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Introduction

We are now entering a new epoch of humanity with the emergence of Artificial Intelligence. The spread of AI has reached the point where it is undeniable that it will revolutionize entire human history. While considering the myriad advantages that technology confers, individuals must be aware of the latent dangers of the technologies as there are "predictions that Generative AI will replace humans are already becoming a reality" (McKinsey).

The first declared world citizen: Sophia

Every existence embodies duality, and AI is no different. It is an indisputable truth that machine learning empowers AI-generated machines to emulate human behaviors, which then branches itself into billions of applications and developments. Yet, at the very edge of it, it possesses the potential for fatal consequences. Gender, racial, and socioeconomic biases, and discriminatory outcomes in hiring, lending, and criminal justice all exemplify how AIs have the potential to damage our such daily lives. Such potentials, however, should not deter humans from pursuing further technological advancement. This rather signifies the power and urgent importance of balancing and harmonizing existing humanities with newly rising technologies (AI and machine learning). It is a groundbreaking finding to endow technologies with the "ability to perform tasks commonly associated with intelligent beings." Therefore, rather than mere disapproval, criticism, and objection, the effort to maximize the machine's capacity is critical.

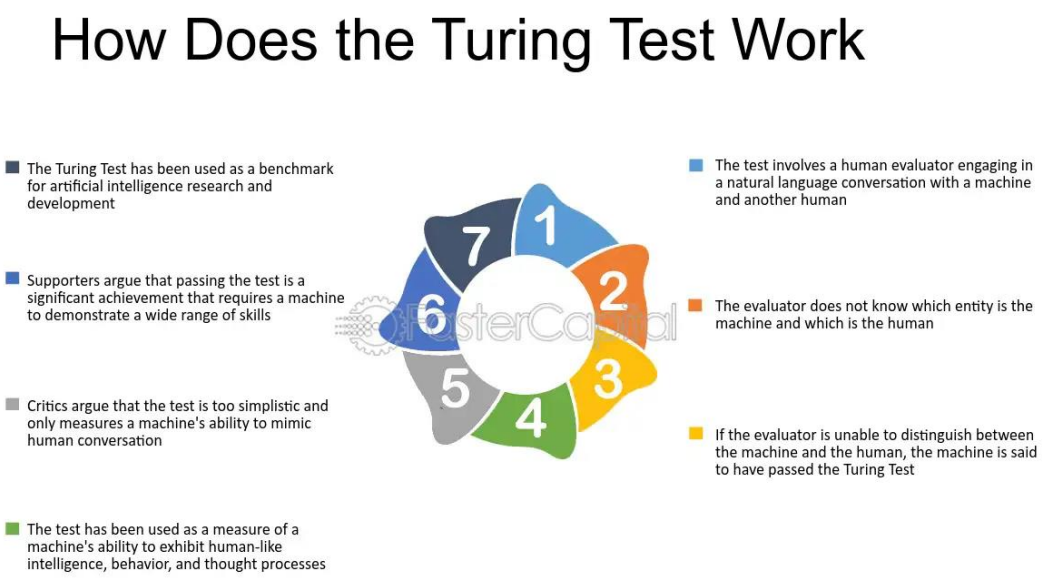
In leading the massive global transformation, establishing new principles to ensure technologies

are used for their fullest potential to serve the common good should take priority in people's minds. AI and follow-up technologies can inaugurate a new phase of human history, eventually facilitating the Sustainable Development Goals (SDGs). Its infinitude applications and fascinating consequences may allure the humanities in the short-term; however, there should be measures to ensure the safe and peaceful coexistence between humanities and technologies.

Background

The typical image of the future that was only imagined and fictionalized by scientists in the first half of the 20th century has now been actualized. The conceptualization of machines acting human-like started with a heartless Tin Man from *The Wizard of Oz* and consistently appeared in front of our eyes in the form of humanoid robots on many media platforms. It was this persistent exposure to the rudimentary idea of animated robots that paved the way for a generation of scientists, philosophers, and mathematicians to emerge and achieve a clear concept of Artificial Intelligence finally in 1950.

One of them was Alan Turing who explored the mathematical possibility of bringing so-called 'AI' to life. Considered the father of modern computer science, Turning formulated the "Turing Test" which became the foundational benchmark in artificial intelligence. This test asks this pivotal question: "Whether or not a computer (machine) can think intelligently like humans?" Serving as an important criterion for evaluating a machine's ability to exhibit human-like natures, the Turning Test remains integral to all AI productions.



How turning test works step-by-step

Not only that, five years later, the concept of machine learning and AI was initialized through Logic Theorist (with Allen Newell, Cliff Shaw, and Herbert Simon). Logic Theorist was a program that

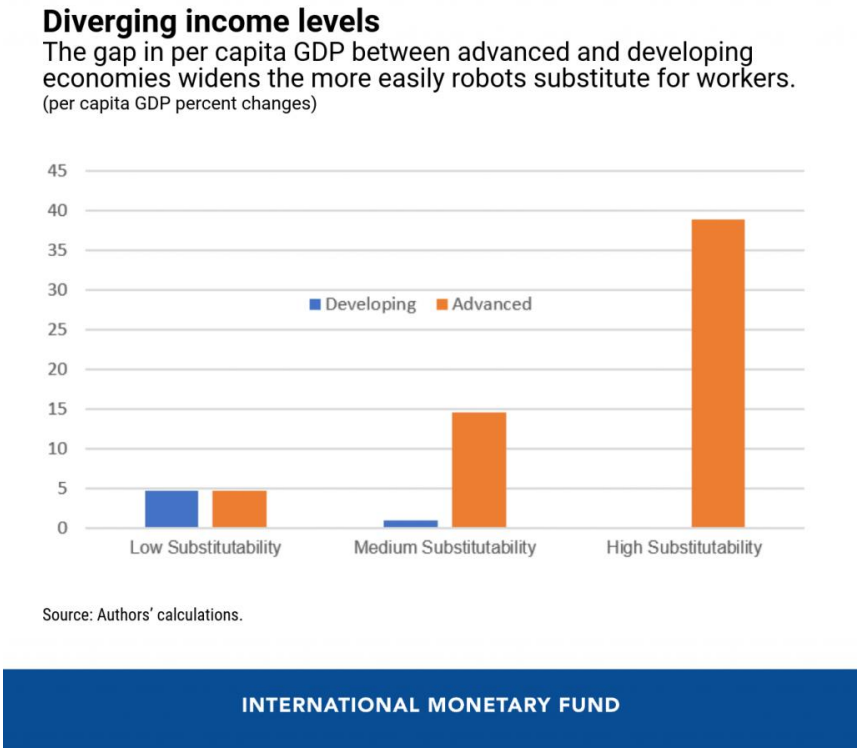
was aimed to emulate human problem-solving skills and was funded by the Research and Development (RAND) Corporation. This is considered to be the world's first artificial intelligence program. In 1956, this program was showcased at the Dartmouth Summer Research Project on Artificial Intelligence (DSRPAI) which was hosted by John McCarthy and Marvin Minsky. It was in this seminal conference, where McCarthy coined the term "artificial intelligence," preeminent researchers were convened for the open-ended discussion on the subject of AI. Despite McCarthy's gigantic aspirations, the conference fell short of his expectations as people came and went as they pleased, resulting in no so-called innovative nor immediate revolutionary changes in the AI field. Undeterred by these challenges, people at the conference wholeheartedly felt that AI was feasible. This remarkable event never gets undermined as it acted as a vital catalyst of AI research which stretches till this modern period.

Picture of those who attended Dartmouth Conference

Problems Raised

Growing Inequality

AI's transformative power is so great that the global economy will also be affected by it. Humanities are on the brink of a new technological revolution – the so-called Third Industrial Revolution, often designated as the information age. AI productions and many machines are aiding humans in productivity, boosting global growth, and raising incomes around the world. However, here comes the point we need to consider – then how about those on the poorer side of the world? Many IMF analysis reveals that AI is likely to complement human work: almost 40 percent of global employment is exposed to AI. This means that AI applications will operate on the key tasks that



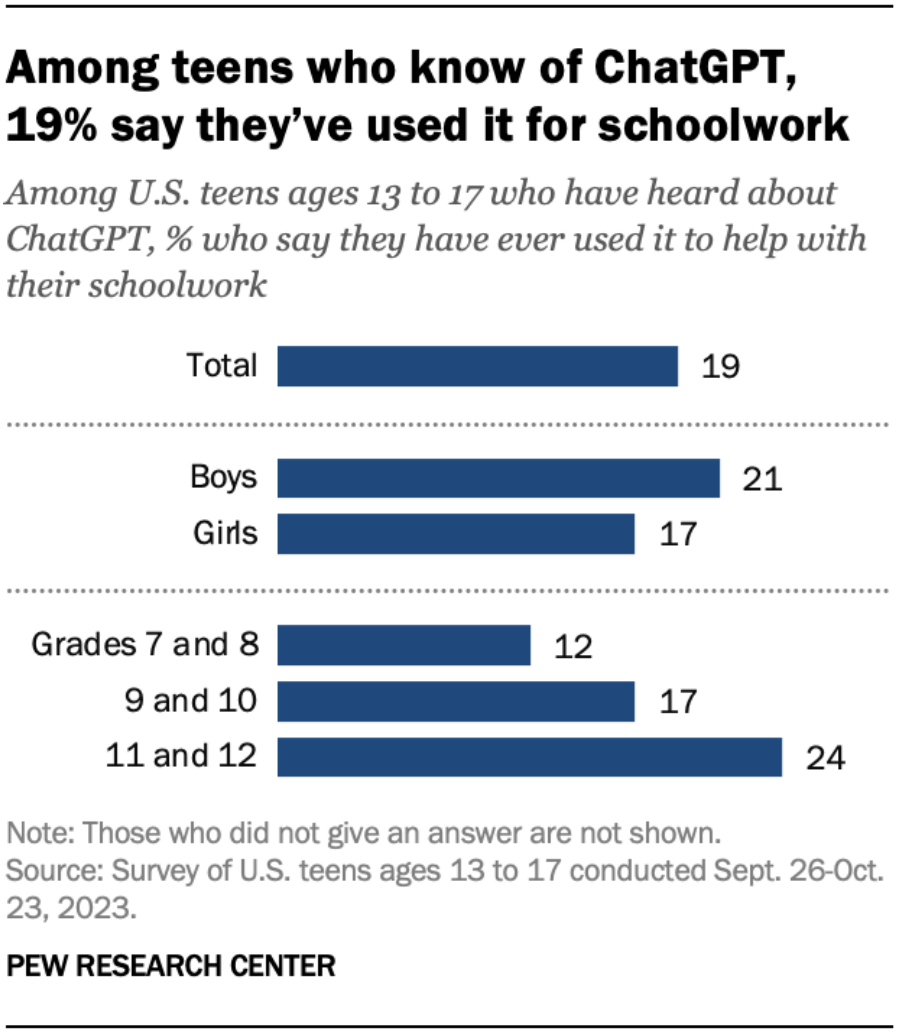
Comparing labor substitutability in developing and advanced nations

humans have been doing for decades, lowering labor demand, lowering wages, and reducing hiring. This may get extreme, being exhibited through the form of job loss.

In newly emerging markets and those less developed countries, AI exposure ranges from 26 percent to 40 percent. This seemingly lower percentage of AI exposure may hint at fewer disruptions from AI. However, at the same time, this low figure alludes that those relatively LEDCs do not have a profound infrastructure or skilled labor force to use AI to their fullest potential. This, in other words, implies the raised risk that over time, technology has the capacity to worsen inequality among nations. Humanities will see growing gaps in every aspect of their lives – not only between the rich and the poor, but on a global scale: between MEDCs and LEDCs.

Students Overusing AI

Artificial Intelligence, as befits its reputation as a symbol of the Third Industrial Revolution, the influence of artificial intelligence not only remains in the industrial sector but also extends itself to the educational sphere. It is an undeniable fact that children's education has been highly affected by artificial intelligence and the machine learning AI machines go through beforehand.



Statistics on how many students use ChatGPT on their assignments

November of 2022 marks AI's giant leap forward with the introduction of ChatGPT, an AI technology that is able to generate creative responses and is able to make human-like dialogue with its users. This was an unprecedented innovation. Sundar Pichai, Google's CEO, denotes artificial intelligence to be "more profound than fire or electricity or anything we have done in the past." There wouldn't be any problem if we, as users, try to take only the positive sides of the AI machines. However, as always, the problem arises as we try to exploit and over-use them. Roughly 1/5 (20 percent) of teenagers said they have used ChatGPT to do

their schoolwork, according to a new Pew Research Center survey. With many teenagers using ChatGPT, 13 percent of United States' children reported that they use other kinds of generative artificial intelligence to do their schoolwork. The extent to which students rely on artificial intelligence chatbots is increasing frighteningly. In teachers' attempts to stop students from relying too much on other intelligent beings in doing their assignments, there have been a lot of ChatGPT or AI detectors.

It is human's natural instinct to overuse artificial intelligence solely for their 'convenience,' meaning measures to alleviate this tension are crucial.

International Actions

UNESCO – First Forum on AI

UNESCO, affiliated with the humanist mission, has been the home for debate on ethical issues that artificial intelligence and machine learning may pose. UNESCO seeks to sort out discussions on computer-based intelligence in a few parts of the world by gathering trained professionals and specialists from various backgrounds and professions. The principal discussion happened in Morrocco in December 2018, which essentially was centered around computer-based intelligence and Africa - and how Africa can profit from AI and further developed advancements. In the end, this discussion resulted in member states agreeing on the definition of important ethical principles regarding artificial intelligence. UNESCO prioritizes guiding international actions in the AI sector. It views Africa's full participation in AI transformations as crucial since it will directly contribute to its development. By actively integrating one of the least developed parts of the world into the newly emerging idea of AI, UNESCO has contributed to maximizing the benefits of artificial intelligence and machine learning to boost development in one country.

First forum on AI in Morocco

2023 Edition of United Nations Activities on Artificial Intelligence (AI)

The 2023 edition of the UN Activities on AI Report presents a collaborative endeavor between the International Telecommunication Union and 46 UN agencies and bodies. This report addresses the need for urgent action to achieve the SDGs, previously set by the United Nations, by 2030. It recognizes Artificial Intelligence as a tool to help speed and scale interventions to achieve SDGs. The report explores ways to leverage the potential of AI to drive change and spread impact across the world. The report presents that AI is being used to forecast food crises, monitor water productivity, map schools using satellite images, optimize communication networks and many more. These applications of AI and its ability are anticipated to enhance the efficiency and effectiveness of UN initiatives. This report also acknowledges challenges – including the ethical, digital divide, and risk of worsening inequalities. Therefore, moving forward, the report calls for the establishment of new principles and guidelines for AI usage.

Key Players

The United Nations Educational, Scientific, and Cultural Organization (UNESCO)

UNESCO strongly advocates for the application of machine learning and AI technologies in classrooms. UNESCO urges human teachers to promote the use of AI in classrooms while guaranteeing that it adheres to universal ethical standards and respects the diverse backgrounds and cultures of the students. UNESCO further suggests a global framework of standards for the ethical use of AI to be adopted by the member states. This is aimed at providing explicit guidelines on the implementation of AI in classrooms and educational fields. This will further emphasize the need for technologies to guarantee the learning environment without the need to compromise on the existing strict ethical principles. The organization also checks for the potential ethical challenges that may arise from the usage of technologies and devise measures to ensure that AI is used and developed in a way that benefits humanity, individuals, society, and the environment.

AI-generated image of future classroom

China

China's AI market is expected to exceed 61 billion dollars by 2025. China has officially declared its position as a global leader in the fields of robotics and artificial intelligence through strategic plans like "Made in China 2025." MIC 2025 (Made in China 2025) is an initiative that attempts to secure China's position as a global powerhouse in high-tech industries. With significant governmental support, China now becomes the world's largest market for industrial robots, which transcends the US with 52 percent global robot installations. Starting in 2017, China announced an ambitious domestic development project for artificial intelligence for the sake of seizing the title of "major AI innovation center." Moving on, China seeks to acquire "leapfrog" technology which includes military AI.

Group of Chinese students looking at AI machine

Possible Solutions

Implementing AI-Related Policies for SDGs

In order to prioritize SDGs that are proposed by the UN, governments and international organizations are recommended to adopt AI-driven policies. These policies may range highly from outlining and ensuring the ethical usage of the technologies to promoting transparency in AI-generated applications. To address one of the main problems associated with AI and machine learning – ethical problems – governments and groups of organizations are asked to establish comprehensive guidelines that are effective at ensuring AI technologies are developed ethically which promotes minimized biases. Examples may include creating the baseline for how machines use and exploit the already existing database, how to protect personal privacy, and how to guarantee and increase algorithmic transparency. Additionally, governments and international bodies should establish an overseeing organization that can regulate and oversee AI-driven technologies to comply with the established standards that have been prevalent in humanity's history. This organization will monitor technologies to prevent any misuse and overuse of them to promote the world's sustainable development.

Encouraging Public-Private Partnership (PPPs) and Increased Connectivity

Fostering collaborations between various groups is essential – ranging from governments, private businesses, academic institutions, and NGOs. To address specific sustainable development goals stated by the UN, only one individual or one individual group is not well enough. Private and public entities must be encouraged to collaborate for the sake of achieving R&D projects for more effectiveness. By working together, the two organizations may use their respective advantages and adopt a more comprehensive outlook. Furthermore, it is essential to promote small firms in less developed countries (LEDCs) through financial channels including innovation funds and venture capital programs. Larger financing aids are made possible by the availability of these financial resources from both public and private entities. Enabling the less developed to catch up to more developed nations will reduce the gap between the rich and the poor. Moreover, especially in developing countries, it is significant to invest in the necessary digital infrastructure. This means improving internet conditions, data storage facilities, and cloud computing resources.

Example of building infrastructures in developing countries

Glossary

SDGs

SDGs, or Sustainable Development Goals, are goals that are set by the United Nations to achieve in the long run. They aim to transform the world and call for actions to end such issues: as poverty, inequality, humanitarian crises, etc.

Turing Test

Turing test is a test for computer-programmed intelligence to be tested on its ability to mimic human behaviors and human problem-solving skills. It requires a human being to be unable to distinguish a machine from another human being that is being tested by using the replies to questions that both the robot respondent and human respondent are given.

R&D Projects

Research and development project are about creative and systematic work that are focused on increasing the amount of knowledge and to create new applications of the available knowledge. It simply deals with experimenting with existing products to innovate new products, processes, or technologies.

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