

Topic: Artificial Intelligence: New Era of Prosperity or Pandora Box of Terrifying Future

Outline

1) Introduction

Thesis statement: The world is ever evolving, what is new today shall be old tomorrow. Artificial intelligence (AI) has proved it through unprecedented developments that it is going to bring a new era of prosperity.

2) Definition and types of Artificial Intelligence

3) Arguments supporting stance of new era of prosperity

A) Modernization in Communication System

- Use of Natural Language Processing (NLP)
- Increase in demand of self driving cars

Case in point: Communication system of US and Singapore

B) Advancement in Information Technology

- Use of robots
- Introduction of Biometric machines

Case in point: IT system of South Korea, INTERPOL

C) Enhancement in Economic system

- Substantial use of digitalization in markets

- Increasing trend of online business platforms

Case in point: As per the report of World Economic Forum, AI will contribute \$15.4T in the economy of the world by 2030.

D) Innovations in Agricultural system

- Enhanced productivity of crops
- Assistance of Farmers

Case in point: Agricultural system of India

E) Developments in Climate Change System

- Weather forecasting techniques
- Predictions and measurements of storms and magnitude of Earthquakes

Case in point: Use of AI based technology by Japan and Brazil.

F) Inventions in Space Technology

- Exploration of Planets and Galaxies
- Assistance in Communication and Navigation

Case in point: National Aeronautics and Space Administration (NASA), space research institute

G) Advancement in Education System

- Online learning platforms
- Abundant content and notes

Case in point: As per the study of Cambridge

University almost 47.3% students use ChatGPT (AI technology) for assignments and homework in UK.

1) Digitalization in Politics

- Online election campaigns
- Use of electronic voting machines (EVMs)

Case in point: Elections in Australia and Estonia

1) Developments in Health System

- Diagnosis of harmful diseases
- Treatment and operations of patients

Case in point: Health system of Canada

4) Anti-Thesis (Pandora Box of Terrifying Future)

A) Attacks on Privacy

Case in point: Issue of the Cambridge Analytica

- Use of AI based technology in Brexit.

B) Job Replacement

- Use of robots creates unemployment
- Self-driving cars cause severe accidents

C) Limitations on Human Cognitive Abilities

- AI is a death of creativity
- Humans are slaves of machines

Case in point: "The development of full AI could spell the end of the human race." [Stephen Hawking]

D) AI would cause digital warfare.

- Advancements and race of Weaponization

(E) Language barriers for AI

- could not translate nearly 7,000 Languages

5) Rebuttal to Anti-Thesis

A) Creation of Jobs

Case in point: As per the report of World Economic Forum, AI will create 97M jobs by 2030

B) Protection against privacy concerns

- Use of Biometric machines and Facial recognition machines

Case in point: Cyber-security control system of China

C) Protection from road accidents

- Self driving cars

Case in point: As per the report of the World Health organization (WHO), 1.19M accidents occur yearly due to human error.

D) Broke the Language barriers

- Voice assistant, Translators
- Siri, Alexa

Case in point: Use of AI in India for Language translations

6) Conclusion

Dawn of 21st century has witnessed that technology is a force multiplier for the world. Since ~~in~~ last decade, AI has been working to revolutionize the world. Artificial intelligence is covering its targets with a smooth and fast ~~of~~ pace because the world is ever evolving, what is new today shall be old tomorrow. AI has proved through unprecedented developments that it is going to bring a new era of prosperity in the world. Today, AI is present in almost every field. Recent developments in the fields of communication, information technology, agriculture, space, education, politics, and health are showing that the future will be of AI. However, some researchers believe that AI is a Pandora box of terrifying future, and it will make humans as a slave of machines. They argue that AI has created unemployment, privacy concerns, language barriers, and digital warfare. Actually, AI developments have negated their concerns because as per the studies of **WHO**, **WEF**, and **NASA**; humans are using AI technology overwhelmingly, and their results are positive. According to their reports, AI is a source of

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creation of jobs, protection against privacy and road accidents, and language translators which endorse the concept of prosperity in the world through AI technology.

Artificial intelligence is the imitation of human intelligence in machines in order to make them able to think, understand, and perform tasks like humans. The word Artificial intelligence (AI) was coined by **John McCarthy** in 1956. AI is a modern technology that inculcates machines to perform human cognitive abilities like learning, reasoning, and problem solving. There are two main types of AI based on the capabilities of machines. One type is **weak or narrow AI**, in which machines are designed to perform limited or specific task only into their domains. Examples of weak AI are **voice assistants, facial recognition, and google maps**. Other type of AI is known as **strong or general AI**, in which human intelligence is induced into machines in order to make able to understand and perform human cognitive abilities. ~~They~~ In this type, machines are not limited or specific in

their domains. Examples of general AI are **robots and satellite technology**.

To begin with, AI has modernized the communication system. AI has introduced Natural Learning Processing (**NLP**) system in which certain voice assistants like **Siri and Alexa** through AI algorithms understand and interpret human language easily. NLP technology is used overwhelmingly in the communication system of **US** in order to give commands to the google voice assistants, and voice assistants catch the commands immediately after processing they give outputs of the commands. Similarly, self-driving cars have also created feasibility in the communication system. Self-driving cars work on the AI algorithms and travel without commands and controls of driver.

Singapore is using driverless vehicles excessively in order to prevent from road accidents that are caused by humans. Hence, NLP and self-driving cars are miracle of AI in communication system.

Additionally, AI has advanced the information technology (**IT**) system of the world. Creation of robots and biometric machines is unmatched. Robots are invention of AI based

technology, which work, understand, and perform task like humans. In **South Korea**, the demand of robots has been increased because robots are used in industries, markets, and health centers. Similarly, biometric or finger-print machines are also used in the world to control crime. **INTERPOL**, UK based investigation agency, is benefiting from them in order to catch the culprits using their finger-prints. As per the report of **Forbes**, 63% IT and telecommunication organizations have implemented AI based technology. Thus, IT is flourishing day by day due to AI based technologies. Moreover, AI has augmented the global economy. As per the report of PricewaterhouseCoopers (**PwC**), AI will contribute **\$15.7T** to global economy by 2030. AI through its innovations has enhanced the trend of online business platforms. It has digitalized the markets. These platforms are ease source of buy and sell the products online. online platforms like Binance, Forex, Amazon, and Alibaba have been working to strengthen global economy. These online business applications have enhanced the importance of online business.

Generative AI is used in various industries :

like textile, transportation, and online shops to boost online business and economy of the world.

Ergo, AI has benefited the global economy.

Next to it, AI works effectively in the field of agriculture. Use of AI in agricultural system is growing day by day. Stakeholders are taking assistance from AI algorithms to enhance crop productivity.

AI has empowered farmers to track ~~✗~~ crop progress over the entire crop cycle. It assists farmers from sowing to harvesting. AI based robots and machines are used for sowing and harvesting of crops. Interestingly,

India is using AI based satellites and data based algorithms in the field of agriculture to store data regarding lands and crops before sowing. Data helps them regarding soil type, moisture, and salinity in the fields. AI facilitates the optimization of tillage and irrigation in the fields. Therefore, AI augments the agricultural productivity.

Besides it, AI is also working to control ~~in~~ climate change activities. AI has ability to forecast weather patterns and magnitude of earthquakes and disasters. As per the report of

European Space Agency, AI has ability to capture the images of melting of icebergs and it does **10,000** faster than human could do it.

This helps scientists to understand how icebergs release into oceans. Countries like **Japan and Brazil** are utilizing AI technology to predict weather patterns and intensity of storms in order to take precautionary measures against climate change. AI encourages clean energy and reforestation to control climatic activities. So, AI algorithms are useful tools to control climate change activities.

Furthermore, AI is also present in the space technology. Countries like **USA, Russia, China, and UK** are taking assistance from AI for space research activities. They use AI algorithms to explore planets, galaxies, and navigation system. AI integration into space exploration has ushered a new era of efficiency, innovation, and discovery. As per **NASA's** report, currently, **2926** satellites are working in space in order to analyze terrain, plain routes, and obstacles in space. Their work is inclusive, which will assist navigation and communication system.

As a result, AI contributes substantially to assist space research technology.

Similarly, developments in education is also a miracle of AI technology. ChatGPT is a great innovation of AI technology, which provides easy access to the students to learn and collect their academic content. It assists students to solve assignments and homework. As per the study of **Cambridge University**, almost **47-3%** students use AI technology for assignments and homework in UK. Along with this, AI has created online educational applications like **Ms Team and zoomTV**, which help teachers and students to remain attached with online lectures and tutorials. It enhances the abilities of teachers and students. As per the report of **PwC**, AI based education market is predicted to reach **\$20B** by 2027. Consequently, AI works for better education system in the world.

In addition to this, AI has transformed the political system of the world. AI has generated electronic voting machines (**EVMs**) for conducting free and fair elections. EVMs have controlled rigging opportunities. Today, online political

movements hold in the world. AI based algorithms are operating in decision making and policy formulation by the politicians. A worker can easily listens to his/her leader through online powershows.

This advancement has created easiness for citizens to remain familiar with politics. It has removed the distance concerned and brought all citizens of a nation on single platforms. **EVMs** and online political movements are used effectively in **Australia** and **Estonia**. To cut in short, political system has benefited from AI based algorithms.

..... Last but not least, AI has revolutionized the health system of the world. AI based technology is utilized to diagnose harmful diseases, treatment of patients, x-rays and ultrasounds, and operation. AI solves issues of patients related to the disease like cancer, tuberculosis, diabetes, and heart problems. AI based robots takes care of ill patients in the hospitals. Similarly, doctors do surgeries and operations through AI based algorithms.

Canada is one of the leading countries in the world, which is using AI technology in bulk quantity in its health system. In brief,

health system of the world is becoming better day by day due to AI technology.

In above paragraphs, it is clearly discussed that how AI is going to bring a new era of prosperity in the world. Now, it is pertinent to shade a light on the anti-thesis arguments which are discussed below.

Firstly, some analysts argue that AI is a Pandora box for terrifying future because its concerns regarding privacy are enhancing speedily. They believe that the **Cambridge Analytica** took place in **2013** due to AI based technology. They say that during Cambridge Analytica AI based technology was used in manipulation of social accounts of people. It was clear manifestation that AI will bring privacy concerns and attack profiles of people. According to them same idea of misusing public accounts was behind the **Brexit**. Hence, they consider AI as a tool to attack privacy.

Secondly, AI has created unemployment. They argue that robots have replaced manpower; self driving cars have

increased rates of accidents. They quote statistics of the **World Economic Forum (WEF)**, AI could replace **85M** workforce by 2025. They are of the view that rise of AI will pose threats to developing countries, and it will enhance unemployment, poverty, and inflation. Thus, rise of AI technology is a great threat to labour-force in the world.

Thirdly, AI has put limitations on human cognitive abilities. It has made humans as a slave of machines. Humans are working over-dependently on AI algorithms and don't use their cognitive abilities. It means, AI is a death of creativity. They argue that humans are not commanding to the machines, but machines are commanding and controlling humans. Humans have become passive; they don't use their rational thinking and reasoning abilities. According to **Stephen Hawking**, "The development of full AI could spell the end of the human race." Ergo, AI is a dangerous tool to halt human cognitive abilities.

Fourthly, AI could cause digital warfare. They argue that race of weaponization is enhancing day by day. Countries are making conventional as well as nuclear weapons using AI algorithms. Similarly, hackers are fabricating deepfakes and cybercrime attacks for social engineering. These weaponization and cybercrime threatening the civilian population of the world. They believe that AI based technology^{cs} used to infiltrate in the territory and to harm the sovereignty of other countries. Recently in 2023, a summit held in **Netherland**, in which 60 countries out of 80 agreed to use AI technology in battlefield. Therefore, rise of AI could bring digital warfare in the world.

Lastly, they say that there are many language hurdles for AI. Nearly 7,000 languages are spoken in the world, and diversity of language is a challenge for AI. According to them, language is a fundamental source of communication, it is not easy and possible for AI to understand and interpret the diverse languages. They believe

that AI could not be able to translate all languages and also could not break language barriers. Multi-cultural languages are confusing AI based algorithms. So, language is an impediment for rise of AI in the world.

In above section counter arguments or anti-thesis are described. Now, it is imperative to discuss rebuttal to the counter arguments in forthcoming paragraphs in order to prove the stance that AI is going to bring a new era of prosperity in the world.

Unquestionably, rise of AI is not a threat to manpower, but it is a source of creation of jobs in the world. As per the report of **World Economic Forum (WEF)**, AI will create **97M** jobs by **2025**. It means, if **85M** labour-force displaces then at the same time creation of jobs ^{will be} **97M**. So, **12M** jobs ^{will be} ~~are~~ produced ~~creating~~ more than replacement. Similarly, according to **Yuval Noah Harari** in his book '**21st lessons for 21st century**' writes that there are **30 people** required for the maintenance and operation of **American Reaper (drone)**. It

means possibility of creation of jobs by AI is more than that of loss of jobs. Hence, it is proved that AI is a source of enhancing employment ratio.

Indeed, it is no denying that AI has curbed the privacy concerns because biometric machines and facial recognition machines are using overwhelmingly to control cyber attacks. **China** has modernized its cyber-security control system. It is using finger-prints machines and location tracers to catch the culprits through AI based algorithms. Similarly, **Germany and Netherland** also utilize AI-surveillance system to combat cybercrime in order to provide protection to their citizens. It means, AI has powerful ability to control cyber-attacks and give maximum protection against privacy. Therefore, AI is an effective tool for privacy protection.

Similarly, self-driving cars have tendency to protect and control road accidents.

As per the report of **WHO**, 1-1.9M accidents occur yearly due to human error. It means, AI based driverless vehicles are the best alternative

to control road accidents. The demand of self-driving cars has augmented. Developed as well as developing countries like **US, UK, Sweden, UAE, and Saudi Arab** are benefiting from self-driving cars to control road accidents and air pollution. As per the report of **Fortune Business (FB) insights**, the global autonomous vehicle market size was **\$1921.1B** in **2023**, and it is projected to reach **\$13632.4B** by **2030**. Hence, enhancing use and demand prove that AI has created technology for protection against road accidents.

Lastly, AI has broken the chains of language barriers through its unprecedented developments. AI has introduced certain voice assistants and translators like **Siri, Alex, and Google translators** to understand, interpret, and communicate with humans easily. These assistants receive commands and communicate after understanding them. Interestingly, **Meta AI** has built a model named **No Language Left Behind (NLLB-200)** for the translation of 200 languages. It is working very fast

to enhance number of Languages. NLLB-200 has tendency to translate English, Chinese, Spanish, French, Arabic, Urdu etc Languages. Similarly, India has taken substantial benefits from AI based algorithms to translate and communicate in Tamil, Hindi, Telgu, and Malayalam to provide easy platform for farmers and illiterate people. Thus, AI has negated the concerns related to Language barriers.

To conclude, AI is a game changer for the world. It has enhanced its domains and covered the destinations fastly. AI has made various developments in the fields of communication, information technology, agriculture, space, education, and health which show that the future of AI would be fruitful.

However, some researchers are of the view that it is a Pandora box for terrifying future because many hindrances are present for AI like privacy concerns, unemployment concerns, and Language barriers that limitize and put a death blow to its achievements. Nevertheless, the amount of successes of AI are more than that of its failures. Achievements like

creation of 97M jobs, self-driving cars, and
NLLB-200 Language translations have proved
that AI is going to bring a new era of
prosperity in the world, which will provide
countless opportunities to the world to take
benefits from it.