Everybody's Talking About Generative AI

How Is This Going To Impact Your Business?

With technology advancing at an unprecedented rate and artificial intelligence ("AI") leading the charge, profound changes are rippling through all sectors of business. Generative AI ("Gen. AI") has surfaced as a ground-breaking tool, but what exactly is it and how is it going to impact your business?
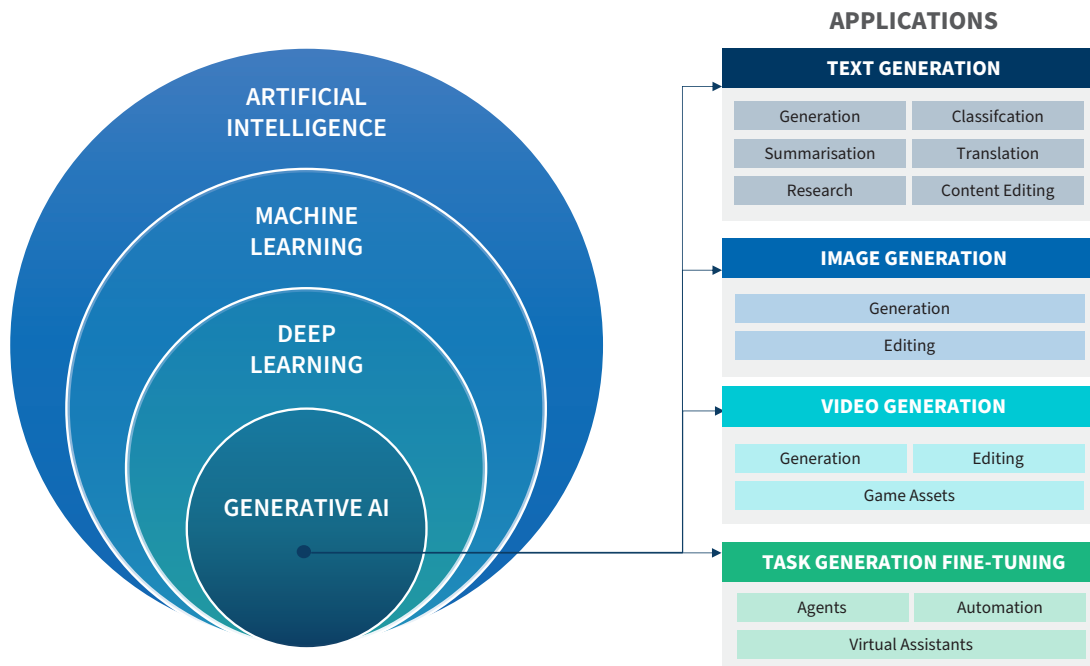
What is Gen. AI?

In its simplest form, Gen. AI involves using algorithms to generate new data (text, images, audio, videos, tasks, etc.) similar to a training set. The most well-known example of Gen. AI is OpenAI's ChatGPT, a large language model ("LLM"). LLMs use a probability distribution method to predict words based on a very large collection of documents; by randomly selecting words from this distribution, LLMs can theoretically generate entire stories. To put this in context, the Writers Guild of America has asked (as part of its latest contract proposal) the entertainment industry to agree not to use AI to replace writers.[1]

Microsoft made international headlines in January 2023 when the company announced a new multiyear $10 billion investment in OpenAI.[2] This investment has many layers, but most notably it means that Microsoft is the exclusive provider of computing power for OpenAI's research, products and programming interfaces; Microsoft can build this AI technology into Bing, Edge, 365 and other products. The impact of ChatGPT was such that Google, fearing that ChatGPT could threaten Google's place as the go-to source of information, was quick to publicly announce its own Gen. AI application, Bard.

The reality is that Gen. AI isn't just approaching — it's here, and you are most likely already using it.

What Are Its Applications?

As alluded to above, Gen. AI broke into the public consciousness with the release of the ChatGPT prototype in late 2022, collecting more than one million users in just five days.[3] ChatGPT is a member of the Generative Pretrained Transformer ("GPT") class of language models and is a task-specific GPT that was fine-tuned for conversation and chatbots. That fine-tuning for conversation is one of the reasons for its popularity — it mimics humans, and people find that interesting, impressive, and sometimes scary. However, the underlying GPT can be fine-tuned for a multitude of uses. In terms of language, there are use cases ranging from creating legal contracts and documentation summaries/reviews to hyper-personalised marketing materials to code generation and quality assurance. If a part of your organisation is involved in the creation of text, then there is an opportunity to leverage this type of Gen. AI.

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APPLICATIONS

TEXT GENERATION

Generation	Classifcation
Summarisation	Translation
Research	Content Editing

IMAGE GENERATION

Generation
Editing

VIDEO GENERATION

Generation	Editing
Game Assets	

TASK GENERATION FINE-TUNING

Agents	Automation
Virtual Assistants	

ARTIFICIAL INTELLIGENCE

MACHINE LEARNING

DEEP LEARNING

GENERATIVE AI

However, it's not only text; following closely on the heels of text-based Gen. AI has image generation. In March 2023, Coca-Cola, in partnership with OpenAI, unveiled an AI platform for consumers to use to generate art for an innovative marketing campaign called "Create Real Magic."[4] At roughly the same time, Adobe announced it was entering the Gen. AI game with the launch of its AI model called Firefly. Firefly, as it exists today, in beta and without firm pricing (Adobe says that's coming), offers a single model designed to generate images and text effects from descriptions. On a technical level, Firefly isn't dissimilar to other text-to-image AI; however, Adobe claims that Firefly avoids the ethical and logistical pitfalls to which many of its rivals have fallen victim. For example, Midjourney and Stability AI are involved in a legal case that alleges they infringed on the rights of millions of artists by training their tools on web-scraped images.[5]

Whether it's text, images, audio, video or other data creation, it is important to consider how this data was created, where it originated from and whether it satisfies responsible AI legislation that's coming down the road.[6] For example, if a model re-creates an image of a person in the style of Andy Warhol, who owns that image? Moreover, who gave permission for the model to be trained in Andy Warhol's art? In November 2022, a class-action lawsuit filed in a federal court in California took aim at GitHub Copilot, a powerful tool that automatically writes working code when a programmer starts typing. The coder behind

the suit argues that GitHub is infringing copyright because it does not provide attribution when Copilot reproduces open-source code covered by a license requiring it.[7]

Key Considerations

These copyright and privacy questions are just the tip of the iceberg when it comes to Gen. AI. The applications and potential benefits seem to be boundless; however, there are many considerations to take into account when deciding whether to invest in and implement a Gen. AI solution, but not limited to:

Cost

— Use of the ChatGPT Application Programming Interface ("API") incurs a cost ranging from $4 to $180 per million words, depending on the model.

— There is a cost-benefit question to be answered. Can you build your solution with a traditional machine-learning model as opposed to incurring the cost of Gen. AI?

Intellectual Property, Copyright and Privacy

— Models are trained on a vast corpus of internet data and many may encompass copyrighted material. This raises concerns regarding potential copyright or intellectual property ("IP") violations for the model outputs.

— The lack of source references or explanations for generated content needs legal and compliance leaders to closely monitor developments in copyright law pertaining to ChatGPT's output.

— Italy's data regulator issued an emergency decision demanding that OpenAI cease using the personal information of Italian individuals included in its training data.[8]

Accuracy

— One concern with Gen. AI models is that they can generate inaccurate yet deceptively plausible information (often referred to as hallucinations) without legal or scientific citations.

— Steven Schwartz, an attorney licensed in New York for over three decades, had to apologise for unknowingly submitting fake court citations from ChatGPT in May 2023.[9]

Security

— The main security concern is around what data you are sending to the Gen. AI model; Samsung made the news when employees shared confidential information with OpenAI via ChatGPT, which was then used to retrain the model.[10]

— Another consideration is around the geographical location of servers and whether they align with clients' regions.

Fairness and Regulation

— Gen. AI models like ChatGPT or Bard can be susceptible to biases present in training data, leading to potential discrimination based on protected fields.

— The draft EU AI Act has recently been updated, establishing new requirements for Gen. AI models. These regulations include transparency mandates, such as disclosing that the generated content is the result of AI, to prevent the generation of illegal content.

Contact Us

FTI Consulting is here to support your organisation on its Gen. AI journey. Contact us today for half-day workshops on product ideation for Gen. AI and to further explore the opportunities and pitfalls associated with it.

MARK HIGGINS
Senior Managing Director
mark.higgins@FTIConsulting.com

SIMON SHORTT
Managing Director
simon.shortt@fticonsulting.com

ARAN BRADY
Senior Director
aran.brady@fticonsulting.com

ABHISHEK KHANNA
Senior Director
abhishek.khanna@FTIConsulting.com

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Endnotes

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