"ARTIFICAL INTELUGENCE:
IT'S PROMISES AND PERILS"

Outline

1- Introduction

Thesis Statement: In the 21st century, mankind has witnessed dawn of Artificial Intelligence. People have fallen in love with the capabilities of AI without considering the potential consequences of their use. Therefore, certain checks must be applied to avoid these consequences.

2- What is Artificial Intelligence and its recent rise

3- The promises of Artificial Intelligence
   a- Efficient processes through automation
   b- Revolutionizing healthcare sector
   c- Source of information
   d- Reduced human dependency
   e- Equal access to all
   f- Full time avaliability of AI based systems

4- The perils of Artifical Intelligence
   a- Threat of increasing unemployment
   b- Increased stratification between developed and developing countries

c- Reduction in human creativity.

d- AI may overstep its boundaries

e- Not a reliable data source

f- AI can cause privacy breach

g- Terrorists can use technology

5- Steps which can be taken to fulfill promises of AI while avoiding its perils :

  a- Establishment of guidelines for AI development

  b- Reliance on natural human abilities

  c- Promoting AI literacy

  d- Developing laws for accountability of AI developers

6- Conclusion

Good

"The potential benefits of artificial intelligence are huge, so are the dangers" - These words of Dr Dave Water, a professor at University of Oxford, aptly depicts the perils associated with the promises of Artificial Intelligence. AI has reached its zeneith in the last decade. The promises of Artificial Intelligence includes efficient processes, revolutionizing health sector and a source of information. AI assures reduce human dependency, equal access to all and fulltime avaliability. However, there are many perils associated with AI as well. AI can increase unemployment and reduce human creativity. It can increase stratification between developed and developing countries. Moreover, AI is still not a reliable data source and it can cause privacy breach as well. Terrorist organizations can also use AI for negative purposes, So there is a dire need to take certain steps in order to avoid the perils of Artificial Intelligence. Guidelines for AI development should be established and AI literacy should be promoted. Humans should rely on their natural capabilities and laws must be developed for accountability of AI developers. In the 21st century, mankind has witnessed the dawn of Artificial Intelligence. People have fallen in love with the capabilities of AI without

Be certain in your arguments

considering the potential consequence of their use. Therefore, certain checks must be applied to avoid these consequences.

Artificial Intelligence is the ability of digital computer or computer controlled robot to perform tasks commonly associated with intelligent beings. In simple words, AI is an attempt to empower robots with human like intelligence. In the 21st century, due to high volumes of data, high speed internet and super computing machines, the concept of AI flourished. Although the development of AI is still in initial stages, experts have raised concerns about the potential dangers accompanied with AI. Elon Musk, the CEO of X (former twitter), Tesla and SpaceX, have warned that AI is far more dangerous than any other human invention. Even scientists have demanded AI developer companies to stop its development for atleast next six months.

AI owes a lot of promise to mankind. Efficient processes through automation is the most important promise of AI. In most of the industrial sectors, human watch over the processes is mandatory. A lot of labour force is required for correct processing and maintainence. AI robots can do the same job with greater efficiency. AI robots have sensors which hardly makes any

mistake making the process more efficient and economically viable. According to IBM, bad data alone costs U.S businesses more than $3.1 trillion a year. This bad data is the result of human mistakes in data entry. Such a heavy cost can be avoided by deploying AI in processes.

Artificial Intelligence has the potential to revolutionize the healthcare sector. AI has been used to analyse large datasets and decode patterns that would be difficult for humans to detect. This has led to breakthroughs in field such as genomics and drug discovery. AI has been used in healthcare settings to develop diagnostic tools and personalised treatment plans. Moreover, robotic surgery has attracted may physicians. According to American college of Surgeons, the use of robotic surgery has increased from 1.8 percent to 15.1 percent in the last decade. On average robotic surgeries have a 95 percent success rate. Thus, AI is fulfilling its promise to revolutionise the healthcare sector.

Another promise of AI is that it will serve as source of information. AI consist of huge data boses which encompasses nearly all the knowledge which mankind have ever had. Moreover, using AI tools as source of information

is much convinient as compared to browsers like Google and Mozilla Firefox. For instance, ChatGPT is one of the AI tool where a person can directly input a query and he would get the relevant answer. There is no need to scroll multiple websites to reach to the required answer. Thus, AI is a credible and efficient source of information.

Dependency on AI can reduce dependency on humans. It is a blessing as well as a dilemma that AI is partially capable of performing human tasks. Repetative tasks which require humans can be done easily by using AI driven technologies. AI is very efficient in adapting to environments. For instance, if some new data or workload is given to AI, it will process that data and will be able to do the job next time. That is why across the globe the works which require repetative efforts are being replaced by AI. A recent study of World Economic Forum (WEF) shows that upto four-fifth of repetitive tasks can be automated through the use of AI. Thus, by deploying AI technologies, human dependency can be reduced.

AI promises equal access to all. The best thing about digital

developments is that it is free from geographical boundaries. Moreover, AI learning is open to all. Anybody can learn AI and Machine Learning and then deploy their skills in their respective states. Also there are no boundaries and restriction for accessing AI databases for any country. Traditionally, underdeveloped nations claimed that new technologies are developed in industrialized nations and outdated technologies are scrapped to developing nations. However, AI has addressed this grevience of underdeveloped nations by promoting equality.

In addition to equal access to all, fulltime avaliability of AI based systems is another promise. Humans cannot work efficiently for the whole day. They require rest and sleep to revive their efficiency. Previously, machines were said to be capable of working for hours but they required human observation which posed a great limitation to utilizations of machines. Now with intelligent machines, human observation is not required which means processing and operation can continue for longer hours. A recent survey by McKinsey estimated that generative AI tools could theoratically automate work that takes as much as 70% of an employees

and that AI could replace half of workers daily work activities by 2025. Thus, full-time availability of AI systems can revolutionize industrial processes.

Although there are many promises of AI, yet there are many perils of AI as well. The greatest threat of increasing unemployment is the greatest peril of AI. AI is adaptive to new environment and thus it can perform repetitive tasks efficiently. Therefore, humans employments in the fields which require repetative tasks are under threat. These basic fields includes jobs like data entry, content writing and packaging etc. According to the data by TalentLMS, an American company, nearly 20% jobs were lost in 2023 due to Open AI and ChatGPT. This is just the start of journey and soon it will be evident that AI is major threat to employment.

AI can also increase stratification between developed and developing countries. To extract maximum advantages from AI, digital literacy and advanced technology are mandatory. Developing nations like Pakistan where literacy rate is just 64% even is lowest educational standards, how can one think of hope that AI would be used by common man. Moreover, developing countries

donot have resources to adapt new technologies. Developed nations will utilize their advanced economic and human resources to adapt AI. It is feared that AI scrap would be shared with developing nations after developed world has sucked all the juice out of this technology. Hence, developed nation will advance more than developing nations and this will lead to increased stratification.

Another threat of AI is that it can reduce human creativity. It is common observation that with technological advancement, quality standards have decreased in various field. For instance, it is hard to find good author nowadays although the number of authors have increased. Similarly, when AI would be used in education, healthcare, research etc, it would lead to reduced standards. AI itself is the result of human creativity and when humans will lose this creative and cognitive abilities, how will the new inventions and technologies come? Thus, over dependency on AI can reduce human creativity.

It is also feared that AI may overstep its boundaries. The use of technology makes it good or bad and not the technology itself. Humans

may violate, the ethical standards for the use of technology. What if AI robots become future warriors or tools of mass destruction. Such a use would become existential threat to humans. The United State's Department of Defense aims to create autonomus fighter jets that will fight alongside men. Lets assume even if this dream and ambition is materalised, robots driven fighter jets would be directed to kill humans? What if the enemy reciprocates with the same technology? Hence, the AI have great potential to overstep its boundaries.

AI can also cause data and privacy breach. AI relies on huge datasets. To integrate this technology into common man life, their data from various social media and digital platforms is extracted. Moreover, even if a company decides to use AI, it would have to share secret information with the technology. Therefore, sooner or later all the data of humanity would be in hands of AI. What if the data is misused or deliberaty used for some unethical purposes. What if the technology is hacked?. In 2020, the Capital One breach exposed personal data of over 100 million customers, showcasing

the vulnerability of sensitive information to hacking. Hence, AI mishandling can be a threat to data privacy and security.

Terrorist can also use technology to gain their strategic goals. AI promises fulltime availability to everyone. What if this technology gets in the hand of terrorist. They will get all the scientific information to strengthen themselves militarily. AI terrorism would be a nightmare for humanity. These are no laws to avoid AI terrorism. The technology can be misused against any nation. Thus, certain checks shall be applied in order to fulfill the promises of AI while avoiding its perils.

First of all, guidelines should be established for the development of AI. Guidelines will serve as boundaries and standard operating procedures. These guidelines should exist at international level. Ethical frameworks shall also be developed for AI. By doing so, the data of users will be protected and the technology will not be misused by any group. The European Union's General Data Protection Regulation (GDPR) sets standards for data protection, including regulations around AI. These standards shall be followed to avoid perils of AI. Humans should also rely on

their natural abilities of critical thinking and problem solving. It is always good to use assistive tools but it is bad to solely depend upon them. Humans can use AI in such tasks that require no human creativity. By doing so, humans can use cognition in other inventions and critical thinking. But if human allow machines to do their job, soon they will forget the art of problem solving and critical thinking. Hence, humans should rely on their own natural abilities.

The only way to avoid stratification among nations on the basis of AI is to promote AI literacy. AI literacy means that people should know what AI is, its tools and how it can be used by them in day to day life. Once people get to know about magics of AI, they would fall in love with this technology. They will adapt it and learn more about it. Once this is done, nations will progress equally in this field. Government should ask teachers to tell students how to properly use AI tools. Moreover, adults should be adaptive to change. Thus, promoting AI literacy is mandatory to get maximum benefits.

Laws shall also be developed

for the accountability of AI developers. It is not enough to just establish guidelines and no legal bindings for that. International law should also prevail in the domain of technology. Anyone of any nation who uses technology for the harm of humanity shall be convicted. World is evolving around AI, if nations fail to check its evolution, it would be destruction for humanity. Thus, laws should be developed for the proper use of AI.

In a nutshell, it is not the technology which is bad or good, but it is the human use which makes it bad or good. AI is now an inevitable reality because of its great potential benefits. It has potential to revolutionise education, healthcare, research and information sector. But, roses are always accompanied with thorns. Similarly, potential dangers of using AI is also a reality. However, through certain checks, we can reduce potential dangers to minimum. By establishing guidlines for AI development, promoting AI literacy and developing laws for accountability of AI developers, benefits of AI can be reaped fully. The real problem is not whether machines think but whether men do- B.F. Skinner.