



# FUTURE-PROOFING YOUR WORKFORCE: AI SKILLS AND THE JOBS OF TOMORROW

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Joshua is a data science industry veteran with a twenty-five-year career spanning 4 languages and 50 countries. He has served on Alabama's Artificial Intelligence Commission, is a TEDx speaker, received his undergraduate degree from Alabama and holds an MBA from Emory University.

**Inc.**

**Forbes**

**UB** University  
Business

**TIME**



THE HECHINGER REPORT

**Newsweek**

**The74**



- Learn
- Path
- History
- Accomplishments
- Get help

← Back

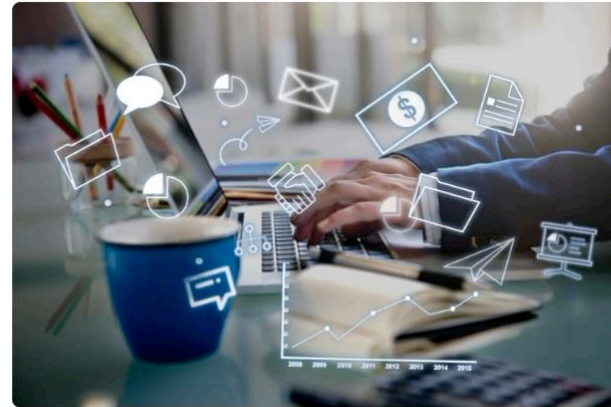
Trial - AI for Marketing

## AI Foundations

7 Learning Activities

AI Foundations

Equip learners with essential AI knowledge and critical thinking frameworks for modern marketing practice. This course directly aligns to AACSB mandates for emerging technology integration—addressing the gap where 98% of marketers use AI but only 2% see measurable results due to lack of critical thinking skills, not tool access.



Achievement Available

Uplift Blog

Preview



# AI FOUNDATIONS

# DIGITAL AGILITY

*Agile, supplemental modules for business and education*

- AI Literacy - Generative AI Basics
- AI Fluency - Agentic flows, systems thinking, advanced GenAI
- Emerging tech by domain / major (“AI in Healthcare”, “AI in Marketing”)
- Business Analytics with Critical Thinking

# CURRENT CUSTOMERS

THE UNIVERSITY OF  
**ALABAMA**

**VOYA**<sup>®</sup>  
FINANCIAL

 **UNC**  
KENAN-FLAGLER  
BUSINESS SCHOOL

**UAB**

 **EMORY**  
UNIVERSITY

  
**Southern  
Company**

 **AUBURN**  
UNIVERSITY



  
**HIGH POINT  
UNIVERSITY**

**UPSTATE**  
  
University of South Carolina Upstate

**OAKLAND  
UNIVERSITY**  


**SH** **Sam Houston**  
State University

# AROUND THE WORLD IN **ARTIFICIAL INTELLIGENCE**





~6mm

~3mm



0.3mm

**6G Internet:** Projected peak speeds of 1 terabit per second

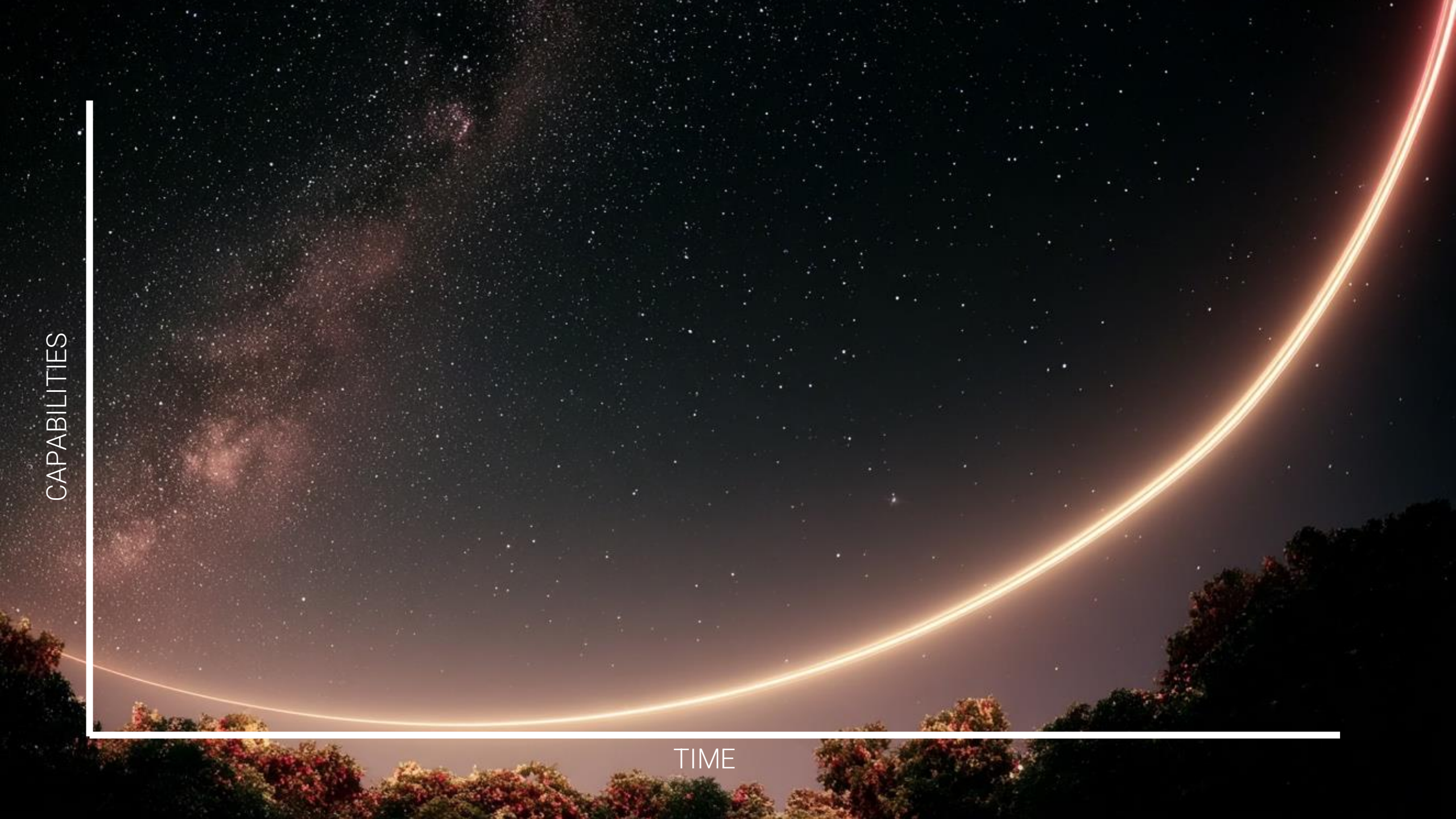


# HOW DID WE GET HERE?



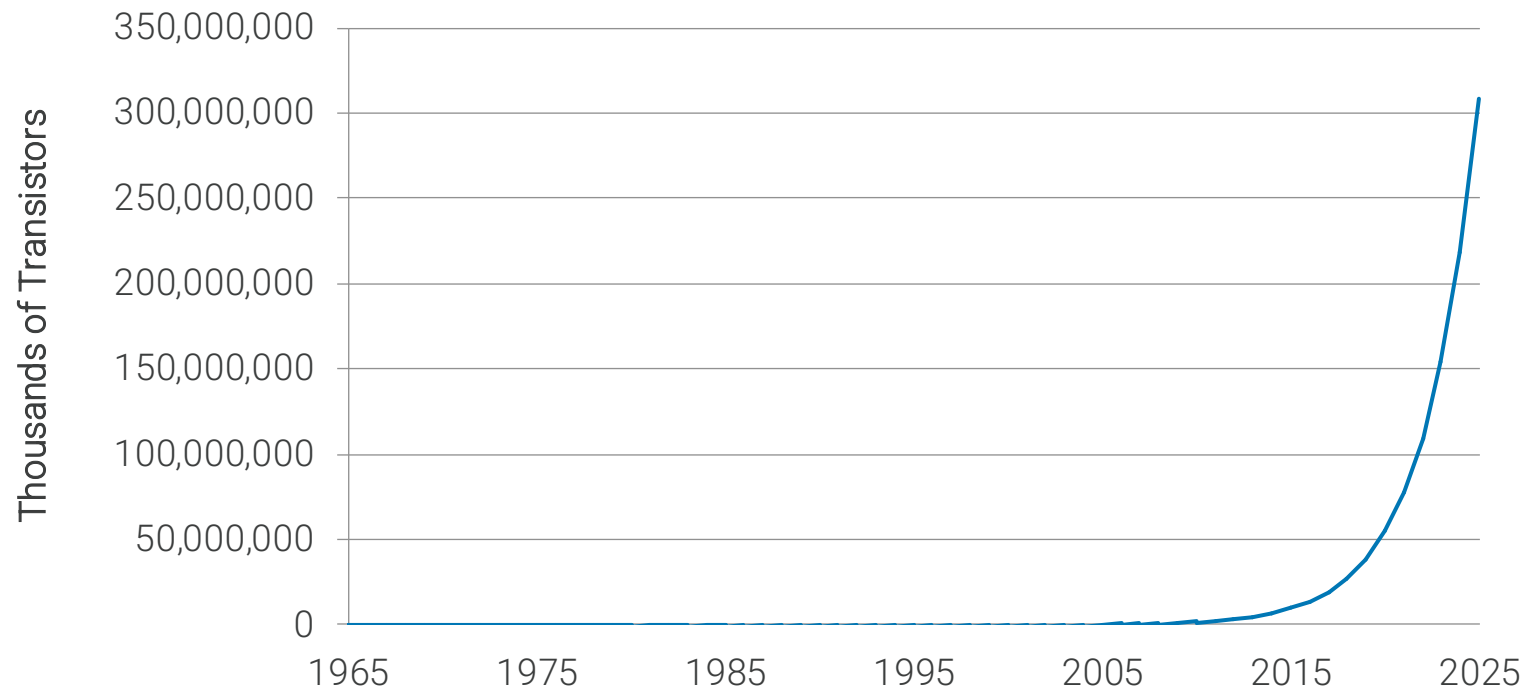
CAPABILITIES

TIME



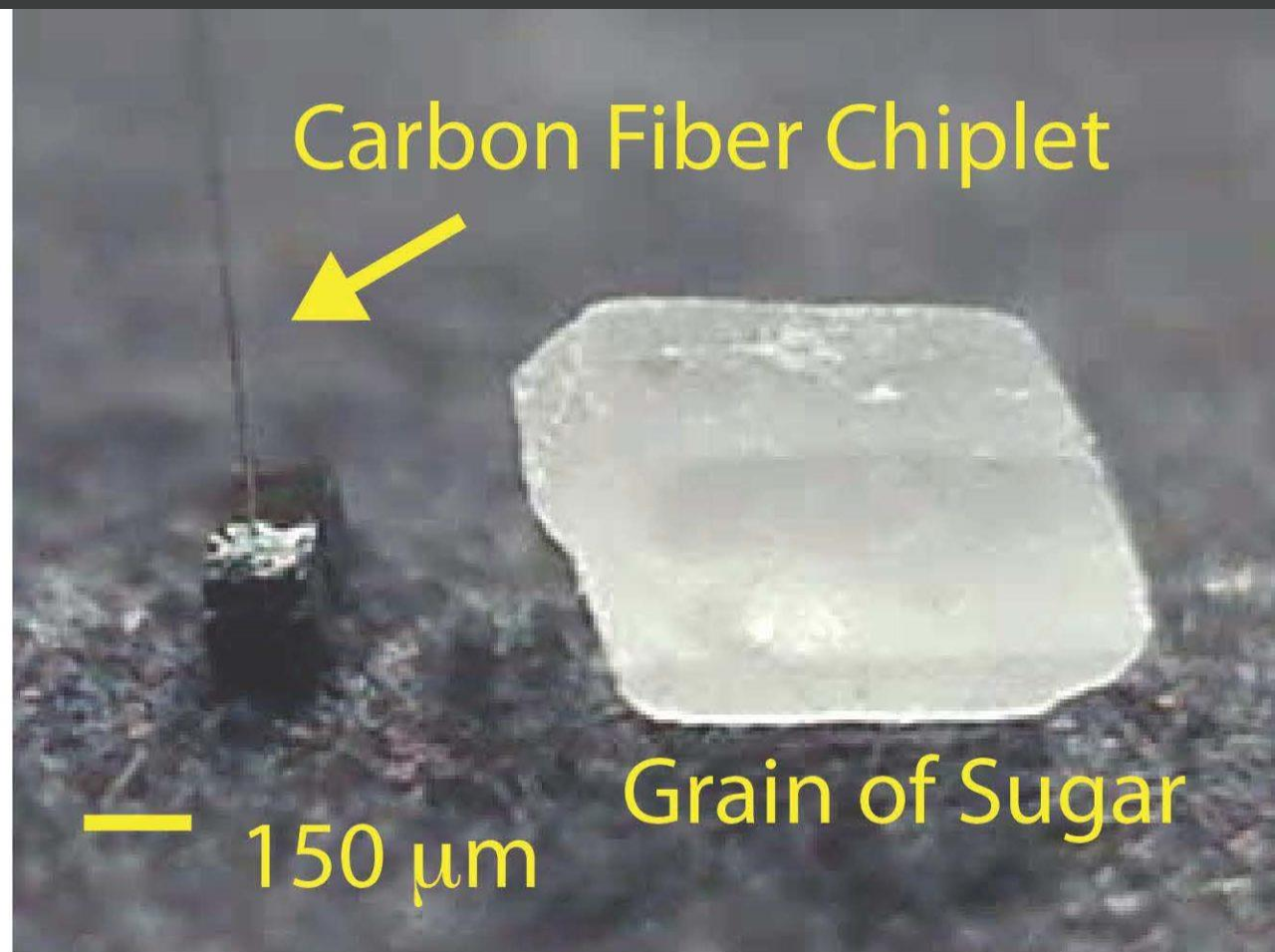
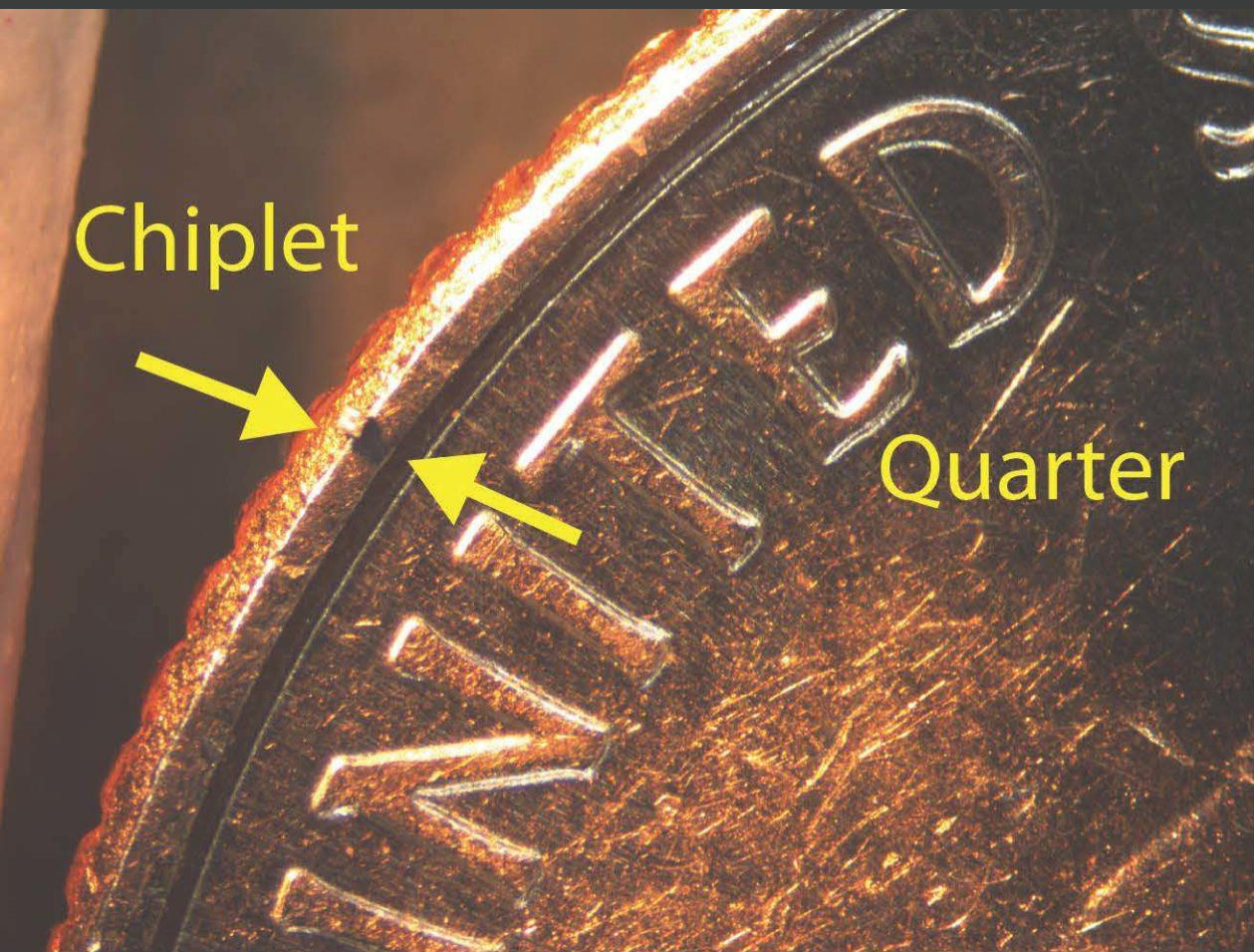


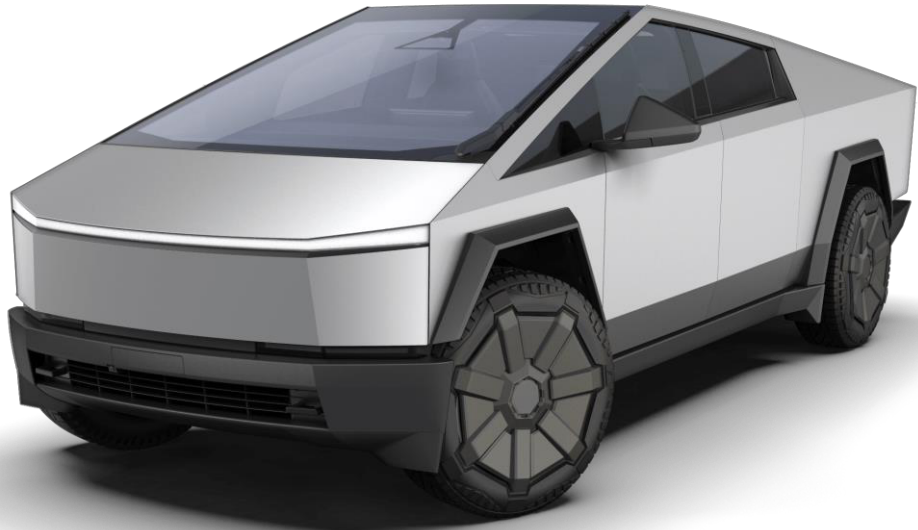
## The Number of Microchips on Transistors Doubles Every Two Years

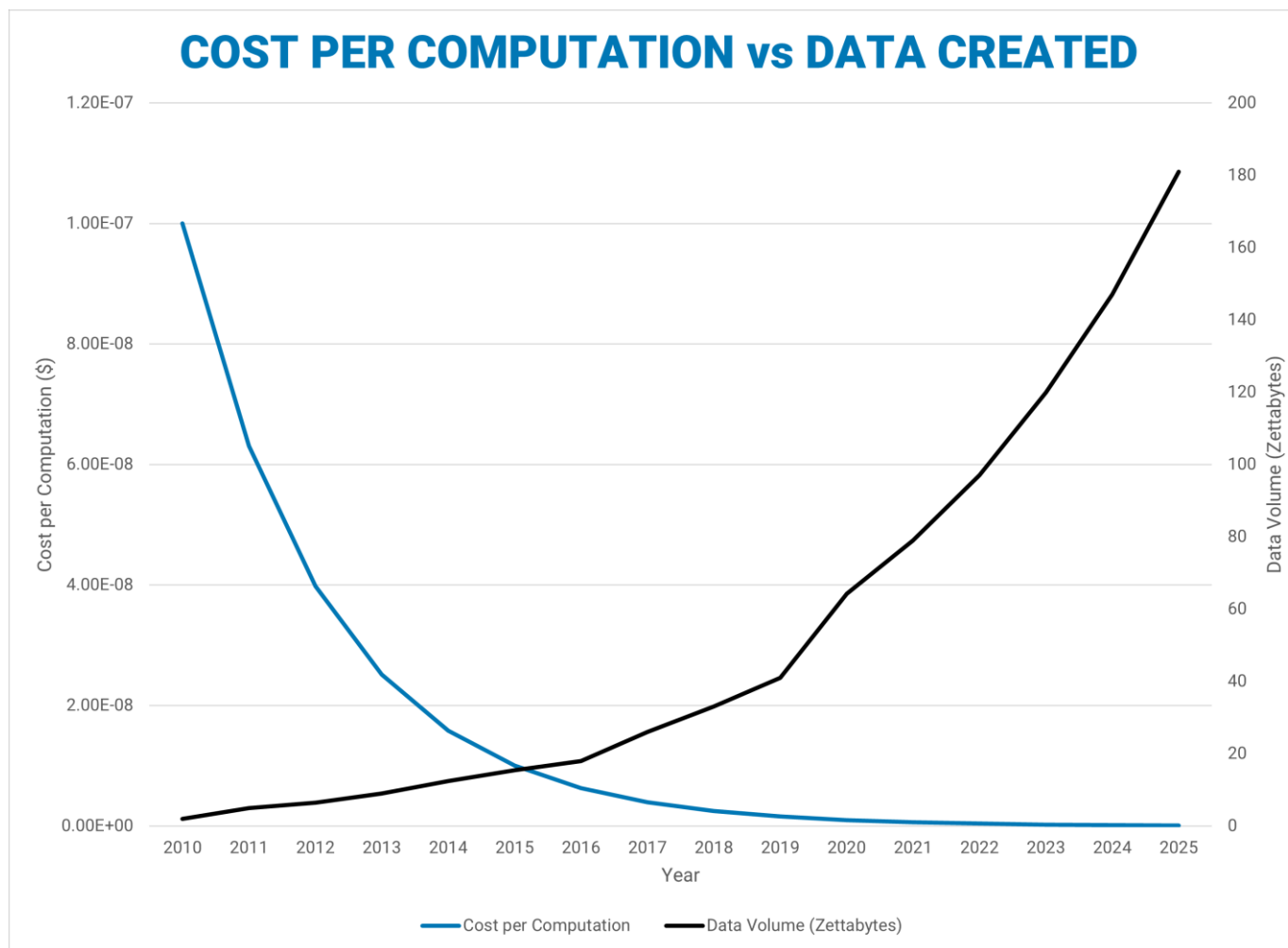




0.15mm



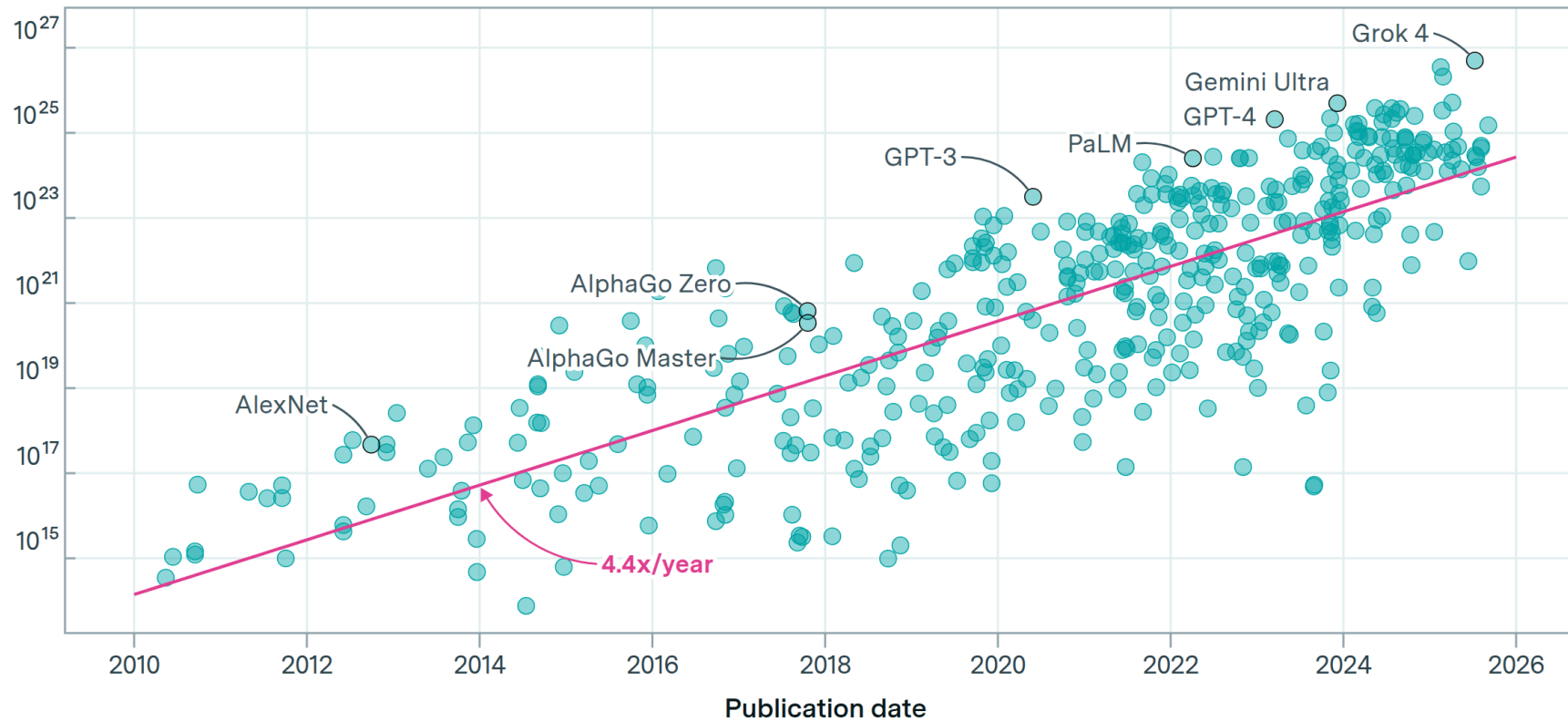




# Training compute of notable models

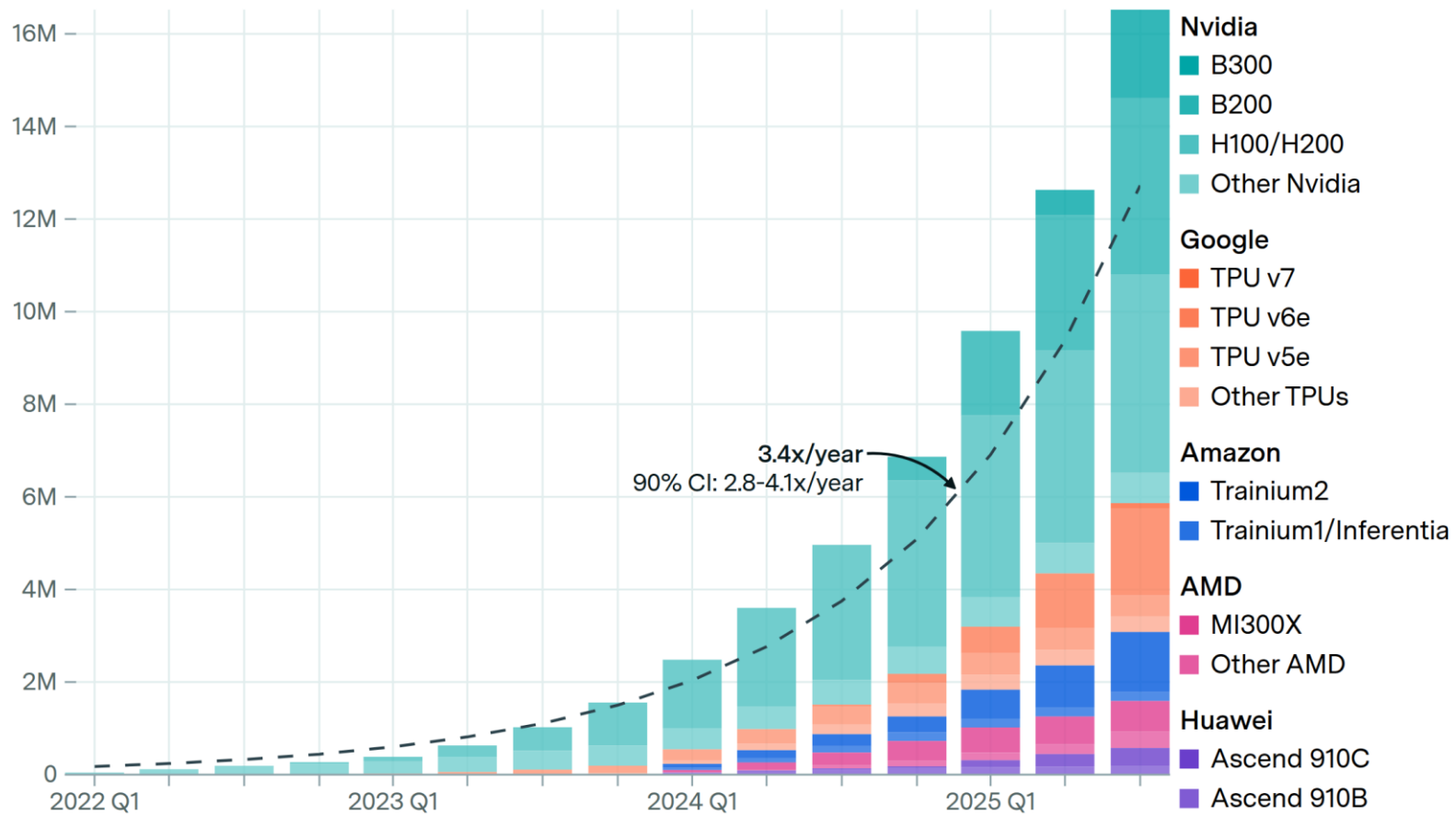
Training compute (FLOP)

443 models



# Global AI computing capacity is doubling every 7 months

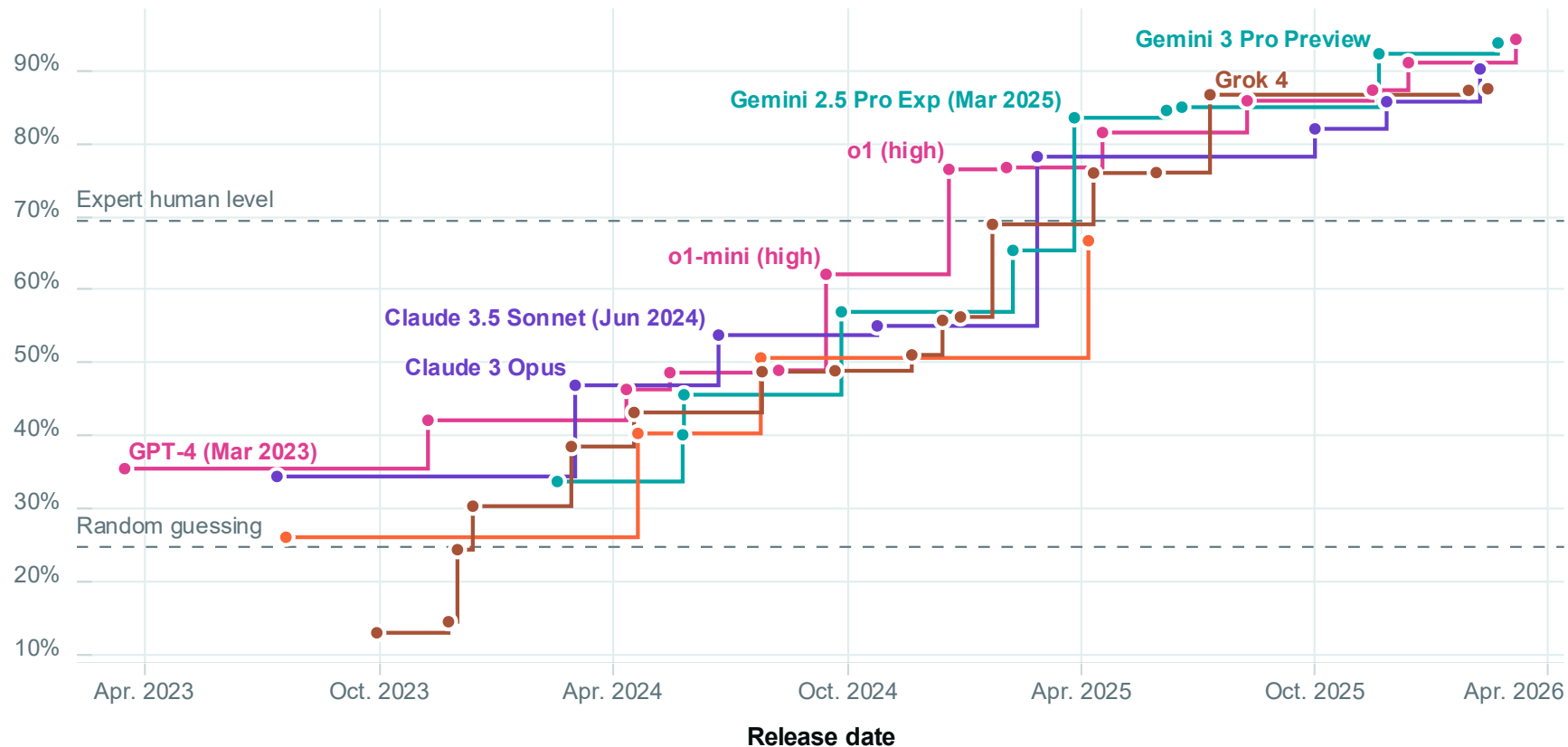
Cumulative compute capacity (H100e)



# AI performance on a set of Ph.D.-level science questions

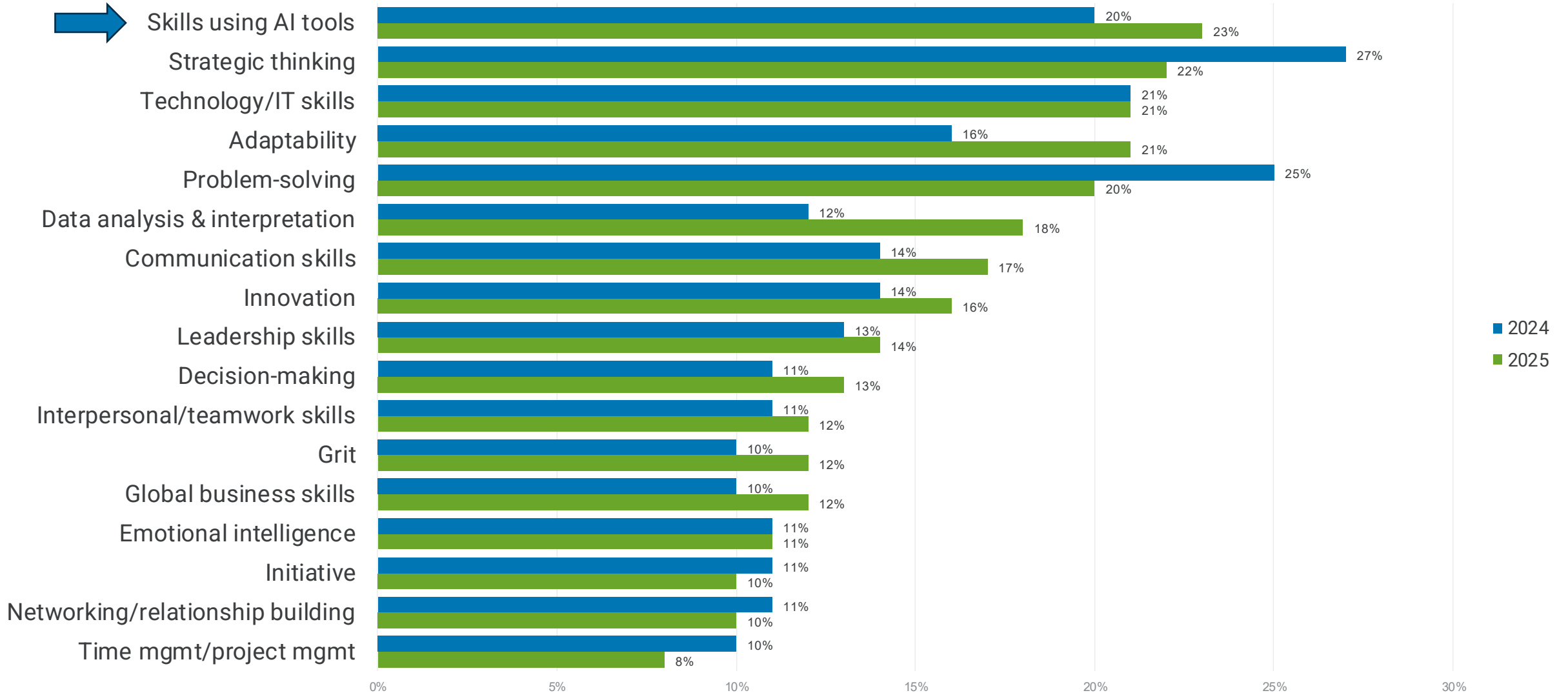
GPQA Diamond accuracy

52 Results

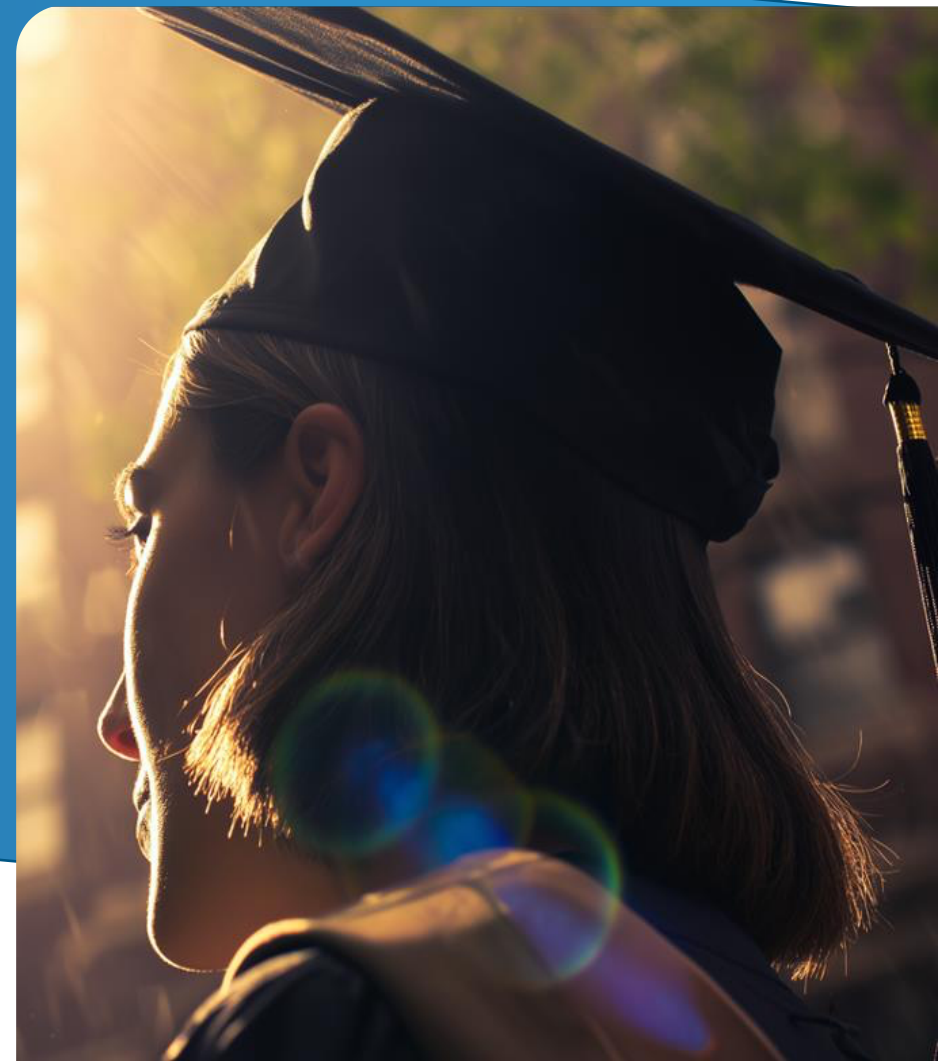


# Predicted Top 3 Most Important Skills in the Next 5 Years

Share of employers selecting skill in top 3 | GMAC Corporate Recruiters Survey, 2024 & 2025



# AI FLUENCY TOOLKIT





**AI History &  
Context**



**Ethics &  
Responsible Usage**



**Practical Skills &  
Tool Mastery**



**Critical Evaluation &  
Assessment**



**Social Impact &  
Communication**

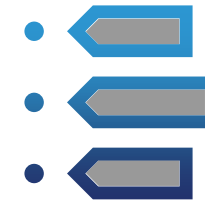
# 3 KEYS TO AI FLUENCY



**ITERATIVE  
PROMPTING**



**WORKFLOW  
INTEGRATION**



**TASK  
DECOMPOSITION**

**AI FLUENCY TOOLKIT**

**ITERATIVE  
PROMPTING**







The image depicts the cockpit of an aircraft, specifically a de Havilland plane. Here's a detailed explanation of the various gauges and controls visible in the photo:

### Upper Panel

#### 1. Directional Gyro / Compass:

- **Top Center:** Shows the aircraft's heading in degrees, allowing pilots to navigate along a specific course.

#### 2. Artificial Horizon (Attitude Indicator):

- **Top Left:** Indicates the aircraft's orientation relative to the horizon, showing pitch and bank.

#### 3. Altimeter:

- **Left of Center:** Displays altitude above sea level in feet.

#### 4. Airspeed Indicator:

- **Top Right:** Measures the aircraft's speed through the air, typically in knots or miles per hour.

#### 5. Vertical Speed Indicator (VSI):

- **Below the Altimeter:** Shows the rate of climb or descent in feet per minute.

#### 6. Turn Coordinator:

- **Below the Attitude Indicator:** Helps maintain balanced turns, showing the rate of turn and slip/skid.

#### 7. Fuel Quantity Gauge:

- **Right Side:** Displays the amount of fuel remaining in the tanks



Message ChatGPT





QuantHub

 Welcome, Josh

|type / for commands




Opus 4.5




 Write

 Learn

 Code

 Career chat

 From Drive



```
=====
DHC-2 BEAVER COCKPIT PROCEDURAL TRAINER
=====
```

```
ENGINE STATE: OFF
OIL TEMP: 46 C
```

```
-----
GAUGES (Feedback)
```

```
MANIFOLD PRES |-----| 10 "Hg
TACHOMETER    |-----| 0 RPM
```

```
-----
QUADRANT LEVERS (Your Inputs)
```

```
[T]HROTTLE |-----| 0 % Fwd
[P]ROP RPM  |#####| 100 % Fwd
[M]IXTURE   |###-| 10 % Rich
```

```
=====
CURRENT OBJECTIVE: Set Mixture FULL RICH (100%), Throttle CRACKED (10-20%). Then press [S].
```

```
CONTROLS:
```

```
Throttle: [T] increase / [t] decrease
Prop:      [P] increase / [p] decrease
Mixture:   [M] increase / [m] decrease
Actions:   [S] Try Starter | [Q] Quit Game
Action > █
```

TELEPORT TO:  
Alaska - Denali

94 KTS

1500 FT  
- 0 FPM

180° S

AIRBORNE THR: 60%

DHC-2 BEAVER  
de Havilland Canada

W/S: Throttle | A/D: Roll | ↑/↓: Pitch | T: Training | ?: Help

### Flight Training

Welcome to the DHC-2 Beaver

You're flying one of the greatest bush planes ever built. The de Havilland DHC-2 Beaver has been the workhorse of backcountry aviation since 1947.

Use W/S for throttle, A/D or arrows for roll, ↑/↓ for pitch

← Back    Next →

+ DHC-2 BEAVER

THROTTLE



94 KTS  
AIRSPEED  
1500 FT  
ALTITUDE  
180°  
HEADING

## AI FLUENCY TOOLKIT

# SYSTEMS INTEGRATION



JJ Is this healthy

Looking at the nutrition facts label, I wouldn't consider for several reasons:

1. Added Sugars: It contains 10g of added sugars (20% sugars in just one small 20g pouch. This is quite high)
2. Low Nutritional Value:
  - 0g protein
  - 0g dietary fiber
  - Very low levels of most minerals (0% iron, 0% potassium)
  - While it does contain some vitamins (A, C, D) and calcium from more nutritious sources
3. Processed Ingredients: The ingredients list shows very corn syrup, modified corn starch, artificial colors, and other processed ingredients.
4. Disclaimer Note: The package explicitly states "Not the diet" at the top, which is telling.

While this snack does have a relatively modest 70 calorie candy/treat product rather than a nutritious food. If you have a snacking urge, you'd be better off eating:

- Fresh whole fruits
- Unsweetened dried fruits
- Frozen fruits without added sugars

Would you like some suggestions for healthier alternative snacking options?

Reply to Claude...

Claude 3.7 Sonnet Choose style



JJ This one?

No, this KIND bar is not optimal for your cardiovascular health.

Key concerns:

1. High saturated fat (4g) - problematic for your LDL of 157
2. Very high total fat (14g) for a small bar
3. High sugar (9g) including added sugars
4. Low protein (7g) - insufficient for post-workout needs
5. Contains palm kernel oil
6. Multiple sugar sources (glucose syrup, cane sugar, honey)

The numbers that matter for you:

- Your LDL: 157 (needs to come down)
- Your triglycerides: 270 (needs to come down)
- This bar: 20% of daily saturated fat in one small serving

Better KIND bar options if you must have KIND:

- KIND Protein bars (specifically plant-based)
- KIND "Whole Fruit" bars
- KIND "Pressed by KIND" bars

But really, for post-workout with your cardiovascular profile, here are some recommendations from the previous message:

1. RXBAR
2. No Cow Bar

Reply to Claude...

Claude 3.7 Sonnet Choose style



JJ Any of these?

From this selection, only KIND Protein bars (visible in the top right) would be marginally acceptable, but they're still not optimal for your cardiovascular health profile.

Let me be direct - all KIND bars, including these options, share similar concerns:

1. High in saturated fats (typically 3-4g per bar)
2. Contains palm oils
3. Multiple forms of added sugars
4. Lower protein content than needed for post-workout (7-12g)

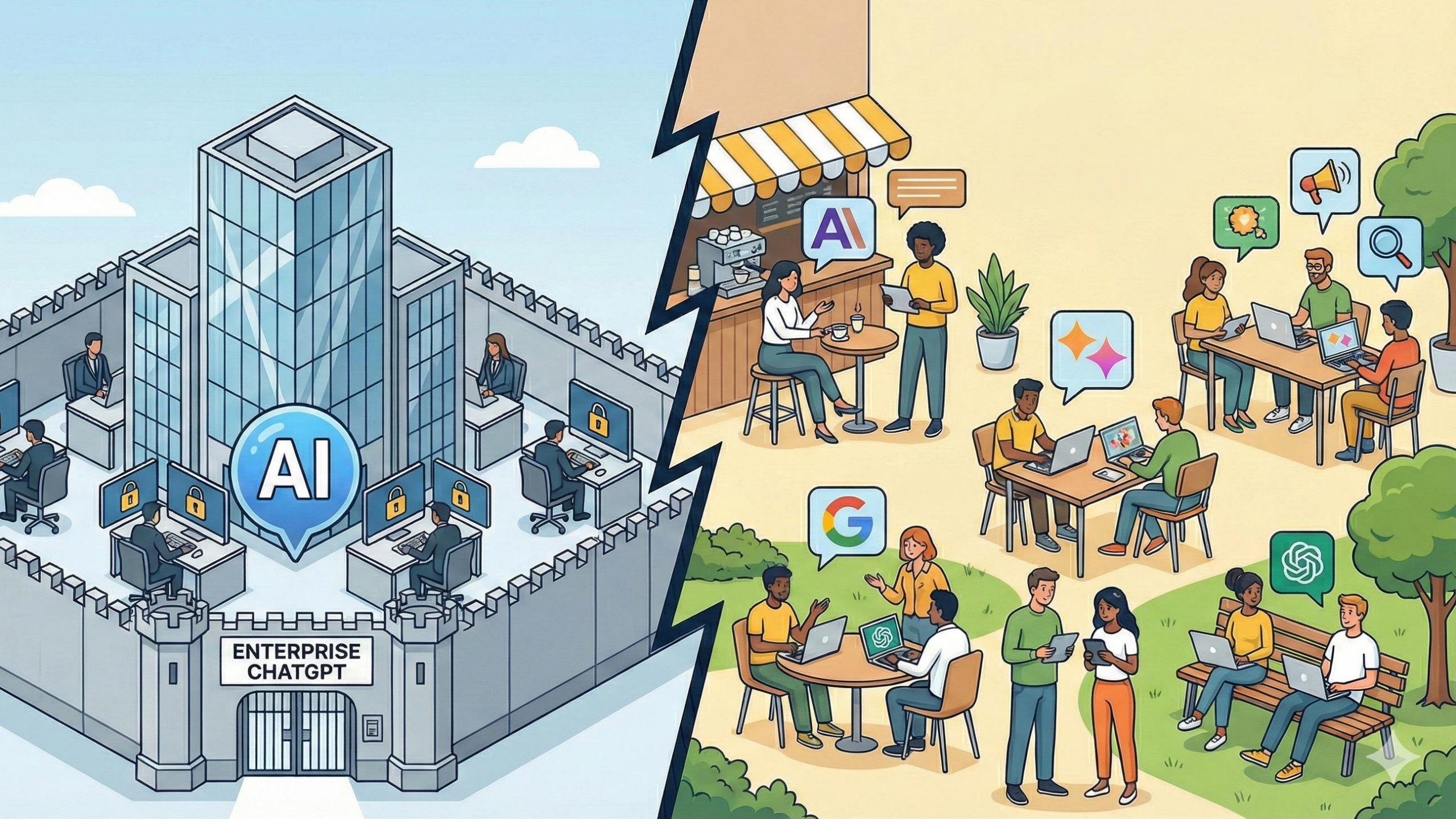
With your LDL at 157 and triglycerides at 270, we need to be more selective. Let me suggest again:

Immediate Post-Workout Options (in order of preference):

1. Liquid:
  - Orgain Clean Protein RTD
  - Ripple Protein Shake
  - OWYN Plant Protein Drink
2. Bars (if you must):
  - No Cow Bar (plant-based, very low saturated fat)
  - RXBAR (no added sugars, clean ingredients)
  - Momentous Plant-Based Protein Bar
3. Quick DIY Option:
  - Small shaker bottle with:

Reply to Claude...

Claude 3.7 Sonnet Choose style



AI

ENTERPRISE  
CHATGPT

G

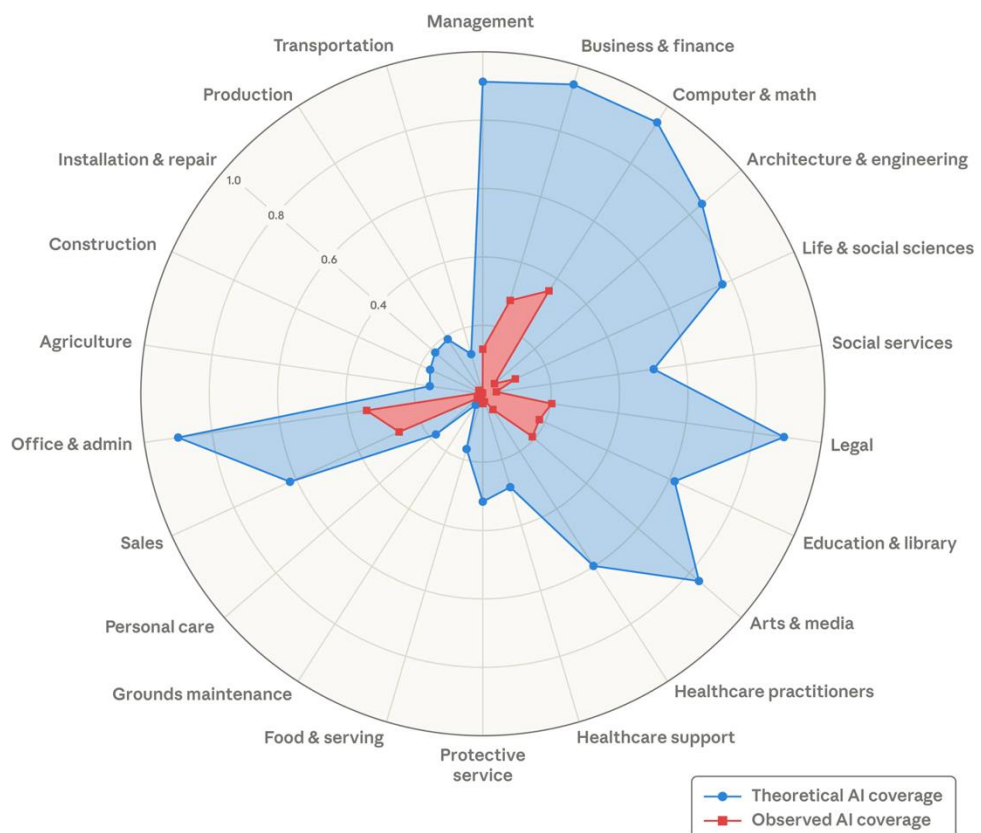
OpenAI logo

AI

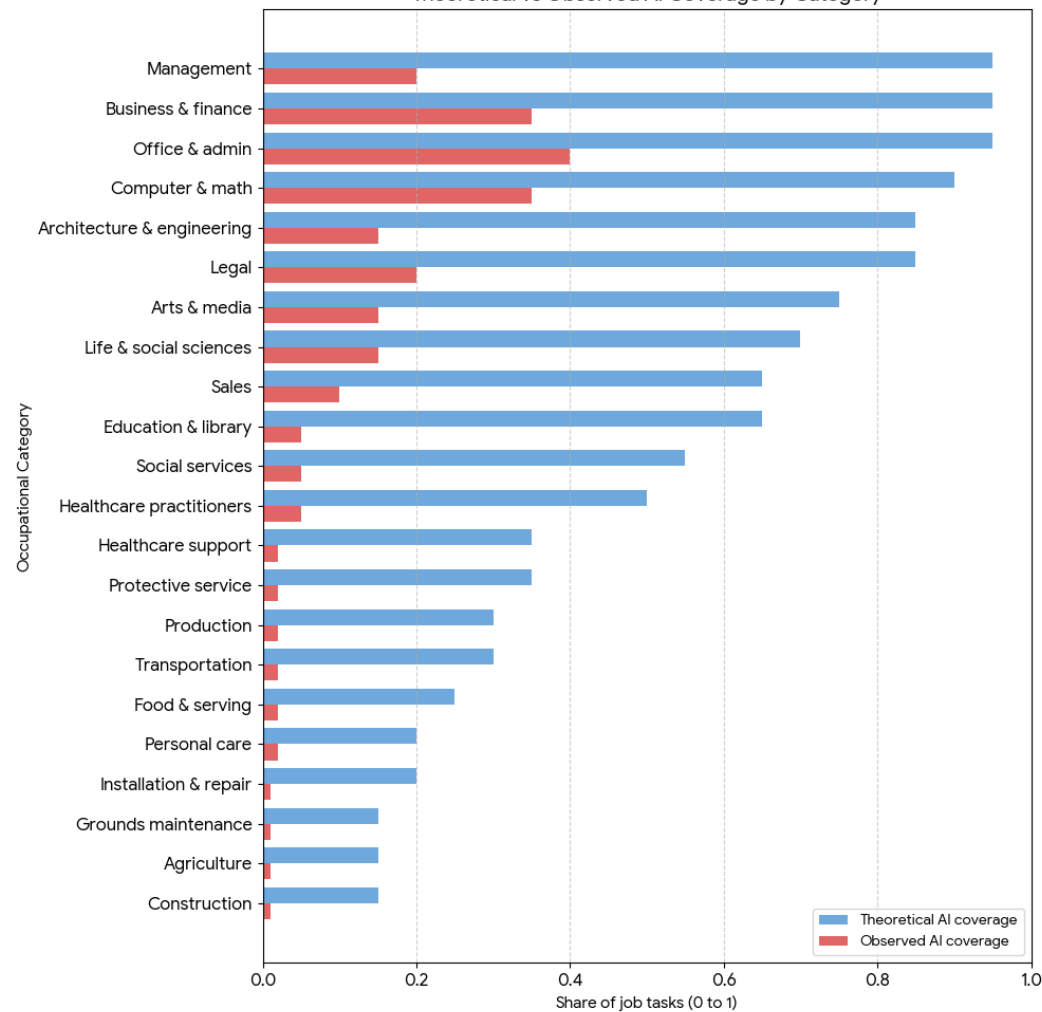
# AI FLUENCY TOOLKIT

# TASK DECOMPOSITION

### Theoretical capability and observed usage by occupational category



Theoretical vs Observed AI Coverage by Category



**“Look how much  
more I can do!”**



Application error: a client-side exception has occurred while loading claude.ai (see the browser console for more information)

ⓘ You've reached the limit for Claude messages at this time. Please wait before trying again. ✕

You're almost out of usage - your limits will reset at 6:00 PM

Subscribe to Max ✕

Reply to Claude...



Research



ⓘ Your message will exceed the length limit for this chat. Try attaching fewer or smaller files or starting a new conversation. ✕



Something went wrong. Please try again.

Retry

ⓘ A network error occurred. Please check your connection and try again. If this issue persists please contact us through our help center at [help.openai.com](https://help.openai.com).

↻ Retry

Something went wrong

ⓘ This functionality is undergoing temporary maintenance ✕

The network connection was lost.

Retry

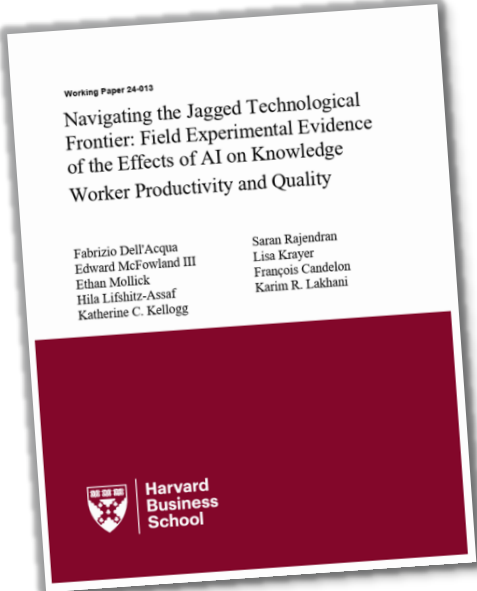
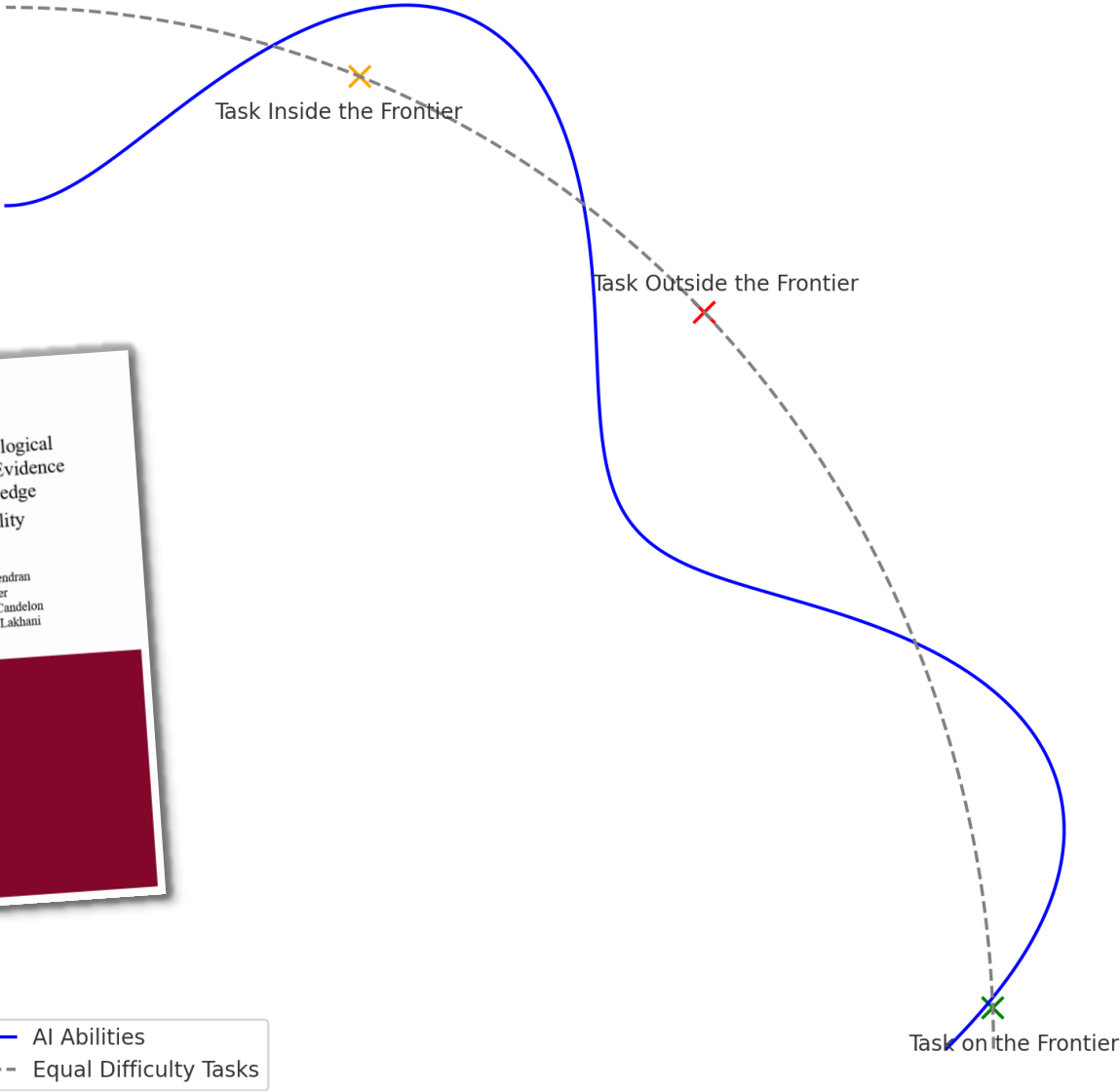


## 404 Not Found

In the heat of day,  
The path dissolves to nothing—  
An empty mirage.



# "THE JAGGED FRONTIER"





# AI FLUENCY TOOLKIT

# CURRICULUM AT THE **SPEED OF AI**



- Learn
- Path
- History
- Accomplishments
- Get help

← Back

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7 Learning Activities

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Achievement Available

Uplift Blog

Preview





# 8 IMPACT AREAS PER DOMAIN



## AI Capabilities

What can AI do?



## Process Impact

How is work changing?



## Partnership Patterns

Who does what?



## Critical Thinking

Why does judgment matter?



## Context Engineering

What does AI need from you?



## Ethical Frameworks

What's at stake?



## Technology Landscapes

Where are the tools headed?



## Org Transformation

So what? (Capstone)

**AI CURRICULUM REFRESH**

# Marketing Communications

MKT 3XX | Undergraduate

**PROPOSED LEARNING OUTCOMES** **AI-Assisted Copywriting**

Draft & refine brand messaging with AI across social, email, and ad copy

 **Ethics in AI Marketing**

Evaluate bias, deepfakes, and disclosure in AI-personalized campaigns

 **AI Audience Insights**

Apply AI-powered sentiment and competitive analysis to inform strategy

 **Human-AI Quality Control**

Assess AI outputs for brand voice, tone, and cultural sensitivity



# Financial Management

FIN 3XX | Undergraduate

## PROPOSED LEARNING OUTCOMES



### AI-Powered Modeling

Build & stress-test NPV, IRR models using AI-driven scenario analysis



### Evaluate AI Forecasts

Identify hallucinations, overfitting, and blind spots in AI valuations



### Automated Analysis

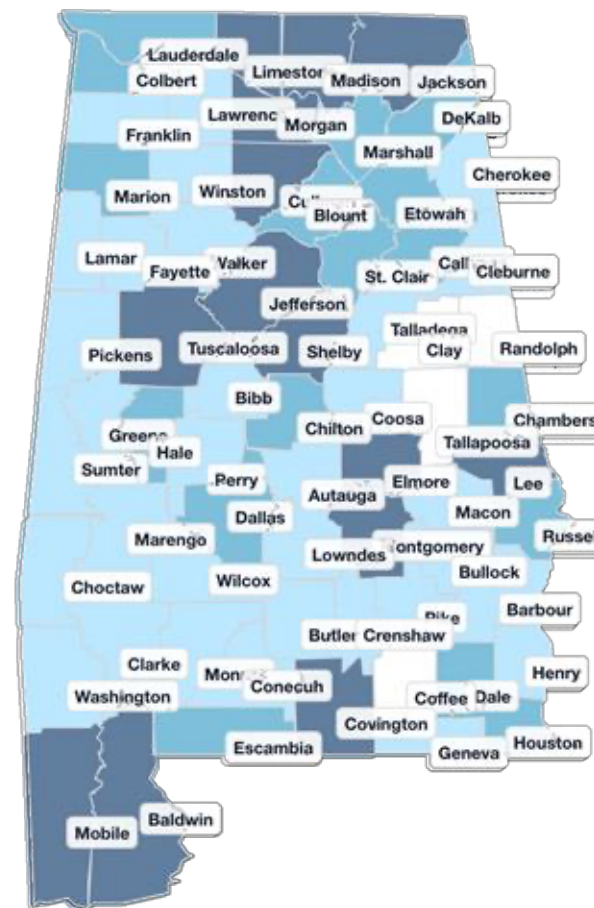
Automate data gathering and ratio analysis to focus on strategy



### Ethical Boundaries

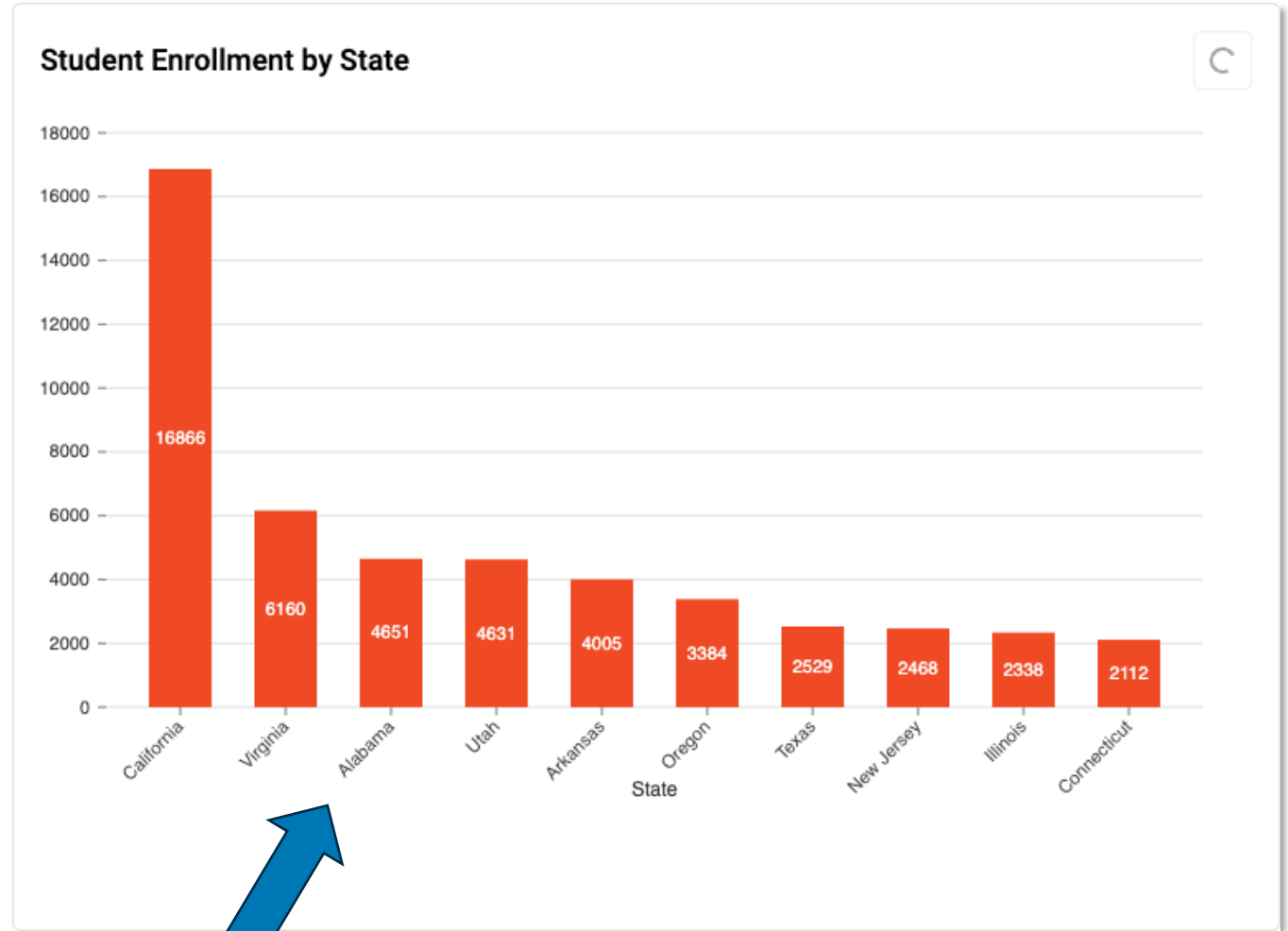
Navigate algorithmic bias, regulation, and fiduciary responsibility

# TEACHING DIGITAL AGILITY ACROSS ALABAMA



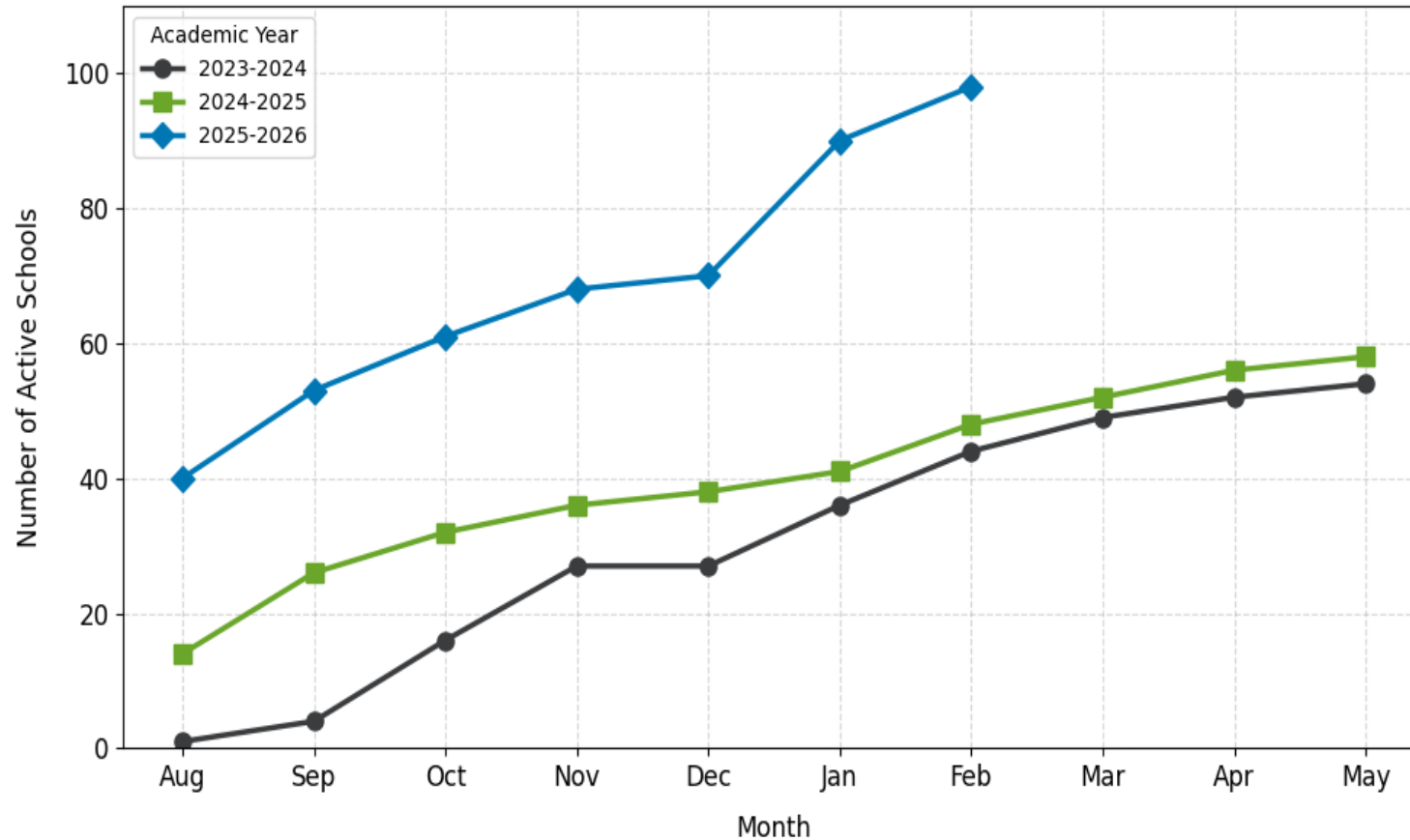
Legend (25-26)

0 Active Schools
  1-3 Active Schools
  4-6 Active Schools
  7+ Active Schools

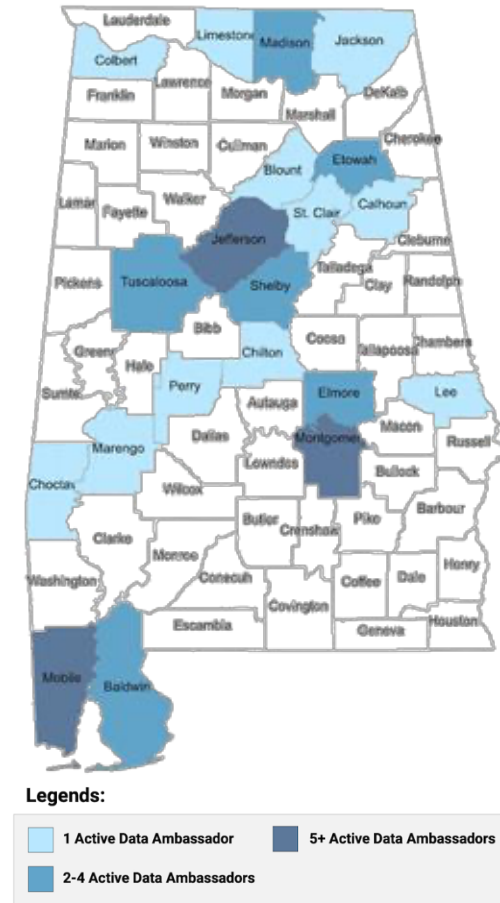


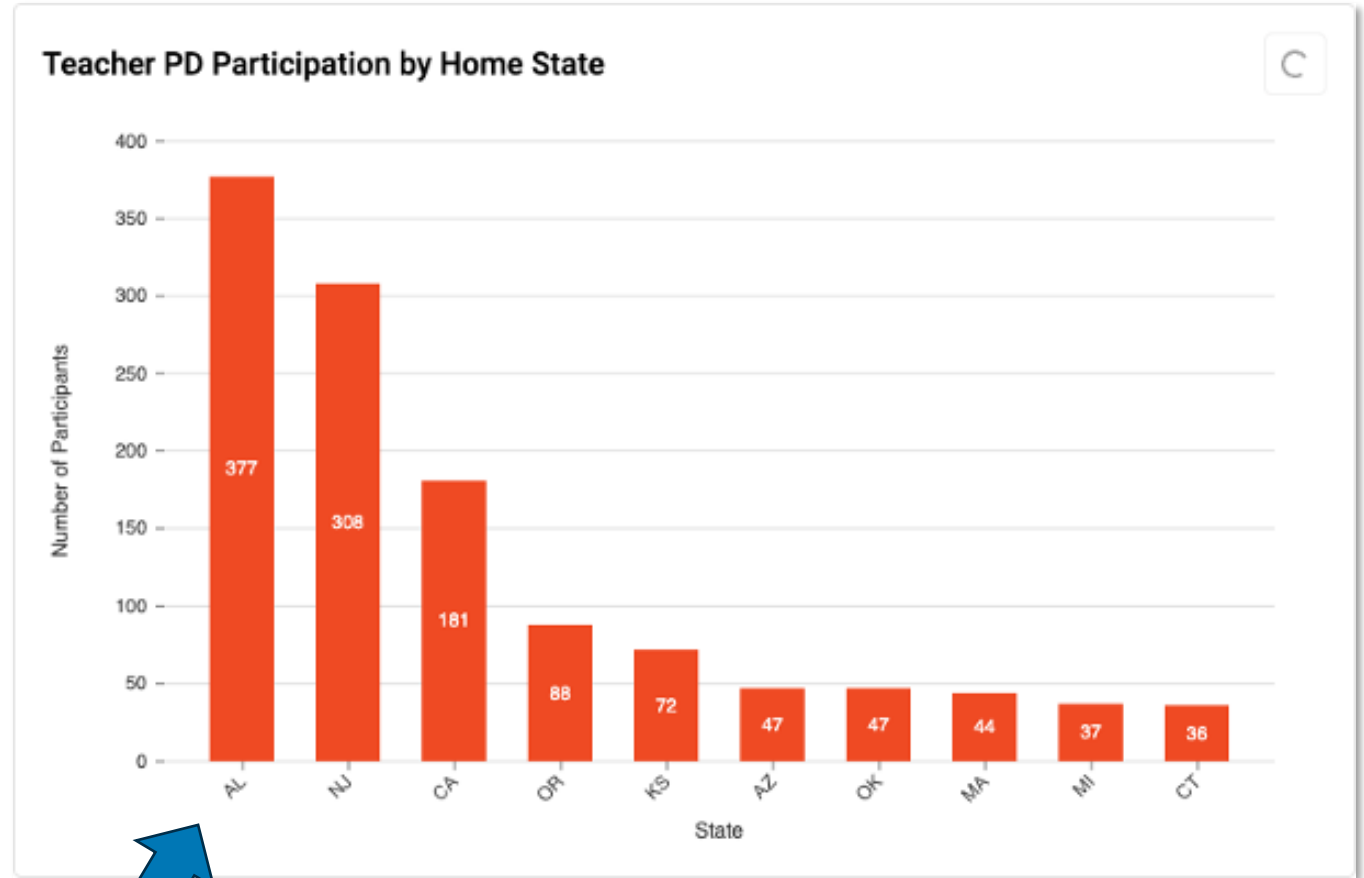
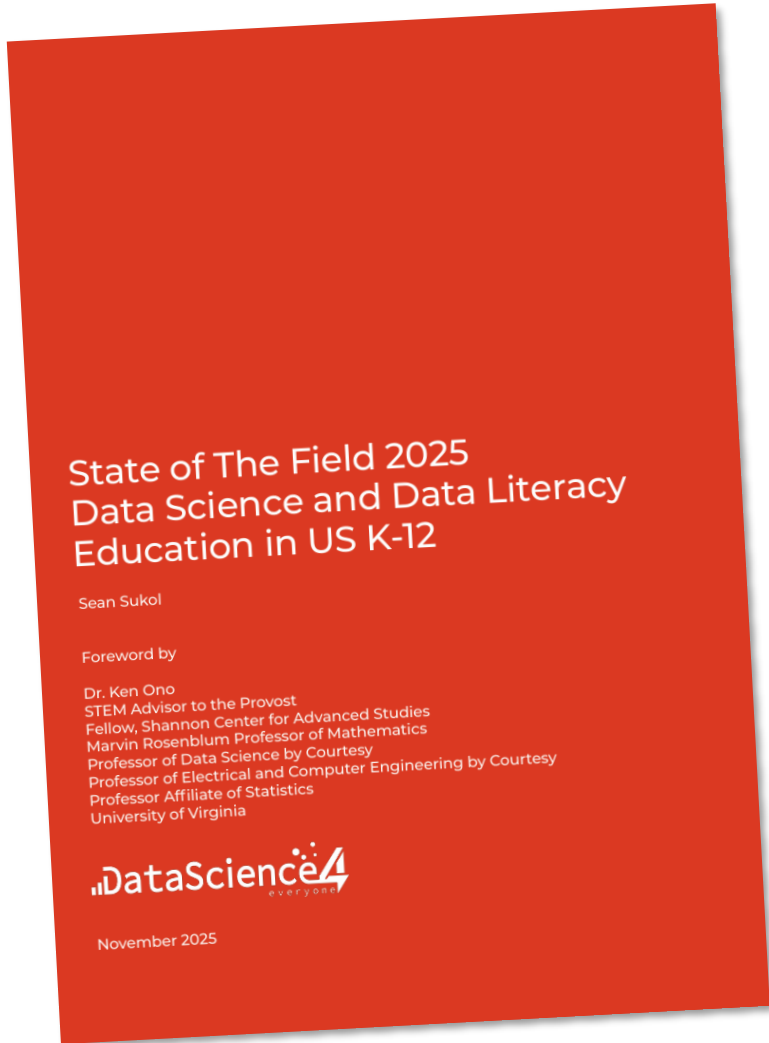


## Cumulative Active Schools with Student Usage by School Year

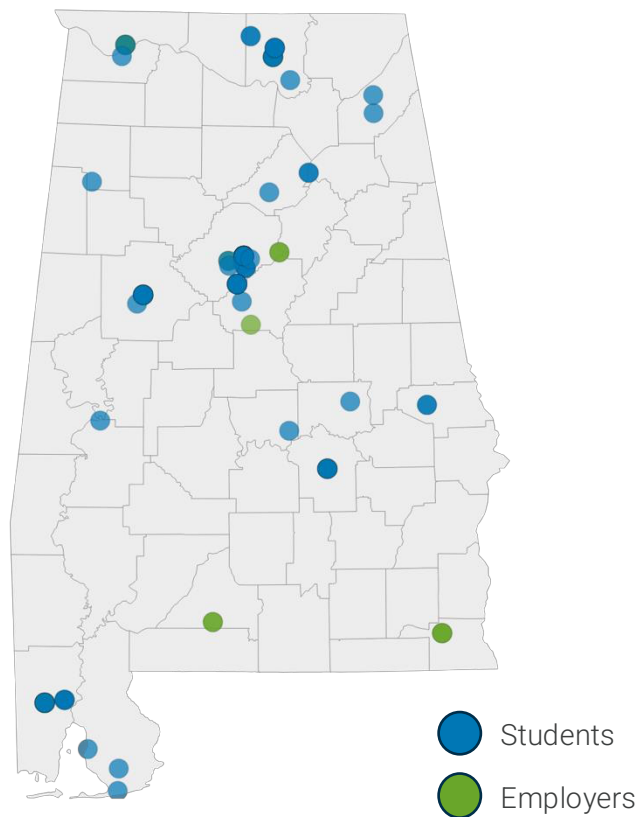


## ACTIVE DATA AMBASSADORS





### Students Have Come From 16 Counties Across The State



# ALABAMA DATA SCHOLARS

70 Internships filled across Alabama and counting



# MADE IN ALABAMA



Team members in Birmingham, Huntsville, Tuscaloosa, and Wetumpka



## Get in touch!

- Download session slides
- Learn about our educational products
- Connect with our internship program

