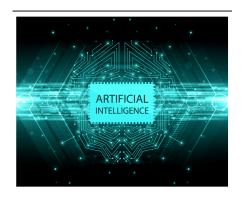
ChatGPT is a threat to education - but is it an asset to management consulting? 26 February 2023



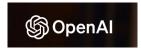
If you haven't used, played around with or even heard of ChatGPT yet, you're probably going to want to get out of the rock you've been living under. ChatGPT, launched on November 30, 2022 has already gained mass amounts of attention and over a million users. The AI chatbot is designed and developed by OpenAI, and can generate text responses to human inputs, while also answering follow ups, admitting to mistakes and challenges incorrect premises.

Whilst people have starting using ChatGPT for harmless personal tasks such as recipes, template blog posts and blocks of code - it has rapidly entered the hands of students, threatening education as we know it. It can easily be used to write essays, academic articles and answer problems that only require input information and access to the internet. The issues surrounding ChatGPT plagiarism are controversial, and there is talk around how ChatGPT could watermark it's text. Alternatively, but more long term, technologies are being developed to detect Al generated responses, however this will have its own flaws as well. ChatGPT has launched its own plagiarism detection tool to combat these criticisms, but that too is still imperfect. A few instances where we can see it being a real threat is when is passed the Wharton MBA exam - and generated "excellent" responses.

However ChatGPT isn't OpenAl's only product. OpenAl is an artificial intelligence research laboratory, it's research focusing on reinforcement learning. In 2021, OpenAl introduced DALL-E, a deep learning model that can generate digital images from natural language descriptions. DALL-E 2 now has learned the relationship between images



and the text used to describe them, and can generate more realistic and accurate images with higher resolution. Codex is another AI system, which translates natural language to code, and is proficient is over 12 languages. It can interpret simple commands in natural language and execute them on the user's behalf, and invites businesses and developers to build on top of OpenAI codex though their API.



Having used traditional search engines for as long as we can remember, it's tempting to ask whether ChatGPT will be a threat to Google? Apparently Google is going to slowly roll out a rival -

Google Bard AI - which will be slowly integrated into its search engine over time.

However the first public demo of Bard showed an inaccurate response, which suggests that these Al tools are not sophisticated enough to replace our tried and tested search engines anytime soon. Microsoft has also announced that they will bring ChatGPT into Bing, and a full release will be expected soon.

However the newest and most unexpected collaboration with OpenAI has been with prestigious management consulting firm, Bain & Co. Bain wants to help its clients implement the value of AI to maximise business potential. They have already embedded OpenAI's tech into their internal knowledge management systems, research and processes to improve efficiency. Examples include:

- **O** Using DALL-E and ChatGPT to create highly personalised ads with targeted messages and rich imagery
- O Improved productivity and responsiveness to clients through analysis of client dialogues and financial literature
- O More streamlined customer service operations
- O Hyperefficient content creation

However it is very difficult to tell whether Bain has done appropriate research on the usefulness and value these tools would bring to their services, or whether they have just decided to hop on the trend and follow where the hype is. Al and chatbots have become buzzwords, so it would be no surprise if Bain decided that they need to be ahead of the curve.

Coca-Cola has inked a deal with Bain & Co to explore new ways to improve the creativity of its marketing through ChatCPT, DALL-E and Codex. The outcomes of this deal will likely give us some more insight as to whether AI is really going to be transformative to the management consulting sphere, and deliver actionable solutions for businesses.

By Sanjana Iyer

Invest in the AI revolution via:

(1) Equities

- Upstart Holdings (NASDAQ:UPST): Cloud-based AI lending platform connecting banks and other lenders with borrowers.
- Nvidia (NASDAQ:NVDA): Semiconductor maker whose chips are central to many Al technologies and applications..
- Intuitive Surgical (NASDAQ:ISRG): Maker of the da Vinci robotic surgical system, which allows for minimally invasive surgeries with precise control.
- iRhythm Technologies (NASDAQ:IRTC): Digital healthcare company focused on cardiac monitoring.
- Brooks Automation (NASDAQ:BRKS): Manufacturing automation company that provides a range of services for semiconductors and life sciences companies.
- Stratasys (NASDAQ:SSYS): A maker of 3D printing systems.
- Ambarella (NASDAQ:AMBA): Semiconductor company that designs video components for chips.
- Splunk (NASDAQ:SPLK): Another cloud stock that uses artificial intelligence and machine learning to improve its data platform.

(2) ETFs

- Global X Robotics & AI ETF (NASDAQ:BOTZ) is a fund that seeks to "invest in companies that
 potentially stand to benefit from increased adoption and utilisation of robotics and artificial
 intelligence." AuM USD 1.35 billion
- ROBO Global Robotics and Automation Index ETF (NYSEMKT:ROBO) is focused on companies driving "transformative innovations in robotics, automation, and artificial intelligence." ROBO invests in companies that are primarily focused on AI, in addition to cloud computing and other technology companies. AuM USD 1.2 billion
- iShares Robotics and AI ETF (NYSEMKT:IRBO) aims to track the results of an index of developed and EM companies that could benefit from the long-term opportunities in robotics companies and artificial intelligence. AuM USD 231 billion
- First Trust Nasdaq AI and Robotics ETF (NASDAQ:ROBT) seeks to track the Nasdaq CTA Artificial and Robotics Index, which is made up of companies engaged in artificial intelligence and robotics in technology, industrials, and other sectors. AuM USD 193 billion