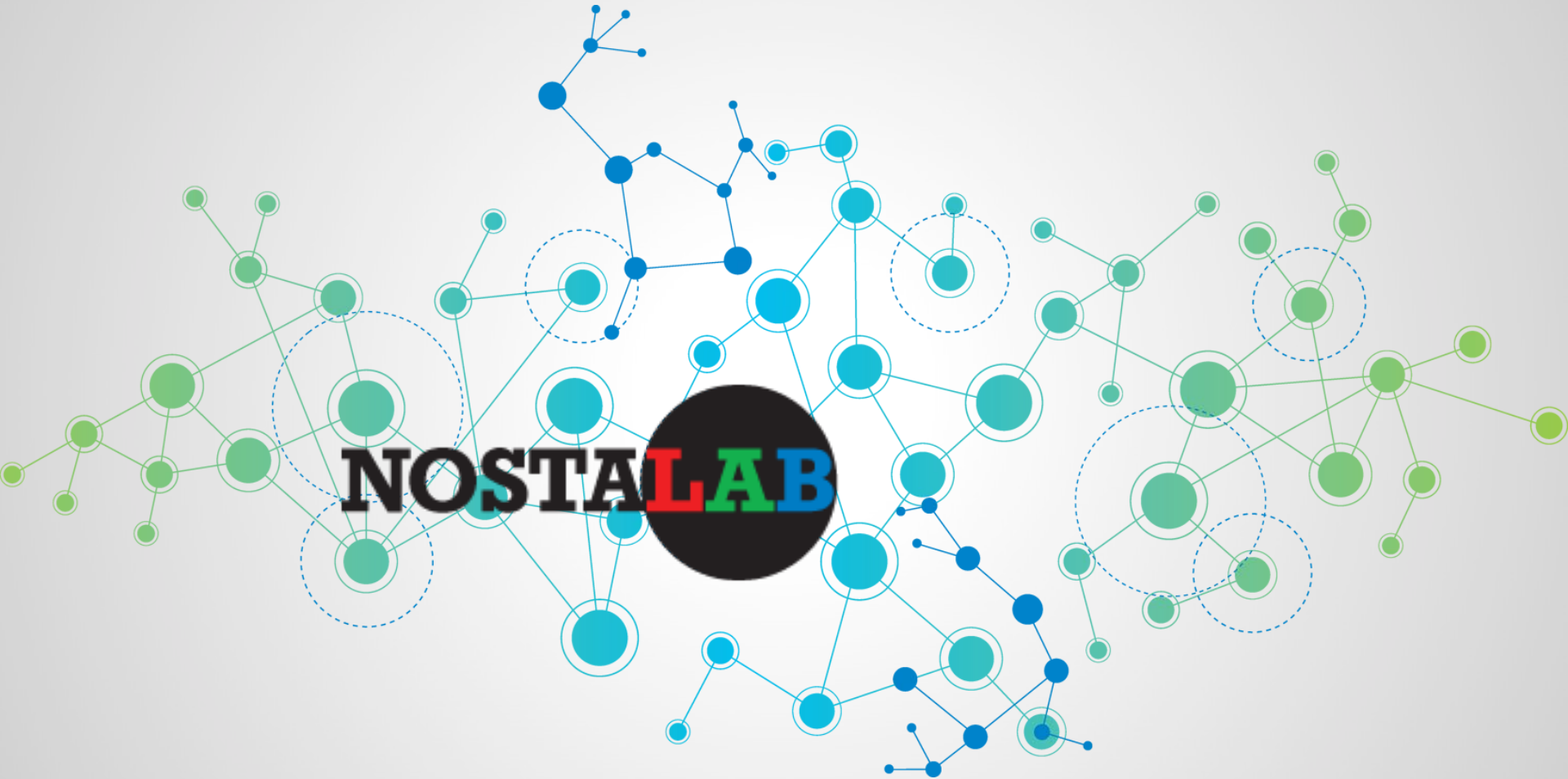# HUMANITY AT A TIPPING POINT

# AI: A Physician In The Style Of Norman Rockwell

AI: What are the single important technological contribution in medicine in the next 10 years?

- **Artificial intelligence** and machine learning, which are being used to improve diagnostic accuracy, predict patient outcomes, and assist in drug discovery.

- **CRISPR-based gene editing**, which has the potential to cure genetic diseases and improve treatments for cancer.

- **Immunotherapy**, which is a form of treatment that harnesses the power of the immune system to fight disease.

- **Stem cell therapies**, which have the potential to repair and regenerate damaged tissue.

- **Nanotechnology**, which is being used to develop targeted drug delivery systems and diagnostic tools.

- **Telemedicine**, which will enable doctors to remotely monitor patients, increase access to care, and reduce healthcare costs.
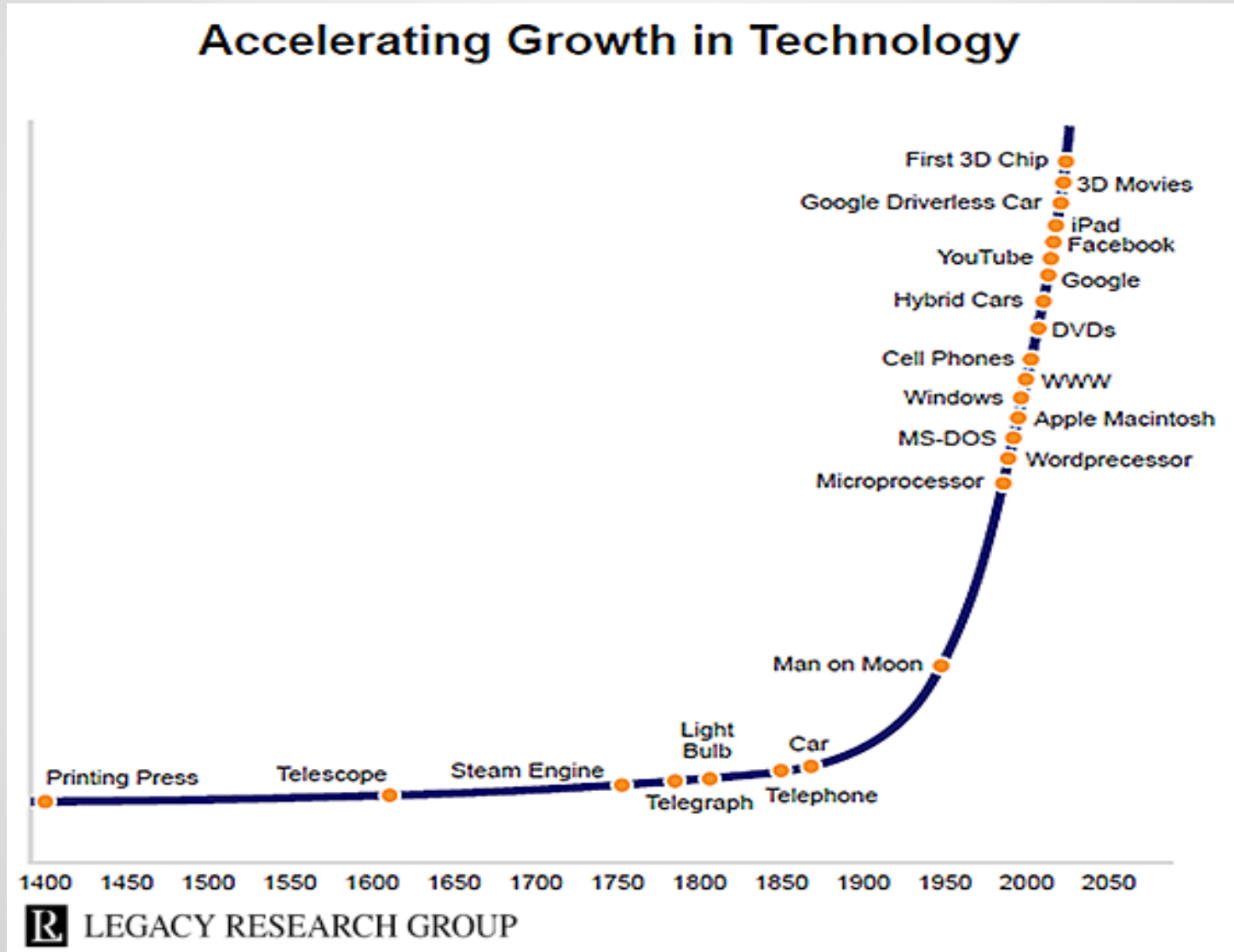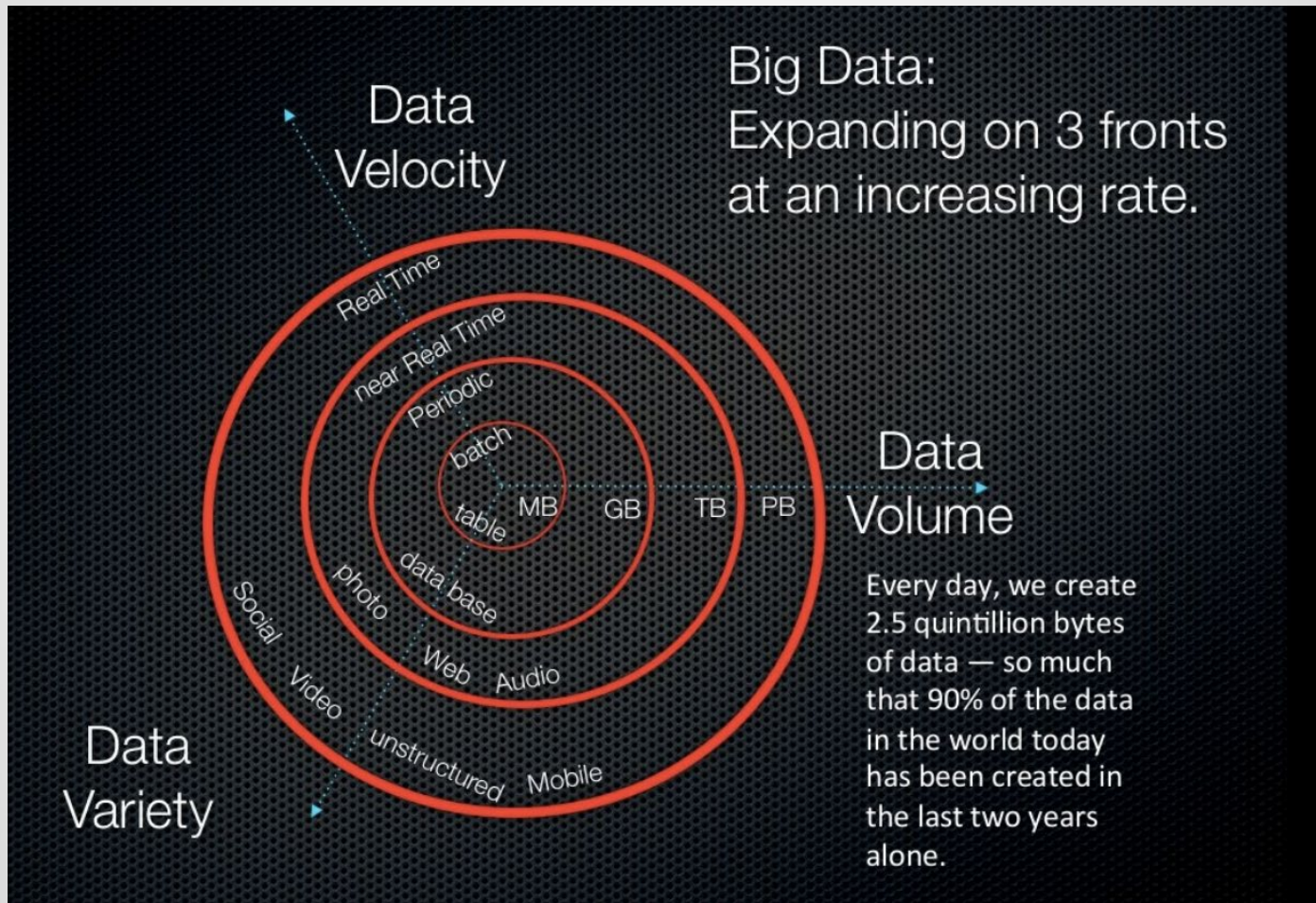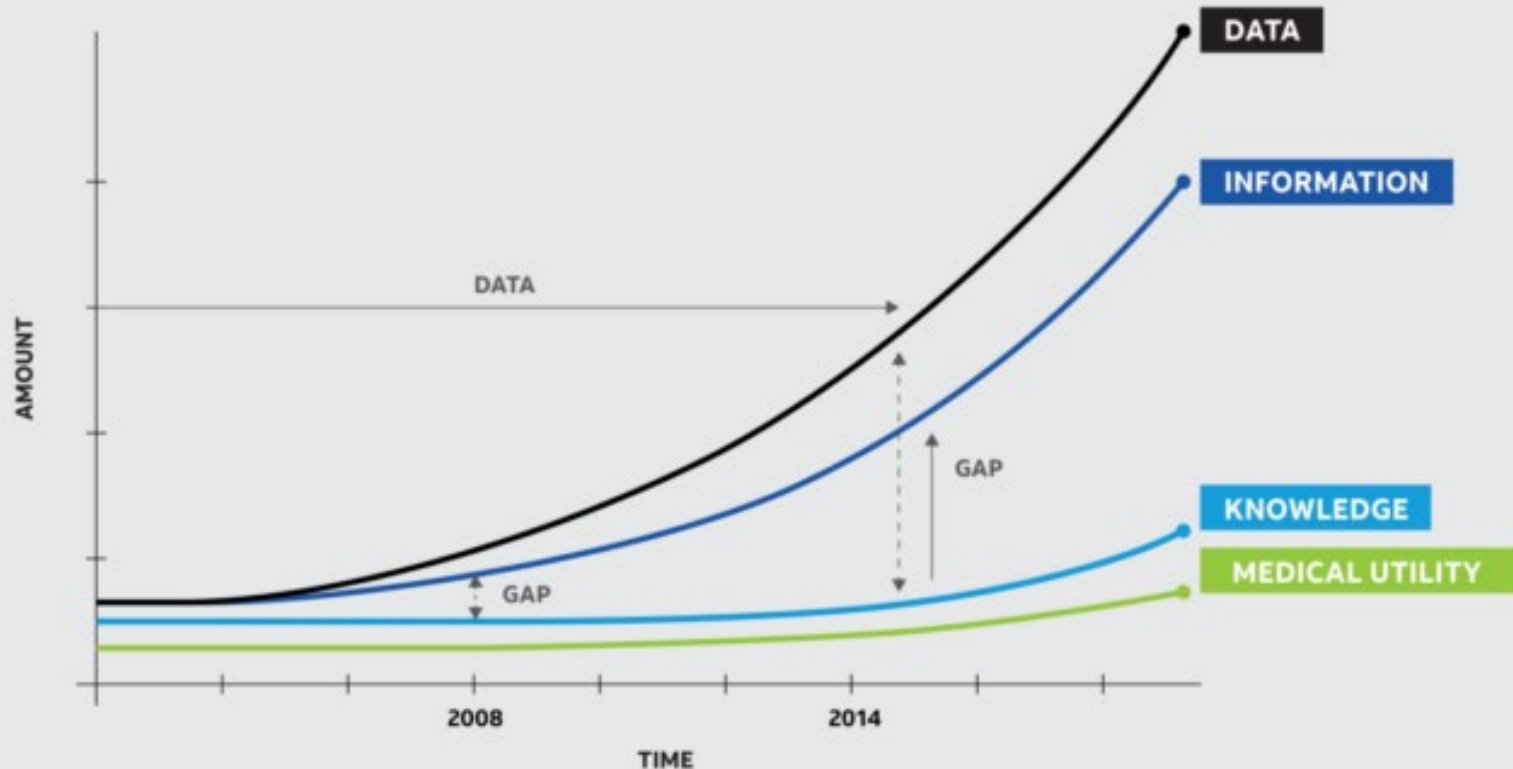
The Expanded "Computational Parameters" of GPT-4

GPT-4

GPT-3

175,000,000,000   100,000,000,000,000

You Are Here!

5
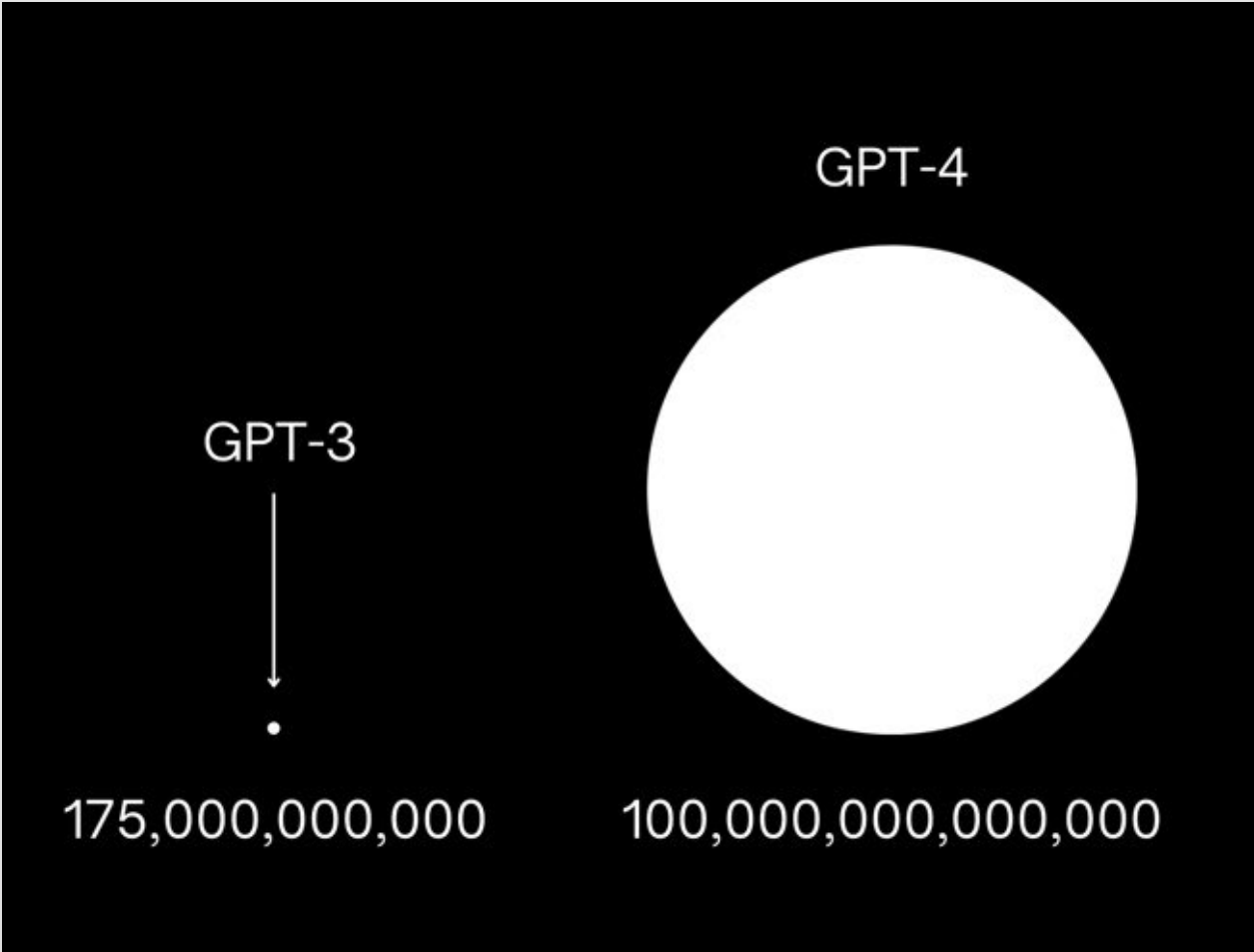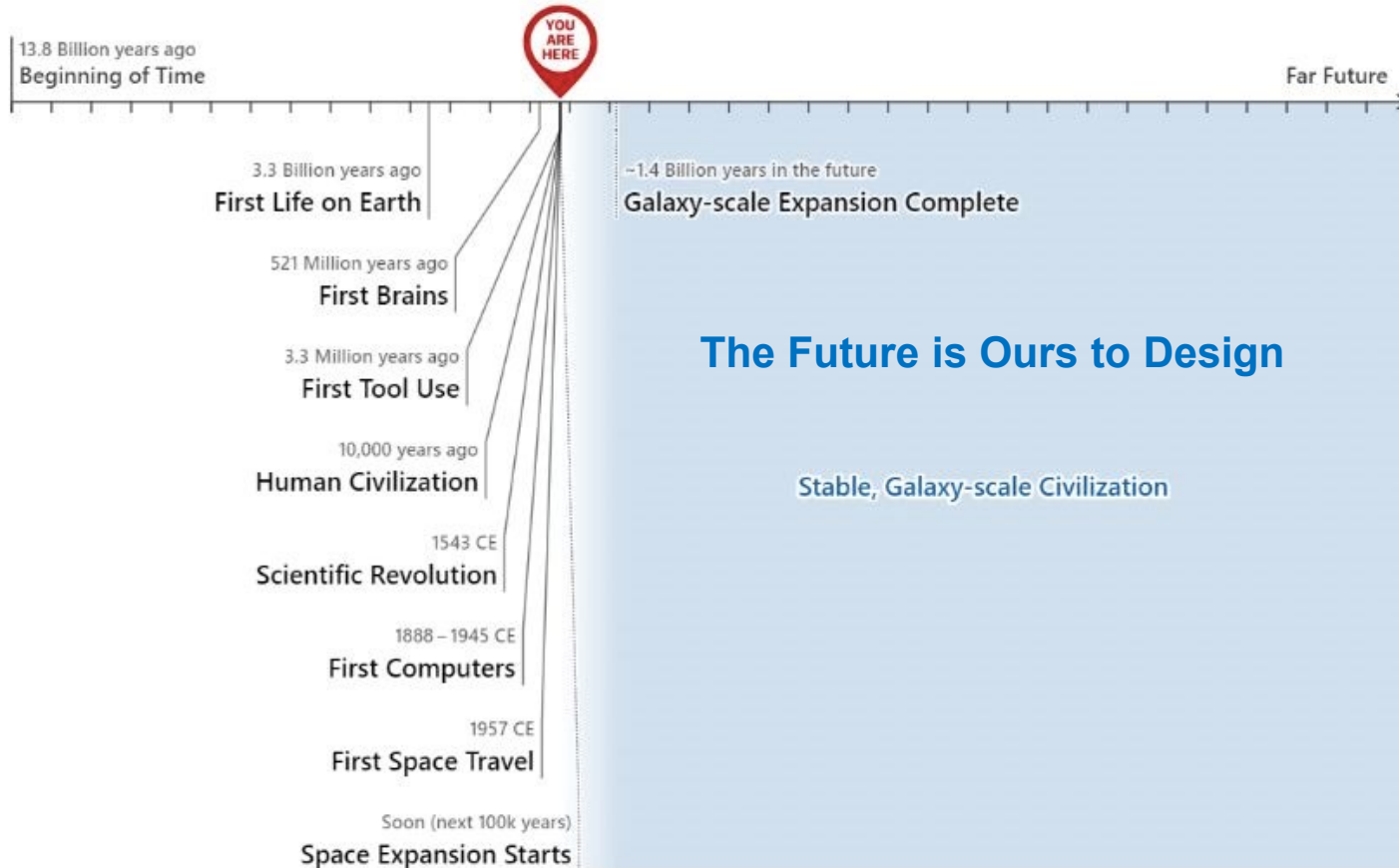
Change, And The Rate Of Change

A Tsunami Of Data
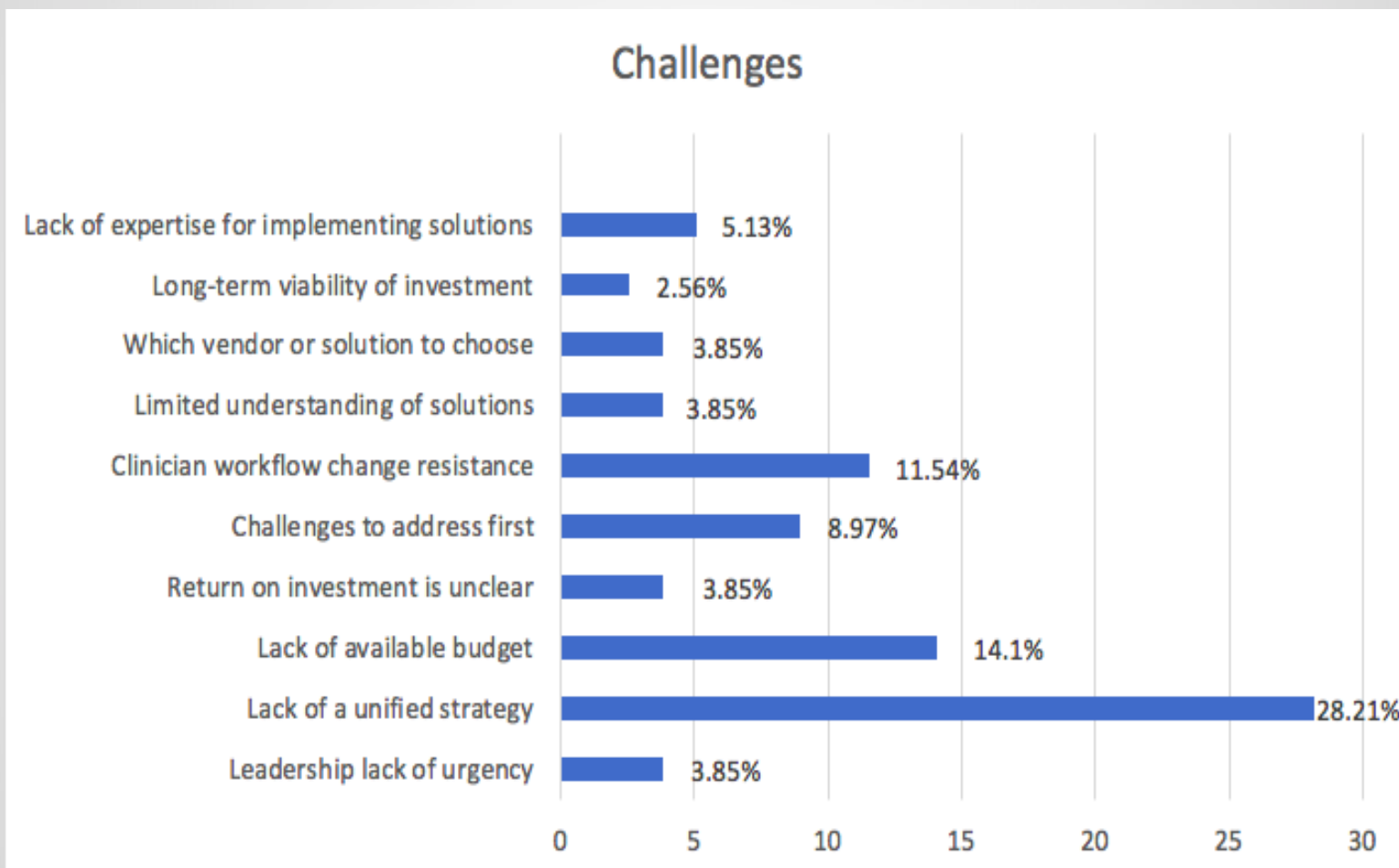
The Data Dilemma And The Clinical (Human) Utility Gap

IPQ Analytics 2021

A FEW UN-RULES OF EXPONENTIAL INNOVATION

Exponential Growth Is Tricky
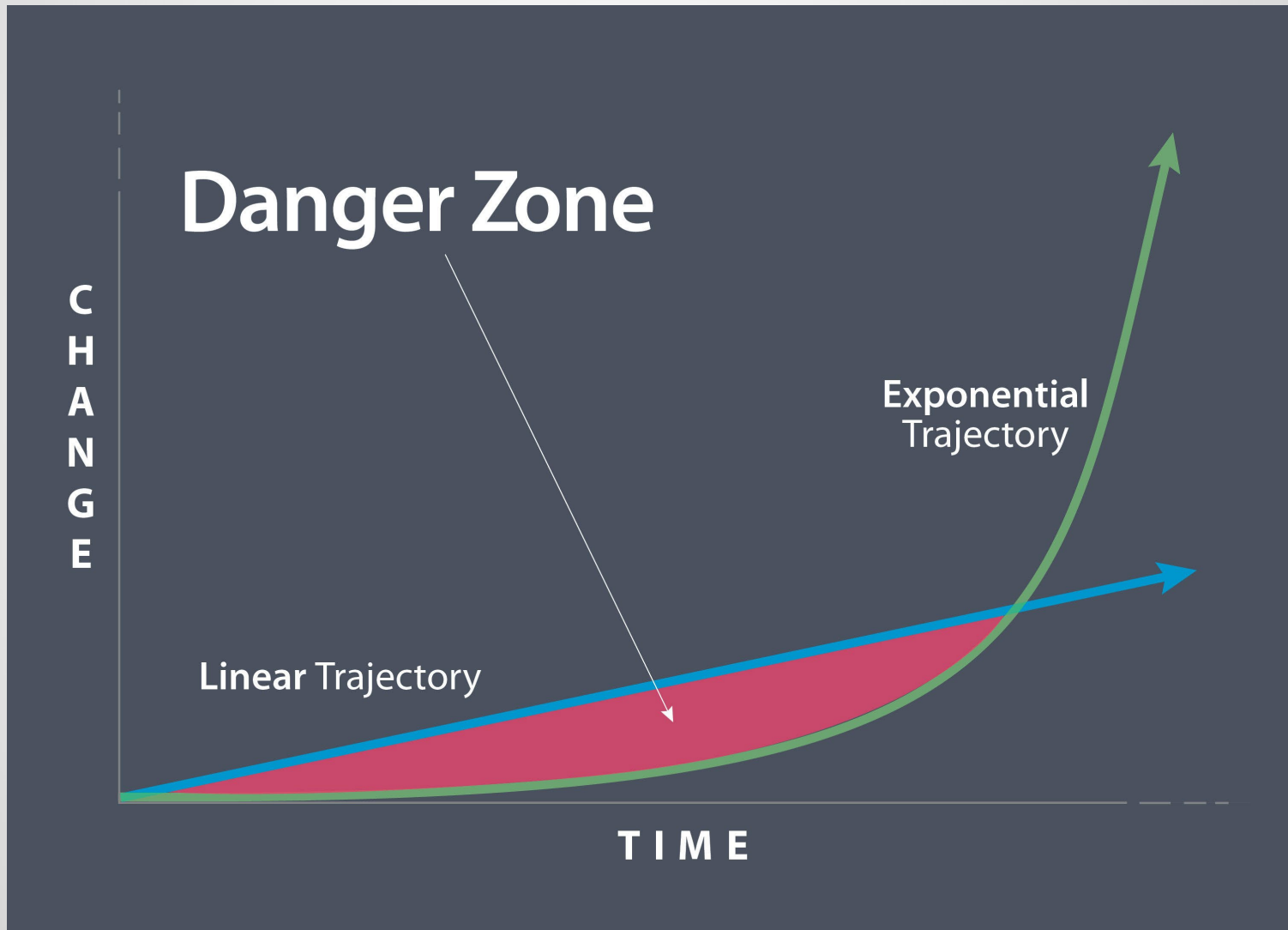
Technology…Without A Plan.

Challenges

Challenge	Value
Lack of expertise for implementing solutions	5.13%
Long-term viability of investment	2.56%
Which vendor or solution to choose	3.85%
Limited understanding of solutions	3.85%
Clinician workflow change resistance	11.54%
Challenges to address first	8.97%
Return on investment is unclear	3.85%
Lack of available budget	14.1%
Lack of a unified strategy	28.21%
Leadership lack of urgency	3.85%

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)

Culture Destroys Innovation

Collaboration And Mediocrity

The New Collaborative Dynamic
(Who is the smartest person in the room?)
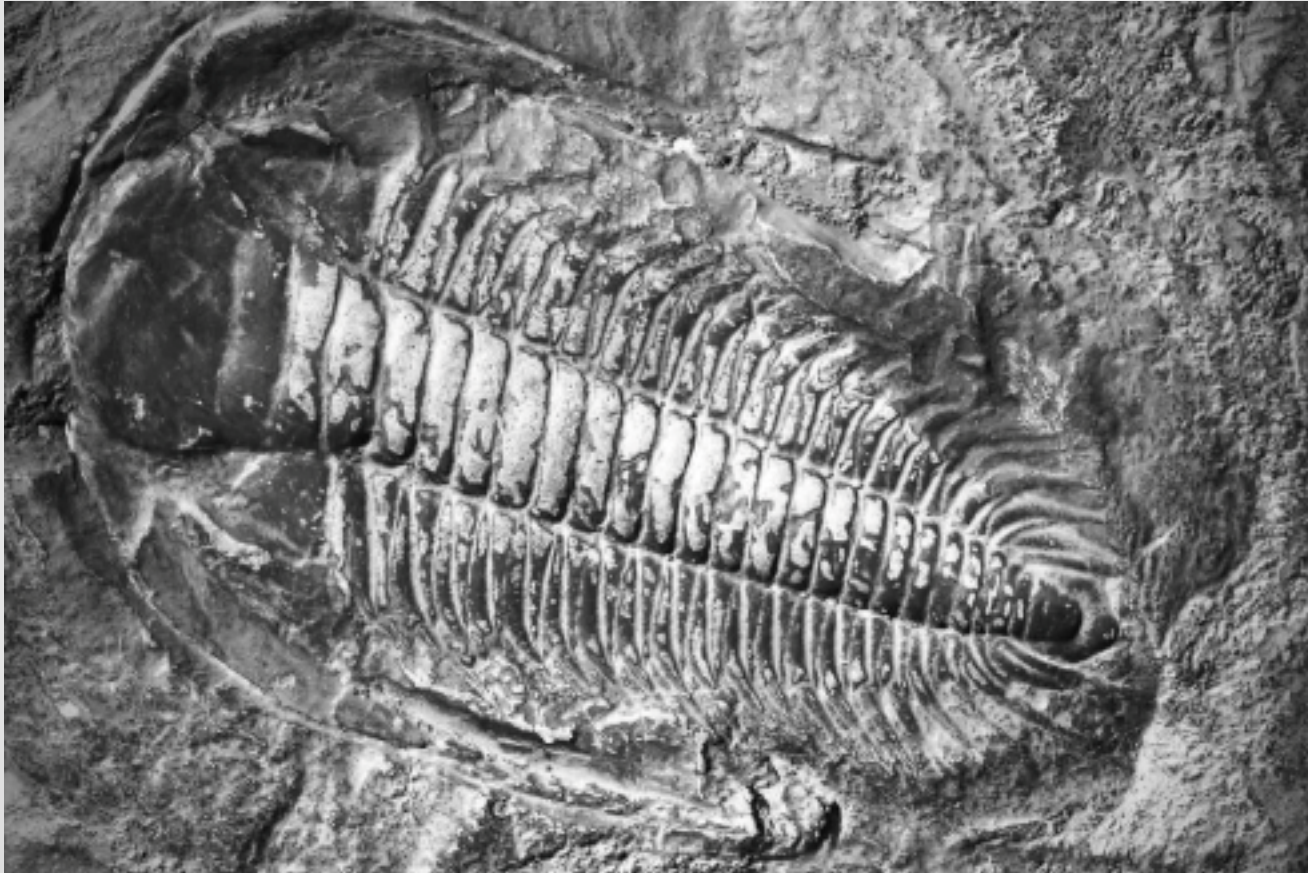
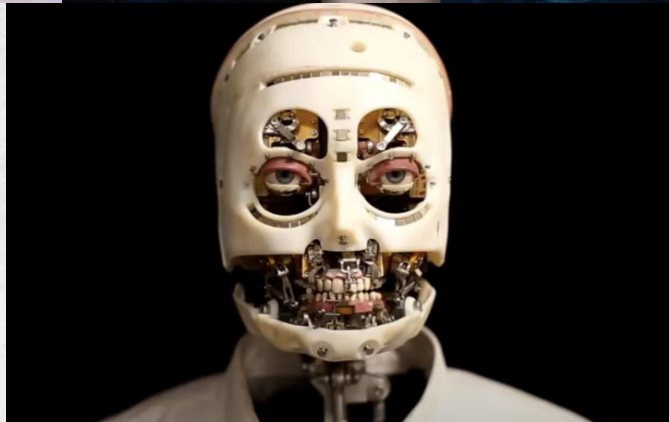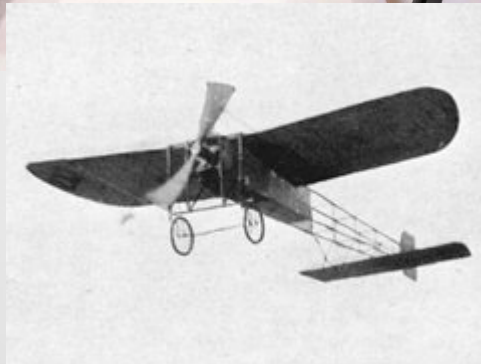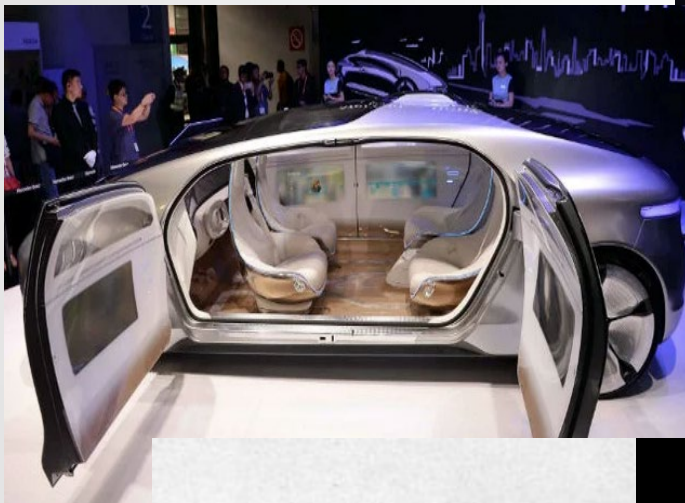# Innovation And Adoption: The Dvorak Keyboard

QWERTY heat map

Dvorak heat map

The Rule Of Punctuated Equilibrium

Steve Jobs' Radio Show And Lesson For Telemedicine
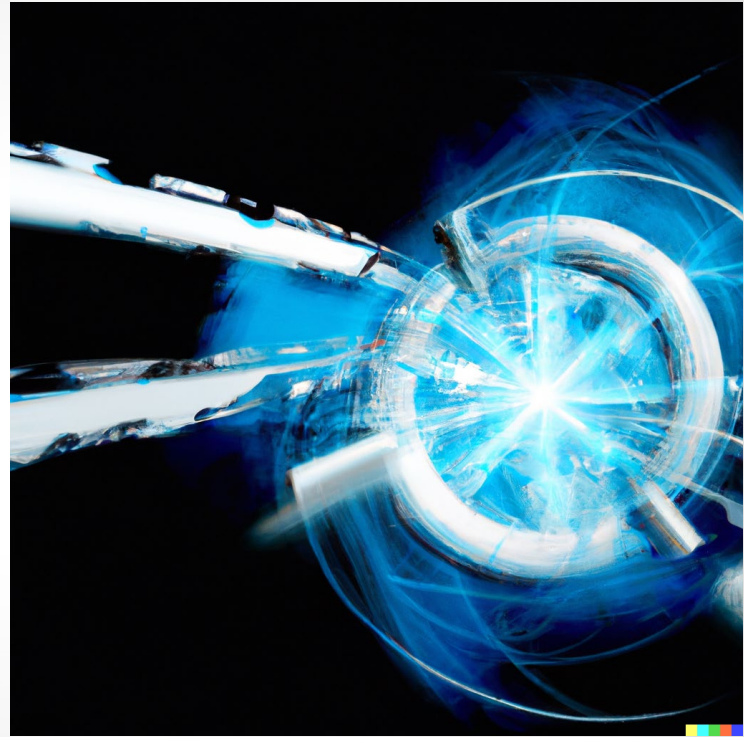
The Duality Of Wonder & Fear
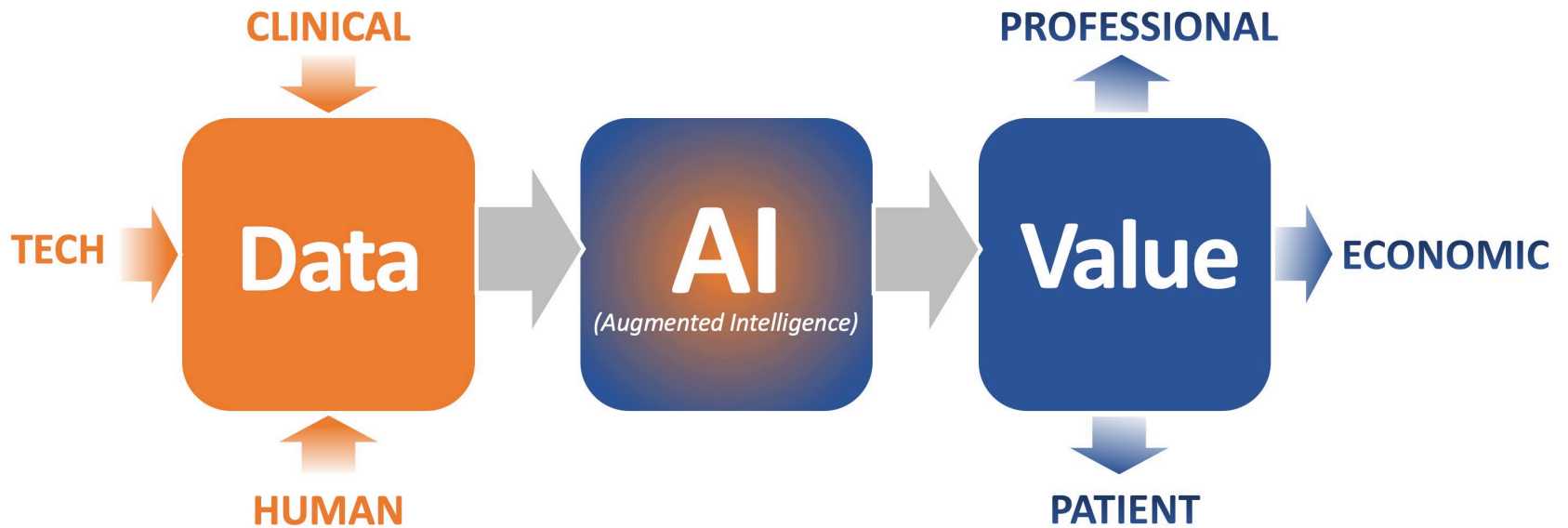
Moving Beyond Just IQ & EQ
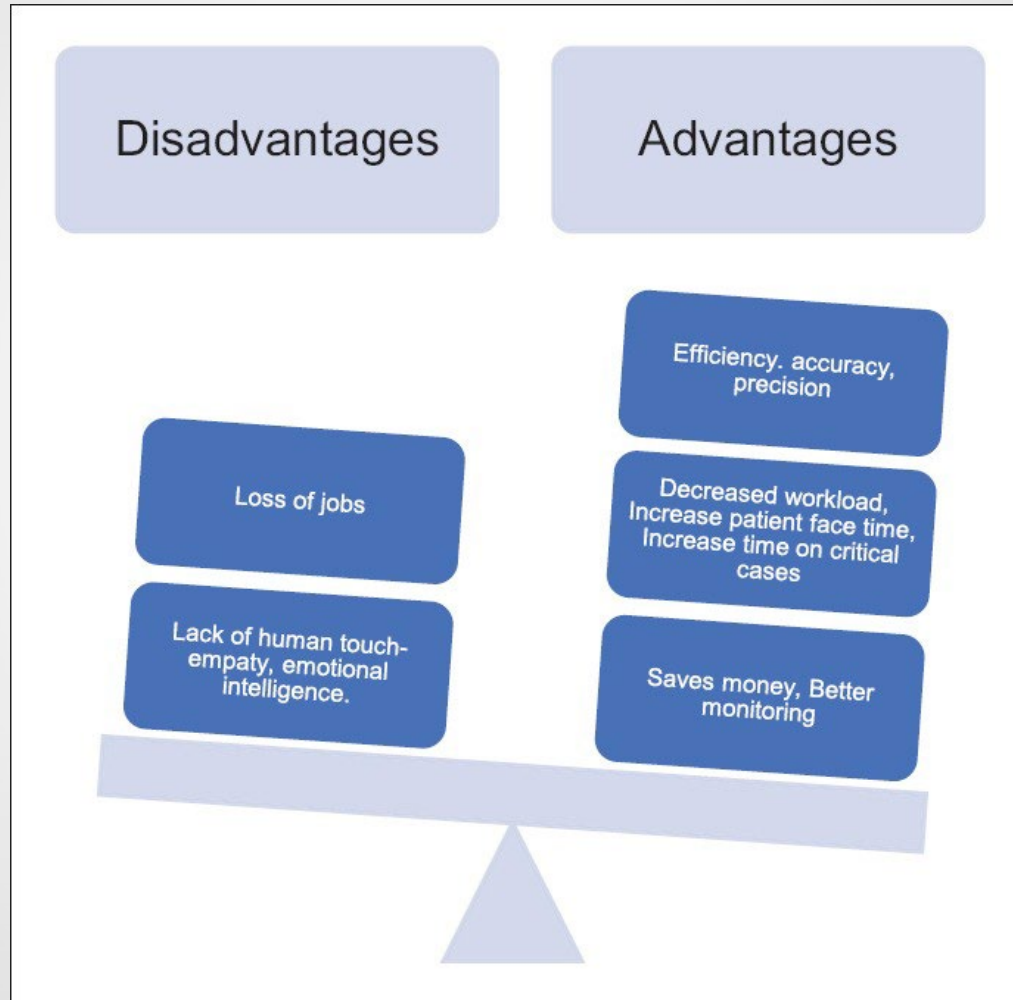
It's Not Innovate, It's Synchrovate!

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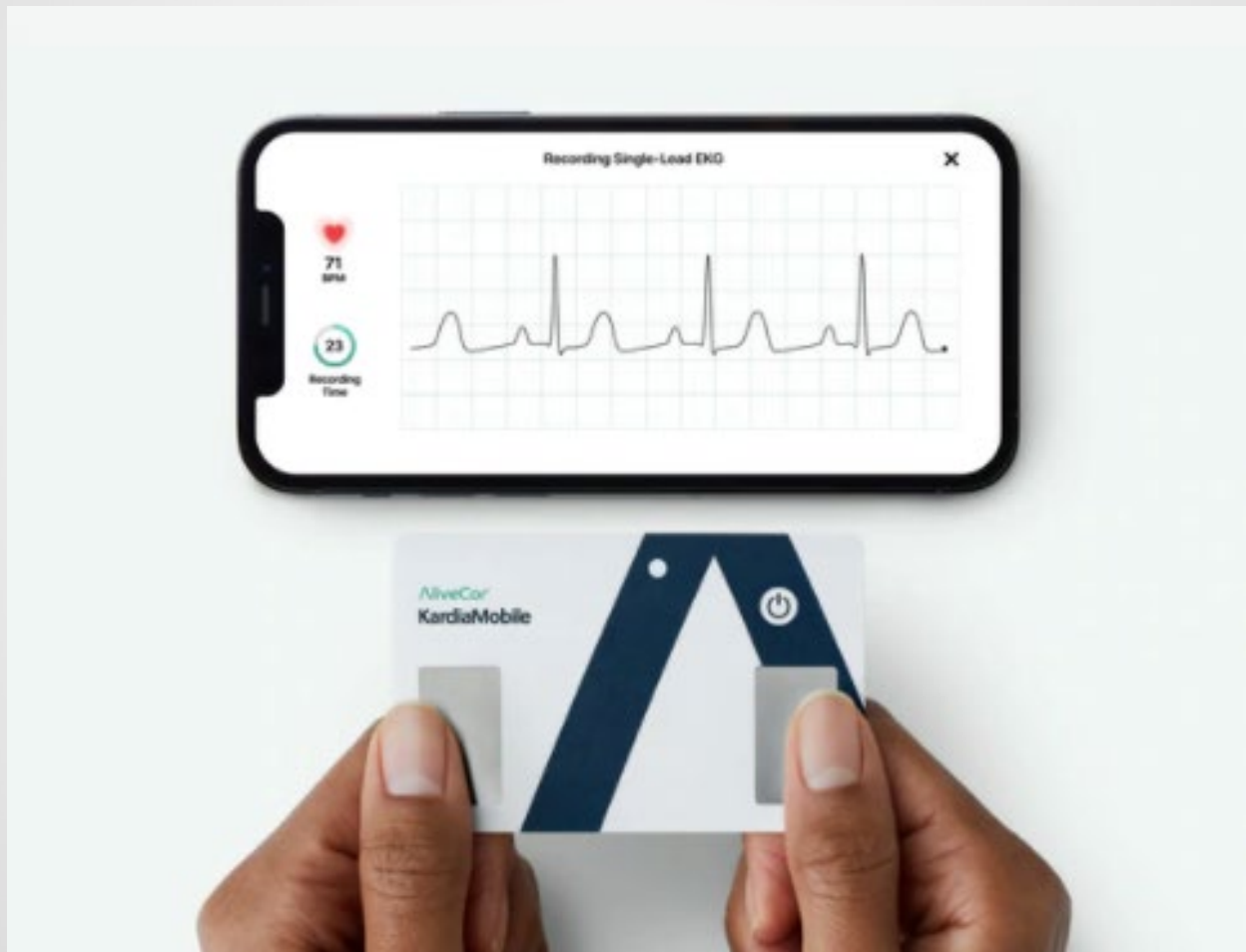
Synchrovation in Practice

Technology Tips The Scale In Your Favor

INNOVATION ON *YOUR* RADAR

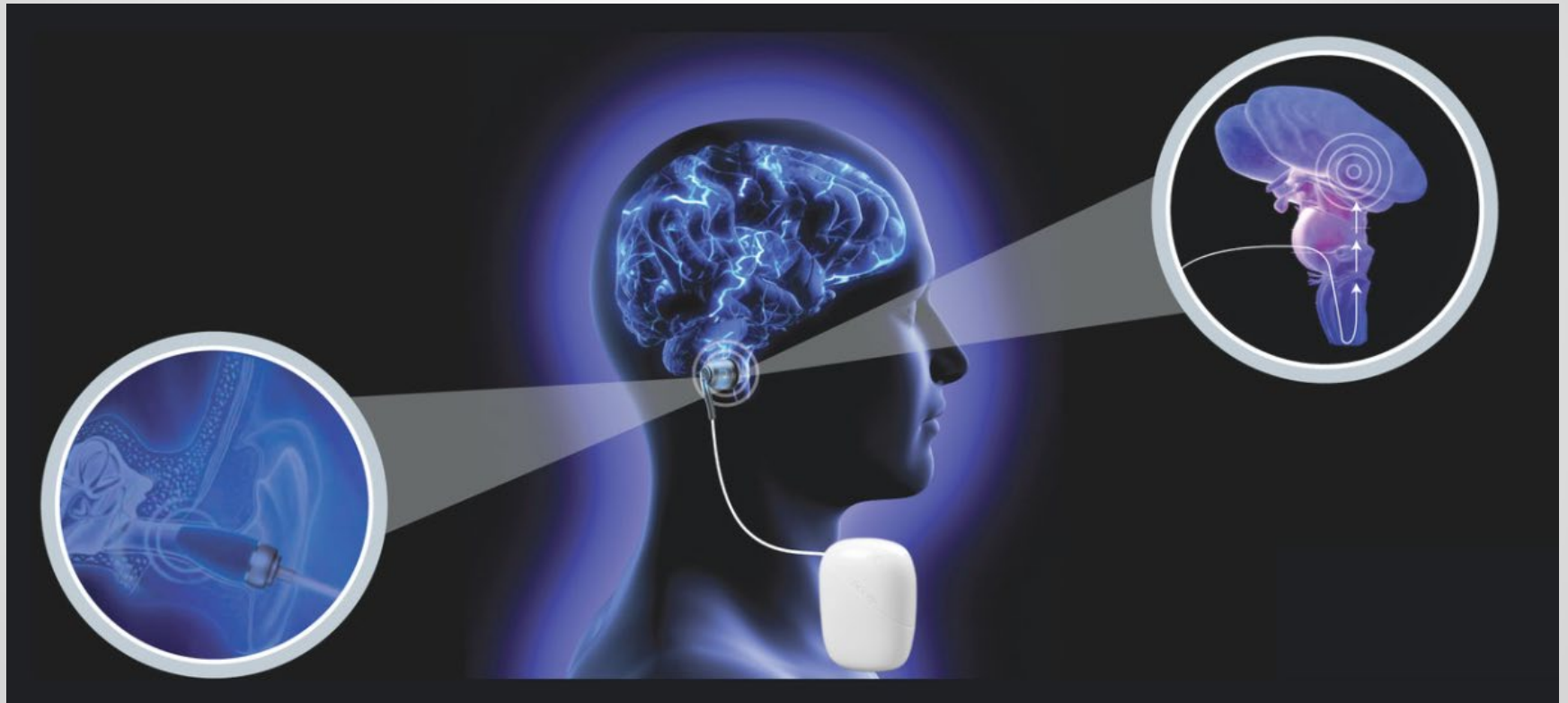# AliveCor—From Office To Amazon

Nanox—Digitizing The X-Ray Source

EKO—Reinventing The Stethoscope

Nocira—Treating Migraines With A Puff of Air

Profusa—Disrupting The Disruptor

A THOUGHT 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

Thank You

@JohnNosta