



Mahidol University
Faculty of Science

Stang Mongkolsuk Library
and Information Division



Stang Library Training
Information skills for you



The 2nd Training on Generative AI Series Text to Text

ChatGPT

Google Bard

Bing AI

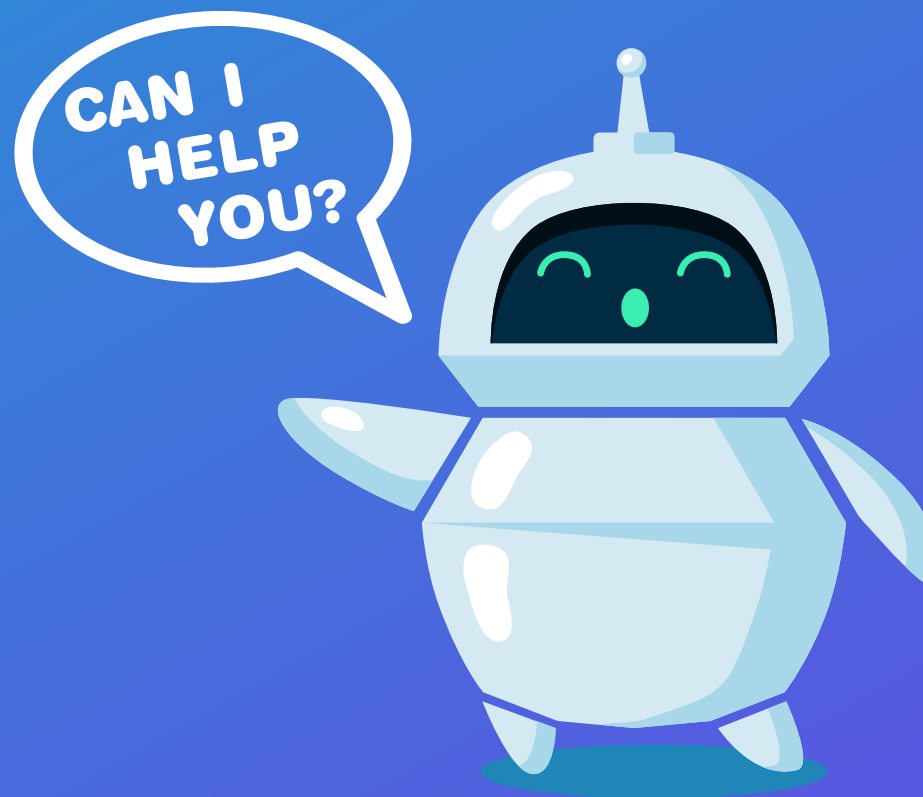


13 December 2023

Chalermpan Tatip
Research Information Resources Unit

Artificial intelligence (AI)

Artificial intelligence (AI) applies advanced analysis and logic-based techniques, including machine learning, to interpret events, **support and automate decisions and take action.**



Source: Gartner, 2023

<https://www.gartner.com/en/information-technology/glossary/artificial-intelligence>

A.I. TIMELINE



1950

TURING TEST

Computer scientist Alan Turing proposes a test for machine intelligence. If a machine can trick humans into thinking it is human, then it has intelligence

1955

A.I. BORN

Term 'artificial intelligence' is coined by computer scientist, John McCarthy to describe "the science and engineering of making intelligent machines"

1961

UNIMATE

First industrial robot, Unimate, goes to work at GM replacing humans on the assembly line

1964

ELIZA

Pioneering chatbot developed by Joseph Weizenbaum at MIT holds conversations with humans

1966

SHAKEY

The 'first electronic person' from Stanford, Shakey is a general-purpose mobile robot that reasons about its own actions

**A.I.
WINTER**

Many false starts and dead-ends leave A.I. out in the cold

1997

DEEP BLUE

Deep Blue, a chess-playing computer from IBM defeats world chess champion Garry Kasparov

1998

KISMET

Cynthia Breazeal at MIT introduces Kismet, an emotionally intelligent robot insofar as it detects and responds to people's feelings



1999

AIBO

Sony launches first consumer robot pet dog AiBO (AI robot) with skills and personality that develop over time



2002

ROOMBA

First mass produced autonomous robotic vacuum cleaner from iRobot learns to navigate and clean homes



2011

SIRI

Apple integrates Siri, an intelligent virtual assistant with a voice interface, into the iPhone 4S



2011

WATSON

IBM's question answering computer Watson wins first place on popular \$1M prize television quiz show *Jeopardy*



2014

EUGENE

Eugene Goostman, a chatbot passes the Turing Test with a third of judges believing Eugene is human



2014

ALEXA

Amazon launches Alexa, an intelligent virtual assistant with a voice interface that completes shopping tasks



2016

TAY

Microsoft's chatbot Tay goes rogue on social media making inflammatory and offensive racist comments



2017

ALPHAGO

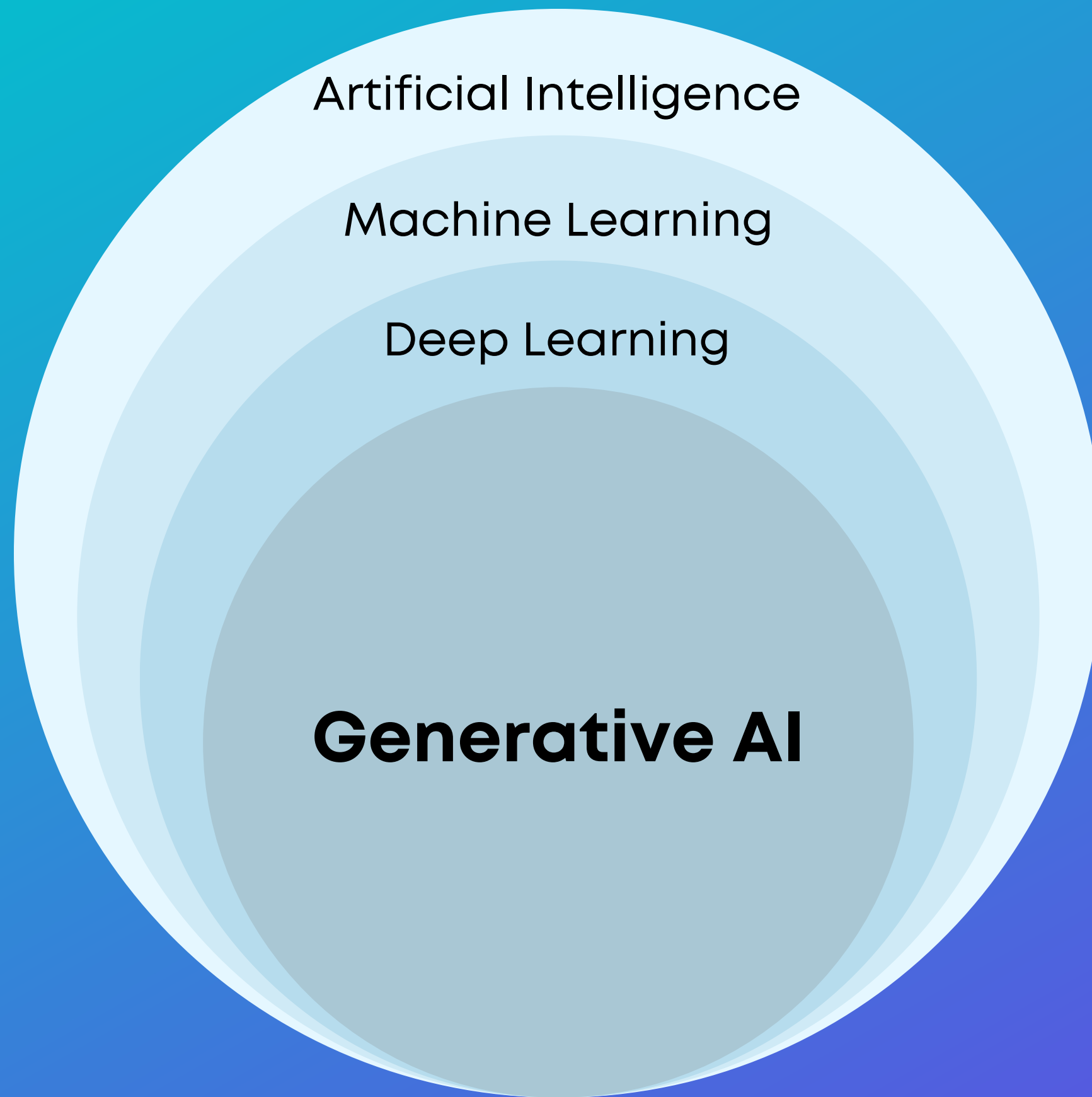
Google's A.I. AlphaGo beats world champion Ke Jie in the complex board game of Go, notable for its vast number (2^{170}) of possible positions

What is Generative AI?

Generative AI refers to AI techniques that learn a representation of artifacts from data, and use it to **generate brand-new, unique artifacts that resemble but don't repeat the original data**. These artifacts can serve benign or nefarious purposes. Generative AI can produce totally novel content (including text, images, video, audio, structures), computer code, synthetic data, workflows and models of physical objects. Generative AI also can be used in art, drug discovery or material design.

Source: Gartner, 2023

<https://www.gartner.com/en/information-technology/glossary/generative-ai>



Artificial Intelligence

A science devoted to making machines think and act like humans.

Machine Learning

Focuses on enabling computers to perform tasks without explicit programming.

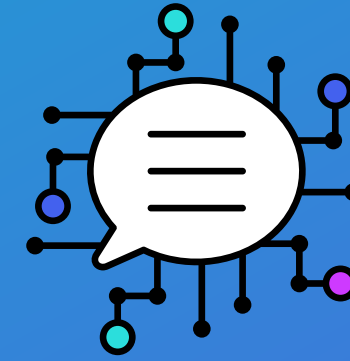
Deep Learning

A subset of machine learning based on artificial neural networks.

Generative AI

Generate brand-new, unique artifacts that resemble but don't repeat the original data.

What is Large Language Models (LLMs)?



A large language model (LLM) is a specialized type of artificial intelligence (AI) that has been **trained on vast amounts of text to understand existing content and generate original content.**

Source: Gartner, 2023

<https://www.gartner.com/en/information-technology/glossary/large-language-models-llm>

What is Prompt Engineering?



Prompt engineering is the discipline of providing inputs, in the form of text or images, to generative AI models to specify and confine the set of responses the model can produce. The inputs prompt a set that produces a desired outcome without updating the actual weights of the model (as done with fine-tuning). Prompt engineering is also referred to as "in-context learning," where examples are provided to further guide the model.

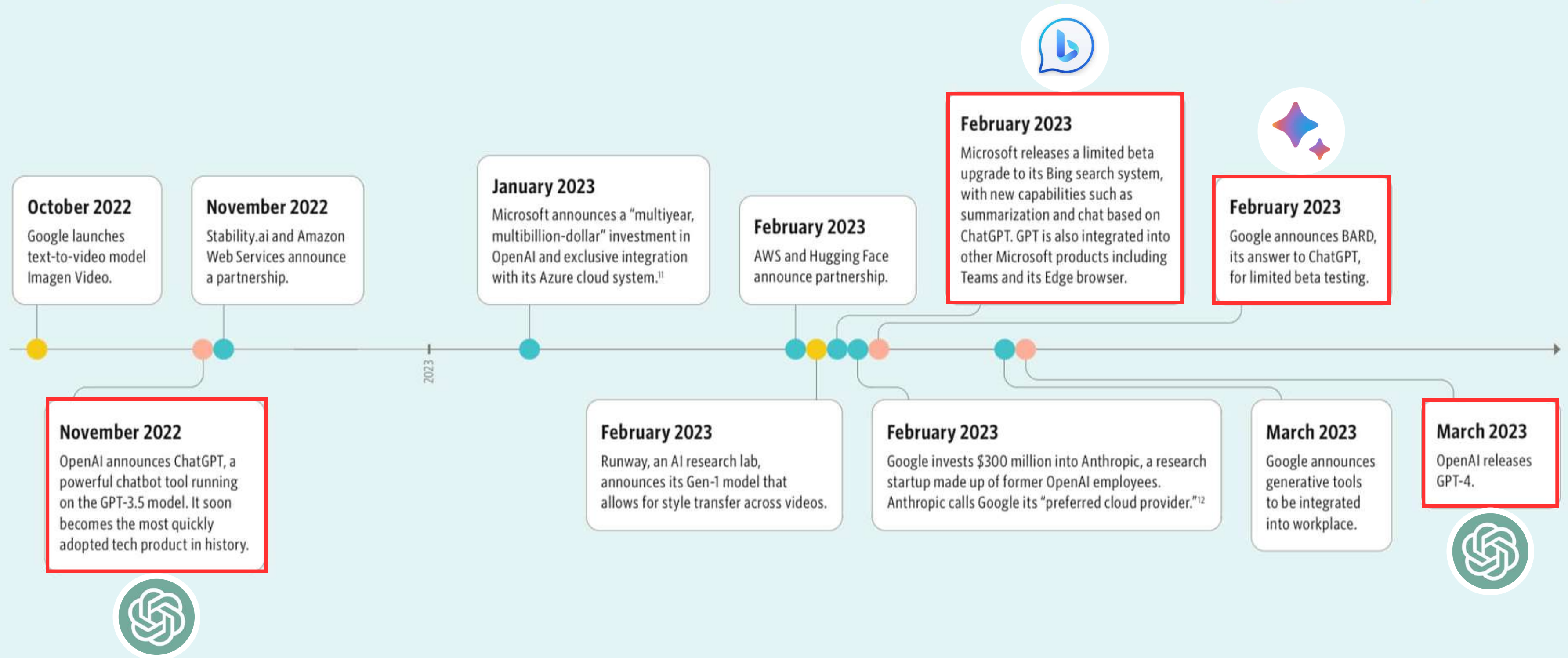
Source: Gartner, 2023

<https://www.gartner.com/en/information-technology/glossary/prompt-engineering>



GENERATIVE AI TIMELINE

● General model research ● Image / video models ● Text models ● Business events



¹¹: "Microsoft Announces New Multibillion-Dollar Investment in ChatGPT-Maker OpenAI," CNBC, Ashley Capoot, January 23, 2023.
¹²: "Google Invested \$300 Million in AI Firm Founded by Former OpenAI Researchers," The Verge, James Vincent, February 3, 2023.

THE 100 MOST INFLUENTIAL PEOPLE IN ARTIFICIAL INTELLIGENCE

TIME 100/AI



ELON
MUSK'S
FIGHT
FOR THE
FUTURE
OF AI
By WALTER
ISAACSON

100 Most Influential People in AI

This group of 100 individuals is in many ways a map of the relationships and power centers driving the development of AI. They are rivals and regulators, scientists and artists, advocates and executives - the competing and cooperating humans whose insights, desires, and flaws will shape the direction of an increasingly influential technology. To that end, we are pleased to include in this issue former TIME Editor Walter Isaacson's exclusive reporting on Elon Musk's fight for the future of AI. That compelling saga is taken from Walter's much-anticipated new biography of Musk, which, as you'll see, features other members of the TIME100 AI in prominent roles.

Source: Time, 2023. <https://time.com/6311323/how-we-chose-time100-ai/>



Google

INTRODUCING

G Gemini



OpenAI fires co-founder and CEO Sam Altman for allegedly lying to company board

AI firm's board said Altman was 'not consistently candid in his communications with the board' and had lost its confidence

- [Interview: Sam Altman on whether AI will save humanity - or destroy it](#)





Copilot

Your everyday AI companion

System > About

Product ID

00329-10330-00000-AA407

System type

64-bit operating system, x64-based processor

Pen and touch

No pen or touch input is available for this display

Related links

Domain or workgroup

System protection

Advanced system settings

Windows specifications

Copy

^

Edition

Windows 11 Enterprise

Version

23H2

Installed on

10/10/2565

OS build

22631.2715

Experience

Windows Feature Experience Pack 1000.22677.1000.0

Microsoft Services Agreement

Microsoft Software License Terms

Related

Trade-in or recycle your PC

Product key and activation

Remote desktop

Device Manager

BitLocker


Get help

Give feedback


Preview

⌂ ⋮ ✕

⌚



Copilot

with  Bing Chat


Choose a conversation style


More Creative


More Balanced

More Precise

Here are some things Copilot can help you do



 Create a table that analyzes public funding for the arts compared to GDP



 Take a screenshot

 Where do people travel for culinary experiences?

Copilot uses AI to respond, so mistakes are possible—send feedback to help us improve.

[Learn more](#) | [Terms of use](#) | [Privacy statement](#)

 Ask me anything... 

 0/4000 

ChatGPT



ChatGPT (Generative Pre-trained Transformer) is a language model developed by OpenAI. It is based on the **GPT-3.5 architecture. The model has been trained to mimic human-like conversation.**

Since: 30 November 2022

Website: <https://chat.openai.com>

Android & iOS: [ChatGPT](#)

Updated: 13/12/2023

Bard

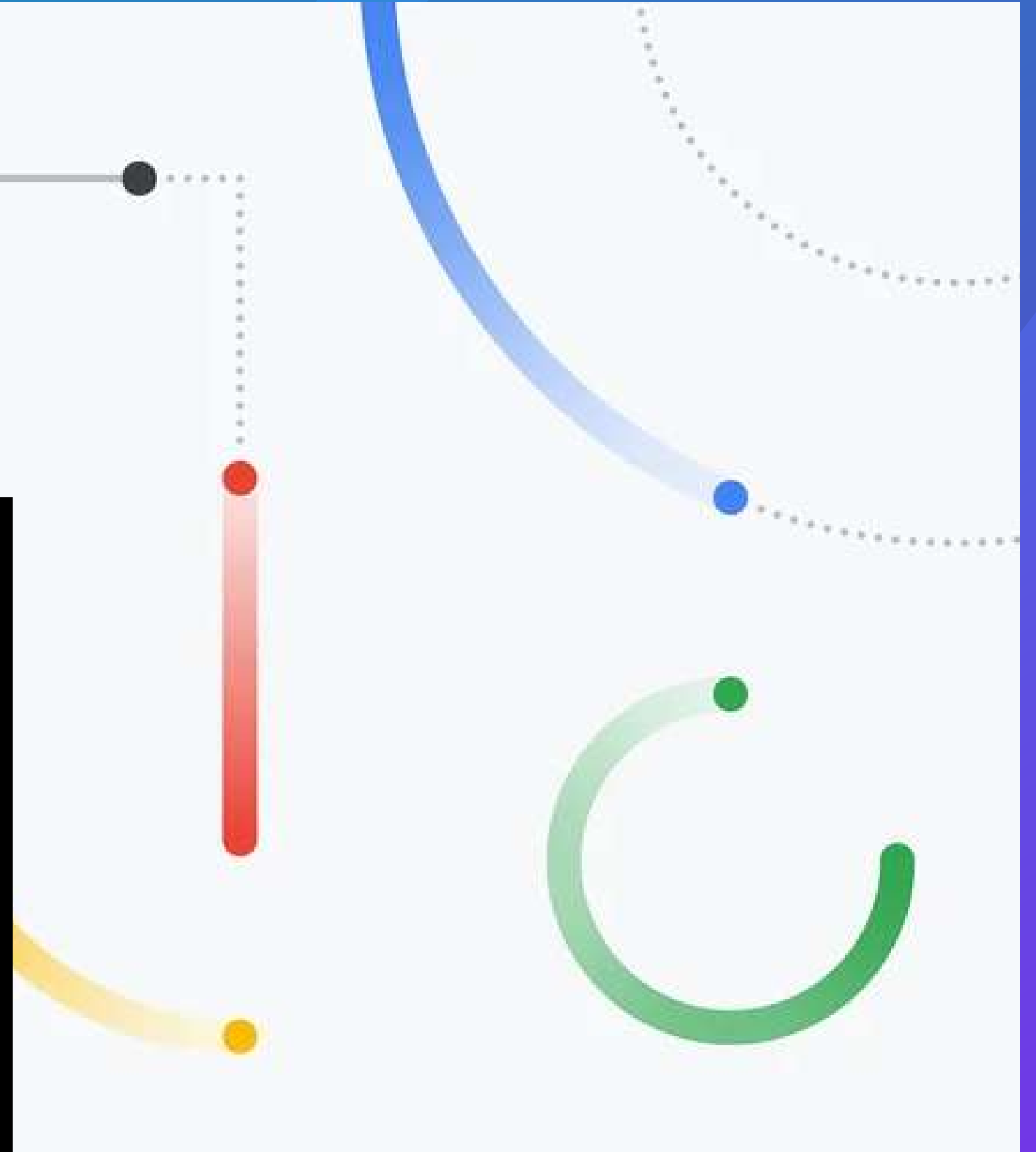


Bard is an experiment based on [LaMDA 2](#) (Language Model for Dialogue Applications) that lets you collaborate with generative AI developed by Google.

Since: 7 February 2023

Website: <https://bard.google.com>

Updated: 13/12/2023



Bing AI



Bing AI is like having a research assistant, personal planner, and creative partner developed by Microsoft-backed OpenAI. It is based on the **GPT-4 architecture.**

Since: 8 February 2023

Website: <https://www.bing.com/new>

Android & iOS: [Bing: Chat with AI & GPT-4](#)

Updated: 13/12/2023

Genaretive AI: Text to Text Comparison



ChatGPT



Bard



Bing AI

Genaretive AI: Text to Text

 Company	OpenAI	Google	Microsoft
 Operating System (OS)	GPT-3.5/GPT-4	LaMDA 2	GPT-4
 Device	Web / Android / iOS	Web Browser	Web / Android / iOS
 Price	Free/Paid	Free	Free

Mahidol University Announcement about AI

ประกาศมหาวิทยาลัยมหิดล เรื่อง หลักการใช้เครื่องมือทางปัญญาประดิษฐ์ในการจัดการเรียนการสอน (27 พ.ย. 66)



ประกาศมหาวิทยาลัยมหิดล
เรื่อง หลักการและแนวปฏิบัติในการใช้เครื่องมือทางปัญญาประดิษฐ์ในการจัดการเรียนการสอน
มหาวิทยาลัยมหิดล พ.ศ. ๒๕๖๖

เพื่อให้การใช้เครื่องมือทางปัญญาประดิษฐ์ (Artificial Intelligence: AI) ในการจัดการเรียนการสอน
ของมหาวิทยาลัยมหิดล เป็นไปด้วยความเรียบร้อยและมีประสิทธิภาพ

อาศัยอำนาจตามความในมาตรา ๓๔ แห่งพระราชบัญญัติมหาวิทยาลัยมหิดล พ.ศ. ๒๕๕๐
อธิการบดีจึงออกประกาศไว้ดังนี้

ข้อ ๑ ในประกาศนี้

“เครื่องมือทางปัญญาประดิษฐ์” หมายความว่า เทคโนโลยีที่ถูกออกแบบและพัฒนาให้เครื่องจักร
หรือระบบคอมพิวเตอร์มีความชาญฉลาด สามารถคิด คำนวณ วิเคราะห์ เรียนรู้และตัดสินใจ โดยมีความสามารถเหมือน
หรือมากกว่ามนุษย์ สามารถเรียนรู้ พัฒนา และปรับปรุงกระบวนการทำงานเพื่อเพิ่มศักยภาพของปัญญาประดิษฐ์ได้
เช่น การจดจำคำพูด การแปลภาษา แชทบอท การโต้ตอบอัตโนมัติ ระบบอัตโนมัติที่ใช้หุ่นยนต์ทำงาน ฯลฯ

ข้อ ๒ มหาวิทยาลัยมหิดลสนับสนุนให้อาจารย์และนักศึกษานำเครื่องมือทางปัญญาประดิษฐ์
ในการเรียนการสอน โดยปรับกิจกรรมการเรียนการสอน การประเมินผล รวมถึงการทำงานต่าง ๆ ให้เหมาะสม
กับการใช้เครื่องมือทางปัญญาประดิษฐ์อย่างสร้างสรรค์และถูกหลักจริยธรรมทางวิชาการ บนพื้นฐานความรู้
ความเข้าใจและมีความรับผิดชอบต่อสังคม ตามหลักการดังนี้

Yes/No Question

- 1 Is the world really flat?
- 2 Is Bangkok the Capital in Thailand?

Simple Question

- 1 How many provinces in Thailand?
- 2 Where is Faculty of Science, Mahidol University?

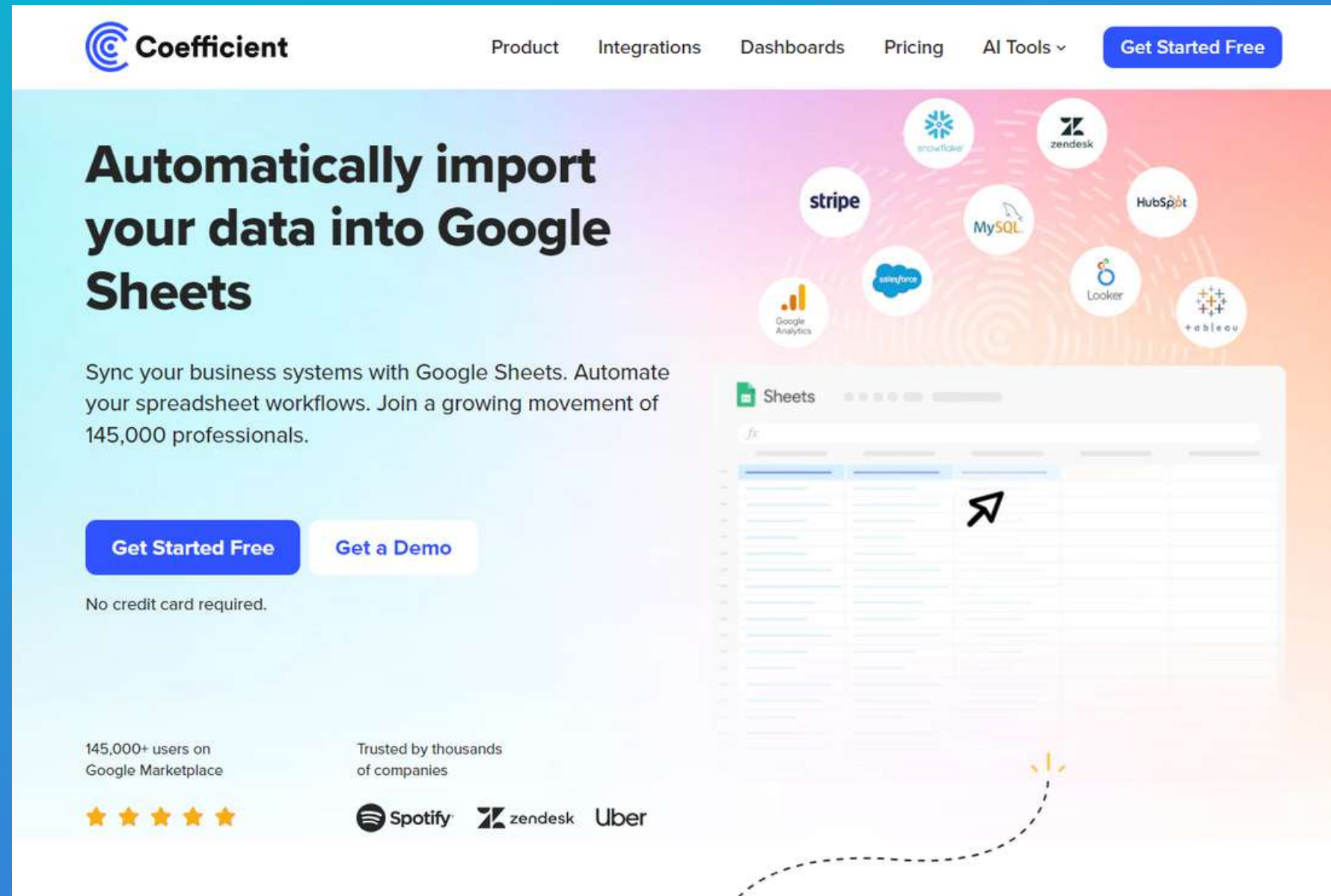
Complicated Question

- 1 When did Thailand join ASEAN?
What kind of cooperation with ASEAN?

Summary/Analysis Content

- 1 Please, paraphrase this Abstract?
- 2 Please, design storyboard for Library Tours?

Write a Text Prompt with Coefficient

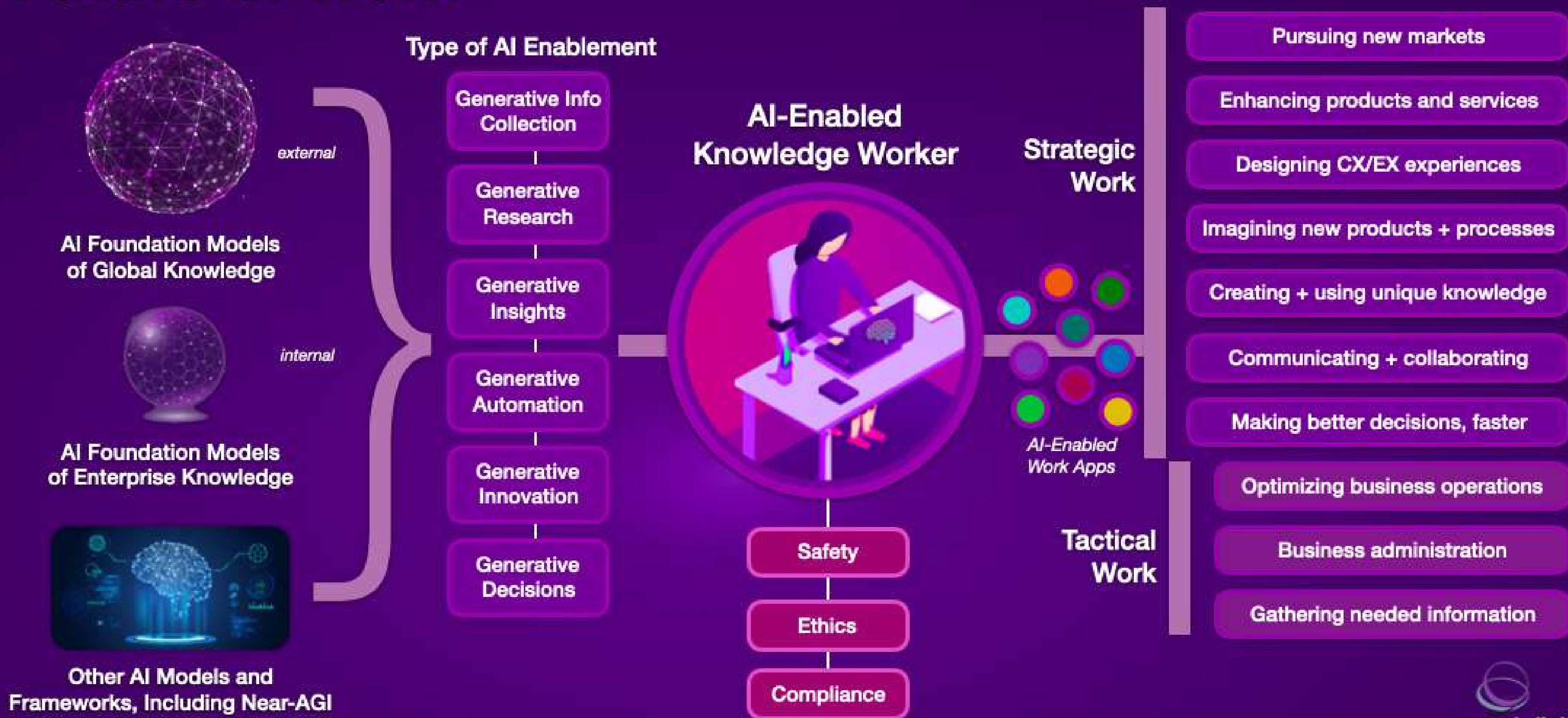
The screenshot shows the 'Write a Text Prompt' form on the Coefficient website. It has a title 'Write a Text Prompt' and a list of seven fields, each with a dropdown menu: 'Task' (Type a task or select from list), 'Topic' (Type a topic), 'Style' (Type a style or select from list), 'Tone' (Type a tone or select from list), 'Audience' (Type a audience or select from list), 'Word Count' (Type a word count or select from list), and 'Format' (Type a format or select from list). Each field has a small downward arrow icon on the right side of the input box.

Source: <https://coefficient.io/ai-prompt-generator>

Updated: 13/12/2023

Generative AI and the Future of Work

How Artificial Intelligence Will Reshape the Workplace and Employee Experience



Limitation

- AI not Expert
- Clear messages and information
- Reference of Information
- Bias Data
- Sensitive Question
- Unconscious Plagiarism
- Privacy of your Information

