/topics/artificial-intelligence

20. Fournier-Tombs, E. (2021). Towards a United Nations Internal Regulation for Artificial Intelligence. Big Data and Society, 8(2). https://doi.org/10.1177/20539517211039493

21. Smuha, N. A. (2021). Accepted for Publication in Law. Innovation & Technology, 13(1), 1–26. www.cifar.ca/ai/pan-canadian-

22. Yusupov, S. (2022). New directions of development of artificial intelligence and the importance of their legal regulation. The Peerian Journa, 3(Mdd), 18–29. https://www.peerianjournal.com/index.php/tpj/article/download/122/98