



A PERSPECTIVE VIEW ON ADVENT OF ARTIFICIAL INTELLIGENCE AND ITS IMPACTS ON WORLD

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ABSTRACT:

With the advent of digital revolution and the arrival of internet, mobile devices, computers and networking etc., the direction of human development picked up a fast pace. However, earlier decades believed to be considered as ancient of digital revolution in which physical development took place like manufacturing of computers and processors, which created infrastructure for digital world to exist. The current decade can be considered as medieval age of digital revolution in which mostly advancement of that physical infrastructure took place and efficiency and processing speed was improved. The modern age of digital revolution may considered as the arrival of artificial intelligence in digital world.

AI to be in short can be understand as a program or algorithm in digital sphere which is able to change its output or course of action by learning from input of data given to it time to time.

The paper begins with short historical introduction of digital world and then move on to the scenario of Artificial Intelligence, that how AI can completely transform various fields like education, defence, communication and governance, the paper introduces about AI tools like chat gpt, Open AI and growing competition and race among digital platform giants to tap this source in their favour. The paper on the other hand aims to point out various cons or challenges ahead due to AI like loss of jobs, data security, controlling authority etc. The paper concludes with the question on the future of humanity with the AI is a boon or a disaster?

INTRODUCTION

With the advent of digital revolution and the arrival of internet, mobile devices, computers and networking etc., the direction of human development picked up a fast pace. The usage of internet started in the 1960s as a way for sharing information, platforms like computers in the 60s were large and immobile and in order to make use of information one had to either travel to the site of the computer or have to use magnetic tapes to transport data from one place to another. In 1969, the first version of the internet was created and setup as a network called ARPANET. From those humble beginnings came new ways to share information and communication. In 1971, the first email message which allows for the expansion and creation of digital sphere.

However, earlier decades believed to be considered as ancient age of digital revolution in which physical development like manufacturing of computers and processors took place, which created infrastructure for digital world to exist and simultaneously development of digital world took place. The digital world in simple words described as a platform that runs on the internet, facilitating a way to standardized and share information from the internet.

The current decade can be considered as medieval age of digital revolution in which mostly advancement of that physical infrastructure took place and efficiency and processing speed was improved. During this transition a need emerge for platforms to display information on the web known as browsers like google chrome, Microsoft edge etc. a need also emerged for tools that could index and search information within the web like google, yahoo Bing etc. in this age the digital world reached to digital maturity. Digital maturity refers to an organisations ability to use technology effectively to achieve that the population is becoming mature within the digital exposure. The modern age of digital revolution may considered as the second phase of digital revolution i.e. the arrival of artificial intelligence in digital world. AI to be in short can be understand as a program or algorithm in digital sphere which is able to change its output or course of action by learning from input of data given to it time to time.

In this paper we are going to discuss impacts and challenges Artificial intelligence may bring in different sphere of society in the coming future

AI AND EDUCATION

Technology has always played an important role in education, but its current phase is changing the dynamics of teaching completely, with the rise of AI in education it opened various different ways to teach students in more interactive and informative ways. For example with the use of AI powered Virtual reality systems in education. Virtual reality is a three dimensional computer generate environment that people can explore and interact with. VR is a great way to help students feel more connected to each other, with VR student can explore things that they may never have the opportunity to see and learn about in real life. The same goes for teachers as well they can create classrooms more engaging and find more creative ways in teaching. Another usage of AI in education is by the use of Chatbots. These are the programs which students might use in their laptops and smartphones through which they can put up their doubts, learn and understand specific topics such as math or reading comprehension. The chatbots can reduce the cycle of tasks assigned to teachers, they can also replace email communication between teachers and parents and update the progress of students to both teachers and parents

However, there are always pros and cons of AI and AI in education is not devoid of it. Biggest fear is loss of human to human engagement, AI bringing change in not only in grading papers, writing essays but also making recommendations to students about what they should study next. The question is should it be?

A robot might not be as good as a teacher as a human can be. AI does not experience emotions it might treat students in just as black and white.

AI AND EMPLOYMENT

One of the most prominent challenges AI is giving is the loss of jobs. The job scarcity is growing day by day in the modern world and in that scenario the arrival of AI boosting the automation in manufacturing and services sector, for example various chat bots are introduced by various government as well as private institutions which are not only improving the customer experience but also a cost effective measure that can shed the load from an organisation to handle the queries of the consumers which was earlier handled by dedicated customer executives. If we look at it from one side then yes AI is taking jobs but the flip side is that the AI has opened a completely new and a vast field which has innumerable potential to create jobs like AI learning and algorithms language

AI AND LAW

Although legal services market is one of the largest in the world, it is also believed to be under digitized in its operations. The legal profession is believed to be conventional in its approach and hesitant to adopt new technologies. It's time for us to accept, that AI has the potential to transform the way lawyers currently work and the way law is viewed in India. As stated by Hon'ble Chief justice of India D.Y. Chandrachud, "technology has become a powerful tool in the legal system for improving efficiency, accessibility and accuracy in the administration of justice."

Indian legal system is extensive, with our constitution alone being the world's longest, it is critical to adopt AI in law to cope with the dynamic environment. In the field of legal research, lawyers can use AI to get insight into the legal world in a matter of seconds. "Kira" an AI powered software that can analyse legal papers, locate and spot any potential dangerous areas, and extract provisions from various legal documents.

The AI can be used in litigation prediction by using the corpus of relevant precedent and the facts of the case as inputs that can expedite settlement negotiations and reduce the number of cases that need to go to trial. Blue J legal, based in Toronto is working on AI powered legal prediction engine, with an initial concentration on tax law. According to the business, its AI can accurately anticipate case outcomes 90 percent of the time.

Another area where AI can make a headway is legal research. Legal research is labour intensive procedure, firm associates and law students searching case law volumes for relevant precedent. However this process has gone digital with the introduction of applications such as LexisNexis and Westlaw, but the downside of these software is that they search on mechanical keyword matching to bring up the most relevant existing legislation. The AI can improve this process by using algorithms to search relevant research.

AI AND SOCIAL WELFARE

India, the second most populous country in the world, runs a host of socially beneficial programs. Most of them aimed to reach the millions of people who live in remote areas. From making healthcare accessible to residents of far flung rural areas to providing mid-day meals to under privileged school children. It's a daunting task for the government to reach to those people residing in rural areas such task are not only time consuming but also very costly.

A study by consultancy firm Accenture showed AI could boost India's annual growth rate by 1.3 percentage points by 2035. Despite increased investment, India's public healthcare system struggled to cope up with the vast needs of the growing population. Only a third of Indians have medical insurance and government spending in public welfare is not sufficient.

AI powered systems can transform and increase the effectiveness of public welfare programs. For instance an AI powered digital platform that collates data on symptoms and suggests treatment based on similar cases that may make the diagnostic process far more accurate in public hospitals

The government's mid-day meal scheme, aims to reduce malnutrition in children and increase enrolment rates in schools. On the flipside the program diverted the attention of teachers and students from education to carrying out tasks such as inspecting quality and quantity of food.

AI can help overcome this challenge in which it could forecast inventory and requirements, leaks during transport and can ensure the right amount of high quality food reaches school on time

Another major issue faced by the government is alleviating water shortage. Despite having 18 percent of the world's population, India has only 4 percent of total available water resources. According to the study of NITI Ayog about 100 million people at risk of losing access to drinking water by 2030. Steps such as desalination and rain water harvesting help, but won't be enough to meet the gap. To reduce the wastage of water AI powered smart meter management systems, such as digital flowmeters that can track, measure and optimize water consumption in real time are implemented in parts of India and Africa. In Surat such flowmeters have helped municipality do a more effective job of monitoring water consumption and control industrial waste to some extent.

Yet more needs to be done to realize AI's potential impact. The government and private organisations must work together to overcome existing challenges such as lack of awareness among stake holders and unclear privacy and security regulations.

AI AND DEMOCRACY

Democracy is a form of government in which power is held by the people, typically through elected representatives. It is a system of government that is based on the principle of equal representation and participation of all citizens. In a democracy, the will of the majority is respected and minority rights are protected. AI on the other hand is the simulation of human intelligence in machines that are programmed to think and learn like humans. AI technology has advanced rapidly in recent years and has the potential to revolutionize many industries and aspects of life.

Democracy and AI are increasingly intersecting in ways that are both exciting and challenging, on the one hand AI has the potential to empower democracy by providing citizen with new tools for decision making and participation as well as by facilitating more efficient govt services, one of the key way in which AI can empower democracy is by providing citizens with new ways to access and process information. For example, AI can help to improve the efficiency and effectiveness of government services such as by automating routine tasks, identifying patterns in large data sets and providing real time feedback to policy makers. On the other hand there are also concerns that AI may undermine democracy by exacerbating existing inequalities and enabling new forms of manipulation and control that may affect in the end the basic ideals of democracy like right to life, freedom of speech etc.

AI AND SOCIAL MEDIA

The extent of social media is growing rapidly and reaching far corners of the world, which enables users to connect worldwide without borders under a single net that makes the case strong for a borderless society. One of the basic human instincts is to socialize with others that has now taken a global shape. This quest to socialize in contemporary times furthered the revolution of internet, which provides the space for people to interact with each other in a networked world. This revolution has recently taken a crucial turn with the introduction of AI in the social media which in turn deviates the internet driven network world from being the stage of socialization to converting it into a fragmented society. As the internet penetrated into the various strata of the world it became a central theme of the current epoch of humanity. It henceforth becomes significant for us to address various issues pertaining to social media to protect the ideals of democracy, specifically freedom of speech and right to life. The growing extent of AI also threaten the right to privacy, as AI is now able to scan and penetrate into the personal data of the people more efficiently. Information politics theorist, Tim Jordan says that digital cultures and politics connect people even as they simultaneously place them under surveillance and allow their lives to be mined for advertising. Further he pushes for an antagonistic politics in the digital world

As the AI is growing day by day the extent and impact of fake news is also growing, the use of AI in the creation and distribution of fake news is a growing concern. AI can be used to realistic looking images, videos and audio recordings (deep fakes) that can be used to spread false or misleading information. AI can also be used to create fake social media accounts or bots that can amplify the reach of news. Additionally, AI can be used to target specific individuals or groups with fake news by analysing their online behaviour and interests, on the other hand the same AI is able to detect and flag fake news, social media platforms like twitter using AI to help moderate and filter out content that may be inappropriate or violate its term of service.

AI AND TERRORISM

Conventionally terrorist organisations needs variety of equipment's like fire arms, blades and vehicles etc. but in modern terrorism they just need a computer and internet connection operated by a trained militant with expertise in information technology. In modern world of internet there are no physical borders, a terrorist can sit in one corner of the world and attack any part of the world through internet, they don't even have a need to physically enter the country to spread the panic and terror worldwide. For example the Christchurch shooting in 2019 in New Zealand was live streamed on Facebook by the attacker, amplifying its impacts and effects on the victims. The modern AI allows terrorists to communicate more quickly and covertly, they are even using modern innovative use of block chain based virtual assets such as "bitcoin" for transfer of funds that make transactions virtually untraceable. With AI the work of password guessing and captcha breaking to target individuals or even big organisation to steal their critical data and used their data and id's to spread misinformation and even sell it on the dark web to accomplish their goal of terrorism becomes much easier. However on the other hand the same AI can be used to track suspicious activity and even stop it from spreading. Recently NATO has demonstrated the prototype of a technology to counter the threat from firearms and explosives in crowded via AI named DEXTER – short for Detection of Explosives and firearms to counter TERRORISM.

CONCLUSION

In conclusion we can say that AI is a technology that is transforming every walk of human life. It has a wide ranging tool that enables people to rethink how we integrate information, analyse and use data to improve decision making. Its application in governance, law, healthcare, social sector, education and its impacts of idea of democracy that brings a light of hope on one side and raises concerns on the other side. On

a way forward it is recommended to keep these points stated ahead in mind in order to maximize AI benefits. Like encourage greater data access for researchers, investment from government in AI research, promote new models of digital education and AI workforce development, regulate broad AI principles rather than specific algorithms, maintain mechanisms for human oversight and control and penalize malicious behaviour and promote cybersecurity

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