



Mahidol University
Faculty of Science

Stang Mongkolsuk Library
and Information Division



Stang Library Training
Information skills for you

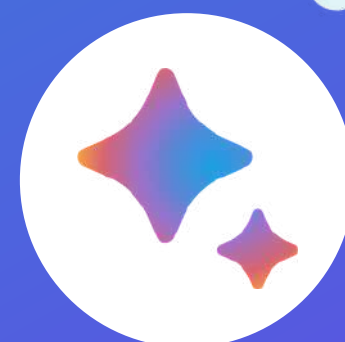


The 2nd Training on Generative AI Series Text to Text

ChatGPT

Google Bard

Bing AI

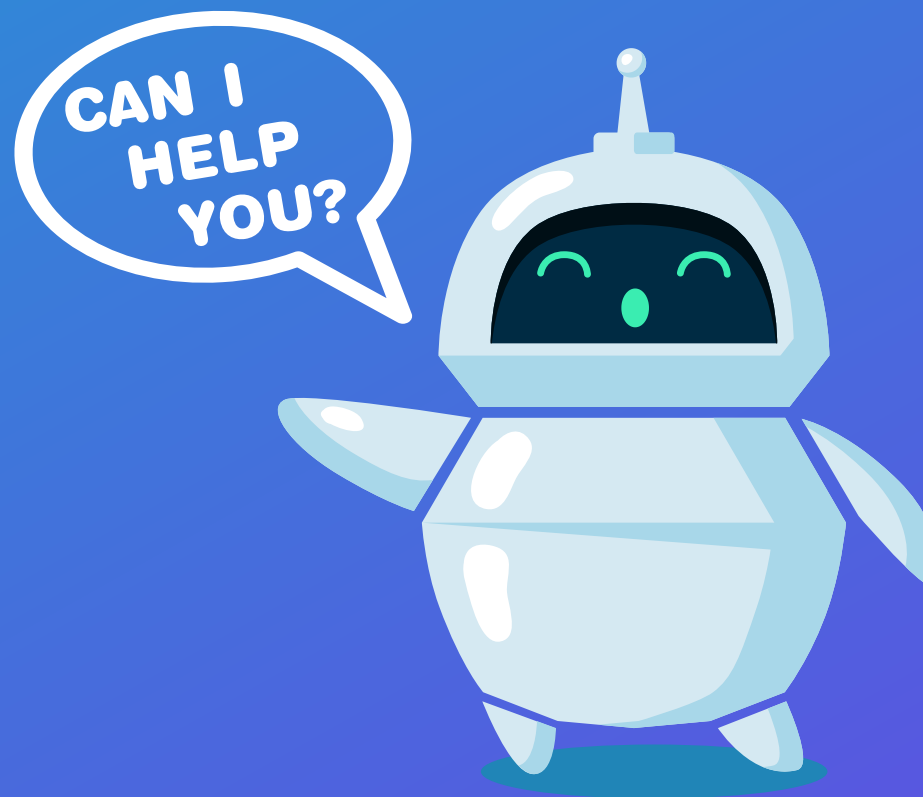


13 December 2023

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

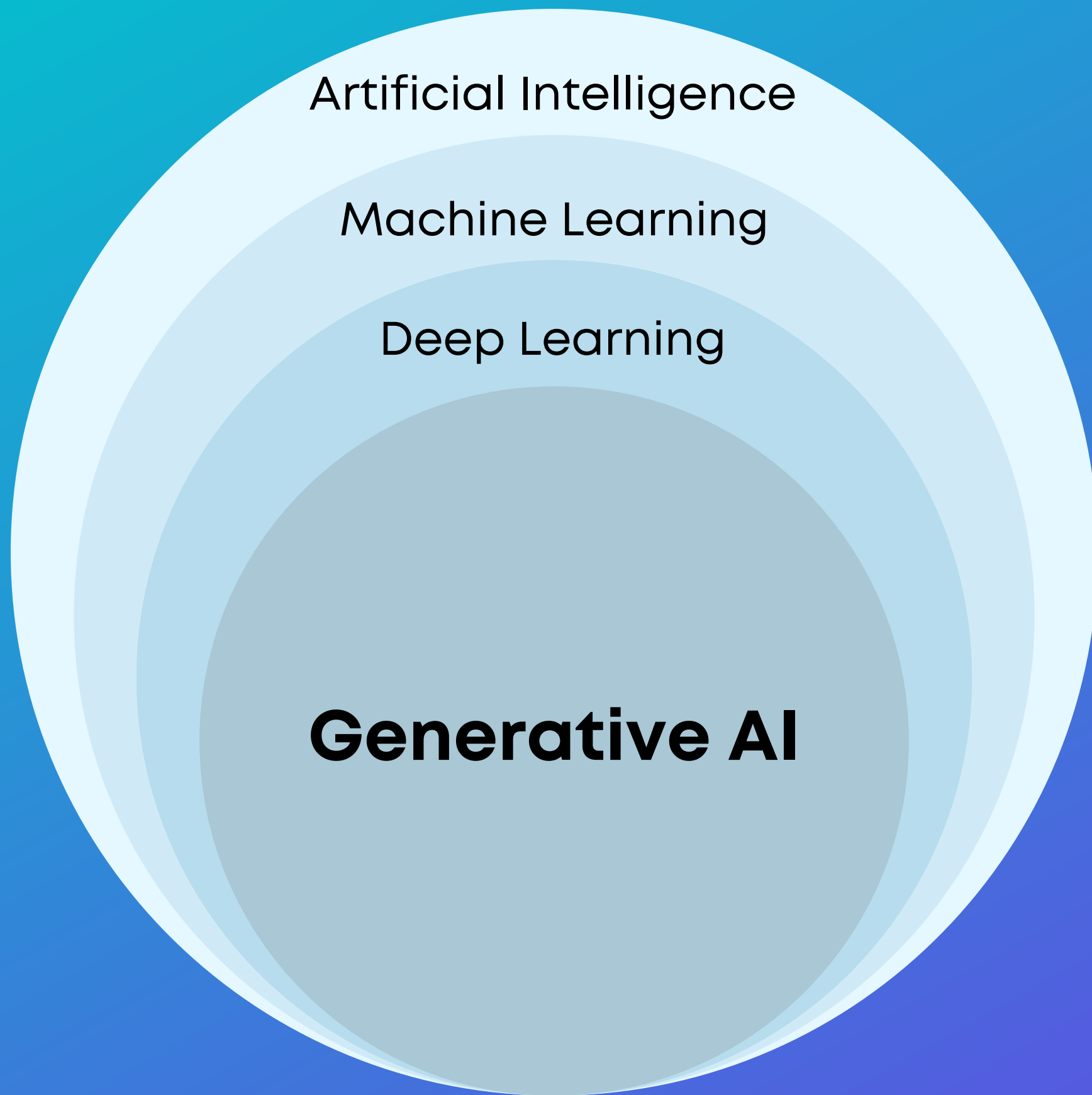
Google's A.I. AlphaGo beats world champion Ke Jie in the complex board game of Go, notable for its vast number (2^{170}) of possible positions

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.

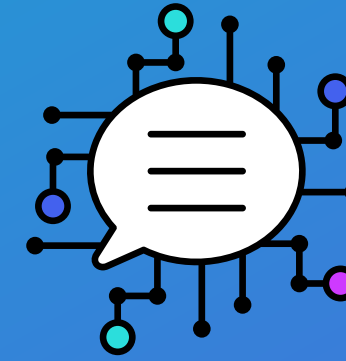
Deep Learning

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.

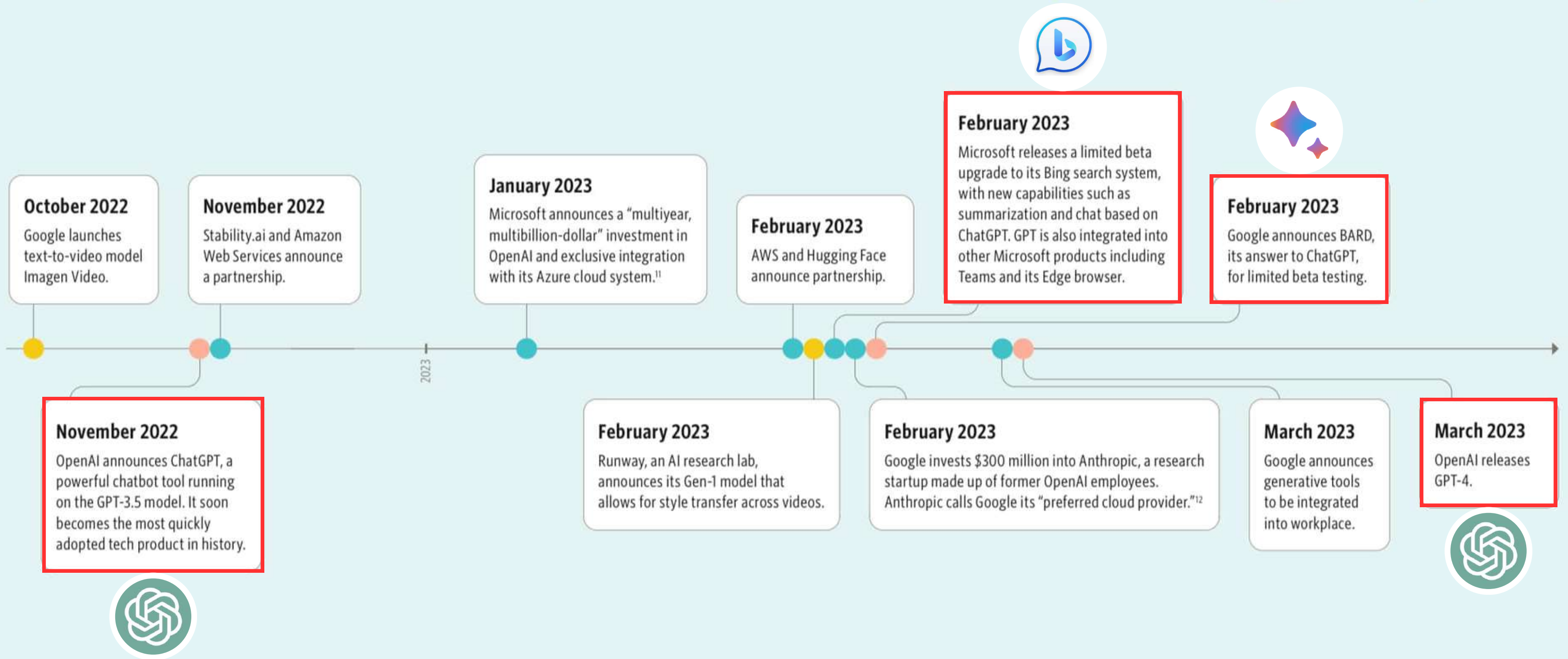
Source: Gartner, 2023

<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

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Get help

Give feedback

Preview



Copilot

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Choose a conversation style

More Creative

More Balanced

More Precise

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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.

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Ask me anything...



0/4000



Search



ENG



10:42

13/12/2566



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.**

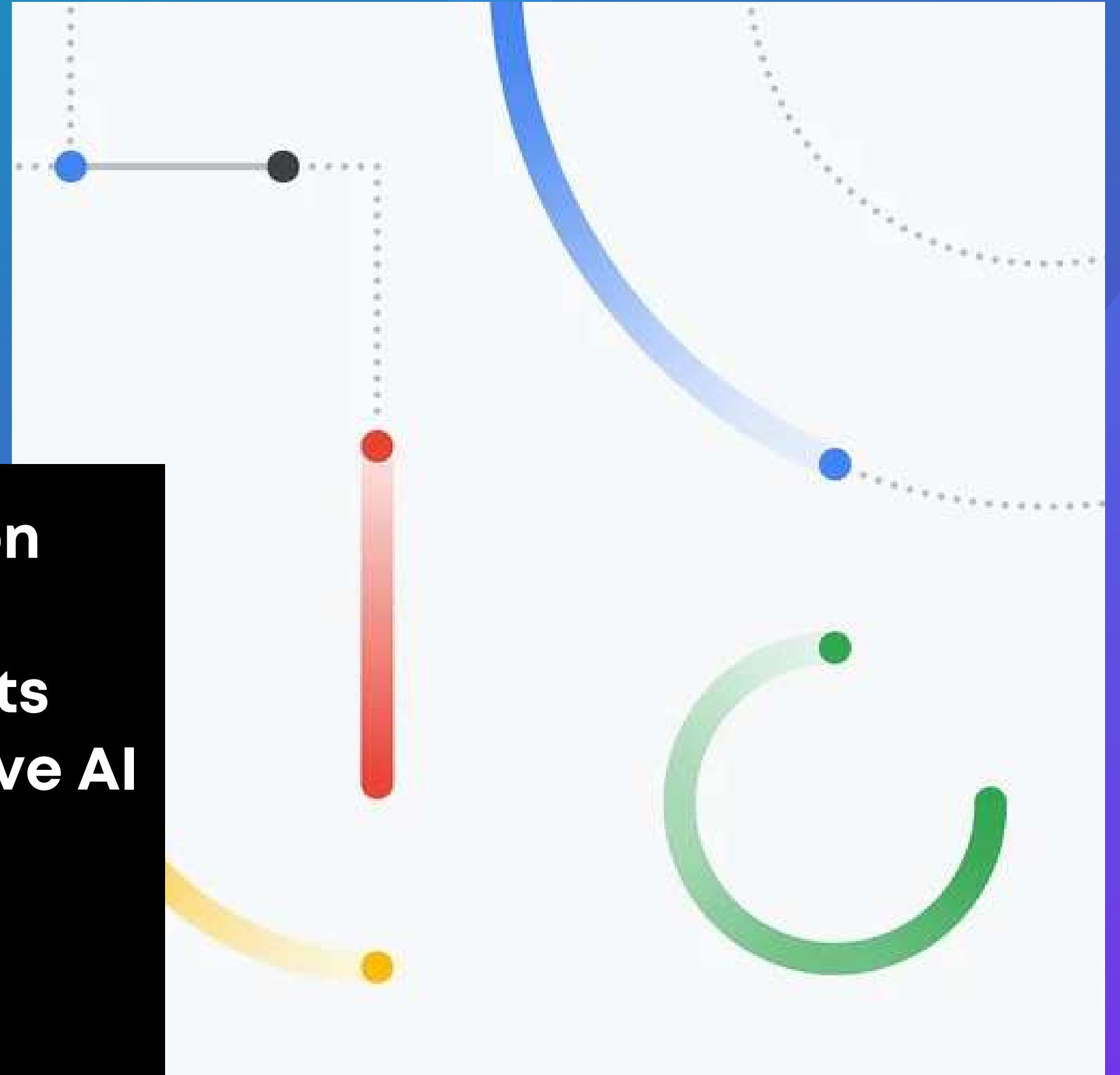
Since: 30 November 2022

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 โดยมีความสามารถเสมือน
หรือมากกว่ามนุษย์ สามารถเรียนรู้ พัฒนา และปรับปรุงกระบวนการทำงานเพื่อเพิ่มศักยภาพของปัญญาประดิษฐ์ได้
เช่น การจดจำคำพูด การแปลภาษา เซทบอท การโต้ตอบอัตโนมัติ ระบบอัตโนมัติที่ใช้หุ่นยนต์ทำงาน ฯลฯ

ข้อ ๒ มหาวิทยาลัยมหิดลสนับสนุนให้อาจารย์และนักศึกษาใช้เครื่องมือทางปัญญาประดิษฐ์
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?

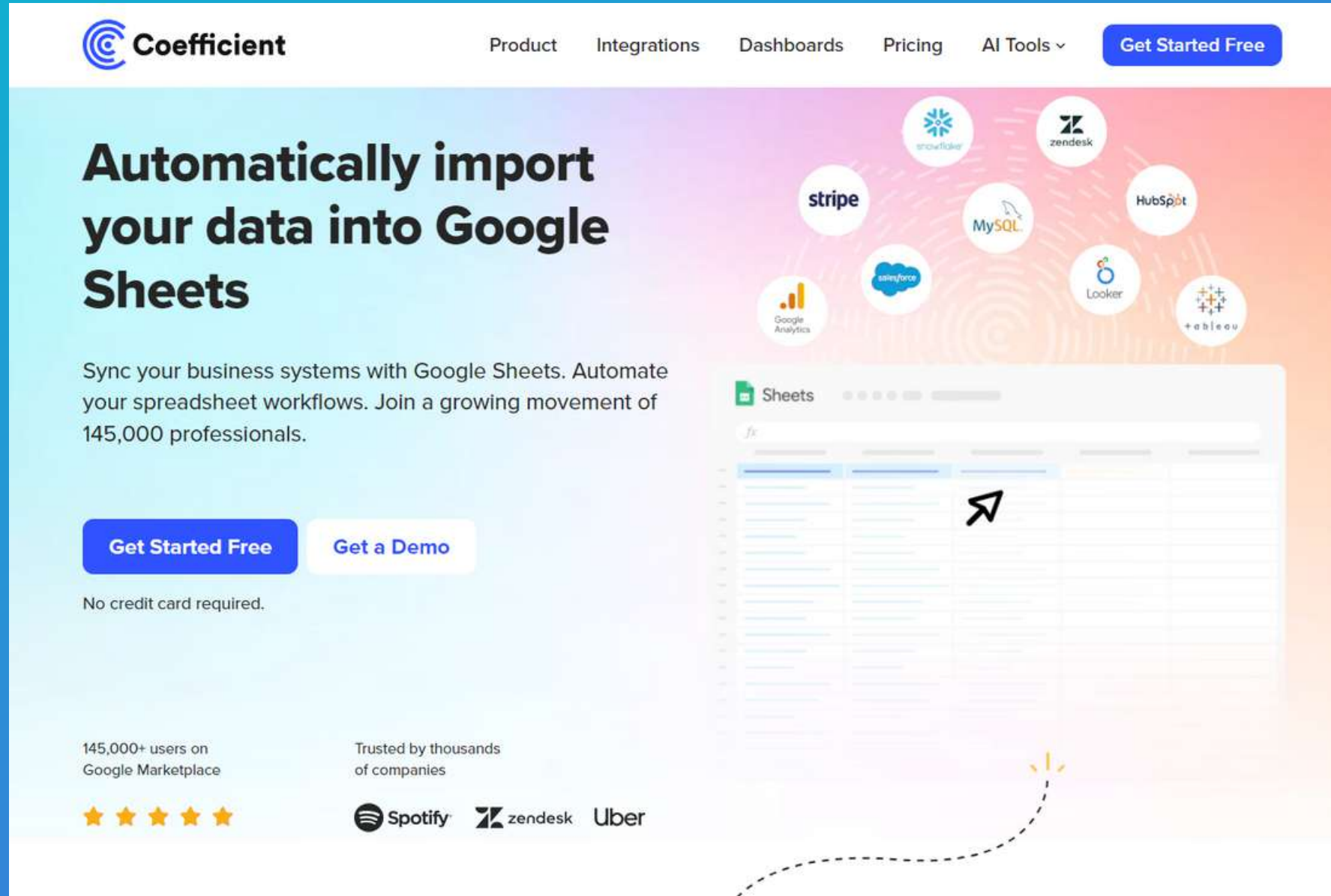
Complicated Question

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

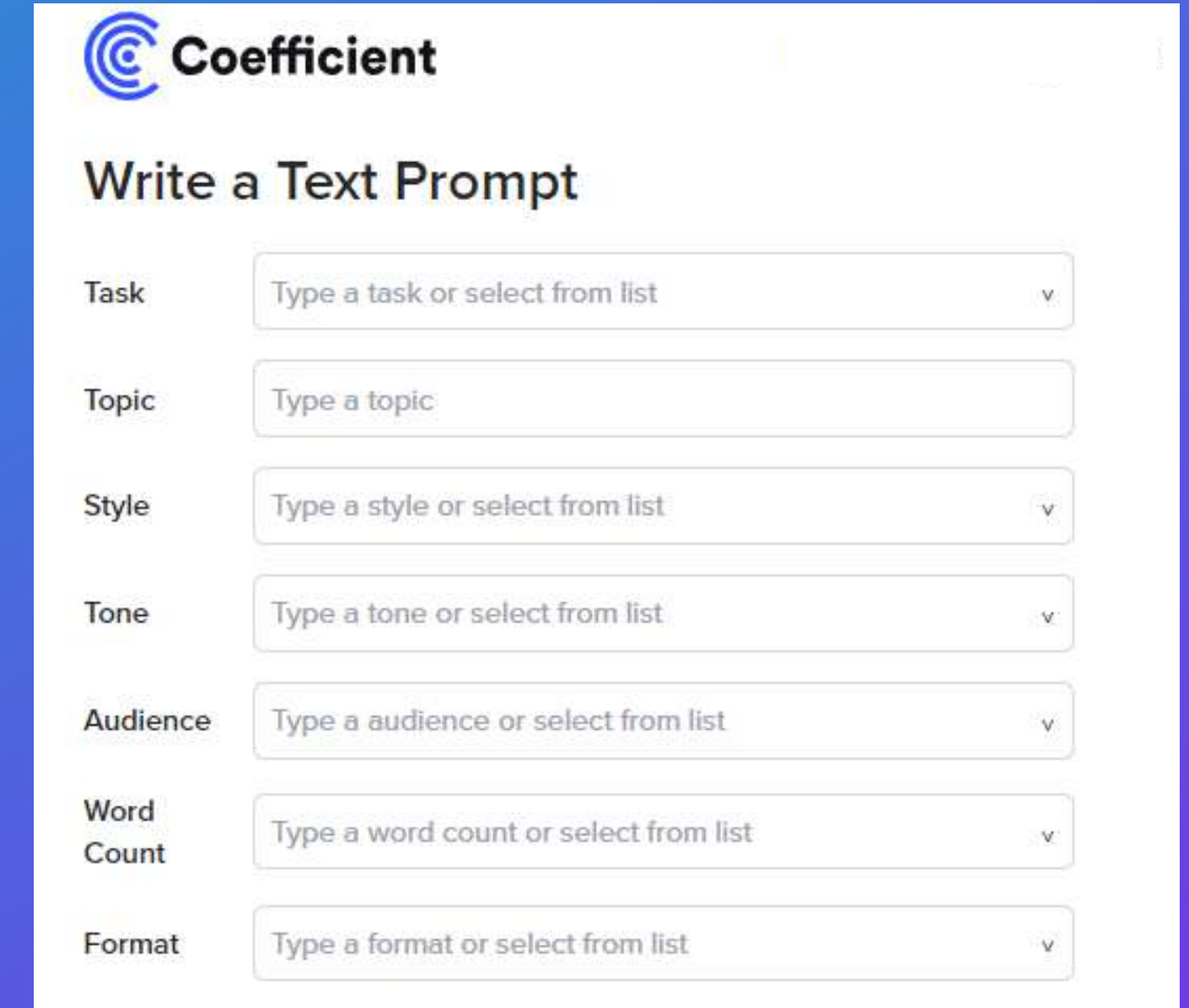
Summary/Analysis Content

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

Write a Text Prompt with Coefficient



The screenshot shows the Coefficient website homepage. At the top, there is a navigation bar with the Coefficient logo, links for Product, Integrations, Dashboards, Pricing, AI Tools, and a 'Get Started Free' button. The main heading reads 'Automatically import your data into Google Sheets'. Below this, a sub-headline states 'Sync your business systems with Google Sheets. Automate your spreadsheet workflows. Join a growing movement of 145,000 professionals.' There are two buttons: 'Get Started Free' and 'Get a Demo'. A note says 'No credit card required.' The central part of the page features a grid of integration logos including Stripe, Snowflake, Zendesk, HubSpot, MySQL, Salesforce, Looker, and Ableto. Below the logos is a screenshot of a Google Sheet with a cursor pointing to a cell. At the bottom left, it says '145,000+ users on Google Marketplace' and 'Trusted by thousands of companies', with logos for Spotify, Zendesk, and Uber.



The screenshot shows the 'Write a Text Prompt' interface in Coefficient. It features a list of seven customizable options, each with a text input field and a dropdown arrow:

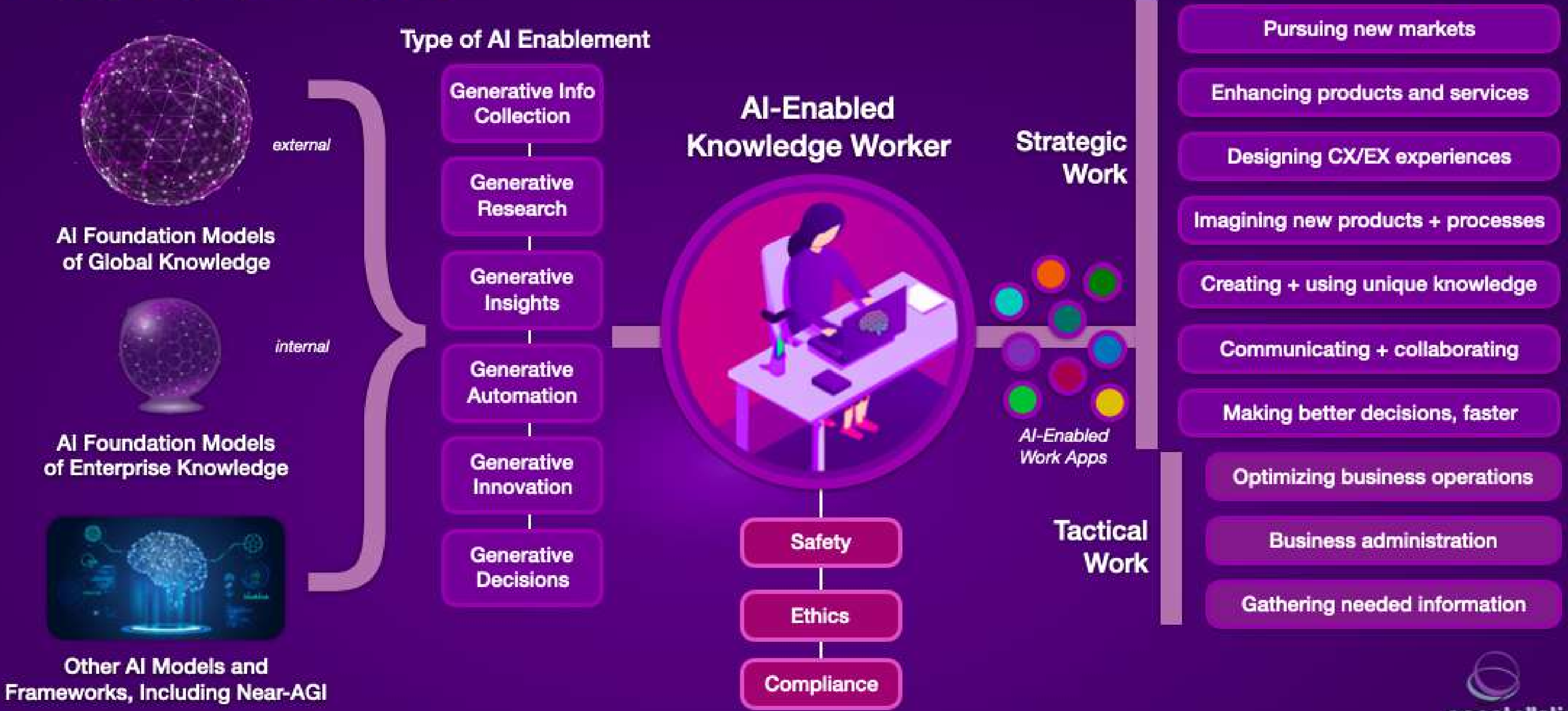
- Task:** Type a task or select from list
- Topic:** Type a topic
- Style:** Type a style or select from list
- Tone:** Type a tone or select from list
- Audience:** Type a audience or select from list
- Word Count:** Type a word count or select from list
- Format:** Type a format or select from list

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

