

Analysing the Relationship Between Artificial Intelligence and Law in Indian Context

Nibedita Basu, Dr. Rhishikesh Dave
Law, Marwadi University

Abstract: The role of artificial intelligence has become widespread in various sectors and its prevalence as well as applicability has become an issue of even more significance since the Covid-19 pandemic. Law enforcement and judiciary has also witnessed rapid incorporation of machine learning and AI, extending its scope not just within litigation and lawyers, but also with judiciary as well as business corporations in the paradigms of corporate law. Artificial intelligence and its involvement in the legal domain has been constantly evolving, with more concerns raised on its validity with relation to replacing human intelligence in matters involving empathy, ethics and socio-cultural ideals. At the same time, AI has been lauded for its role in reducing cumbersomeness in accessing and analysing past legal history, for promoting legal analytics, cost-efficiency and productive functioning of judiciary and corporate proceedings.

The main concerns regarding law and AI are two-fold: first, being a conceptual issue about the shortcomings of machine learning in law; and second being a practical one regarding its effects on social behaviour and future scope of law; both judicial and corporate. This study is concerned with not just judicial but also legal publishers, legal business departments, and AI services helping shape up and regulating legal frameworks. While a lot of related studies focus on the negative effects of AI in law, this study envisions a top-down deductive approach to analyse the incorporation of artificial intelligence in law from a global perspective, and then narrow down the focus to study regional legal implications in the Indian context.

Keywords: Artificial Intelligence, Law, Machine Learning, Legal Framework, Judiciary, Corporate law, Law enforcement.

INTRODUCTION

Artificial intelligence has been in the epicentre of technological shifts, transforming decision-making and rationale towards approach of everyday lives as well as management and operations across everyday

important aspect on a global scale. AI and machine have created dynamic shifts in the economic sphere, across labour markets and business corporations; altering the way in which socio-economical domains function. It is only inevitable that AI has found its way to legal systems and judiciary as well with increasing advancement in incorporation of technology by governments and businesses worldwide. Techpreneur Elon Musk states that,

“AI doesn't have to be evil to destroy humanity – if AI has a goal and humanity just happens to come in the way, it will destroy humanity as a matter of course without even thinking about it, no hard feelings.”

Similarly, in the field of law, Richard Susskind, a renowned advocate for online courts, says,

“Automation is what most professionals have in mind when they think of the relevance of technology for their disciplines.”

In addition, indeed it proves right that professional fields with increasingly complex work are rich in scope for the advent of artificial intelligence. One such field is that of Law and judiciary, which has copious amounts of paperwork, intertwined with human behaviour and complex judgement decisions. This mismatch of overlap between the areas of behavioural and ethical issues in law and the development of AI is the main source of contention for many experts in arguing that AI will only be able to aid in the process of legal justice, making human work simplified

The field of legal systems while having cumbersome work which can be simplified by the use of automation, it also remains a fact that human reasoning as well as empathetic thought may be incomprehensible for the level of artificial intelligence we have in store for the time being.

AI and its implementation requires an institutional approach in its incorporation of ethical principles, to accommodate a scientific procedure as well as to align its applications within the realms of society. The

importance of ethical principles in AI is generally recognized in the institutional framework, in the scientific community and in society in general. (Boddington, 2017). In law, there needs to be established boundaries on what constitutes breach of ethical boundaries. At the same time, there needs to be an understanding on the limits of rational thinking and its limits on social behaviour as well. “Humans are not rational automatons” (Kahneman, 2011). “They are riddled with a set of systematic cognitive biases and subjective probability weights”. This becomes an important point of contention since AI and deep learning is concerned with the building of rational agents; designed, optimised and modelled to produce the best possible results with a certain performance indicator as a parametric measure. (Stuart Russell and Peter Norvi, 2021). Performance of specific tasks constitutes more of robotics, which is rudimentary in nature considering the wide range of functions that machine learning can be required to do in the field of law. The earliest forms of AI were just concepts represented by symbols, developed into software (Margaret A. Boden, 2017). From the contemporary point of view, machine learning needs modelling to not only delegate different areas of work in an industry, but also cater to the inter-connected nodal frameworks that can be witnessed in fields like law, which have several inter-disciplinary aspects. Thus, the aspects of AI, which can be specifically assigned for legal frameworks needs to be recognised and worked upon, especially self-learning software such as machine learning as well as deep learning algorithms. “Machine learning refers to software capable of improving itself automatically as it learns from data” (Melanie Mitchell, 2019).

New advancements in machine learning such as the existence of Natural language processing, which can be further developed to understand dynamic human proceedings can be very handy in law. These machine-learning tools can simulate the way human interactions occur in verbal and rational forms, paving way for understanding beyond the search and segregation of data.

The opinions regarding the inadequacies of AI seem to be divided. Some may argue that if AI can be better equipped to deal with objective reasoning related to justice and law, the requirements of ethical grounds for the judiciary managed by AI systems would be of a much lesser concern. (Oliver, 2018).

If the ability to predict leads to more just and objective situations, actually there would be no need for ethical or legal standards. However, if that ability had not been sufficiently or generally established, part of the AI’s usefulness, functioning and purposes could be questioned. There is not enough social or political awareness on AI. It is an increasingly complex and difficult issue to regulate, that even challenges the need for such regulation. It is a difficult starting point. In spite of this, there are other reasoning, which may state that justice and law along with ethics always do not fall into synchronised paradigms, with law not just limited any set of mandates. Pervasive laws and its verbal implications range across various forms of interpretations; which can be increasingly hard to compute through encoding (Ryan McCarl, 2014).

Another key area of contention regarding AI in law is regarding its possible disruption of the labour market in the legal industry. This encompasses attorneys, and also publishers as well as academicians who aspire to be a part of the legal engine. Although the possibility of AI replacing every kind of human chore as well as process of work seems far-fetched and has been debunked mostly in the academic circles, the fact remains that AI might sometimes even prove to be less crucial in notable to help in aiding the work of attorneys (Kevin Ashley, 2006).

Perhaps the more dramatic as well as prominent of all the complaints regarding AI is its ability to warp existing threats in every industry and give rise to magnified problems which were previously never even thought about. Its implications on legal domain is no different. Increased applications of AI in legal and judicial systems can risk the rise of anonymity, blurring the lines of subjective nature of criminal behaviour and objective view of delivering justice. The gap of psychological distance from the victim and lack of ethical and moral backgrounds, which already remain topical and subjective, can cause a lot of diffusion and put the criminal justice system in threat, undermining its very purpose. (Brundage et al., 2018). The optimal need for AI in legal systems as well as in business law needs stringent regulations from the authority; to minimise its potential evil while maximising its governance potential in administration. Yet, therein lies the paradoxical dilemma; how shall we give governance to AI when the same administration is the framework meant to regulate it? (Bostrom, 2002).

The main problems as already mentioned in this section pertain to the ways, in which the potential risks involving the governance as well as human risk of AI can be minimised through regulation. International laws governing such machine learning activities in judiciary as well as law enforcement seem to be dispersed and decentralised, needing constant updating its schema to accommodate recent developments. The international legal frameworks constitute of transnational agreements as well as soft laws, which may not be entirely legally binding universally or may not possess any ratifications. The Indian scene concerning usage of law in AI is very much dormant, with about only a fraction of the Indian lawyers using machine learning in their proceedings. Apart from this, there is apprehension that AI would disrupt the legal systems, with the advent of independent data solutions as well as software product delivery services taking precedence in their role in dynamic shifts for business and governance solutions, which also includes legal solutions to decision-making and paperwork. However, promotion of AI has been rampant in its scope for transforming public policies by The Ministry of Electronics and the Union Government. Yet, biases in its usage in legal proceedings and data privacy is a critical juncture to be considered. (Barocas S, Selbst A. 2016)

This study explores the legal frameworks put in place to curtail well as optimize the requirements of AI in law, their effectiveness or lack thereof and its implications on the legal environment and automation solutions to legal problems in India. This is used as the basis for understanding more about the interaction between machine learning tool and law in India.

REVIEW OF LITERATURE

Monika Zalnieriute (2021) explores the role of AI in the judicial establishment including the automation and digitization of legal proceedings, as well as the incorporation of machine learning in administration, litigation and criminal proceedings. The aims of the study is to have an unbiased approach towards supporting the role of artificial intelligence in law, while considering every functional and ethical concerns regarding it. Referencing different papers and their inferences, the study points out that artificial intelligence and its incorporation into law is inevitable. However, the scope of the study is limited

to judicial independence and legal frameworks, not to any other ancillary domains.

Peter Cihon, Jonas Schuett et al. (2021) studies the role of artificial intelligence in corporate governance and its incorporation into handling legal affairs of business entities, media houses as well as non-profit organisations in addition to government bodies. The study has a comparative approach towards measuring the progressive effects of blending machine learning into legal analytics for businesses. The references used include major corporations and their use of exclusive digital and machine learning services to manage employee legal frameworks with their personalised software. The main results of the study indicate that artificial intelligence proves to be efficient economically as well as resourcefully for corporate legal administration, resulting in better good for the public interest.

S Chatterjee, NS Sreenivasulu (2021) studies the relationship of including machine-learning technology in human rights issues. The implications of having AI as a driving tool in business legalities and its civil as well as criminal repercussions, if any, was explored in this study. The policy decision of the government regarding AI was found to be at an important stage in effective regulation of artificial intelligence in the interests of Indian legal community. The study employs descriptive and statistical tools to elaborate on the further improvements that can be made under the Indian jurisprudence.

Bernt.W.Ritz et al. (2020) studies the roles of governments and business alike in adopting new methods to incorporate the effects of AI in public administration and corporate governance alike. Theoretical references as well as descriptive analyses is made use of to study the potential harmful practices that could endanger the linkage industries as well a government institutional bodies that internalise AI or are yet to but will be in the near future. The multi-faceted threats that artificial intelligence poses with regard to distorting the integral tenets of justice and the hierarchal structure of corporations.

Bryant Walker (2020) explains the effects of advancements in machine learning on international justice and its corresponding reaction to curb the negative effects of AI through legislations. It states that AI employed in criminal law will overlap and conflict with transnational agreements related to compliance and negotiation patterns in such cases. The

study also explored the possibility of each region in the international realm and their respective abilities to adapt to the collective transition in technology that AI could bring forth.

Sudhanshu Sarangi et al. (2020) focuses on the challenges with regard to the adoption of Ai in the different sectors of the economy with respect to the Indian scenario. The study points out that non-existent presence of widespread technological infrastructure as well as lack of understanding on fundamental data ecosystems makes it harder to implement a synergy between the governments and the stakeholders.

Chandra, G., Gupta, R. and Agarwal, N. (2020) focuses on the changes created by the role of artificial intelligence in delivery of justice in the legal system, effects on the legal procedures carried out in the absence of court gatherings as well as its impact on the legal domain and on the legal careers of lawyers. The study also deals the legal aspects that slows down or altogether prevents the inclusion of data science in the judicial process. The parts of legal frameworks inaccessible artificial intelligence is also highlighted in this study. The impact of the pandemic and its paving the way for more digitization in the legal system is highlighted, with specific focus on jurisprudence and justice delivery.

Dongyan Lao, Dennis J. Baker (2020) studies the role of machine learning in the field of criminal liability and its increasing role in being a reliable technological aid in enforcing criminal law by the legislation. With special references to criminal proceedings from China, the study points out that crime had been effectively recognised as well as internalized into the justice system. The study also highlights the importance of protection of data regarding cybersecurity as well as economic offences that could possibly result from criminal complicity and its subsequent detection by the use of machine learning in criminal proceedings. The study uses integrated case studies to conclude that increasing complexities in criminal behaviour is effectively monitored, brought into justice increasingly with the help of artificial intelligence.

Sumit Kumar (2020) adopts a contextual investigation into the potential that further implementation of artificial intelligence could have on the administrative and legislative delays that exists in the governing bodies of the country. The study points out the gaps that exist in AI-driven legislative measures, in announcement of government decisions related to

public welfare schemes and financial institutions. On the other hand, the study also highlighted the moral issues that are bound to exist when artificial intelligence is utilized in legal dynamic procedures.

Vidushi Marda (2018) explains the social benefits and economic implications of AI implemented through promotion of government initiatives in Indian context. The study explains the important domains of machine learning relevant for the Indian context and its ethical and data security while proposing frameworks to tackle the issue. The study concluded that policy framing regarding AI should be prudent and not retrospective to avoid irreversible consequences on data privacy and inefficiency in legal aspects.

METHODOLOGY

Legal papers are usually extensively studies based on either doctrinal or non-doctrinal approaches. Doctrinal research is usually a compilation study to add to existing literature by a researcher with data collected and analysed from secondary sources such as libraries, archives as well as other databases. It is a research of legal proposition by way of studying existing statutory provision, comparing it to the present case laws way of reasoning. In The various judgments, statutes texts, legal journals, case laws is extracted to collect relevant material to draw gaps in problem solving to provide feasible as well as relevant solutions in policy formulation.

The process of comparing existing case studies of legal research and juxtaposing with the current concerns of the study can also be termed as a critical approach to obtaining a solution to problems in legal mandates. Considering the scope of this paper, the methodology adopted is a hybridized approach of combining doctrinal study of case laws related to legal statutes, both international and national, regarding the use of artificial intelligence in law.

This study has a deductive point of view in researching the legal frameworks related to law governing artificial intelligence and the potential gaps in it. The methodical approach involves a thorough study of the international legal scenario, followed by its comparison as well as implication on the rather comparatively less governed laws existing in India with regard to machine learning and growing incorporation of artificial intelligence across sectors.

According to the methods, the objectives of the study is elucidated as follows:

To determine the role of Artificial Intelligence (AI) and international law.

To determine the role of Artificial Intelligence (AI) and national law.

To analyse the relationship between Artificial Intelligence (AI) and Indian law.

The impact of AI in the Indian context is studied with reference to three main emerging companies, which provide machine-learning solutions to emerging businesses, which also include legal firms, attorneys as well as publishers and academicians. These companies are “THIRDEYE DATA”, “TALENTICA SOFTWARE” and “KNOLDUS INC”. To give support to the observations gained from this study, secondary sources of data from published archives of related articles and research papers, national as well as international legal books. Information from Cyber and Information Security (C&IS) documents has also been made use of for the purpose of this study.

This will be followed by an explanatory summary of the findings of the study, succinctly summarised in the form of statistical representations as well as descriptive details. The conclusions of the study will shed light on : i) the potential effects of AI in legal domain ii) the legal reforms and policies that can be improved or formulated anew altogether in the Indian context for regulation of machine learning and AI, specifically in law.

ANALYSIS AND DISCUSSION

Artificial Intelligence (AI) and Legal Frameworks

The term “legal autonomous weapons systems” (LAWS) was infamously coined in the last decade to describe the potential dangers of AI going rogue and out of bounds of the control of human regulation, yet it remains an oxymoron (Yuan Sheng, 2007). The state of regulations in the international grounds remain divided and the stance of each of the transnational unions as well as nations with regard to regulations of AI. The European Union has been the most wary in the international grounds with regard to recognising AI as technology rather than a potentially dangerous tool, which could intrude into data privacy as well as dynamic shifts in legal formulations (Hill, 2020). This is in stark contrast with the US adopting a much more lenient approach to regulating the policies existing

with regard to controlling biases and legal threats of AI. Thirty-one countries and regions have prohibitive laws in place that restrict the sharing and exchange of data without prior consent or with other restrictions. (Forbes, 2021). Out of these, many of the countries have been part of conferences and attempts at treaties to regulate, yet a unified mandate at regulating AI in the global level has not been witnessed yet. Mandates like the General Data Protection Regulation (GDPR) have already been enforcing data privacy with restrictions on sharing information via machine learning and automation without prior consent and this includes 27 of the EU nations including UK along with Belgium, Estonia, Germany, Finland, Hungary too. (Johansson, 2020). This paves way gradually for an integration of systemic ratifications across the world in co-operating towards a future with minimised harm from AI and foreseeing it well in advance.

In addition, global nations have co-operated with the recommendations of the United Nations, prohibiting any biased ethical crises arising from use of machine learning, including countries like Brazil, South Africa, Singapore and Australia the US unfolding its legal terms at the federal level. In addition, countries such as Canada aim to create a Technology Roadmap, a Standards Framework and a national AI Ethics Framework to support the responsible development of AI. Yet, it cannot be ignored that no one country has specific regulations and legislations in their region regarding the malicious use of AI. Interestingly, and arguably rightfully so, many countries have been less complaint with these regulations and have been promoting use of such tools, outright rejecting the inception of LAWS, with Belgium being a prime example.

Cognitive technology and their adoption in India although virtually non-existent in the past decades, has shown rapid growth with even the Indian government acting as an advocate through its policy schemes. The initial moves included the Union Ministry of Commerce and Industry setting up an Artificial Intelligence Task Force in August 2017 to ‘embed AI in our Economic, Political and Legal thought processes so that there is systemic capability to support the goal of India becoming one of the leaders of AI-rich economies’. This includes establishing a nodal agency; the National Artificial Intelligence Mission for coordinating AI-related activities in India. Similarly, In February 2018, The Ministry set up four

committees to prepare a roadmap for a national AI programme, which included citizen centric services; data platforms; skilling, reskilling and R&D; and legal, regulatory and cybersecurity perspectives.

Even the planning commission; the NITI Ayog collaborated with Google in May 2018 to train start-ups that look to develop and integrate AI-based solutions in their business models. In 2020, it recommended an AI-explicit computer framework “AIRAWAT” for the operational needs of tech-hubs, start-ups as well as students and researchers alike. . Some of these start-ups have been instrumental in the growth of machine learning services in multi-dimensional fields, which include data analytics and research as business solutions. With the availability of readily collectible vast amounts of data and diverse technical ability, India is ripe for reaping the benefits of AI. Yet, there are many worrying problems as well. In fields of education, agriculture as well as infrastructure, there are many undeveloped technological drawbacks that could hinder potential growth of AI in these sectors. Whereas, in fields such as law, defence and public policy; the implied biases of AI systems in their accuracy as well as the security threats from the part of the legal enforcement.

From the context of the Indian law, there are no particular statutes that dictate the terms operations of AI. The NITI Ayog with its Documents and Working Drafts, although recognising the ethical and fundamental concerns of AI, has mostly advocated for a self-regulatory approach. However, the specific concerns and potential malice’s, if any, can be grouped under existing legal sections. The privacy breach concerns and violation of personal freedom can be contended under IT (Reasonable Security Practices and procedures and sensitive personal data or information) Rules, 2011. Rule 5(3) of the 2011; which states that,

“While collecting information directly from the person concerned, the body corporate or any person on its behalf shall ensure that the person concerned is having the knowledge of —

The fact that the information is being collected; b. the purpose for which the information is being collected; c. the intended recipients of the information; and d. the name and address of — (i) the agency that is collecting the information; and (ii) the agency that will retain the information.”

However, from the context of the Indian law, there are no particular statutes that dictate the terms operations of AI. The NITI Ayog with its Documents and Working Drafts, although recognising the ethical and fundamental concerns of AI, has mostly advocated for a self-regulatory approach.

The focus of this study with regard to the AI start-ups in focus can be summarised as follows:

THIRD EYE DATA:

Riding the wave of the AI onslaught, Third Eye Data is a Silicon Valley based firm, which has operations in both USA and India. The provision of their legal solutions extended to industry names such as Microsoft to various other organisations from backgrounds of Fintech, Law, Sales, Media, Medicine and Agriculture among other fields. The existence of their application development platform with the aid of machine learning as well as Artificial intelligence provides a single-window solution to end customer, which makes this firm a formidable name in the AI industry. As customized industry demands are much needed for actionable plans in tackling vast data to have an edge over competitors as well as having optimal business performance, the services offered by Third Eye Data are observed to be relevant in providing fast-paced solutions in Data Engineering and predictive research analysis.

Two of the advantages observed from the firm indicate: i) Starting earlier in the inception in 2010 provides them more access to knowledge databases while also giving the credential and expertise in the field of AI. ii) State-of-the-art business solutions providing cost-effective solutions to provide cutting-edge solutions, optimising their service results for their clients sets the firm apart.

On the financial part, the firm has an authorized share capital is Rs. One lac and the total paid-up capital is Rs. 85,000.