



Mahidol University
Faculty of Science

Stang Mongkolsuk Library
and Information Division



Stang Library Training
Information skills for you

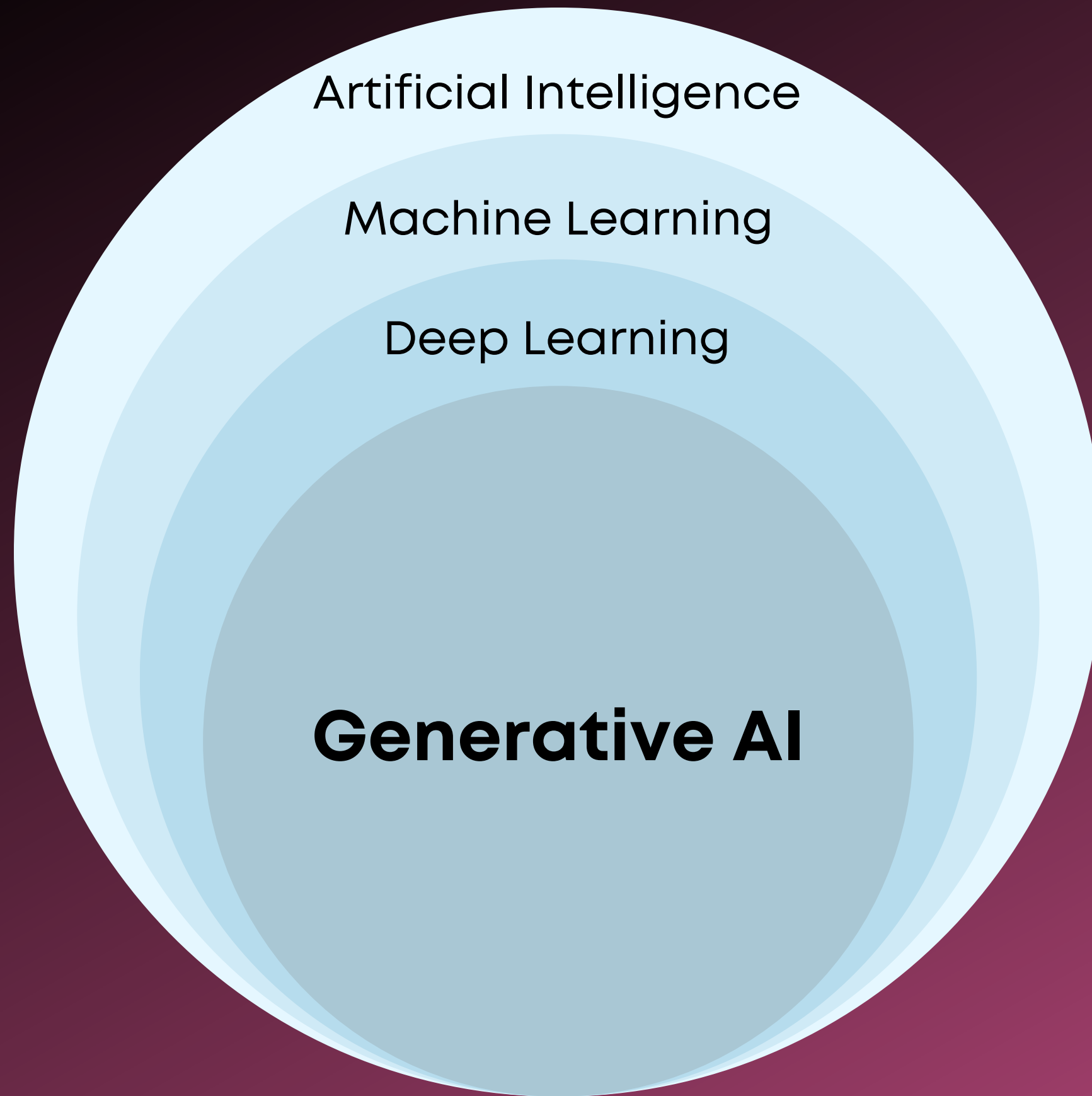
Generative AI with MS Copilot

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19 June 2024

Stang Mongkolsuk Library & Information Division
Faculty of Science Mahidol University



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.

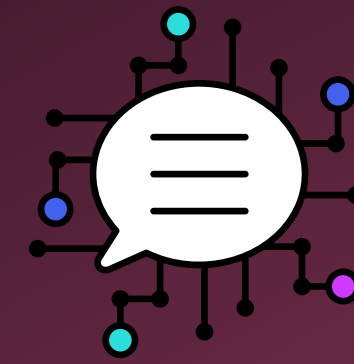
What is Generative AI?

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:

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

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.

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. Prompt engineering is also referred to as "in-context learning".

Source:

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

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

50 National AI Strategies - The 2020 AI Strategy Landscape

50 National Artificial Intelligence Policies as at February 2020.

HOLONIQ. GLOBAL INTELLIGENCE Holon IQ

Global AI Strategy Landscape

50 National Artificial Intelligence Policies as at February 2020.

Argentina Drafting the "National Plan of Artificial Intelligence". Falls under the Innovative Argentina 2030 Plan and the 2030 Digital Agenda.	Australia November 2019, AI Roadmap focused on specialization in health, infrastructure and natural resources. Planning for an additional 161,000 AI specialists by 2030.	Austria June 2019, 'Artificial Intelligence Mission Austria 2030 (AIM AT 2030)'. Outlines seven fields for which AI will be critical.	Belgium March 2019, 'AI 4 Belgium' launched and includes seven major objectives.	Brazil Consultation period ended January 2020. Building a network of eight research facilities focused on artificial intelligence.
Canada 2017 federal budget announced five-year, \$125m plan. Led by CIFAR, Research and talent focus. First National AI Strategy.	Chile Expected April 2020. Ministry of Science, Technology, Knowledge, and Innovation created a committee of 10 experts to develop.	China July 2017, China launched the most comprehensive AI strategy globally with 2030 targets for a \$11 RMB AI industry.	Colombia November 2019, first draft issued for 'National Policy for Digital Transformation'. Medellín to become an AI & Robotics Centre of Excellence.	Czech Republic May 2019, 'National Artificial Intelligence Strategy of the Czech Republic' was launched.
Denmark March 2019, Denmark announced the 'National Strategy for Artificial Intelligence' with four key objectives.	Estonia - Krotts Strategy May 2019, Estonian AI experts, led by government CIO produced a roadmap, later adopted as the Estonian National AI Strategy in July 2019.	Finland June 2019, 'Leading the Way into the Age of Artificial Intelligence' identified 11 key actions following May 2017 Steering Group announcement.	France €1.5 billion plan announced in 2018 influenced by the 'Vilani Report' to transform France into a global leader in AI.	Germany €3 billion plan announced Nov 2018 with a dedicated AI strategy to make Germany & Europe a global leader in AI.
Hungary October 2019, Hungary announced an AI Action Plan, the first pillar of a national AI strategy, expected in 2020.	India June 2018 working paper on using AI to ensure social growth, inclusion and positioning the country as a leader in AI.	Indonesia Indonesia Artificial Intelligence Society (IAIS) inaugurated under Smart Indonesia in October 2019. National Strategy expected in 2020.	Ireland Irish Economic Development Agency led process. AI Master program launched in 2018 and is 100% industry driven.	Israel Innovation Authority, tasked with AI policies, has warned that a strategy is needed to prevent falling behind.
Italy March 2018, AGID released a White Paper called "AI at the service of citizens," which was edited by the AI Task Force.	Japan March 2017, Japan's AI policy, the 'Artificial Intelligence Technology Strategy', was announced second only to Canada with 'Society 5.0'.	Kenya January 2018, government announced task force to create a five-year strategy on national use of emerging technologies.	Lithuania April 2019, Artificial Intelligence Strategy announced "to modernize and expand the current AI ecosystem and ensure that the nation is ready".	Luxembourg May 2019, launched 'Artificial Intelligence: a strategic vision for Luxembourg'.
Malaysia 2018, Malaysia revealed a National Artificial Intelligence Framework expanding the National Big Data Analytics Framework.	Malta October 2019, 'A Strategy and Vision for Artificial Intelligence in Malta 2030' Malta.ai launched and aspiring to be the 'Ultimate AI Launchpad'.	Mexico June 2018, 'Towards an AI Strategy in Mexico: Harnessing the AI Revolution', serves as a foundation for building full AI strategy.	Netherlands November 2018, AINED published a roadmap for developing a full national strategy.	New Zealand May 2018, AI Forum of New Zealand, released "Artificial Intelligence: Shaping a Future New Zealand."
Norway January 2020, Norway issued its National Strategy for Artificial Intelligence.	Pakistan Presidential Initiative for Artificial Intelligence launched December 2018, focused on training beginners in AI and advanced technology.	Philippines Nov 2019, AIM, Abaitiz School of Innovation, Technology and Entrepreneurship (ASITE) appointed to craft an AI roadmap.	Poland November 2019, 'Assumptions for the AI strategy in Poland' as an action plan towards developing an AI strategy.	Portugal February 2019, 'AI Portugal 2030', seeks strengthen economic growth, scientific excellence, and human development using with AI.
Qatar October 2019, National AI Strategy as a blueprint produced by Qatar Computing Research Institute (QCRI).	Russia October 2019, Russia published its National Strategy for the Development of Artificial Intelligence by 2030.	Saudi Arabia September 2019, Royal decree to establish an AI center, to align with the Kingdom's Vision 2030 program.	Singapore May 2017, AI Singapore is a five-year, \$150 million national program launched in to enhance Singapore's capabilities in AI.	South Africa Intsimbi Future Production Technologies Initiative" launched in 2018 with aim to advancing manufacturing sector.
South Korea May 2018, five-year AI development plan launched with \$195B budget.	Spain March 2019, the Spanish Ministry of Science, Innovation and Universities launched the RDI Strategy in Artificial Intelligence.	Sweden National Approach for Artificial Intelligence launched in May 2018.	Switzerland An Artificial Intelligence (AI) expert group has published its recommendations for a Swiss AI strategy.	Thailand Thailand's Digital Economy and Society (DES) Ministry has drafted the country's first artificial intelligence (AI) ethics guidelines.
Tunisia AI Task Force and Steering Committee to develop a national AI strategy. The strategy was scheduled to be published in the first quarter of 2019.	United Arab Emirates October 2017 announced strategy. First country to create a Ministry of AI and first in the Middle East to launch an AI strategy.	United Kingdom April 2018, 'Sector Deal' announced. \$1.24B funding as part of the UK's larger industrial strategy.	United States of America February 2019 by Executive Order to promote and protect AI technology. AI.gov launched Mar 2019. Followed by the National Artificial Intelligence Research and Development Strategic Plan.	Vietnam Ministry of Information and Communications developing a broad AI strategy.

Source: HoloniQ and source government strategy and policy papers. www.holoniq.com

Source: <https://www.holoniq.com/notes/50-national-ai-strategies-the-2020-ai-strategy-landscape>

Thailand National AI Strategy

แผนปฏิบัติการด้านปัญญาประดิษฐ์แห่งชาติ เพื่อการพัฒนาประเทศไทย เพื่อการพัฒนาประเทศไทย (พ.ศ. 2565-2570)



Source: <https://ai.in.th/wp-content/uploads/2023/08/AI-Thailand-Annual-2023-1.pdf>

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

MS Copilot



Microsoft Copilot is an AI-powered productivity tool that uses large language models (LLMs) and integrates data with the Microsoft 365 Apps. developed by Microsoft-backed OpenAI. It is based on the **GPT-4 architecture.**

Since: 19 July 2024

Website: <https://copilot.microsoft.com/>

Updated: 19/06/2024

Genareitive AI: Text to Text Comparison



ChatGPT



Gemini

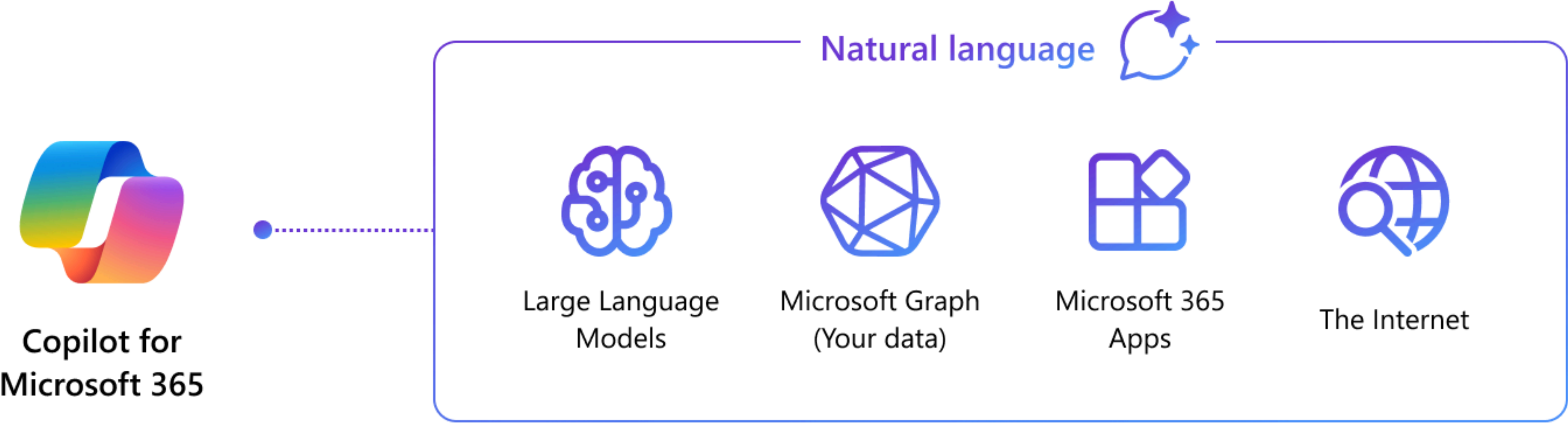


MS Copilot

Genareitive AI: Text to Text

Company	OpenAI	Google	Microsoft
Operating System (OS)	GPT-3.5/GPT-4/GPT-4o	Gemini/Gemini Advance	Copilot/Copilot Pro
Device	Web / Android / iOS	Web / Android	Web / Android / iOS
Price	Free/Paid	Free/Paid	Free/Paid

MS Copilot for Microsoft 365



Source: <https://learn.microsoft.com/en-us/microsoft-365-copilot/extensibility/>

Limitations of MS Copilot

- **Accuracy and bias**
- **Privacy concerns**
- **Customization limitations**
- **Integration with third-party apps**



Yes/No Question

Are cats in the same family as lions?

Simple Question

What rank did Mahidol University get in THE Impact Rankings?

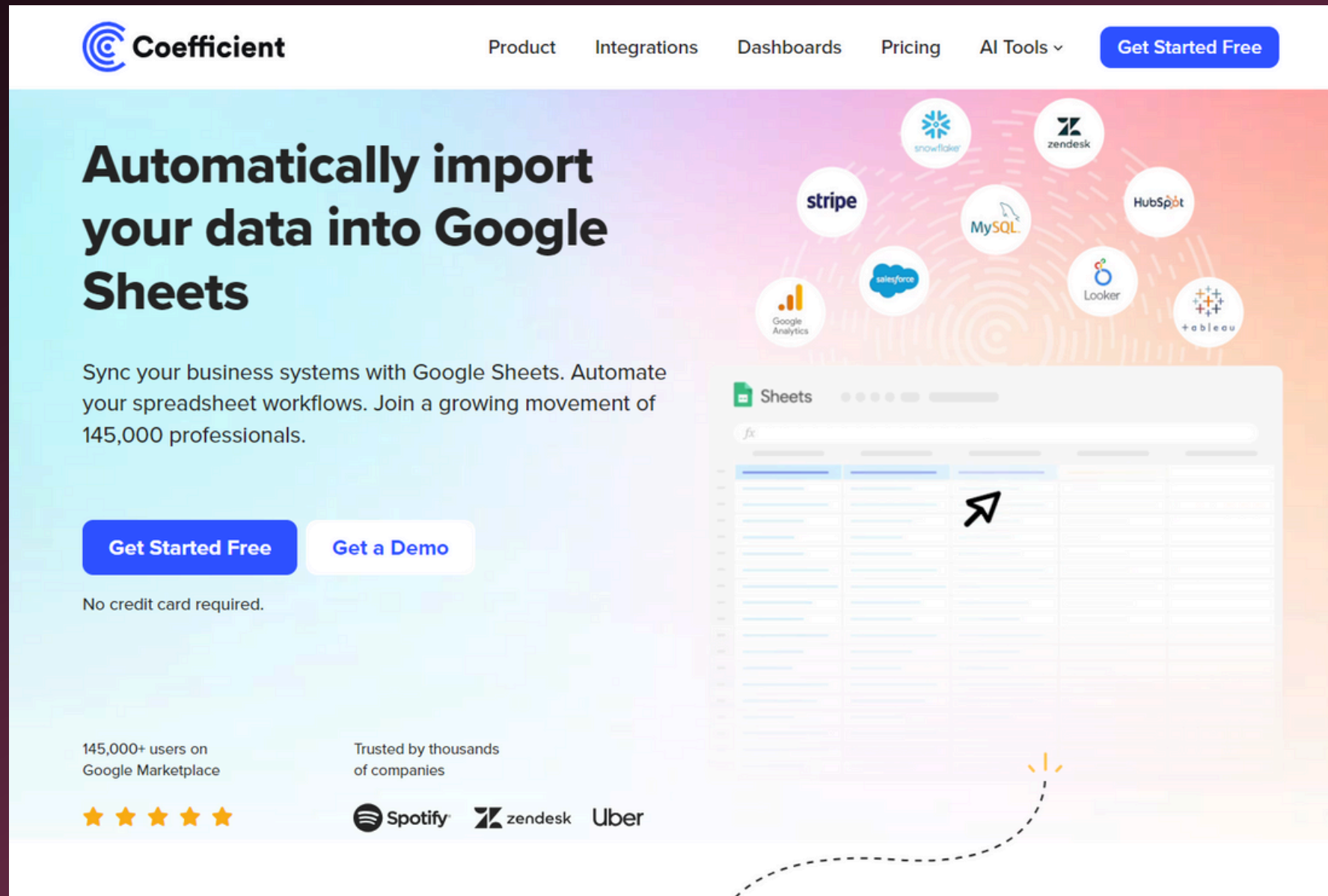
Complicated Question

What is Climate change? How can we contribute to solving the problem of Climate change?

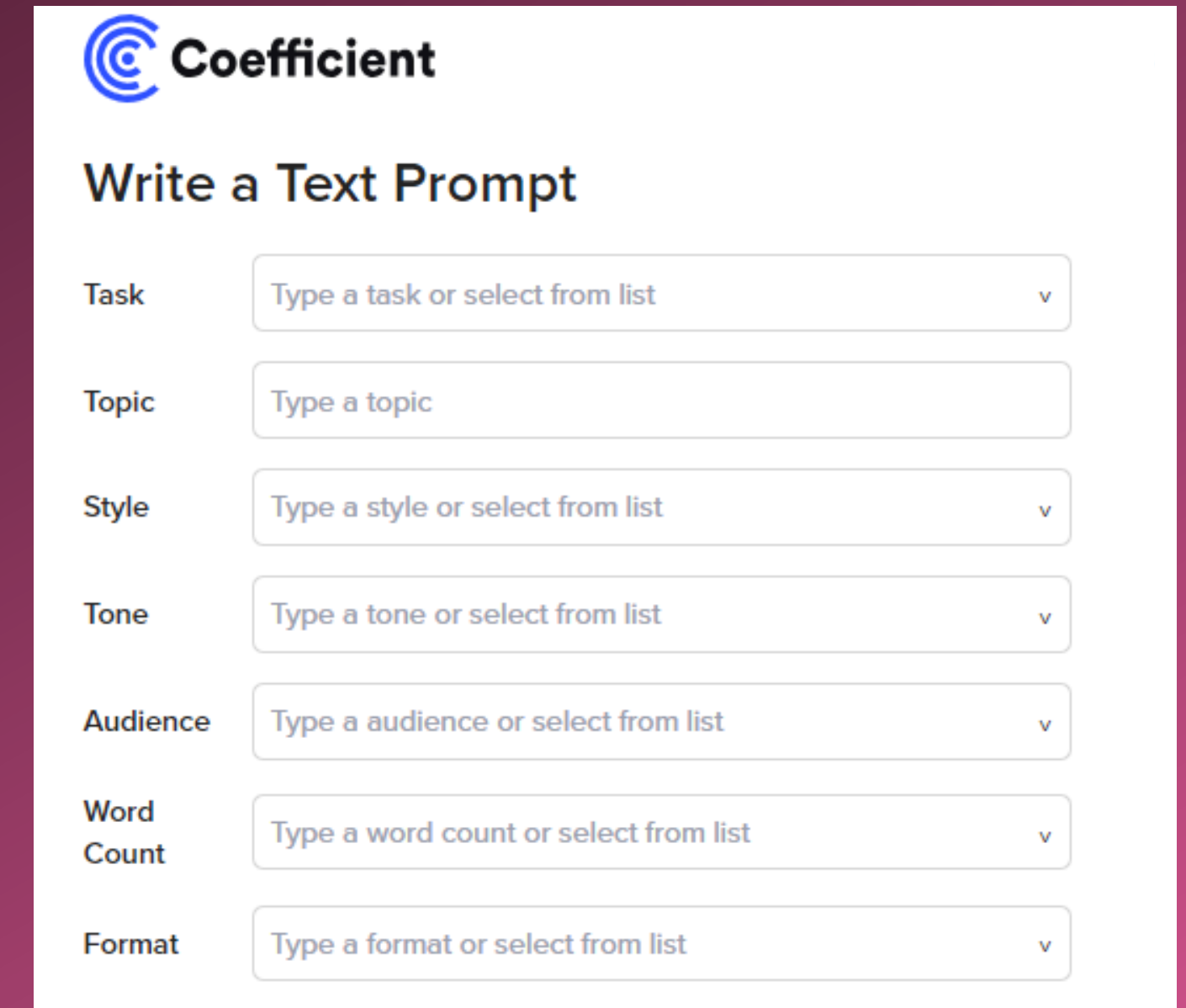
Summary/Analysis Content

Analyze the differences between MS Copilot, Gemini, and ChatGPT.

Write a Text Prompt with Coefficient



The screenshot shows the Coefficient website's landing page for Google Sheets integration. The header includes the Coefficient logo, navigation links for Product, Integrations, Dashboards, Pricing, and AI Tools, and a 'Get Started Free' button. The main heading is 'Automatically import your data into Google Sheets'. Below this, a sub-heading reads '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 states 'No credit card required.' The page features a central graphic with various integration logos (Stripe, Snowflake, Zendesk, HubSpot, MySQL, Salesforce, Looker, Tableau) and a Google Sheets spreadsheet interface. At the bottom, it mentions '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' form on the Coefficient website. The form includes the Coefficient logo and the title 'Write a Text Prompt'. It contains several input fields for customizing the prompt:

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

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

Updated: 19/06/2024