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LIFTING THE VEIL OF AI AND ITS APPLICATION IN THE INDIAN JUDICARY

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ABSTRACT

The advancement in technology in the 21st Century has been significant, Artificial Intelligence has progressed exponentially, even the first case of Corona virus was detected by the Canadian AI company named BlueDot on 31st December 2019 in China. With the rise in COVID-19 pandemic around the world, the use of Artificial Intelligence is revolutionized in every profession including the legal field in the form of ODR, where only matters of great urgencies are heard. Judicial system if powered by AI will be unstoppable and won't suffer anymore delays during the COVID-19 pandemic and hence, can become a better medium to deliver justice to the victims as well as the accused. This won't be the first time that the judiciary is taking help of Artificial Intelligence to lessen their burden. Gina the Avatar, has been serving the Supreme Court of Los Angeles as an online assistant and assists approximately 5000 users in a month. Also, the AI enabled lawyer bots are working cases more efficiently, which are usually dealt by lawyers of high human intellect. In India, with the limited use of physical hearing, the Supreme Court had passed an immediate order entrusting to all the High Courts and the Supreme Court to adopt the measures to use artificial intelligence in the court operations. Some countries like Kenya are still struggling with the criminal justice system which has been brought to a halt due to insufficient funds. This research paper dwells into a detailed study of the role of AI in the Indian judicial system during the COVID-19 pandemic to analyze the extent of its impact in the legal profession. This study will also highlight the implementation of AI in various international jurisdictions and will end by suggesting various ways in regard for the future of AI in the legal sector.

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<u>I.INTRODUCTION</u>

"Technology will be the main driver of this change. And, in the long run, we will neither need nor want the professionals to work in the way that they did in the twentieth century and before"

- Richard Susskind

The term Artificial Intelligence (AI) was first invented by John McCarthy, the father of AI [1], but before that Vannevar Bush had already mentioned in his seminal [2] a system in the future that will be able to replicate and process the understanding and knowledge that is displayed by humans. Five years after that Alan Turing, the then British logician and computer scientist wrote about machines being able to perform tasks and simulations as intelligibly as humans in the future, this resulted in the development of the Turning Test [3]. AI when putting simply, an extensive branch of computer science that functions independently, intelligently, and has its own thought process, understanding it and acting upon it, and use skills to replicate human behavior. We can infer that AI with an ability to solve problems which otherwise are solved by the presence of human beings, with the help of their natural intelligence.[4] AI processes like human intellect having a cognitive mind like character perform in a way of perceiving the problems by solving it and learning decision making with advancement in collecting data and processing power like a computer it complements and supplements the human intelligence and changes the perspective of the way that people work.

On September 27, 2018, a conference was held by the European Commission for the Efficiency of Justice and Latvian Courts Administration in Riga, Latvia on "Artificial Intelligence at the Service of the Judiciary" [5]. The importance of AI in the Judiciary was highlighted and the direction in which AI can be utilized was discussed. Georg Stawa, the President of CEPEJ, expressed that they are positive and open-minded in welcoming AI, they are looking at it from a point of good innovation to improve the performance of traditional systems. They also addressed possible concerns such as fair trial principles, equality of arms, independence of judges, and availability of effective remedies which should not be challenged by simply using a new technical dimension. Their ambition is to support the use of AI within the systems to strengthen and not diminish the guarantees of rule of law. Giuseppe Contissa, professor at LUISS University, explained exactly how AI can be effectively used by Judges, these systems

are not only programmed to getting better and faster knowledge of cases but also includes an algorithm that will help in improving and providing resolute drafting. It will further assist in the selection of only significant segments from the previous cases and salvage segments from the previous documents into the new ones. He better described the workings of AI by mentioning about, Ravel Law, an AI-assisted legal research service that introduced a feature last year where particular concise work of federal judges has been analyzed and is called "Judge Analytics". Opinions cited by any judge are available as well as the judges that have been cited by any judge are also available, this will assist a lawyer in Court to better communicate and understand the Judges.

II.MANUAL INTENSIVE versus AI

AI is one of the most successful inventions in the 20th century has now entered the field of law. In the landmark study by the researchers of eminent universities including Standard Law School, Duke Law, and Southern California University, they researched on the AI-based system known as 'LawGeex' which attained an accuracy of 94% (9% more than that of 20 most renowned US lawyers) when asked to issue the spots in five Non-Disclosure Agreements (NDAs) and it took only 26 seconds to finish it while the lawyers took over 60 minutes.[6]

With the market pertaining to legal services as one of the largest in the world however it is one of the most under- digitized when it comes to working various complicated cases, including the cases found in the bulky law books to the real proceedings of a case in the court of law and various difficulties the lawyers, the judges and even in some case the clients have been facing which is in fact time-consuming. Due to the existence of such labor-intensive work, the need for the use of AI in this field was much needed. With the advancement in the approach of the people changes from traditional ways to adapting new tools, became a perfect replace.

III.ARTIFICIAL INTELLIGENCE IN INDIA: ITS APPLICATION DURING COVID-19

In the year 2018-19, the Hon'ble Finance Minister, put forth the idea before the NITI Aayog to set up the National Program on Artificial Intelligence as an innovative step for the development of technologies. With this, NITI Aayog adopted, three main extended approaches- an undertaking of proofs-of-concept of projects of AI in various fields, national strategies crafted for building the ecosystem of AI in the legal system.[7] The underlying aim includes identifying the applications with larger social impact with the technological advancement in AI, the willingness to earn from the best, and democratizing the access for further development of AI.

One of the reasons behind the adoption of AI is that it is the solution provider for emerging and developing economies of the world including India.

Anna Roy in her report provided us with the economic impact of AI in selected G20 countries and an estimation of 1.3% to boost India's annual growth rate by the year 2035.[8] The use of AI in both public as well as in private sectors is necessity to progress further in the world of technology.

AI possesses the facility to change the way the lawyers have been operating in court in a current manner as it was earlier being done in India. It disrupts the nature of the jobs which now inclines towards the technological skills and an aptitude of the workforce forming an essential segment of acquiring AI technology.

AI has been adopted in various sectors globally. In India, some of the sectors which have adopted the implementation of AI are Healthcare, Agriculture, Smart Mobility including Transports and Logistics, Retail, Manufacturing, Energy, Smart Cities Education, and many more. It is of no surprise that the banking and financial services comes to as a leading sector globally while adopting the AI with India exponentially increasing in this sector.

The Indian legal system is considered conventional when we talk about the archaic practices it follows as compared to the legal systems globally. Due to the COVID-19 crisis, all the Courts at the district level, state level, and the Supreme Court were to shut down. Recently, the crisis led to the increase in the use of AI technology in the Courts and shows that the Courts can adapt to any situation while keeping the wheel of justice moving. Courts have now shifted from physical hearing to video conferencing wherein the judges, as well as the advocates for both the parties, are proceeding with the matters by staying at home. The Courts when started hearings via virtual took up only matters of great urgency of national importance and bail matters in some High Courts. In Supreme Court, the advocate is enabled to use the Video App to appear for their matters. As the change is not so easy, there persists a long way to fully adopt AI in the judiciary even though during a situation as catastrophic as the COVID-19 pandemic, it becomes necessary to use.

Justice D.Y. Chandrachud, while promoting AI and to facilitate the judges with the orders to reassuring the work, its process, the judgment can't be replaced with the person's mind and it is there to provide wider access to judges to the aggrieved, which is the ultimate goal.

"Technology is of relevance in so far as it promotes- efficiency, transparency, and objectivity in public governance"

- D.Y. Chandrachud[9]

Many tech-savvy lawyers and various law firms are using the advancement of AI in their daily professional work and are utilizing it to the fullest possible manner while on the other hand, some advocates still opposing the fashion of extensive use of AI as it might take away the human approach in the field of law. Even though it is still in its nascent stage, but when there are cases of menial offense AI manages to lessen that burden from the shoulders of the judges by acting as a catalyst.[10]

AI made its debut as the world's first AI lawyer as IBM Watson powered robot called ROSS which is used in solving the research questions by mining data and interpreting trends and patterns. In India, as the use of AI is still growing, it was first used in the year 2017 when Kira, a software useful to identify, examine and separate the provisions in the legal documents performed this task with very high-level accuracy.[11] With the use of this, a lot of drafting and clerical work is earlier done by the paralegal and other lawyers are reduced to a great extent, and it's cost-effective.

Applications like Cloud computing and machine learning facilitate the smooth functioning of the judiciary.[12] With the systematic growth of the AI, the conundrum of the magnitude of the cases, are delayed and adjournments which if not resolved may turn into outrage otherwise.

The use of AI can easily transform the day-to-day judiciary functions and can completely change the game when it comes to using it in due diligence matters, maintaining judgment databases, *ratio decidendi* for the matters which are under adjudication.

IV.STARTUPS: PATH FINDING

Startups being a part of the private sector play a crucial role in expediting justice delivery by identifying the issues pertaining to physical access into the courts to find affordable, efficient remedies and to bridge the deficit of trust of the courts.

As per reports, AI was valued at $ 3245 million and is expected to reach a considerable value of US $ 37,858 million by the year 2026.[13]

Online Dispute Resolution (ODR) being one of the Indian startups has the potential to disrupt the status quo by bringing broad access to the corporation with the consumer interface and can

reach the remote areas pertaining to the local disputes.[14] With this, the ODR can reach to maximum people without requiring the presence of either litigant or the client and is cost-effective.

The judiciary, on the other hand, has been actively taking part in deriving the solutions to dispose of the age-old lawsuits. Some of them are e-courts service application, the Integrated Mission Mode project, zero pendency courts, and many others. Due to pandemic, Supreme Court and many other High Courts have initiated the use of AI during proceedings like the use of video courtrooms like jitsi- meet and various other use of mobile-based modules for such purposes. The introduction of machine-readable formats is also an example of such forms of AI specifically for filing of cases and judgments and for the formats of other statutes.

One such measure taken by the CJI, Justice Bobde; was when he declared the launch of the Neural Machine Translation (NMT) tool which was also popularly called SUVAS (Supreme Court VidhikAnuvaad Software) and encapsulates the potential to translate judgments and orders from the court into nine different vernacular languages; on the occasion of National Constitutional Day held on 26 November 2019.[15]The National Data Judicial Grid (NDJG) is an online platform that is used in updating the pending cases across the District and various other High Courts.[16] ITAT (Income Tax Appellate Tribunals) is one such tribunal where the use of AI has a significant role to play and helps in decision making and docket management. Similar use of the AI is useful in other judicial institutions where it curbs the burdensome of the cases and can give result in effect time.[17]

V.RESPONSIBLE AI

AI is evolutional in the areas of technology of mankind and the strategy of its ecosystem needs to be conscious when talking about ethical conduct, privacy impingement, and undermining one's security protocol. Appropriate steps need to be taken to mitigate the risk concerns when using AI. With the issue of ethics arising due to concerns related to the bias that the AI system can disseminate with the concern about privacy and its inappropriate use leading to personal discrimination can affect the citizens individually as well as the whole nation. One should also be aware about its potential frangibility of regulatory structures in the society which are under human control and thereby, setting up higher standards for the protection and privacy for the use of AI.

In the case of *K.S. Puttawamy and Anr. v Union of India and Ors.*[18]Wherein the right to

privacy was held to be a fundamental right under the Constitution of India. With the advancement of this technology in the Indian legal system involving mechanical analysis of user data when forming results with the help of human directions. Major concerns encompassing the use of AI are related to data protection. The Government of India has taken steps to provide protection from data theft while forming a committee for investigation into these matters, to help in developing the utilization of AI in India.[19]

The information which is an essential driver for the movement of AI, guaranteeing its protection is an utmost significant step and #AIforAll has its responsibility to ensure adequate security, privacy for its working in the legal system.[20]

The growth of Artificial Intelligence is also increasing the cases of cybercrimes and to imagine the world without AI is impossible now. AI being part of our lives needs to be protected from such cyber scavengers which come with its own limitations. With the growth of the technological advancement in AI, there is a growth of interaction between the AI cybercrimes and the Cyber Laws in our country [21]. Indian legal system is one of the oldest in the world is not only the pride of our country but also is a matter of concern and secondly, the victim of the cybercrime and the culprit do not necessarily fall under the same jurisdiction, so when the crime is committed in one region but the cyber laws of another region may not identify it as a crime, so it may hamper the delivery of justice as the courts have yet to establish stringent laws for such cases.

The more autonomous the technology becomes; the more difficult it is for humans to handle it. The automated system may many times sentence the innocent person with the punishment and put him behind the prison. Also, the creator of the particular software may even be held liable for certain acts or omissions. For complex AI-driven software, Indian laws need to give its identity as a legal person to set up its own liabilities and rights like another human being. However, at present there is no such advancement is seen in the laws in India.

James Baldwin said, "*Not everything that has been faced can be changed, but nothing can be changed until it is faced"*. With the proper systematic study, the loopholes which are still pertaining in the current situation can be changed, and hence, the use of AI can be protected when using it in the long run.

VI.AI IN JUDICIARIES AROUND THE WORLD

The Judiciary in China welcomed the use of AI by introducing the "206 System" [22] at the No. 2 Intermediate People's Court, Shanghai. Where all the pieces of evidence related to the cases of murder and robbery were displayed clearly and in length by the "206 System" in front of all the people inside the courtroom. The "206 System" was able to clearly differentiate between a questioner and a responder, which resulted in it exceptionally transferring voice into the characters. Along with that, a guide has been programmed into this system which embodies more than 100 cases which will ultimately also help Police in avoiding mistakes when collecting evidence. Since its introduction in 2018, the "206 System" has proved to be a powerful tool in many criminal cases, as it aids the judges throughout the process of the case, which ultimately provides an impartial judgment.

In 2014, Josh Blackman who is a scholar at the South Texas College of Law, along with his colleague had come up with an algorithm that had a 70% accuracy rate in predicting whether the decision of the lower court will be upheld or reversed by the Supreme Court of United States [23]. Using only data available from justice votes around 68,000 and around 7,700 cases, the algorithm is able to forecast votes of individual justice by 70.9% because unlike other algorithms which predicts results on the basis of data acquired by a group of nine judges at a time, this algorithm predicts after analyzing thirty judges spread over six decades, appointed by thirteen Presidents. But in an instance of an unusual case with an inconsistent pattern, the accuracy of the algorithm will be somewhat affected because it depends on the precedents. However, this will help attorneys in Court in making a more informed decision because, with such intelligence at hand, they already will have an idea about how the Court will decide on a particular matter or at least will be able to predict the attitude of the Court for a case.

In the United States, a software has been developed to be provided to the courts for risk assessment, called the COMPAS ("Correctional Offender Management Profiling for Alternative Sanctions"), it provides data-centric decisions which are provided through evaluation of answers that the offender gives in an interview process where 137 questions are asked, keeping in mind his criminal history and the public safety. To better understand the consequences and benefits of using AI's such as COMPAS where the algorithm provides the risk score after calculating criminological factors and categorizing the offenders in high/, medium/ low risk, we have analyzed the case of State v. Loomis [24], where the defendant was charged with five counts of criminal charges for shooting while driving in the lower court and was imprisoned for six years in prison based on a high-risk score through the algorithm. Loomis challenged this in

the Wisconsin Supreme Court claiming that his right of due process was violated due to the use of the COMPAS. However, these claims were rejected, as it was held that the mechanism of the COMPAS cannot be made public as it was a proprietary instrument, also because the algorithm mainly uses public data and facts of the case, the accuracy of the risk score can easily be evaluated or challenged by the defendant. Also, it must be kept in mind that the Court has the discretion to set aside the COMPAS report altogether, however, in this case, they had not entirely relied on the report but had also taken into consideration the circumstances to provide an "individualized judgment". All these factors led to the dismissal of the appeal filed by the defendant against the use of COMPAS [25].

While America has a long history of systematic racism, similarly, India too suffers from deep-rooted casteism, under this risk assessment often defendants don't even get to challenge it in court. The calculation behind the risk assessment is not disclosed under the claim of proprietary rights, however, the defendant's counsel is still provided with the results. These results are based on multiple factors like financial security, level of education, etc., and were called out multiple times for discriminating against black people [26]. In 2014, in the case of Brisha Borde, an 18-year-old girl who was accused of petty theft for trying to steal bikes, and Vernon Prater who is a 41-year-old man charged for shoplifting were both booked, and their risk assessment was calculated. Vernon, who was charged with armed robbery and was in prison was five years in the past, appeared to be at a lower risk of committing a felony than Borden, who just had some petty records as a juvenile in the past [27]. This not only shows us how racist an artificial intelligence with an incorrect algorithm can be but also that if a person with a secured job who has been accused of molesting children is to take this assessment, he might appear to be at a lower risk than a homeless person held for petty theft because of the factors that are used in the algorithm. In our country, this very system can pose to be a great threat, to tackle such a nuisance and ensure that the artificial intelligence used is not bias in any sense, there should be complete transparency about the calculations of the risk assessments.

The Commission europeene por l'efficacite de la justice (CEPEJ) in order to keep up with the increasing use of artificial intelligence around us has introduced five fundamental principles called the "European Ethical Charter on the use of AI in the judicial systems and their environment" [28]. Firstly, the fundamental rights of an individual must be respected when designing or implementing any tool to assist in judicial making or for resolving a dispute. Secondly, the aim of developing and utilizing AI should be to eradicate the existing

discrimination, in no way should the AI be responsible for any discriminating behavior or suggestions. Thirdly, the AI should only be using intangible data and certified sources to provide a standard of quality. Along with that track of all the ethical safeguards and modifications must be made available in a secure environment to ensure that integrity. Fourthly, keeping in mind that these tools can affect people's life significantly, the aim should be to make the algorithm as transparent, fair, and impartial as possible to maintain intellectual integrity. Lastly, it should be "under user control", where the AI tool used must tell the user whether the prediction or solution to any of the query is binding or has multiple outcomes available, along with their right to access the Courts and their right to have legal advice.

In March 2019, the Lord Chief Justice of England, Lord Burnett of Maldon realized the importance and potential influence of Artificial Intelligence in the Judiciary in today's world [29]. So, he decided to further strengthen and well- equip England and Wales Judiciary, to introduce an Advisory Body. It will be chaired by Professor Richard Susskind who is the President of the Society for Computers Law, he believes that AI is a fast-trending influential operation and has been around for years and has not only become affordable but practical as well and aims to provide AI recognition among judges so that the court systems in England and Wales will be able to utilize the opportunity to use this technology. This ten-person team of senior judges as well as leading experts in Law and AI, will guide the Senior Judiciary on the power and the use of AI and are trained to use it in a manner that important factors like political, cultural, social, and economic, etc., are kept in mind while exercising AI. The thought behind an Advisory Body is not only brilliant but well- thought of, any country planning to introduce AI in their Judiciary System must first educate themselves properly on the pros and cons of such an instrument so that the citizens of that country don't suffer due to negligence and discrepancies.

In the Judicial System in England and Wales, artificial intelligence has already been introduced in the form of the Traffic Penalty Tribunal (TPT), where the ticket is handed out to drivers for a penalty by an online local authority [30]. The TPT works by analyzing facts of the case and huge data of precedents. These tickets can, however, be appealed by a driver, where it is then presented in front of an individual adjudicator, who then gives his judgment by applying laws of the land to the facts of the case and listening to the reasons of the applicant for the appeal.

Like every third-world country during this pandemic, even Kenya has faced the horrors of COVID-19 and to protect its citizens the Kenyan Government has issued several measures. One

of them being the introduction of e- filling in the Chief Magistrate's Commercial Court and High Court of the Commercial & Tax Division for advocates to use instead of frequently visiting the Courts. Chief Justice David Marga had also stopped all court activities be it criminal or civil and denied Court visits to prisoners/remandees for two weeks [31] with an exception to important and urgent cases to work out proper measures to fight against the Coronavirus. Since then, the Kenyan Government has only strived to introduce as much of AI as they can with their limited funds, like the Electronic Case Management System on 20th of March 2020[32]. It is important to social distance and to avoid public places, so the Government was forced to introduce the use of information and communication technologies (ICTs) to any proceedings on or before these directions by conversion to electronic transactions and it is to be used by the judiciary.

VII.CONCLUSION

Different fields have witnessed the efficiency as well as the scope of Artificial Intelligence. Due to the COVID- 19 pandemic that is pertaining in the country as well as in various other parts of the world, AI has proved itself to be the rescuer in not only the legal system but in various other fields as well. It has outreached the traditional methods which were used earlier if we are to put emphasis on creativity and productivity. In the case of the legal system, it has acted as a game-changer with its latest developments and its far reach accessibility.

Moreover, it must be realized and understood by Judges in the US dealing with evidence-based sentencing that the scores are not completely accurate. New York State started using COMPAS in 2001 and provided with its statistical evaluation in 2012, with the tool having an accuracy rate of 71%, however, the probability of racism was not calculated or was a made a factor in this report. The algorithm works on the data provided to it, to avoid making the algorithm racist it is essential that the difference between those who have been detained by the Police and those who have been finally convicted in the Court must be established, this difference is important to be there in the algorithm because the Police has no constitutional knowledge, whether a person is guilty can only be determined by the Court, so in a bid to avoid the "risk assessment" from being racist the opinion of Judges should be prioritized rather than that of the Police. Even though the use of AI in the Judiciary is undoubtedly a step forward while making use of technology the Judges in Indian Courts must keep an open mind and assess the situation with all the facts and not completely rely on the algorithm, to avoid any discrimination based on caste or religion.

While the optimum utilization of this AI is still up for debate, there is no doubt that the AI systems in the UK have worked well to reduce the burden from the shoulders of the adjudicators by scooping off the much simpler and smaller cases which have predictive results [33]. As for the debate that whether AI can completely replace the judiciary body [34], seems like a far-fetched thought and something that might happen in the future but as of now the AI can merely act as a tool of assistance and data pattern analysis for the Judicial systems around the world. Moreover, under the guidelines provided by Article 29 Working Part [35], there is a specific prohibition under the General Data Protection Regulation (GDPR) on decisions "based solely on automated processing" or simply "with no human involvement", it is an important step as it is important to understand that however advanced, AI is still behind understanding human values.

The world has evolved and has stepped out to the new digital world. In the case of the judicial system, we have now adopted the e-courts which are one big leap for digital India. The use of AI has not only reduced the working of the judges but also has optimistically allowed speedy justice in the legal world. However, for the continuous application of AI, in the long run, we must strengthen the laws and use them in a more organized manner which will serve the purpose of delivering justice and have a constructive effect on the legal system.

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[1] John McCarthy, *what is Artificial Intelligence?* Stanford University, (2007)

[2]Vannevar Bush, *As We May Think*, The Atlantic (1945).

[3] Chris Smith, *The History of Artificial Intelligence*, Univesity of Washington, pp. 4 (2006).

[4] Pallavi Kapur, *Scope of Artificial Intelligence in Law*, Legaldesire, Issue 22 (2020) https://legaldesire.com/scope-of-artificial-intelligence-in-law/.

[5] Council of Europe Portal, *Justice of the future: predictive justice and artificial intelligence*, CEPEJ (2018).

[6] Apoorva Mishra, *Artificial Intelligence in Juduciary: Does it really make sense*? ETGovernment (2020). (https://government.economictimes.indiatimes.com/news/digital-india/artificial-intelligence-in-judiciary-does-it-really-make-sense/73211365.

[7] Anna Roy, *National Strategy for Artificial Intelligence,* NITI Ayog (2018).

[8] Rekha M. Menon, Madhu Vazirani, Rewire *for Growth: Accelerating India's Economic Growth with Artificial Intelligence,* Accenture (2017).

[9] Supra 3

[10] Ananth Kini, *Artificial Intelligence and the Legal Profession: An 'intelligent' way ahead?*BarandBench (2020). https://www.barandbench.com/columns/artificial-intelligence-and-legal-profession-an-intelligent-way-ahead.

[11] Priya Agarwal, Riya Agarwal, *AI in legal services: Past, Present and Future, Indian Legaltech*(2020). https://www.indianlegaltech.com/ai-in-legal-services-past-present-and-future/.

[12] Richa K Gaurav, *Indian Judiciary: A(I) Way Forward*,KSK (2020). https://blog.ksandk.com/information-technology/artificial-intelligence-in-judiciary/.

[13]Desh Gaurav Sekhri, *Start- ups and AI can rescue choked Indian Courts*, The Print (2020). https://theprint.in/opinion/start-ups-and-ai-can-rescue-choked-indian-courts/406257/.

[14] Id.

[15] Ameen Jauhar, *AI Innovation in Indian Judiciary a Distant Dream Without an Open Data Policy*, VIDHI: Centre for Legal Policy, (2020). https://vidhilegalpolicy.in/blog/ai-innovation-in-indian-judiciary-a-distant-dream-without-an-open-data-policy/.

[16] Id.

[17]Tripaksha, *Artificial Intelligence in Judiciary*, (2020). https://tripakshalitigation.com/artificial-intelligence-in-judiciary/.

[18]K.S. Puttawamy and Anr. v Union of India and Ors ,10 SCC 1 (2017).

[19] Mr. Ved Vyas, *Artificial Intelligence in The Indian Judicial System: The Need of The Hour*, Law Audience Journal, Vol. 1, Issue 4 (2019).

[20] Id.

[21]Malvika, *Artificial Intelligence and its impact on the Indian Legal System*, Lawescort, (April 2020). https://lawescort.in/2020/04/artificial-intelligence-and-its-impact-on-the-indian-legal-system/

[22]Yadong Cui, ARTIFICIAL INTELLIGENCE AND JUDICIAL MODERNIZATION (2020).

[23]FranciskaZsófiaGyuranecz, BernadettKrausz and Dorottya Papp, *The AI is now in session – The impact of digitalization on courts (*2019).

[24]State v Loomis, 881 N.W.2d 749 (Wis. 2016).

[25] Liu Han-Wei, Lin Ching-Fu, Chen Yu-Jie, *Beyond State v. Loomis: Artificial Intelligence, Government Algorithmization, and Accountabili*ty, International Journal of Law and Information Technology, p. 5 (2018).

[26] Nancy Siboe, *Use of Artificial Intelligence by the Judiciary in the Face of COVID- 19*, Oxford Human Rights Hub (2020). https://ohrh.law.ox.ac.uk/use-of-artificial-intelligence-by-the-judiciary-in-the-face-of-covid-19/.

[27] Julia Angwin, Jeff Larson, *Machine Bias*, ProPublica (2016). https://www.propublica.org/article/machine-bias-risk-assessments-in-criminal-sentencing.

[28]*European Ethical Charter on the use of Artificial Intelligence in judicial systems and their environment*, European Commission for the Efficiency of Justice (CEPEJ), (2018).

[29] Andrew Wilkinson and Ailin O'Flaherty, *New Artificial Intelligence Advisory Body in England and Wales - Bringing the Modern World to the Judiciary,* Lexology (2019).

[30] Morison, J., & Harkens, A., *Re-engineering justice? Robot judges, computerised courts and (semi) automated legal decision-making,* Queen's University Belfast, pp 6 (2019).

[31]*Coronavirus: Kenya's CJ suspends foreign travel, halts open court*, The EastAfrican (March 2020).

[32] Florence Ogonjo, *Technology and COVID-19 in the Kenya Judicial System,* Strathmore University (April 2020).

[33] Supra 26

[34] Michael Chui, James Manyika, *Where Machines could replace Humans- and Where they can't (yet)*, McKinsey Digital, (2016) https://www.mckinsey.com/business-functions/mckinsey-digital/our-insights/where-machines-could-replace-humans-and-where-they-cant-yet#

[35] Article 29 Data Protection Working Party (2017) Guidelines on Automated individual decision - making and Profiling for the purposes of Regulation

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