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WHAT CHATGPT IS - AND HOW IT WILL IMPACT OUR LIVES

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In late 2022, OpenAI released ChatGPT, an *artificial intelligence* (AI) chatbot (computer software able to simulate human conversation) with astonishing capabilities for producing detailed replies over a broad range of topics. With ChatGPT's emergence, AI now commands centre stage. Among all the hype around it, forecasters point to a wide range of scenarios, from "nothing to see here" to "an uncontrollable and irreversible technology."

First, some definitions. Al is a broad term, but it basically involves automated decision-making by computers. *Machine learning* (ML), a form of Al, is "trained" – meaning it predicts future output based on output historically associated with a given set of inputs. This replaces traditional, explicit programming instruction. Think of the movie recommendations Netflix gives you, e.g., it has learned that you enjoy tongue-in-cheek whodunits, so it will suggest you watch *Glass Onion*. ML is already very prevalent in our lives: Amazon shopping recommendations, Siri, autocorrect and social media feeds like Instagram, to name a few.

ChatGPT is a type of ML, but the scale is huge: 175 billion parameters plus an unprecedented level of human training. This produced a huge leap in the response quality, which fuelled a surge of interest in Al. The uptake broke records, reaching 100 million active users in just two months.

Chances are we all know someone who's used ChatGPT. The GPT in ChatGPT stands for *generative pre-trained transformer*. Generative Al is an Al model that generates content in response to a prompt, producing a wide variety of credible writing in seconds. This can benefit many organizations, saving time and resources – and allowing them to pursue other opportunities.

But generative AI is not without its risks. It will confidently produce inaccurate, plagiarized or biased results without any indication these may be problematic. That's because the AI models are trained on the Internet – hardly a universally reliable source! ChatGPT can "hallucinate" facts and make reasoning errors. For that reason, great care should be taken when using ChatGPT in high-stakes contexts. Before use, be sure to subject it to human review.

Just released: GPT-4, based on an estimated 100 trillion data points (over 500x more than GPT-3). GPT-4 is more reliable and creative, and can handle more nuanced instructions compared to the previous

version. GPT-4 can also take images as an input. However, like its predecessors, GPT-4 has been shown to hallucinate and have biases.

Where does this leave us? Unquestionably, AI can benefit nearly all industries, from logistics to customer service to Internet search to advertising. Recent breakthroughs are both exciting and terrifying. Many warnings cite the dangers of technology; even call for a pause in development and regulations coming from its creators.

The fact is that, like most technology, AI can be used for good and bad. The rapid pace of uptake and advancement alone increases the potential for causing harm. On the bright side, AI will prove to be a powerful tool for many workers, improving their capabilities and expertise – and providing a boost to the economy. However, down the road, companies could also use it to destroy traditionally automation-proof jobs, well-paying ones that currently require creative skills and logical reasoning – doing little for economic growth.

The impact will probably include a bit of both. Technology will increase productivity, which would boost consumer income and spending. While some jobs will be eliminated by innovation, new and betterpaying jobs would also be created – boosting living standards. So, while some things will be substituted, there's also potential for expansion.

Top economist Ed Yardeni writes, "In the past, technology disrupted animal and manual labor... The focus was on brawn. The Great Disruption is increasingly about technology doing what the brain can do." Yardeni says Al could spark another Roaring Twenties for the stock market. The original roaring (19)20s were an exuberant decade that included amazing stock market returns – but ultimately ended with the most devastating depression in modern history. There's no reason that history must exactly repeat itself – but we should be prepared for a range of possibilities, while staying rational.

Lastly, this article, like all articles in Perspectives, was written by a human.



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