

Happy birthday, ChatGPT. The family's grown and we should get to know it better

Companies should train their staff on the possibilities and pitfalls that rapidly advancing generative AI technologies bring to the table.



Lim Sun Sun

It is hard to believe that it has been only one year since ChatGPT exploded onto the scene on Nov 30, 2022, and changed our world forever. Generative AI capabilities have progressed at a lightning pace since then. Big tech companies like Google and Meta have unveiled their own large language models which power generative AI and relatively new entrants like Grok by Mr Elon Musk's xAI and Ernie from China's Baidu have also entered the fray.

Accelerated by such fierce industry competition, significant new features have been added to chatbots like ChatGPT, Google Bard and Anthropic's Claude, as well as to AI image generators such as OpenAI's Dall-E, Midjourney and Stable Diffusion. These disruptive waves of change have not only heralded new uses of these platforms but also pose formidable challenges for users' digital competencies.

In other words, while we are surrounded by generative AI, are we familiar enough with it to tap its true potential in our workplaces or at home? Are companies training their employees enough on how to leverage these powerful new technologies?

The truth is that the quicker such tools evolve, the more some people struggle to keep up.

Yet the use of these technologies is widespread – ChatGPT alone reached one million users in its first five days and has more than 100 million users now, with 1.5 billion monthly visitors to its website. With so many generative AI platforms on the market offering infinite possibilities in their application, it is vital that users be sensitised to not only the potential but also limitations of generative AI.

HOW THEY HAVE GROWN

When it first entered our

consciousness in November 2022, ChatGPT had a key limitation, which was that it was trained on data up to 2021 and would therefore spew inaccuracies about current events. It was also unable to access the Web and retrieve "live" information. However, Microsoft's Bing AI and Google's Bard chatbots can now do exactly that. When posed questions in natural language about current developments, both will search the Web and provide coherent-sounding answers drawing on several sources.

Bing AI will helpfully indicate its online sources with hyperlinks via footnotes while Bard provides a button for you to double-check the response via a live Google search. The quality of their responses varies by the subject matter and different users will likely report wildly divergent results that also depend on how effectively their prompts are phrased. Notably, both chatbots come with disclaimers such as "Bing is powered by AI, so surprises and mistakes are possible" and Bard reminding its users that it "may display inaccurate info, including about people, so double-check its responses".

Considering how quickly technology is advancing and the sheer number of users providing feedback to tech companies to hone their wares, it is safe to say that these chatbots will be constantly tweaked to offer improved functionality. However, their accuracy and reliability are still far from watertight, and "hallucination", or conjuring up untruths, remains a problem. Users must still exercise the discipline of verifying these chatbots' neatly packaged answers with online searches of their own and cross-check against authoritative sources. A critical rule to bear in mind is that chatbots are designed to speak with an air of confidence and self-assurance, however inaccurate they may be.

Another key advancement in generative AI platforms in the past year has been the introduction of multimodal capabilities. In other words, some chatbots are not merely text-based but can accept and generate data in multiple formats, such as text, image and audio. Both Bing AI and Bard can

already accept prompts and provide answers in all those forms. Visual interpretation is a remarkable game changer for queries, given its many possible applications.

The OpenAI website has a section explaining the enhanced capabilities of ChatGPT 4, its latest version, which unpacks how a range of image inputs can be analysed. These include serious tasks such as interpreting charts and answering exam questions to more playful challenges such as explaining why a meme is funny. Such capabilities can obviously be custom trained and deployed for myriad commercial purposes including medical diagnoses, facilities management and customer support.

For lay users with more everyday concerns, likely uses could include getting these chatbots to decipher complicated appliance manuals or confusing road maps. Online accounts by users sharing their experiments with image prompts suggest that these interpretations can often be valid but are by no means consistently foolproof. In other words, it is still best to proceed with caution and engage in independent verification.

Visual outputs must also be carefully and critically examined. A current popular use of AI image generators is to create images for promotional, marketing and educational materials. These image generators can be truly marvellous, allowing one to create, in seconds, images in response to detailed prompts such as "a classroom from the 1920s with students listening attentively to a robot professor" or "portrait of a mother feeding her child in the style of Frida Kahlo".

Common Sense Media, a notable non-profit advocacy group providing guidance to families on healthy media content, assessed and rated different AI image generators. It found that Snapchat's MyAI, Dall-E and Stable Diffusion reinforced biases such as ageism, sexism and cultural stereotypes. It also detected a tendency by these image generators towards objectifying and sexualising women and girls as well as reinforcing gender stereotypes. These biases stem from dominant tropes in the images on which



Amid fierce competition, significant new features have been added to chatbots like ChatGPT, posing challenges for users. Companies need to foster a healthy environment for the judicious use of generative AI, says the writer. PHOTO: AFP

these AI models have been trained.

Even as these companies become more aware of inherent biases in their AI models and work to correct them, users must recognise their constraints and be more discerning in how we generate, interpret and use these images. It is also helpful to be aware of which image generators have introduced guardrails to prevent the creation of inappropriate content that is harmful, violent, adult, or hateful in nature so as to enjoy a safer user experience.

TINKER AND GET TRAINED

With the ground literally shifting under our feet, is the solution then to adopt a conservative wait-and-see stance before using generative AI? On the contrary, the only way to understand how generative AI works is to actually use it. Tinkering with different chatbots and testing their performance with similar tasks will enable you to compare and contrast their relative strengths and weaknesses, and how to exploit their diverse features. Experimenting with rival AI image generators will give you a sense of how different kinds of prompts yield different results.

There is also an ever-expanding pool of social media accounts, discussion forums and online resources providing guidance on how to use generative AI for all kinds of purposes catering to a long tail of personal interests and commercial specialisations. Following these social media feeds and interacting online with other users is an excellent way to

familiarise yourself with these emerging and fast-evolving technologies.

Almost everyone can access these powerful technologies for recreation and for work, and employers would do well to support their employees in their learning journeys. With generative AI innovations disrupting business processes, individual employees cannot be expected to figure out these technological changes on their own.

Organisations must establish training and guidelines to support employees through this exciting yet bewildering period.

An online survey conducted on over 1,000 full-time office workers in Singapore between late July and early August 2023 offers telling insights. Commissioned by global tech giant Salesforce and executed by YouGov, results were released in September.

It found that 40 per cent of Singapore employees currently engage and experiment with generative AI in the course of their work. Of those using generative AI in their work, more than 90 per cent believe it enhances their productivity. A striking 76 per cent of those employing generative AI admitted to presenting work completed using this technology as their own, and 53 per cent confessed to doing this on multiple occasions. Additionally, almost half (48 per cent) of the generative AI users conceded to using platforms banned by their employers.

The survey revealed a limited understanding among respondents of ethics and safety in generative AI use. Less than 37 per cent could identify helpful

practices such as using only company-verified tools and fact-checking generative AI outputs before application. Furthermore, approximately 80 per cent of respondents report a lack of clearly defined policies in their companies regarding the use of generative AI for work, while 63 per cent of respondents have yet to receive training from their employers on the ethical or safe use of generative AI.

The survey data underlines that companies need to foster a healthy environment for the judicious and effective use of generative AI. This endeavour should encompass the use of trusted and secure platforms, clear guidelines and policies, and training programmes to ensure ethical and safe use. Middle managers in particular must engage with and learn about generative AI so that they can provide much-needed guidance to their subordinates on ethical and effective use.

In the course of one short year, generative AI has made its presence felt in ways that will only become more palpable. Getting acquainted with this technology is the first step towards understanding how it works and how to make it work for you.

Lim Sun Sun is vice-president of partnerships and engagement and professor of communication and technology at the Singapore Management University. She is also a member of the Media Literacy Council and an affiliate of the International Panel on the Information Environment.