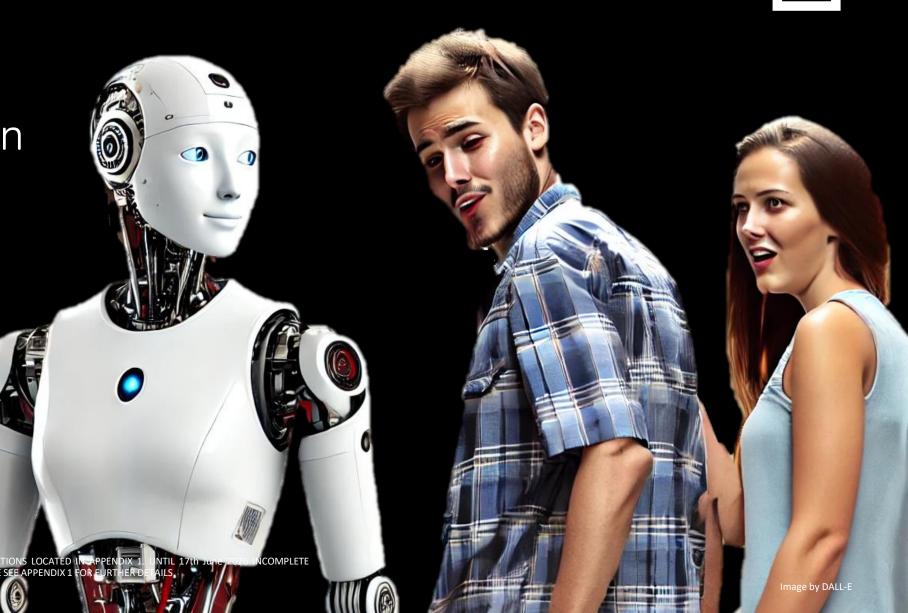
Deutsche Bank Research

Al in summer 2025:

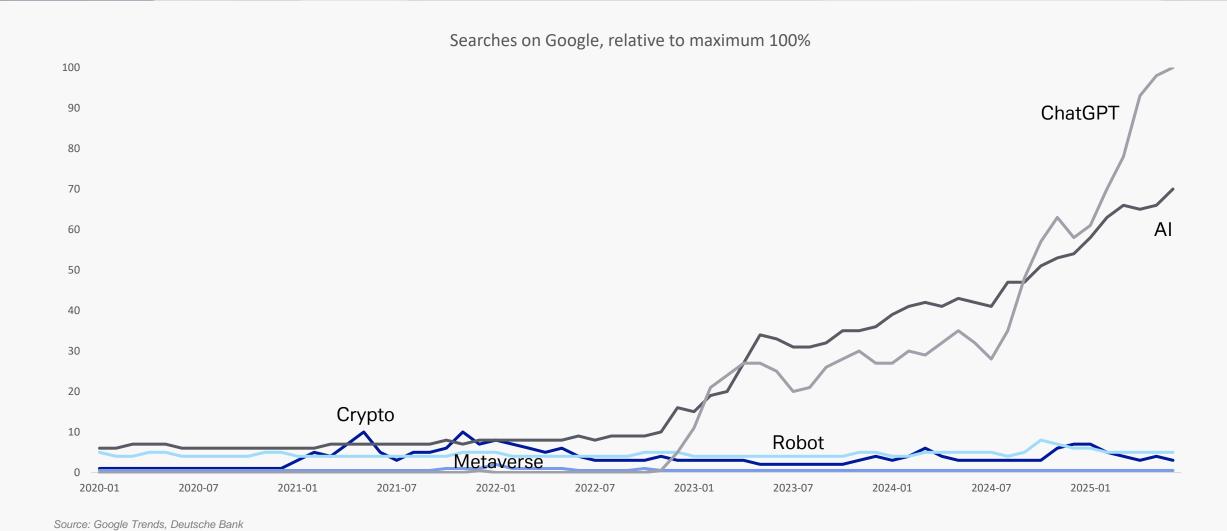
Eight themes in eight memes

Deutsche Bank Wealth Management New York June 18, 2025

Adrian Cox Thematic Strategist (+44)-20-7541-7775 adrian.cox@db.com



# The hype is real



Deutsche Bank Research | Adrian Cox (+44) 20 7541 7775 | May 2025

# Al in 2025: Eight themes in eight memes

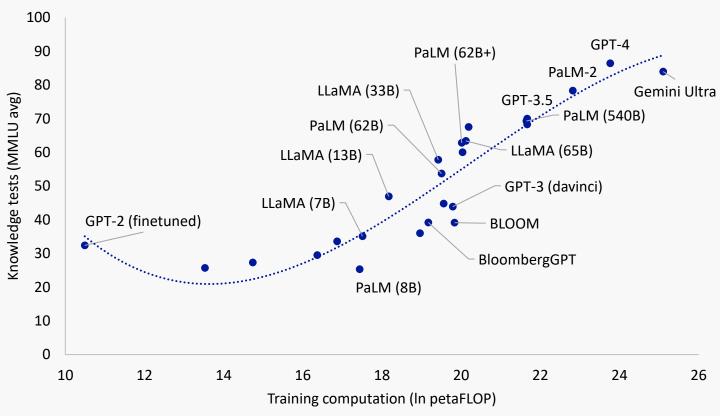


#### 1. Bigger isn't always better





#### Performance on knowledge tests vs. training computation

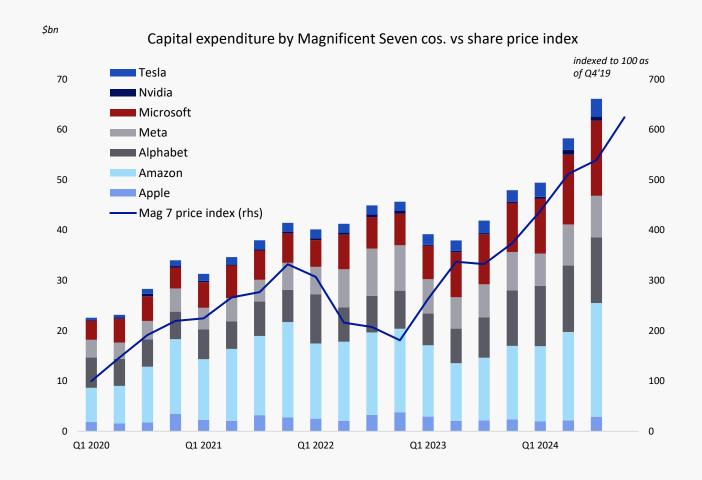


Source: Author, using imgflp; Our World in Data, Deutsche Bank.

## 2. Agents are coming to the rescue – at a cost



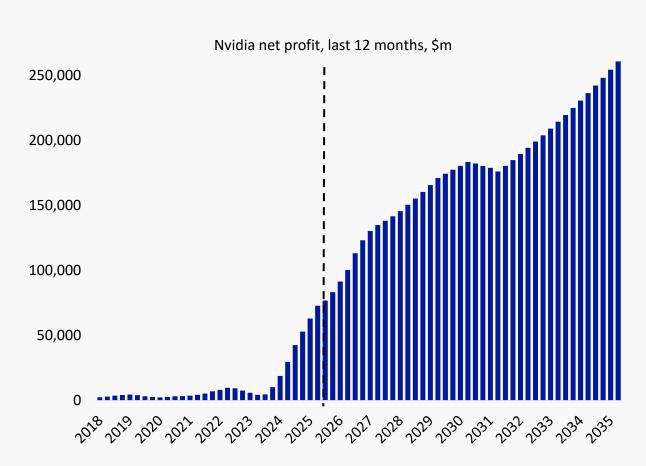




Source: Author, using imgflip.com; Bloomberg Finance LP, Deutsche Bank

### 3. Nvidia is still the standout winner (for now)

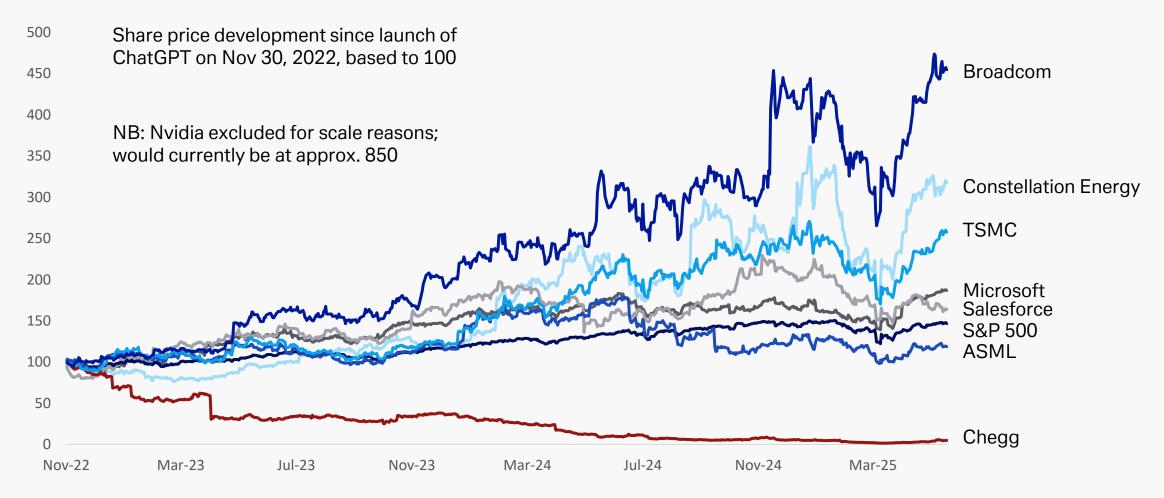




Source: Via koehnsen on 9gag; Bloomberg Finance LP, Deutsche Bank.

### Note 1: Al has been good for many and terrible for a few



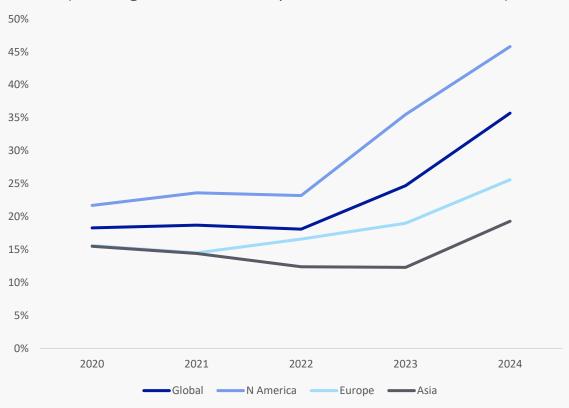


Source: Bloomberg Finance LP, Deutsche Bank.

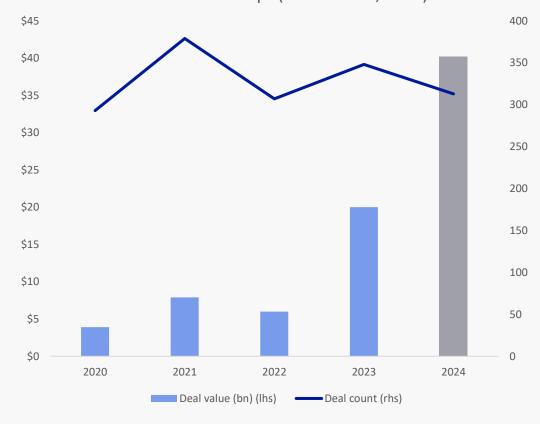
# Note 2: Much activity is in VC categories



Al and machine learning share of global deal value (Overall global investment up more than 50% to \$131.5bn)



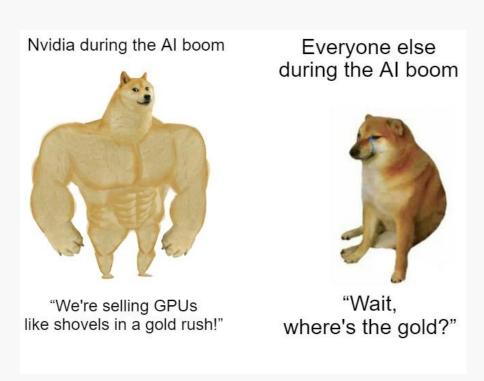
Global VC deal activity for foundation model and core Al software startups (as of Dec 20, 2024)

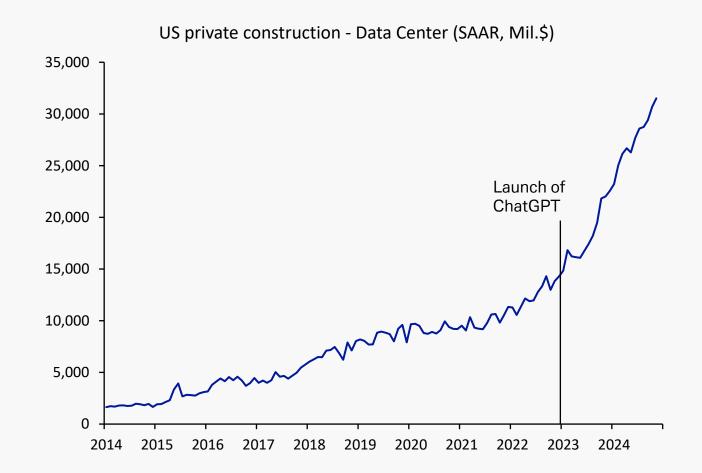


Source: PitchBook data, Deutsche Bank.

#### 4. Investment pours into data center picks and shovels





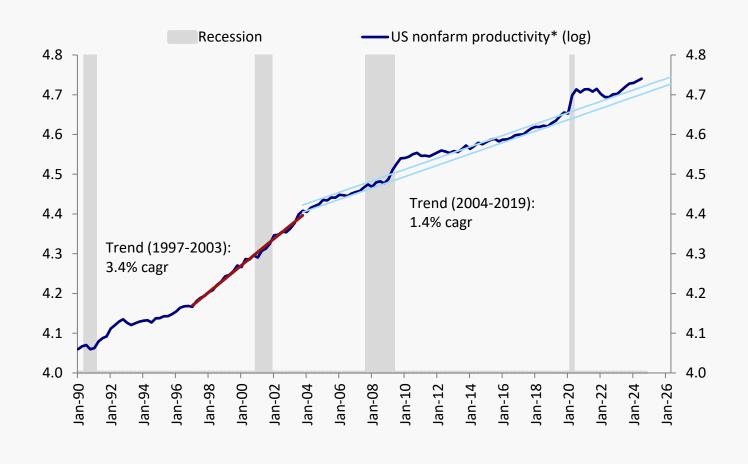


Source: Author, in collaboration with imgflip's Al Meme Generator; Haver Analytics, Deutsche Bank.

### 5. The economy doesn't live on AI alone



Source: Via yagash on Memedroid; BLS, Deutsche Bank.

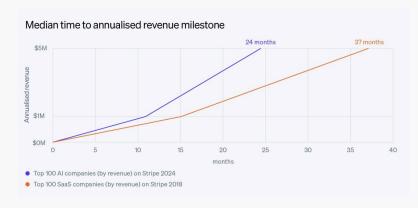


For more, see Asset Allocation: Outlook 2025: What's Still To Come - Deutsche Bank Research (Nov 24, 2024)

#### 6. There's still more chat than action







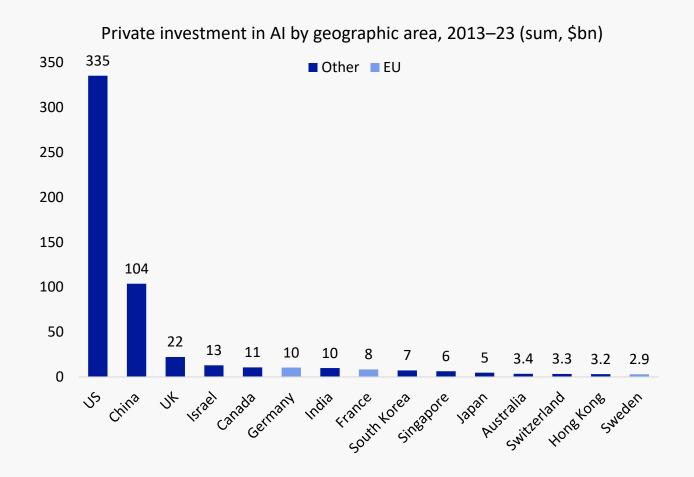
Source: Author, in collaboration with imgflip's Al Meme Generator; Slack's Fall 2024 Workforce Index; Stripe annual letter (Feb 27, 2025)

For more, see Where's my Al revolution? Practical ways you can get less chat, more action

#### 7. EU regulates while US innovates



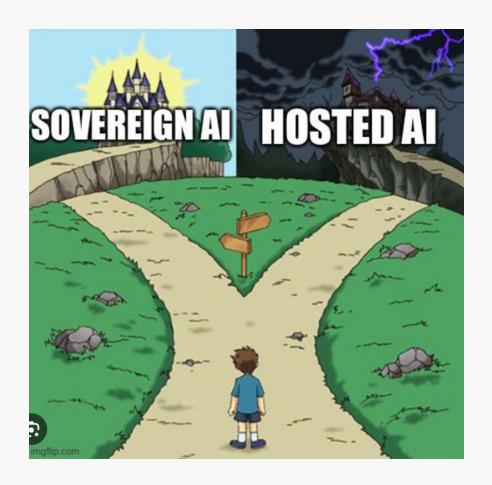




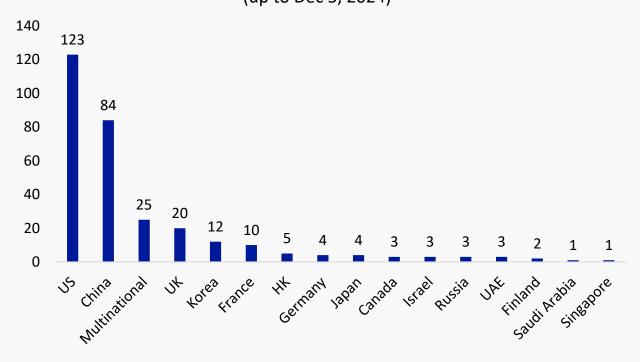
Source: Author, based on Awesimo-5001 on Reddit; 2024 Stanford Al Index report, Deutsche Bank.

### 8. National security is overtaking safety concerns





# Cumulative number of large-scale AI systems by economy since 2017 (up to Dec 5, 2024) \*



Source: Via <u>Alex Cheema</u> on X; Our World in Data, Deutsche Bank. \* Note: Refers to the location of the primary organization with which the authors of a large-scale Al systems are affiliated. The 2024 data is incomplete and was last updated 05 December 2024. The source defines Al models as "large-scale" when their training compute is confirmed to exceed 10<sup>23</sup> floating-point operations.

# The technology is still flawed

"Ultra realistic photo of three people diving into a swimming pool on a hot Sunday"

# The technology is still flawed

"Ultra realistic photo of three people diving into a swimming pool on a hot Sunday"

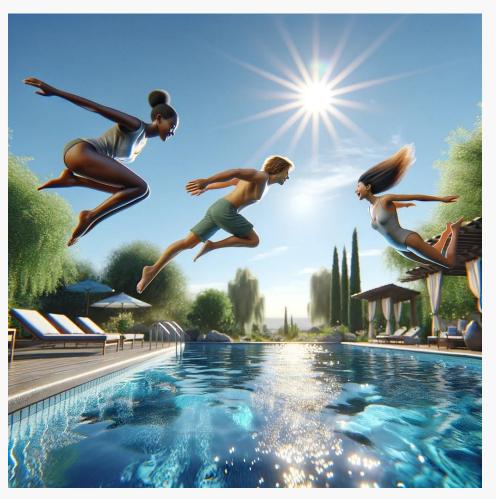


Image by DALL-E 3

# The technology is still flawed

"Ultra realistic photo of three people diving into a swimming pool on a hot Sunday"



Image by DALL-E 2

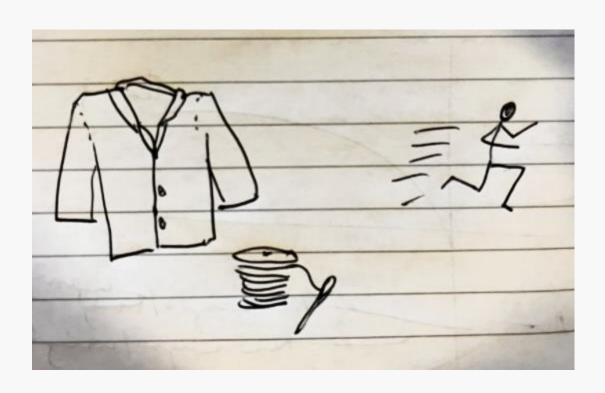


Source: Unattributed meme on imgflip.com; OpenAI's ChatGPT



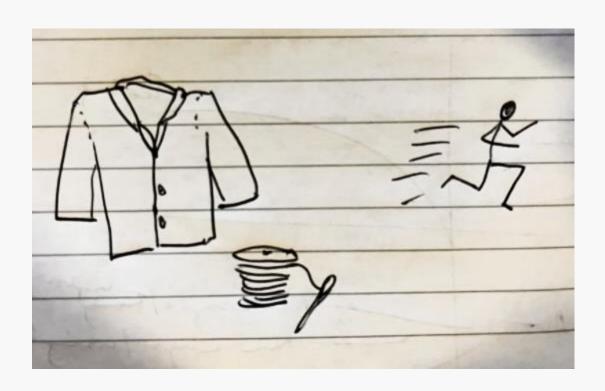
"This image humorously comments on the typical weather in England. It revolves around the stereotype that summer weather in England is often disappointing... typically characterised by rain and cloudy skies."

Source: Unattributed meme on imgflip.com; OpenAI's ChatGPT



Q: This drawing represents a well-known celebrity. Who is it?

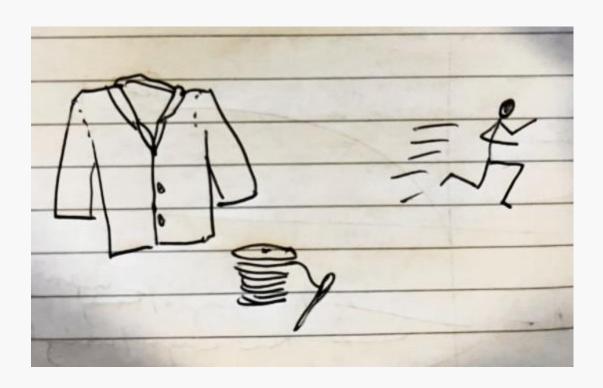
Source: OpenAl's ChatGPT



Q: This drawing represents a well-known celebrity. Who is it?

A: The drawing appears to depict a stick figure doing a jump (potentially representing "hops" or "leaping"), a spool of thread (similar to "sewing"), and a suit or jacket.

Source: OpenAl's ChatGPT



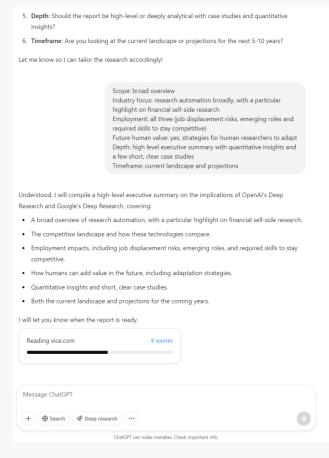
Q: This drawing represents a well-known celebrity. Who is it?

A: The drawing appears to depict a stick figure doing a jump (potentially representing "hops" or "leaping"), a spool of thread (similar to "sewing"), and a suit or jacket.

This combination... tailoring and swift movement or leap... could be referring to the singer and songwriter Taylor Swift.

Source: OpenAI's ChatGPT

#### And look at OpenAl's deep research



analysts. Integrating insights on adoption, integration, and automation statistics. Q Searched for AI impact on financial analyst Mondering how AI might reduce 200,000 iobs on Wall Street, according to Bloomberg's analysis. I need to find a way to access Forbes content, possibly bypassing a paywall. Q Searched for AI job impact on Wall Street (§) I'm pulling together insights from Bloomberg, estimating up to 200,000 jobs could be cut in the next 3-5 years as Al takes over tasks. Read m.economictimes.com I see now that global banks are predicted to downsize by 200,000 roles in the next 3-5 years, primarily due to AI, which represents roughly 3% of their total workforce. Read fintech.io S Gathering insights into Al-driven equity Q Searched for financial analyst exposure to GPT study Searched for OpenAI study on job exposure to GPT \$ 80% of the US workforce might see 10% of tasks altered by GPTs. Specifically, financial analysts and market research analysts might face notable changes. OpenAI's data and additional sources might refine this Read vice.com

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# AI-Powered Deep Research: Implications for Financial Sell-Side and Beyond

#### Overview: Research Automation in Finance

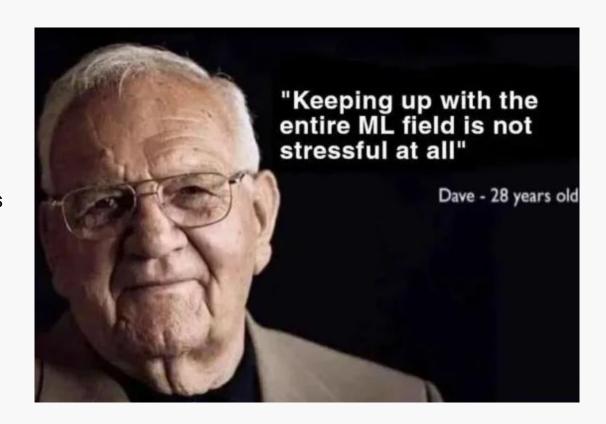
Advanced AI systems are transforming research automation, enabling rapid analysis and report generation across domains. OpenAl's newly launched Deep Research agent exemplifies this trend - it can autonomously browse the web, synthesize information, and produce fully cited research reports in minutes CONSTELLATIONR.COM . These tools are built for intensive knowledge work in areas like financial sellside research, where analysts traditionally spend countless hours gathering data, modeling, and writing equity research reports. By delegating routine tasks (e.g. parsing financial statements, summarizing earnings calls, drafting initial reports) to AI, banks and firms can drastically accelerate research workflows. Early examples show a full analyst report can be generated in as little as 3-30 minutes by AI constellations.com - a process that might take a human analyst days - while maintaining a thoroughness that includes source citations. This kind of efficiency is especially valuable on Wall Street, where research departments have been under pressure. In fact, equity research divisions have already seen headcounts drop 30% from post-2008 peaks due to industry shifts FINTECHIO . Al-powered research automation offers a way to cope with doing more with less, helping analysts cover more stocks and update clients faster. As one Bain & Company researcher put it, these tools "increase my personal capacity so that I can use my time doing other research tasks." OPENALCOM In short, AI "deep research" agents act as tireless junior analysts - scouring sources, crunching data, and drafting insights - allowing human experts to focus on higher-level analysis and judgment.

#### Competitive Landscape: OpenAl vs Google in Deep Research

OpenAI and Google are leading the race in autonomous research assistants, but their approaches have key differences. OpenAI's *Deep Research* (available via ChatGPT Pro) emphasizes multi-step reasoning

### Conclusion: Keeping up with AI in 2025? Good luck with that...

- 1. Bigger isn't always better
- 2. Agents are coming to the rescue at a cost
- 3. Nvidia has been the standout winner (for now)
- 4. Investment pours into data center picks and shovels
- 5. The economy doesn't live on Al alone
- 6. There's still more chat than action
- 7. EU regulates while US innovates
- 8. National security is overtaking safety concerns



Source: Via oroberos on Reddit

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DB Research Al microsite: www.dbresearch.com/ai

DB Research client site: Artificial Intelligence - Deutsche Bank Research (db.com)

DeepSeek Al: Why drive a Tesla Model X when a BYD will do? (Jan 27, 2025)

Semiconductors: Al Upheaval? DeepSeek's impact on our semis coverage (Jan 27, 2025)

Communications Infrastructure: DeepSeek implications for Networking, Hardware, and Comm. REITs (Jan 27, 2025)

Data Center Capex: Our Initial Thoughts on DeepSeek Impact (Jan 27, 2025)

Semiconductors: Deepseek - things get edgy in AI (Jan 27, 2025)

Global Copper: DeepSeek - implications for future copper demand (Jan 28, 2025)

European Capital Goods: Thoughts on DeepSeek (Jan 28, 2025)

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Al Risk and Regulation 101: Bias, bots and battlegrounds (April 22, 2024)

Where's my Al revolution? Practical ways you can get less chat, more action (Nov 11, 2023)

Generative AI and ChatGPT 101 (May 23, 2023)

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