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Megha Middha, is working as an Assistant Professor of Law in Mody University of Science and Technology, Lakshmangarh, Sikar (Rajasthan). She has an experience in the teaching of almost 3 years. She has completed her graduation in BBA LL.B (H) from Amity University, Rajasthan (Gold Medalist) and did her post-graduation (LL.M in Business Laws) from NLSIU, Bengaluru. Currently, she is enrolled in a Ph.D. course in the Department of Law at Mohanlal Sukhadia University, Udaipur (Rajasthan). She wishes to excel in academics and research and contribute as much as she can to society. Through her interactions with the students, she tries to inculcate a sense of deep thinking power in her students and enlighten and guide them to the fact how they can bring a change to the society

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Avinash Kumar



Avinash Kumar has completed his Ph.D. in International Investment Law from the Dept. of Law & Governance, Central University of South Bihar. His research work is on "International Investment Agreement and State's right to regulate Foreign Investment." He qualified UGC-NET and has been selected for the prestigious ICSSR Doctoral Fellowship. He is an alumnus of the Faculty of Law, University of Delhi. Formerly he has been elected as Students Union President of Law Centre-1, University of Delhi. Moreover, he completed his LL.M. from the University of Delhi (2014-16), dissertation on "Cross-border Merger & Acquisition"; LL.B. from the University of Delhi (2011-14), and B.A. (Hons.) from Maharaja Agrasen College, University of Delhi. He has also obtained P.G. Diploma in IPR from the Indian Society of International Law, New Delhi. He has qualified UGC - NET examination and has been awarded ICSSR - Doctoral Fellowship. He has published six-plus articles and presented 9 plus papers in national and international seminars/conferences. He participated in several workshops on research methodology and teaching and learning.

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INVESTIGATING THE RISE, VARIED APPLICATIONS, AND WORLDWIDE EXPANSION OF AI, WITH EMPHASIS ON CHATGPT: WITH SPECIAL MENTION TO EU'S AI REGULATION

Authored By - Seathal Devi

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

- Gray Scott

Abstract

Artificial intelligence (hereinafter "AI") is one of the vital human inventions that are used by many of us in our day-to-day lives, either professionally or personally. A wide range of areas, like healthcare, energy consumption, climate change, financial risk management, etc., were using AI to make their work easier. For example, AI, including Machine Learning (hereinafter "ML"), Deep Learning (hereinafter "DL"), Natural Language Processing (hereinafter "NLP"), and Robotic Process Automation (hereinafter "RPA"), aids healthcare tasks: analyzing diverse data, reports, medical images like X-rays, scans, ECGs, MRIs, etc., from multiple organizations. Many of the AI supporters trust that it does the equivalent work of an activated human brain, monastically. However, few of its vibrant promoter's state that AI can perform many tasks better than humans. Hence, it needs to be regulated to ensure that it is used in a legal, ethical, moral, and appropriate way. In this research, the evolution, usage, advantages, latest developments like Chat-GPT, and implications of AI are listed out, along with the governance of AI by the European Union (hereinafter "EU"), which includes a detailed study of the AI Act, which is to be the first ever legislation for the enforcement of AI. In this research, the true nature of AI is going to be analysed, and a legal conclusion is going to be given about whether AI has to be regulated or not.

Introduction

The law is a gadget that regulates everything in an orderly manner. The law has the power to ensure the safety and security of every act that is happening around us. Without proper study and regulation of societal event, it is impossible to detect anomalies and inconsistencies in society. The same applies to the people using AI. This unexhaustive AI has been evolving since 1940. It

has an enormous capability corresponding to that of a human brain, which could analyse large amounts of data, much faster and more accurate than humans. AI can also perform repetitive tasks without getting exhausted or making errors. New tools of AI have been increasingly invented day by day. According to a survey by Klynveld Peat Marwick Goerdeler (hereinafter “KPMG”), the adoption of AI is increasing across every sector, including industrial, technology, and retail¹. In many countries, AI tools reach many citizens with easy access. So, it is highly prone to risks such as misusing, hacking, committing any crime, violations of fundamental rights, threats to data protection, etc. Hence, there is an urgent need for regulation of these AI tools and the launching stakeholders or companies to ensure that data is protected, and AI is not used for any unethical use, or will not decrease any job opportunities or intellectual capabilities of humans. Even though AI has been developing since 1940, in many developed countries, they are still at the beginning stage of its regulation.² Many developing countries does not even start to regulate AI, yet AI has been evolving dynamically. This research aims to analyze the inherent characteristics of AI and provide a legal verdict on whether regulation of AI is necessary. This research also takes a comprehensive approach by examining EU’s AI regulation with the first ever AI Act.

Objectives

- To figure out the real nature and scope of AI.
- To analyse the economic, social, and legal advantages and disadvantages of AI tools.
- To examine the expeditious evolution of AI, in various field including Chat-GPT.
- To study how developed countries like the EU regulate AI.
- To examine whether all countries, especially those with a high market for AI, need proper regulation.

Preface to AI

AI is an intellectual knowledge that is capable of studying, analysing, planning, creating, and storing various information via an artificially man-made device, and the purpose of its invention is to assist humans in various ways, either mechanically or intellectually. It is also capable of taking decisions in any specific situation and can also synthesise various pieces of information in an orderly manner from various sources. Russell & Norvig rightly expressed as “defining the AI

¹Embracing the rapid pace of AI, available at: <https://www.technologyreview.com/2021/05/19/1025016/embracing-the-rapid-pace-of-ai/> (Visited on June 20, 2023).

is not easy; in fact, there is no generally accepted definition of the concept".³

The Merriam-Webster Dictionary defines intelligence as the ability to learn, understand, or deal with new or trying situations.⁴ It additionally characterizes AI as a field within computer science that focuses on simulating intelligent behavior in computers.⁵ Many of us will have the opinion that AI is a new form of technological development, but it is a very longstanding idea that actually originated in the 1940s as a way to describe human intelligence in a machine.⁶

However, the formal discussion was made at a conference at Dartmouth College in Hanover, New Hampshire, in 1956, where the term "AI" was coined by John McCarthy, one of the "founding fathers" of AI, together with Alan Turing, Marvin Minsky, Allen Newell, and Herbert A. Simon.⁷

How AI works: Inspired by the human brain

The core idea behind the working of AI is mirroring human intelligence, as AI's ultimate aim is to mimic humans and exert an effective intelligence beyond human's natural intelligence without getting exhausting. AI functions akin to a human child's brain, learning without comprehensive interpretation. Similar to how a child absorbs messages, AI stores and repeats, accumulating experience to shape future thinking. The same applies to machines that are programmed with AI. It has two essentials: an internal way of representing the information and transforming that information into the anticipated output.⁸ These two activities happen in a repetitive way, and as a result, an AI device would gain experience and become capable of exhibiting its own intelligence or making relevant decisions in a given situation. Machines could do this better than humans, as they are capable of storing larger amounts of data and are also capable of speedy recollection of particular data when required. For this process, AI adopts ML⁹, by which they gather the input, handle it, and understand it.¹⁰ An advanced form of ML is deep learning via artificial neural networks, which is used to deduct large numbers of samples or big data.¹¹

³ Philosophy of artificial intelligence, *available at*:

https://en.wikipedia.org/wiki/Philosophy_of_artificial_intelligence, (Visited on June 22, 2023).

⁴ Intelligence, *available at*: <https://www.merriam-webster.com/dictionary/intelligence> (Visited on June 22, 2023).

⁵ AI, *available at*: <https://www.merriam-webster.com/dictionary/artificial%20intelligence> (Visited on June 22, 2023).

⁶ Tanya Lewis, "A Brief History of AI", LiveScience, Dec. 5, 2014.

⁷ Dartmouth Conference, AI in 1956 and Reflections After 50 Years, *available at*: <https://kikaben.com/dartmouth-conference-ai-in-1956/>, (Last Modified June 16, 2023).

⁸ Jan De Bruyne and Cedric Vanleenhove (eds.), *Artificial Intelligence and The Law*, 4, (Intersentia Ltd, UK).

⁹ Tom M. Mitchell, *Machine Learning*, 14-16, (McGraw-Hill, USA, 1997).

¹⁰ Jan De Bruyne and Cedric Vanleenhove (eds.), *Artificial Intelligence and The Law*, 1, (Intersentia Ltd, UK).

¹¹ Jan De Bruyne and Cedric Vanleenhove (eds.), *Artificial Intelligence and The Law*, 7, (Intersentia Ltd, UK).

AI devices also use algorithms and the Internet of Things (*hereinafter* “IOT”) to exhibit the functions of smart devices and share information among other AI devices.¹² Beyond these AI applications, functions like search algorithms and computer vision analyze virtual data. NLP aids human interaction via automatic speech recognition. Autonomous agents engage with users, performing tasks for humans or other programs.¹³

Applications of AI in Various Fields

AI is used in various fields, as it is not restricted only to computer applications. The uses are as follows: -

1. Transportation

In the case of transportation, the future is predicted to be completely dependent upon driverless vehicles with a high-tech computer program algorithm. The dependence on gasoline will also be reduced. According to Statista, autonomous vehicles are expected to grow between 2019 and 2030.¹⁴ By 2030, it is estimated that approximately 58 million units of these vehicles will be sold globally.¹⁵ The top five countries in the world, such as the US, Japan, France, the UK, and Germany¹⁶, support the launch of AI-installed automated vehicles.

2. Robots

AI robots are a combination of software, a mathematical algorithm, and a mechanical part that work concurrently. They are examples of cyberphysical systems. Robots not only include humanoid robots but also self-driving cars, drones, and other smart devices. They work much more accurately and quickly than humans without getting drained. There are various differences between using a normal machine and an AI machine for work. A normal machine cannot deduce anomalies, whereas the AI can deduce them and can resolve them even in the absence of human monitoring. These are more useful for

¹² Rajiv Malhotra, *Artificial Intelligence and the future of the power*, 43, (Rupa Publications India Pvt. Ltd, New Delhi 110002, 1st edn., 2021).

¹³ Jan De Bruyne and Cedric Vanleenhove (eds.), *Artificial Intelligence and The Law*, 11-14, (Intersentia Ltd, UK).

¹⁴ Projected sales of autonomous vehicles worldwide from 2019 to 2030, available at: <https://www.statista.com/statistics/1230733/projected-sales-autonomous-vehicles>, (Visited on June 24, 2023).

¹⁵ Projected sales of autonomous vehicles worldwide from 2019 to 2030, available at: <https://www.statista.com/statistics/1230733/projected-sales-autonomous-vehicles>, (Visited on June 24, 2023).

¹⁶ The top five best-equipped countries to support autonomous vehicles – Who’s leading the self-driving revolution?, available at: <https://electrek.co/2022/03/04/the-top-five-best-equipped-countries-to-support-autonomous-vehicles> (Visited on June 24, 2023).

industrial purposes than household purposes. However, recent advances in AI are leading to the emergence of a new class of robot. In the next five years, our households and workplaces will become dependent on robots.¹⁷

3. Healthcare

Through ML, DL, analysis of big data, and Computer Vision, AI plays a major role in the healthcare sector. Health organisations have accumulated big data sets in the form of health records and images, population data, claims data, and clinical trial data, which helps in assisting, diagnosing, and monitoring the patient.¹⁸ For example, during the COVID pandemic, AI chatbots were used to find the right for treating COVID patients.¹⁹ Many countries, like the USA, China, the UK, Israel, India, Finland, and Germany, are supporting the development of AI in healthcare via funding for AI-research.²⁰

4. Public safety

An AI algorithm is used in surveillance cameras for facial recognition, to identify traffic violations, allow for more resourceful allocation of policing through crime predictions, and to deduct any anomalies in human behavior on public roads and streets. Smart programs like biometrics, smart cameras, and video surveillance systems are installed on the streets to ensure public safety.²¹

5. Legal Field

Since 1956, AI has been used in the field of law, where logic was introduced as a tool for drafting and interpreting legal documents.²² AI is being used in the legal field to draft contracts, guess legal outcomes, acclaim judicial decisions about sentencing or bail, perform due diligence to uncover background information, generate results that forecast litigation outcome, and use data points from past case law, win/loss rates, and a judge's

¹⁷ These 5 robots could soon become part of our everyday lives, *available at*: <https://www.weforum.org/agenda/2022/02/robots-future-tech/> (Visited on June 24, 2023).

¹⁸ What is artificial intelligence in healthcare?, *available at*: <https://www.ibm.com/topics/artificial-intelligence-healthcare>, (Visited on June 25, 2023).

¹⁹ A.S. Miner et al, 'Chatbots in the fight against the COVID-19 pandemic', III, *Digital Medicine*, 1–4, (2020).

²⁰ Indiaai, Report: Artificial Intelligence in Healthcare Sector, (November 2022).

²¹ Christopher Rigano, "Using Artificial Intelligence to Address Criminal Justice Needs", *Mckinsey*, Mar. 10, 2020.

²² L.E. Allen, 'Symbolic logic: A razor-edged tool for drafting and interpreting legal documents', *LXVI, Yale L.J.*, 833–879, (1957).

history to be used for trends and patterns.²³ Apart from this, with regard to dispute resolution, Quantitative or algorithmic legal prediction (*hereinafter* “QLP”) is used, which uses the techniques of ML and NLP to make a legal analysis of a particular case.²⁴ QLP can help lawyers and judges make more informed decisions by providing them with data-driven insights into the likely outcomes of legal cases. There are many QLP applications, which include Correctional Offender Management Profiling for Alternative sanctions. (*hereinafter* “COMPAS”)²⁵ is a decision support tool used by many States in the US that assesses the likelihood of recidivism in a criminal defendant. The Harm Assessment Risk Tool (*hereinafter* “HART”) performs a similar function as that of COMPAS, yet it employs a method called random forests, a form of ML used by the Durham Constabulary in the United Kingdom.²⁶ These tool lists are not exhaustive. Apart from these tools, there are many others that are used to obtain quick legal advice, improve the efficacy of many daily tasks of advocates, find proper issues in each case of facts, or predict the cost of damages or compensation in a particular case. Yet, there are many disadvantages to the use of these AI tools. High risk is involved if these tools are fed biased or wrongful information, which in turn gives biased results. They are also prone to hacking, and it can be difficult to interpret the results of QLP models because they are often based on complex algorithms that are difficult to understand.²⁷

Recent Developments in AI: Chat-GPT

AI's evolution began in 1940. The inaugural program, Logic Theorist (1955), by Simon and Newell, proved mathematical theorems effectively.²⁸ AI was also applied to some games, such as Nim, checkers, and chess, in the early years of its development, around the 1970s.²⁹ Nevertheless, following 1970, symbolic algorithms and expert systems, alternatively referred to as knowledge

²³ Law Bots: How AI Is Reshaping the Legal Profession, *available at*: <https://businesslawtoday.org/2022/02/how-ai-is-reshaping-legal-profession/>, (Visited on June 25, 2023).

²⁴ J. Hafner et al., “Quantitative Legal Prediction - or - How I Learned to Stop Worrying and Start Preparing for the Data-Driven Future of the Legal Services Industry,” XXVII, *Artificial Intelligence and Law*, 337-359, (2019).

²⁵ COMPAS (software), *available at*: https://en.wikipedia.org/wiki/COMPAS_%28software%29, (Visited on June 25, 2023).

²⁶ UK police are using AI to inform custodial decisions – but it could be discriminating against the poor, *available at*: <https://www.wired.co.uk/article/police-ai-uk-durham-hart-checkpoint-algorithm-edit>, (Visited on June 25, 2023).

²⁷ The advantages and disadvantages of AI in law firms, *available at*: <https://venturebeat.com/datadecisionmakers/the-advantages-and-disadvantages-of-ai-in-law-firms/>, (Visited on June 25, 2023).

²⁸ History of Artificial Intelligence – AI of the past, present and the future!, *available at*: <https://data-flair.training/blogs/history-of-artificial-intelligence/>, (Visited on June 26, 2023).

²⁹ “A Brief History of Artificial Intelligence” *Live Science*, Dec. 5, 2014.

systems, were created with the ability to encode and manipulate knowledge specific to particular domains.³⁰ From 1990, practical adoption of machine learning and deep learning enables machines to enhance performance through data-based learning.³¹ At present, we are at the advanced stage of developing generative AI. Generative AI is a type of AI structure that is capable of generating something in the system programmed with Large Language Models (LLM), for example, text, code, image, video, etc. Even though generative AI tools have been launching since the 1960s, like ELIZA³², Teaser AI³³, Studio Bot³⁴, etc. At present, Open AI, a non-profit research company, has created Chat-GPT, a generative AI tool that is expected to revolutionise the economy of the world as it has many special features, in the Open AI research lab based in San Francisco, CA.³⁵ The term Chat-GPT has a meaning that is syllabified into Chat (which means chatbot) and GPT (which means Generative pretrained transformer). Chat-GPT excels in human-like responses to natural language. It answers questions, generates text, translates languages, aids grammar, provides info, assists in creative tasks, automates repetitive chores, and engages in conversation. Chat-GPT is subject to a content policy that states that it cannot provide assistance with illegal activities, including harm, or any form of criminal behavior. It cannot provide assistance or advice that may pose a risk to an individual's well-being, including self-harm, suicide, or harm to others. It aims to use language that is respectful, inclusive, and free from discrimination or offensive content, and cannot generate or promote hate speech, discrimination, or any form of harassment. It can create graphics, music, programmes, and images if fed with proper input.³⁶ It mainly helps entrepreneurs and investors.³⁷ Chat-GPT streamlines customer service and sales, cutting costs. Students and graduates use it for presentations and job readiness, enhancing employability. It analyzes stocks, but overuse may impact human creativity, values,

³⁰ Timeline of AI: a brief history of artificial intelligence it's highlights, *available at:* <https://www.ai.nl/artificialintelligence/timeline-of-ai-a-brief-history-of-artificial-intelligence-its-highlights/>, (Visited on June 26, 2023).

³¹ Evolution of Artificial Intelligence, *available at:* <https://inlocrobotics.com/en/evolution-of-artificial-intelligence/>, (Visited on June 26, 2023).

³² Josh Fruhlinger, What is generative AI? The evolution of artificial intelligence, *Infoworld*, (2023).

³³ Teaser AI: Can Generative AI Solve the Ghosting Problem in Online Dating?, *available at:* <https://www.thequint.com/tech-and-auto/tech-news/teaser-ai-dating-app-chatbot>, (Visited on June 25, 2023).

³⁴ Generative AI, *available at:* <https://ai.google/discover/generativeai>, (Visited on June 25, 2023).

³⁵ Matthew Kupfer, "I Tried to Visit OpenAI's Office. Hilarity Ensued", *The San Francisco Standard*, Dec. 20, 2022.

³⁶ Thomas H. Davenport and Nitin Mittal, How Generative AI Is Changing Creative Work, *Harvard Business Review*, (2023).

³⁷ ChatGPT is about to revolutionize the economy. We need to decide what that looks like, *available at:* <https://www.technologyreview.com/2023/03/25/1070275/chatgpt-revolutionize-economy-decide-what-looks-like/>, (Visited on June 25, 2023).

and intellectual recognition.³⁸

It also has many limitations, as it sometimes creates plausible-sounding but incorrect or nonsensical answers. It also has a tendency to provide inaccurate information confidently as it is updated to September 2021. For example, if you asked chat-GPT when it got launched, it would probably give a response, as *I, as an AI language model known as GPT-3.5, was launched by OpenAI in June 2020*. But to the real fact, the Chat-GPT was launched by Open AI on November 30, 2022.³⁹ In addition to this, it has the risk of privacy issues and may also be prone to hacking. There is also a high expectation in society that these generative AI tools like chat-GPT would decrease job opportunities, as they have various abilities to give human-like responses to any natural language input.

Despite the above criticisms, chat-GPT, being a tool that could quickly generate high-quality contents, is being used by many in the world. As per statistics, chat-GPT is being used by over 100 million users.⁴⁰ It has created a record as it reached 1 million users within 5 days, which has never happened so far in history. Other famous applications such as Instagram, Facebook, and Netflix reached 1 million users in 2.5 months, 10 months, and 3.5 years, respectively.⁴¹ It is predicted that the revenue of Open AI will be \$200 million by the end of 2023, and it will reach up to \$1 billion by the end of next year.⁴² Chat-GPT is available in 56 countries.⁴³ Out of that, 37 were developed countries, 16 were developing countries with high populations, including India and China, and it has not even launched in one under-developed country. Also, Open AI, being a non-profit research company, has targeted countries with a high population in order to obtain a high number of users.

³⁸ ChatGPT is about to revolutionize the economy. We need to decide what that looks like, *available at*: <https://www.technologyreview.com/2023/03/25/1070275/chatgpt-revolutionize-economy-decide-what-looks-like/>, (Visited on June 25, 2023).

³⁹ ChatGPT, *available at*: <https://en.wikipedia.org/wiki/ChatGPT>, (Visited on June 25, 2023).

⁴⁰ Number of ChatGPT Users (2023), *available at*: <https://explodingtopics.com/blog/chatgpt-users>, (Visited on June 25, 2023).

⁴¹ Number of ChatGPT Users (2023), *available at*: <https://explodingtopics.com/blog/chatgpt-users>, (Visited on June 25, 2023).

⁴² Jeffrey Dastin, Krystal Hu and Paresh Dave, "Exclusive: ChatGPT owner OpenAI projects \$1 billion in revenue by 2024", *Reuters*, Dec. 15, 2022.

⁴³ Chat GPT Available Countries List, *available at*: <https://chatgptdetector.co/what-countries-is-chat-gpt-available/>, (Last Modified March 29, 2023).

Recent developments in Chat-GPT: Chat-GPT-4

The chat-GPT was launched on 22, November 2022 by the open AI. Within four months it has undergone enormous changes and updates. Now we have the advanced version of chat-GPT i.e., Chat-GPT 4. The main difference between chat-GPT and chat-GPT 4 is that, earlier version of Chat-GPT accepts only text as its input, whereas the latest version accepts images, text, and also have the capability of returning textual responses.⁴⁴ This latest version was launched on 14th March 2023 by the Open AI.⁴⁵ Within the span of this four months, many versions of chat-GPT, like 3, 3.5 were also launched.⁴⁶ The chat-GPT 4 can do various tasks that the earlier versions failed to do, including chat-GPT 3.5. chat-GPT 3.5 is a text-to-text model, whereas chat-GPT 4 is a data to text model, which means that it can generate text by analysing the data.⁴⁷ In addition to this chat-GPT 4 can also translate up to 26 languages for the valid input.⁴⁸ Distinguishing versions relies on parameters, machine learning model variables for data adjustment. Neural networks' weights and biases are parameters. Previous ChatGPT updated to September 2021, while ChatGPT-4 incorporates current data. Bing AI, also known as Bing Chat, is an AI chatbot developed by Microsoft and released in 2023.⁴⁹ Bing AI, based on OpenAI's GPT-4, functions as a chat tool akin to ChatGPT 4. Its Image Creator is multilingual.

Does AI needs regulation?

AI's swift advancement, like OpenAI's ChatGPT, brings potential and peril. AI tools enhance efficiency yet may displace jobs. However, they could also generate fresh roles, facilitating cost-effective product innovation. Balancing these impacts becomes crucial in harnessing AI's potential.⁵⁰ So, as a result, the implication of AI tools is uncertain in reality. Only regulation will bring a clarity to it and these regulations should be built in such a way, making AI tools to be benefited in a positive way. Also on the other side, they are vital for the economic growth of the country.⁵¹

⁴⁴ GPT-4 vs. ChatGPT: An exploration of training, performance, capabilities, and limitations, *available at*: <https://towardsdatascience.com/gpt-4-vs-chatgpt>, (Visited on June 25, 2023).

⁴⁵ GPT-4, *available at*: <https://en.wikipedia.org/wiki/GPT-4>, (Visited on June 25, 2023).

⁴⁶ WHO OWNS OPENAI CHATGPT AND WHEN DID IT LAUNCH?, *available at*: <https://www.hitc.com/en-gb/2022/12/07/who-owns-openai-chatgpt-and-when-did-it-launch/>, (Visited on June 25, 2023).

⁴⁷ Eric Griffith, "GPT-4 vs. ChatGPT-3.5: What's the Difference?", *PC*, Mar. 16, 2023.

⁴⁸ Eric Griffith, "GPT-4 vs. ChatGPT-3.5: What's the Difference?", *PC*, Mar. 16, 2023.

⁴⁹ Microsoft Bing, *available at*: https://en.wikipedia.org/wiki/Microsoft_Bing, (Visited on June 25, 2023).

⁵⁰ Marcin Frąckiewicz, "The Economics of Chat GPT-4: Analyzing the Financial Implications of Advanced AI", *TS2*, Mar.16, 2023.

⁵¹ Chia-Hui Lu, "The impact of artificial intelligence on economic growth and welfare", *Journal of Macroeconomics*, LXIX 3 (2021).

AI's boundaryless, algorithmic nature and non-personhood pose regulatory challenges. Government oversight of stakeholders and companies becomes crucial to address anomalies. Another risk is that even the manufactures, are not aware of the result of the AI technology.⁵² If this above fact was taken into consideration, then even the stakeholders and companies launching AI cannot be blamed if it was misused or went uncontrollable. There is also a risk of probable human rights violation and as a responsible government, it has to ensure the rights of its citizens. Sophisticated AI systems often produce authentic content but may err by generating incorrect or copyrighted material, violating intellectual property rights. Thus, advocating government regulation for AI becomes reasonable.

The EU's attempt of regulating AI- The AI Act

The EU Commission proposed the AI Act on April 21, 2021.⁵³ The Act has attempted to define AI, which has much clarity in it.⁵⁴ This act has adopted the risk-based regulation of AI, which means that the Act classifies AI tools or applications based on the nature of the risk they can cause to society. The AI applications are classified as either unacceptable risk, high risk, limited risk, minimal risk, or no risk.

Unacceptable risk tools, labeled as banned applications, pose human dangers. These encompass voice-activated toys, discriminatory social scoring devices, and real-time biometric systems, such as facial recognition.⁵⁵

The applications with high risk are as follows:

- Biometric identification refers to the techniques that are used to identify human fingerprints: facial recognition, voice recognition, vein scanning, and iris scanning.⁵⁶ These are also used for the categorization of natural persons. These can be dangerous when coupled with AI, as they store valuable human data of humans.⁵⁷

⁵² Diksha Munjal, "Explained | What is the EU's Artificial Intelligence Act and how does it plan to rein in tech like ChatGPT?", *TH*, May.3, 2023.

⁵³ Artificial intelligence act, available at: <https://www.europarl.europa.eu/>, (Visited on July 1, 2023).

⁵⁴ Benjamin Mueller, "The Artificial Intelligence Act: A Quick Explainer", *Datainnovation*, May.4, 2021.

⁵⁵ EU AI Act: Risk Categories, available at: <https://www.mhc.ie/hubs/>, (Visited on July 1, 2023).

⁵⁶ AI-Powered Biometric Authentication, available at <https://www.iotforall.com/press-releases/ai-powered-biometric-authentication>, (Visited on July 2, 2023).

⁵⁷ EU AI Act: first regulation on artificial intelligence, available at <https://www.europarl.europa.eu/news/en/headlines/society/20230601STO93804/eu-ai-act-first-regulation-on-artificial-intelligence>, (Visited on July 2, 2023).

- Management and operation of critical infrastructure to ensure the security of the Nation and the public.⁵⁸
- Education and occupational training for the AI.
- AI in Health Care.
- Enforcement of Legal Actions and the justice delivery system.
- Migration and border control management This involves identity management, Border Management Information Systems (BMIS), Integrated Border Management (IBM), and Humanitarian Border Management (HBM).⁵⁹
- Assistance in the legal interpretation and application of the law.

The above list is not exhaustive. These high-risk AI applications will undergo strict reviews under the Act. For example, they would undergo Conformity assessments,⁶⁰ in which the following are analysed:

- ✓ Data that is fed
- ✓ Tools, and its nature.
- ✓ The presumptions and biases
- ✓ Interacts
- ✓ Outputs
- ✓ Overall performance

Results are rigorously evaluated for clarity, adequacy, and transparency before market release, with subsequent post-market monitoring. Low-risk AI tools maintain transparency standards, aiding user assessment of relevance. This Act has also been amended in a way that can regulate generative AI like ChatGPT.⁶¹ The main aim of this act is to ensure transparency and prevent it from generating illegal content and publishing copyrighted data.⁶²

The AI Act, which is of global standard, is also drafted for the constitution of the European AI

⁵⁸ critical infrastructure, available at: <https://www.techtarget.com/whatis/definition/critical-infrastructure>, (Visited on July 2, 2023).

⁵⁹ Border Management, available at: <https://www.iom.int/sites/g/files/tmzbd1486/files>, (Visited on July 2, 2023).

⁶⁰ Guidance on Classification and Conformity Assessments for High-Risk AI Systems Under EU AI Act, available at: <https://ai-regulation.com/guidance-on-high-risk-ai-systems-under-eu-ai-act/>, (Visited on July 2, 2023).

⁶¹ EU AI Act: first regulation on artificial intelligence, available at <https://www.europarl.europa.eu/news/en/headlines/society/20230601STO93804/eu-ai-act-first-regulation-on-artificial-intelligence>, (Visited on July 2, 2023).

⁶² Christopher McFadden, "EU officials confident its 'AI Act' will pass sometime this year", *Interesting Engineering*, May.1, 2023.

Board.⁶³ The primary objective of this Act is to ensure the safety, transparency, traceability, non-discrimination, and environmental friendliness of AI systems employed within the EU.⁶⁴ The Member of European Parliament (MEP) negotiated the AI bill on June 14, 2023⁶⁵, where they announced an authoritative ban on AI, which is involved in the tasks of biometric surveillance, emotion recognition, and predictive policing.⁶⁶ The generative AI systems like ChatGPT were also deliberately regulated so that they should be updated in such a way to disclose the contents that they were generated by AI, expressly.⁶⁷ After the negotiations with the European Council, the AI Act is expected to be enforced.⁶⁸

Conclusion

The fact is, even most of the developed countries were at the beginning of the regulation. Many countries are not aware of the true nature of AI and its dangerous implications. Many judges, lawyers, and judicial officers around the world are unable to make judgements regarding liability in cases involving AI disputes. AI is neither identified as a juristic person nor as a natural person. Its characters are undistinguishable. For example, in the case of *Gonzalez v. Google LLC*⁶⁹, the US Supreme Court unanimously held that the family's claims against the social media companies were not allowable under the Antiterrorism Act, and this judgement was favourable to Google, even though Google has been used by terrorist activities, and as a result, the petitioner lost his daughter. The same happened in the case of *Twitter, Inc. v. Taamneh*.⁷⁰ However, in the case of *Gonzalez v. Google LLC*, Google cannot be held liable as even as an inventor or stakeholder as Google is unaware of the results of the AI installed in its applications, and a person cannot be held liable unless he has a *Mens rea* and *Actus rea*. However, mere immunity cannot be given to

⁶³ James Vincent, "The EU is considering a ban on AI for mass surveillance and social credit scores", *Theverge*, Apr.14, 2021.

⁶⁴ EU AI Act: first regulation on artificial intelligence, *available at* <https://www.europarl.europa.eu/news/en/headlines/society/20230601STO93804/eu-ai-act-first-regulation-on-artificial-intelligence>, (Visited on July 2, 2023).

⁶⁵ MEPs seal the deal on Artificial Intelligence Act, *available at*, <https://www.euractiv.com/section/artificial-intelligence/news/meps-seal-the-deal-on-artificial-intelligence-act/>, (Last Modified May 23, 2023).

⁶⁶ MEPs ready to negotiate first-ever rules for safe and transparent AI, *available at* <https://www.europarl.europa.eu/news/en/press-room/>, (Visited on July 2, 2023).

⁶⁷ MEPs ready to negotiate first-ever rules for safe and transparent AI, *available at* <https://www.europarl.europa.eu/news/en/press-room/>, (Visited on July 2, 2023).

⁶⁸ EU Lawmakers Pass Landmark AI Regulation Bill, *available at*, <https://foreignpolicy.com/2023/06/14/eu-ai-act-european-union-chatgpt-regulations-transparency-privacy>, (Visited on July 2, 2023).

⁶⁹ Lawrence Hurley, "Supreme Court sidesteps ruling on scope of internet companies' immunity from lawsuits over user content", *NBCnews*, May.19, 2023.

⁷⁰ Adi Robertson, "The Supreme Court will determine whether you can sue platforms for hosting terrorists", *Theverge*, Oct.3, 2022.

companies and stakeholders without proper regulation.

Therefore, AI needs a regulation, not only for the developed countries but also for the developing countries like India and China, where the population is very high. As the population increases, the risk increases along with it. This paper strongly suggests national regulation of AI, as each country is completely unique in its social, economic, political, legal, and cultural identities. National regulation can also have a great impact on international regulation if it is binding. This paper appreciates the efforts that were taken by the EU countries to regulate AI, and it inspires many countries around the world.

