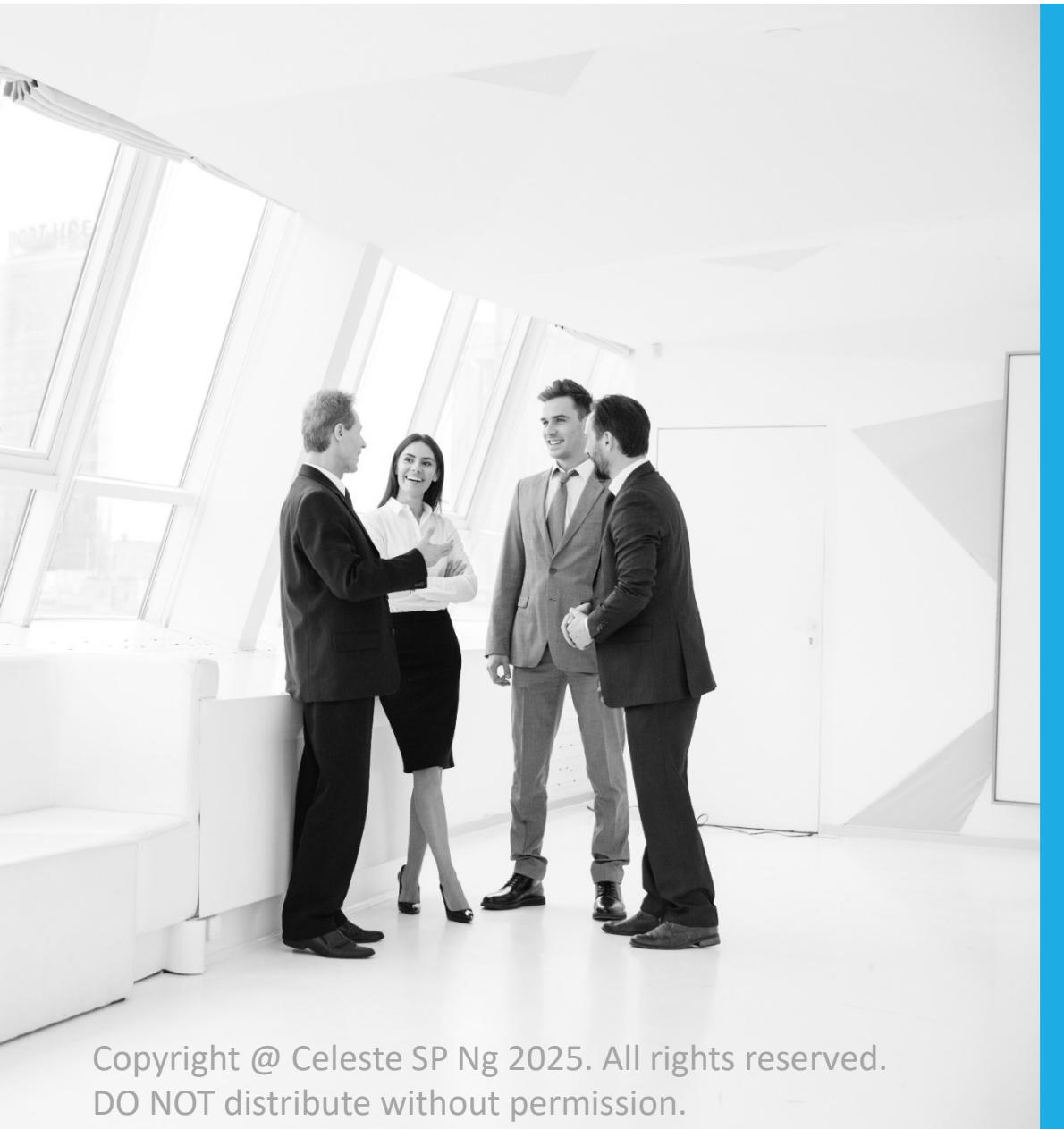


Designed by:
@CelesteSP
Ng, 2025



AI Chatbots

APRIL-MAY 2025

PREPARED & EDITED BY:
CELESTE SP NG

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Contents

- AI Chabot
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 - <https://chatgpt.com/>,
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 - <https://grok.com/>
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- AI assistant (RAG LLM chatbot) building
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AI Chatbots

- The first [Chatbot] program ... was created in 1966 with Joseph Weizenbaum's **Eliza**. In 1988, British-born programmer Rollo Carpenter created a "chatterbot" named **Jabberwocky**, among the first "conversational AI" to learn new responses instead of ... serving pre-written language
- A **chatbot** is a program or script designed to interact and respond to humans in real-time conversation.
- Broadly, chatbots provide pre-written responses to
 - Handle basic requests or
 - Get enough information from customers to connect them to a live agent
- More advanced chatbots use machine learning, artificial intelligence (AI) and generative AI technology to generate real-time responses based on user input.

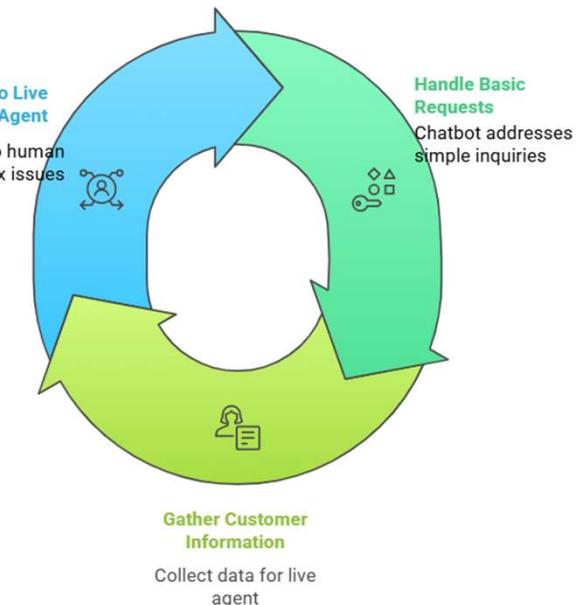
Source: 2025, <https://www.ibm.com/think/topics/chatbot-use-cases>

ELIZA

Computer program :



ELIZA is an early natural language processing computer program developed from 1964 to 1967 at MIT by Joseph Weizenbaum. [Wikipedia >](#)



AI Chatbots

- There are two types of chatbots:
 - Rule-based and
 - AI-powered.
- **Rule-based** chatbots
 - Use pre-defined rules and scripts to respond to specific keywords or phrases. They offer limited flexibility but are quick and efficient tools for simple tasks.
- **AI-powered** chatbot
 - Leverage machine learning and NLP (natural language processing) to understand prompts and context.
 - They can learn from past interactions and improve over time

→ LLM Chatbot or AI Assistant

The screenshot shows a comparison between two chatbot interfaces: Rule-based and AI-Powered. The Rule-based interface on the left has a simple UI with buttons for 'Order Status', 'Cancel Order', and 'Return Request'. The AI-Powered interface on the right is more advanced, featuring a 'Grok' bot and a 'Capacity' bot. A callout box from the Grok bot asks about the key components of a digital transformation program. Below the interface, a summary of these components is provided, followed by a 'Needs improvement' button highlighted with a red box. The bottom section shows a 'How can Grok help?' prompt with a 'DeepSearch' button.

Rule-based

AI-Powered

Grok

Capacity

Describe the key components of a digital transformation program. Give some practical examples. Provide references to all of the answers provided.

Key Components of a Digital Transformation Program

A digital transformation program involves integrating digital technologies into all areas of an organization to fundamentally change how it operates and delivers value. Based on synthesized insights from multiple sources, the key components include:

1. Vision and Unexpected Insight
 - Description
 - Details
2. Technology
 - Description

An often-overlooked aspect is the iterative nature of digital transformation. Unlike traditional projects, it's not a one-time effort but requires continuous adaptation to emerging technologies and market shifts, as emphasized by McKinsey's iterative frameworks ([McKinsey](#)).

References

- McKinsey: How six companies are using technology and data to transform themselves
- Deloitte: Digital transformation - From strategy to execution
- Forbes: The five biggest healthcare tech trends in 2022
- Harvard Business Review: Why is it so hard to become a data-driven company?
- TechTarget: Digital transformation
- Gartner: Digital transformation strategy

Needs improvement

How can Grok help?

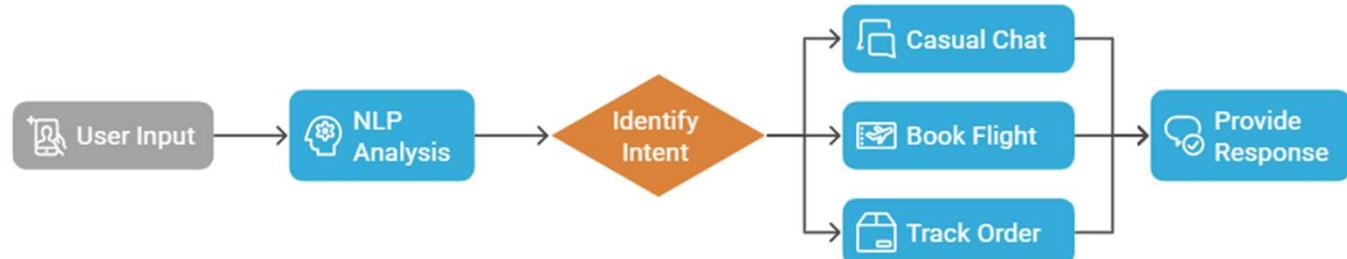
DeepSearch

Think

Source: 2025, <https://www.ibm.com/think/topics/chatbot-use-cases>

AI Chatbots – Ruled-based

Chatbot Interaction Process



- Most chatbots...rely on a combination of critical elements. It starts with
 - Input: get User input, where a user asks questions or prompts the chatbot through text or voice
 - Analyze: The chatbot then instantly analyzes the request using NLP techniques to understand the meaning behind the request
 - Identify: Based on the NLP analysis, the bot will identify the goal or purpose of the query—is the user just chatting, do they want to book a flight or do they want to track an order?
 - Determine: The bot will use intent recognition to decide and its internal logic and algorithms will determine the appropriate response based on the recognized intent.
 - Provide: Sometimes this involves accessing a knowledge base, searching for relevant information or generating a creative response

Source: 2025, <https://www.ibm.com/think/topics/chatbot-use-cases>

AI-powered Chatbots – LLM-based

- In the past, **companies** had to laboriously: **predefine every question and answer**, the development process lengthy and inflexible.
- On the **user side**, the experience **was restrained....and not very user-centered**.
- AI-powered or intelligent chatbots [only simply **LLM Chatbot** are **based on large language models (LLM)**] such as GPT-4 or other open source models that have been trained **with enormous amounts of text data** to develop **an in-depth understanding of context, syntax and semantics**.

Celeste:
"I feel blue"

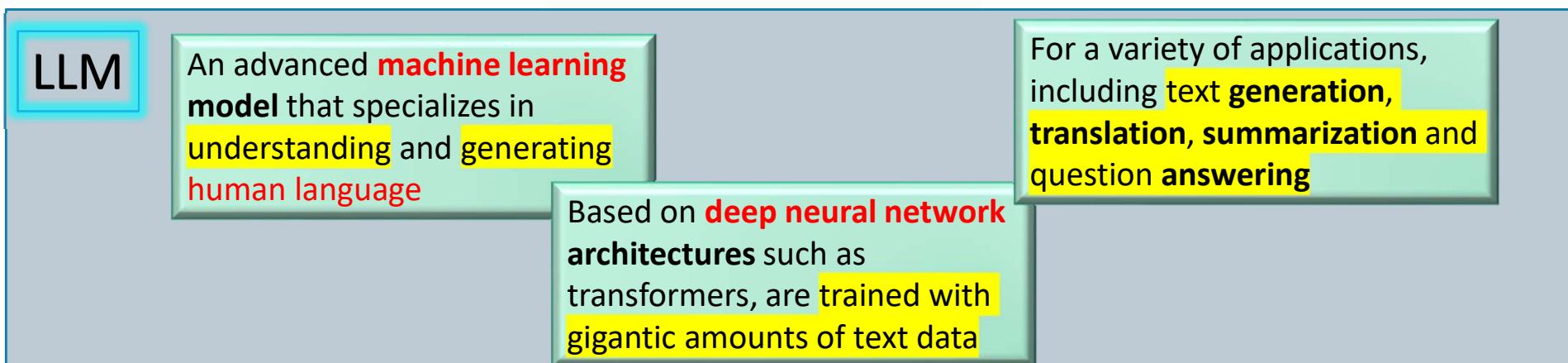
Context = environment (human emotion)

Syntax = subject (I) + verb (feel)
+ object/adjective (blue)

Semantics = meaning (sadness)

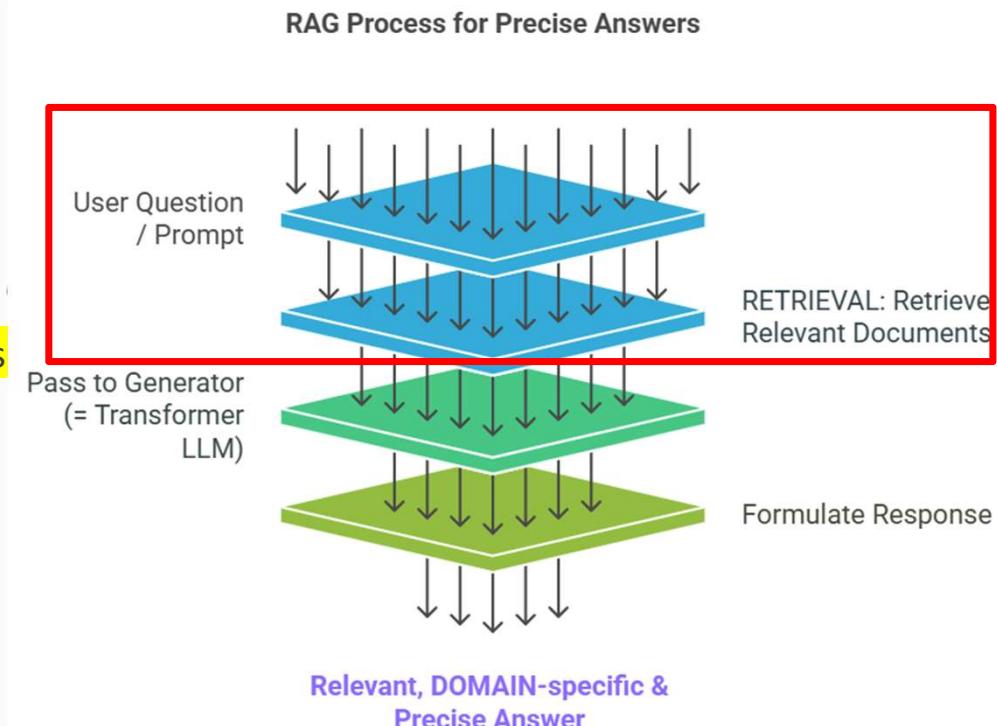
AI-powered Chatbots – LLM-based

- Today, **LLMs** are able ... respond dynamically to a wide range of queries without having to program every possible conversation scenario in advance



AI-powered Chatbots – LLM-based

- LLMs ... methods such as **Retriever-Augmented Generation (RAG)**, are able to communicate in a very specific and ... and target group-oriented way
- (RAG) is a method in natural language processing (**NLP**) that combines an **information retriever** and a **text generator** to generate precise answers to user questions.
- The process begins with the **retriever** pulling relevant documents or data from a large database based on how well they match the user question asked.
- This selected information is then passed to the **generator**, typically an advanced language model such as a **transformer-based** large language model.
- The generator uses this information to formulate a coherent and informed response. responses that are not only based on pre-trained knowledge but also incorporate current, specific, and contextual information, significantly improving the accuracy and relevance of the responses.



AI-powered Chatbots – LLM-based

- **RAG** LLM chatbots significantly expand the functionality of LLM chatbots by
 - Enabling companies to individually supplement the chatbot's knowledge ...
 - Only accessing specific, contextual information and content provided by the company.
 - Generating more precise and informed responses
 - Ensuring that the bot does not access unwanted or incorrect information.

AI-powered Chatbots – LLM-based

What risks do LLM chatbots pose?

■ Quality issues:

- Even though LLM chatbots are generally given fixed rules of conduct in ..., 則...在極少數情況下仍可能出現錯誤回應 incorrect responses may still occur in rare cases.
- This cannot be completely ruled out, but it is constantly being improved.

■ Lack of control:

- LLM chatbots generate a new response for each user query.
- Companies have no direct control over the chatbot at that moment. This makes it all the more important that the bot is sufficiently tested before it is published.

■ Data protection and security:

- LLM chatbots store conversation data and other information. It is important to ensure that no data is passed on to third parties without consent and that the way in which data is stored complies with the company's compliance requirements.

LLM 聊天機器人通常會被賦予固定的行为規則... 在極少數情況下仍可能出現錯誤回應

LLM 聊天機器人會為每個使用者查詢產生一個新的回應。目前，公司無法直接控制聊天機器人

LLM 聊天機器人儲存對話資料和其他資訊。重要的是確保未經同意不會將資料傳輸給第三方

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AI assistant & Search engine – ChatGPT

The screenshot displays the ChatGPT interface, which includes a sidebar with navigation links like ChatGPT, Explore GPTs, and a 'Yesterday' section. The main area features a large input field asking 'What can I help with, Celeste?'. Below it, there are buttons for 'Ask anything', 'Search', 'Reason', and a microphone icon. A 'Temporary' profile picture is shown. To the right, there's a 'Create image' feature (updated) and a 'Canvas' feature (collaborate on writing and code). On the far right, there's a 'Upgrade your plan' section with options for Personal and Business plans, and a 'Pro' plan.

ChatGPT
Computer program :

Ask anything

+ Search Reason ...

Create image Updated
Visualize ideas and concepts

Canvas Collaborate on writing and code

Temporary

What can I help with, Celeste?

Upgrade your plan

Personal Business

Free \$0 USD/month

Explore how AI can help you with everyday tasks

Your current plan

- ✓ Access to GPT-4o mini and reasoning
- ✓ Standard voice mode
- ✓ Real-time data from the web with search
- ✓ Limited access to GPT-4o
- ✓ Limited access to file uploads, advanced data analysis, and image generation
- ✓ Use custom GPTs

Plus POPULAR \$20 USD/month

Level up productivity and creativity with expanded access

Get Plus

- ✓ Everything in Free
- ✓ Extended limits on messaging, file uploads, advanced data analysis, and image generation
- ✓ Standard and advanced voice mode
- ✓ Access to deep research, multiple reasoning models (o3-mini, o3-mini-high, and o1), and a research preview of GPT-4.5
- ✓ Create and use tasks, projects, and custom GPTs
- ✓ Limited access to Sora video generation
- ✓ Opportunities to test new features

Pro \$200 USD/month

Get the best of OpenAI with the highest level of access

Get Pro

- ✓ Everything in Plus
- ✓ Unlimited access to all reasoning models and GPT-4o
- ✓ Unlimited access to advanced voice
- ✓ Extended access to deep research, which conducts multi-step online research for complex tasks
- ✓ Access to research previews of GPT-4.5 and Operator
- ✓ Access to o1 pro mode, which uses more compute for the best answers to the hardest questions
- ✓ Extended access to Sora video generation

Source: 2025,
<https://chatgpt.com/>

Developer: OpenAI, Microsoft

Initial release date: November 30, 2022

Programming language: Python

Engine: GPT-4; GPT-4o; GPT-4o mini; GPT-4.5; OpenAI o1; OpenAI o3; ChatGPT Search

AI assistant & Search engine – ChatGPT: Business Pricing

The screenshot displays the ChatGPT Business Pricing interface. It includes three main sections: a sidebar with a 'Team' plan, a central workspace creation dialog, and a main panel for selecting a team plan.

Team Plan:

- Price:** \$25 USD/month
- Description:** Supercharge your team's work with a secure, collaborative workspace
- Get Team** button
- Features:**
 - ✓ Everything in Plus
 - ✓ Protect your team's data with encryption, MFA, and data excluded from training by default
 - ✓ Centrally manage members, access, and billing
 - ✓ Use more deep research to get in-depth reports on any topic
 - ✓ Connect to Google Drive to search and analyze your team's internal knowledge
 - ✓ Collaborate with projects and shared GPTs
- For 2+ users, billed annually

Create workspace: A modal window titled 'Create workspace' with a close button 'X'. It contains a 'Workspace name' field with the placeholder 'Internship', a 'Cancel' button, and a 'Select billing options' button.

Select your Team plan: A main panel titled 'Select your Team plan' with a close button 'X'. It shows 'Users' set to 2, with a minus and plus button for adjustment. It compares two billing options:

- Annual:** USD \$25 USD/month per user/month
 - Billed annually
 - Minimum 2 users
 - Add and reassign users as needed
- Monthly:** USD \$30 USD/month per user/month
 - Billed monthly
 - Minimum 2 users
 - Add or remove users as needed

Summary: A summary table on the right side of the main panel.

ChatGPT Team	\$60
2 users	\$30/seat
Discount	\$0
Today's total	USD \$60
Billed monthly starting Today	

Continue to billing button at the bottom right.

Source: 2025,
<https://chatgpt.com/>

AI assistant & Search engine – Gemini

The image shows a screenshot of the Gemini AI interface. At the top, there's a navigation bar with a menu icon, the text "Gemini 2.0 Flash", and a "Try Gemini Advanced" button. Below the navigation is a sidebar titled "Recent" which is currently empty. The main area has a title "Gemini 2.0 Flash" and a list of models:

- Gemini**
 - 2.0 Flash New
 - 2.5 Flash (experimental)
Uses advanced reasoning New
 - 2.5 Pro (experimental)
Best for complex tasks New
- Deep Research**
 - Get in-depth research reports New
 - Personalization (experimental)
Help based on your Search history New

At the bottom of the main area are buttons for "Gemini Advanced" and "Upgrade". Below the main area is a search bar with the placeholder "Ask Gemini" and options for "Deep Research" and "Canvas".

Gemini
Chatbot :

Gemini, formerly known as Bard, is a generative artificial intelligence chatbot developed by Google. Based on the large language model of the same name, it was launched in 2023 in response to the rise of OpenAI's ChatGPT. It was previously based on the LaMDA and PaLM LLMs.

Source: [Wikipedia](#)

Initial release date: March 21, 2023

Available in: 46 languages; 239 countries and regions

Developer(s): Google AI

License: Proprietary

Operating system: Web app; Android; iOS

Source: 2025, <https://gemini.google.com/app>

AI assistant & Search engine – Gemini



Gemini Advanced

Gemini ▾
2.0 Flash

- Gemini**
- 2.0 Flash Get everyday help New
- 2.0 Flash Thinking (experimental) Uses advanced reasoning New
- 2.5 Pro (experimental) Best for complex tasks New
- Deep Research Get in-depth research reports New
- Personalization (experimental) Help based on your Search history New
- Gemini Advanced** Upgrade

Get Gemini Advanced and more with a Google One AI Premium plan

NT\$650 NT\$0 for 1 month,
NT\$650/month after

- Gemini Advanced with our latest AI innovations
 - With our most capable AI models
 - Priority access to new features
 - Experience a 1 million token context window
- Also included in this Google One subscription
 - Gemini in Gmail, Docs, and more
 - NotebookLM Plus
 - 2 TB of storage
 - Other Google One premium benefits

Gemini Advanced and Gemini for Gmail, Docs, and more are only available for ages 18+. Certain Gemini Advanced features and Gemini for Gmail, Docs, and more are only available in select languages.

With our most capable AI models

Far more capable at logical reasoning, analysis, coding, and creative collaboration so you can get more done, faster

Priority access to new features

Be one of the first to access Google's latest AI innovations as they become available.

Experience a 1 million token context window

 Process and understand significantly more information – up to 1,500 page PDFs -- so you can tackle more complex problems than ever before

Gemini in Gmail, Docs, and more

- Help you write in Gmail and Docs**
Get help writing invites, resumes, & to polishing your final draft
- Create original images in Slides**
Effortlessly create relevant visuals from few words
- Enhance your video quality in Meet**
Magically enhance the quality of your video sharpness, and fixing the lighting
- 10% back from the Google Store**
on purchases like devices (only available after the trial and in some locations)
- More Google Meet features**
like longer group video calls (limit without a subscription is 1 hour)
- More Google Calendar features**
like enhanced appointment scheduling
- Unlimited Magic Editor saves in Google Photos**
Reimagine your photos and save as many edited photos as you like

Source: 2025, <https://gemini.google.com/app>

Close

AI assistant & Search engine – Grok

What are the key success factors of digital transformation program in an organization?

∴ DeeperSearch
13s

Thinking

Understanding the request

Comparing key factors

organizations"

10 results found

- The keys to a successful digital transformation | McKinsey.com
- Digital transformation – five key success factors | Insights TT-S.com
- AMCS Resources | AMCS amcsgroup.com
- Flipping the Odds of Digital Transformation Success | BCG bcg.com
- 7 key factors of successful digital transformation | CIO cio.com

See more (5)

Browsing results

- I'm considering the search results to find relevant digital transformation success factors.
- Several sources, like McKinsey and TT-S.com, list factors, which I'll need to compare.

Comparing key factors

How can Grok help?

DeeperSearch

Think

Q Completed
2m 21s · 32 sources

- Understanding the request
- Comparing key factors
- Evaluating BCG factors
- Identifying common themes
- Exploring additional sources
- Formulating the answer

How can Grok help?

DeeperSearch

Celeste: LLM chatbot – key features:

- Memory
- Workspace
- Canvas (coding, document formatting)
- Real-time & deep search
- Document integration (Google sheet, G Doc, Gmail, GitHub)

Thinking

Understanding the request

- The request is about identifying key success factors for a digital transformation program in an organization.

Q Searching for "key success factors for digital transformation in organizations"

10 results found

- The keys to a successful digital transformation | McKinsey.com
- Digital transformation – five key success factors | Insights TT-S.com
- AMCS Resources | AMCS amcsgroup.com
- Flipping the Odds of Digital Transformation Success | BCG bcg.com
- 7 key factors of successful digital transformation | CIO cio.com

See more (5)

Grok 3

Source: 2025,
<https://grok.com/>

AI assistant & Search engine – Grok

What is the difference between Think and DeepSearch on Grok?

With DeepSearch mode, Grok 3's search engine delivers more detailed and deeper internet results, probing more sources than Think mode. Therefore, DeepSearch mode typically takes more time to execute a query than Think mode. Apr 4, 2025

TechTarget
<https://www.techtarget.com/whatis/feature/Grok-3...>

Step	DeepSearch	DeepResearch
Initiation	Single question input	Multi-section TOC creation
Process	Iterative search-read-reason loop	DeepSearch applied to each section
Output	Concise answer with references	Full-length, structured report
Optimization	Local (single query focus)	Global (report-wide coherence and depth)
Use Cases	Quick fact-checking, short explanations	Market reports, academic papers, whitepapers

Aspect	DeepSearch	DeepResearch
Primary Goal	Deliver concise, accurate answers quickly	Generate structured, long-form research reports
Process	Single query loop with iterative refinement	Multiple DeepSearch loops for each report section
Output	One-off answer with references	Full report with sections, charts, and tables
Complexity	Local optimization for individual questions	Global optimization for document coherence
Ideal For	Fact-checking, quick lookups, short explanations	Market research, academic papers, policy reports
User Effort	Minimal—input a question and receive an answer	Moderate—define research scope and structure
Time Taken	Seconds to minutes	Minutes to hours, depending on report length
Strengths	Speed, accuracy, iterative reasoning	Comprehensive coverage, structured output
Limitations	Limited to single-query focus	Requires more resources and time

Source: 2025, <https://medium.com/@sahin.samia/how-deepsearch-and-depresearch-with-langs-are-redefining-the-way-we-find-information-ece019a3facb>

AI assistant & Search engine – Grok

The screenshot shows the Grok AI interface. At the top, there's a search bar with the placeholder "What do you want to know?". Below it are three buttons: "DeepSearch" with a magnifying glass icon, "Think" with a lightbulb icon, and a "Grok 3" dropdown menu. The "Grok 3" menu is open, displaying a list of AI personas: "Latest News", "Companion", "Unhinged Comedian", "Loyal Friend", "Homework Helper", "Not a Doctor", and "Not a Therapist". Below the search bar are several other buttons: "Research", "Create images", "Edit Image", "Personas" (with a dropdown arrow), and "Workspaces New".

The screenshot shows the SuperGrok pricing page. At the top, it says "Unlock advanced Capabilities". It features two main sections: "Basic" and "SuperGrok". The "Basic" section includes "Free" and "Grok 3 Model", "Aurora Image Model", "Context Memory", "Limited access to Thinking", "Limited access to DeepSearch", and "Limited access to DeeperSearch". The "SuperGrok" section is priced at "\$30.00/ month" and includes "More Grok 3", "More Aurora Images", "Even Better Memory", "Extended access to Thinking", "Extended access to DeepSearch", and "Extended access to DeeperSearch". A "Get 20% off with yearly" offer is available. Payment options are shown as "Monthly" and "Yearly". At the bottom, there are "Current" and "Subscribe Now" buttons.

Source: 2025, <https://grok.com/>

AI assistant & Search engine – Perplexity



Perplexity AI

AI company :

Perplexity AI is a conversational search engine that uses large language models to answer queries. Its developer, Perplexity AI, Inc., is based in San Francisco, California. Founded in 2022, Perplexity generates answers using sources from the web and cites links within the text response. [Wikipedia](#) >

perplexity.ai

Founders: Aravind Srinivas, Johnny Ho, Denis Yarats, Andy Konwinski

Founded: August 2022

Headquarters: San Francisco, California, US

Number of employees: 100 (2024)

Source: 2024, <https://www.perplexity.ai/>



Perplexity
<https://www.perplexity.ai> ::

Perplexity AI

Perplexity is a free AI-powered answer engine that provides accurate, trusted, and real-time answers to any question.



New Thread Ctrl I
Home Discover Spaces Library



Try Pro
Upgrade to more powerful AI models, increased limits and more advanced answers.
[Learn More](#)



celestespn21...

perplexity^{PRO}

Standard

Start for free, no credit card needed.

Free

Forever

[Continue with Free](#)

- Unlimited free searches
- 3 Pro searches per day
- Fast free AI model
- Upload 3 files per day

Professional

Unlock the full capabilities of Perplexity and enjoy new perks as they are added.

\$20

Monthly

[Continue with Pro](#)

- Unlimited free searches
- 300+ Pro searches per day
- Choose a smarter AI: pick from Deepseek R1, OpenAI o3-mini, Claude 3.7 Sonnet, Sonar, and more
- Upload unlimited files
- Search your files in Spaces
- Custom knowledge hubs and collaborative spaces

Want Perplexity for your team or business? [Learn More](#) >

What do you want to know?

Ask anything...

Introducing our Windows App
Install the native Windows App

27°C Party cloudy Fangting Musk's DOGE misses \$1T savings target US to Cancel Immigrants' Social...

28° L: 19°

AI assistant & Search engine – Felo (Japan): multiple AI model comparisons

@Celeste SP
Ng, 2025

The screenshot displays the Felo AI platform interface. On the left, there's a sidebar with navigation links: New Thread, Felo Agent, Topic Collections, Felo Library, and History. A prominent search bar at the top says "Search the world in your own language". Below it, a "Quick" search tab is active, showing a search history with items like "Fast search, detailed answers, perfect for daily use" and "Ask anything...". A red box highlights a dropdown menu titled "Select more advanced models" which lists several AI models: Pro Search, DeepSeek R1, o4-mini (medium), GPT-4o (selected), Claude 3.7 Sonnet, and an option to "Add Advanced Model". The main search results area shows various AI models and their capabilities. On the right, there's a "Felo Chat" section with a "New Conversation" button and a list of messages from "GPT-4o" and "GPT-4O". To the right of the chat is a "New Conversation" window showing messages from "GPT-4o" and "GPT-4O MINI". Further right, there are sections for "Claude 3.5 Sonnet (New)" and "Gemini 1.5 Pro", each with a list of features. At the bottom, a message input field shows a list of selected AI models: "GPT-4o", "Claude 3.5 Sonnet (New)", "GPT-4o mini", and "Gemini 1.5 Pro".

Search the world in your own language

Ask anything...

Quick Research Fast search, detailed answers, perfect for daily use

Select more advanced models

Next Step →

4o

Pro Search

DeepSeek R1 reasoning

o4-mini (medium) reasoning

GPT-4o

Claude 3.7 Sonnet

Add Advanced Model

Pro search remaining 5 times today

New Conversation

GPT-4o

GPT-4O

New Conversation

GPT-4o

GPT-4O MINI

Claude 3.5 Sonnet (New)

Gemini 1.5 Pro

GPT-4o

Claude 3.5 Sonnet (New)

GPT-4o mini

GPT-4O MINI

GEMINI 1.5 PRO

Enter to send, Shift + Enter to wrap, / to search prompts, . to use commands

Upgrade Plan

Upgrade to Felo Pro for 300 Pro searches per day, allowing you to use more advanced models for searching and chatting.

Learn more

吳思佩

© 2025. Felo Inc. Felo Enterprise | Blog | LLM Playground | Commercial Disclosure | Privacy Policy | Terms of Use

Source: 2025, <https://felo.ai/>

AI assistant & Search engine – Felo (Japan)

The screenshot shows the Felo AI interface with a sidebar on the left and a main content area on the right.

Subscription

Free

- Pro Search: 5 / 5 Per Day
- File Analysis: 3 / 3 Per Day
- voice note: 30 / 30 Minutes
- PowerPoint Generation: 3 / 3

Upgrade Now

Answer Preference

Set Advanced AI Models **Pro**
The response models include GPT-4o, Claude3.7-Sonnet, etc.

Selected 4 advanced models ▾

Deep Reasoning Mode
When enabled, Deep Reasoning is available in Pro mode

Preferred response language

Custom Instructions

Upgrade Plan
Upgrade to Felo Pro for 300 Pro searches per day, allowing you to use more advanced models for searching and chatting.

[Learn more](#)

奥思佩 ▾

Source: 2025, <https://felo.ai/>

AI assistant & Search engine – Felo (Japan)

Answer Preference

Set Advanced AI Models Pro
The response models include GPT-4o, Claude3.7-Sonnet, etc.

Deep Reasoning Mode
When enabled, Deep Reasoning is available in Pro mode

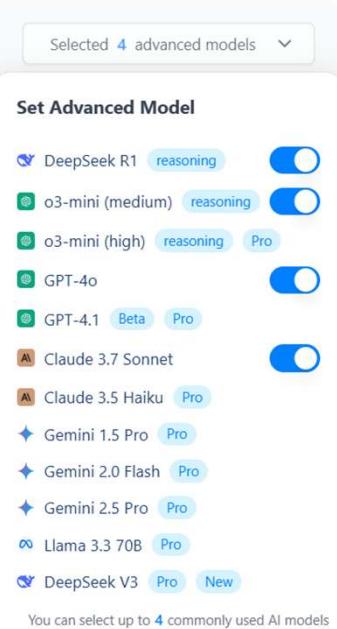
Preferred response language
Answers will be displayed in this language

Custom Instructions
Guide AI to reference personal information for answering results

Settings

Appearance
Display on Device

Interface Language
User Interface Display Language



Custom Instructions

Felo provides personalized responses based on your search and language preferences.

What would you like Felo to know about you to provide better responses?

Please introduce yourself

Any preferences like name, profession, hobbies, etc., that can help Felo provide better answers.



0 / 1000

Location

Please enter location information

Save

Settings

Source: 2025, <https://felo.ai/>

AI assistant & Search engine – Felo (Japan): multiple AI model comparisons

@Celeste SP Ng, 2025



The screenshot shows the Felo pricing page with three main options:

- Annual subscription:** \$12.5 /Month (Save 16%)
\$149.99/Year, more cost-effective
Unlock all features of Felo and enjoy new functionalities.
Upgrade Now
- Monthly subscription:** \$14.99 /Month
Unlock all features of Felo
Upgrade Now
- Standard:** Free /Forever
Start for free, no credit card required.
Includes Content
 - ✓ Access 300 Professional Searches Daily
 - ✓ Unlimited PowerPoint Generation
 - ✓ Unlimited file analysis
Files are permanently saved, supporting up to 2 million words for analysis
 - ✓ Unlock Advanced Model Access
GPT-4o, Claude 3.7 Sonnet & More
 - ✓ Upload Up to 50 Files per Topic
 - ✓ Chat Mode Alternative to GPT and Claude Memberships
Professional search quota usable with Felo chat advanced models [Learn More](#)

The screenshot shows the Felo AI interface with several components:

- Felo:** Main navigation bar with New Thread, Felo Agent, Topic Collections, Felo Library, History, and Today.
- LLM Playground:** Your own AI assistant. It shows a current plan (Standard) with 0 messages and 4/16/2025, 8:52:07 PM. It also shows a new conversation with 0 messages and 4/16/2025, 8:52:07 PM.
- Research Paper Analyzer:** A tool for analyzing academic papers (PDF). It includes fields for Search Source, Research Paper, and a toggle for Enable Pro to use our most powerful search.
- Upgrade Plan:** Upgrade to Felo Pro for 300 Pro searches per day, allowing you to use more advanced models for searching and chatting.
- Bottom Bar:** A horizontal bar with various AI tools:
 - AIBot Draw Picture, GitHub Copilot, Prompt improvement, LLM Playground (highlighted with a red box and arrow)
 - Travel Guide, JavaScript Console, Plagiarism Checker, Storyteller, Debater, Prompt Generator, Midjourney Prompt Generator, ChatGPT-Essay-Writer, Chat-GPT-Articles
 - ChatGPT Presentation Maker, FlirtBot, ChatGPT Drawing AI Assistant, Witty Reply Generator, Witty Reply Generator, ChatGPT Code Generator, CantoneseGPT, TarotMaster AI
 - English to Spanish translation AI, AI Translator: Spanish to English, AI Translator: English to Urdu, TikTok short video script writer, Regular Expression Generator, Prompt Engineer Assistant
 - Short Q&A in English, Scheduling Employees, Advanced AI Meal Planner, IT professional and systems administrator AI Assistant, English-Japanese Translator, Chinese-English bilingual translator
 - French-English Translator, Meeting Summary Assistant, Web 3D Animation Effects Generator, SVG Icon Generator, LinkedIn Headline Generator, Resume Title Generator
 - Generating Professional Resume Summaries, SEO Title and Meta Description Generator, Response Generator, Email Response Generator, Content Idea Generator, Interview Answer Generator
 - SMART Goal Generator, Performance Evaluation Generator, Cornell Notes Generator, Riddle Generator, Headline Generator, Letter Of Recommendation Generator, Love Letter Generator
 - GPT-4o mini, Compare AI-generated results

Source: 2025, <https://felo.ai/>

AI assistant – Claude

The screenshot shows the Claude AI interface. At the top, it says "Your ideas, amplified" and "Privacy-first AI that helps you create in confidence." Below this is a sign-in form with fields for "Enter your personal or work email" and a "Continue with email" button. A note below the form states: "By continuing, you agree to Anthropic's Consumer Terms and Usage Policy, and acknowledge their Privacy Policy." The main content area features a bar chart titled "Sales funnel" with the following data:

Step	Count
Ad view	400
Email open	200
Website Visit	100
Product Demo	50
Purchase	20

A message from Claude reads: "Hi Claude! Can you visualize my sales funnel from awareness to purchase using bar graphs?"

Source: 2024, <https://claude.ai/>

The screenshot shows the account creation process. It starts with the message "First, let's create your account". Below this is a form to "Verify mobile phone number & age". It includes a dropdown for country selection (set to Taiwan), a field to "Enter phone number", a checkbox for "I confirm that I am at least 18 years of age", and a large orange "Send Verification Code" button. A note at the bottom states: "You must have a valid phone number to use Anthropic's services. SMS and data charges may apply."

The screenshot shows three pricing plans: Free, Pro, and Max.

- Free**: \$0 / month billed annually. Includes "Try Claude". Buttons: "Stay on Free plan" and "Get Pro plan".
 - ✓ Chat on web, iOS, and Android
 - ✓ Generate code and visualize data
 - ✓ Write, edit, and create content
 - ✓ Analyze text and images
- Pro**: \$16.67 / month billed annually. Includes "For personal and professional projects". Buttons: "Get Pro plan".
 - Everything in Free, plus:
 - ✓ More usage
 - ✓ Access to Projects to organize chats
 - ✓ Ability to use more Claude models
 - ✓ Extended thinking for complex work
- Max**: 5-20x more usage than Pro. \$100 / month billed monthly. Button: "Get Max plan".
 - Everything in Pro, plus:
 - ✓ Substantially more usage to work with Claude
 - ✓ Scale usage based on specific needs
 - ✓ Higher output limits for better and richer responses and Artifacts
 - ✓ Be among the first to try the most advanced Claude capabilities
 - ✓ Priority access during high traffic periods

Prices shown do not include applicable tax. Usage limits may apply. [Learn more](#)

AI assistant – Claude (no references citations)



Hey there, I'm Claude.

I'm your AI assistant for brainstorming, creative learning together.

Here's a few things you should know about me:



Curious? Just ask

Chat with me about anything from simple to complex ideas! I'm always ready to help.



Your data is in your control

I don't train on your chats by default. You own your data and can delete chats or your account at any time.



I'm built to help, never harm

Automated safeguards protect our community, preventing creating violent, abusive, or deceptive content.

I understand



What are you into, Celeste? Pick three topics to get started.

Coding & developing

Learning & stu

Writing & content creation

Business & strategy

Design & creat

Life stuff

Claude's choice

Let's go

Claude 3.7 Sonnet

Our most intelligent model yet

Claude 3.5 Haiku

Fastest model for daily tasks

More models

Due to my knowledge cutoff of October 2024, I don't have the very latest information about these platforms, as they are rapidly evolving.

Note on References

I don't have the ability to cite specific external references or papers with URLs. The information I've provided represents general knowledge about these AI systems as of my knowledge cutoff. For the most current and detailed information, I'd recommend:

1. Visiting each company's official documentation
2. Reading recent comparative analyses from tech publications
3. Checking academic papers on large language model benchmarking
4. Consulting sites like Papers With Code for technical performance comparisons

Would you like me to elaborate on any specific aspect of these AI assistants?

The screenshot shows the Claude AI upgrade page. At the top, there's a navigation bar with icons for profile, settings, and help, followed by a search bar containing "claude.ai/upgrade/pro". Below the navigation is a sidebar with sections for "Curious? Just ask", "Your data is in your control", and "I'm built to help, never harm". The main content area has a heading "What are you into, Celeste? Pick three topics to get started." with several topic buttons. A "Let's go" button is at the bottom of this section. To the right, there's a "Model selection" sidebar with options for "Claude 3.7 Sonnet" (selected), "Claude 3.5 Haiku", and "More models". Below this is a "Pricing" section with "Monthly" (\$20.00/month + tax) and "Yearly" (\$200.00/year + tax) plans, both with a "Save 17%" badge. The "Yearly" plan is highlighted with a blue background. At the bottom is an "Order details" table with rows for "Pro plan Annually", "Subtotal", "Tax", and "Total due today", all showing a value of \$200.

Order details	
Pro plan	\$200
Annually	
Subtotal	\$200
Tax	\$0
Total due today	\$200

Source: 2024, <https://claude.ai/>

Comparisons of the SIX AI assistants

Feature	ChatGPT	Gemini	Claude	Perplexity	Felo	Grok
Developer	OpenAI	Google DeepMind	Anthropic	Perplexity AI	Felo AI	xAI (Elon Musk)
Strengths	Versatile in text generation, creative tasks	Multimodal capabilities (text, image, audio)	Natural, human-like conversation	Real-time search with citation support	Comparison of multiple AI responses	Real-time data access from social media
Limitations	Less effective in deep reasoning tasks	Still developing reasoning capabilities	Limited to text input, no image generation	Can produce shallow responses for complex queries	Newer entrant, may lack extensive features	May lack depth in analysis compared to others
Use Cases	General-purpose chatbot, creative writing	Ideal for tasks requiring multimodal input	Best for coding assistance and ethical reasoning	Best for research and fact-checking	Good for comparing AI outputs	Strong in math and coding tasks
Pricing	Free and paid versions (Plus at \$20/month)	Free access, integrated with Google services	Pricing varies by model	Free and Pro versions available	Free and Pro plans available	Free access, with potential premium features

Feature	ChatGPT	Gemini	Claude	Perplexity	Felo	Grok
Data Sources	Trained on diverse datasets up to October 2023	Uses Google's extensive data sources	Limited to training data, no real-time updates	Real-time web search capabilities	Access to multiple AI models for comparison	Real-time updates from X (formerly Twitter)
Multimodal Support	Yes (text and images with DALL-E)	Yes (text, images, audio)	No	No	No	No
Response Style	Conversational, creative	Concise, factual	Conversational, focused on clarity	Direct answers with citations	Comparative, analytical	Engaging, sometimes humorous

Summary

- ChatGPT is best for general use and creative tasks.
- Gemini excels in multimodal applications.
- Claude is focused on safe and ethical interactions.
- Perplexity is ideal for research and fact-checking.
- Felo allows for comparison across multiple AI models.
- Grok provides real-time data access, particularly from social media.

Source: Felo, 2025; <https://felloai.com/2025/02/grok-3-vs-chatgpt-vs-deepseek-vs-claude-vs-gemini-which-ai-is-best-in-february-2025/>

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AI assistant – example of Google NotebookLM

Research on AR/VR in Marketing

Share Settings Studio

Sources Chat Studio

+ Add Discover Select all sources

Effect_of_Augmented_Reality_AR_and_Vir... Frontiers | Virtual Reality in Marketing: A ... Gen Z and Millennials Rely on AR to Over... Impact of Augmented Reality (AR) on Co... Marketing to the Gen Z The Impact Of AR And VR On Customer E... The theories those have been used to inv... What's holding consumers back from ad...

Research on AR/VR in Marketing

8 sources

These sources collectively examine the burgeoning role of augmented reality (AR) and virtual reality (VR) in retail and e-commerce. They explore how these immersive technologies impact customer engagement and purchase behavior across different demographics, particularly Gen Z and Millennials. The texts discuss the applications of AR/VR, their potential to overcome online shopping limitations, and the challenges and limitations hindering widespread consumer adoption. Furthermore, they touch upon the theories explaining AR/VR's influence and offer insights into future research directions and implications for retailers.

Save to note

Add note Audio Overview Mind Map

Start typing... 8 sources

How significantly are AR/VR technologies transforming customer engagement a >

NotebookLM can be inaccurate; please double check its responses.

Audio Overview

Deep Dive conversation Two hosts (English only)

Customize Generate

Notes

+ Add note Study guide Briefing doc FAQ Timeline

Saved notes will appear here
Save a chat message to create a new note, or click Add note above.

AI assistant – example of Google NotebookLM

The screenshot shows the Google NotebookLM interface. On the left, there's a sidebar for "Add sources" with options to "Upload sources" (via file upload or drag & drop) and "Supported file types: PDF, txt, Markdown, Audio (e.g. mp3)". Below this are buttons for "Google Drive", "Link", "Pas", "Google Docs", "Google Slides", "Website", and "YouTube". The main area is titled "Chat" and contains a message from the AI: "In what specific marketing applications and across which consumer segments are AR/VR technologies demonstrating the most substantial impact?". The AI response below states: "Based on the sources provided, Augmented Reality (AR) and Virtual Reality (VR) technologies are demonstrating substantial impact in specific marketing applications within the retail sector, particularly influencing younger consumer segments 1 ...". It then lists "Specific Marketing Applications with Substantial Impact": "The retail industry, including e-commerce, is a primary area where AR and VR are having a transformative effect on customer engagement and purchase behavior 1 Key applications include:" followed by two bullet points. The first bullet point is about "Virtual Try-Ons" and the second is about "Interactive Product Displays and Demonstrations". At the bottom, there's a text input field "Start typing..." and a list of suggested questions: "Is consumer decision-making?", "What technological barriers hinder AR/VR adoption in retail?", and "Which theories help explain AR/VR's retail impact?". A note at the bottom says "NotebookLM can be inaccurate; please double check its responses.".

Share Settings Refresh

Chat

In what specific marketing applications and across which consumer segments are AR/VR technologies demonstrating the most substantial impact?

Based on the sources provided, Augmented Reality (AR) and Virtual Reality (VR) technologies are demonstrating substantial impact in specific marketing applications within the retail sector, particularly influencing younger consumer segments 1

Specific Marketing Applications with Substantial Impact:

The retail industry, including e-commerce, is a primary area where AR and VR are having a transformative effect on customer engagement and purchase behavior 1 Key applications include:

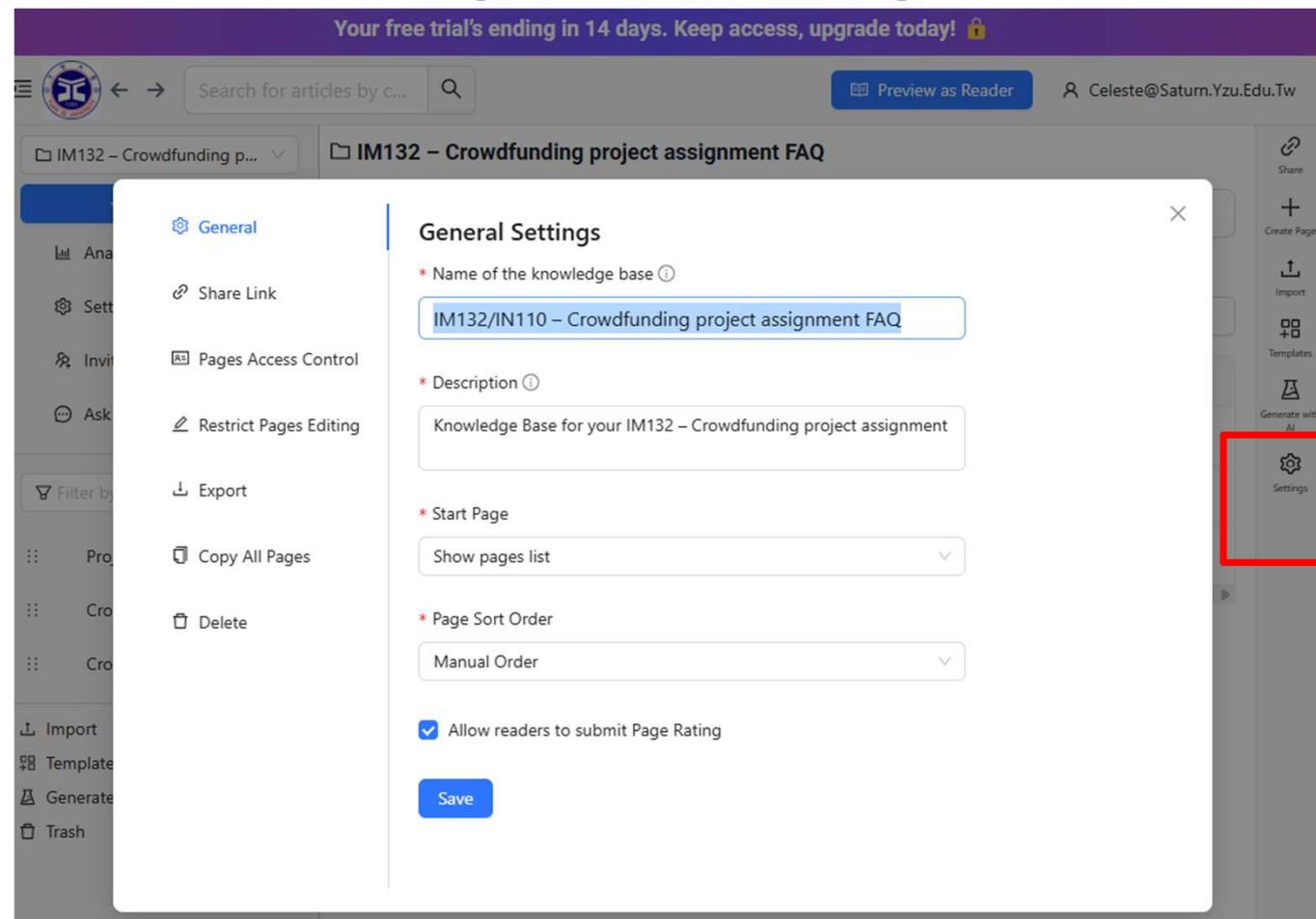
- **Virtual Try-Ons:** This is frequently mentioned as an impactful application, allowing customers to visualize products like clothing, accessories, eyewear, shoes, and makeup on themselves without physical interaction 1 Virtual try-ons significantly boost exploratory behavior, enhance product evaluation, improve understanding, and reduce purchase hesitancy 15 Sources specifically note their popularity and use in clothing and accessories categories 10
- **Interactive Product Displays and Demonstrations:** AR and VR enhance how products are experienced by providing vivid and interactive information through overlays, 3D models, and real-time data integration 1 This leads to more informed purchasing decisions by improving product evaluation and reducing uncertainty 15

Start typing... 8 sources

< Is consumer decision-making? What technological barriers hinder AR/VR adoption in retail? Which theories help explain AR/VR's retail impact?

NotebookLM can be inaccurate; please double check its responses.

AI assistant – example of (IM132 – Crowdfunding project assignment) – settings: to change name



AI assistant – example of (IM132 – Crowdfunding project assignment)

The screenshot shows a Microsoft Teams interface. On the left, the sidebar includes sections for Activity, Chat, Teams, Assignments, Calendar, Calls, OneDrive, Copilot, and Apps. A green box highlights the 'Teams' icon. The main area displays a team named 'Teams-(1132-IM132-A)管理資訊系統'. The 'General' channel is selected, and a red box highlights the 'Perfect Wiki' tab in the top navigation bar. The 'Document Preview' section shows a document titled 'IM132/IN110 – Crowdfunding project assignment FAQ' from 'saturn.yzu.edu.tw'. Below the preview, there's a search bar and three cards: 'Project assignment Mar ...', 'Crowdfunding successfu...', and 'Crowdfunding Platform ...'. At the bottom right, a red box highlights a 'Got a Question? Ask Away!' button with a microphone icon, and a blue button below it says 'Switch to Reader View'.

– in Reader View

AI assistant – example of (IM132 – Crowdfunding project assignment)

Ask a question

Document Preview

The screenshot shows a Microsoft Teams document preview. At the top, it displays the URL saturn.yzu.edu.tw. Below the URL, there's a breadcrumb navigation: All > IM132/IN110 – Crowdfunding project assignment FAQ. The main content area features a large title: **IM132/IN110
Crowdfunding p
assignment F**. Below the title is a search bar with the placeholder "Search for articles...". There are two cards: "Project assignment Mar ..." (Last updated today) and "Crowdfunding successfu..." (Last updated today). At the bottom, it says "saturn.yzu.edu.tw" and "Powered by Perfect Wiki".

The screenshot shows three separate AI Assistant windows. The first window has a message from the AI: "Hey there! 🤖 Need quick answers? Just ask! I'm your AI assistant." The second window contains a detailed assignment description: "section must clearly show the contributor's name. - Submit a report (docx format) and the project website URL or screenshots, if applicable. - Prepare a group PowerPoint presentation. - Individual and group evaluation will be based on clarity, contents, contribution, teamwork, and quality of work." The third window shows a user asking: "what is to be submitted in this assignment". A red box highlights this question. The AI responds with: "- Write out your research and explanations for the chosen topic (in the report). - Each section must clearly show the contributor's name. - Submit a report (docx format) and the project website URL or screenshots, if applicable. - Prepare a group PowerPoint presentation. - Individual and group evaluation will be based on clarity, contents, contribution, teamwork, and quality of work." Both the user's message and the AI's response in the third window have a "Send Message" button.

Building an AI assistant - EdCafe

@Celeste SP
Ng, 2025

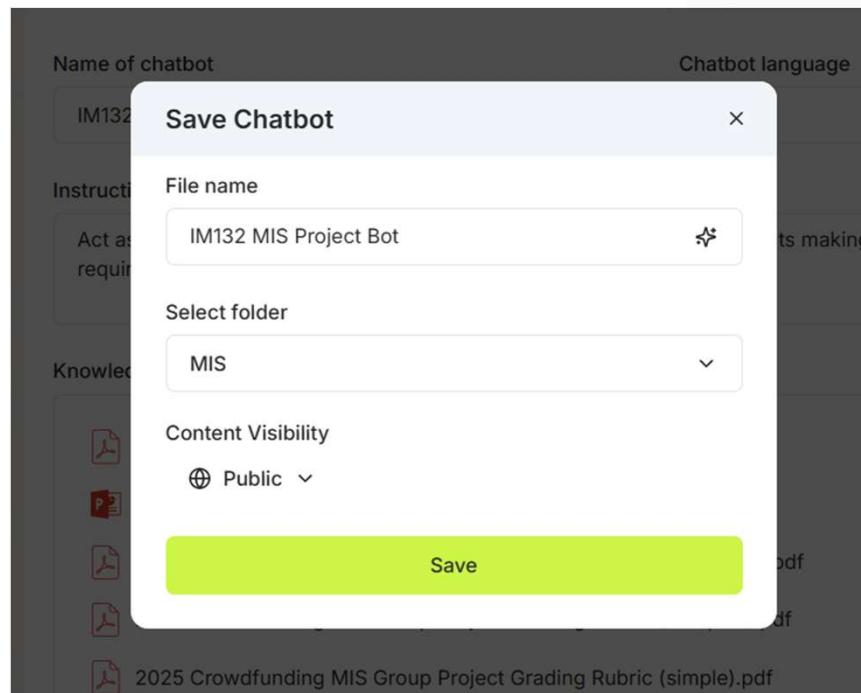
AI assistant – example of EdCafe

The screenshot shows the EdCafe platform interface for creating an AI assistant. On the left, there's a sidebar with a 'Create new' button and links for Home, My Library, Recent, and Account. Below this is a library view showing various files like '2025 Crowdfunding MIS Group Project Grading Rubric (complex)' and 'IM132 MIS Project Bot'. A prominent 'Upgrade your subscription' banner is at the bottom left.

The main area is titled 'Create Chatbot' with the sub-instruction 'Create a custom chatbot tailored to your specific needs and interactions.' It includes fields for 'Name of chatbot' (set to 'IM132 MIS Project Bot') and 'Chatbot language' (set to 'English'). The 'Instructions' section contains the text: 'Act as a teaching assistant who can provide real-time feedback to students making inquiries related to group project requirements and the basic knowledge about crowdfunding.' The 'Knowledge (optional)' section lists several files: 'IM132 IN110 MIS Group Project Details 2025.pdf', 'Crowdfunding Platform Types 2024.pptx', 'Celeste IM132 IN110 student report cover (crowdfunding proposal).pdf', '2025 Crowdfunding MIS Group Project Grading Rubric (complex).pdf', and '2025 Crowdfunding MIS Group Project Grading Rubric (simple).pdf'. A large green 'Create Chatbot' button is at the bottom right.

Source: <https://app.edcafe.ai/>

AI assistant – example of EdCafe



A screenshot of the IM132 MIS Project Bot dashboard. At the top, it shows the bot's name and a brief description: 'The IM132 MIS Project Bot is an AI-driven chatbot designed to support students with their group project on crowdfunding by offering real-time feedback and guidance.' Below this are buttons for 'Assign', 'Chat sessions', 'Edit', and more. The main area features a large green speech bubble icon with the text 'Hi, I'm IM132 MIS Project Bot'. To the right, there are two sections: 'Instructions' (describing the bot's role) and 'Documents' (listing several PDF and PPTX files related to crowdfunding and group projects).

Source: <https://app.edcafe.ai/>

Building an AI assistant - EdCafe

@Celeste SP
Ng, 2025

AI assistant – example of EdCafe

The screenshot shows a messaging interface. At the top, there's a navigation bar with 'My Library', 'MIS', and 'IM132 MIS Project Bot (Preview)'. On the right, there are icons for a file, a person (Celeste), and a message bubble, with the status 'Free'.

IM132 MIS Project Bot:

Hi, I'm IM132 MIS Project Bot
I am the IM132 MIS Project Bot, here to assist students with inquiries related to their group project on crowdfunding, providing real-time feedback and insights.
 ⓘ Test chat session will not be saved

IM132 MIS Project Bot:

Hello Celeste! How can I assist you today with your group project or any questions related to crowdfunding?

Celeste:

When is the deadline for this project?

IM132 MIS Project Bot:

The deadlines for the IM132/IN110 MIS Group Project are as follows:

- 1st round: 10th June 2025
- 2nd round: 17th June 2025

Make sure to plan your work accordingly! If you have any more questions, feel free to ask.



Celeste

what is a crowdfunding?



IM132 MIS Project Bot

Crowdfunding is a method of raising funds from a large number of people, typically via the internet, to support a project, business, or cause. It allows individuals or organizations to gather small amounts of money from many contributors, rather than relying on a single source of funding, such as a bank loan or venture capital.

There are several types of crowdfunding, including:

1. **Reward-based Crowdfunding:** Backers contribute funds in exchange for rewards, which can be products or services related to the project. Platforms like Kickstarter and Indiegogo are examples of this type.
2. **Donation-based Crowdfunding:** This type involves raising money for charitable causes or social projects, where backers do not receive any financial return. An example is GoFundMe.
3. **Equity-based Crowdfunding:** Investors provide funds in exchange for equity or shares in the company. This is often used by startups looking to raise capital. Platforms like Seedrs and CrowdCube are examples.
4. **Debt-based Crowdfunding:** Also known as peer-to-peer lending, this involves raising funds through loans that are paid back with interest. Platforms like LendingClub and Prosper are examples.

Crowdfunding can be an effective way to validate ideas, build a community around a project, and gain exposure before launching a product or service. If you have more specific questions about crowdfunding or its types, feel free to ask!

ⓘ Send a message

Source: <https://app.edcafe.ai/>

AI Assistant – “Assign”

The screenshot shows the IM132 MIS Project Bot interface. At the top, there's a header with a CHATBOT icon and the title "IM132 MIS Project Bot". Below the header, there are four buttons: "Assign" (highlighted in green), "Chat sessions", "Edit", and a more options menu. A large QR code is displayed prominently. In the center, a modal window titled "Assign Chatbot" is open, showing the status "Accepting chats" with a green toggle switch. It features a large QR code for sharing, and buttons for "Copy link", "Save QR", "Embed", "Google Classroom", and "Microsoft Teams". Below the QR code, it says "Responses collected 0 / 25". A note at the bottom states: "Your plan only supports up to 25 chat sessions. Upgrade to collect more!". The background of the main interface shows some text about the bot's purpose and a file list.

Source: <https://app.edcafe.ai/>

URL:

[https://app.edcafe.ai/chatbot/
67fe6400eb945205b132bcd2](https://app.edcafe.ai/chatbot/67fe6400eb945205b132bcd2)

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AI Challenges

1. Data-Related Challenges

- **Quality Over Quantity:** High-quality data is essential for effective AI systems. Poor data can lead to unreliable outputs, as evidenced by **Unity Technologies'** \$110 million loss due to ingesting bad data.
- **Integration Issues:** Combining data from various sources is challenging, especially with no standard for IoT devices. Siloed data complicates this further.
- **Privacy and Security:** With over 6 billion malware attacks in 2023, ensuring data privacy and security is paramount.

2. Ethical Concerns

- **Bias and Fairness:** AI systems can inadvertently perpetuate biases present in training data, leading to unfair outcomes.
- **Transparency:** Understanding how AI models make decisions is crucial to trust and accountability.

Source: <https://www.sandtech.com/insight/the-top-5-ai-challenges-insights-and-solutions/>
<https://www2.deloitte.com/us/en/pages/consulting/articles/challenges-of-using-artificial-intelligence.html>

The impact of bad data: a case study on Unity

Unity stock dropped 37% on 11 May 2022, after the company announced its first-quarter earnings, despite strong revenue growth, decent margins, good customer growth and continued high performance in dollar-based net expansion.

But there was one data point in Unity's earnings that were not as positive.

The company also shared that its operating revenue growth was still up but had slowed due to a fault in its platform that reduced the accuracy of its Audience Pinpointer tool.

The fault in Unity's platform? Bad data [Bad data](#).

Unity ingested bad data from a large customer into its machine learning algorithm, which helps place ads and allows users to monetize their games. This not only resulted in decreased growth, but also ruined the algorithm, forcing the company to fix it to remedy the problem going forward.

The company's management estimated the impact on the business at approximately USD 110 million in 2022.

Source: <https://www.ibm.com/think/insights/observability-data-benefits>

AI Challenges

■ 3. Regulatory and Legal Challenges

- **Compliance:** Navigating the evolving landscape of AI regulations requires businesses to stay informed and adaptable.
- **Liability:** Determining responsibility for AI-driven decisions can be complex, especially when outcomes are unfavorable.

■ 4. Bias and Transparency

- **Algorithmic Bias:** Ensuring AI models do not reinforce existing societal biases is a significant concern.
- **Explainability:** Developing AI systems whose decision-making processes are interpretable is essential for user trust.

■ 5. Talent and Expertise

- **Skill Shortage:** There's a growing demand for professionals skilled in AI, data science, and related fields.
- **Continuous Learning:** As AI technologies evolve, ongoing education and training are necessary to keep pace.

Source: <https://www.sandtech.com/insight/the-top-5-ai-challenges-insights-and-solutions/>



Source: <https://hai.stanford.edu/ai-index>

AI Index

The mission of the AI Index is to provide unbiased, rigorously vetted, and globally sourced data for policymakers, researchers, journalists, executives, and the general public to develop a deeper understanding of the complex field of AI. To achieve this, we track, collate, distill, and visualize data relating to artificial intelligence.

The 2025 AI Index Report Is Here

The 2025 Index is our most comprehensive to date and arrives at an important moment, as AI's influence across society, the economy, and global governance continues to intensify.

[Read the Report →](#)

[Request a Briefing](#)



THANK YOU!

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