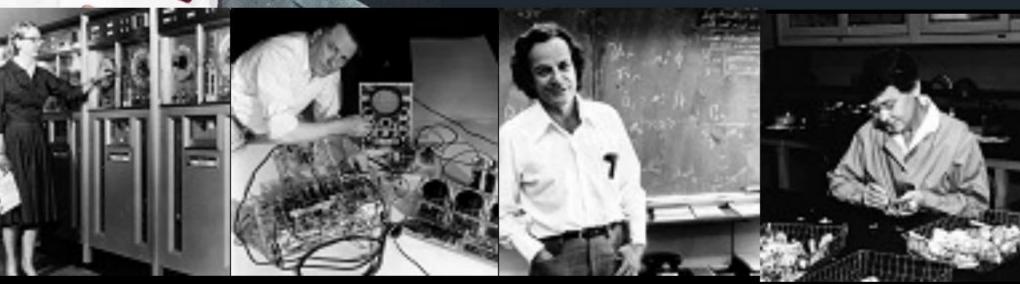
## FuturistSpeaker.com



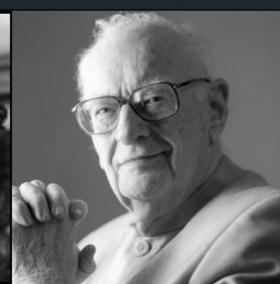
#### Fifth Annual Kyunghyang Forum

"Understanding Our Post-COVID World: Preparing for the Coming Tidal Wave of Disruption & Opportunity"









#### Futurist Thomas Frey

**Executive Director** 

Twitter - @ThomasFrey

DaVinci Institute, Westminster, CO 80031

(303) 666-4133 - dr2tom@davinciinstitute.com

### Every 10 seconds ...

... another 17 people die!

# 151,600

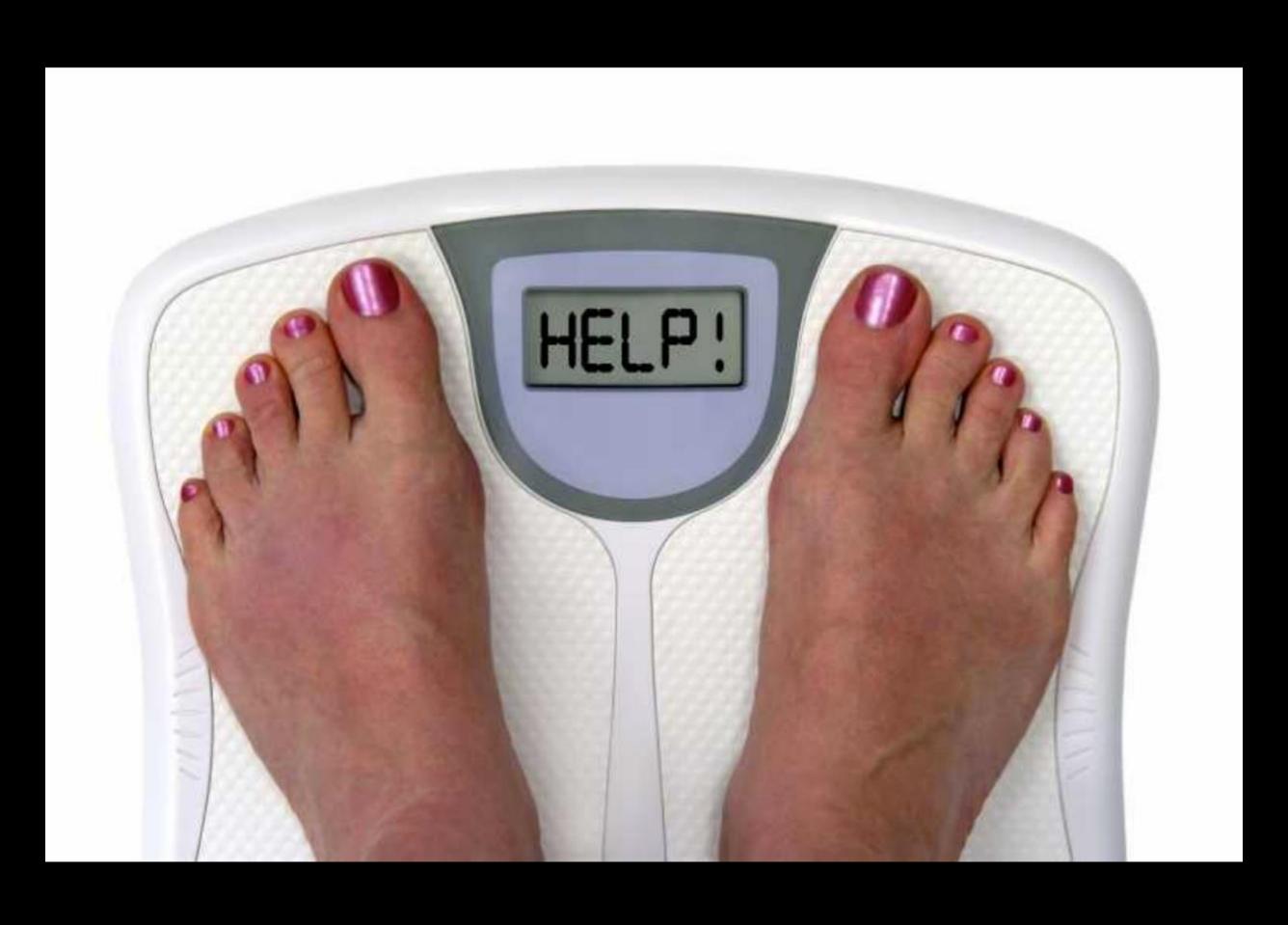
#### QUESTION

- No person should ever die ... ever!
- If we can fix human aging, repair accidents, cure diseases, & modify deviant behavior, people no longer need to die.
- As a result, no person should ever die ...

#### ...ever!

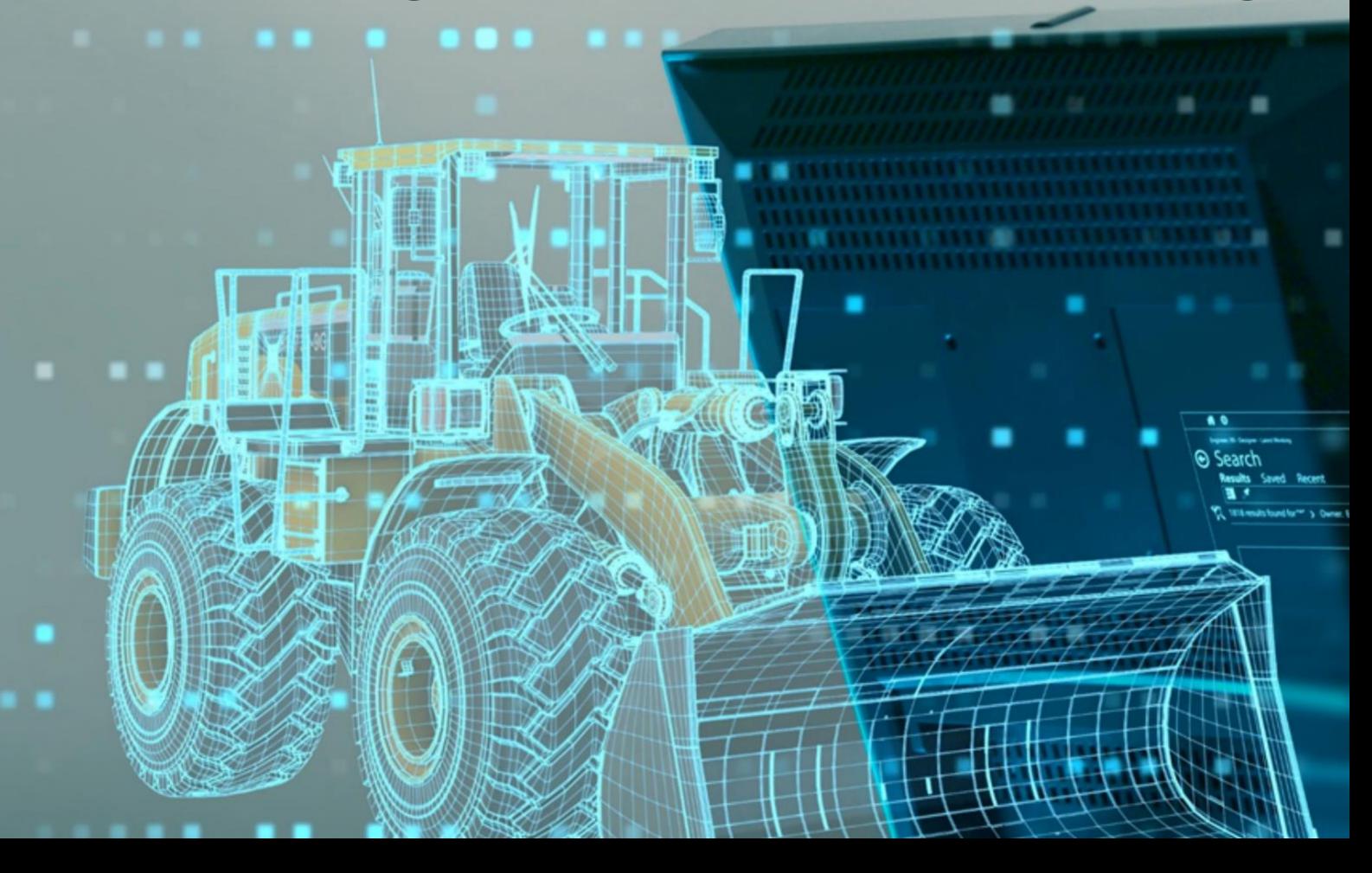
• Is that our goal? And if not, why not?

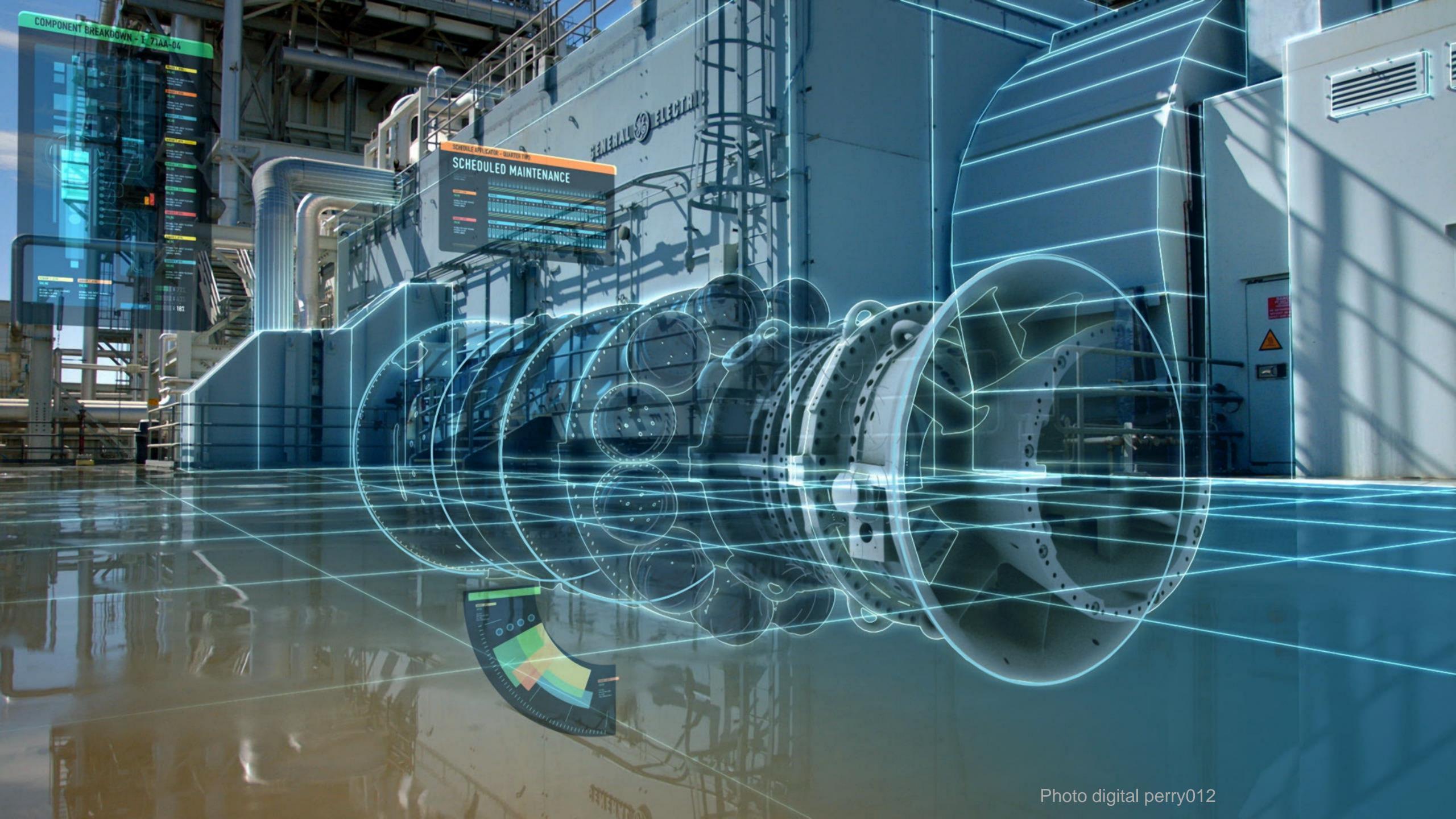
#### Major Challenges Ahead



- 34% obese
- 20.6% smoke
- 20.9% over 5 drinks a day
- Only 25.4% physically active
- 55.6 million diagnosed with mental disorders

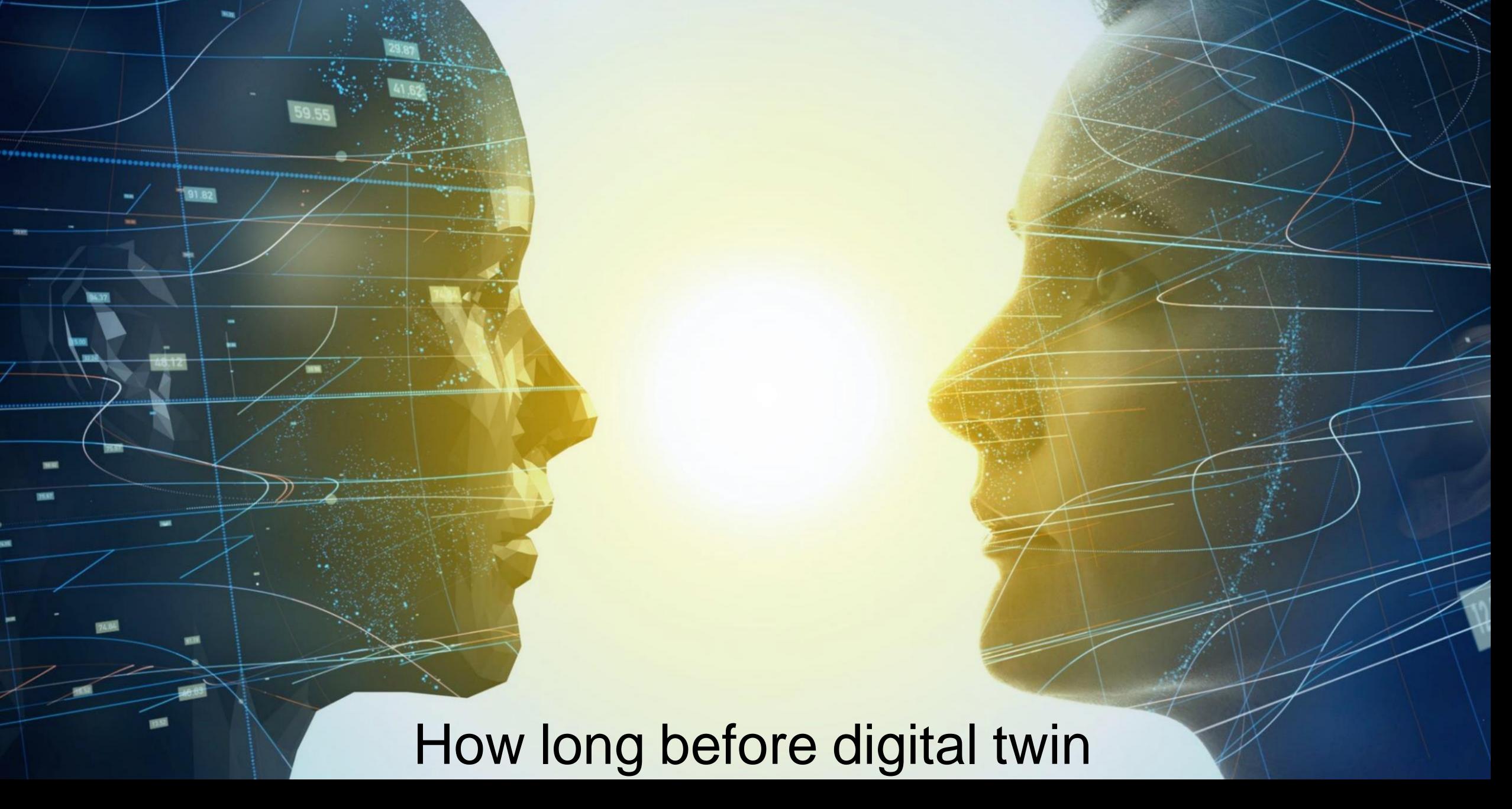
### Digital Twin Technology

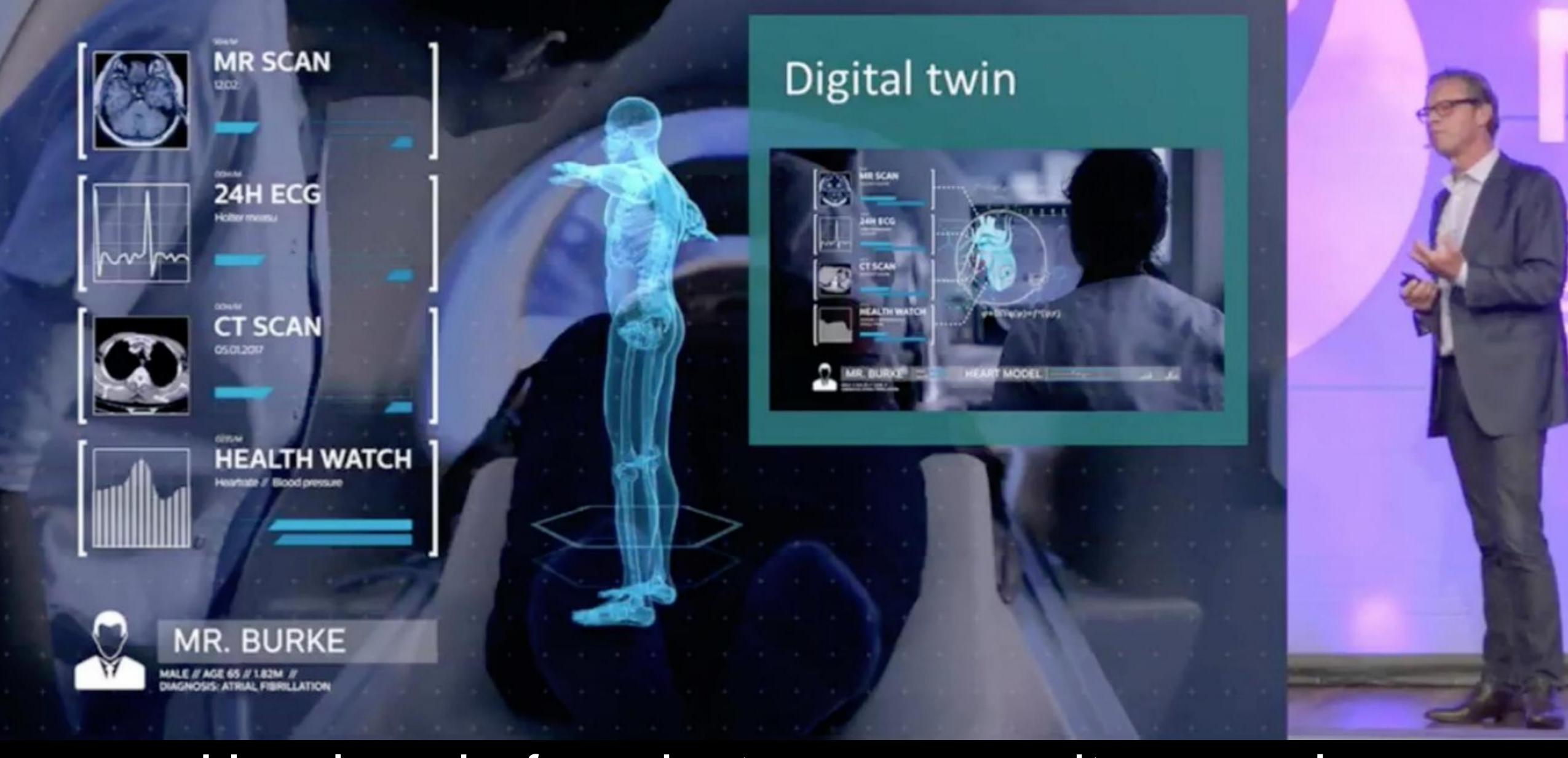












How long before doctors can monitor some's health remotely through their digital twin?

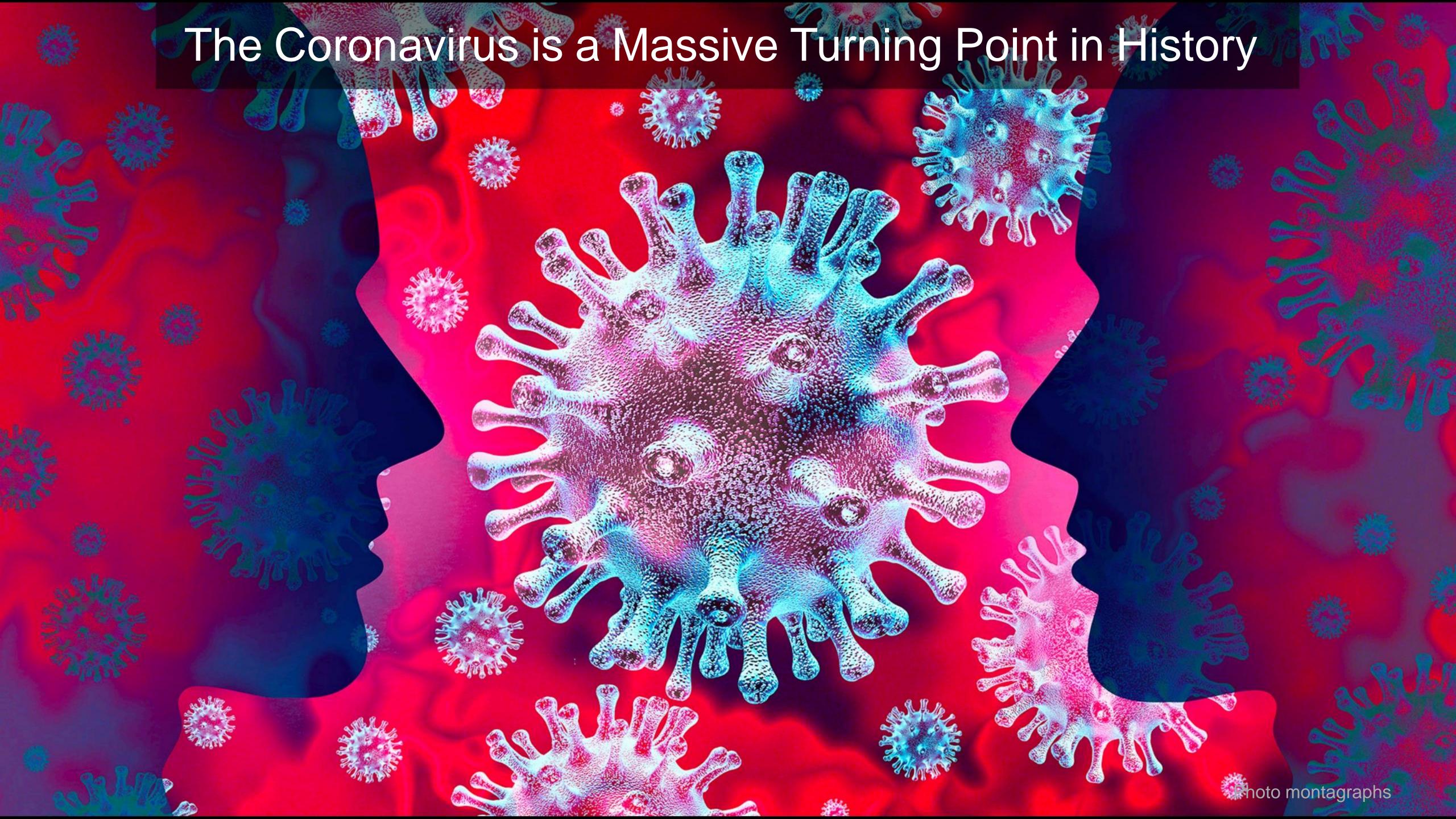
Healthcare is transitioning from an industry driven by pharmaceuticals to an industry driven by data!

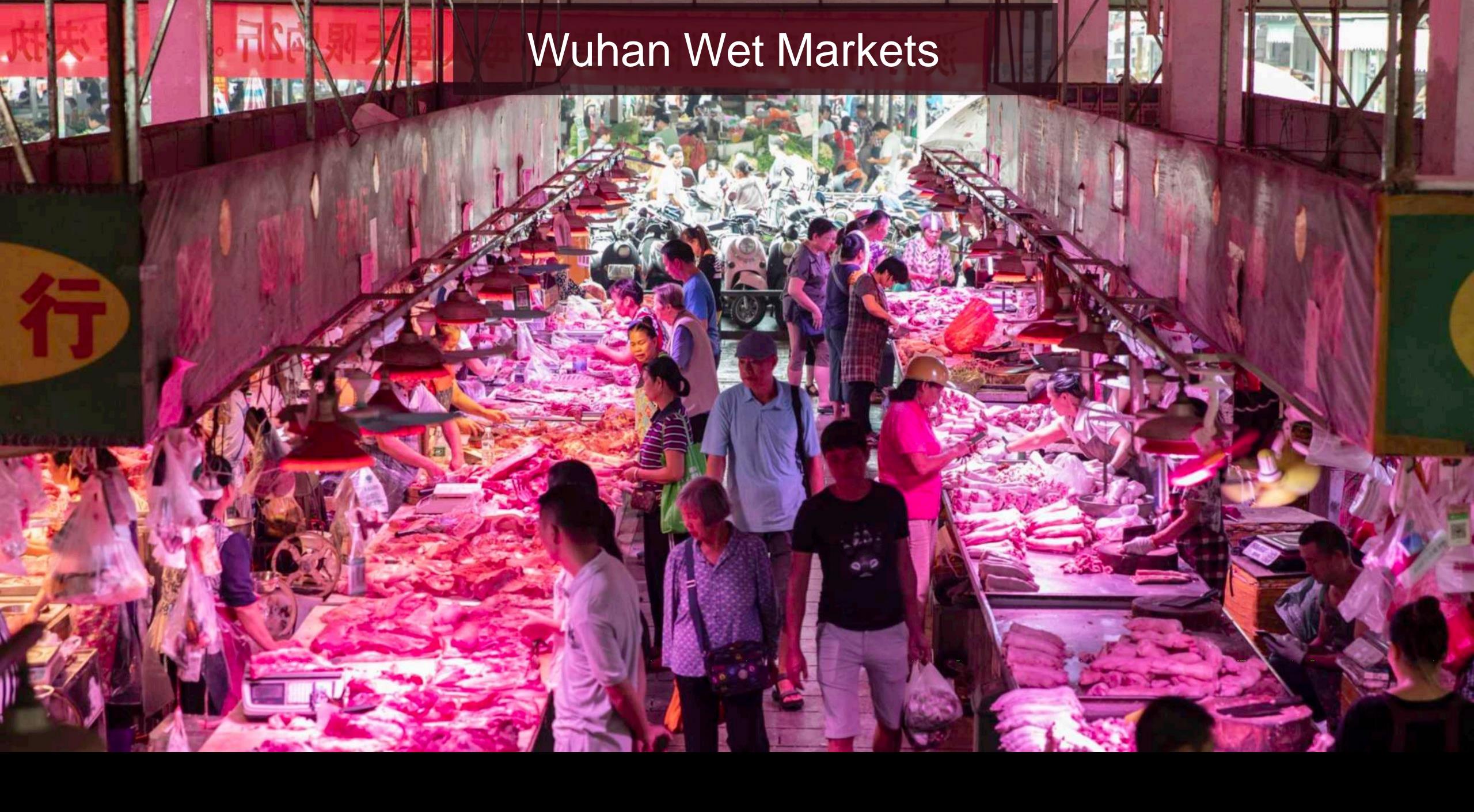




# Did you predict a global pandemic?

### Yes, but ...









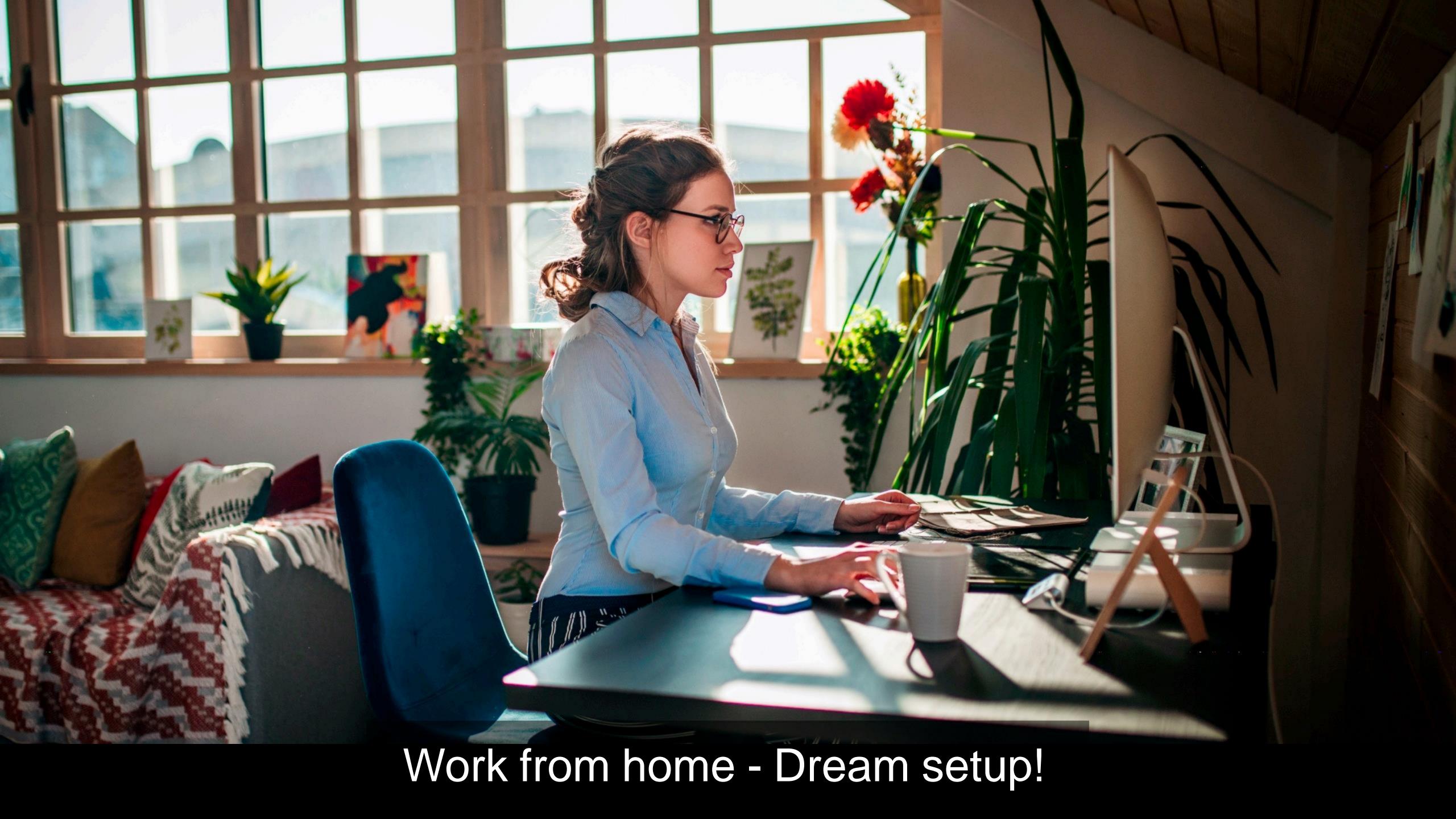


# We are rebooting society - several pluses and minuses!



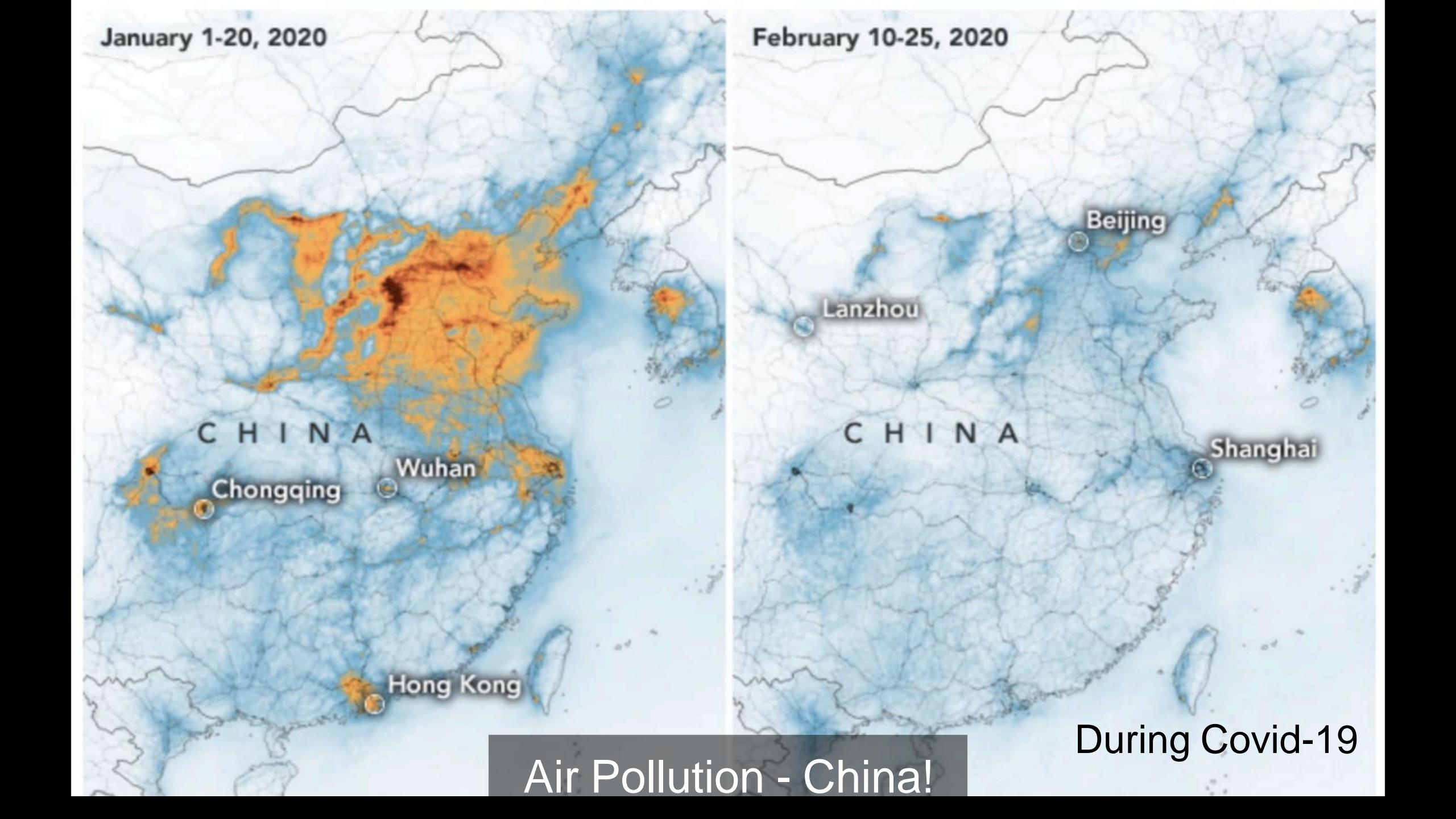


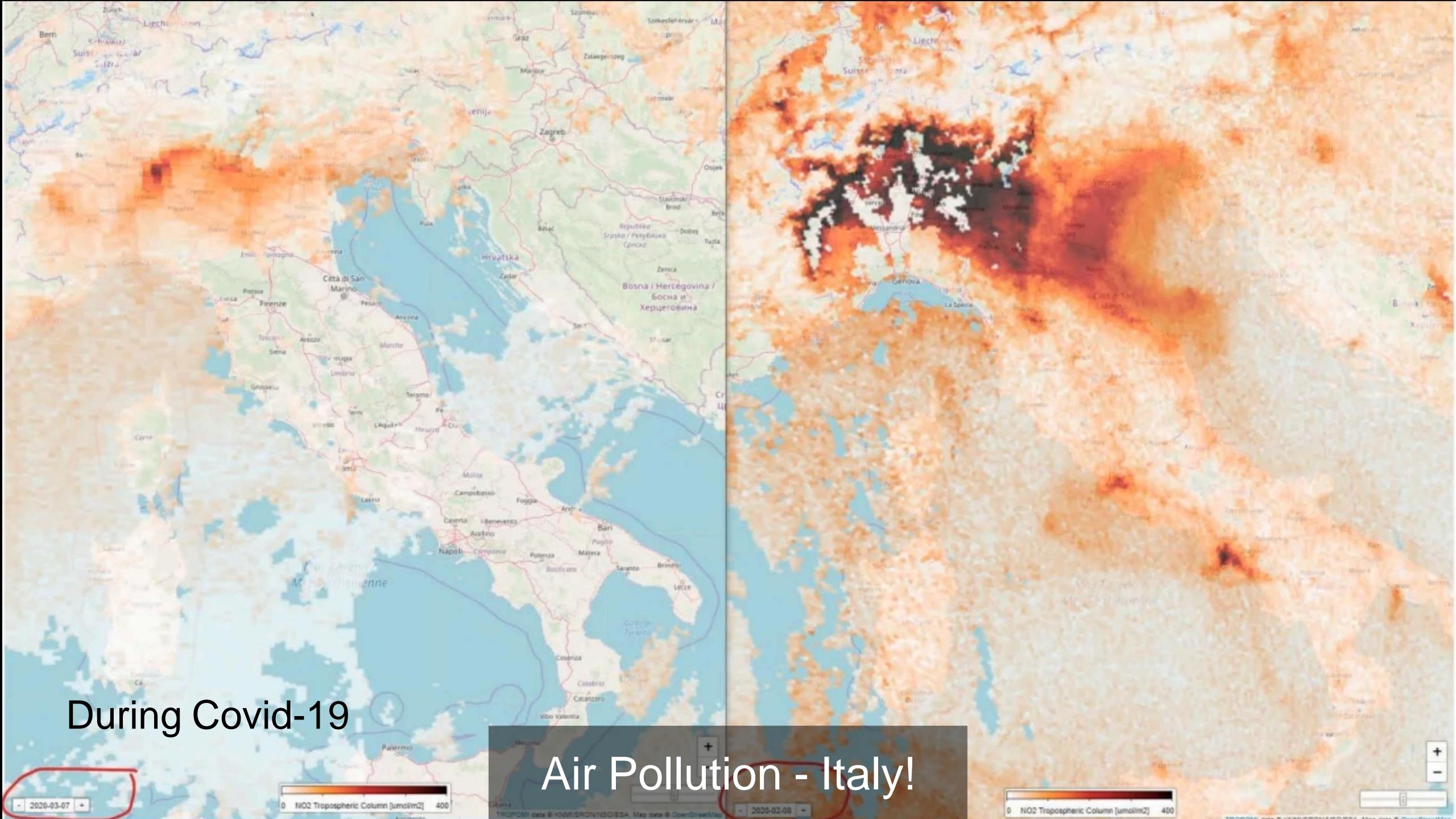
The great reboot has given us time to think!













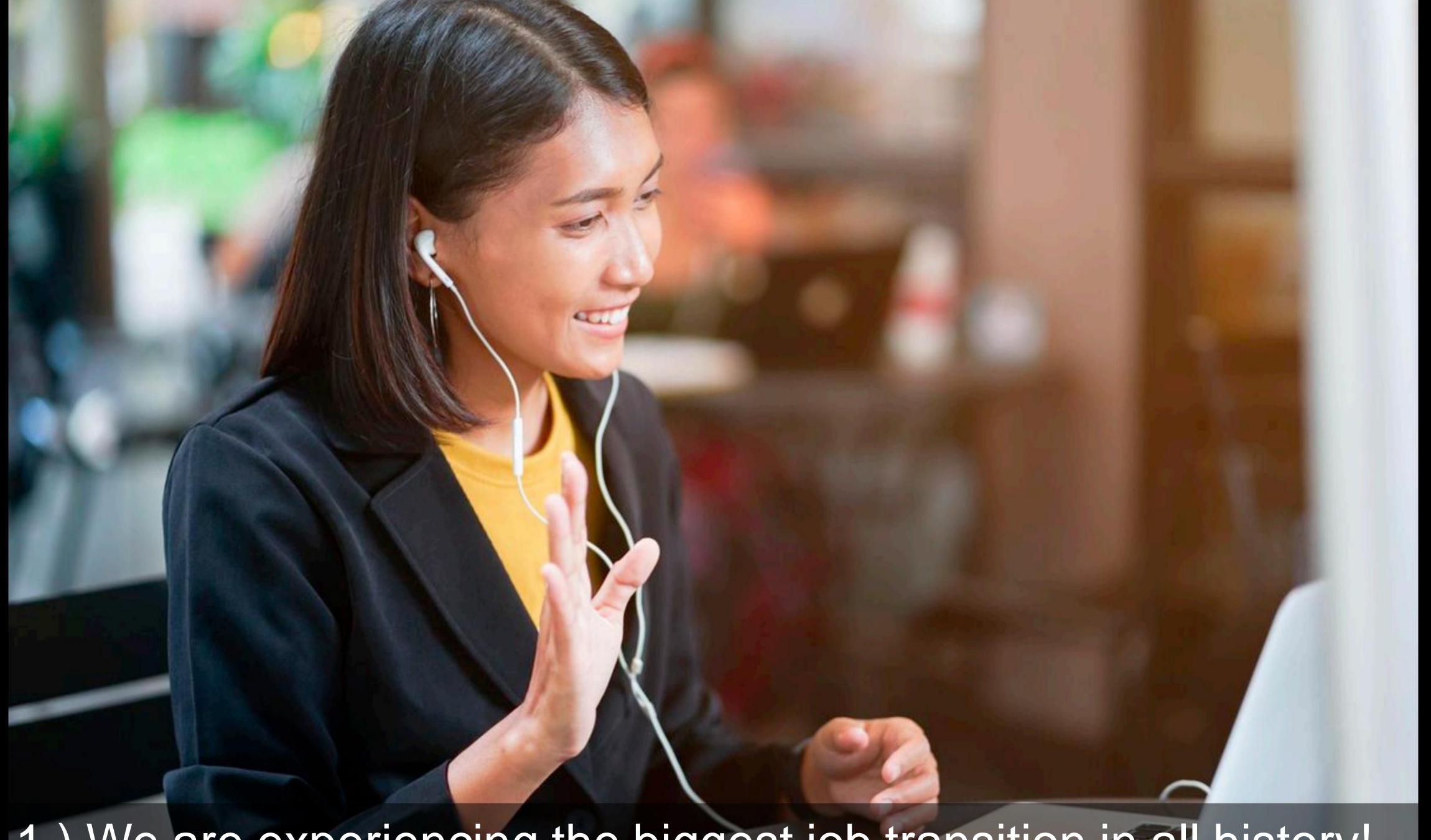
## This will be the most expensive crisis in human history!



Businesses were never designed to be shut down and restarted months later

It's impossible to have this many top-down decisions without creating a massive number of unintended consequences!

# Future Trends: 10 Predictions!



1.) We are experiencing the biggest job transition in all history!



Most are looking for more "meaning" and "purpose"



# Hot New Skills **(** Problem-Solving & Critical Thinking









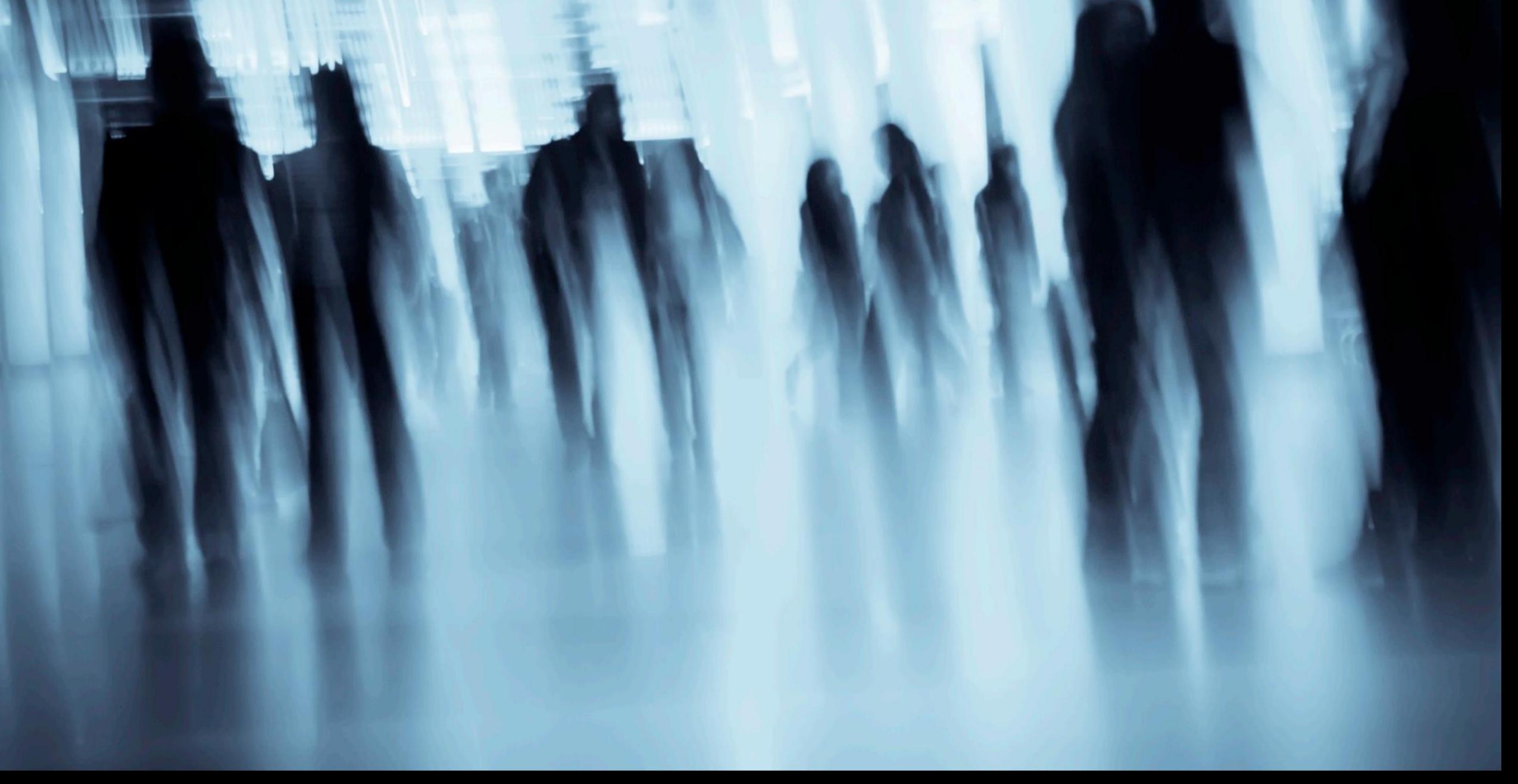




Shaking hands has become a symbol for "you're an idiot!"



4.) Universities are struggling! Roughly 50% will close by 2030!



5.) Covid: Greatest source of conspiracy theories in all history!

### Many business sectors are still struggling!





#### Concerts!

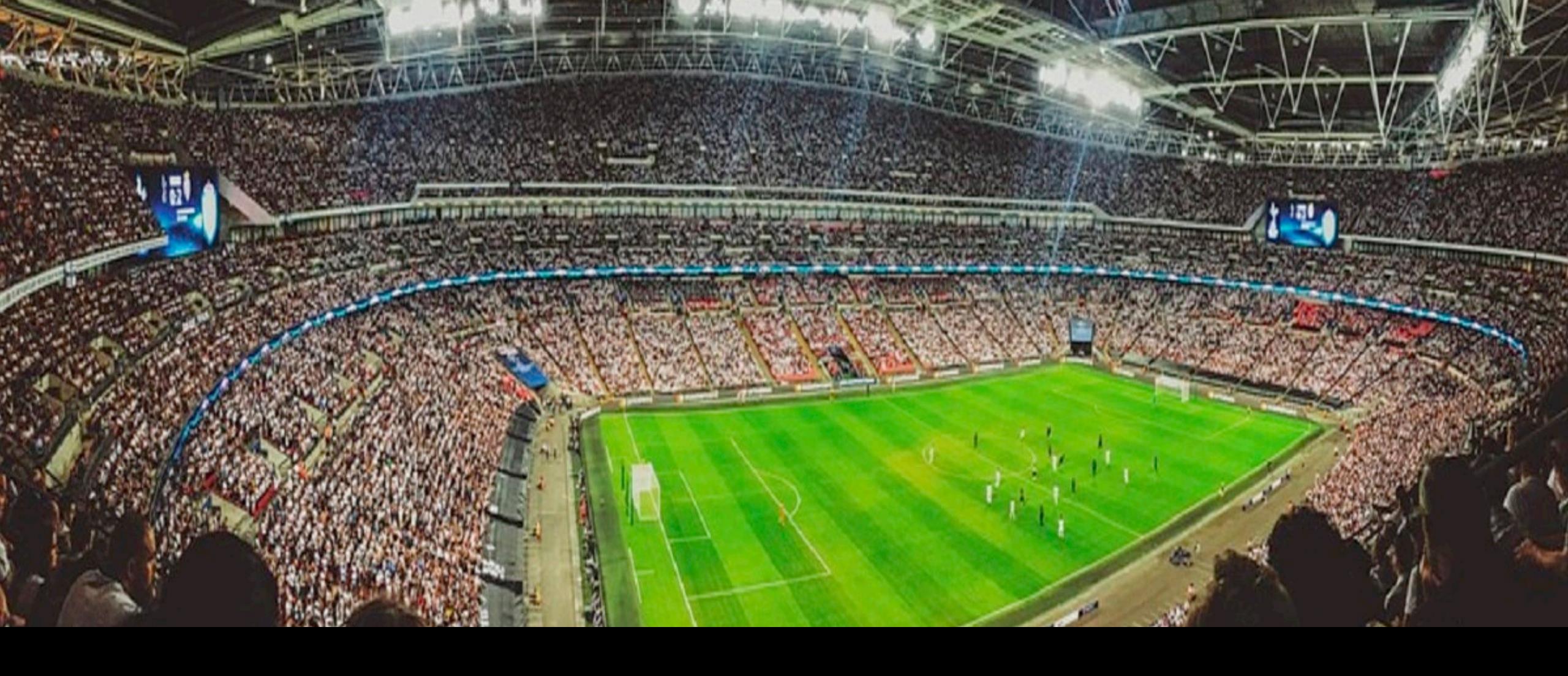












Professional Sports!



Movie Theaters!





But some business sectors are moving exponentially faster!

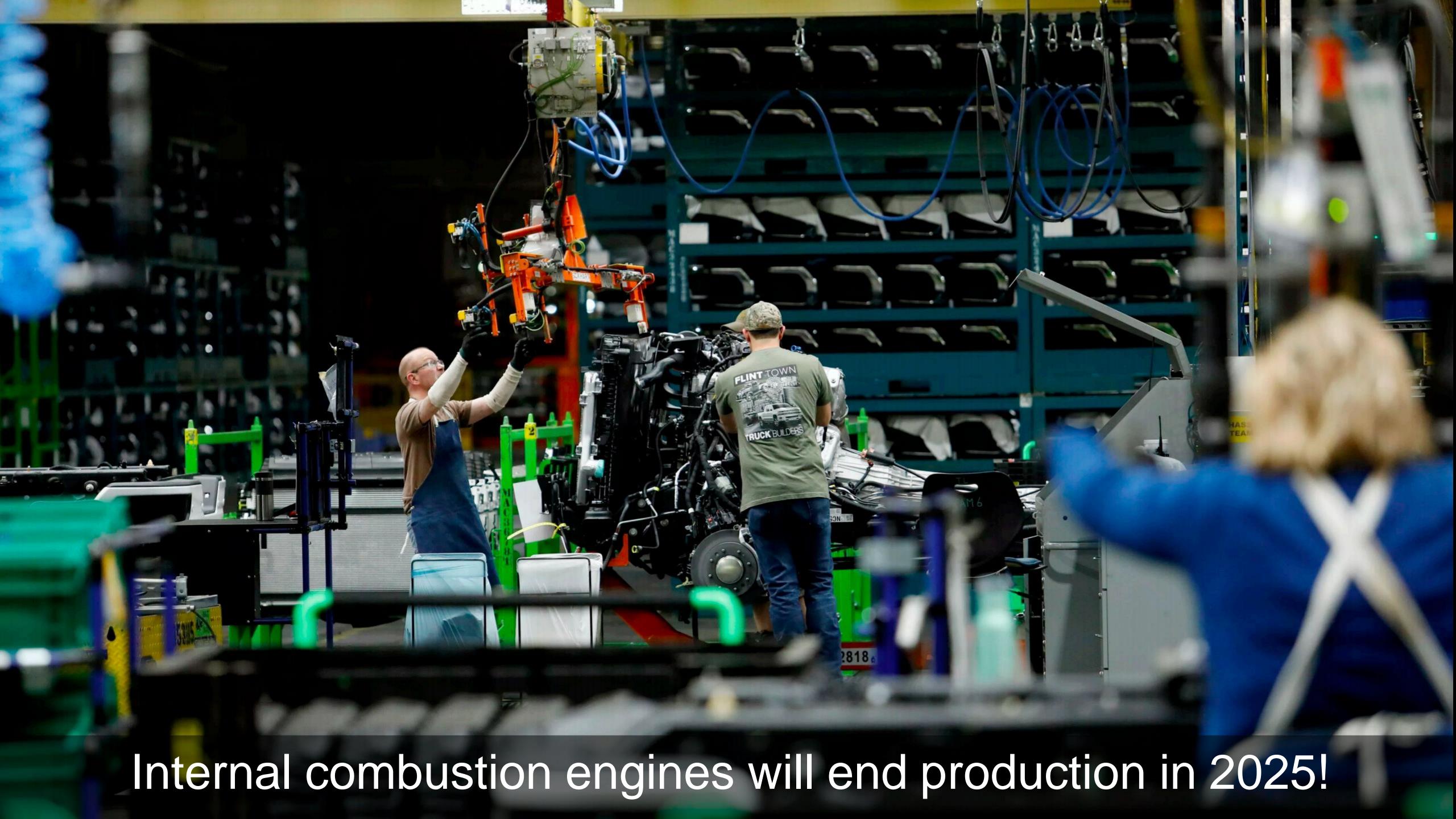




Most successful product launch in history!



Now the most valuable car company in the world!





7.) Lab-grown meat production facilities will be common in 2025!







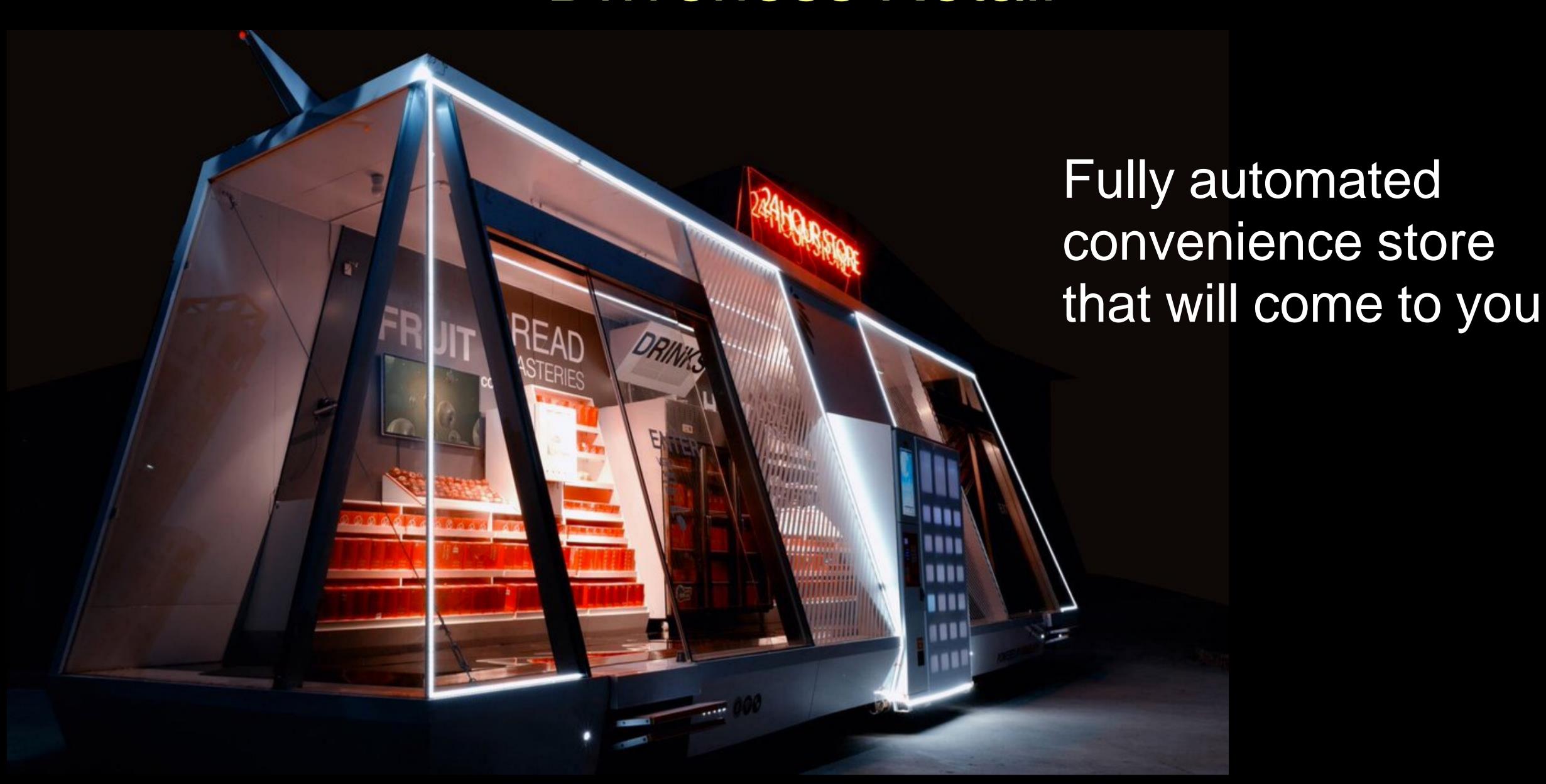
10.) Driverless technology will be the most disruptive in all history

## Future Retail defined by Driverless Mobile Businesses

### Driverless Mobile Businesses



### Driverless Retail

























## Mobile Vending Machines



#### Mobile Hotel Rooms

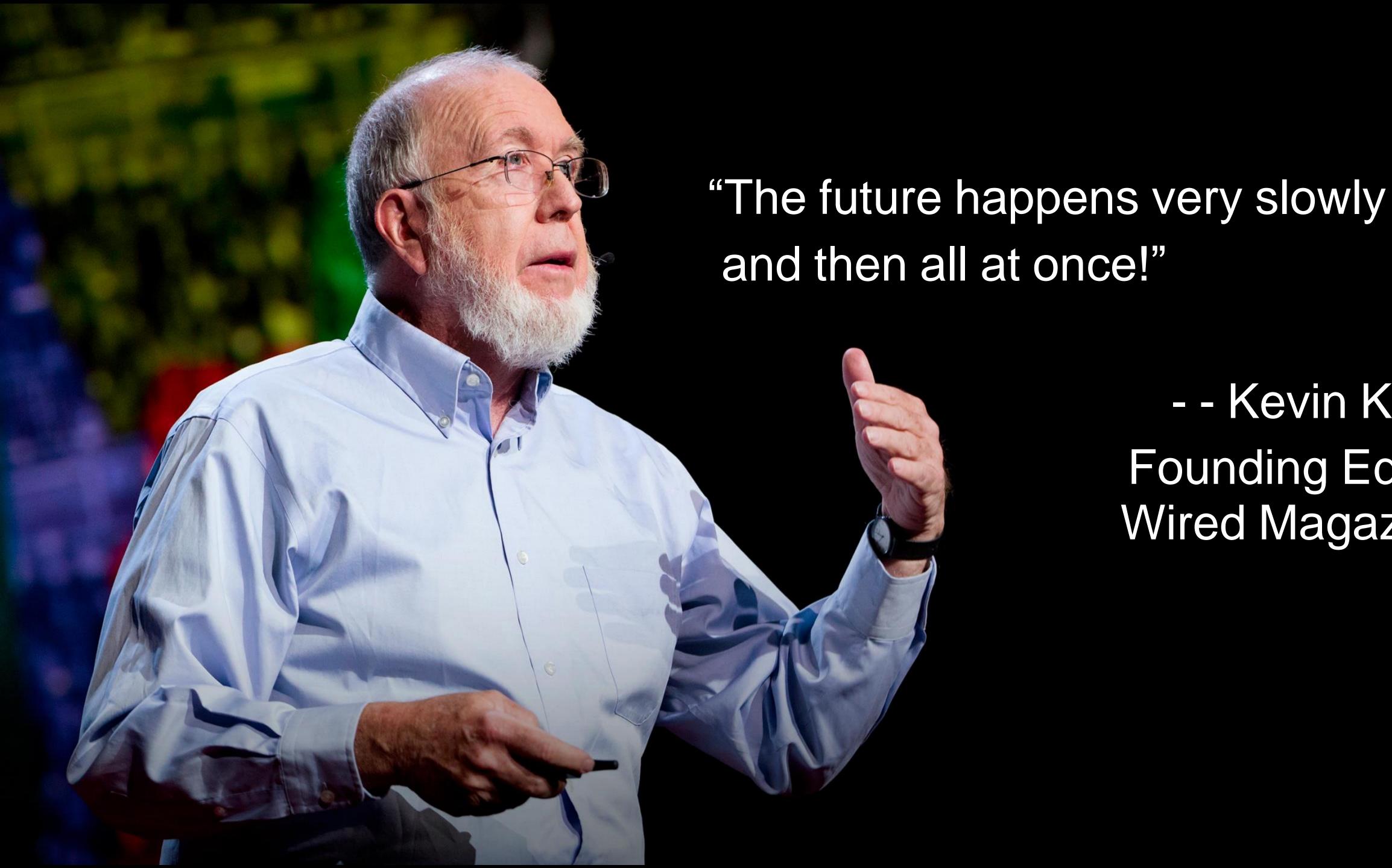






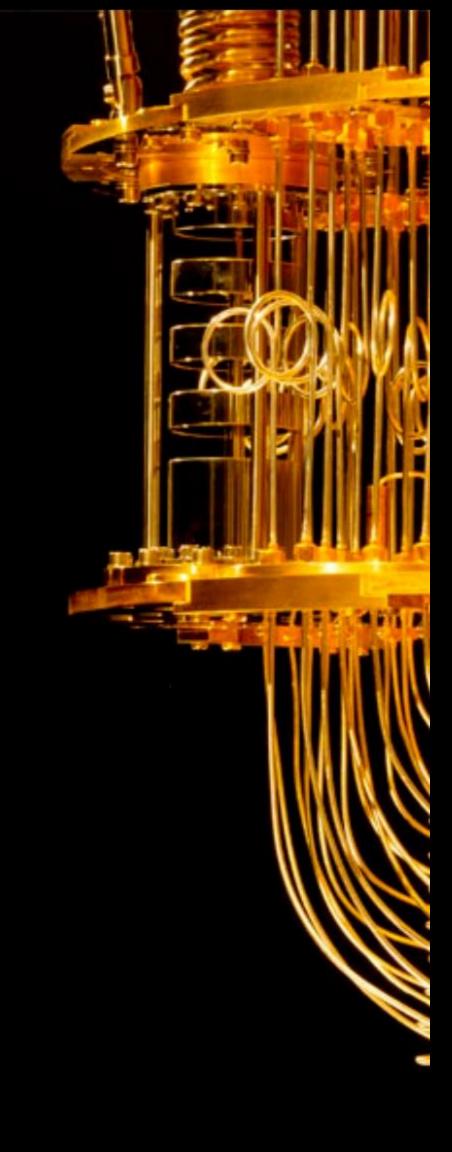




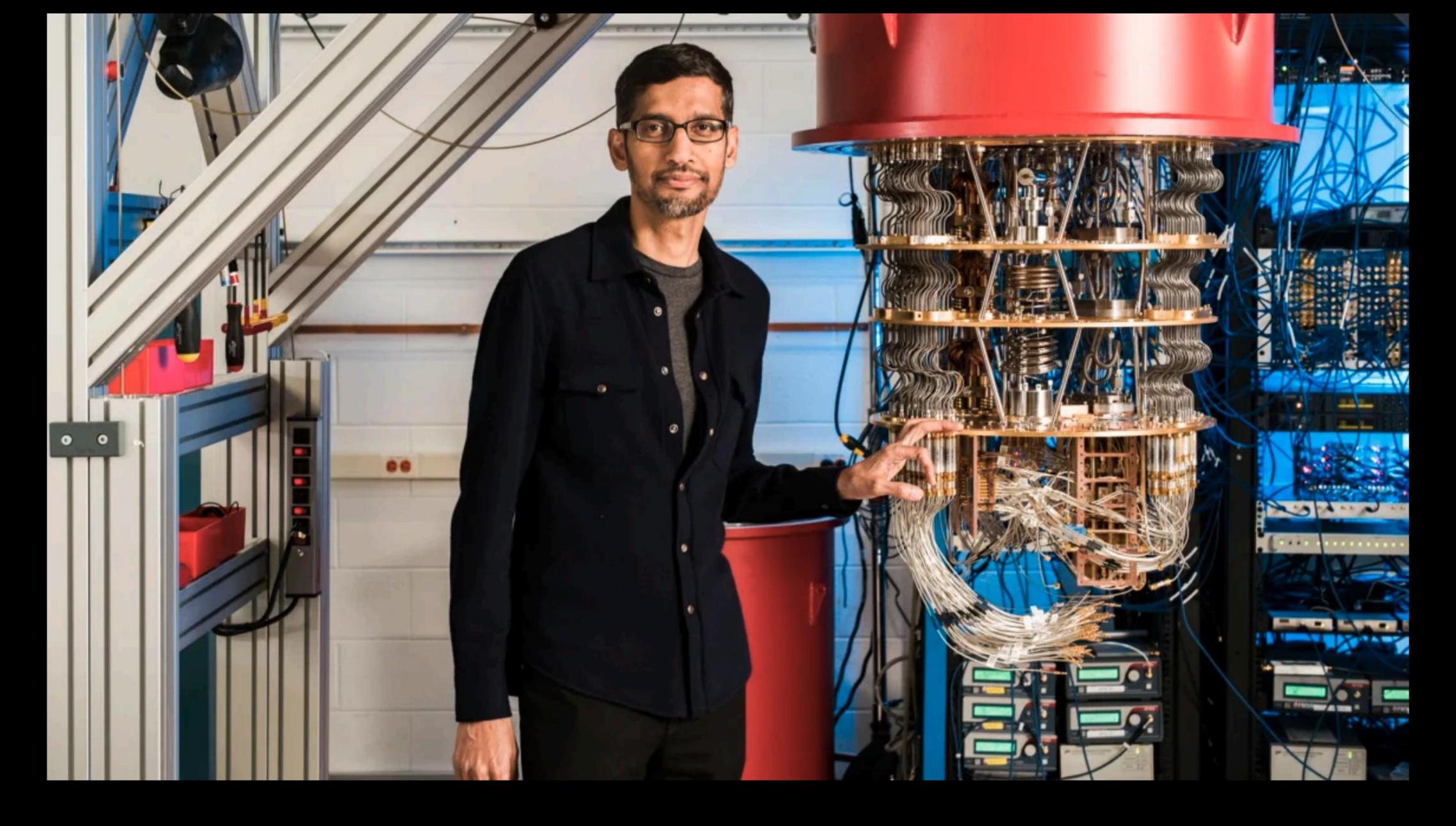


- - Kevin Kelly Founding Editor Wired Magazine

## Quantum Computing!

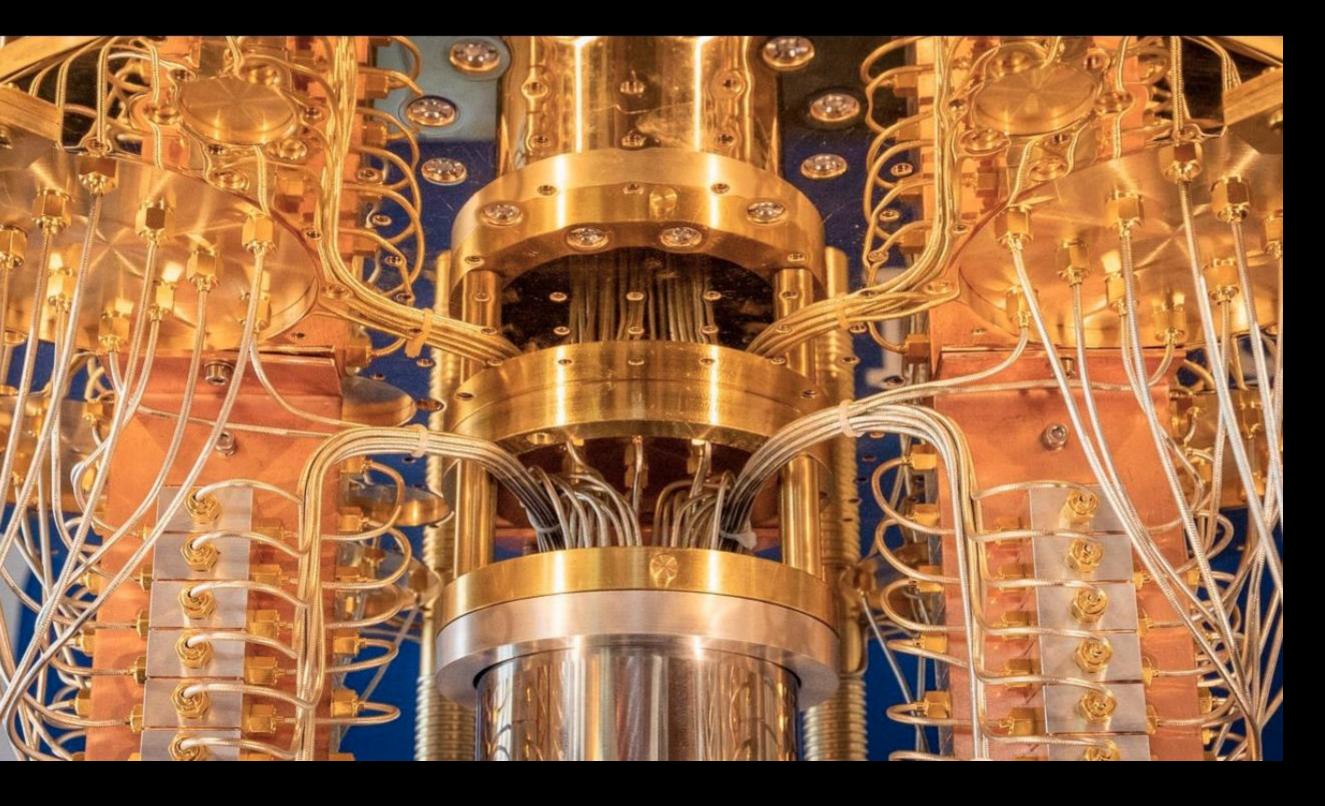


### Quantum Computing



Oct 23, 2019 - Google claims to have achieved Quantum Supremacy

#### What is Quantum Supremacy?

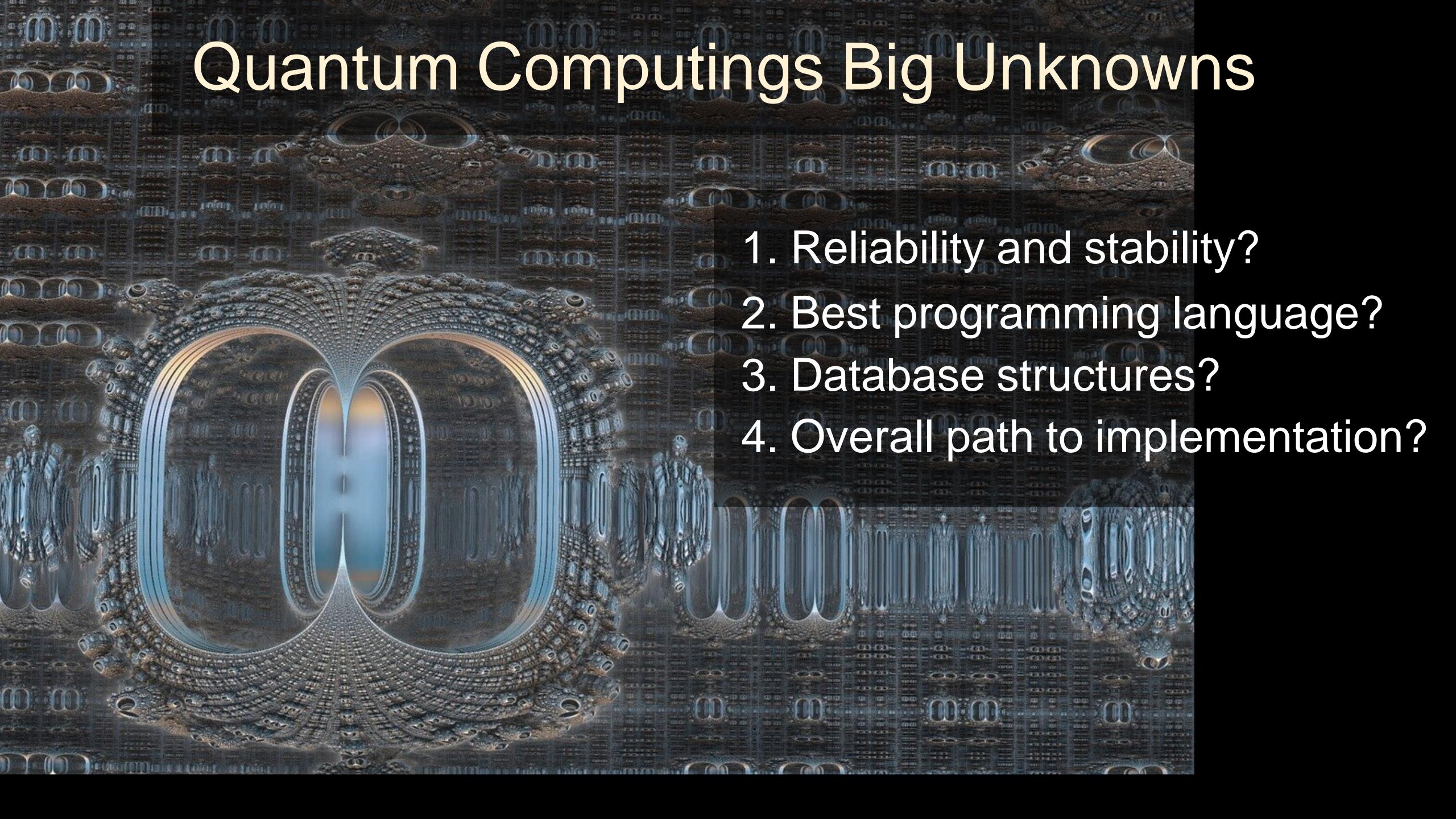


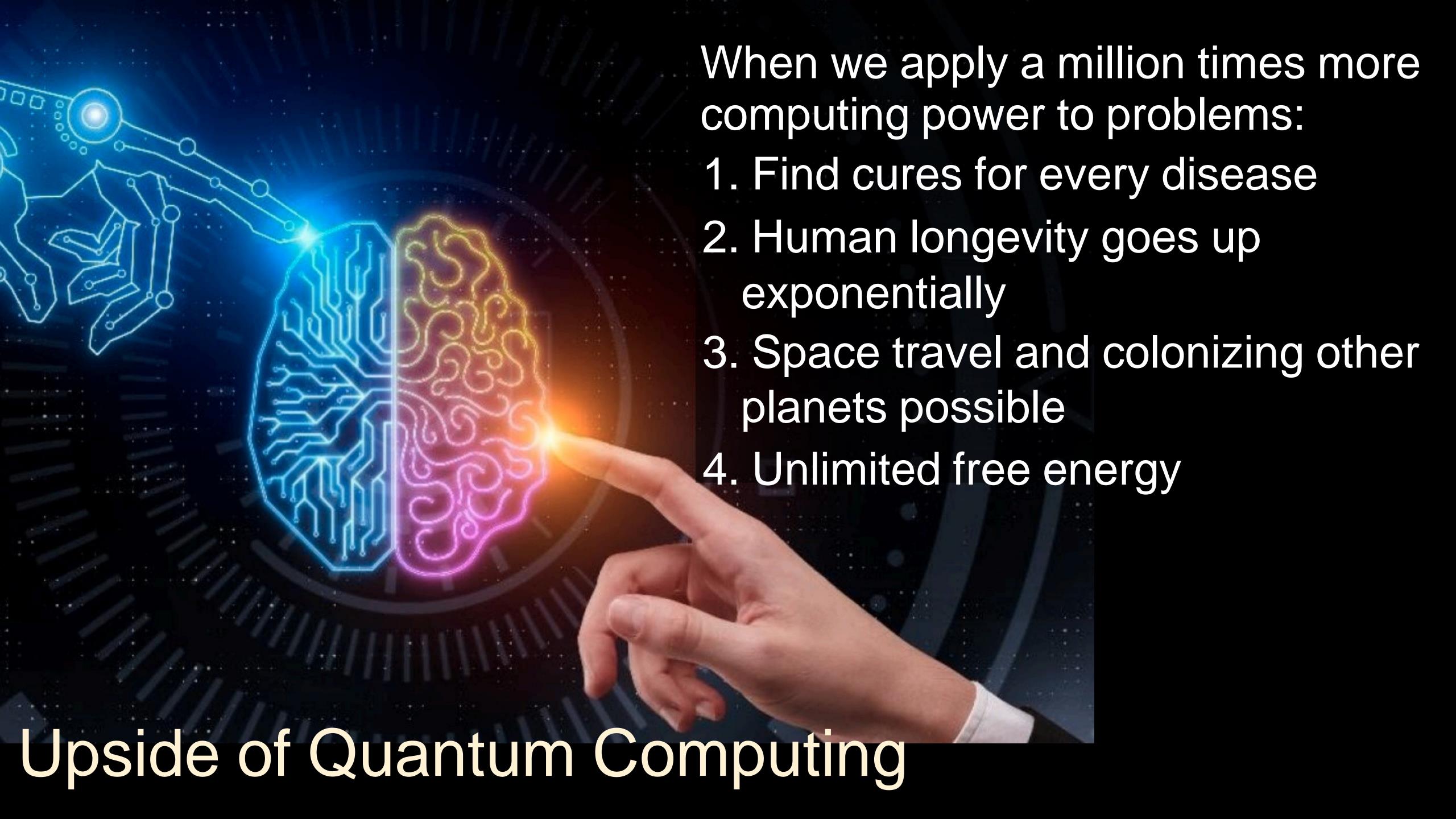
- 1.Google's quantum computer called "Sycamore" completed a task in 200 seconds that the world's most powerful supercomputers would need 10,000 years to accomplish
- 2.But IBM claims their supercomputer accomplished the same task in 2.5 days

#### Was this Google's Sputnik moment?

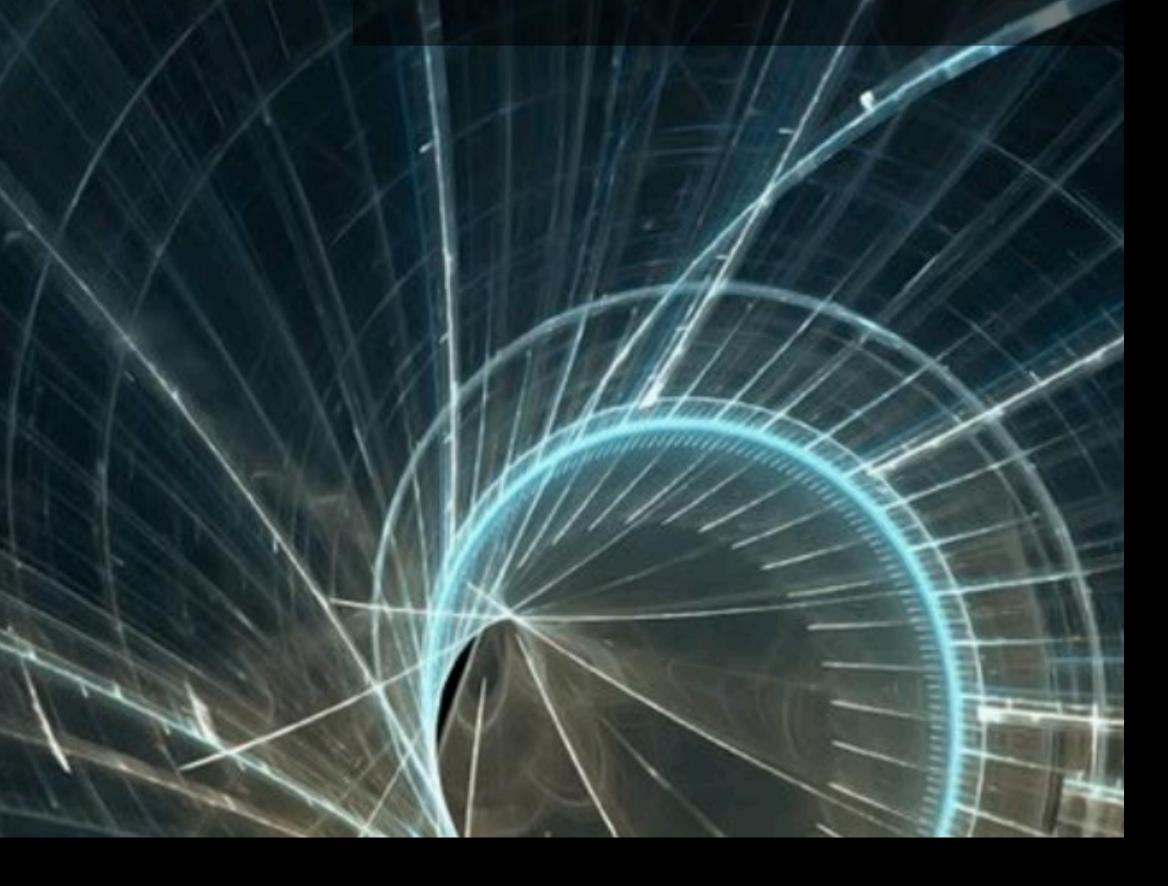


- 1. Equal to:
  - Wright Brothers first flight
  - Tim Berners-Lee launching the first website
  - Deep Blue beating Gary Kasparov
  - Steve Jobs unveiling the first iPhone
- 2. But there's a challenging road ahead for quantum computing



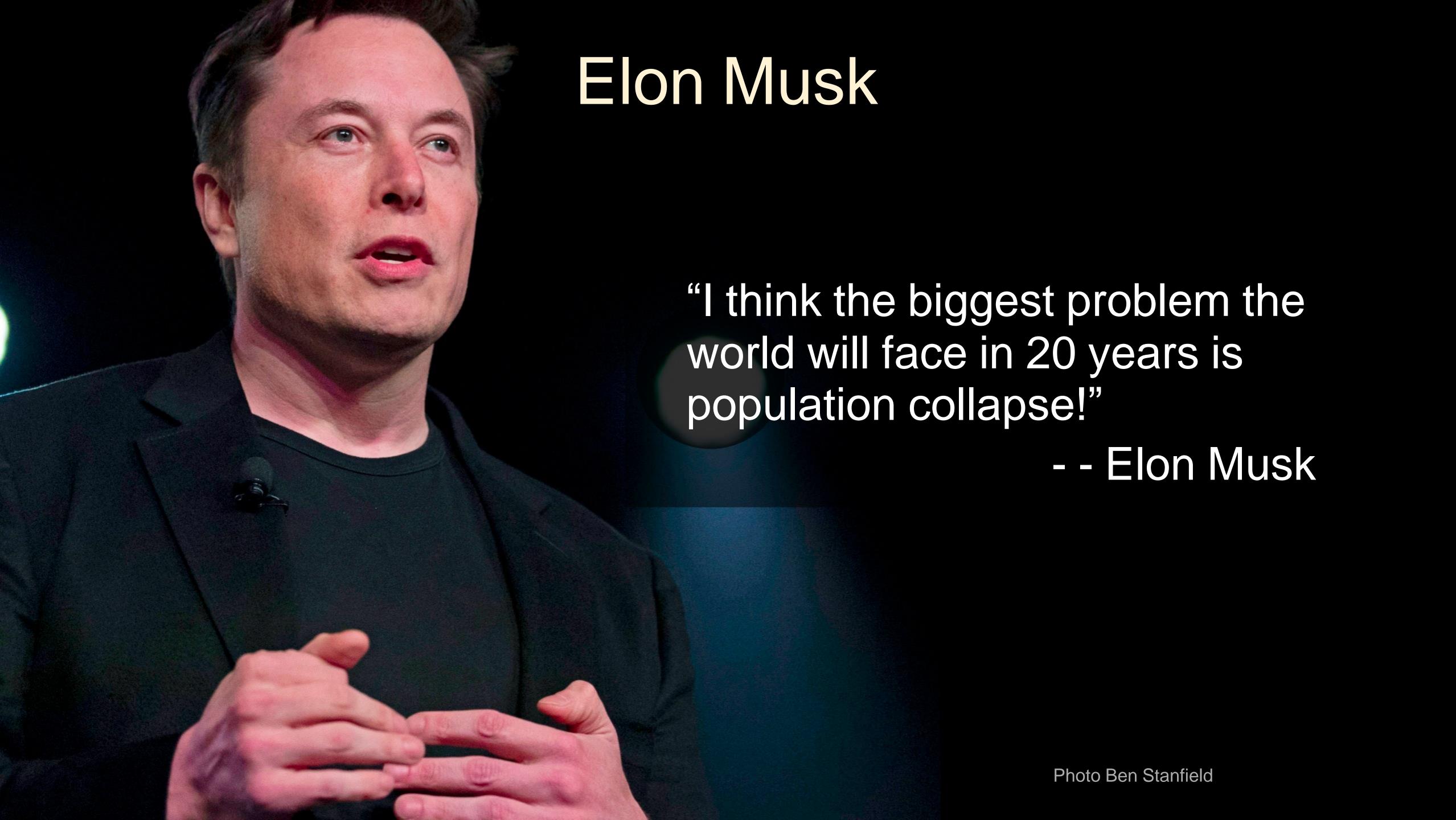


#### Downside of Quantum Computing



- 1. All encryption systems become breakable
- 2. All cryptocurrency gets mined instantly
- 3. Blockchain becomes a broken technology
- 4. Stock markets no longer work
- 5. Gambling industry implodes

## Rapidly Shifting Demographics









#### By 2050 ...

- 1. India 1,450,000
- 2. China 1,065,000
- 3. Nigeria 733,000
- 4. U.S. 434,000
- 5. Pakistan 403,000
- 6. Congo 362,000
- 7. Indonesia 321,000
- 8. Ethiopia 294,000
- 9. Tanzania 286,000
- 10. Egypt 225,000

# 23 Countries will Loose Over Half their Population by 2100 including:



- 1. South Korea
- 2. Japan
- 3. China
- 4. Brazil
- 5. Thailand
- 6. Italy
- 7. Russia
- 8. Ukraine
- 9. Poland
- 10. Spain

# Artificial Intelligence and the Future of Education

#### Our Need for Teacherless Education



#### Our Need for Teacherless Education

- Teacher Shortage 69 million globally
- 23% of all children do not attend school



#### Our Need for Teacherless Education



If we continue to insert a teacher between us and everything we need to learn, we can't possibly keep up with the demands of the future

# The role of education is changing

It is no longer possible to predict the educational needs of business 4-5 years in advance.

# We are currently preparing students for jobs that don't exist ...

## Using technology that hasn't been invented ...

# To solve problems we don't even know are problems yet!

#### Future Jobs?

The average person entering the workforce in 2030 will need to reboot their career 8-10 times



112

#### 166 Virtual Reality Developer Jobs



23 days ago

#### Associate Game Content **Developer**

Intific ★★★☆☆ 1 Review - Orlando, FL

 Create and manage planning & design documentation for use throughout entire production cycle · Analyze, design, document, implement, maintain... Glassdoor

Overview Reviews Salaries



7 days ago

#### Sr. **Developer**

OneSource Virtual ★★★★☆ 33 Reviews – Irving, TX

This position will assist in developing proprietary applications developed in cutting edge Cloud Computing technologies using C# on .Net framework... OneSource Virtual

Overview Reviews Salaries



30+ days ago

#### Visualization Engineer – easy apply

Delta Search Labs ★☆☆☆ 1 Review - Cambridge, MA

 Design, implement, and maintain virtual reality applications and tools for a CAVE system. Port existing applications and user interfaces to... Glassdoor

Overview Reviews Salaries

113



#### Virtual Reality 3D Football Play Creator

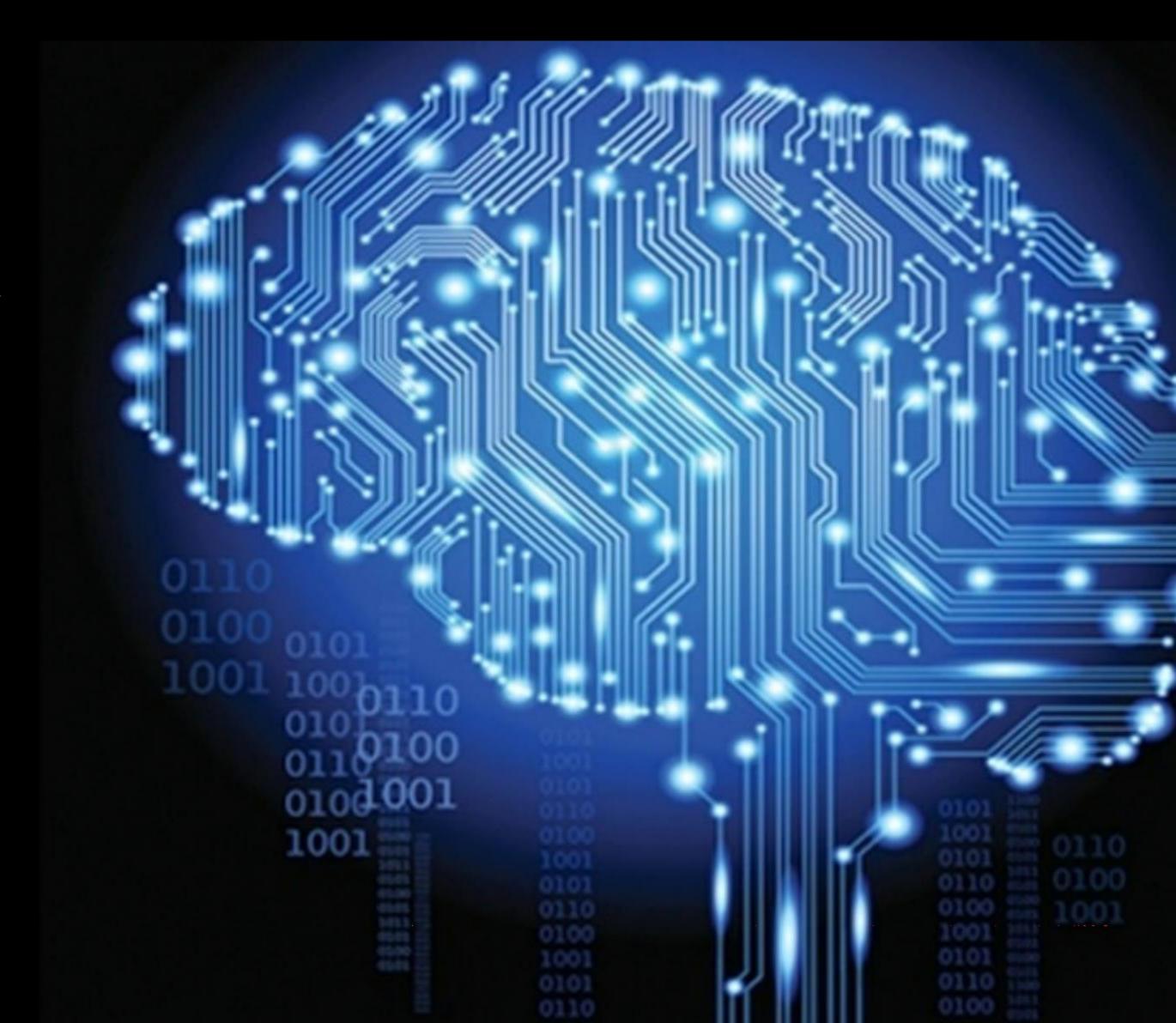
EON Reality Sports - United States

You will be responsible for creating football plays in Virtual Reality, and we give you the software and X's and O's that will be created.... EON Reality Sports

30+ days ago

## Artificial Intelligence Today

We stand on the brink of a technological revolution that will fundamentally alter the way we live, work, and relate to one another.



### Al's Converging Forces

deep learning machine learning predictive analytics translation natural language classification & clustering processing (NLP) information extraction speech to text Artificial Intelligence speech text to speech (AI) expert systems planning, scheduling & optimization robotics image recognition vision machine vision

#### Al's Early Application Drivers

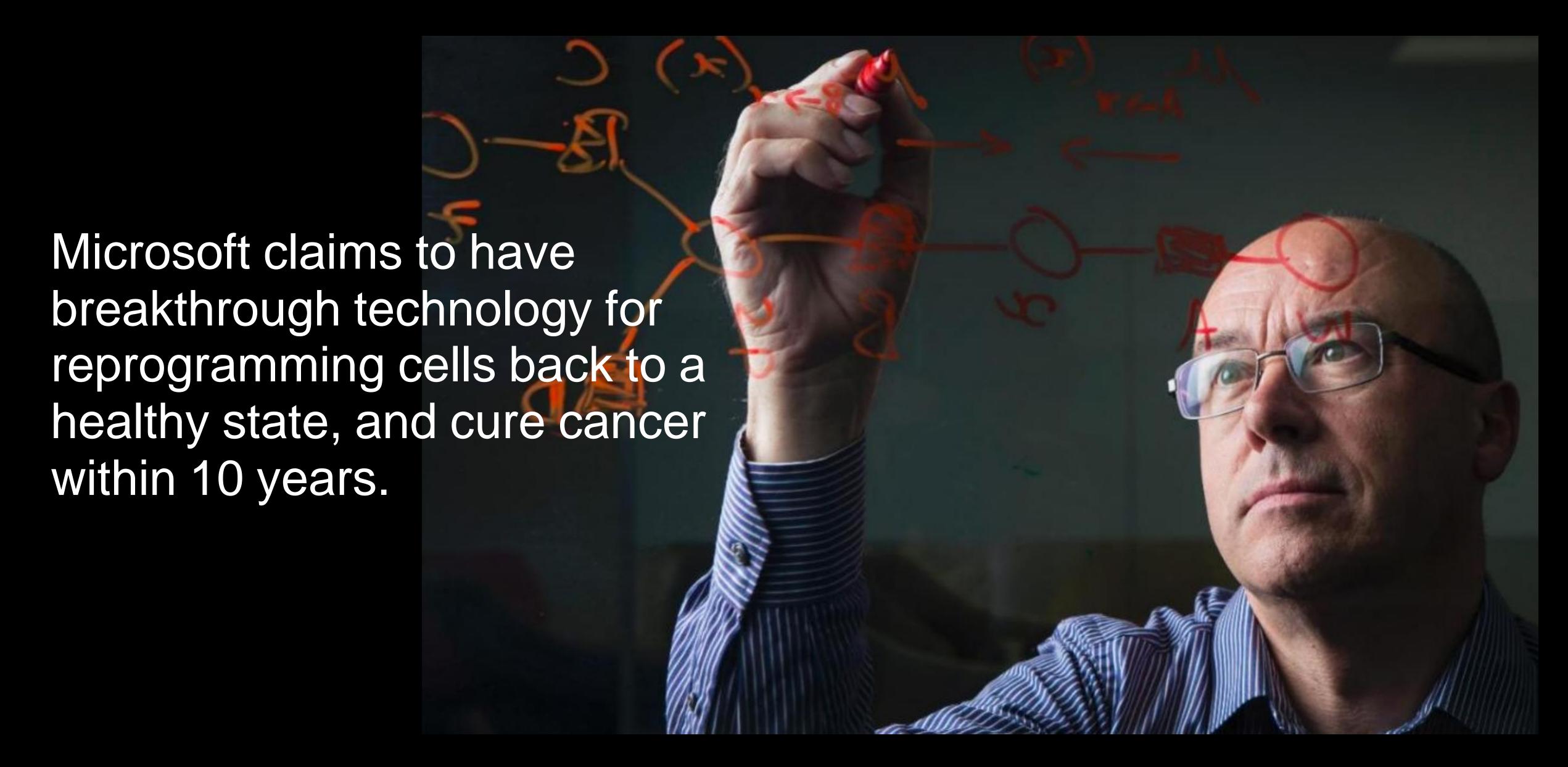
- Healthcare
- Power/Energy Tech
- Driverless Vehicles
- Internet of Things
- 3D Printing
- Drone Technologies
- Virtual Reality
- Megaprojects

#### A.I. Headlines



"Microsoft views the human genome as just another coding language"

## Microsoft's Effort to Reprogram Cells





### DeepMind playing Breakout

- 1. Simple instructions maximize the score
- 2. 30 minutes (100 games) Pretty terrible, but still learning



#### DeepMind playing Breakout

2 hours - It had mastered the game, even with the balls moving very fast

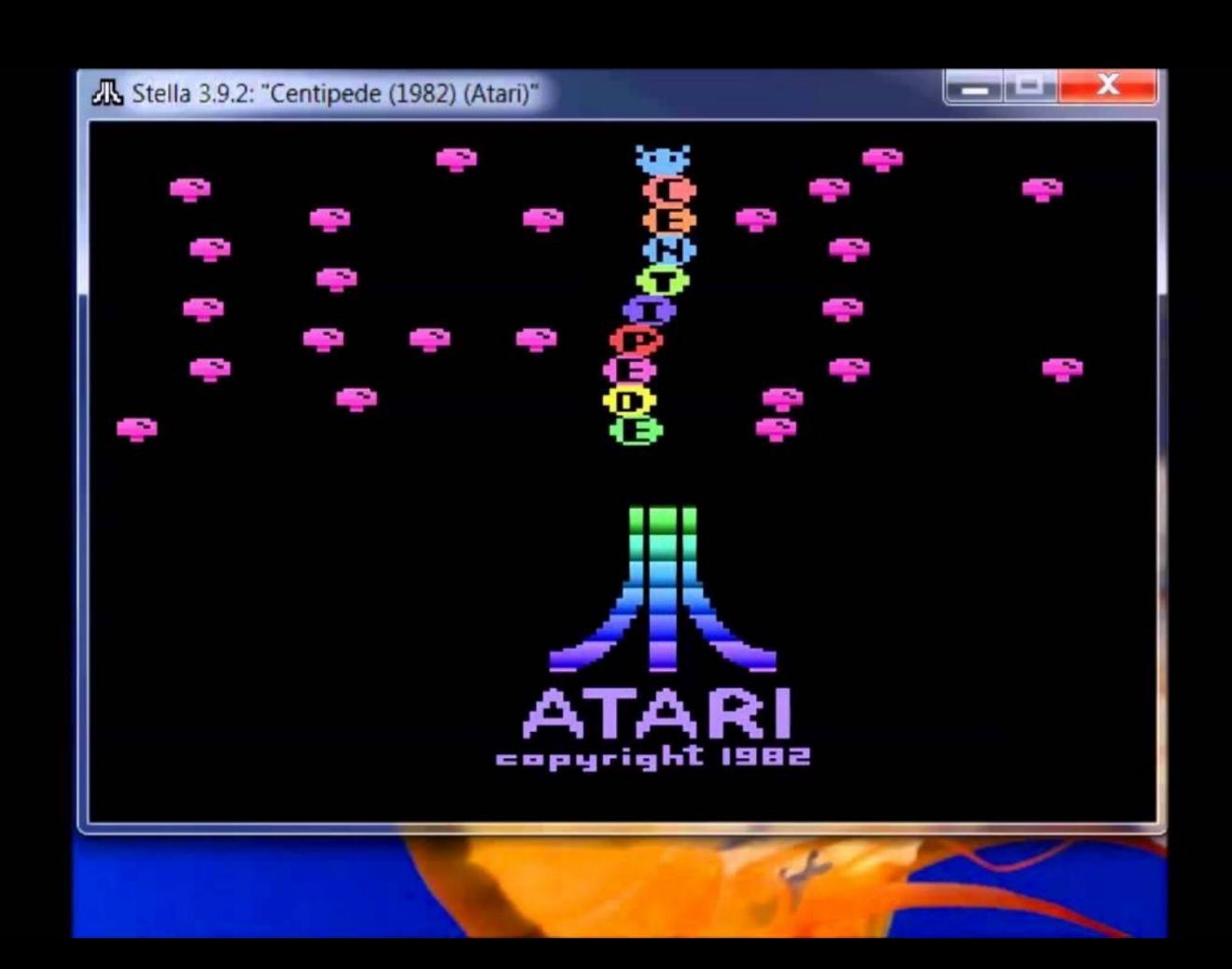


### DeepMind playing Breakout

4 hours - Optimal strategy -- dig a tunnel round the side of the wall, and send the ball around the back in a superhuman accurate way. The designers of the game didn't even know this was possible.



**DeepMind** learned to play 49 Atari 2600 video games with minimal background information, mastering everything from a martial-arts game, to boxing, and 3D car-racing games





## Cognifying Education



If we apply AI to teacherbots, the new game will be to find the fastest way to teach students.

## Cognifying Education



Over time, Al's will learn every students proclivity, idiosyncrasy, preferred tools, personal reference points, and how to stay engaged and learning even in the face of distractions.

#### The A.I. will know when ...



- 1. Skills are deficient
- 2. What's needed to bring them up to speed
- 3. How and when to schedule your training
- 4. When you've mastered the topic







#### Cognifying Education





- Throughout this training curve, individual learning will begin to scale far faster than anything we've ever dreamed possible.
- 2X, 4X, and perhaps even 10X faster than anything today

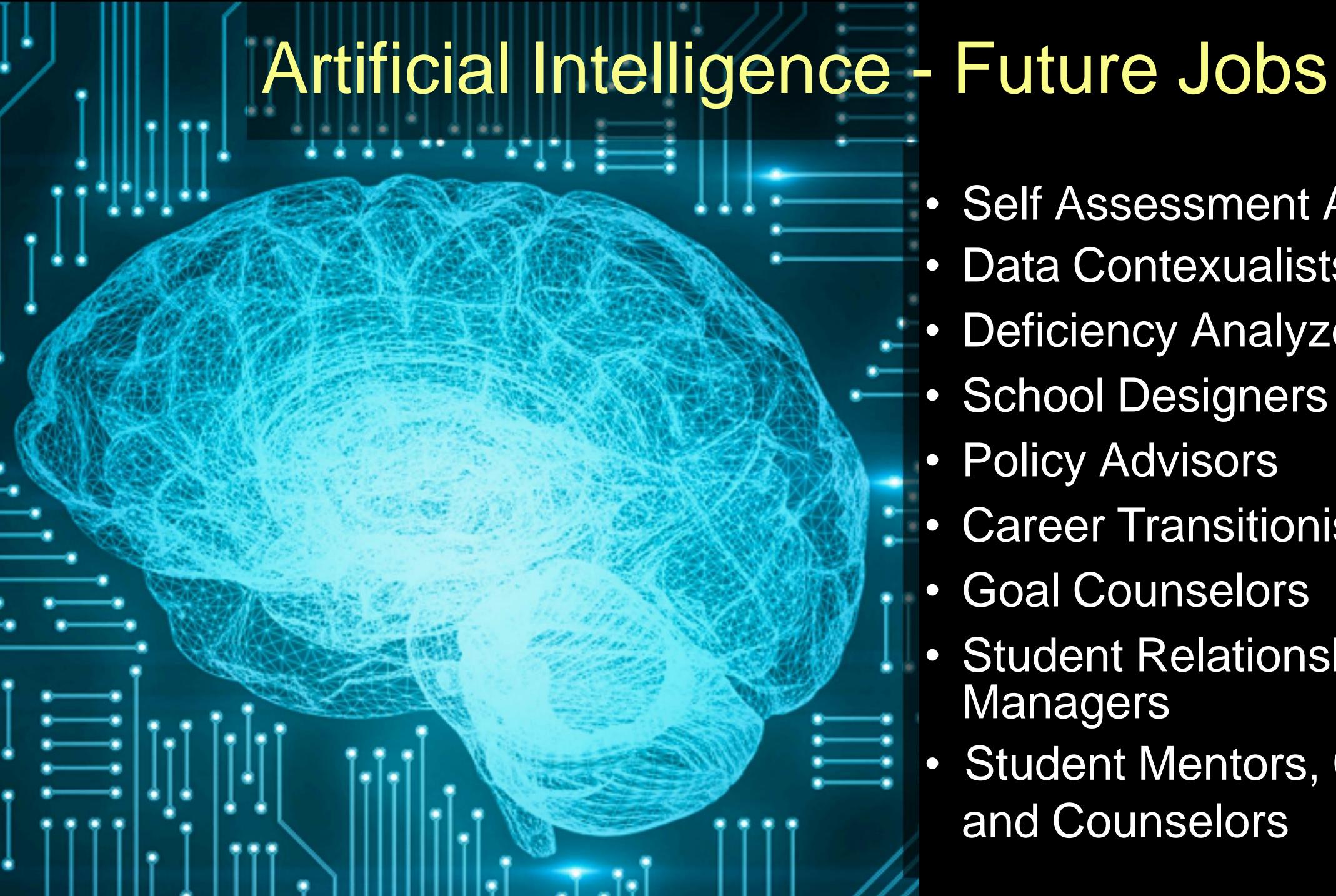
#### Artificial Intelligence - Prediction



By 2030 the largest company on the Internet will be an education-based company that hasn't been invented yet

#### Artificial Intelligence - Micro Industries





- Self Assessment Auditors
- Data Contexualists
- Deficiency Analyzers
- School Designers
- Policy Advisors
- Career Transitionists
- Goal Counselors
- Student Relationship Managers
- Student Mentors, Coaches, and Counselors

## For people all over the planet, the COVID-19 crisis is a deeply personal experience!





Short-term de-globalization!



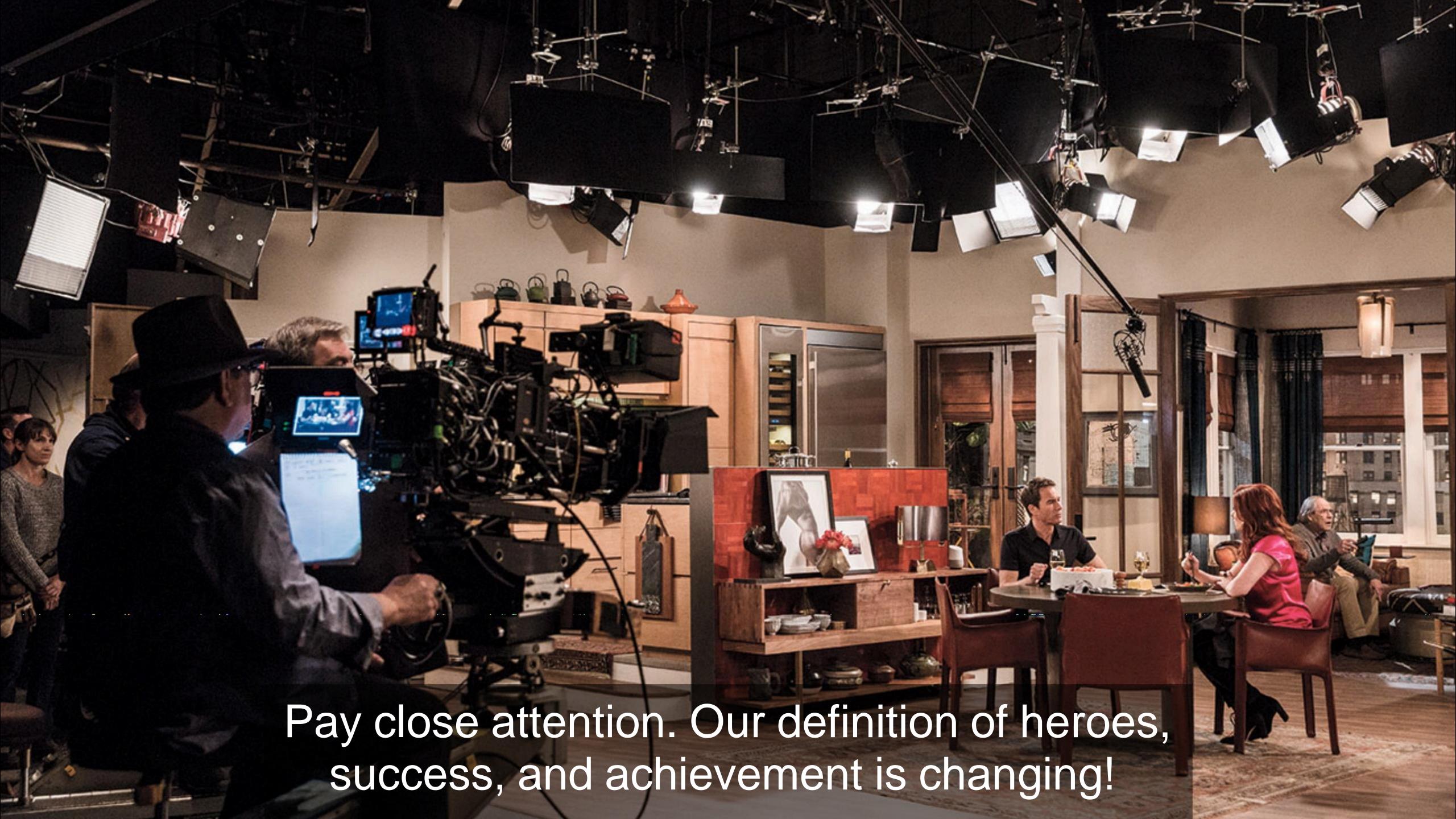
Short-term protectionism!



stockpiling, tight controls over sensitive exports

## Society is changing faster today than ever before in history!







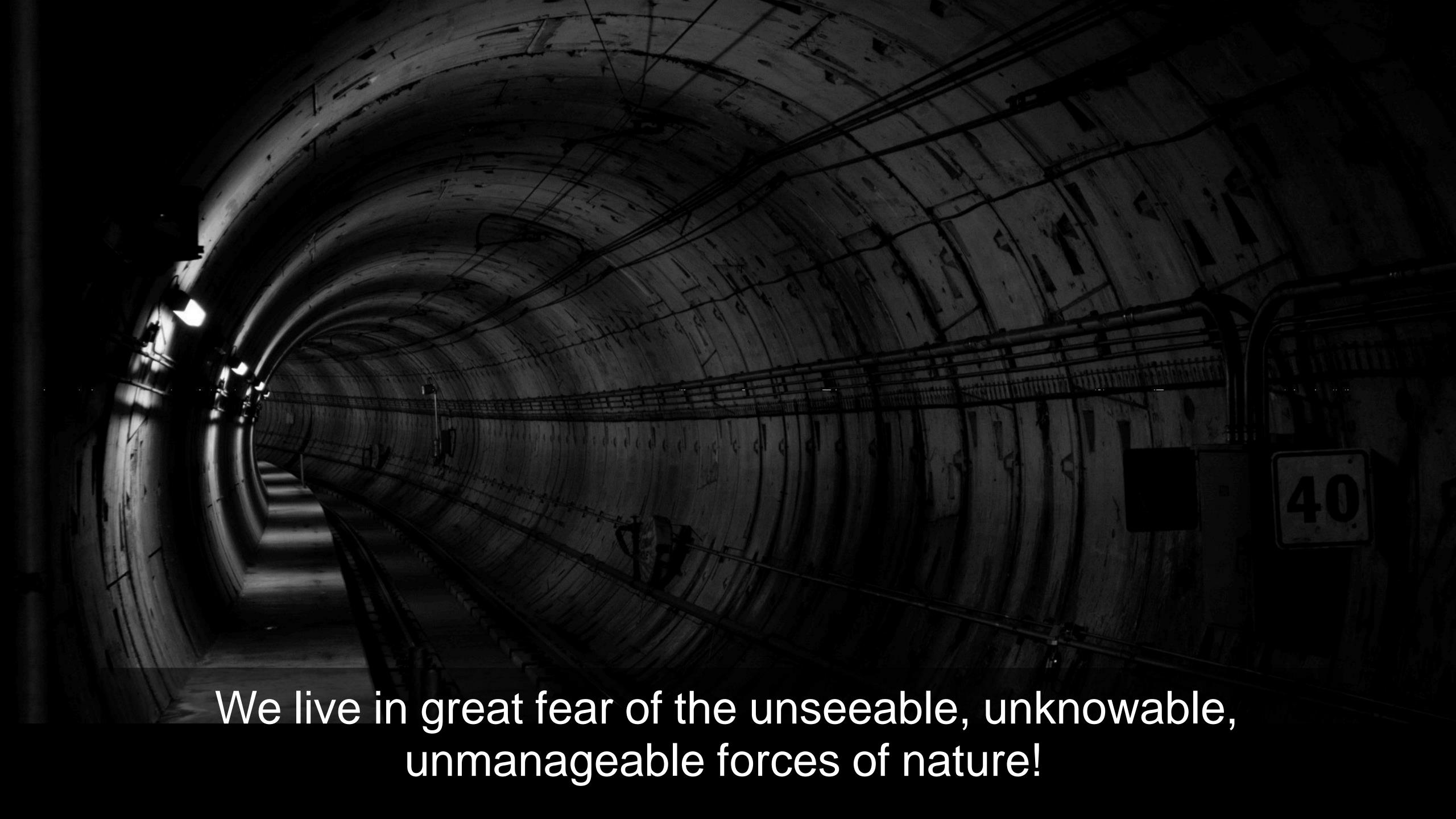




We no longer feel comfortable with our old sense of morality, purpose, pursuits, and relationships!



### Never Again!





After this, the people of the world will demand - "Never Again!" So how do we "pandemic-proof our world so this never happens again?

# Is it possible to pandemic-proof our world?!



Step 1 - Control the meat supply!



Eliminating the wildlife markets!





Make the transition to lab-grown meats



Transition to plant-based meat substitutes!



Step 2 - Dramatically reduce deforestation!



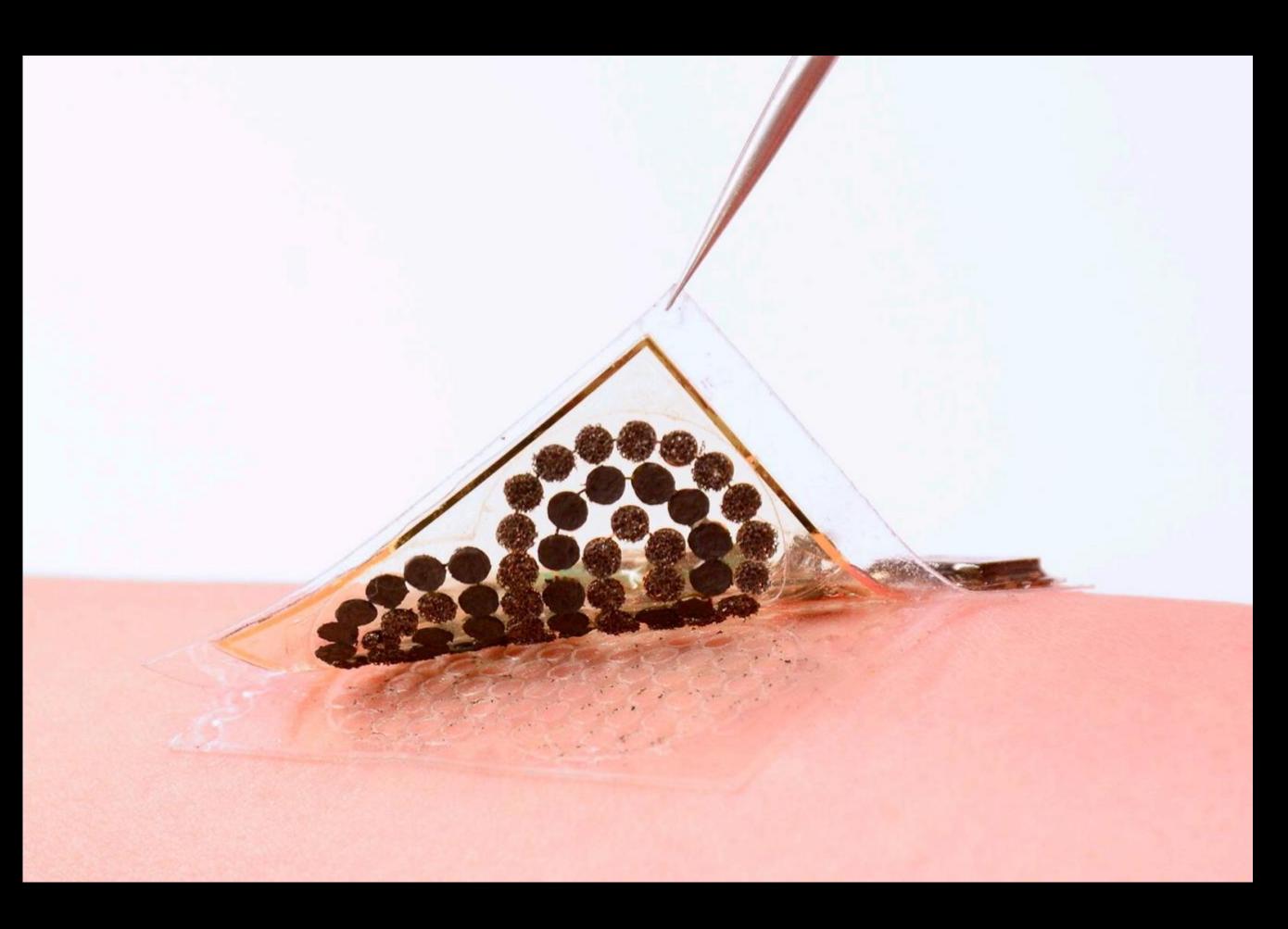
Implement reforestation programs to restore buffer zones between the habitats of wild animals and domestic livestock!



ep 3 - Develop augmented reality tech capable of scanning for viruses!



#### Other Options



- Digital tattoos for monitoring blood
- Odorometer for monitoring smells
- Anti-virus skin coatings
- Self-disinfecting houses
- CRISPR



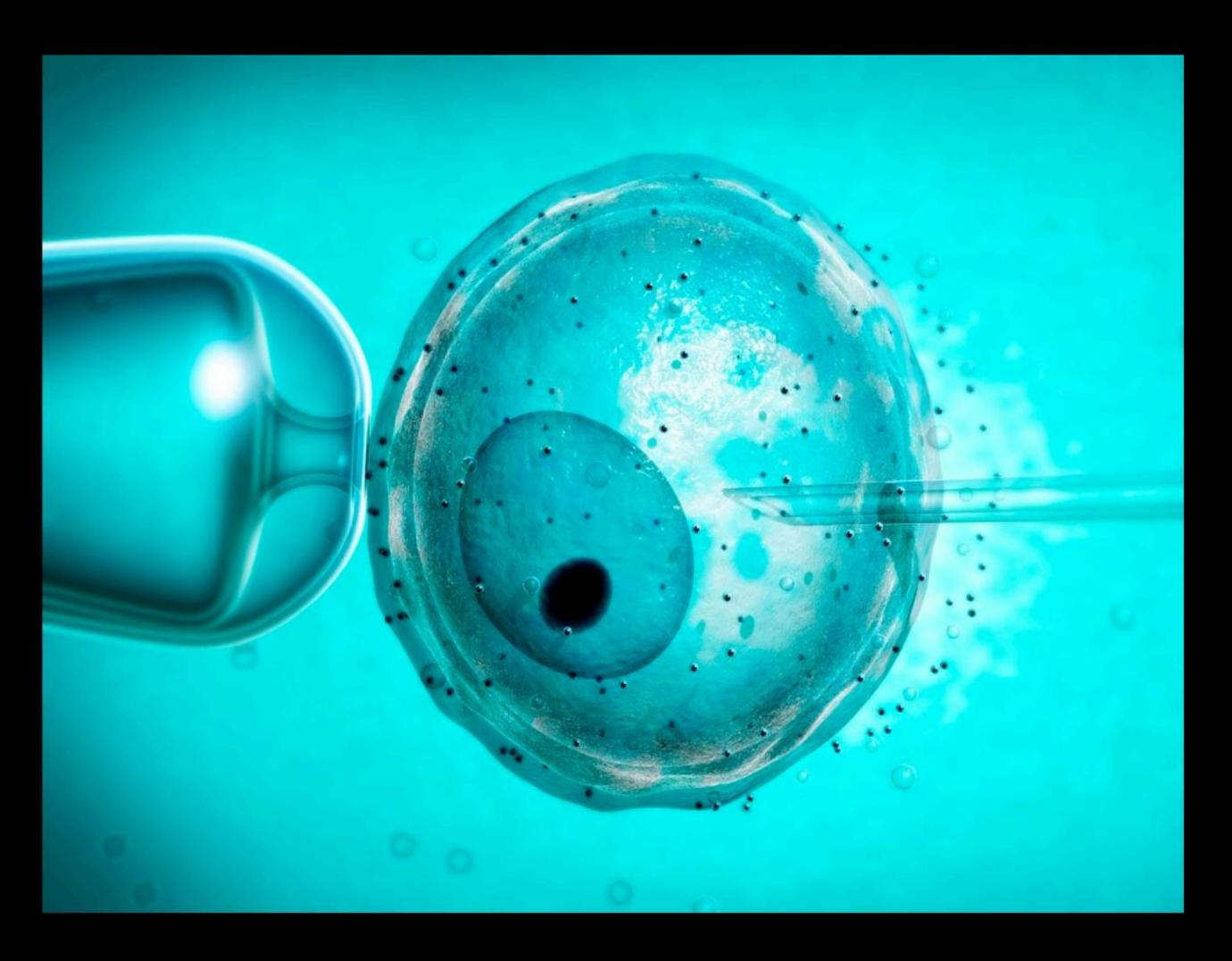
#### CRISPR

- Clustered Regularly Interspaced Short Palindromic Repeat
- Discovered in 1987 by Yoshizumi Ishino



#### CRISPR

- 2012, Jennifer Doudna, co-inventor of CRISPR-Cas9 first demonstrated the ability to cut and replace segments of DNA
- CRISPR is a revolutionary new tool to improve humanity



1.) CRISPR can correct the genetic errors that cause disease even before a baby is born



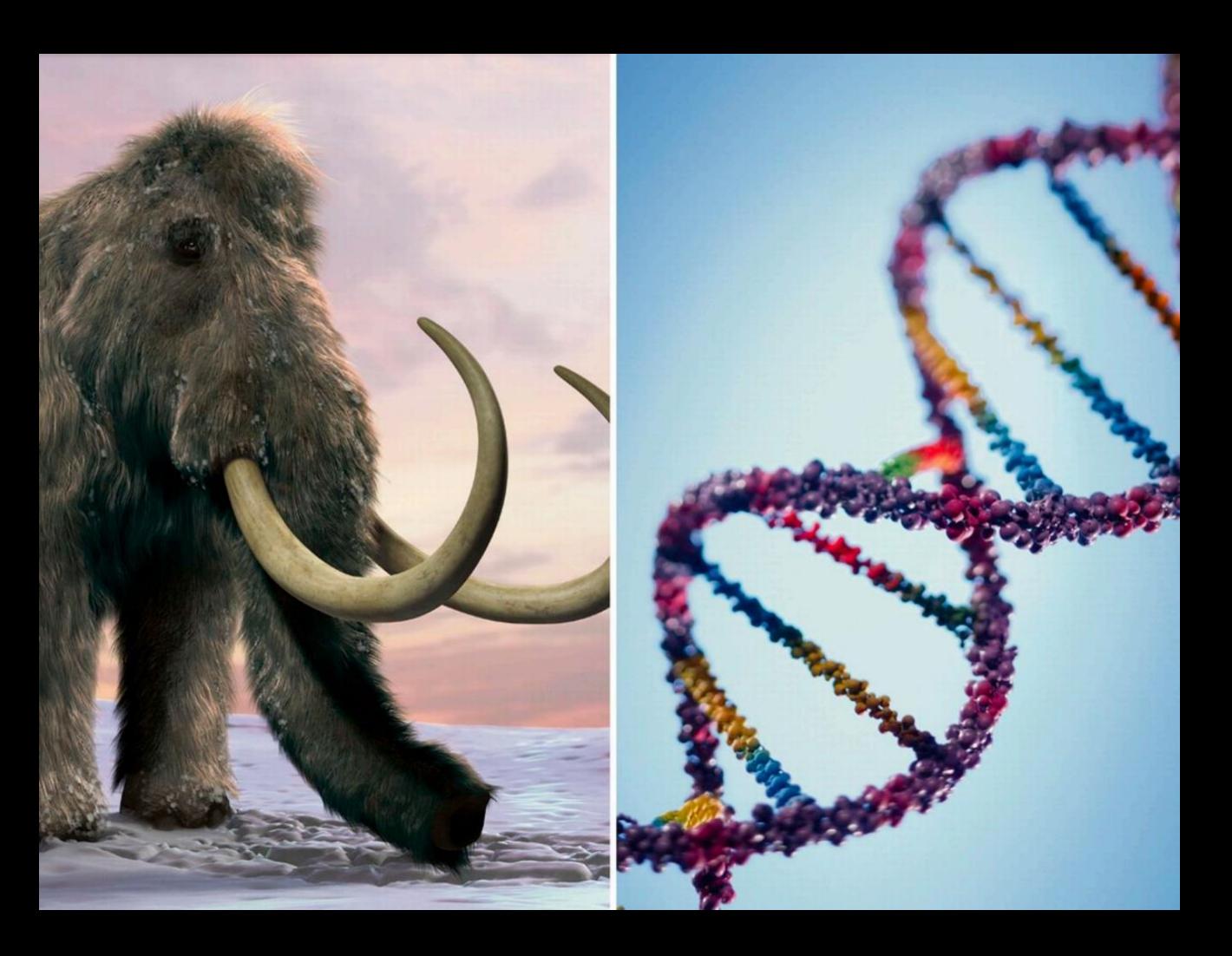
2.) CRISPR can eliminate the microbes that cause a disease, including Covid-19



3.) CRISPR is being used to develop clean meats



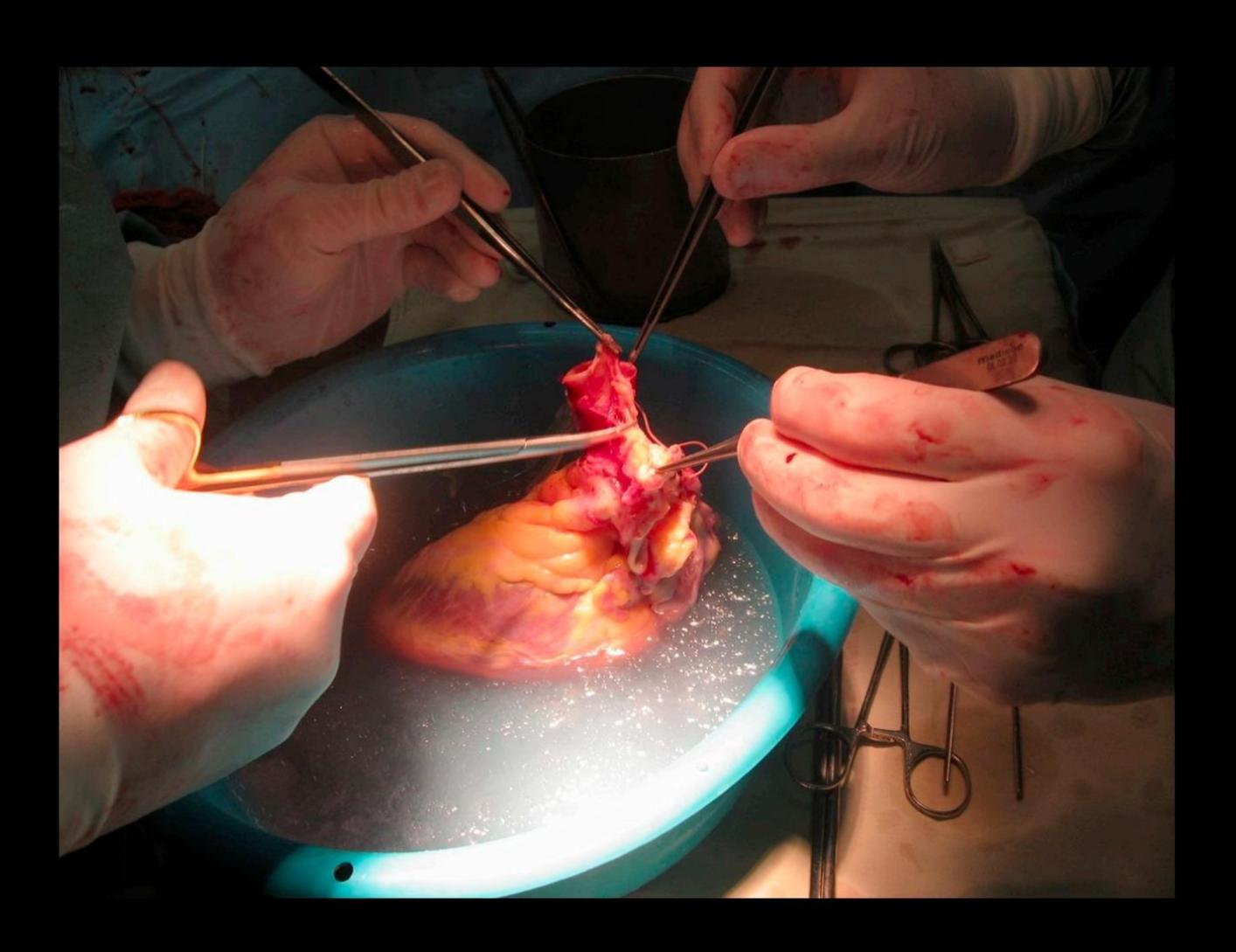
4.) CRISPR will be used to develop healthier foods



5.) CRISPR may even be used in the revival of extinct species



6.) CRISPR may eliminate the threat of disease-spreading mosquitoes



7.) CRISPER has the potential to make transplantable organs safer and more readily available.



8.) CRISPR could help people have healthier babies as well as "designer babies"

#### Cost of Pandemic-Proofing



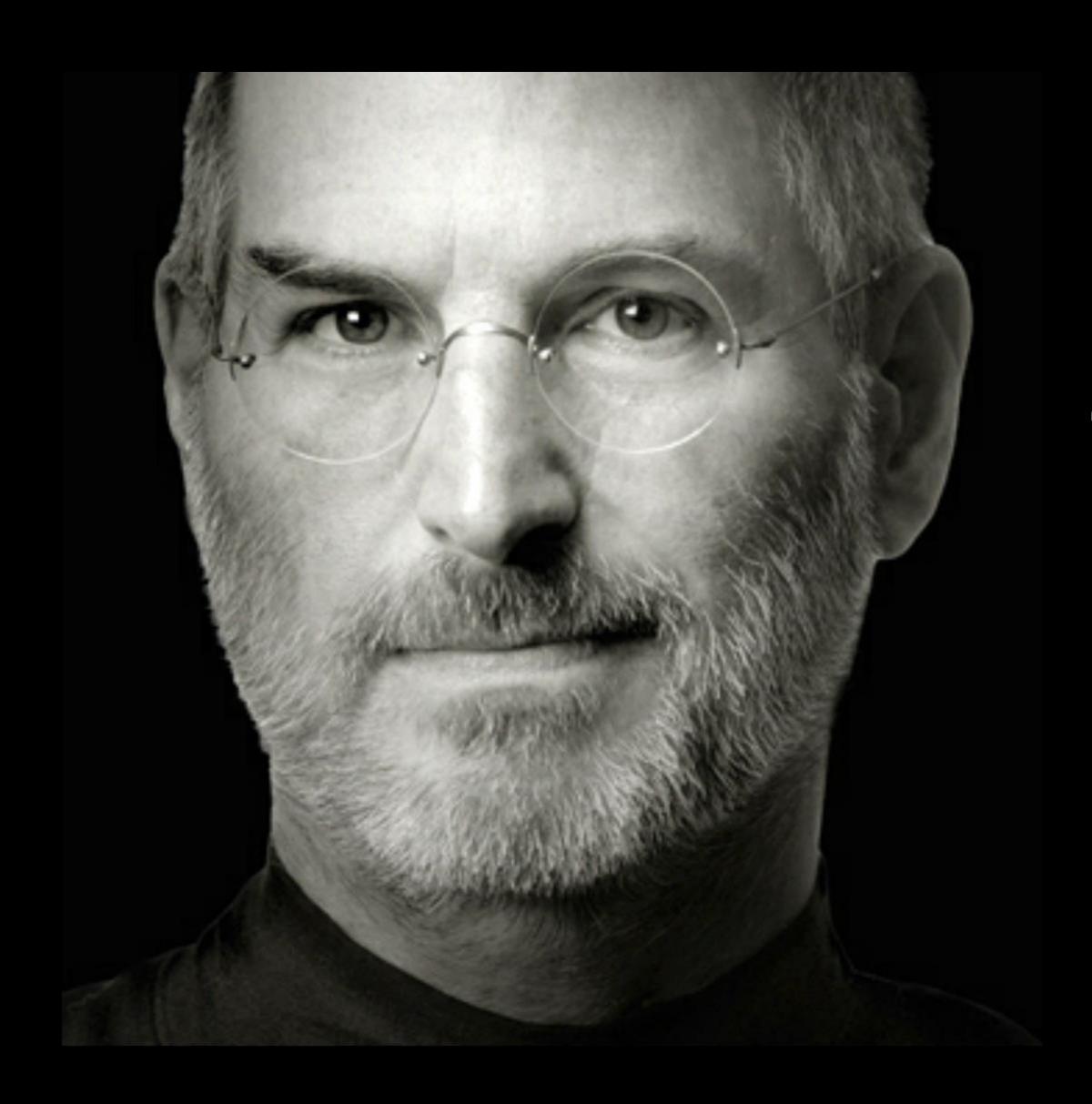
# We are entering a period of unprecedented opportunity

#### Why is this period so important?



- Humanity will change more in the next 20 years than in all of human history
- Risk factors will increase exponentially
- Our children's children, who haven't even been born yet, are depending on you

#### Steve Jobs



"...right now is one of those moments that YOU are influencing the future."

- - Steve Jobs

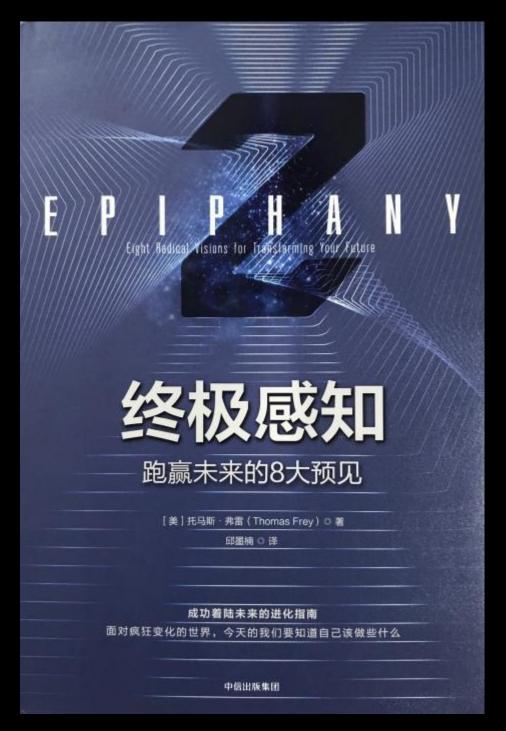
#### But sometime our best efforts ...

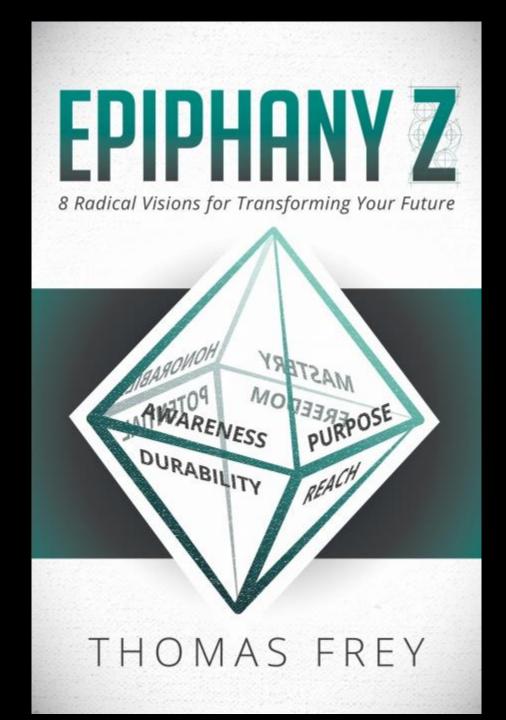


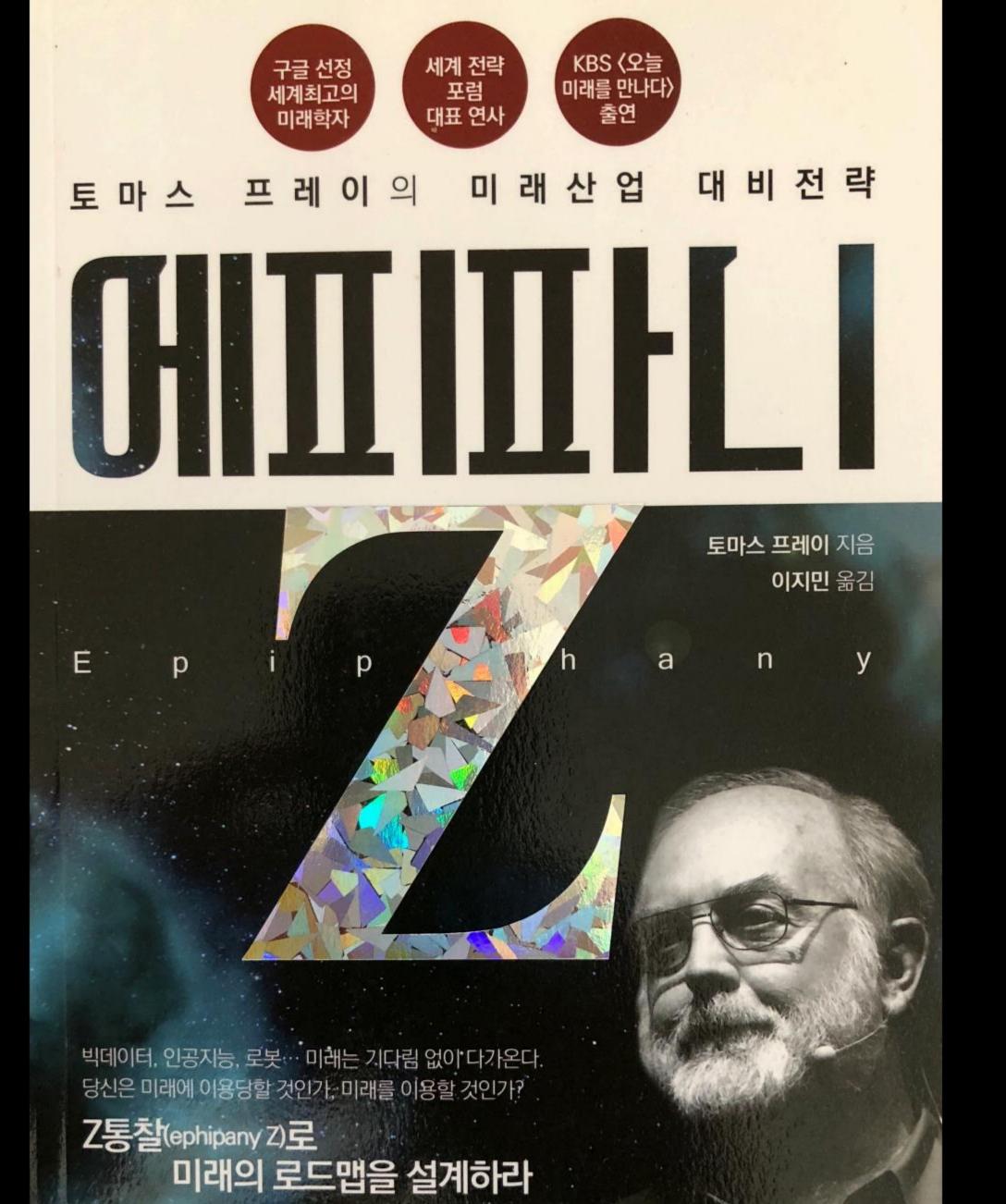
#### Now in Audio Book

#### "Epiphany Z:

8 Radical Visions for Transforming Your Future"



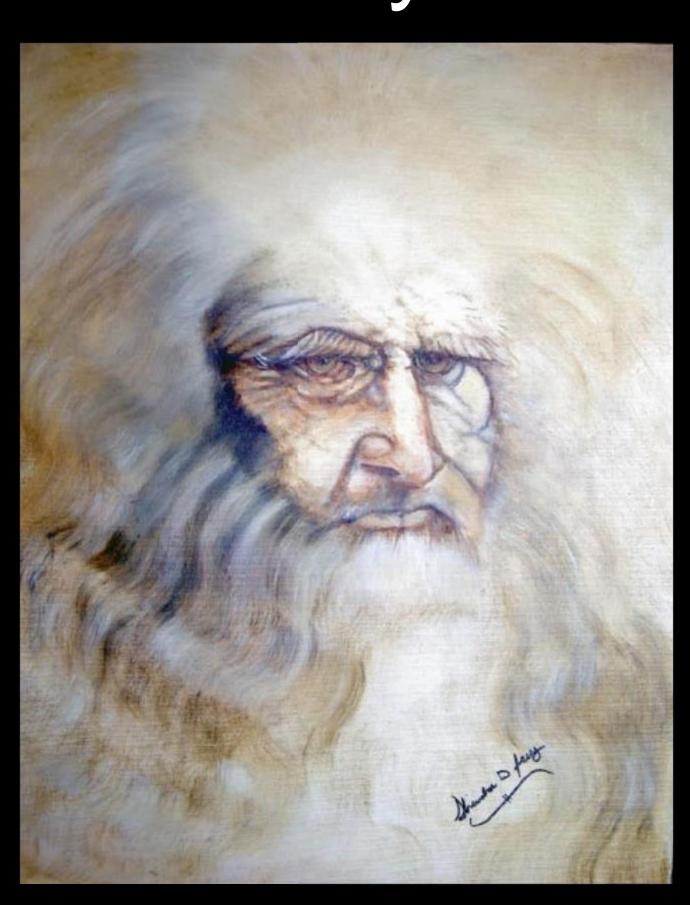






# For more information...

#### Fifth Annual Kyunghyang Forum Newsletter Offer: FREE Weekly "Future Trend Report"



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