Strengthening Protection of Artificial Intelligence in India: A New Emerging Trends in Intellectual Property Laws

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Abstract

Nowadays Artificial Intelligence is a very emerging technology in our life. It will change the lifestyle of everyone from the Technology Industry to normal people, their communities and society, almost entirely in ways that improve human health, safety and productivity. India has taken steps to encourage the responsible and inclusive development of AI for economic progress. The National strategy on AI document of 2018, released by India's NITI Aayog, Covers training, research and development, centers of excellence, data accessibility and high computing infrastructure. In this paper researcher is mainly focusing on the protection of artificial intelligence from legal point of view.

Key Words: Artificial Intelligence, NITI Aayog, the Information Technology Act 2000, Intellectual Property Rights, Regulatory Approach

Introduction

The development model in India includes a huge amount of technological advancement which includes Artificial Intelligence as well. The use of Artificial Intelligence is not limited to social media or entertainment but has accelerated from online shopping to the use of online car services, education; etc. the country saw a rapid change in technology. The issues in a developing country like India are of much more concern as it is the basic infrastructure which needs to be revised upon. However, there is no particular law to regulate Artificial Intelligence particularly in India. The existing laws do not cover the ambit of Artificial Intelligence and which are based on the conventional intellectual property types like books, creative writings and patents, discoveries etc.

Development across the World: History

Artificial intelligence was founded as an academic discipline in 1956, and in the years since has experienced several waves of optimism, followed by disappointment and the loss of funding followed by new approaches, success and renewed funding. Artificial Intelligence research has tried and discarded many different approaches during its lifetime, including simulating the brain, modeling human problem solving, formal logic, large databases of knowledge and imitating animal behavior. In the first decades of the 21st century, highly mathematical statistical machine learning has dominated the field, and this technique has proved highly successful, helping to solve many challenging problems throughout industry and academics. The field was founded on the assumption that human intelligence "can be so precisely described that a machine can be made to simulate it". This raises philosophical arguments about the mind and the ethics of creating artificial beings endowed with human-like intelligence. These issues have been explored by myth, fiction and philosophy since antiquity. Science fiction and futurology have also

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suggested that, with its enormous potential and power, Artificial Intelligence may become an existential risk to humanity. Artificial Intelligence Ross, developed by IBM, has been adopted many law firms worldwide, particularly in the USA and is primarily used to vet legal contracts, conduct legal research, and briefly summarize case laws etc.

Atabekov, O. Yastrebov 781 Bearing in mind the research results the authors would recommend to the Russian lawmakers to consider the following: The possibility of introducing a self regulation institute in the field of robotics, which will be able to develop standards and codes of conduct that are mandatory for owners and owners of robot agents to comply with, as well as by the robot agents themselves. The introduction of such an institution as the authorized body at the national level in the field of robotics that will be able to determine the types of activity acceptable for robots, taking into account the fact that the robot is a source of great danger.[2]

Meaning

The term "Artificial Intelligence (AI)" refers to activities that machines can complete without human involvement. The machine can be used in place of the term computer. Natural language processing, sentiment classification, detection and face recognition, risk evaluation, and detection of fraud are all examples of cognitive technologies. The industry may employ Artificial Intelligence to provide real-time data for supply chain monitoring and real-time notifications for manufacturing activities. [3]

Section 5002(3) of the National Artificial Intelligence Initiative (NAII) Act 2020 defines the term "artificial intelligence" as a machine-based system that can, for a given set of human-defined objectives, make predictions, recommendations or decisions influencing real or virtual environments.[4]

Artificial Intelligence (AI) is a phrase coined by John McCarthy, the father of Artificial Intelligence: Artificial Intelligence (AI) is a vast discipline of computer science whose purpose is to develop systems that can operate autonomously and intelligently.[5] It can be described as an intelligent machine capable of thinking, understanding, and acting on its own, as well as the ability to replicate certain human behavior. As a result, Artificial Intelligence is a system that has the capability and ability to solve problems that we humans would normally solve using our natural intelligence. To elaborate further, the goal of Artificial Intelligence development is to meet the need for and desire for automation in today's fast-paced human lives.[6]

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2 Yashi chowdhary, Artificial Intelligence And Laws In India, https://www.legalserviceindia.com/legal/article-8171-artificial-intelligence-and-laws-in-india.html,(visited on 22/7/2023).

3 JAKE FRANKENFIELD,Artificial Intelligence: What It Is and How It Is Used, https://www.investopedia.com/terms/a/artificial-intelligence-ai.asp,(Visited on 20.9.2023)

4 Assessing the Intelligence of the Artificial Intelligence in Law: Prospects in India, https://singhania.in/blog/assessing-the-intelligence-of-the-artificial-intelligence-in-law-prospects-in-india-,(vISITED on 23/9/2023)

5 Chhtrapati, D., Chaudhari, S. P., Mevada, D., Bhatt, A., & Trivedi, D. (2021). Research Productivity and Network Visualization on Digital Evidence: A Bibliometric Study. Science & Technology Libraries, 1–15. https://doi.org/10.1080/0194262x.2021.1948486

6 Prof. A. Lakshminath & Dr. Mukund Sarda, Digital Revolution and Artificial Intelligence- Challenges to Legal Education and Legal Research, CNLU LJ (2) (2011-2012).

The Oxford Dictionary defines Artificial Intelligence as "the theory and development of computer systems able to perform tasks normally requiring human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages.[7]

Artificial intelligence is defined as a science that aims to understand the nature of human intelligence through the work of a computer program, and the ability to simulate intelligent human behavior, and it means the ability of a computer program to solve a problem, or make a decision in a situation, that is, the program itself finds the method that should be followed to solve the issue or reach a decision to identify the similarities between different situations and adapt to emerging situations. Millions of sources of data can be protected, organized and unorganized, domestic and foreign. So much of this data can be used to develop personalized displays for customers.[8]

The advantages of Artificial Intelligence are as follows[9]:

Artificial Intelligence is the technology which is very helpful for human beings. By using this technology, the hard work of humans can escape. Artificial intelligence can be used in healthcare, education, in electronics, software development, pharmacies, games, engineering, communication and development. The phrase "human error" was born because humans are mistaking from time to time. Computers, however, don't make these mistakes if they're programmed properly. With Artificial Intelligence, the choices are taken from the previously gathered information applying a particular set of algorithms. So, errors are reduced and therefore the chance of reaching accuracy with a greater degree of precision may be a possibility. Some of the highly advanced organizations use digital assistants to interact with users which save the necessity for human resources. The digital assistants are also utilized in many websites to supply things that users want. We can chat with them about what we are trying to find. Some chat bots are designed in such how that it's become hard to work out that were chatting with a chatbot or a person's being.

Advantages as follows[10]:

  I. By using Artificial intelligence human work can be reduced; by replacing people by machines, people can do others works.
  II. Programming, self-writing, self-modifying etc. by these works man feels burden on him.
  III. Artificial intelligence is like cheap labor, and by using this labor our work will be fast, and the profit will be increased.
  IV. Machines do not require refreshments and breaks like human beings.
  V. The machines can be re programmed for work for long time without getting bored or getting tired.

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[7] Publisher: Oxford University Press 2nd edn, Print Publication Date:2005Print ISBN-13:9780198609810, Published online:2006 Current Online Version:2006DOI:10.1093/acref/9780198609810.001.0001eISBN:9780191727047,

[8] Mr. Sanjeev Ghanghash, INTELLECTUAL PROPERTY RIGHTS IN THE ERA OF ARTIFICIAL INTELLIGENCE: A STUDY REFLECTING CHALLENGES IN INDIA AND INTERTIONAL PERPECTIVE, http://s3-ap-southeast-1.amazonaws.com/ijmer/pdf/volume11/volume11-issue5(6)/12.pdf,(Visited on 14.8.2013)

[9] Advantages And Disadvantages Of Artificial Intelligence, https://www.researchgate.net/profile/Vinayak-Pujari-2/publication/344584269_Advantages_And_Disadvantages_Of_Artificial_Intelligence/links/5f81b70192851c14bcbc1d96/Advantages-And-Disadvantages-Of-Artificial-Intelligence.pdf,(Visited on 12.9.2023)

[10] *Id*

VI.   The science of robotics and artificial intelligence can be deployed into mining and other fuel exploration processes by this we can save human life because human can make new robots but we can't make that human.

VII.   Artificial intelligence can be deployed in industries and companies.

VIII.   Artificial Intelligence -driven automated cars can substitute for human error. Artificial Intelligence combined with the web of things can potentially generate smart cities with minimal pollution and improved traffic management.

Disadvantages as follows[11]:

I.   Artificial Intelligence is making humans lazy with its applications automating the bulk of the work. Humans tend to urge hooked into these inventions which may cause a drag to future generations.

II.   As Artificial Intelligence is replacing the majority of repetitive tasks and other works with robots, human interference is becoming less which may cause a significant problem within the utilization standards.

III.   Every organization is looking to exchange the minimum qualified individuals with Artificial Intelligence robots which may do similar work with more efficiency.

IV.   There is little question that machines are far better when it involves working efficiently but they can't replace the human connection that creates the team. Machines cannot develop a bond with humans which is an important attribute when involves Team Management.

V.   Machines can perform only those tasks which they're designed or programmed to try to, anything out of that they have a tendency to crash or give irrelevant outputs which might be a serious backdrop.

VI.   It is not easy to develop the machines because the equipment are also expensive. It can cost tons of cash and time to create, rebuild, and repair. Robotic repair can occur to scale back time and humans wanting to fix it, but that'll cost extra money and resources.

VII.   Robots, with them replacing jobs, can cause severe unemployment, unless humans can fix the unemployment with jobs AI can't do or severely change the govt to communism.

VIII.   There are a lot of disadvantages to using artificial intelligence in schools. The main one being that it takes out the thinking power from students and makes them more dependent on technology for everything instead of learning how to do things themselves.

Applications of Artificial Intelligence[12]

Artificial Intelligence has a big role in transportation; service robots; healthcare; education; low resource communities; public safety and security; employment and workplace; and entertainment etc.

Smarter cars[13]

GPS was introduced to personal vehicles in 2001 with in-car navigation devices and has since become a fundamental part of the transportation infrastructure. Current vehicles are also equipped with a wide range of sensing capabilities. An average automobile in the US is predicted to have seventy sensors including gyroscopes, accelerometers, ambient light sensors, and

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[11] *Id.*

[12] ARTIFICIAL INTELLIGENCE AND LIFE IN 2030 ONE HUNDRED YEAR STUDY ON ARTIFICIAL INTELLIGENCE | REPORT OF THE 2015 STUDY PANEL | SEPTEMBER 2016, https://cra.org/ccc/wp-content/uploads/sites/2/2016/09/ai_100_report_0916fnl_single.pdf,(Visited on 20/9/2023)

[13] *Id.*

moisture sensors. Automobiles built before 2000 had sensors for the internal state of the vehicle such as its speed, acceleration, and wheel position.

Health care[14]

Artificial Intelligence based applications could improve health outcomes and quality of life for millions of people in the coming years—but only if they gain the trust of doctors, nurses, and patients, and if policy, regulatory, and commercial obstacles are removed9. Poor human-computer interaction methods and the inherent difficulties and risks of implementing technologies in such a large and complex system have slowed the realization of Artificial Intelligence's promise in healthcare.

Education [15]

Artificial Intelligence have been used by teachers and educators around the world to improve student performance with their exceptional capabilities, such as being able to provide information constantly from a variety of sources and never forgetting anything. There is also increased use of Artificial Intelligence (AI) system usage in schools across different countries because it helps students become more efficient learners due to its comprehensive understanding abilities which allows them to access new knowledge quickly. The past fifteen years have seen considerable AI advances in education. Applications are in wide use by educators and learners today, with some variation between K-12 and university settings. Robots have long been popular educational devices, starting with the early Lego Mind storms kits developed with the MIT Media Lab in the 1980s. Many kinds of robots such as Ozobot and Cubelets teach and help children.

Domestic Service[16]

Robots have entered people's homes in the past fifteen years. Disappointingly slow growth in the diversity of applications has occurred simultaneously with increasingly sophisticated Artificial Intelligence deployed on existing applications. Artificial Intelligence advances are often inspired by mechanical innovations, which in turn prompt new Artificial Intelligence techniques to be introduced.

Public Safety and Security[17]

Artificial Intelligence may enable policing to become more targeted and used only when needed. And assuming careful deployment, Artificial Intelligence may also help remove some of the bias inherent in human decision-making. Cyber security (including spam) is a widely shared concern, and machine learning is making an impact. The cameras deployed almost everywhere in the world today tend to be more useful for helping solve crimes than preventing them.

The Niti Aayog in a discussion paper in 2018, described the importance of Artificial intelligence in healthcare, education, infrastructure etc. The benefit of such technology during pandemic was also recognized and it was suggested that Artificial Intelligence should be made to meet the criterion under the Indian Patent Act to facilitate faster operation in data processing, screening, publication, examination, medical support, hearings and application filing during pandemic. However, there is still a long road to follow. Not only do the laws need to be regulated but better infrastructure for the implication of such rules also needs to be determined.

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[14] *Id.*
[15] *Supra* Note 11.
[16] *Id.*
[17] *Id.*

The Protection of Artificial Intelligence: The Information Technology Act 2000

The Protection of Artificial Intelligence in the context of Law is very important. The use of Artificial Intelligence in civil proceedings, however, is particularly challenging in India. India's legal system is complicated and varied with a vast variety of laws, courts and legal procedures. It is important to carefully weigh the potential benefits and challenges of utilizing Artificial intelligence in this situation. Anyone commits crime through Artificial Intelligence, and then such crime will be filed under the information Technology Act 2000. Artificial Intelligence technology can cause harm or errors, which raises questions about who is responsible for the damage caused by such advanced technology. Also, Artificial Intelligence systems rely on vast amounts of data to function. Since, these data are very sensitive; therefore, it must be taken care through some specified law that can regulate the collection, processing, storage, and sharing of data to protect individuals' privacy and prevent data misuse. As such, an exclusive law needs to determine liability for Artificial Intelligence based harm or errors, including whether the responsibility lies with the Artificial Intelligence system creator, user, or both.

Section 43A & 72 A[18] :

India does not have specific laws for data protection, but personal information is safeguarded under Section 43A and Section 72A of The Information Technology Act. It gives a right to compensation for improper disclosure of personal information like GDPR.

Artificial intelligence: Intellectual Property Rights in India

Under the Patents Act of 1970, computer programs, business methods or mathematical formulas are not considered as patentable inventions. Furthermore, the terms 'patentee' under Section 2 (p) of the said Act and 'person interested' under section 2 (t) of the said Act creates a barrier to include Artificial Intelligence in its scope. The Act specifically terms out the patentee of any other person interested in being human. [19]

Under the Copyright Act, there are two basic doctrines which define the originality of the work under this Act, "Sweat of the Brow Doctrine" and "Modicum of Creativity". Since the doctrine states that a minimum degree of creativity is also acceptable, the original work of Artificial Intelligence can be included in it. However, the rights of copyright are given to the 'author' of the work done under section 2 (d) of the Act. Author in this act has been implied to be a human or legal person, thus, making the idea of machine to be protected under this act restricted.

The current regime and laws are not in consonance with the upcoming and even existing dynamics of technology. In case of failure due to confusion or misunderstanding of Artificial Intelligence, there are various questions such as who will be made liable? Can the liability be shifted to the user? Furthermore, any new invention based on same algorithm or same concept may hamper with the rights of the original owner. This becomes a serious issue. On one hand, it can discourage the start-ups from being inventive and thus, ruining the whole purpose and existence of Intellectual Property Rights in the first place and on the other hand it can cause a series of litigation and chaos in the Intellectual Property Rights sector.

Implication of use of Artificial intelligence by enhancing productivity, accuracy, and justice access, the application of Artificial Intelligence in civil matters in India has the potential to completely alter the way the judicial system operates. However, there are certain moral and legal issues that must be resolved, such as prejudice and discrimination, a lack of openness, issues with privacy, job losses, and access to justice. To make   sure that Artificial Intelligence are

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[18] Section 43A & 72 A of The Information Technology Act 2000
[19] 2(p) and 2(t) of The Patent Act 1970

created and used in a way that supports fairness, accountability, and social justice, legislator, the legal community and technologist must collaborate.

Regulatory Approach towards Artificial Intelligence: Indian Perspective

Artificial Intelligence has many potential benefits for society, such as improving healthcare, education, transportation and entertainment. However, the concept of Artificial Intelligence poses challenges and risks, such as ethical dilemmas, privacy violations, bias, discrimination and security threats. To address these challenges and risks, a global group of Artificial Intelligence experts and data scientists has released a new voluntary framework for developing artificial intelligence products safely. The World Ethical Data Foundation has 25,000 members, including staff at tech giants such as Meta, Google and Samsung. The framework contains 84 questions for developers to consider at the start of an AI project. However, with a surge in usage of Artificial Intelligence, there is a growing need to have exclusive legislation for the regulation of Artificial Intelligence for eliminating in built or acquired bias and to address ethical concerns while using it.

As rightly pointed out by a leading tech journalist Zinnia Banerajee "India is part of The Global Partnership on Artificial Intelligence[20] is an international initiative to support responsible and human centric development". India has moved up the ladder and taken the GPAI Council Chair position as of this November. Virtually representing India at the GPAI meeting in Tokyo for the symbolic handover from France was Rajeev Chandra, Minister of State for Electronics and Information Technology.

Currently, there are no specific laws in India with regard to regulating Artificial Intelligence. The Ministry of Electronics and Information Technology, the executive agency for Artificial Intelligence related strategies, recently constituted four committees to bring in a policy framework for Artificial Intelligence. The Niti Aayog has developed a set of seven responsible AI principles, which include safety and dependability, equality, inclusivity and non-discrimination, privacy and security, transparency, accountability, and the protection and reinforcement of positive human values. These principles are expected to protect the public interest while also encouraging innovation through increased trust and adoption.

In 2020, NITI Aayog prepared documents based on launching a supervising body and enforcement of Artificial Intelligence principles that covered the following key aspects:

a. Representing India on a global standard.
b. Evaluating and employing principles related to Artificial Intelligence.
c. Forming legal and technical work.
d. Specific standards to be set through clear design, structure and process.
e. Educating individuals and making them aware about responsible Artificial Intelligence.
f. Creating new tools and techniques for Artificial Intelligence.

Critical Study

Artificial intelligence is the result of human creativity, which present big opportunity and potential risks for countries around the global, and India is no exception. The government of India establishes the NITI Aayoga, its apex public policy think tank, with establishing guidelines and policies for the development and use of AI (In the year 2018). Government of India also recently enacted a new privacy law, the Digital personal Data protection Act in 2023, which it can leverage to address some of the privacy concerns concerning AI platforms. But lacuna of

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[20] The Chair of the Global Partnership on Artificial Intelligence (GPAI),

protection of At in India, is the "Law". In India there is no specific law on AI with respect to exclusive rights, infringement, liability, and offence concerned.

Conclusion

Artificial Intelligence has become an integral part of human life. Artificial Intelligence is a technology which is moving at a fast pace and it is crucial to examine and analyses the issues and challenges which might surface with it. With the use of Artificial intelligence, data can be modified or collected in a much better and time efficient manner. Usage has boomed with the use of new technological tools. Therefore, there is an urgent need to make proper laws concerning the same. Presently, through the interpretation of the courts the issues involving Artificial Intelligence and Intellectual Property Rights are being addressed. But there is a need for structured, analyzed and clear rules and regulations. Amendments should be made in existing Intellectual Property Rights laws to address the issue of Artificial intelligence as well. With the use of Artificial Intelligence, there can be more benefits for future inventions. India has been potentially looking forward for ways to do.