



Tech Skill Evolution in the AI age

By Mina Hanna

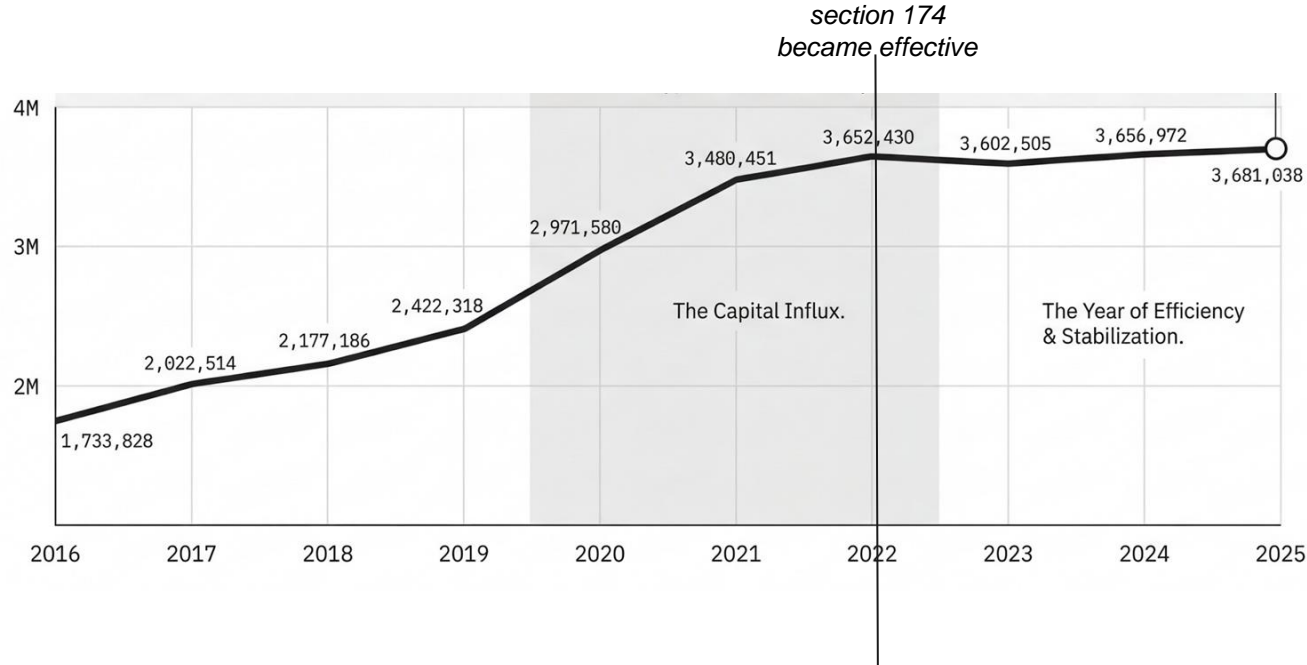
March, 2027



The Tech Employers (HL View)



- Steady increase till 2019
- Sharp increase during COVID
- Stagnation from 2022 onwards
- Changes in accounting rules

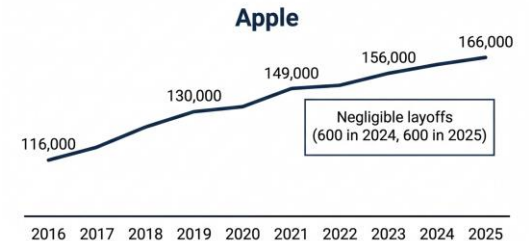
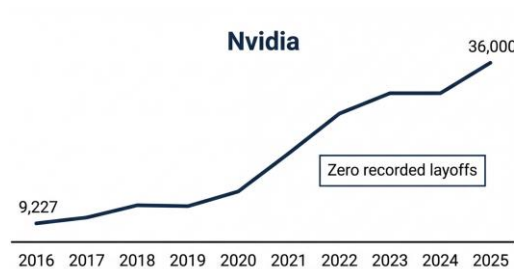
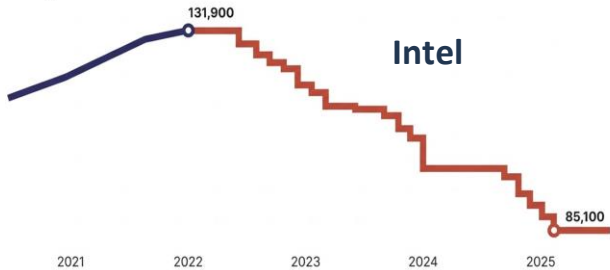
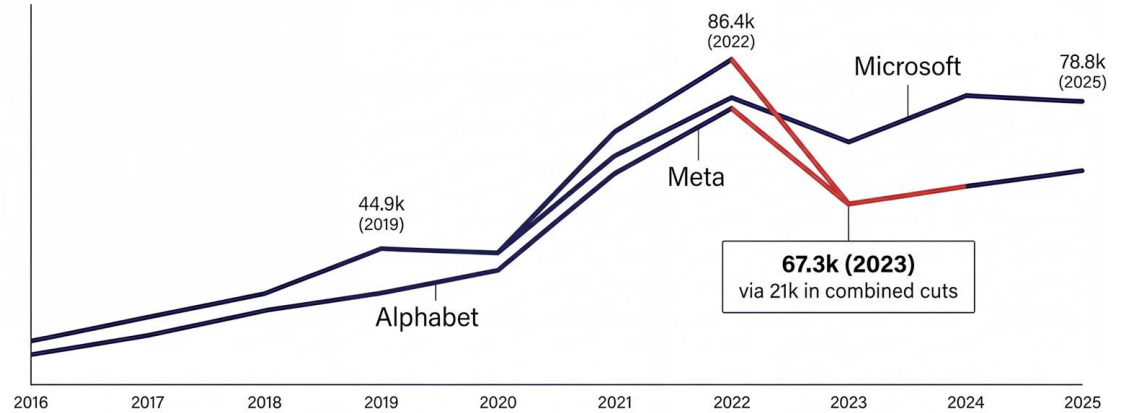


Total company published headcounts (Microsoft, Google, Meta, Apple, Amazon, Accenture, Netflix, Nvidia, Intel, Oracle, Salesforce and IBM)

The Tech Employers



- Companies are not all the same
- Steady growth Vs. sharp moves
- Special cases like Intel with deeper impacts in AI race



What Really Happened is the Skill Lifecycle Change

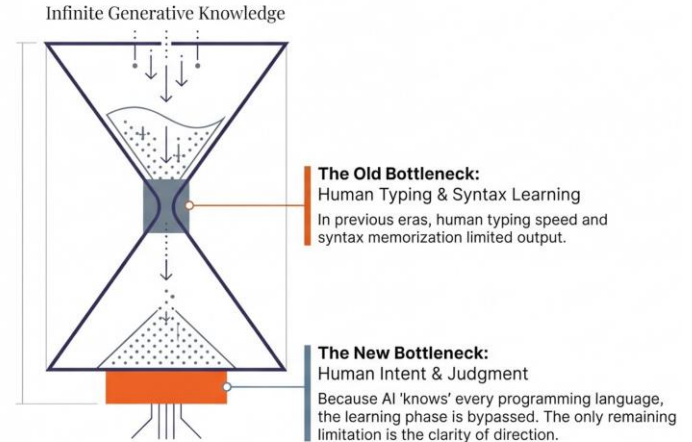
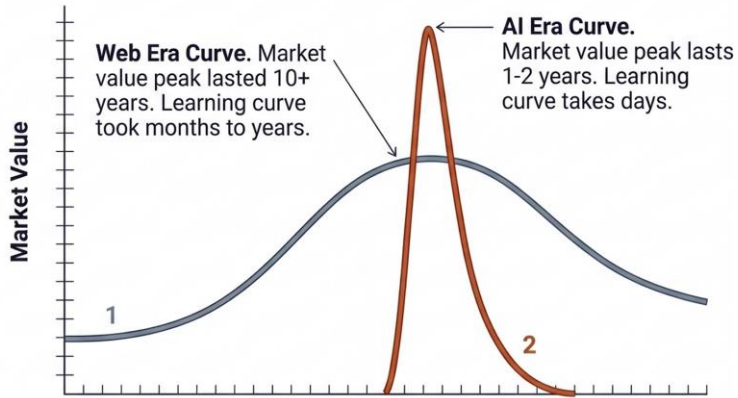


	Web Era (1995-2015)	Cloud Era (2015-2023)	AI Era (2024+)
Learning Curve	High learning curve (Months/Years)	Moderate learning curve	Low learning curve (Days)
Value Peak	10+ year value peak	5-7 year value peak	1-2 year value peak
Core Action	Manual DOM manipulation.	Boilerplate CRUD, APIs, YAML wrangling.	Vibe coding, Agentic orchestration, RAG strategy.

The incredible shrinking shelf life of IT skills

Prompt engineering is so 2024. Try these prompt templates instead

Skill Lifecycle has Shifted the Tech Bottleneck

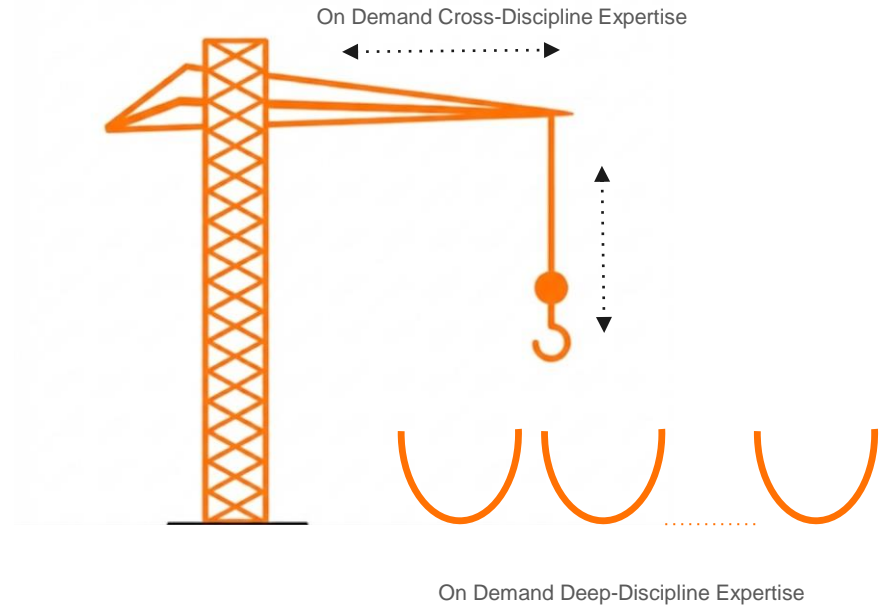
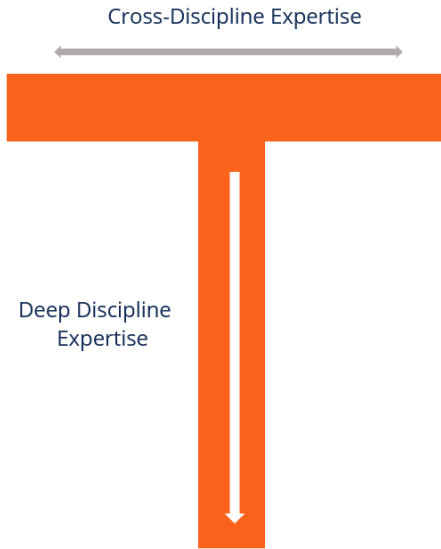


Shift in Employers Assessment



5 Years Ago (Pre-AI Wave)	Now (The Agentic Era)
Focus: Producing output.	Focus: Reasoning about work.
Test: Can you write code and solve problems from scratch?	Test: Can you think critically, spot when AI hallucinates, and make sound technical decisions?
Automation: Using digital assistance was an optional bonus.	Automation: Mandatory proficiency with AI tools (Browser-based Gemini, CLI Claude, Agentic IDEs like Cursor).
The Ultimate Differentiators: Employers now assess a graduate's willingness to learn, ability to say 'No' when uncertain, and structural understanding of Agentic Workflows vs. Context Engineering.	

From T Skill to On Demand Model



What skill would differentiate fresh grads in STEM fields in the age of AI ?

- Judgment over output. AI can produce - what's scarce is knowing what to build, why, and whether the result is actually correct. Deep fundamentals + problem framing + systems thinking.
- Ability and knowledge to implement and use agentic AI tools like Claude Co-Work or Cursor. Becomes important for everyone regardless of the role.
- Integrity, communication skills
- Go getter with a right attitude to learn (this beats everything else)
- What they think about AI?
- Understanding of Agents, RAG, etc.. - just to see how much they know
- Check if they know various way to use AI -Browser based (Gemini) vs CLI based (Claude), IDEs like Cursor
- understanding of AI Usage - Vibe Coding vs Context Engineering vs Agentic Workflow

How have your assessments changed compared to 5 years ago, before the AI wave ?.

- Before: Can you write code/solve problems from scratch?
- Now: Can you think critically, spot when AI is wrong, and make sound technical decisions?
- The bottleneck shifted from producing work to reasoning about work.
- Previously, automation and using digital assistance was an option
- but, going forward, it will become mandatory in all STEM fields.
- Not by Much, can they explain their school projects with authority - to verify how much they understand what they did
- How did they acquire the knowledge/learning for the things they didn't know
- Goal is to understand:
 - Are they willing to put in effort to learn?
 - Can they articulate their thought?
 - Are they willing to say No, when doesn't know something rather than ***
 - Are they approaching with positive attitude?
 - Able to understand new stuff easily?

"AI lowers the floor so anyone can create; the great engineer raises the ceiling to redefine what is possible."

Thank You !!