ARTIFICIAL INTELLIGENCE AND INDIAN JUDICIAL SYSTEM: A CRITICAL ANALYSIS IN PERSPECTIVES OF SPEEDY TRIAL

Abstract

Apart from the need for an efficient and healthy court system for every democratic country, quick justice is an individual's basic right, particularly of the accused in the name of justice. It is a component of the fair and just legal process that guarantees the nonarbitrariness of the court and the rationality of justice. Article 21 of the Indian Constitution ensures reasonable, fair, and due process of law and fast trial is an unmentionable but unquestionable aspect of this Article, that increases public confidence in the management of justice. Utilizing efficient adjudicatory systems with enhanced technology, the court is entitled to direct for increasing and strengthen the judicial system so that proper and swift justice shall be reasonably accessible. The digital revolution results artificial in intelligence (AI), an established or developing computer software to finish tasks free from human intellect implications. Its approach of detecting new patterns, auto-learning, autoadoptability, feeling, logical reasoning, problem understanding, and solving methods helps people to produce better products and services. Moreover, its fast and accurate recognition and solving mechanism encourages greater longand short-term output. Certainly, Artificial Legal Intelligence (ALI) is a useful tool that could improve legal research and services. An expert artificial legal assistant can offer better legal reason analysis, fast identification, case research, fact framework, drafting, judgment, and intelligent support to Judges, Legal Professionals, Advocates, Legal Researchers, and Scholars. Moreover, "Justice delayed is justice denied" is one of the fundamental ideas of justice. The Preamble of the Indian Constitution expresses the objective, fair, and faster justice towards the people of India

Author

Ranit Kumar Bose

Advocate High Court at Calcutta. through the phrase "JUSTICE, social, economic and political." Thus, one of the elements and methods to ensure justice which might be suppressed by the complicated, formal, and tedious process of the current legal system is Artificial Intelligence, sometimes known as Artificial Legal Intelligence.

Keywords: Artificial intelligence, court system, fast trial, machine learning

I. INTRODUCTION

In essence, Artificial Intelligence (shortly "AI") is the result of digitalization leaving a good impact by providing many opportunities for a great number of people, so this technology can grab attention from every sphere of society. It offers practically all disciplines—including philosophy, cognitive science, economics, law, and the social sciences—contributions as well as problems. It has left a multi-dimensional effect to improve efficiency along with progressive change in the environment of numerous sectors and industries. Nonetheless, the cornerstone of the sustainable development of the developed and developing industry or sector adaptation and innovation is leading to sustainable production and use of technology. Thus, smart intelligent productions and technologies are needed with universal and agreed viewpoints of their use to encourage sustainability.²⁵⁹ An efficient technology for increasing sustainable production and development is artificial intelligence grounded on artificial human thinking and machine learning programs. Furthermore, modern smart gadgets or technologies satisfy the demand for creative ideas and boost the sustainability of quality and volume while lowering expenses. ²⁶⁰ Furthermore, in the twenty-first century, artificial intelligence has evolved into an inseparable component of research in domains including engineering, science, education, medicine, business, accounting, finance, marketing, economics, stock market, law, etc.). Furthermore, its upgrading and expanding potential in the machine intelligence with machine learning skills has had a noticeable influence on business, governments, and society. ²⁶¹ Consequently, by guaranteeing time, quality, and quantity, artificial intelligence helps to solve important issues for sustainable manufacturing of the product. Thus, artificial intelligence will also be useful to increase the effectiveness of the Judicial System particularly in the process of justice delivery. Artificial Legal Intelligence (ALI) a virtual intelligence program shall be fruitful in artificial legal assistance for the judicial system of the largest democracy as the application of AI technology can be presented as a feasible alternative in serving the ends of justice to the one of the largest and complexed justice deliver systems by assisting greatly in achieving the merits of an ideal judicature mechanism including inter alia, timeliness, affordability and transparency of the judicial procedure. ²⁶² Certainly, in any nation, the function of the court is rather important for interpreting and implementing the law as well as for resolving conflicts and rendering justice. Furthermore, the courts guarantee the people from rule by law and help to preserve the rule of law. Furthermore, by defending constitutional supremacy, the court guarantees that the interpretation and implementation of the legislation maintain all the authorities within the constitutional framework.²⁶³ Thus, under the elaborative interpretation of Article 21 of the Constitution of India as given in Maneka Gandhi²⁶⁴, fast trial or swift adjudication is an essential basic right under which the court needs to ensure the acceptable time length in adjudicating a trial. In Balaji Baliram Mupade v. The State of Maharashtra²⁶⁵, the Hon'ble

²⁵⁹ Governance Insights Center Technology series Emerging technologies, "*The Essential Eight technologies Board byte: artificial intelligence*" 2 (December 2017).

²⁶⁰ Raffaele Cioffi, Marta Travaglioni, *et. al.*, "Artificial Intelligence and Machine Learning Applications in Smart Production: Progress, Trends, and Directions", 12 *Sustainability* 1 (2020).
²⁶¹ *Id.*, at. 2.

²⁶² Dr. A. Lakshminath & Dr. Mukund Sarda, "Digital Revolution and Artificial Intelligence: Challenges to Legal Education and Legal Research" *Bharati Law Review* 9 (2013).

²⁶³ M.P. Jain, *Indian Constitutional Law* 194 (LexisNexis, Haryana, India, 8th Edition, 2020).

²⁶⁴ Maneka Gandhi v. Union of India AIR 1978 SC 597; Also See, Hussainara Khatoon v. Home Secretary, State of Bihar, AIR 1979 SC 1360.

²⁶⁵ CIVIL APPEAL NO.3564 of 2020 on October 29, 2020.

Apex Court observed that judicial discipline calls for timely delivery of rulings — an issue this Court has often stressed. The issue is more severe when the outcome is known but the causes are unknown. Furthermore, the Supreme Court established that Justice delayed is justice denied. This deprives any offended party of the chance to pursue additional legal redressal in the next layer of judicial inspection. A system of criminal procedure devoid of a swift trial could hardly be claimed to be either fair or reasonable; the fast trial is essentially what criminal justice is all about and there is little doubt that delay in trial by itself represents denial of justice. ²⁶⁶

II. IDEAS OF ARTIFICIAL INTELLIGENCE

John McCarthy first suggested the idea and vocabulary of artificial intelligence during the summer research project conference at Dartmouth College. Significantly, six decades ago of McCarthy's claim, the year 1896 was the ab-ovo of technological creation when Herman Hollerith constructed the first punch and tabulation machines for the USA Census Bureau for data sorting and analysis. Dr. J. Presper Eckert and Dr. John Mauchly originally developed the Electronic Numerical Integrator and Computer (ENIAC) in 1940 and subsequently in Binary Automatic Computer (BINAC) with magnetic storable tape in 1949. Still another creation of theirs was the Universal Automatic Computer (UNIVAC).²⁶⁷

In 1956 McCarthy proposed an innovative machine having "every aspect of learning or any other feature of intelligence". Based on the theory put up by mathematician Alan Turing in 1950, this argument sought to answer if it is feasible to design robots with the same capacity for thought, learning, and self-awareness shared by all human beings. ²⁶⁸ The best invention for the advancement of science and technology will be a machine with hi-tech, if capable of thinking like a scientist or with scientific brain. Alan thus managed to respond to his study question after his series of tests which was dubbed the "Turing test" (originally termed the imitation game by Alan Turing) in the year 1950 that computers can think and it is conceivable to enable machines to learn and respond just like humans. As aspects of intelligence, McCarthy mentioned the use of language, the development of abstractions and concepts, issues now saved for humans, and self-improvement. Moreover, artificial intelligence mostly seeks to copy or imitate human intelligence. In this context, one wonders whether artificial intelligence will replicate all biological organisms, including human behaviour, working of different principles from digital technologies, and will access all the mental abilities, perceptions, intuition, emotions, and even spirituality of humans or of the individual it aims to replicate. Moreover, it begs the question of whether artificial intelligence could mimic all human actions, including moral or ethical ones.²⁶⁹ Therefore, by considering all the angles, the Organization for Economic Co-operation and Development (OECD) advised the definition and concept of artificial intelligence as a machine-based system that can, for a given set of human-defined objectives, make predictions, recommendations, or

²⁶⁶ Hussainara Khatoon v. State of Bihar AIR 1979 SC 1364.

²⁶⁷ Manirani Dasgupta, Cyber Crime in India: A Comparative Study 27 (Eastern Law House, 1st edn., 2009).

²⁶⁸ Mariam Khalid Alsedrah, "Artificial Intelligence," American University of Middle East, Middle East, Research DOI: 10.13140/RG.2.2.18789.65769, 2017; Also See, Bernd Carsten Stahl, Artificial Intelligence for a Better Future: An Ecosystem Perspective on the Ethics of AI and Emerging Digital Technologies 7 (Springer, Cham, 1st edn., 2021).

²⁶⁹ Bernd Carsten Stahl, Artificial Intelligence for a Better Future: An Ecosystem Perspective on the Ethics of AI and Emerging Digital Technologies 7 – 8 (Springer, Cham, 1st edn., 2021).

decisions influencing real or virtual environments. AI systems are made to run with different degrees of autonomy; moreover, the OECD also mentioned some data on AI:

Phases of the Artificial Intelligence System life Consist of

- 1. "Design, data and models"; this sequence depends on the situation and covers planning and design, data collecting and processing, as well as model development;
- 2. "Verification and validation";
- 3. "Deployment"; and
- 4. "Operation and monitoring".

Often occurring iteratively, these phases are not always sequential. Retiring an artificial intelligence system from use could happen anywhere in the operating and monitoring phase.

- AI Knowledge: Data, code, algorithms, models, research, know-how, training programs, governance, processes, and best practices, necessary to grasp and engage in the AI system lifetime.
- AI Actors are those who actively participate in the AI system lifecycle, including companies and people that use or run AI.²⁷⁰

Elaborately, then, the sixteen categories of artificial intelligence—reasoning, programming, artificial life, belief revision, data mining, distributed artificial intelligence, expert systems, genetic algorithms, systems, knowledge representation, machine learning, natural language understanding, neural networks, theorem-proving, constraint satisfaction, and theory of computation—can be distinguished from one another. Furthermore, among the subfields of artificial intelligence are machine learning, natural language processing, image processing, data mining, etc.; these are quite beneficial in smart manufacturing, medical science, pharmacology, agriculture, archaeology, games, commerce, etc.²⁷¹

The European Commission (2020) describes artificial intelligence as a set of technologies combining data, algorithms, and computational capability. Key drivers of the present rise of artificial intelligence are hence advances in computers and the growing availability of data. In this regard, the panel advises that artificial intelligence should be anchored based on values and fundamental rights such as human dignity and privacy protection if we are to develop trust and social acceptability. Moreover, the effects of artificial intelligence systems should be taken into account by society as a whole as well as by an individual. A major part of reaching the Sustainable Development Goals and supporting the democratic process and social rights can be played by AI systems.

Consequently, the artificial intelligence ecosystem offers advantages of the technology towards the society and economy as follows:

• For **citizens** to enjoy fresh advantages including better public services, safer and cleaner transportation systems, less malfunctions of domestic equipment, and better health care;

²⁷⁰ OECD, Recommendation of the Council on Artificial Intelligence, OECD/LEGAL/0449

²⁷¹ OECD, Recommendation of the Council on Artificial Intelligence, OECD/LEGAL/0449

- For **business development**, for example, a new generation of products and services in ٠ areas where Europe is particularly strong (machinery, transport, cyber-security, farming, the green and circular economy, healthcare and high-value-added industries like fashion and tourism); and also
- For services of public interest, for example by lowering the costs of providing services (transport, education, energy, and waste management), by enhancing the sustainability of products, and by arming law enforcement authorities with suitable tools to guarantee the security of citizens, with proper safeguards respecting their rights and liberties. 272

Working holistically on ethical issues of artificial intelligence, Virginia Dignum, an artificial intelligence scientist saw that AI speaks not only of objects but also of an academic community. She claims that artificial intelligence is the field of research and development for computational artifacts displaying certain aspects of intelligent behaviour. Many times, such objects are referred to as artificial agents. Intelligent agents are those with flexible action ability to fulfill their design goals, in which case flexibility comprises the following characteristics.²⁷³

III. ARTIFICIAL LEGAL INTELLIGENCE

Pamela N. Grey artificial legal intelligence presents a creative, utopian perspective on the technological application of legal reasoning. Based on artificial intelligence technology and following several empirical studies on artificial intelligence techniques to legal reasoning, artificial legal intelligence (ALI) offers a vision of the law as a whole at the brink of developing into a codified computer system of legal services. ALI supports the pragmatic approach of thinking or thought-provoking to both the application of evolutionary thinking about and learning of the law and computational models of legal reasoning. Grey claims that computerized artificial legal intelligence is a vision of developments in both technology and legal history. Furthermore, the integration of technology and automation mechanisms will be a trend in the future both in artificial intelligence and legal curriculum and leave an evolutionary imprint for law and society by means of its efficient analytical approach to legal reasoning and problem solutions. ²⁷⁴

Legal service and research for legal specialists, professionals, practitioners, judges, and academics combine naturally with legal reasoning and case analysis. Practically, it sometimes presents major difficulties for the experts to analyze cases or for developing a system of experts that gives legal professionals fast and appropriate intelligent support by means of case analysis and legal reasoning. In the pragmatic legal field, ALI is the reasonable outcome or method that can be demonstrated as successful.²⁷⁵ Grey also notes that case-based reasoning, expert systems, and neural networks are the three artificial intelligence domains most

²⁷²European Commission, Brussels, "White Paper on Artificial Intelligence - A European approach to excellence and trust" (February 2020).

²⁷³ Bernd Carsten Stahl, Artificial Intelligence for a Better Future: An Ecosystem Perspective on the Ethics of AI and Emerging Digital Technologies 8 (Springer, Cham, 1st edn., 2021). ²⁷⁴ Stephen M. McJohn, "Review of 'Artificial Legal Intelligence" 12 Harvard Journal of Law & Technology,

^{241 - 261} (1998).

²⁷⁵ Dr. A. Lakshminath & Dr. Mukund Sarda, "Digital Revolution and Artificial Intelligence: Challenges to Legal Education and Legal Research" Bharati Law Review 14 - 17 (July - September 2013).

Disruptive Technologies and the Law: Navigating Legal Challenges in an Era of Innovation E-ISBN: 978-93-6252-374-7 IIP Series ARTIFICIAL INTELLIGENCE AND INDIAN JUDICIAL SYSTEM: A CRITICAL ANALYSIS IN PERSPECTIVES OF SPEEDY TRIAL

pertinent for legal practice. Aimed to solve a problem by depending on solutions to past and related ones, a case-based reasoning software analyzing and using precedents in resolving legal reasoning forms the foundation of this method. An artificial or virtual human expert sought to be replicated by an expert system—an artificial intelligence or ALI system—using its abilities and intelligence to tackle any particular kind of problem. Furthermore, neural networks are synthetic systems meant to function in a manner like that of the neurons making up the brain. Under this networking architecture, a virtual network connects the input and output sites. Until the included input yields the desired outcome, the network can be "trained" by means of modification of interconnection or inclusion of new connection in the network. Once the network is correctly tuned, it should produce the right output in future as an artificial neural network should learn the rule of output production on the number of examples and should be flexible enough to adapt if a new case arises.²⁷⁶

Grey also sees two foundations for legal intelligence: "holistic legal intelligence" and "cyclic paradigms of legal intelligence". "Holistic legal intelligence" is a special and autonomous type of legal analysis. Like judges' decision-making procedures, the advocacy and advice of lawyers depend on specific talents using ideas and rules of inference that could be symbolically expressed. Grey thus describes the evolution of holistic legal intelligence as the advancement of a single field, in the same manner, that physics may be characterized as a sequence of advancements inside a single domain. Grey likes to link legal intelligence with the "science of legal choice". Legal thinking is understood as just a process of "moving from one unit of legal data to the next to make a selection." Whether in laws, cases, or other written forms, this perspective links together the idea that law is an autonomous discipline with the notion that the law consists of its formal representations and that such representations are linked together by some sort of coherent logic. The autonomy and formalizability of both presumptions would enable the law to be caught in a single computer program as Grey imagines. Gray's other theory, "cyclic paradigms of legal intelligence," relates the computerization of the legal system with the historical evolution of legal systems. This perspective holds that every legal system develops via consecutive life cycles, each of which consists of five stages: "ritual, common law, theory, casuistry, and codification". Grey also mentions the artificial intelligence initiative meant to automate the "collective legal intelligence," including a legal information system with human intelligence knowledge and processes. 277

IV. SPEEDY TRIAL²⁷⁸:

After the *Maneka Gandhi*²⁷⁹ case, the Supreme Court of India noted fresh liberal interpretations of fundamental rights, particularly Article 21, based on an innovative approach. Therefore, a great change and liberal approach in judicial attitude were seen toward the preservation of the right to life and personal liberty and the application of the "due process mechanism". The result of the liberal perspective of the court, derived from Article 21 catered to the right to the accused of promptness in the trial. R.M.'s Sahai, J., noted in

²⁷⁶ Stephen M. McJohn, "Review of 'Artificial Legal Intelligence" 12 *Harvard Journal of Law & Technology* 241 – 261 (1998).

²⁷⁷ Id.

²⁷⁸ M.P. Jain, *Indian Constitutional Law* 1158 – 1184 (LexisNexis, Haryana, India, 8th edn., 2020).

²⁷⁹ Maneka Gandhi v. Union of India 1978 AIR 597.

*Kartar Singh v. State of Punjab*²⁸⁰ that a right to a prompt trial derives from a clause of the Magna Carta. From then, this idea has also been included in the Sixth Amendment of the Constitution of the United States of America, which states that in all criminal proceedings, the accused must enjoy the right to a quick and public trial. The Virginia Declaration of Rights of 1776 also reflects this idea. Furthermore, Article 21 treats the idea of "speedy trial" as a necessary component of the fundamental right to life and liberty assured and safeguarded under our Constitution. The right to speedy trial starts with the actual restraint imposed by arrest and consequent incarceration and continues at all stages, namely, the stage of the investigation, inquiry, trial, appeal, and revision so that any possible prejudice resulting from the impermissible and avoidable delay from the time of the commission of the offense can be avoided. In this regard, Section 309 of the Code of Criminal Procedure, now it is Section 346 of the *Bharatiya Nagarik Suraksha Sanhita*, 2023, fairly reflects the constitutional requirement of quick trial.²⁸¹ Section 346(2) of the *Bharatiya Nagarik Suraksha Sanhita*, 2023, states that no adjournment shall be allowed for the purpose only of enabling the accused person to show cause against the sentence proposed to be imposed on him. Further, no adjournment shall be granted at the request of a party, except where the circumstances are beyond the control of that party. Moreover, where the circumstances are beyond the control of a party, not more than two adjournments may be allowed by the Court after hearing the objections of the other party and for the reasons to be recorded in writing. Further, the fact that the advocate of a party is engaged in another Court, shall not be a ground for adjournment; and where a witness is present in Court but a party or his advocate is not present or the party or his advocate though present in Court, is not ready to examine or crossexamine the witness, the Court may, if thinks fit, record the statement of the witness and pass such orders as it thinks fit dispensing with the examination-in-chief or cross-examination of the witness, as the case may be.

Bhagwati, J. noted in Hussainara Khatoon v. Home Secretary, State of Bihar (I)²⁸² that although the quick trial is not officially listed as a basic right, it is implied in the broad range and content of Article 21 as construed by the Court in Maneka Gandhi. Article 21 grants a fundamental right—that is, no one shall be deprived of his life or personal liberty except in line with the need of that Article, which specifies some sort of legal procedure to be followed but which should be "reasonable, fair and just". Should one be deprived of his liberty by a process deemed not "reasonable, fair or just," such deprivation would violate his basic right under Article 21 and he would be entitled to enforce such fundamental right and achieve his restoration. Now clearly, legally mandated deprivation of liberty cannot be "reasonable fair or just" unless that process guarantees a quick trial for guilt of such person. Any operation devoid of a reasonably speedy trial cannot be considered as "reasonable, fair or just" and would violate Article 21. Thus, there is no doubt that fast trial, and by fast trial or fairly expedient trial, is an inherent and important aspect of the fundamental right to life and liberty ingrained in Article 21.²⁸³ Furthermore, the same Court has placed considerable focus on quick trial of criminal acts and concluded in Hussainara Khatoon v. Home Secretary, State of Bihar (II)²⁸⁴ "it is implicit in the broad sweep and content under Article 21." A fair trial

²⁸⁰ 1994 SCC (3) 569, JT 1994 (2) 423

²⁸¹ Ajay Kumar Choudhary v. Union of India, CIVIL APPEAL No. 1912 of 2015

²⁸² 1979 AIR 1369: 1979 Cri.L.J. 1036.

²⁸³ Also See, Abdul Rehman Antulay v. R.S. Nayak 1992 AIR 1701: 1991 (3) Suppl. SCR 325; Also See, Pankaj Kumar v. State of Maharashtra, CRIMINAL APPEAL NO. 1067 of 2008.

²⁸⁴ 1979 AIR 1819: 1979 SCR (3)1276

suggests a swift and efficient one. Until the process guarantees a timely trial for the decision of guilt of such a person, no process can be reasonable, fair, or due.

But under Article 21, the right to a speedy trial is an innate right covering the entire criminal procedure, including police inquiry in addition to the actual court procedures. Not limited to any one category of cases, the right to speedy trial also applies equally to all criminal proceedings. Where the right to a speedy trial is claimed to have been violated, the court must balance all the accompanying circumstances, listed above, and decide in every case whether the right has been denied in that particular case. Should the court find that an accused's right to a speedy trial has been violated, the charges or conviction—as the case may be—may be quashed unless the court believes, considering the nature of the offense and other pertinent circumstances, quashing of proceedings would not be in the best interest of justice. ²⁸⁵ Under such circumstances, the court is free to render a suitable decision as it may find fair and equitable including fixation of time limit for ending of trial.

Moreover, the State cannot be allowed to deny the accused their constitutional right of speedy trial on the grounds that the State lacks sufficient means to pay the required expenses for enhancing the administrative and judicial system, so guaranteeing quick trial. The law does not let any government deny its people of constitutional rights on a claim of poverty, or administrative incompetence; the State may have financial restrictions and priorities in expenditure. ²⁸⁶

The Supreme Court noted in Raj Deo Sharma v. The State of Bihar²⁸⁷ that the fair, just, and reasonable process implied in Article 21 of the Constitution generates a right for the accused to be tried fast. The accused's right to a quick trial is theirs. It is not any less the accused's right if a swift trial is likewise in the public interest or serves the social interest as either of these factors also do. All those involved would benefit from the prompt determination of the accused's innocence or quilt in the relevant circumstances. Furthermore, the court established that clearly, neither length of time is per such too long to pass inspection under this principle nor is the accused person called upon the show genuine prejudice by delay of resolution of cases. The Court must thus adopt a balancing approach by considering the possible prejudices and disadvantages to be suffered by the accused by avoidable delay and so ascertain whether the accused in a criminal proceeding has been deprived of his right of having speedy trial with reasonable delay which could be identified by the factors - (1) length of delay, (2) the justification for the delay, (3) the accused's assertion of his right to speedy trial, and (4) prejudice caused to the accused by such delay. Nevertheless, the fact of delay depends on the situation of every case since reasons for the delay will differ: the deliberate absence of witnesses or witnesses, crowded dockets on the file of the court, delay in the investigation on account of the widespread ramification of crimes and its designed network either nationally or internationally, etc. ²⁸⁸

More lately, *Sanjay K. Kaul, J. Balaji Baliram Mupade v. State of Maharashtra*²⁸⁹ saw that court discipline calls for timely delivery of rulings, a feature this Court has stressed time and

²⁸⁵ Vakil Prasad Singh v. State of Bihar (2009) 3 SCC 355: AIR 2009 SC 1822.

²⁸⁶ Hussainara Khatoon v. Home Secretary, State of Bihar 1979 AIR 1369: 1980 SCC (1) 98

²⁸⁷ 1998 AIR SCW 3208

²⁸⁸ Kartar Singh v. State of Punjab (1994) 3 S.C.C. 569

²⁸⁹ CIVIL APPEAL NO.3564/2020

times. The issue gets worsens when the outcome is known but the causes remain unknown. This robs any offended party of the chance to pursue more judicial redressal in the next level of judicial review.

V. ARTIFICIAL INTELLIGENCE AFFECTS JUDICIAL SYSTEM FOR SPEEDY TRIAL

Certainly, the demographics and philosophy of the people of any nation determine the officials of their legal system to some extent. The court's job is to uphold the constitutional demands as well as to maintain the social trends, thereby resolving any conflict. Should any conflict surface during adjudication, the court will follow the reasonable, fair, and just favour recommended by the Constitution. Beginning "WE, THE PEOPLE OF INDIA, having solemnly resolved to constitute India," the Preamble of the Indian Constitution finishes with ".... adopt, enact, and give to ourselves this Constitution", which prefers and declares that the ultimate and absolute sovereignty towards the people of India depends on their power and the source of all authority under the Constitution.²⁹⁰ Moreover, the Preamble also envisages the terms "Democratic," "Republic," "Justice-social, economic and political," "liberty," etc. which are deliberate to meet the need of balancing the law and morals. Therefore, in a changing society, it is quite necessary to adapt the change from every aspect including technological transformation for the development and progress of society.²⁹¹ Therefore, it is evident that the court of the biggest democracy has to confront many obstacles to execute its obligations and powers; one of the main ones is the high growth of pending cases and delays in adjudication and hence residual delivery of verdict.²⁹² The Supreme Court of India and the government of India have linked Alternative Dispute Resolution (ADR), Lok Adalat, and Nyaya Panchayats as alternative machinery for adjudication of matters for lowering the strain of pending cases in court. In this sense, artificial intelligence-or rather, artificial legal intelligence-can be demonstrated as a successful model to increase court efficiency, particularly in quick adjudication. Furthermore, computerization and artificial intelligence can be used to stimulate the alternate adjudication machinery for a greater degree of openness and accessibility, giving credibility to the reliance of government and people on these forms of alternative adjudication machinery. In this regard, the Niti Aayog Expert Committee (2021) recommended an e-ADR or ODM (Online Dispute Resolution) system-the application of technology to "resolve" conflicts. Not only any kind of technology integration—such as electronically arranging a session—but also active use of it to help resolve the conflict—such as video conferencing for hearings or electronic document sharing for filing. Although ODR comes from ADR, its advantages go beyond simply e-ADR made possible by technology. ODR can make use of technology tools driven by artificial intelligence or machine learning in the form of automated dispute resolution, script-based solution and curated platforms addressing particular kinds of conflicts. The advantages of ODR are likewise several. It is affordable, practical, and quick; it lets one create personalized procedures and helps to reduce unconscious prejudice resulting from human contact.

Regarding levels of justice, ODR can support conflict avoidance, dispute containment, and dispute resolution. Its general use can guarantee better contract execution and so enhance the

²⁹⁰ D.D. Basu, *Introduction to the Constitution of India*, 20 (LexisNexis, Haryana, India, 25th edn., 2021).

²⁹¹ Dr. Manirani Dasgupta, Cyber Crime in India: A Comparative Study 154 (Eastern Law House, 1st edn., 2009).

²⁹² Dr. A. Lakshminath & Dr. Mukund Sarda, "Digital Revolution and Artificial Intelligence: Challenges to Legal Education and Legal Research" *Bharati Law Review* 15 (July – September 2013).

Ease of Doing Business Ranking for India, thereby improving the legal health of the society. With time, the advantages of ODM and Digital Courts—that is, public court system technology—together can change the legal landscape overall.²⁹³

Therefore, participation in artificial intelligence or ALI could show success and could be the answer to the problems of the fast trial. Though the AI-based knowledge management techniques may help to integrate data for the analysis of decision-making scenarios to improve the production time of procedural components, the automation of service giving in counselling, and adjudication systems may help to integrate data for the analysis of decision-making scenario improvement.²⁹⁴

The way of functioning AI in the Judicial system is²⁹⁵:-

1. Collection of the case
2. Gone through the case and briefing
3. Summarization of the content
4. Analysis of the fact
5. Research of Precedent and case laws
6. Analysis for adjudication
7. Determination of settlement or punishment
8. Judgment

Figure 1

The way of functioning AI adjudicating a civil case:

Institution Stage

1.	Institution of Suit
2.	Issue of summons
3.	Service of summons to Defendant(s)
4.	Defendant Appear
5.	Written Statement by defendant

Figure 2

²⁹³ NITI Aayog Expert Committee on ODR, "Designing the Future of Dispute Resolution: the ODR Policy Plan for India", (October 2021).

²⁹⁴ Weslei Gomes de Sousa & Rafael Antunes Fidelis, *et. al.* "Artificial intelligence and speedy trial in the judiciary: Myth, reality or need? A case study in the Brazilian Supreme Court (STF)", 39 (1) *Government Information Quarterly* 3 (2022).

²⁹⁵ Parth Jain, "Artificial Intelligence for Sustainable and Effective Justice Delivery in India", 11 (6) *OIDA International Journal of Sustainable Development* 63-70 (2018); Also See, the Code of Civil Procedure, 1908 & the Code of Criminal Procedure, 1973.

Trial Stage

1.	Framing of Issues
2.	Evidence produced by Plaintiff
3.	Evidence produced by Defendant
4.	Argument

Figure 3

Judgment Stage

1.	Judgment or Decree or Order
2.	Review
3.	Appeal
4.	Execution

Figure 4

The way of functioning AI adjudicating a criminal case:

In Police Case

1.	Lodging First Information Report (F.I.R)
2.	Police Investigation
3.	Charge Sheet produced by the Investigating Officer (I.O.) of the case
4.	Record of all documents the case by proper Court
5.	Trial conducted by Public Prosecutor (PP)
6.	Inquiry by the Court on <i>prima facie</i>
7.	Discharged (if required after hearing of the submission by PP)
8.	Framing of Charge (if not discharged)
9.	Plead guilty by accused (then it will be recorded and judgment will be drawn)
10.	Prosecution Evidence production (if not pleaded guilty by the accused)
11.	Cross-examination of the Evidence by Prosecution
12.	Acquittal (If, after taking the evidence for the prosecution, examining the
	accused, and hearing the prosecution and the defense on the point, the Judge
	found no evidence against the accused)
13.	Statement of Accused
14.	Defense Evidence
15.	Argument
16.	Judgment and Order (Acquittal or Conviction)
17.	Jail or Probation
18.	Appeal

In Complaint Case

1.	Complaint before the Magistrate
2.	Examination of complaint and Inquiry by the Court
3.	Record the prima facie by Court on the basis of preliminary
	evidence produced by the complainant
4.	Framing of Charges
5.	Evidence produced by the complainant
6.	Accused statement
7.	Evidence produced by defence
8.	Argument
9.	Judgment and Order (Acquittal or Conviction)
10.	Jail or Probation
11.	Appeal

Figure 6

VI. CONCLUSION

True is that every new technology arrives and changes the surroundings for human life. Consequently, each person exhibits a variety of behavioural modifications and alterations. This process of transformation not only balances society, science, and technology but also the whole system of human civilization. Therefore, it also transforms globally and increases the extent and scope of human rights and practice. Human rights, then, are those minimal rights based on generally accepted standards and moral values that unite the people in the fabric of contemporary society. Those natural viewpoints of a human being define particular norms of human interaction inside and outside of society and government. Artificial intelligence-driven solutions clearly benefit people and communities, and AI is sometimes given the ability to transfer the decision-making process from humans to machines therefore empowering individuals and communities. ²⁹⁶ Surely, including artificial intelligence in the legal system will improve justice administration and help the people. Given the poor speed of adjudication in this biggest democracy, the court is generally under great demand. Therefore, the quick trial is not only a basic entitlement but also a civic obligation. T. S. Thakur, CJI. observed in *Anita Kushwaha v. Pushap Sudan*²⁹⁷ was the need for expediency in adjudication. A constitutional value, "access to justice" will only be a mirage if justice is slow. Delayed justice is famously said to be denied. It would be equivalent to a denial of not only access to justice but also justice itself if the process of administering justice is so time-consuming, labour-intensive, indolent, and frustrating for those who seek justice that it dissuades or deters from even considering resorting to that process as an option. Sheela Barse v Union of India²⁹⁸, P Bhagwati, J. proclaimed that fast trial is a component of the right to life since if a citizen's trial runs nonstop his right to life itself is violated. For ought we know that civil conflicts can at times have an equally, if not more severe impact on a citizen's life or the

 ²⁹⁶ Igor Shnurenko, Tatiana Murovana & Ibrahim Kushchu, "Artificial Intelligence Media and Information Literacy, Human Rights and Freedom of Expression" Ibrahim Kushchu & Tuba Demirel (Eds.) *TheNextMinds for the UNESCO Institute for Information Technologies in Education* 56 – 57 (2020).
 ²⁹⁷ (2016) 8 SCC 50.

²⁹⁸ JT 1986 136; Also See, Anita Kushwaha v. Pushap Sudan (2016) 8 SCC 50

Disruptive Technologies and the Law: Navigating Legal Challenges in an Era of Innovation E-ISBN: 978-93-6252-374-7 IIP Series ARTIFICIAL INTELLIGENCE AND INDIAN JUDICIAL SYSTEM: A CRITICAL ANALYSIS IN PERSPECTIVES OF SPEEDY TRIAL

quality of it. There is, therefore, jurisprudentially no qualitative difference between denial of speedy trial in a criminal case, on the one hand, and civil lawsuit, appeal or other proceedings, on the other. Therefore, access to justice would be a constitutional value of any relevance only if the citizen receives justice quickly; otherwise, the right to access to justice is merely an empty slogan of no purpose or inspiration for the citizen. In *Kadra Pehadiya* v. *State of Bihar*²⁹⁹ it was pointed out the decision of *Hussainara Khatoon (I)* and (*II*) held that speedy trial is a fundamental right of an accused implicit in Article 21 of the Constitution.

Therefore, artificial intelligence in legal systems is much sought after and rather helpful in solving this issue. Moreover, research and legal reasoning benefit much from the fast-analysing approach. Conversely, the issue may be whether the highly intelligent artificial human mind can replace the human mind and whether it will be justiciable. ³⁰⁰ The truth is that human intelligence cannot be replaced by any technology. There is no computerized model that can replace the creative intellect of people. AI or ALI systems will only be used to help human labour. Denial of this assisting hypothesis will be turned into non-justiciable. A thinking machine might be highly trained or programmed, for instance; never criticizes something new and not implemented in its system. Under such circumstances, the only and best choice available will be the human mind. Artificial intelligence, however, could assist courts in making decisions by providing objective, calculated opinions that thus guarantee the process of managing a great volume of litigations with quickness in rendering judgment.

REFERENCES

- [1] "Designing the Future of Dispute Resolution: the ODR Policy Plan for India", the NITI Aayog Expert Committee on ODR (October 2021).
- [2] "The Essential Eight technologies Board byte: artificial intelligence" Governance Insights Center Technology series Emerging technologies (December 2017).
- [3] "White Paper On Artificial Intelligence A European approach to excellence and trust" *EUROPEAN COMMISSION*, Brussels, 19.2.2020 COM (2020) 65 final.
- [4] Abdul Rehman Antulay v. R.S. Nayak 1992 AIR 1701: 1991 (3) Suppl. SCR 325;
- [5] Ajay Kumar Choudhary v. Union of India, CIVIL APPEAL No. 1912 of 2015
- [6] Anita Kushwaha v. Pushap Sudan (2016) 8 SCC 50
- [7] Bernd Carsten Stahl, "Artificial Intelligence for a Better Future: An Ecosystem Perspective on the Ethics of AI and Emerging Digital Technologies" *Springer, Cham* (First Edition, 2021), p. 7-8.
- [8] Bernd Carsten Stahl, "Artificial Intelligence for a Better Future: An Ecosystem Perspective on the Ethics of AI and Emerging Digital Technologies" *Springer, Cham* (First Edition, 2021).
- [9] D.D. Basu, "Introduction to the Constitution of India", *LexisNexis* (Twenty-fifth Edition, 2021).
- [10] Dr. A. Lakshminath & Dr. Mukund Sarda, "Digital Revolution and Artificial Intelligence: Challenges to Legal Education and Legal Research" *Bharati Law Review* (July September 2013).
- [11] Dr. Manirani Dasgupta, "Cyber Crime in India: A Comparative Study" Eastern Law House (First Edition, 2009).
- [12] Hussainara Khatoon v. Home Secretary, State of Bihar 1979 AIR 1369: 1980 SCC (1) 98
- [13] Hussainara Khatoon v. Home Secretary, State of Bihar, AIR 1979 SC 1360.
- [14] Hussainara Khatoon v. State of Bihar AIR 1979 SC 1364.

²⁹⁹ AIR 1981 SC 939.

³⁰⁰ Parth Jain, "Artificial Intelligence for Sustainable and Effective Justice Delivery in India", 11 (6) *OIDA International Journal of Sustainable Development*, 63 – 70 (2018).
³⁰¹ Id.

ARTIFICIAL INTELLIGENCE AND INDIAN JUDICIAL SYSTEM: A CRITICAL ANALYSIS IN PERSPECTIVES OF SPEEDY TRIAL

- [15] Igor Shnurenko, Tatiana Murovana & Ibrahim Kushchu, "Artificial Intelligence Media and Information Literacy, Human Rights and Freedom of Expression" Ibrahim Kushchu & Tuba Demirel (Eds.) *TheNextMinds for the UNESCO Institute for Information Technologies in Education* (2020) pp. 56-57.
- [16] Kartar Singh v. State of Punjab (1994) 3 S.C.C. 569
- [17] M.P. Jain, "Indian Constitutional Law", LexisNexis (Eighth Edition, 2020), p. 194.
- [18] Maneka Gandhi v. Union of India 1978 AIR 597
- [19] Mariam Khalid Alsedrah, "Artificial Intelligence," American University of Middle East, Middle East, Research DOI: 10.13140/RG.2.2.18789.65769, 2017;
- [20] OECD, Recommendation of the Council on Artificial Intelligence, OECD/LEGAL/0449
- [21] Pankaj Kumar v. State of Maharashtra, CRIMINAL APPEAL NO. 1067 of 2008.
- [22] Parth Jain, "Artificial Intelligence for Sustainable and Effective Justice Delivery in India", 11 (6) OIDA International Journal of Sustainable Development, (June 30, 2018), pp. 63-70, 2018; Also See, the Code of Civil Procedure, 1908 & the Code of Criminal Procedure, 1973.
- [23] Raffaele Cioffi, Marta Travaglioni, et. al., "Artificial Intelligence and Machine Learning Applications in Smart Production: Progress, Trends, and Directions", 12 Sustainability (January 2020).
- [24] Stephen M. McJohn, "Review of 'Artificial Legal Intelligence" 12 Harvard Journal of Law & Technology, 1998.
- [25] Vakil Prasad Singh v. State of Bihar (2009) 3 SCC 355: AIR 2009 SC 1822.
- [26] Weslei Gomes de Sousa & Rafael Antunes Fidelis, et. al. "Artificial intelligence and speedy trial in the judiciary: Myth, reality or need? A case study in the Brazilian Supreme Court (STF)", 39 (1) Government Information Quarterly, 2022.