



SUNG KYUN KWAN
UNIVERSITY

SKK GSB

FMBA AI Workshops

AI Workshop Journey: From User to Developer

- Nov 11, 14, 20
- Jan 16, 23, 30

Dr. Yuan Tian

What to Expect in a Workshop



Not Traditional Lectures

- **Less** talking from me, **more** doing from you.
- Hands-on learning — **less theory, more practice.**
- **Learn by experimenting**, not just listening.

Learning by Doing

- Use real AI tools to create outputs in every session.
- Practice, iterate, and learn from feedback.

Collaborative & Interactive

- You are welcome to work in pairs or small groups.
- Share ideas, test prompts, and build together.

This Workshop is Not About...



This workshop is **NOT** about **deep technical knowledge**; therefore, we **will NOT cover** the following:

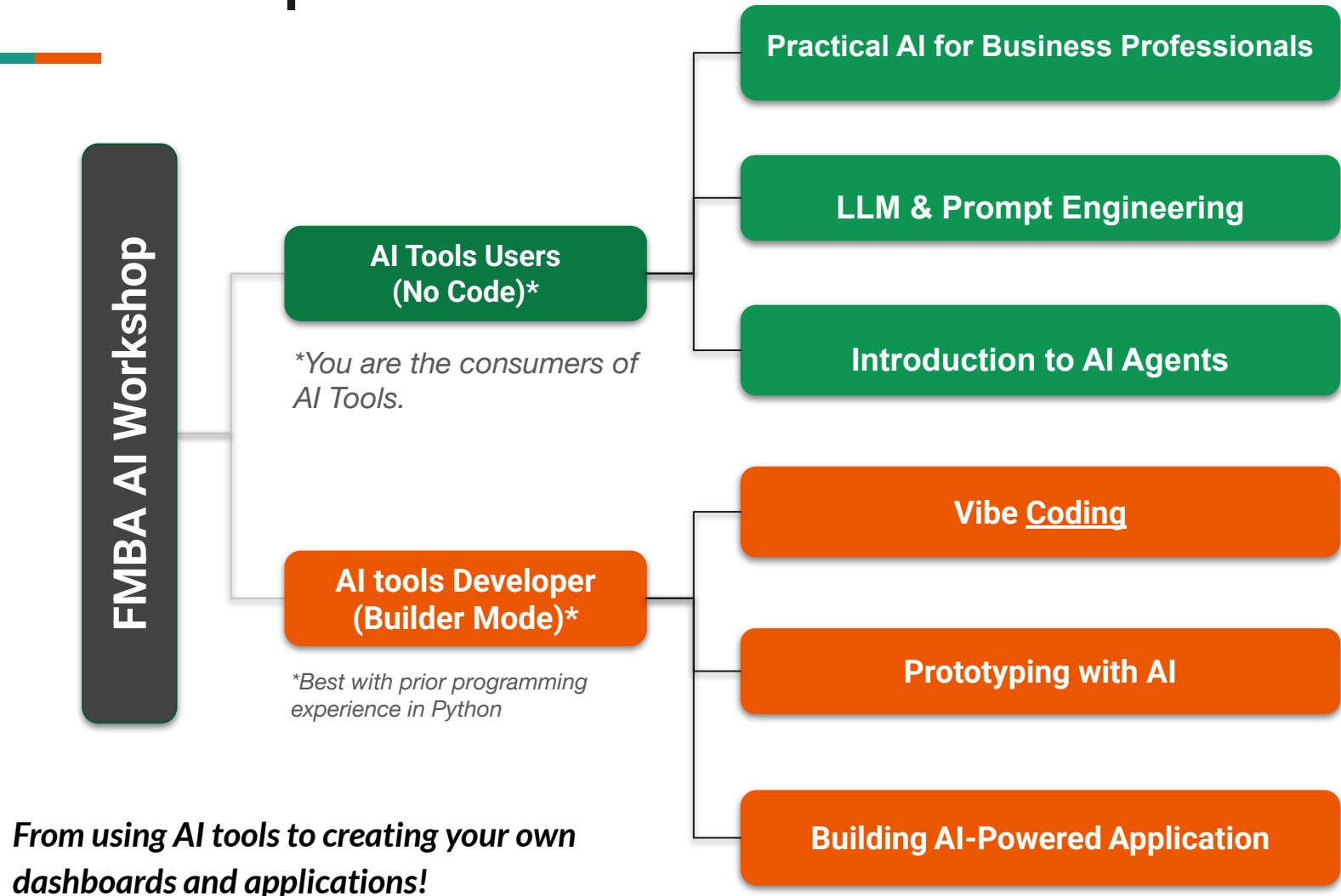
- Neural networks or how they work internally.
- How to build, train or fine-tune deep learning models.
- Building predictive models using deep learning models
- Retrieval-Augmented Generation or other advanced large language models principles.
- Deep learning models architectures, frameworks, or theory.

Disclaimer



I have no conflict of interest in any the AI tools mentioned in this workshop.

AI Workshop Overview





SUNGKYUNKWAN
UNIVERSITY

SKK GSB

FMBA AI Workshop 1

Practical AI for Business Professionals

Dr. Yuan Tian

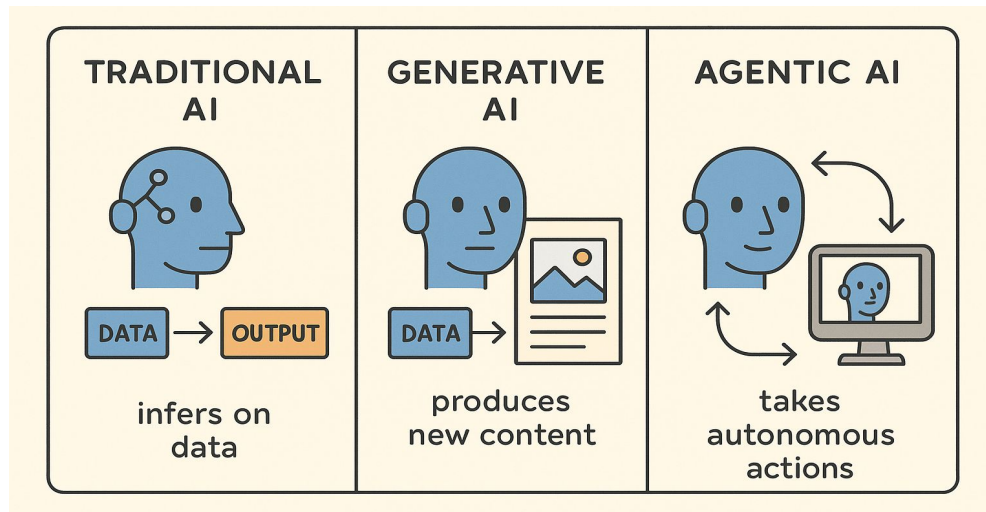
Overview



- Introduction to Generative AI
- Applications and Tools of Generative AI
- Major Use Cases of Generative AI
- Gen AI's Early Years – AI Adoption 23-24

Generative Artificial Intelligence (Gen AI)

- **Generative AI** is a type of **artificial intelligence algorithms** that **creates new content**, such as text, images, audio, and video, based on **patterns it learned** from massive existing data through **training**.



Applications and Tools of Generative AI



Content Generation

- Text Generation
- Image and Video Generation
- Audio Generation
- Code Generation

AI Product Landscape



Large tech companies are rapidly developing AI tools for text, image/video, audio, and code generation — **covering nearly every content creation use case.**

Common Product Pattern:

- **Chat / Prompt-based tools** for business users (**no coding**).
- **Application Programming Interface (API) versions** for developers and enterprise integration (**coding is required**)

As of today (2025-11-4)

Too Many AI Tools, Too Little Clarity

The growing overlap among AI tools from OpenAI, Microsoft Copilot, and Google Gemini has created **significant user confusion**.

- Microsoft offers **multiple “Copilot” versions** (Copilot for 365, Copilot Chat, and Copilot integrated within Word, Excel, or Edge)
 - Microsoft 365 Copilot (former “Microsoft Office”)
- Google provides **several “Gemini” products** (Gemini for Workspace, Gemini AI Studio)
- OpenAI’s ChatGPT used to have many models for user to choose.

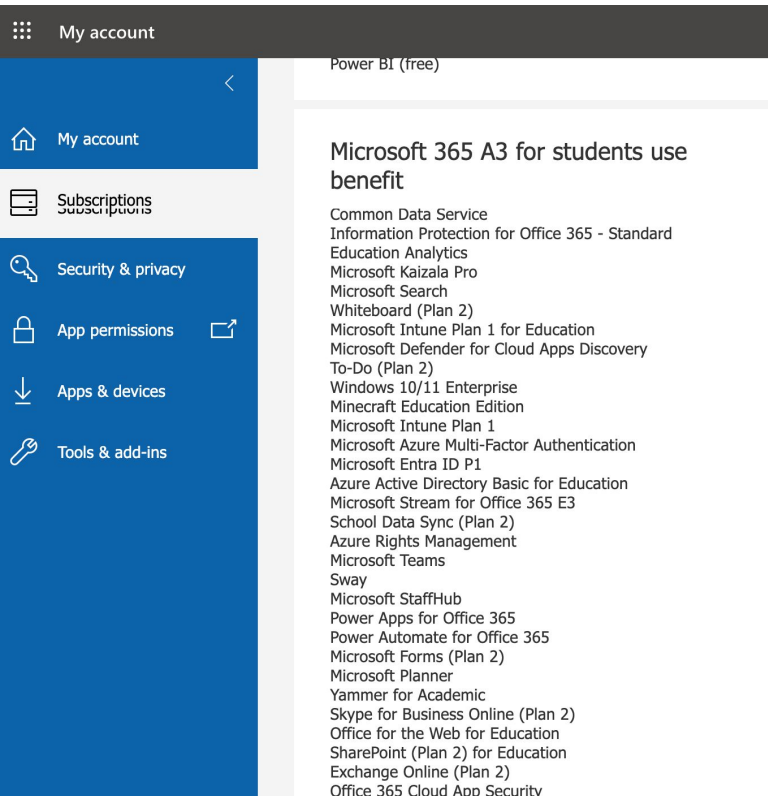
As of today (2025-11-4)

Text Generation Tools



- **ChatGPT (OpenAI)** – versatile conversational and content-drafting engine
- **Claude (Anthropic)** – strong for long-form, structured writing & summarisation
- **Microsoft Copilot (in Microsoft 365)** – integrated into Word/ Powerpoint.
- **Gemini Chat (Google)** - Chat-style text generation

Text Generation: Microsoft Copilot



- SKKU provides Microsoft 365 A3 for students use benefits.
- **Microsoft 365 Copilot Chat (the basic free one comes with Microsoft 365 subscription) is now built into apps like Word, Excel, PowerPoint.**
- Inside these apps the **Copilot feature is context-aware** — meaning it knows what document (spreadsheet, word, or ppt) you're working on.
- **It can NOT directly modify or make changes** to your working documents.

<https://portal.office.com/Account>
<https://www.microsoft.com/en-us/microsoft-365-copilot/pricing>

Lab: Explore Microsoft 365 Copilot Chat



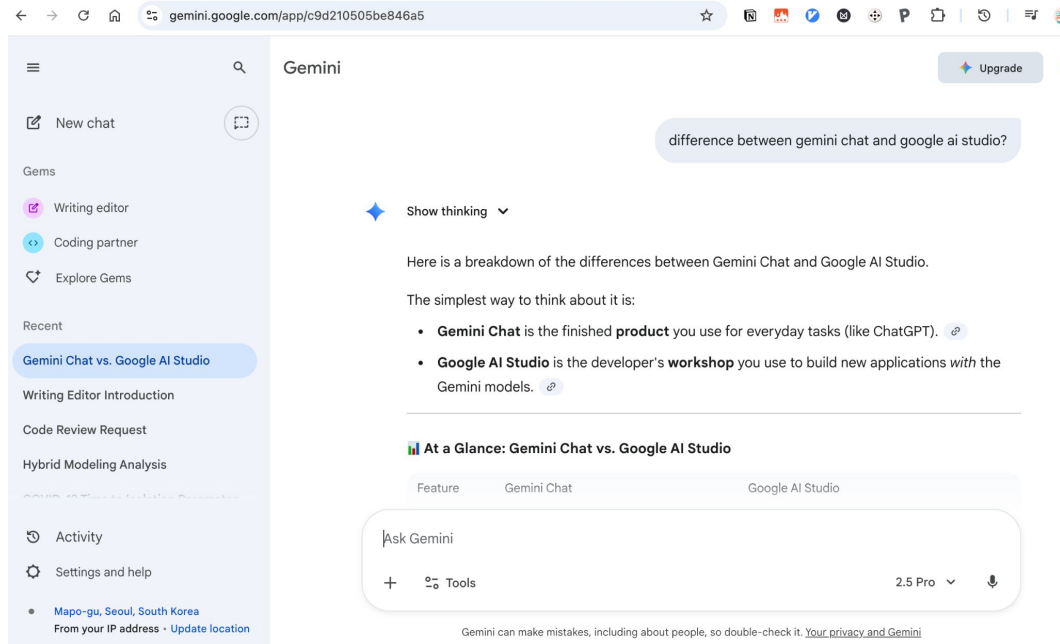
- In Word, Excel, Powerpoint
- In Edge (browser)

Lab (20 minutes)

Summarize the **financial reports** of NVIDIA and generate word, excel, and powerpoint files.

Text Generation Tools: Google Gemini

- **Gemini Chat (like ChatGPT):**
https://gemini.google.com/app?hl=en_GB



Google Gemini for Developers and Business

BUILD WITH GEMINI MODELS:

[Google AI Studio](#)

Experiment, prototype, and deploy. Google AI Studio is the fast path for developers, students, and researchers who want to try Gemini models and get started building with the Gemini Developer API.

[Vertex AI](#)

Build AI agents and integrate generative AI into your applications. Google Cloud offers Vertex AI, a single, fully-managed, unified development platform for using Gemini models and other third party models at scale.

USE GEMINI IN YOUR BUSINESS:

[Gemini Enterprise](#)

Bring the best of Google AI to every employee. Gemini Enterprise empowers teams to discover, create, share, and run AI agents all in one secure platform.

[Google Workspace with Gemini](#)

Your AI-powered assistant built right into Gmail, Docs, Slides, Sheets, and more, to help boost your productivity and creativity.

Note: **Google AI Studio (for developers)** has a **free tier** for individuals. We will use it for later sessions in this workshop. Please make sure you got one Google account.

Lab: Explore Google AI tools



- Explore Google Gemini Chat
- Explore Google AI Studio (has both API and temporal chat feature)

Note: Google AI Studio has a **free tier** for individuals. We will use it for later sessions in this workshop. Please make sure you got one Google account.

Reference: <https://cloud.google.com/ai/gemini?hl=en>

Image (and Video) Generation Tools



- **Gemini 2.5 Flash Image (Nano Banana)** in [Gemini](#) AI Studio
- [Midjourney](#) – high-quality creative image generation via prompt
- **Adobe Firefly** – text-to-image, generative fill, integrated into Adobe Creative Cloud
- [Synthesia](#) – avatar-based video generation from script (business/training use)

Image Generation



- Gemini 2.5 Flash Image ([Nano Banana](#)) in Gemini App (or Google AI Studio)

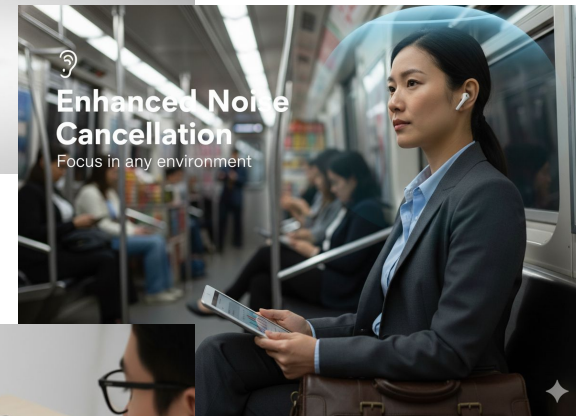
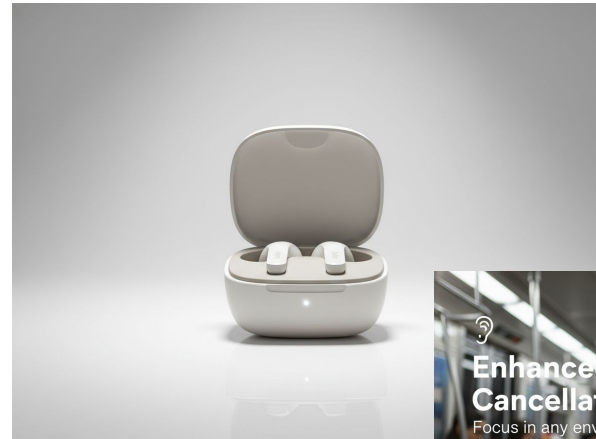
Be creative!

Lab: Image Generation

- You are given a white, no-label night cream bottle, design a brand identity and packaging visual for a minimalist night cream bottle.



Lab: Image Generation



Audio Generation



- **ElevenLabs** – text-to-speech, voice cloning, multilingual voice-overs
- **OpenAI Audio API** - process audio by using sound as input, creating sound as output, or both.
- **Notebook LM by Google** - text to audio (podcast-style)

Lab: Audio Generation – NotebookLM Demo



- Audio by Notebook LM
- https://finance.yahoo.com/news/mit-report-95-generative-ai-105412686.html?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xILmNvbS8&guce_referrer_sig=AQAAAJbiK4E-W1pJAKm1daSR6VIf9imQPFJJRqqA8p1IrwnU_Y45AQPE_u5fFFZfmKpA5azZPGcWGN2Yhl8mW3JNaXLxfHTuH31W2nYXImxIZKOE3tBxi2VGw1kOQ79-LF_rj3-ObFEPV2a-4Wr6TOqjwLhungXhQ_t8GUd0fd3L6GAa

Code Generation



- **GitHub Copilot** – in-editor AI code completion and generation (works via your GitHub/Microsoft accounts)
- **Google Gemini Code Assist** – code-assist model from Google, available to individuals (and via Google Workspace)
- **OpenAI Codex (via API)** – more developer-centric code generation and automation capabilities

Price note: **GitHub Pro** is provided to **students for free** with access to many premium AI models for coding; Google Gemini has **a free tier** for individuals.

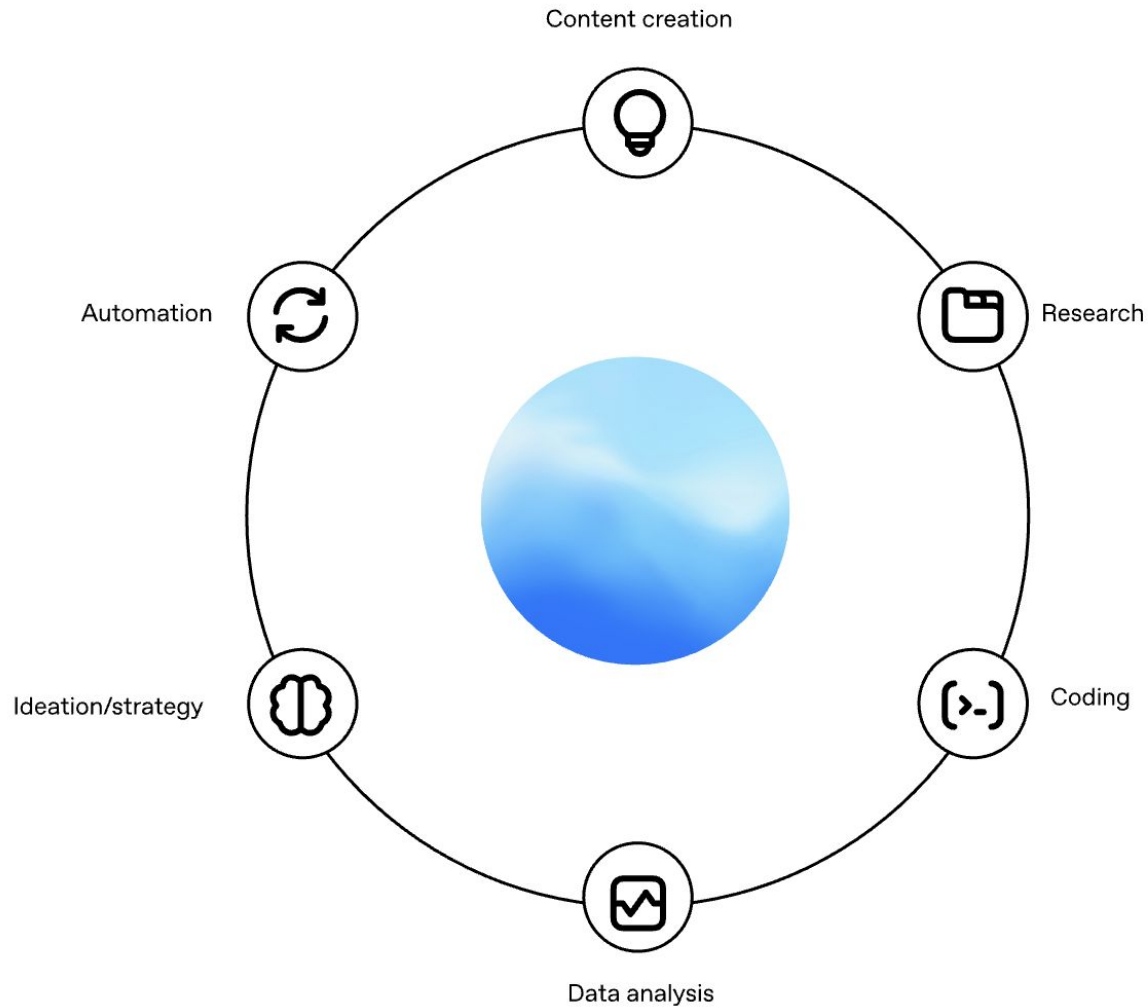
Lab: Code Generation




Setup Github Copilot

<https://github.com/tianyuan09>

Six Major AI Use Cases



Real-world AI Use Case - Content Creation



Klarna, the fintech company, used generative AI (tools like DALL·E, Midjourney, Adobe Firefly) to generate **marketing images**. They reported savings of about USD 6 million by **cutting traditional image production costs**.

- **Increased Efficiency and Creativity:** Generated over 1,000 images in the first three months of 2024 using genAI, reducing the image development cycle from 6 weeks to just 7 days. This acceleration includes checks for brand consistency, image quality, and legal compliance.
- **GenAI is also driving savings in writing marketing copy.** Klarna has built an AI-powered copywriting tool, Copy Assistant, which allows the company to use AI for 80% of all copywriting.
- <https://www.klarna.com/international/press/ai-helps-klarna-cut-marketing-agency-spend-by-25-and-run-more-campaigns/>
- <https://www.marketingdive.com/news/klarna-gen-ai-openai-cut-marketing-spend-efficiency/717332/>

Real-world AI Use Case - Content Creation

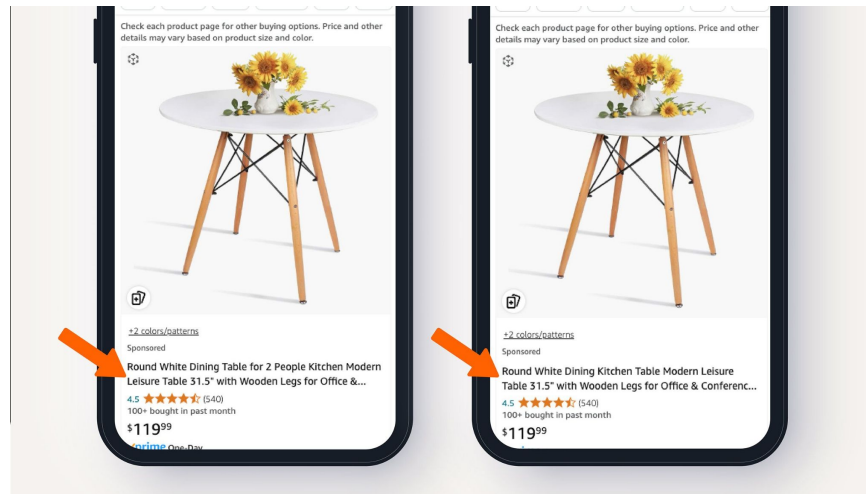


European online fashion retailer **Zalando** is using generative artificial intelligence to **produce imagery faster for its app and website**.

- Using generative AI **cuts the time needed** to produce imagery to around three to four days from six to eight weeks, and **reduces costs by 90%**, Haase said, adding the AI-generated content drives greater engagement from customers.
- <https://www.reuters.com/business/media-telecom/zalando-uses-ai-speed-up-marketing-campaigns-cut-costs-2025-05-07/>

Real-world AI Use Case - Content Creation

Amazon is using generative AI to improve product recommendations and product descriptions so they are more relevant for customers.



When you search "table for two"

- <https://www.aboutamazon.com/news/retail/amazon-generative-ai-product-search-results-and-descriptions>

Beware of **Reporting Bias** in AI “Success Stories”



The Hidden Side

- Many AI projects fail quietly — they don't make it into case studies or press releases.
- **Reporting bias:** Only successful implementations are shared (similar to how positive research results get published more often).
- **Negative or neutral outcomes are underreported** — creating a false sense of universal success.

Beware of **Reporting Bias** in AI “Success Stories”



Why the Bias Exists

- Companies may use “AI success” stories for **marketing**.
- Startups want to attract investors — showing positive ROI helps **raise funding**.
- Internal teams highlight wins to secure more budget or visibility.

Think Critically

- Who is sharing this story, and **why**?
- Is this result **independently verified** or **self-reported**?
- What’s Hidden” (failed projects, unmet ROI, shelved pilots)?

Lab: Generative AI's Early Years – AI Adoption 2023-24



Goal:

Explore how Generative AI (ChatGPT, DALL·E, etc.) transformed industries in 2023–24.

Students use AI tools to *research AI itself* — trends, uses, and impacts.

Tasks:

- Use AI to gather insights on adoption of AI in:
 - **Marketing** – content, personalization
 - **Finance** – fraud, analytics

Summarize your learning in a short report (1-2 page)

<https://ai.wharton.upenn.edu/focus-areas/human-technology-interaction/2024-ai-adoption-report/>

Hallucination of LLMs



AI “hallucination” = when a model gives false or made-up information.

Why it happens:

- Trained to predict words, not facts.
- Missing or biased data.
- No real-world verification.

Examples:

- Fake citations or events.
- Incorrect facts stated confidently.

Responsible Use of AI



- **Data Privacy & Confidentiality** – **Never share sensitive or personal data (e.g., customer, patient, or financial info).**
- **Compliance Awareness** – **Follow company policies and laws (GDPR, CCPA, HIPAA).**
- **Appropriate Use** – **Use AI for productivity, not to bypass rules, security, or ethics.**
- **Accuracy & Verification** – **Always fact-check AI outputs before using or sharing.**
- **Security Practices** – **Avoid entering confidential info into public AI tools.**

Responsible Use of AI: Samsung's AI Data Leak



What Happened

- Samsung engineers accidentally uploaded **sensitive source code and meeting notes into ChatGPT** (Mar 2023).
- The data became part of ChatGPT's input history, raising concerns over **confidentiality and data governance**.

Company Response

- Samsung **banned** employee use of ChatGPT and other public AI tools, and Introduced stricter AI usage policies and limits on data sharing.

Source:

<https://www.forbes.com/sites/siladityaray/2023/05/02/samsung-bans-chatgpt-and-other-chatbots-for-employees-after-sensitive-code-leak/>

Responsible Use of AI



AI make mistakes!