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Artificial Intelligence & Law: An Insight to Future

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ABSTRACT

We heard many times that law cannot remain static but with the changing laws now the techniques and even instrumentalities in law may be change. Here author researched on the much burning topic in the present legal arena with the advancement of technology is about Law and Technology i.e. AI and Law. This paper tries to analyse the future perspective and present condition of law and its relation with the AI, it was a misconception that AI and law is a new topic, and the truth is topic gains it relevance now because of many technology advancement. The field of AI and Law is at least 30 years old; it has had a charming and vibrant history. In 1970 Stanford law review article titled "Some Speculation about Artificial Intelli¬gence and Legal Reasoning" even in this article many things were discussed with respect to AI and Law. The paper deals with many of the aspects of AI and involvement of AI in law in recent time with some landmark developments in field of AI, the researcher specifically focuses the relation of AI and law with respect to future and how it can cause problems and how it may help us also.

The paper deals with the principle question that is AI is bane or boon for law industry and have clarified the feared questions which was addressed by many personnel of legal fraternity is that Can AI replace the lawyers and other legal personnel in courts. Today we have to understand that AI is still in its developing phase which is now expeditiously developing as a result we have first AI lawyer ROSS; the paper discussed the comparative study of AI in global perspective and AI in India.

Much has already been researched on the AI and law topic but here researcher tried to go into the depth of the future perspective by analysing current situation and some situation where contrast with discussion of AI and law is decided by comments of legal scholars like CJI and other stalwarts from field of AI.

Keyword: AI, Law, Future Perspective, Boon or Bane

I. Introduction

Artificial Intelligence (AI) will be watershed in future for sure, in present time also it is

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developing in every dimension. After 10 years down the line we can't think where the future of AI will go, there is not a single field where AI is not introduced and its continuously developing day by day from medical to Defence form offices of lawyers to chartered accountants it is everywhere. But as we all know each coin have two faces, same with AI it is making our life easy and comfortable but also we have to see other side that there are many challenges which we have to tackle from AI like the most prominent is about privacy issues, data protection, apart from it also if the wrong is done by AI which in future have emotions and ability to take decisions then who will be liable under this the creator of AI or AI itself it is a big question which may be come up before the courts in future. This are some prominent issues which we have to face in future, apart from it there are many others.

It is stated, Artificial Intelligence is certifiably not a novel concept to the individual who looks at science experimental writing. To get AI and its nexus with our comprehension of knowledge, one needs to investigate the improvement of the idea of AI.

The term was first begat, when individuals started attempting to comprehend whether machines can genuinely think. During the 1940s McCulloch and Walter Pitts had first made an endeavor to comprehend insight in numerical terms. John McCarthy had utilized term "Man-made reasoning" in Dartmouth Conference at the Massachusetts Institute of Technology. He characterized AI as science and designing of making keen machines, particularly clever PC programs. As indicated by him "each strong meaning of knowledge relates it to human intelligence...." Alan Turing proposed a test in 1950 to demonstrate a machine "as astute". He recommended that a machine needs to finish the Turing assessment to demonstrate the PC is canny.

The Turing test connected with a person, as the 'judge', to pose inquiries by means of a work station to two different substances, one of which will be individual and the other will be PC. In the event that the adjudicator (individual) consistently neglected to fittingly separate the PC from the human, at that point the PC was said to have breezed through the assessment. Marvin Minsky characterized AI, (in 1968), as a study of making machines to do things that would require insight whenever done by men. In 1993, Luger and Stublefield have given present day meaning of AI as the part of software engineering that is worried about the computerization of smart conduct. Man-made intelligence was characterized by Stuart Russell and Peter Norvig as planning and working of wise operators that get percepts from nature and take activities that influence that condition. This meaning of AI unites distinctive subfields of PC vision, discourse preparing, normal language getting, thinking, information portrayal, learning, and mechanical technology, with the plan of accomplishing a result by the machine.

David Poole and Alan Mackworth characterized AI as the field that reviews the union and examination of computational specialists that demonstration cleverly. Marcus Hutter (ANU) and Shane Legg (Google Deep Mind) proposed the "human-free" meanings of AI as Intelligence gauges an operator's capacity to accomplish objectives in a wide scope of conditions. Oxford word reference has characterized man-made reasoning as a PC framework, ready to perform errands which ordinarily require human knowledge. In layman terms, manmade brainpower is innovation that acts and acts like human or different creatures. In mainstream terms AI is a science and a lot of computational advancements that are motivated by the manners in which individuals utilize their sensory systems to detect, learn, reason, and make a move.

II. WHAT IS ARTIFICIAL INTELLIGENCE?

Artificial intelligence is the science and engineering of making intelligent machines, especially intelligent computer programs.' – John McCarthy, father of AI

AI can be defined in numerous ways but to understand it in most easy way we can say that 'AI is an entity or collective set of cooperative entities, able to receive inputs from the environment, interpret and learn from such inputs and exhibits related and flexible behaviors and actions that help the entity achieve a particular goal or objective over a period of time'. In most simple term and in relation with present development of AI it can be defined as "AI is the science of automating intelligent behaviors currently achievable by humans" here we have to take into account two words "Currently" and "Humans", these words signifies that right now human is superior but the cause of concern coming with everyday development in the field of Artificial Intelligence, it is that in future it may be possible that AI can replace humans at various places. Here we are particularly dealing with AI and law, the aforementioned reason can be a genuine argument for the lawyers who are saying that in future AI may replace lawyers but it has long way to go, as we have to understand that for it AI needs to be evolved far more than where it is now, because right now AI cannot perform task own its own, it needs to be programmed by humans for different tasks, on the commands of human AI performs various tasks.

III. ARTIFICIAL INTELLIGENCE IN INDIA

India is at an infant stage. Many a times we get to see the statement that 'AI in India a hype or reality', where we stand today and are, we developing in field of AI with the contemporary developments in world or not. The report published by Brookings Institution, reported that the Indian AI industry "has seen growth in this period [2012–2017], with a total of \$150 million invested in more than 400 companies over the past five years. Most of these investments have

come in the last two years, when investment nearly doubled from \$44 million in 2016 to \$77 million in 2017²" No doubt AI industry in India is also growing and when we are focusing on legal field, in a recent development CJI Bobde said that we will implement AI in courts for better, effective and quick redressal of cases, he also added that he does not opined that AI can replace lawyers and judges in court room. But the issue which may arise from AI is that in lawyers office on one side it may ease the work of lawyers for research and finding case laws, documents and other information but on other side it may create a problem for newly graduate to gain experience in the field of law by acquiring practical knowledge.

AI also open new ventures for the law as it comes up with some extraordinary challenges as when we are talking about concept of law of torts then there is prime remedy is compensation or the principle of restitution but if an AI cause harm then who is responsible for it? AI or owner of AI or one who programmed that AI. To understand it better, if an automated car hit a pedestrian then who is liable to pay that pedestrian, will court apply master servant relationship here but how as AI is not servant neither the concept of Independent contractor can be applied here, in future may get to see this type of legal jargons, which also needs to be addressed by courts. There are many other fields where we can see AI and law colliding will discuss it later here.

In India we don't have any specific laws or government issued guidelines regulating Artificial Intelligence, but in 2018 government comes up with various plans, strategies and road maps related to it.³ We need a comprehensive and holistic regulation for AI in present time. Ministry of Industry and Commerce constituted an 18-member task force on AI for India's Economic Transformation. The task force examined 10 sectors and in that 10 sectors nowhere law is explicitly mentioned yet. They looked at the "use of AI along with its major challenges, and possible solutions for each sector." Form this its evident that in India AI would in coming times will surely come with some great prominence in some sectors like Defence to help forces to combat battles which is beneficial for us, but when we comes to sector of law as of now we don't have any high level discussion or any committee's report for use of AI in law in India. However, the data protection bill may implicitly question the AI and technology use and form

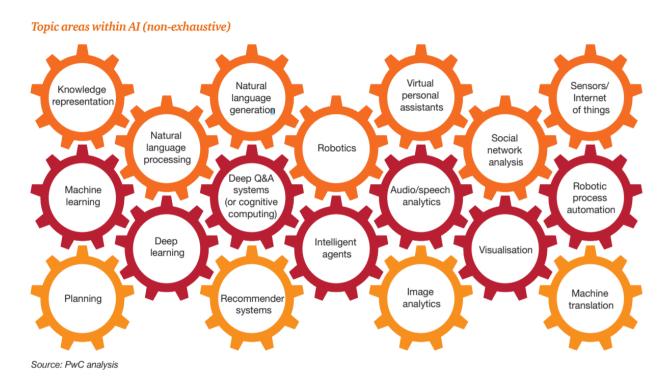
² https://www.brookings.edu/research/harnessing-the-future-of-ai-in-india/, archived at https://perma.cc/Z6EC-SYZ4.

³ Amber Sinha et al., AI in India: A Policy Agenda, THE CENTRE FOR INTERNET AND SOCIETY (CIS) (Sept. 5, 2018), https://cis-india.org/internet-governance/blog/ai-in-india-a-policy-agenda, archived at https://perma.cc/XC62- PLNY.

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the minds of judicial and legal scholars it may be linked for law as well. We don't have to forgot that many developed nations already started using AI in their legal practices and we ourselves cannot completely say that we are untouched by AI in legal field as the research work which we done on online database is a form of machine learning language which itself is a component of AI so wear e also using it for safeguard of our time, but in a minimalistic way as in ordinary sense when we talking about AI a layman just understand and visualize it is as a form of robot and in law a robo-attorney, which is not the case presently in India.

IV. ARTIFICIAL INTELLIGENCE IN DEPTH: ANALYSIS



AI is one of the emerging technologies with the greatest prospects for use, we must need an adequate regulation of AI technology for safe and efficient use and not a hindrance for scientific development and advancement. What actually AI is, in present situation? Its just a too evolved version of computer and machine learning in a more sophisticated way. It is a sub-field of computer science with an objective that can perform all the task generally performed by human, till now the AI is considered as 'narrow', what does this means that AI is 'narrow', this means that a particular AI is programmed in such a way that it is competent to perform task in one particular area. Its sometime also referred or called as augmented intelligence to highlight its ability to enhance human intelligence. We have to understand that artificial intelligence and augmented intelligence is a little bit different from each other Augmented intelligence is a species of AI. Augmented intelligence elevates human intelligence and help them in working quicker and in more efficient way, we have to note down that the augmented intelligence tools

are created to help humans rather than to replace humans but the case with AI is maybe different with changing times as we have see that AI is taking away jobs of humans as they are more efficient and fast and doing work, so it creates a problem of job opportunity. The best example of augmented intelligence is *Deep Blue* a computer developed by IBM in the 1980s that shows us above human ability in playing chess. The other level is called 'general', this means that AI can have intelligence across multiple fields but of a certain domain and not like narrow level in which it is specified for one thing or to perform a specific task. In AI driven era empathy is what we can't miss in any field. The other level is called 'super', this means the AI that is both general and narrow, a prominent writer on this subject named Nick Bostrom, defines super intelligence ass "an intellect that is much smarter than the best human brains in practically every field, including scientific creativity, general wisdom and social skills." Here we have to take some deep look into the field of AI, above here we have discussed the main three phases or classification of AI in their nature in general way. But with the last one i.e. super AI is what we have to bring our notice on the tables as in future we have main issues due to this as this is no less than a human and can perform all task that is performed by humans, in future it may be a problem for humans if not regulated properly and this is where some tech geeks who are evil minded can also use AI, like hackers in present time committing cybercrimes in present to tackle this problem we need a regulation for exchange of AI like Information technology Act. 2000. Also the main concern with AI is from present time till how far we can see or imagine the development of AI in practical way so we can make a policy or statute for regulating policies of functioning of Artificial intelligence.

Concerns over consumer privacy have peaked in recent years with the development and engagement of AI in various field raise this issue. According to study by *Intouch International*, about 9 in 10 American internet users say that they are concerned about the privacy and security of their personal information online, and 67% are now advocating for strict national privacy laws. For tackling the issue related to AI some continents are already had taken steps so the AI is only used as a boon and not as a curse and cannot be misused in future, like Europe's General Data Protection Regulation the legislation that went into effect in May 2018 was made to protect the consumers legal protections. U.S. also on par with the saving rights of citizens about their privacy from AI and protecting the privacy of individuals and in relation to this topic US comes up with a federal bill called *'Future of Artificial Intelligence Act'*, but that bill has seen little movent since it was introduced in the Senate in 2017. In India, we also at national level now need to come up with a legislation specifically dedicated for AI, as we all know that privacy is hard concept to define as stated by Justice D.Y.

Chandrachud in dissenting opinion in Aadhar verdict and the concept which is hard to define is more difficult to safeguard it from a thing which is still in its evolution and no one knows that how far in future we will go with AI, Debatin said that good privacy legislation in the age of AI, should include five components:

- 1. The system of AI must be transparent.
- 2. An AI must have a "deeply rooted" right to the information it is collecting.
- 3. It should be option for consumer to opt out of the system.
- 4. Purpose of AI must be limited by design and functioning for which data is collected.
- 5. On request of consumers data must be deleted.

"These steps make it possible to protect us from potential AI-based discrimination, lack of consent, and data abuse," Debatin says. We have to look while framing the legislation for protection of individuals privacy and for use of AI in productive manner. As from all this we get to know this is the prominent challenge for tackle us with AI functioning in our lives in future. As with any major advancement in technology, it brings with it spectrum of opportunities as well as challenges. Though several countries have decided their strategy for AI, India has not even scratched for the same.

Here we get to see that AI is revolutionising human and computer interaction, today we are completely surrounded by IoT (internet of things) which is a form of AI from your essentials to wants at every aspect we are surrounded by AI from SIRI to ALEXA we are already using so many AI's in present. We got to see that AI is beneficial for humans but also we have to regulate it in a better way because if we don't then maybe things happen which we cant think or even expect as we most of times see in Hollywood science fictional movies. AI application helps us to address social, economic and environmental causes, no doubt AI is something which will be proved as boon for us in coming time but we just have to keep in mind that every thing has advantages and disadvantages, we have to keep the high hand on advantages and control the disadvantages, as we are trying to do with the cybercrime.

From AI we have a unique and unmatchable golden opportunity to apply the technology to solve some of ours biggest problems from which we are struggling from the time of independence and still working on it like to improve the quality of education etc. India may easily tackle the most important problem of providing good quality Healthcare to every individual due to shortage of doctors, AI can do this easily and also doing the same in many parts of world in their trial level. Technology and AI has potential to boost economic growth

and many positive impacts but we also don't have to forgot the adverse effect of AI which is prominent, it will impact the job opportunity in factories and at many other places for this we have to think. We have to use AI at the fullest for our benefits.

V. AI AND LAW

"Artificial intelligence will reach human levels by around 2029. Follow that out further to, say, 2045, we will have multiplied the intelligence, the human biological machine intelligence of our civilization a billion-fold." – **Ray Kurzweil**

When specifically, we are dealing with AI and law in consonance then there is notion among the lawyers and law firms that Artificial Intelligence or Machine Learning is a threat to their existence, or in easy terms it is debate right now that can AI replace lawyers completely? But before dwelling into this question we have to understand that Ai is not only bane for human civilization but it is also boon for us. Many legal firms, organizations have engaged themselves in developing software products which mainly focus on extracting information from the legal documents. Here itself we started use of AI in law, in the sphere of law AI is the intelligent support for legal research community with the help of automation it can reduce the time and human risk. The Automated Intelligence and Artificial Intelligence is not same former one is species and later one is genus. In field of law, both can help attorneys, lawyers and legal scholars, AI involves more data and work speed for lawyers, the application of AI in the field of law endless as it can be used in multi-dimensional way as from legal research to contract drafting to resolve normal dispute cases like motor vehicles etc.

We have to understand that AI is not the replacement of lawyer, as the profession require highly driven by analysis, research, decision making and representation which cannot be performed by AI at same time with automation, AI can only reduce lawyers time and effort in their work and give a suitable suggestion to their clients. There are some key areas where AI can help the legal industry like AI can draft contract specifically, it can review contract. Ai can also predict legal outcomes by analysing past rulings and also it can provide relevant legal analytics. Apart from it there are other fields also where AI can be used in law.

"The real question is, when will we draft an artificial intelligence bill of rights? What will that consist of? And who will get to decide that?"- Gray Scott

VI. ROBO ADVOCATE: NOT FUTURE, ITS PRESENT

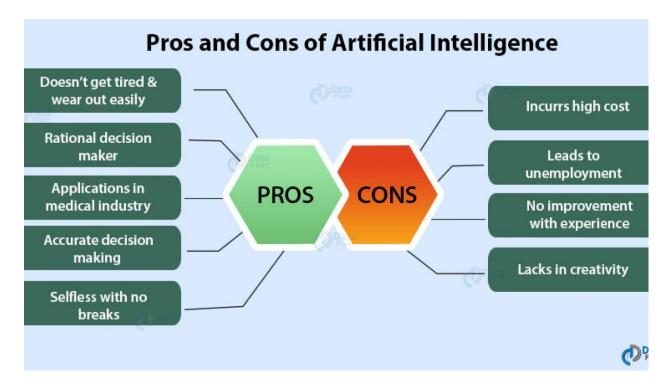
AI lawyer is not future, its in practice the world's first AI lawyer named ROSS is hired by a one of the largest law firm in the United States, The Baker & Hostetler law firm. The first AI

lawyer, ROSS is officially hired by the law firm in US and it is operative there. ROSS works on the IBM Watson technology, it will serve as a legal researcher for the firm, it also reviews the legal documents to make strong and bolster the case. A future where ROSS, or similar robot lawyers may be used soon in all over the country. The firm hired ROSS especially for dealing with the cases related to Bankruptcy laws. It was designed to read and understand postulates hypotheses, language and to do research work to finally back up its conclusions. ROSS is also programmed as it keeps growing and learning from experiences, it will gain speed and knowledge the more you interact with it. Additionally, ROSS is programmed in such a way that it monitors and keep itself updated with the latest development of law and notify you on new decisions that can affect your case especially.

Chief Information Officer of firm Baker & Hostetler Bob Craig said "At Baker Hostetler, we believe that emerging technologies like cognitive computing and other forms of machine learning can help enhance the services we deliver to our clients.", this is the rationale behind hiring ROSS. Also, the most debated topic on AI and law, is also answered by the firm should human lawyers be worried about their jobs being replaced by robots? Baker Hostetler stressed that this is not the case. "ROSS is not a way to replace our attorneys – it is a supplemental tool to help them move faster, learn faster, and continually improve," said Bob Craig.

AI is boon for us but also we have to take cognizance of AI in the terms of its development as in his 2008 book entitled 'The End of Lawyers' and another book entitled 'Tomorrow's Lawyers: An Introduction to Your Future', Susskind has predicted the emergence of online court, AI-based legal business, and new legal jobs. And in present time after 12 years down the line we have all these factors which were mentioned in book in present time from online courts to AI based businesses.

Our intelligence and emotions is what makes us human, and AI is an extension of that quality which don't have feelings yet. AI in law is already used by many developed nations on standard level and also in India we are using it in small level of machine learning language in legal database research and not in an standard use like in US as law firms using other AI also for different purposes especially for contract drafting and reviewing of documents.



VII. CONCLUSION & SUGGESTIONS

Our failure to answer the difficulties emerges because of use of AI constrain us to comprehend the shortcoming of our lawful framework to manage AI. Since AI is the ability of a machine to mirror wise human conduct. To shield the reconciliation of AI, a decent methodology would should be received which productively controls the working of AI frameworks yet additionally expands its advantages.

Successful and solid Contract drafting-In India anyway AI innovation is in its rising stages however there are a lot of chances for private enterprises to take part and benefit from its turn of events. Without consistency system, Contracts between the AI client and the AI designer are crucial in deciding the risk of gatherings. It is basic that members diagram their individual jobs, duties and commitments in the agreement. During the exchange of an agreement, the gatherings ought to obviously distinguish the extent of administrations being offered, the guarantees identifying with the AI innovation, extent of obligation (counting impediments and prohibitions) at the very least.

Stringent IT Law- if there should be an occurrence of penetrate of Data security structure, who is to be accused without human intercession, in light of the fact that the information insurance system in India is alarmingly frail to coordinate the pace of development of AI. Extensively, the Information Technology Act, 2000 is the main bit of enactment which 'addresses' this subject. While it is unquestionable that specific shields relating to information security and security have been set down in Sections 43A and 72 of the Act, however the protections miss

the mark regarding guaranteeing real assurance due to the dark idea of arrangements, included significantly through changes. It raises the requirement for exhaustive information security enactment in India, on the lines of European Directive on Data Protection, UK Data Protection Act (1998), OECD Guidelines on the Protection of Privacy and Transborder Flows of Personal Data, 1980, and the Safe Harbor standards of the US. Besides, the legislature must set up satisfactory protects as earlier implication of extraction of data to singular clients i.e., to the wellspring of data.

Approach with Parity and Equality -Artificial insight is the future and there is no refusal, yet in our mission of supplanting 'human blunders' with brilliant innovation and solid AI, we have to move moderate and stay up to date with the equal needs of overhauling the laws and abstract structure in the nation.

Model with Double layered protection - Since 2017, in excess of 20 nations (counting, India) have discharged conversation papers on AI. Be that as it may, till date, no nation has established a particular enactment to extensively direct the utilization of AI. Hence, to be at bleeding edge of this transformation, the Indian governing body should find a way to fill the administrative lacunae and give guarantee in this field. Man-made intelligence is developing mutli-crease innovation and we don't have the foggiest idea about all the points of interest or peril related with it. Subsequently it is of most extreme significance to have a two-layered security model: one-innovative controllers; and two-laws to control AI activities just as for responsibility of mistakes.

The solution to the problem isn't to keep down on advancement, yet we need to advance around: how would you keep individuals connected with when AI can show improvement over most people. In the in the interim, without an administrative structure, partners ought to endeavor towards executing estimates that would shield them from unexpected outcomes and liabilities that may emerge throughout use and usage of AI innovation. A simple oversight at the contracting stage could prompt critical misfortunes.

The capability of using AI throughout the legal industry, and specifically in legal departments, is poised to take machines beyond simple keyword search tools, to partners with whom lawyers will team up to deliver better, faster, and cheaper legal services to the company. We have an early look at the potential impact of this technology on the legal industry, but does that mean an army of robo-lawyers will take over the profession?⁵

We have to understand that there are some current limitations on AI, in future we may see that

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⁵ https://legal.thomsonreuters.com/en/insights/articles/ai-and-its-impact-on-legal-technology

someday computers may able to generate or even mimic legal reasoning as due to the evolving technology which is unfolding at rapid speed. Till, that time all that issue pertaining to AI and the existence of dangers of lawyers is in vain, history is evident that AI is highly successful in task where high level structured answer is present either black or white but the field of law is not like that many a times we get to see that judicial minds interpret one section in different way and the other in different way, we don't have to forgot that *today's limitation-tomorrow's potential*.

AI is just a helping hand and an added extension for comfort of human intelligence but we can't forgot that each coin have two faces same with the case of AI, it also have some grave cons which needs to be addressed by humans for better use of it and to build a consonance of technological development among all the individuals specially in country like India.

When we see recent development in AI its huge as per the report presented by task force which is constituted by Ministry of Industry and commerce constituted, apart from India on a world level its more immense and eye catching. The recent explosion in AI is due to a fundamental rule of technology: Moore's Law. In 1965, Gordon Moore, a scientist at Intel, made a prediction based on his observation that the number of transistors per square inch on integrated circuits had doubled every year since their invention. His law predicts that this trend will continue, and growth in computer power will double roughly every two years while the cost of that computing power will go down. Simply put, more computer for less money. When coupled with the everlower cost of storing electronic data, you have the basis for the rapid rise in AI capabilities and availability. In fact, experts predict that spending on AI by companies will grow from \$8 billion in 2016 to \$47 billion in 2020, up almost 600%.

There is something on which me must took a note of it, it is about how we have to develop with AI other wise it may be harmful for human race.

"The development of full artificial intelligence could spell the end of the human race. It would take off on its own, and re-design itself at an ever increasing rate. Humans, who are limited by slow biological evolution, couldn't compete, and would be superseded."—Stephen Hawking

⁶ https://legal.thomsonreuters.com/en/insights/articles/ai-and-its-impact-on-legal-technology

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