

HEADLINER

Humanity at a tipping point

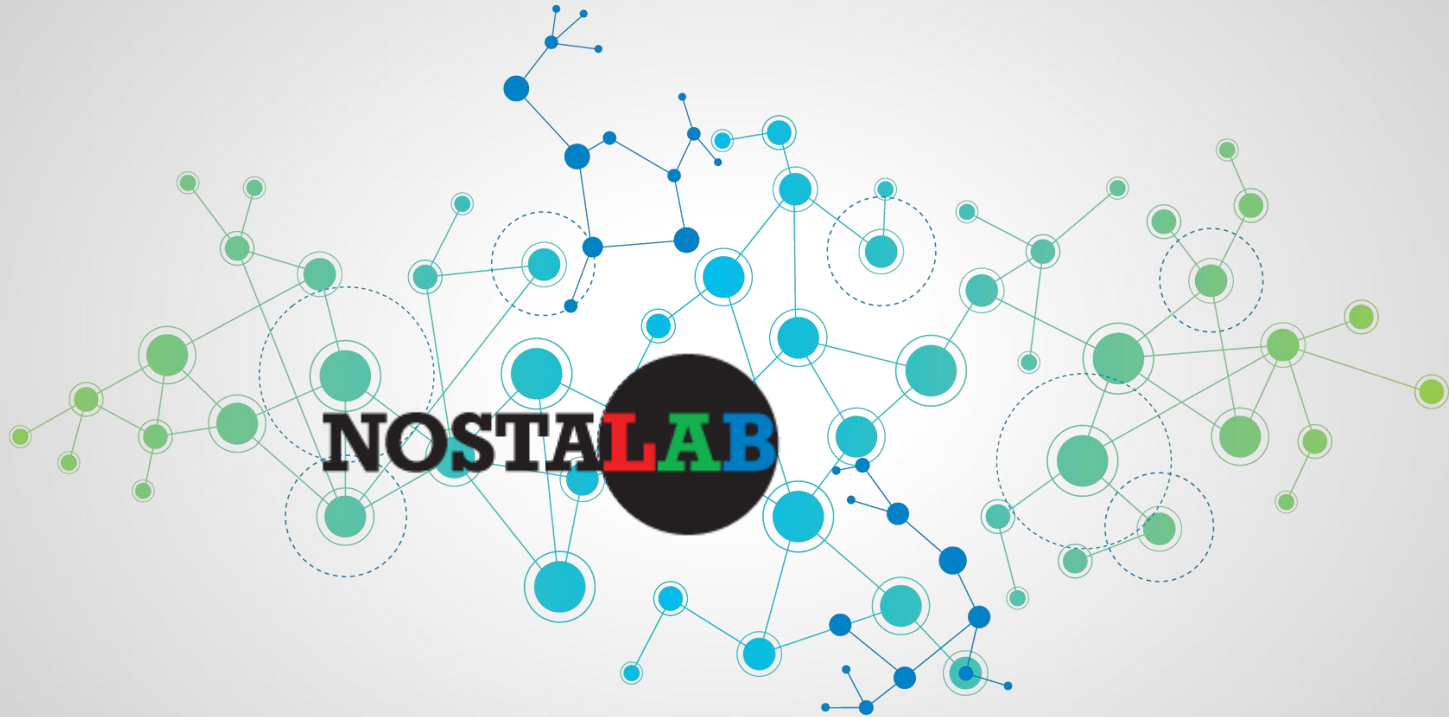


JOHN NOSTA

President

NostaLab

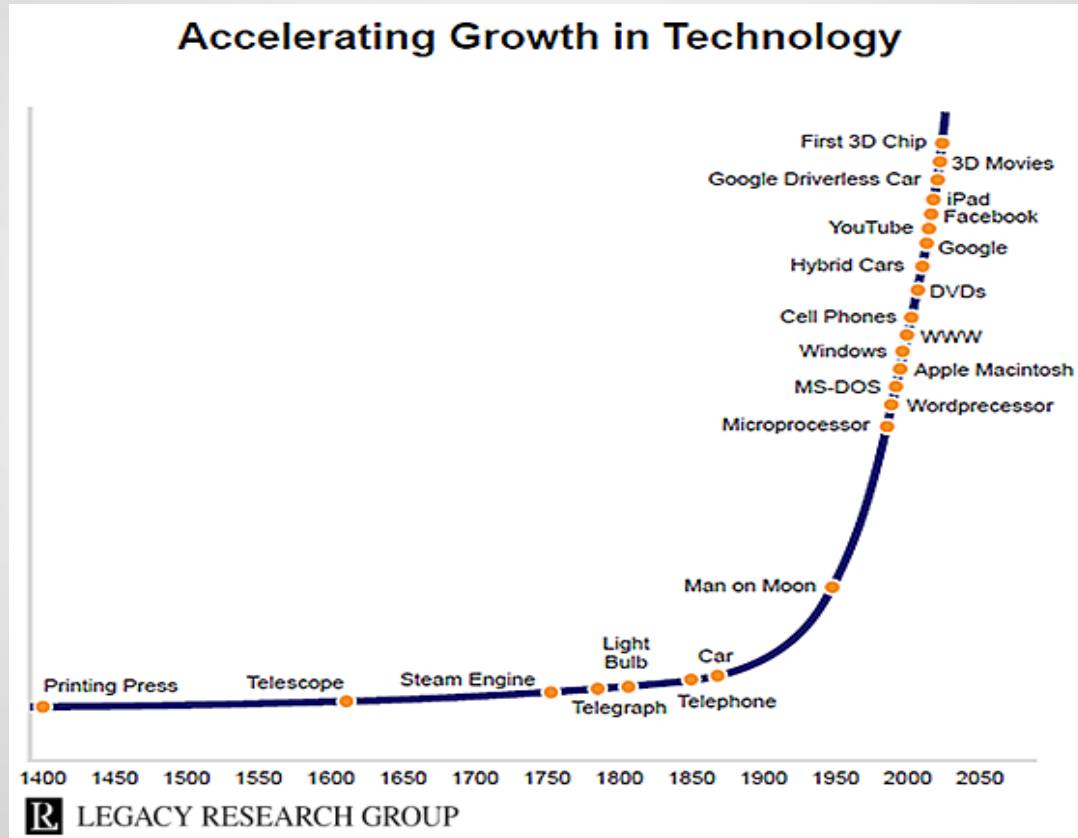
HUMANITY AT A TIPPING POINT



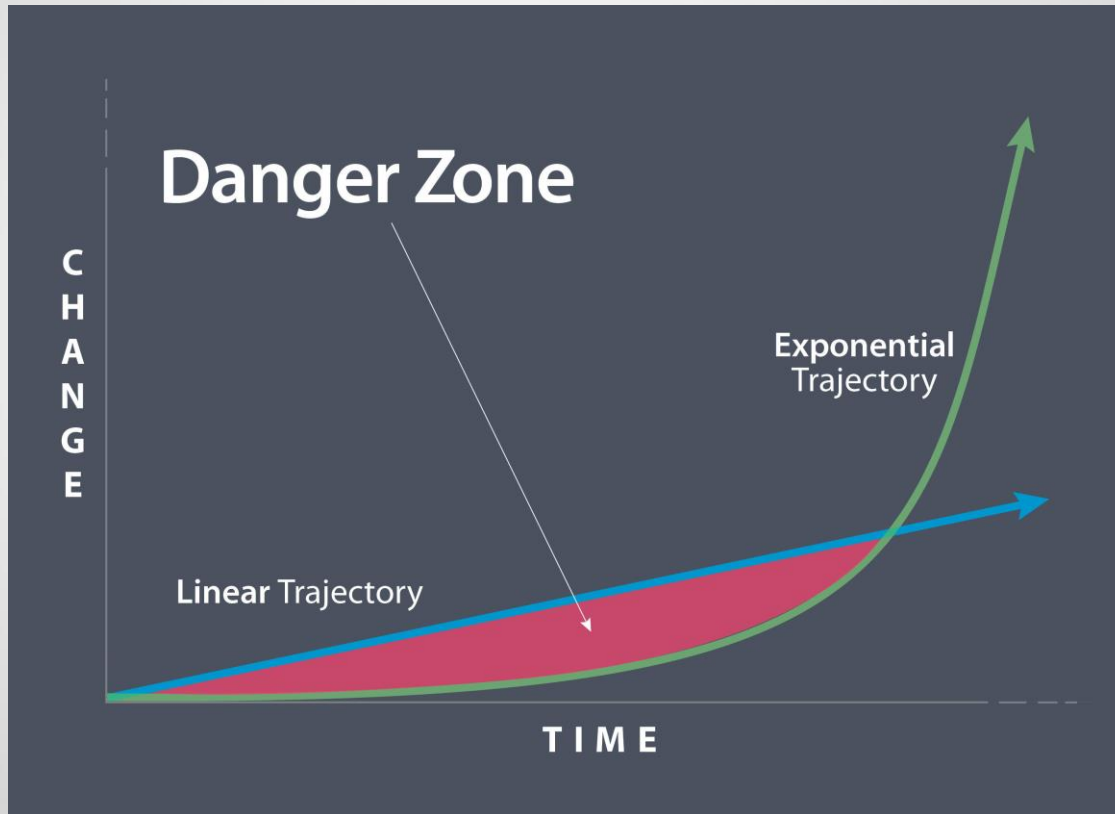
Let's Start With Norman Rockwell and Johannes Vermeer



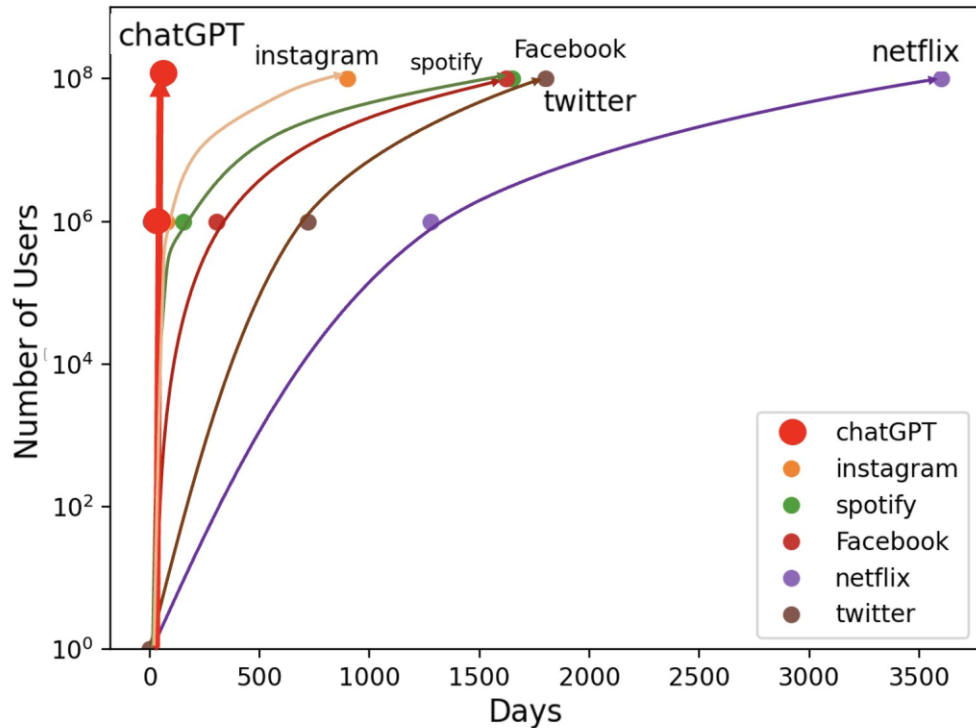
Change, And The Rate Of Change



Exponential Growth And Beyond



The Most Important Graph In 100 Years



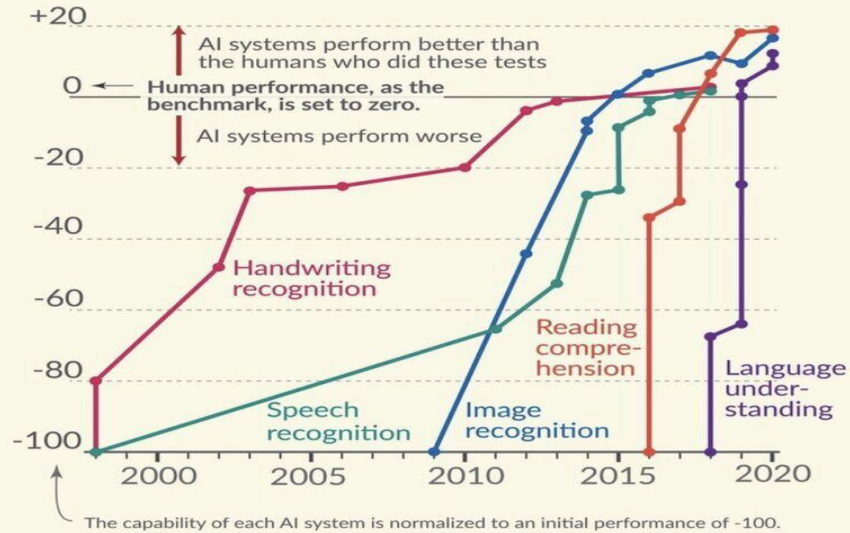
Artificial intelligence is doubling at a rate much faster than Moore's Law's 2 years, or evolutionary biology's 2M years. Why? Because we're bootstrapping it on the back of both laws. And if it can feed back into its own acceleration, that's a stacked exponential.

Epic Games CEO, Tim Sweeney

Yes, Speed.

Language and image recognition capabilities of AI systems have improved rapidly

Test scores of the AI relative to human performance



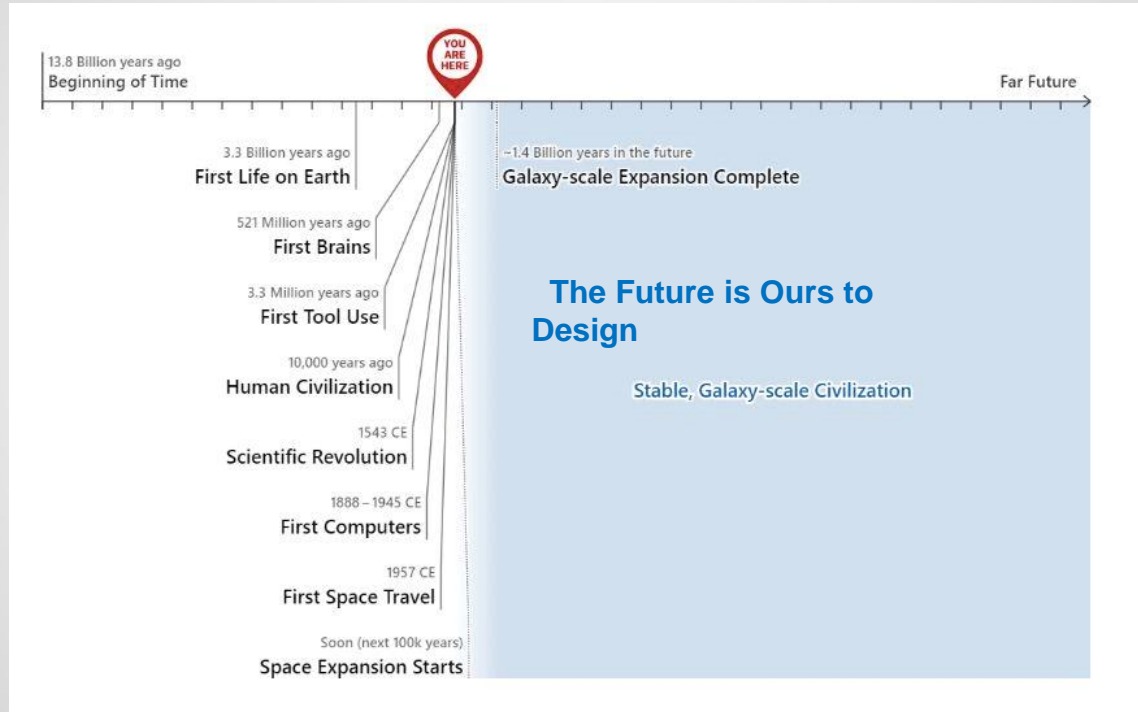
Source: Kiela et al. (2021) Dynabench: Rethinking Benchmarking in NLP
OurWorldInData.org/artificial-intelligence • CC BY



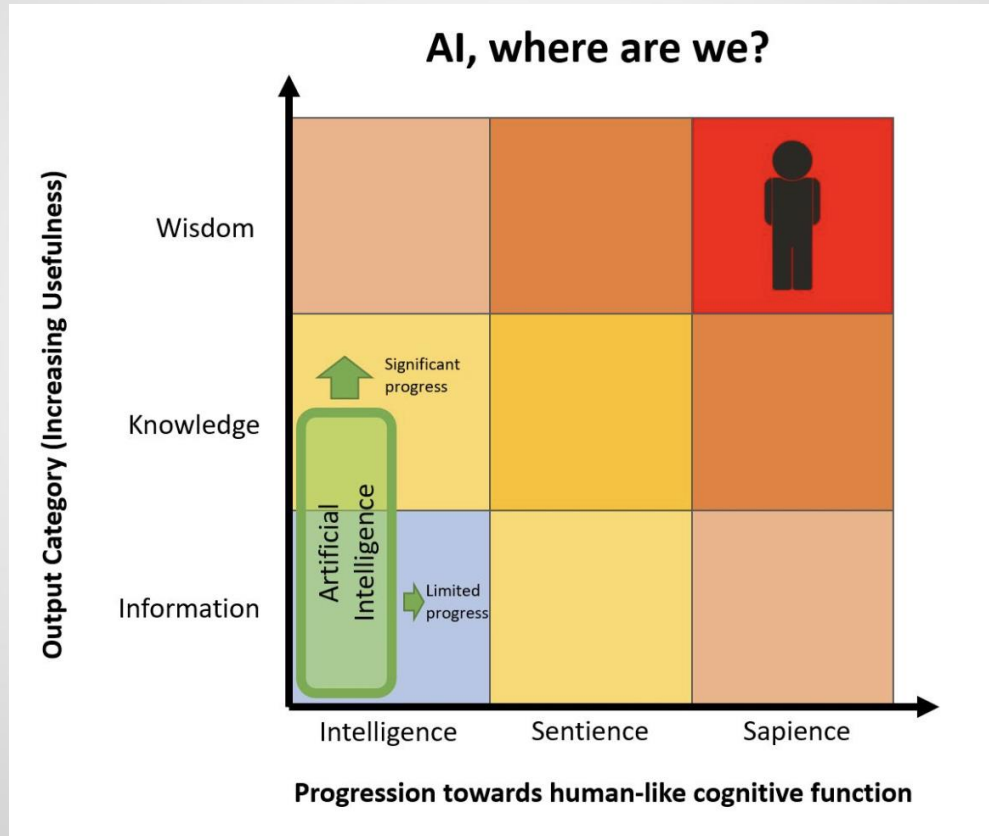
Speed that's delicious



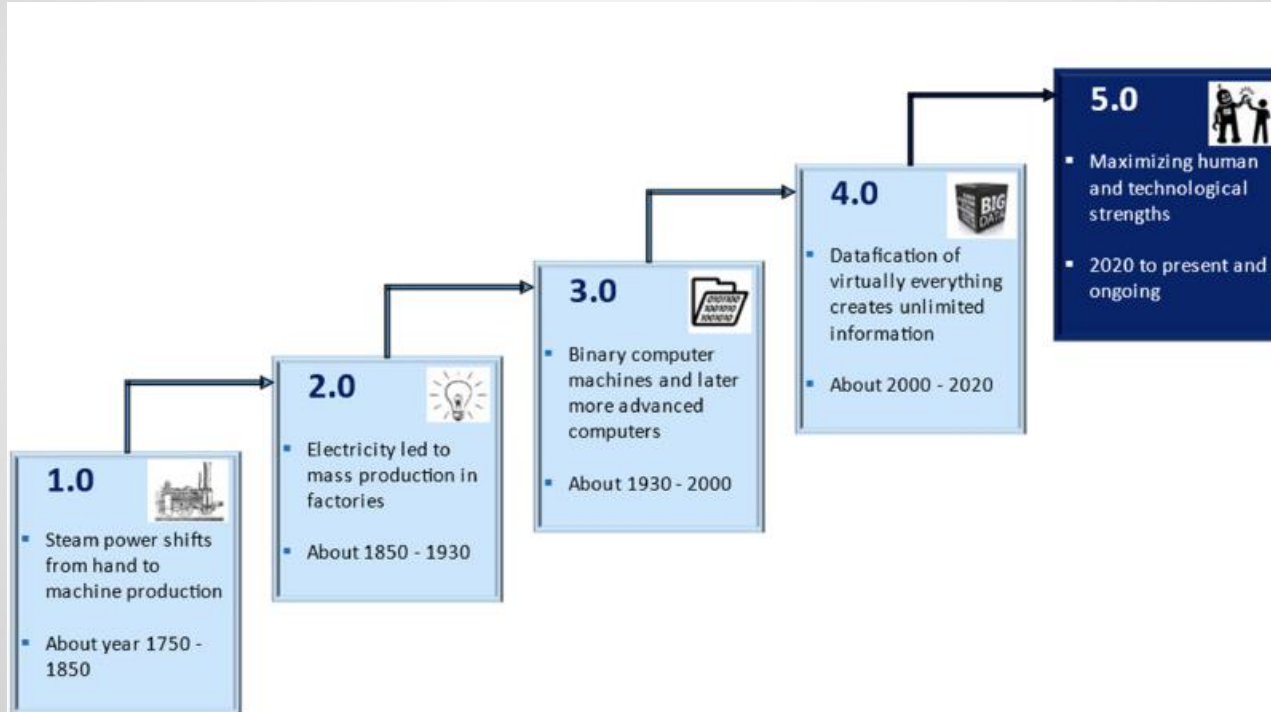
We Are Here—The Second Big Bang



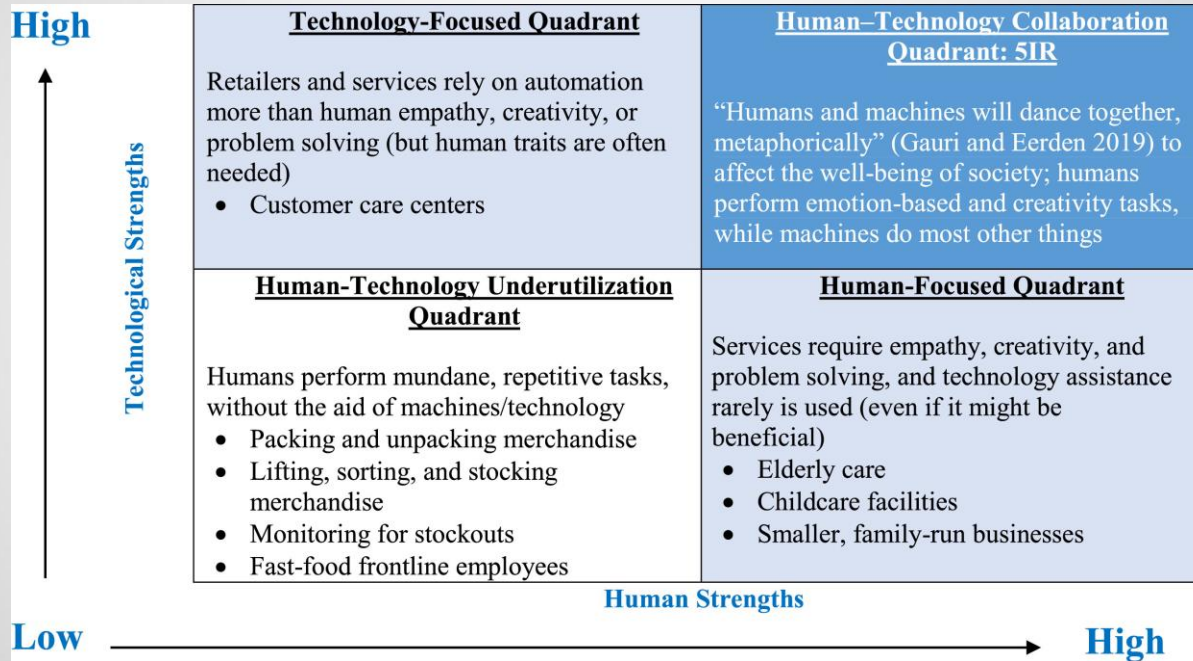
But Where Is AI?



AI and GPT: Catalyzing The Fifth Industrial Revolution



A shift from AI tools to AI partners will establish the ‘cognitive age.’



A FEW INSIGHTS ON 5th INDUSTRIAL (COGNITIVE) REVOLUTION

Ghost In The Machine

#1. Is AI A Better Form Of Intelligence?

“Our brains have 100 trillion connections. Large language models have up to half a trillion, a trillion at most. Yet GPT-4 knows hundreds of times more than any one person does. **So maybe it’s actually got a much better learning algorithm than us.**” —Geoffrey Hinton



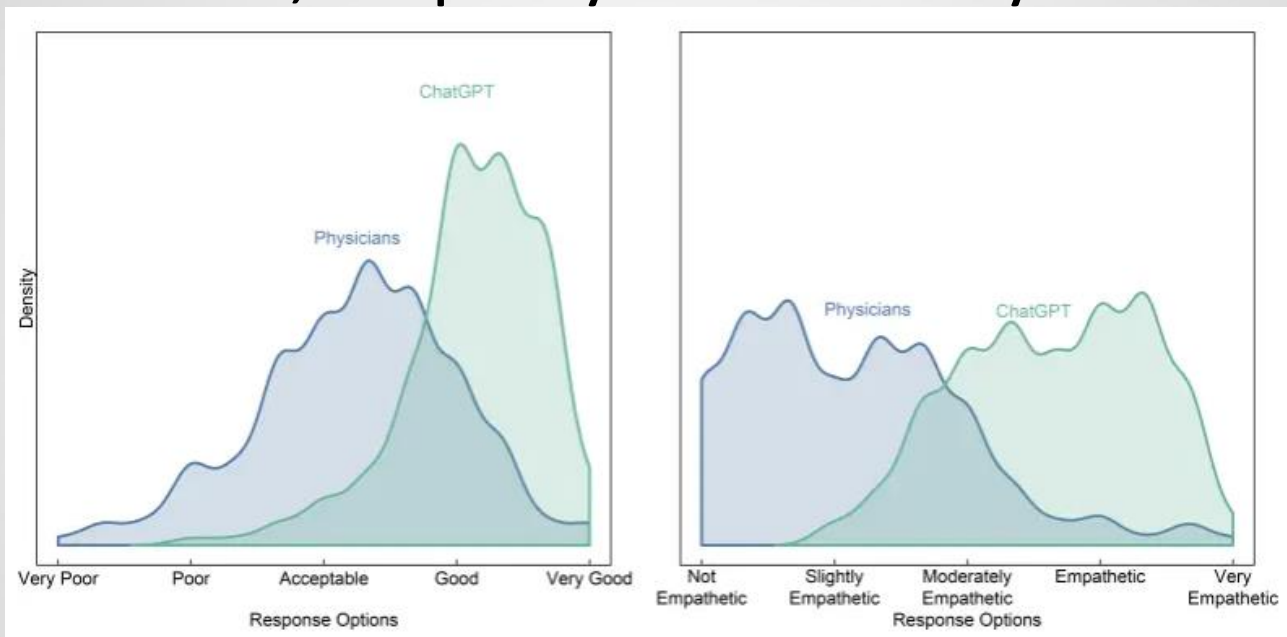
Ghost In The Machine

#2. GPT hallucination is a feature, not a bug!

“People always confabulate. Half-truths and misremembered details are hallmarks of human conversation—**confabulation is a signature of human memory. These models are doing something just like people.**” —Geoffrey Hinton

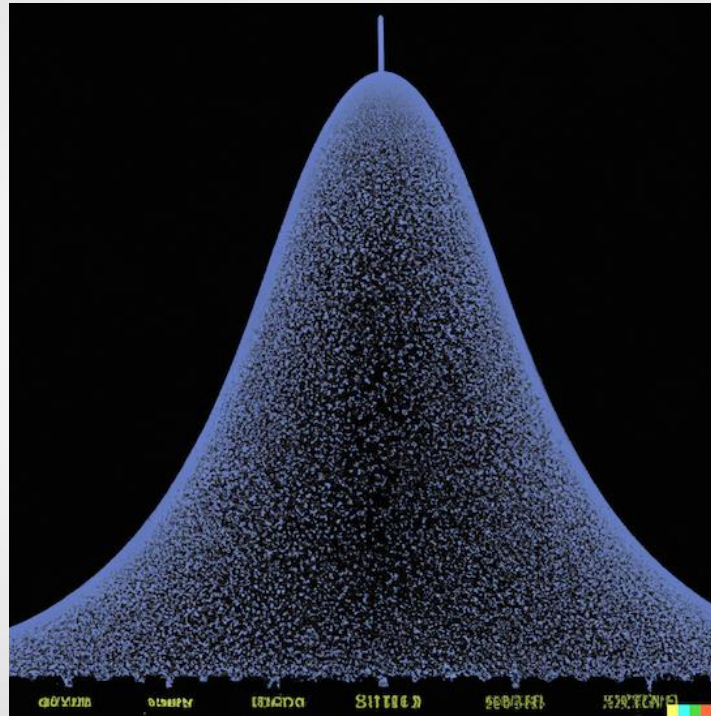
Ghost In The Machine

#3. GPT, Empathy And The Physician?

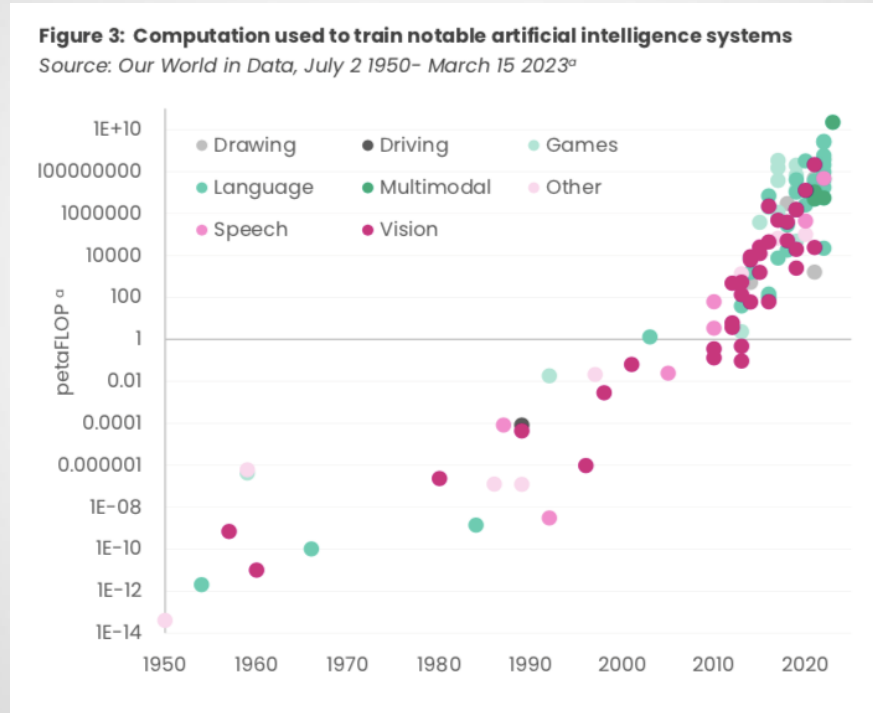


The panel of healthcare professional evaluators preferred ChatGPT responses to physician responses 79% of the time.

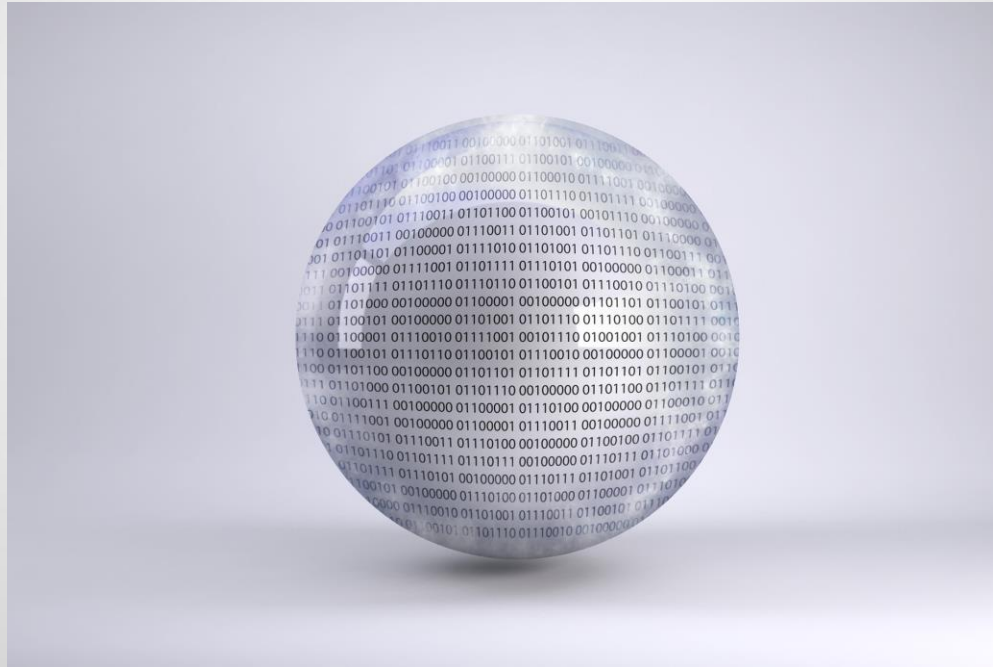
Squeezing The Bell Curve Of Productivity



BIG—Multi-Modal Advantages



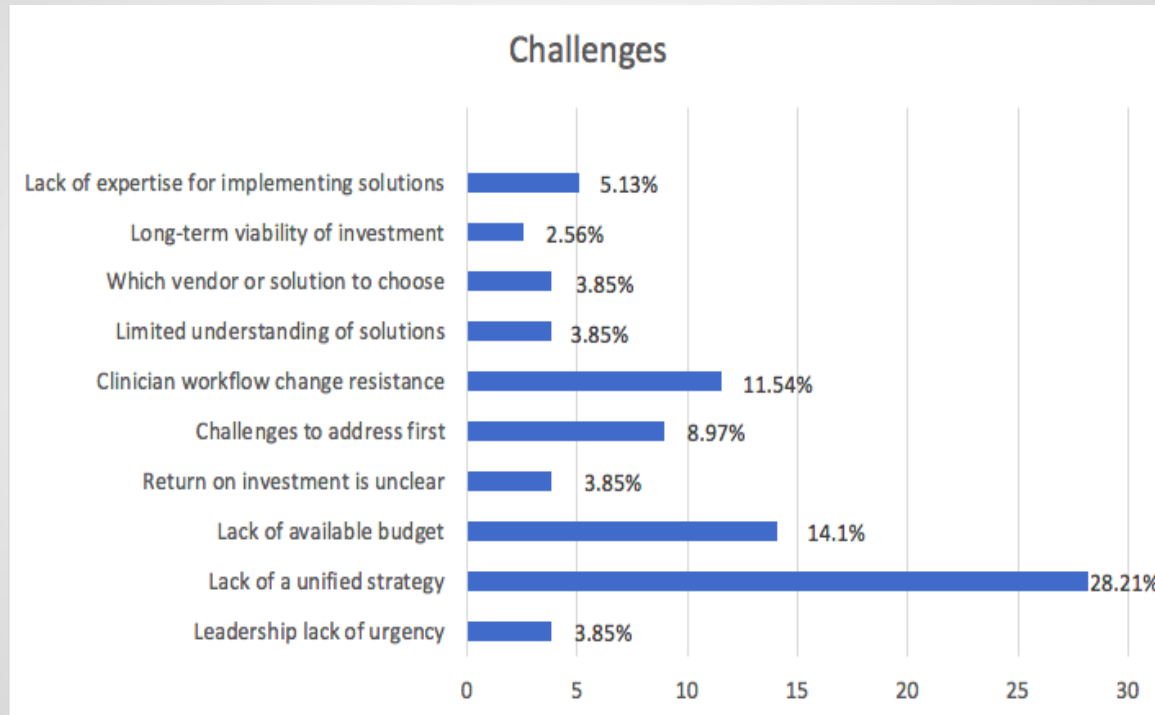
SMALL—Revolutionizing language model training with small, curated datasets.



Data Ecology—Seeing The Unseen



Technology...Without A Plan.



Senior healthcare IT leaders from the College of Healthcare Information Management Executives (CHIME) were asked what was the top obstacle to digital transformation that faces your organization. (n = 91)

The New Collaborative Dynamic

(Who is the smartest person in the room?)

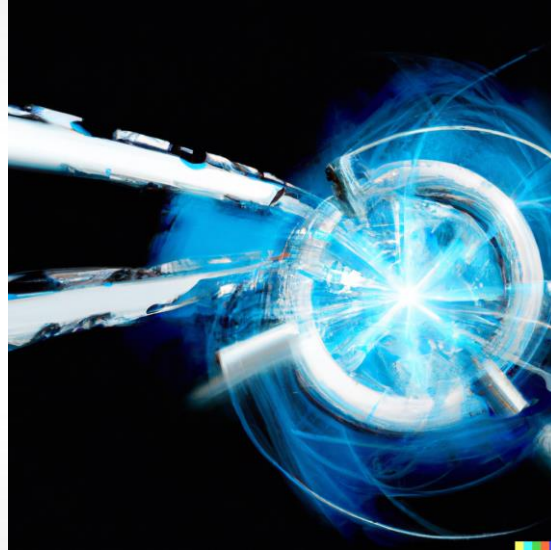


Moving Beyond IQ and EQ

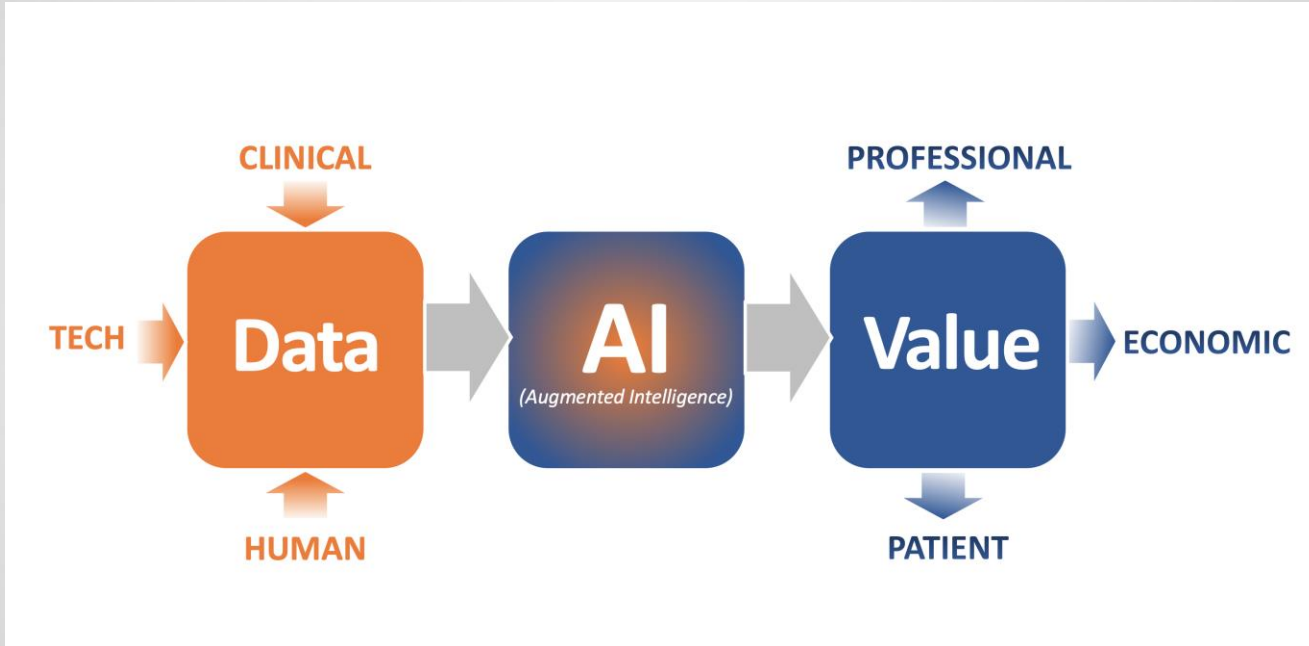


It's Not Innovate, It's Sychrovate!

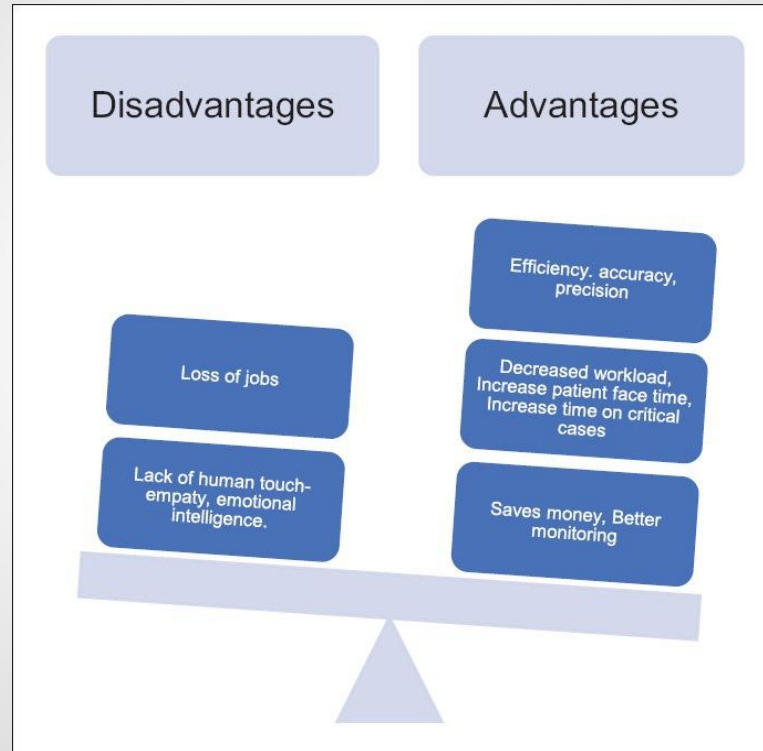
- AI
- Fintech
- Genomics
- Robotics
- Digital Health
- 3D Printing
- Autonomous Vehicles



Synchrovation in Practice



Technology Tips The Scale In Your Favor

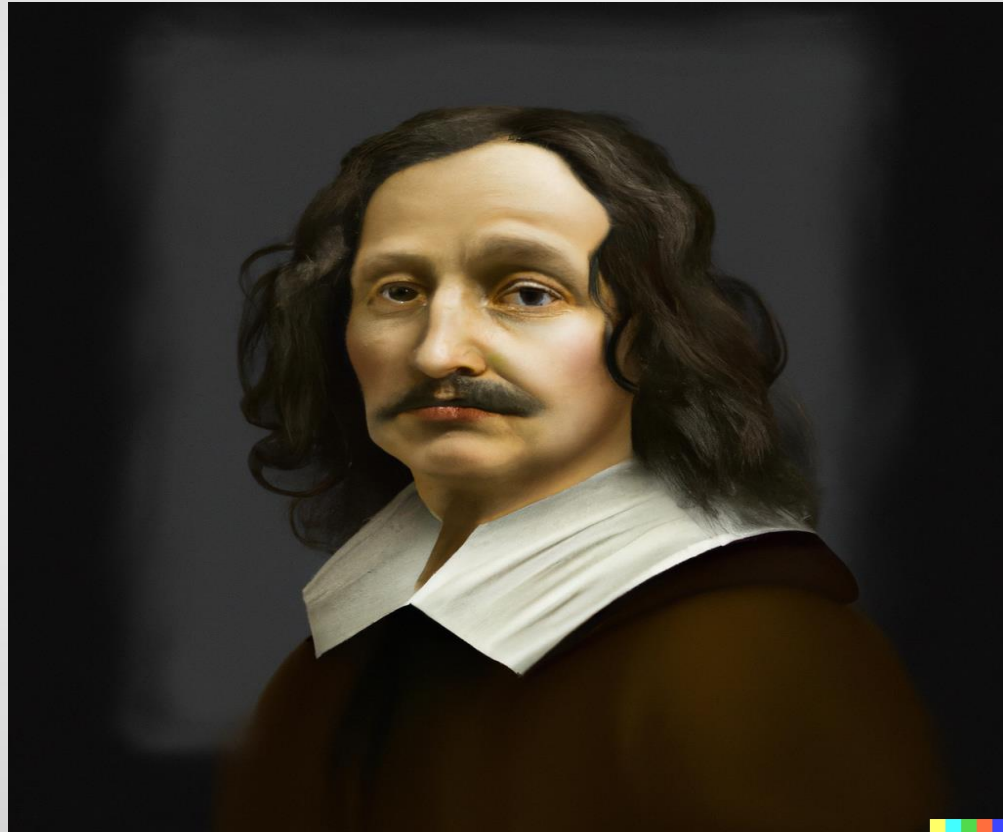


THOUGHTS ABOUT TOMORROW

“The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn.”

— Alvin Toffler

Cogito Ergo Creo



Thank You

@JohnNosta

INTELLIGENT HEALTH UK 2023

Breaking down the barriers
between tech and healthcare