‘Free AI’: A game changer for world’s toughest problems

Recently I watched a movie, *Free Guy*, where a non-player character suddenly comes ‘alive' because he's technically a very advanced Artificial Intelligence (AI) and got to change his fate. While unpredictable characters actually are not a desirable game feature, AI is becoming increasingly prevalent and accessible in almost every industry, including game developing, with applications like virtual travel assistant, arts generating, robot-assisted surgeries, self-driving car, financial robo-advisors. It is evident that AI is one of the most transformative inventions in our era, reshaping our economy while contributing to improved living standards and solutions to sustainable developments by making cheap predictions possible. Despite valid concerns about AI’s impacts on ethics and employment, I believe in the long run, the net effect of AI is positive.

AI is the latest example of a game-changing “General Purpose Technology”, inventions that revolutionize all sectors in the economy like the steam engine or the Internet, which will eventually enhance the living standards because it reduces operating costs. In other word, the main reason to adopt AI is simply “a drop in the cost of prediction”, where Agrawal et al. (2018) framed AI systems as “prediction machines” that make predictions cheap and abundant, which implies less uncertainty, higher productivity and more opportunities for organizations to make more and better-informed decisions. With this advantage, any sector with prediction concerns can adopt AI, e-commerce, agriculture and healthcare, improving the affordability and overall quality of life for all. Some argue that AI exacerbates unemployment, which reflects the ‘Luddite fallacy’ - technological improvements are believed to create more unemployment, without thinking about the fact that these improvements can help increase productivity. Through automating and augmenting decisions in the economy, which according to Solow, technological progress like this is the basis of lasting economic growth. According to a research by PwC and Microsoft (n. d.), by 2030, the use of AI for environmental technologies could add up to USD $5.2 trillion to the world economy, an improvement of

4.4% compared to business as usual. If the growth rate of population is slower than this increasing rate of productivity, higher living standards is to be expected.

Under the increasing unpredictability of climate change impacts, AI can help solve the complex balance between economic, social and environmental challenges to achieve a more sustainable future framed by the 17 Sustainable Development Goals (SDG) due to two main reasons. First, because AI augments, that is increasing the value of the tasks carried out by humans, rather than replaces our own intelligence and capabilities, so AI will only complement human interests. Second, because obtaining facts and patterns from all over the world is challenging, new technologies like AI can help with summarizing and predicting data at a much larger scale with better accuracy. For example, high-resolution satellite imagery with powerful machine learning algorithms to find how rich or poor specific locations are, or assessing the casualties after an extreme weather event, or monitoring illegal fishing. A research by Vinuesa et al. (2020) found AI technologies have the potential to positively affect around 82% of the SDG's societal outcomes, 93% of the environmental outcomes and 70% of economic outcomes. Admittedly, there are ethical concerns regarding the lack of transparency with AI applications such as Elon Musk's AI-brain-implant company, which emphasize the need to incorporate international human rights law as an essential baseline into AI systems, like using a human rights framework proposed by Pizzi and colleagues (2020).

In a word, the future of AI worldwide is bright, but complicated. Therefore, AI developments should be 'freed', but not without regulations. AI advancements can help human achieve SDGs and other challenges, but transparency and consent are key in developing tools, policies and accountability mechanisms that protect human rights, and to ensure the sustainability and ethical implementation of algorithms that affect our lives.

(593 words)

References

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