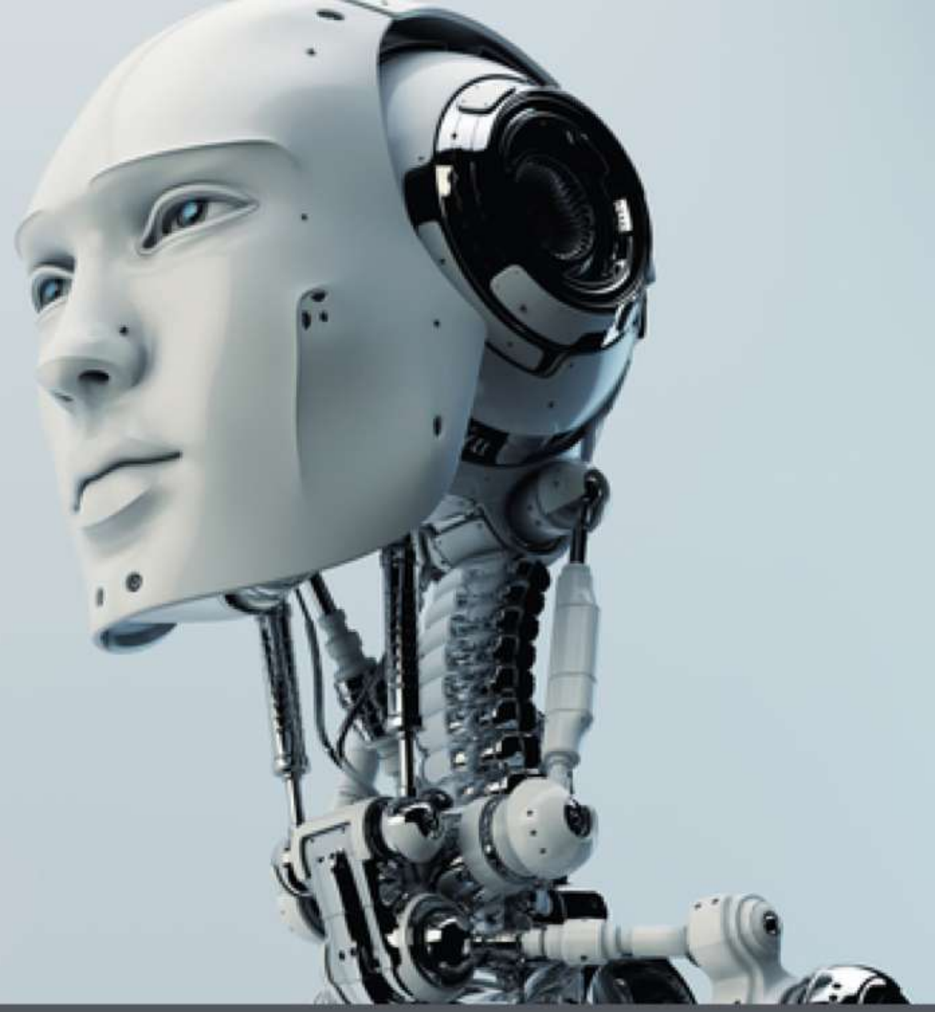
The Future Of Work & The Work Of The Future



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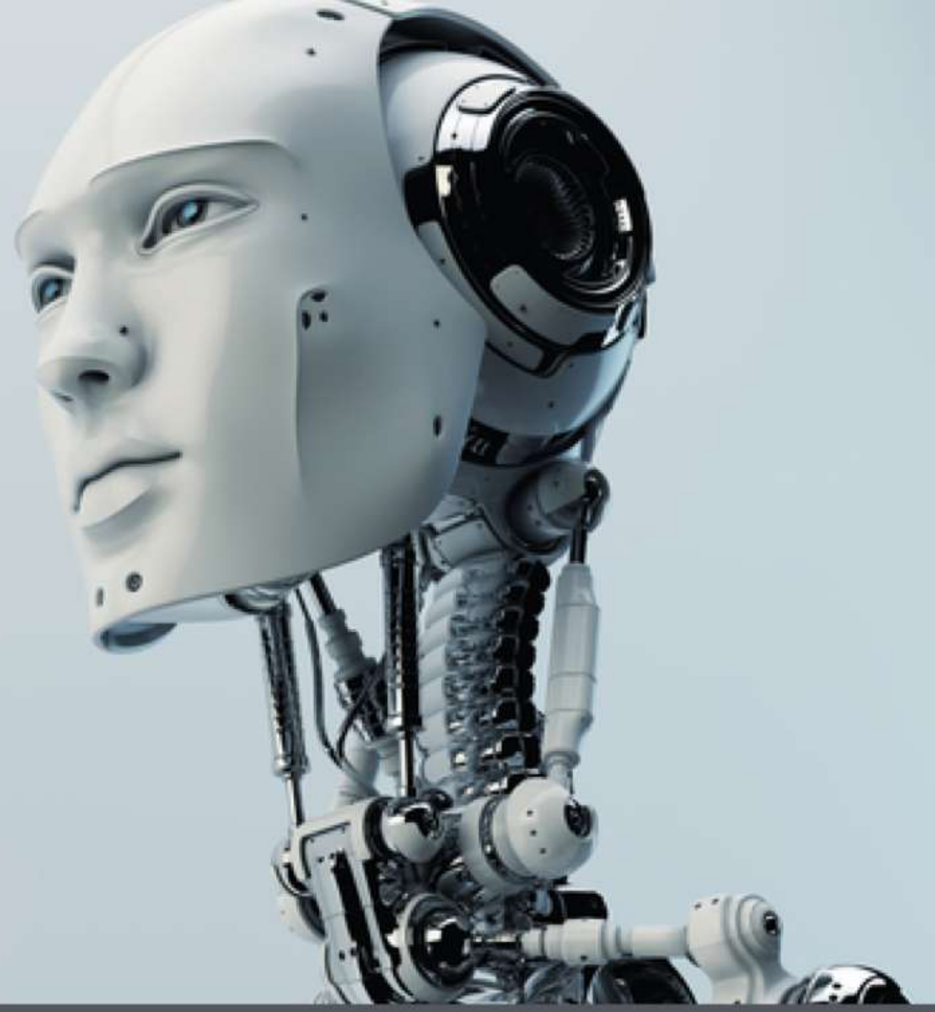
Content:



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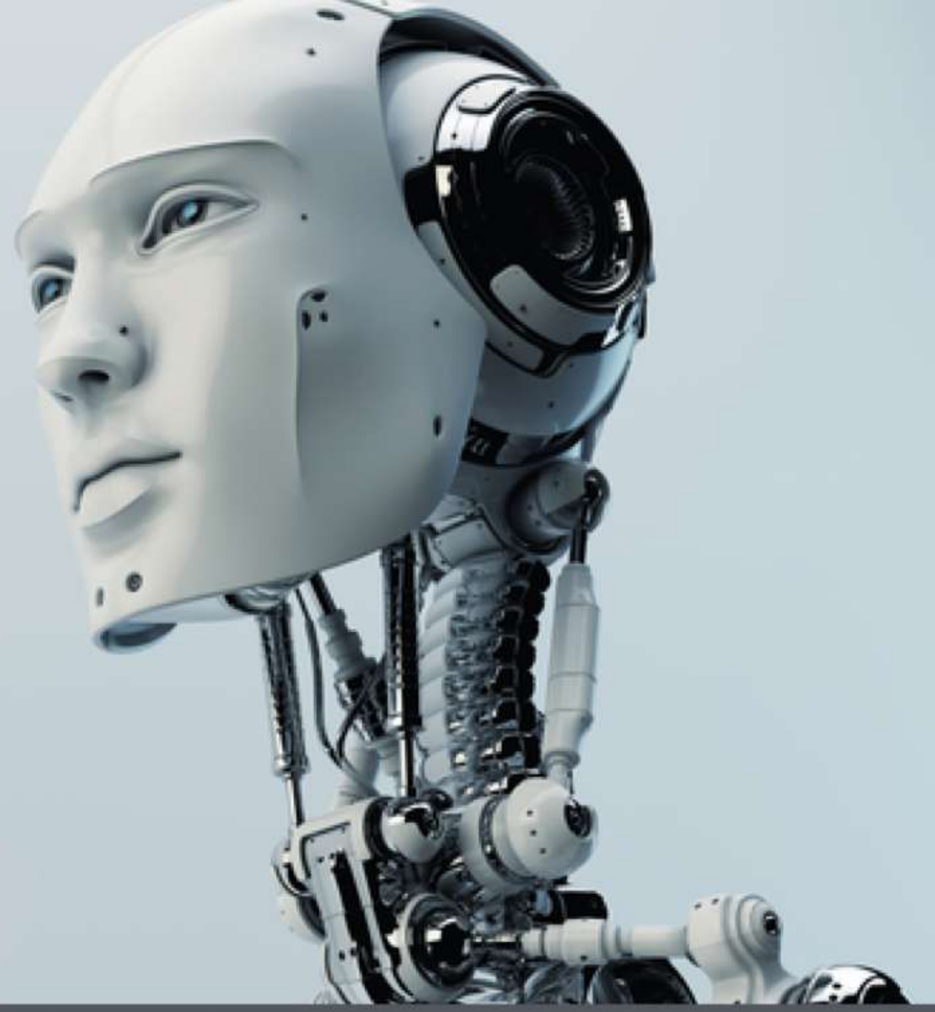
Everything in the next slides was captured
ONLY from news from February 2016.



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We are living in very exciting times.

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This is your present.

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This is your present.
Not your children's.

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This is your present.
Not your children's.
Not your children's children's.

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These slides are not meant to scare you.

It is intended to make you aware of the context we live in.
Awareness is the best antidote for ignorance.

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Are you ready?

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We are entering the next wave of tech change.

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1981

1994

2007

@CDIXON on MEDIUM

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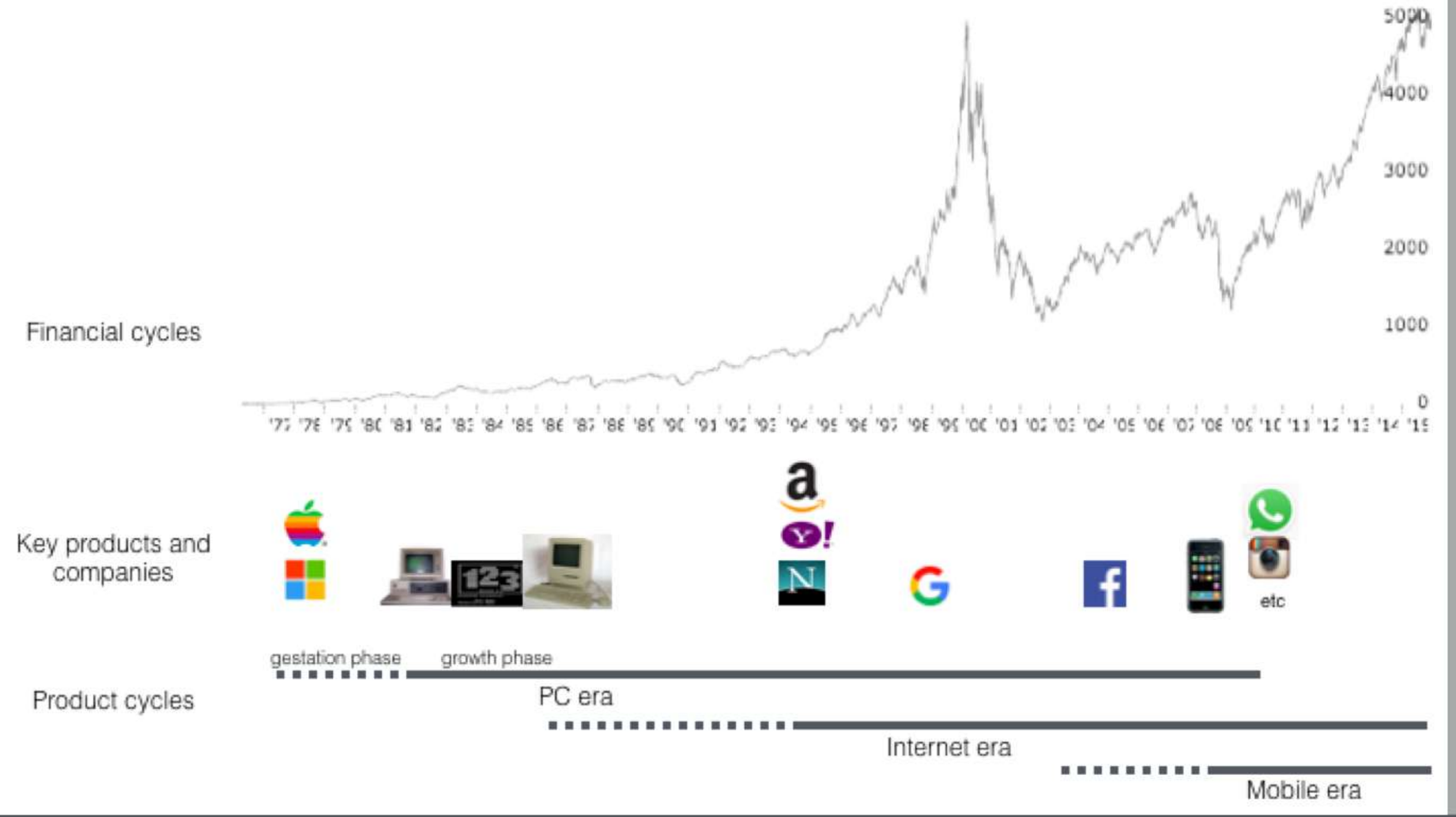

10-15 year cycles

Independent of $

attribution: https://medium.com/@cdixon/

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But… this change is *not* linear.

We are entering Augmented & Virtual Reality.

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Canon

Bill
Dan
MacDonald

400 HOURS PER MIN

At one gigabyte per hour this results in a petabyte (PB) of new storage every day.
The trend for video uploading is increasing exponentially by about 10X every 5 years.

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Who remembers the Babel Fish?

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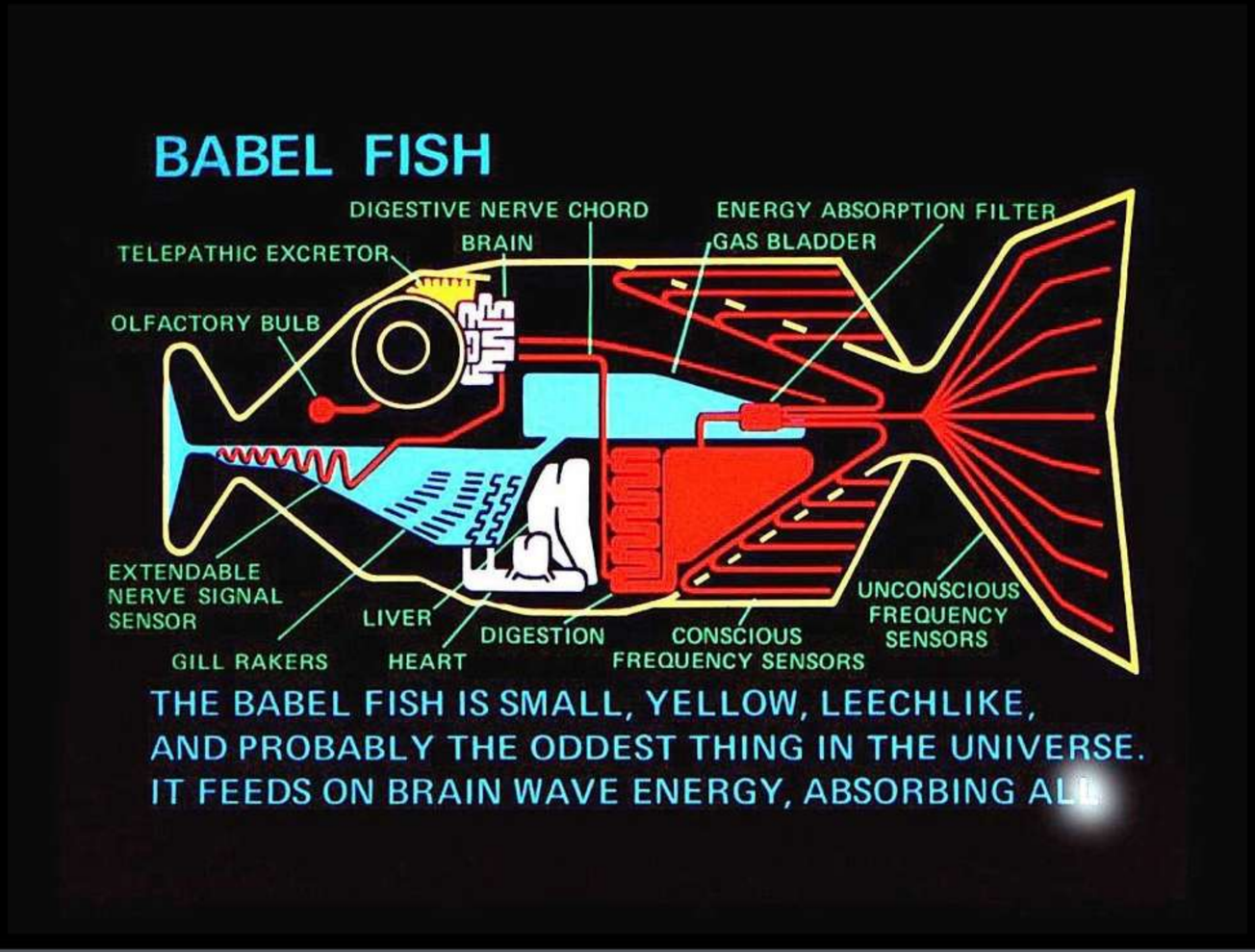

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Surprise!
It's within reach in less than a decade.

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90+

LANGUAGES
ONLINE TODAY

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1,000,000,000 DAILY TRANSLATIONS

200’000,000 DAILY USERS

Whenever the machine translations get it wrong, users can flag the error—and that data, too, will be incorporated into future attempts.

ALEC ROSS - WSJ

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This is *not even* the warm-up.

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Bloomberg
Business

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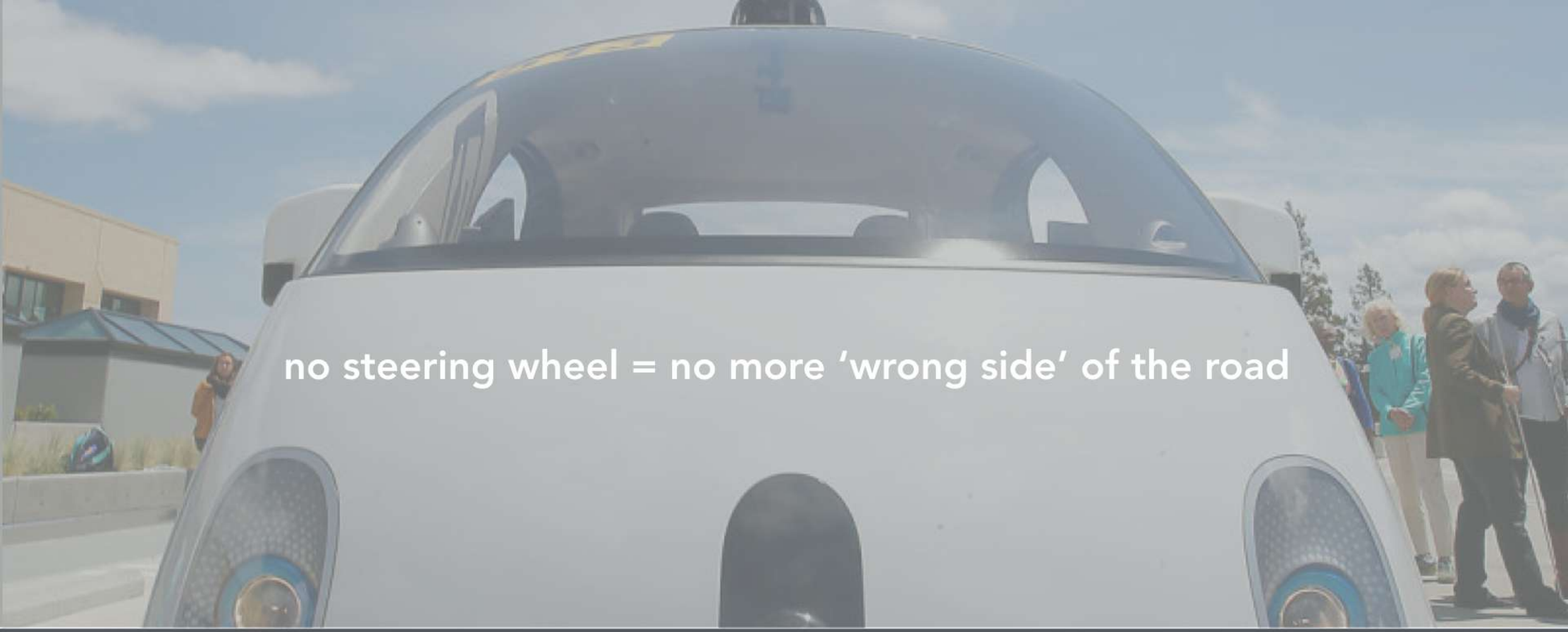

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1,300,000,000 PEOPLE W/O ELECTRICITY

2,400,000,000 PEOPLE W/O TOILETS

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7,600,000,000 ACTIVE GLOBAL CELLPHONES

1,600,000,000 PEOPLE ON FACEBOOK

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Cheaper. → Order of magnitude cost drop.

Better. → Near-immediate new features & improvements.

Faster. → Technology leapfrog.

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Power dynamics
fundamentally change.

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OLD POWER | NEW POWER | NEW POWER VALUES

Power dynamics fundamentally change.

Jeremy Heimans' framework for Old vs New Power.

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OLD POWER	NEW POWER	NEW POWER VALUES
Currency	Current	Speed

Power dynamics fundamentally change.

Jeremy Heimans' framework for Old vs New Power.

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Power dynamics fundamentally change.

OLD POWER	NEW POWER	NEW POWER VALUES
Currency	Current	Speed
Held by few	Made by many	Networked governance

Jeremy Heimans' framework for Old vs New Power.

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Power dynamics fundamentally change.

OLD POWER	NEW POWER	NEW POWER VALUES
Currency	Current	Speed
Held by few	Made by many	Networked governance
Downloads (hierarchical)	Uploads (grassroots)	Do-it-ourselves

Jeremy Heimans' framework for Old vs New Power.

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Commands	Shares	Collaboration

Jeremy Heimans' framework for Old vs New Power.

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Commands	Shares	Collaboration
Leader-driven	Peer-driven	Participation

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OLD POWER	NEW POWER	NEW POWER VALUES
Currency	Current	Speed
Held by few	Made by many	Networked governance
Downloads (hierarchical)	Uploads (grassroots)	Do-it-ourselves
Commands	Shares	Collaboration
Leader-driven	Peer-driven	Participation
Closed	Open	Transparency

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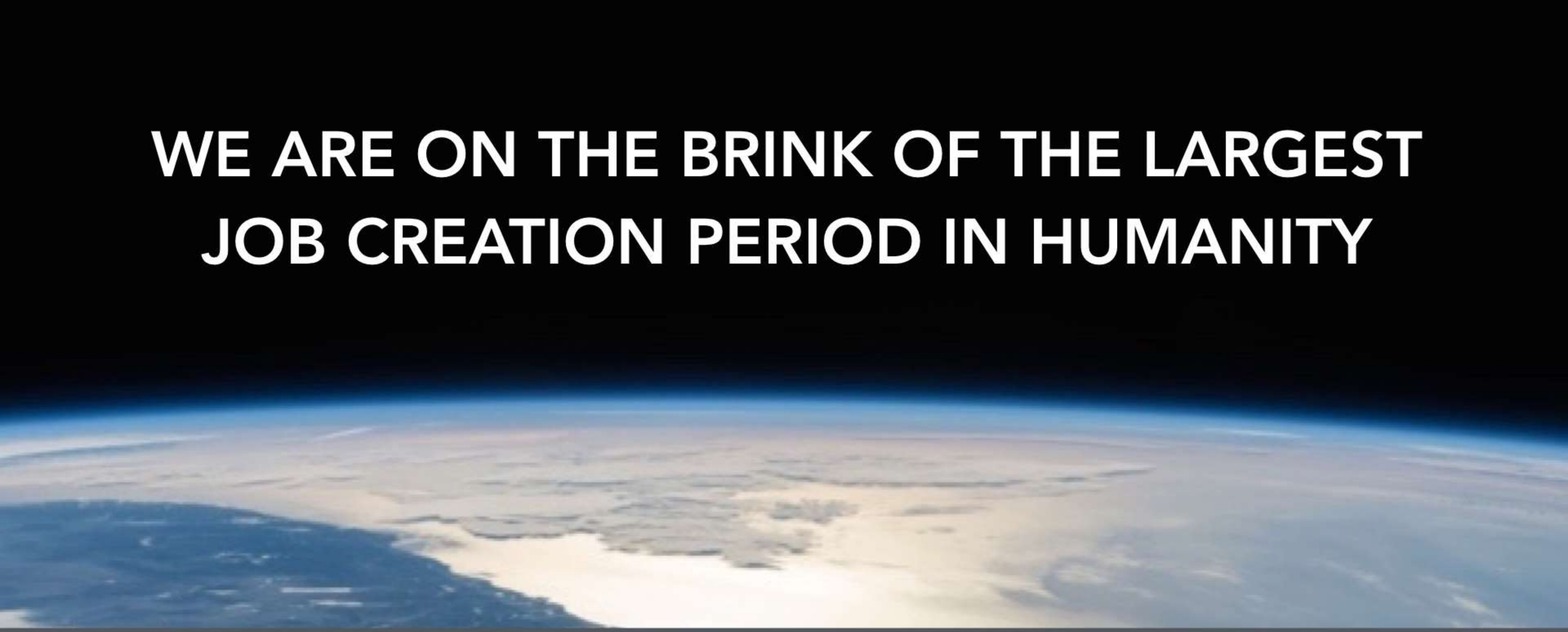
WE ARE ON THE BRINK OF THE LARGEST JOB CREATION PERIOD IN HUMANITY



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Hang on a minute…

Wasn’t this talk about how robots where going to take over my job?

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Ehhhmmm.... no.

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This is what happened since the 1980s

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The Great Prosperity: 1947–79

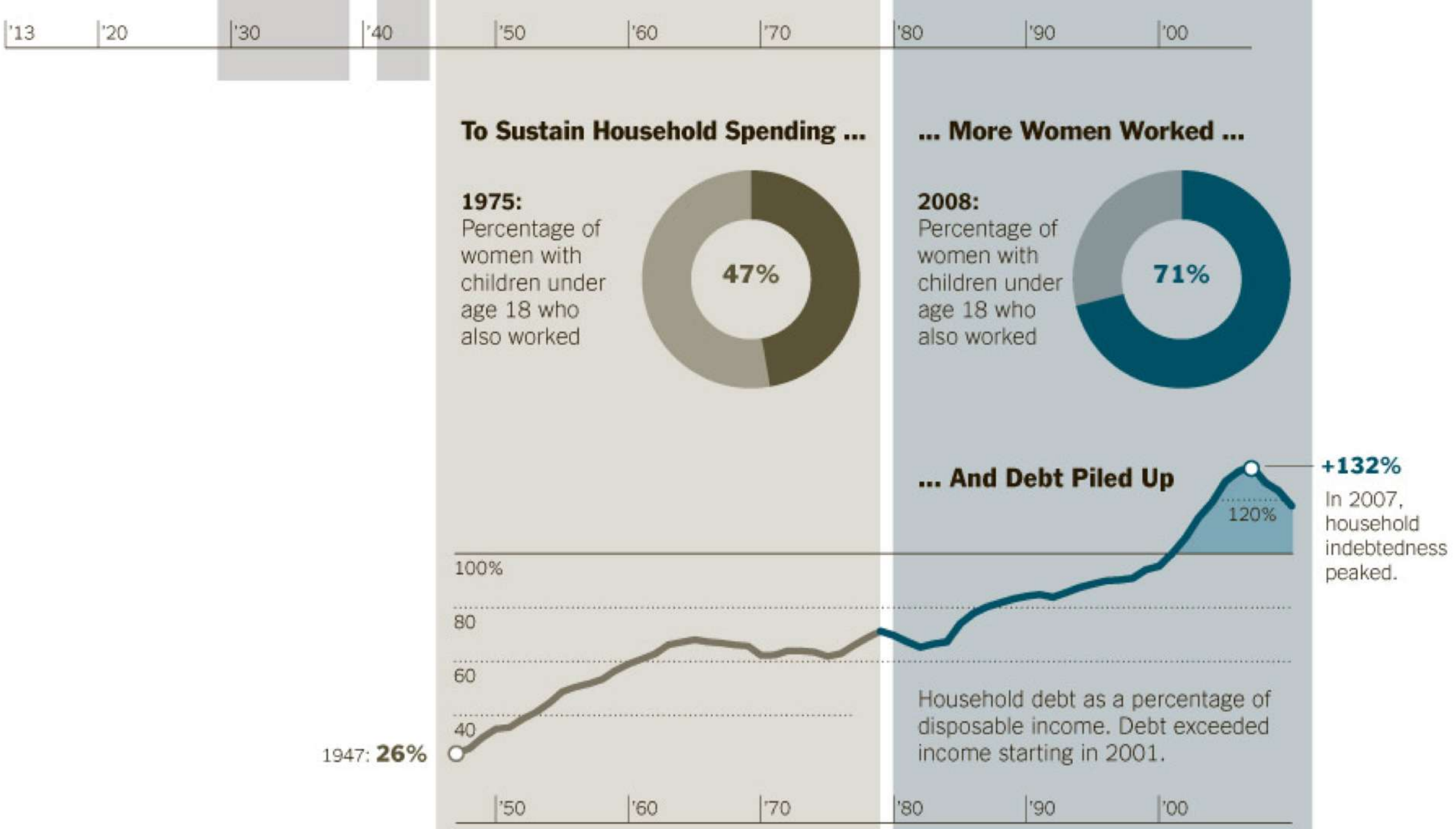
Pay Rose With Productivity ...

Wages and overall compensation, for production and non-supervisory workers (now about 82 percent of the private sector work force), tracked steadily upward alongside gains in productivity.

The rising value of goods and services per worker meant rising pay. But that relationship ended in the 1970s.

The Great Regression: 1980–Now

... And Then It Didn't


'13
'20
'30
'40
'50
'60
'70
'80
'90
'00
To Sustain Household Spending ...
1975:
Percentage of women with children under age 18 who also worked
47%
... More Women Worked ...
2008:
Percentage of women with children under age 18 who also worked
71%
... And Debt Piled Up
+132%
In 2007, household indebtedness peaked.
120%
100%
80
60
40
1947: 26%
Household debt as a percentage of disposable income. Debt exceeded income starting in 2001.
'50
'60
'70
'80
'90
'00

Don’t blame our Robot Overlords.
It’s been human greed all along.

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I remain optimistic.

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Humans decide.
Humans code the algorithms (for now).

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We are about to hit the hockey puck.

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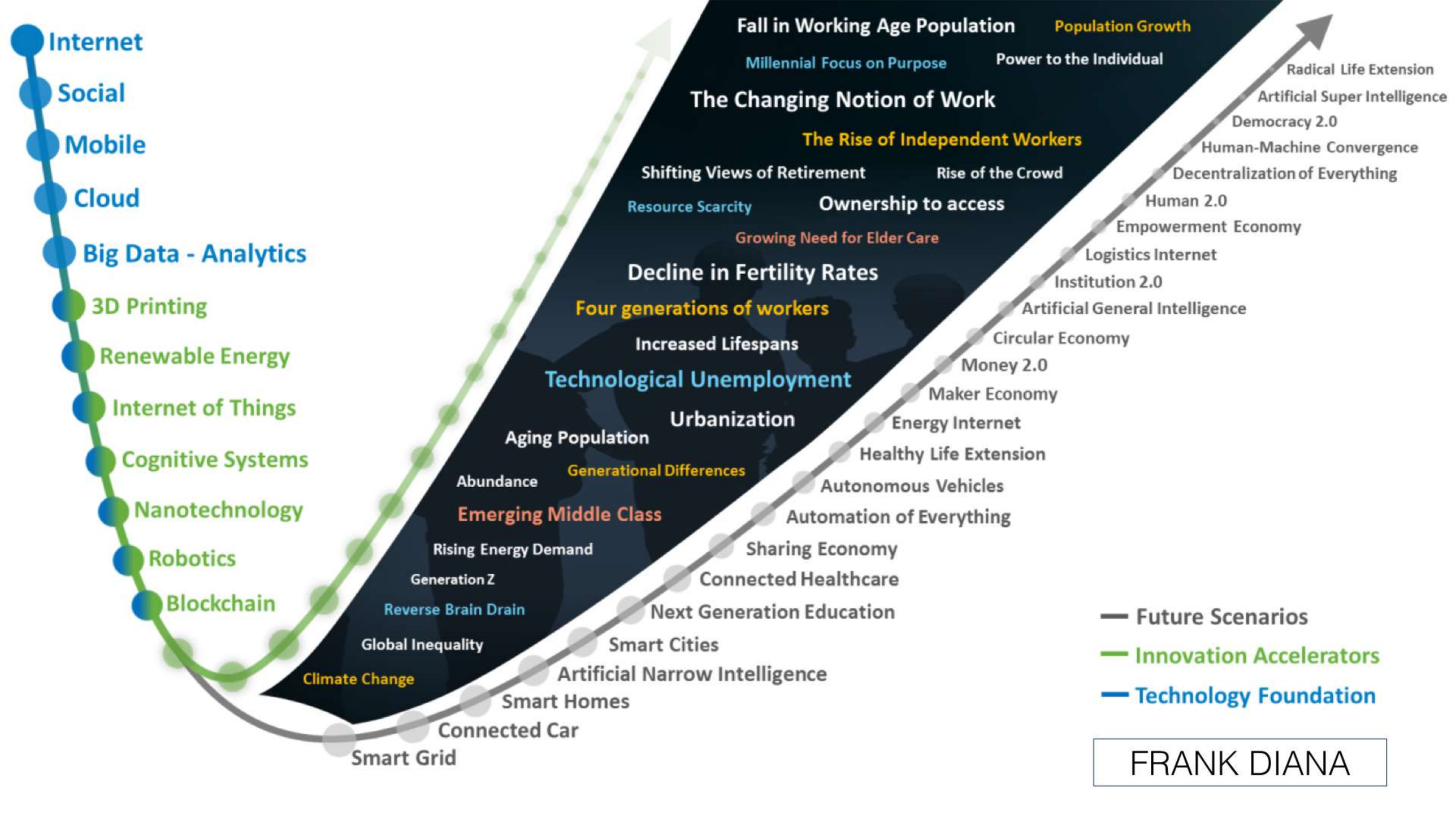
Internet
Social
Mobile
Cloud
Big Data - Analytics
3D Printing
Renewable Energy
Internet of Things
Cognitive Systems
Nanotechnology
Robotics
Blockchain
Fall in Working Age Population
Population Growth
Millennial Focus on Purpose
Power to the Individual
The Changing Notion of Work
The Rise of Independent Workers
Shifting Views of Retirement
Rise of the Crowd
Resource Scarcity
Ownership to access
Growing Need for Elder Care
Decline in Fertility Rates
Four generations of workers
Increased Lifespans
Technological Unemployment
Urbanization
Aging Population
Generational Differences
Abundance
Emerging Middle Class
Rising Energy Demand
Generation Z
Reverse Brain Drain
Global Inequality
Climate Change
Smart Grid
Connected Car
Smart Homes
Artificial Narrow Intelligence
Smart Cities
Next Generation Education
Connected Healthcare
Sharing Economy
Automation of Everything
Autonomous Vehicles
Healthy Life Extension
Energy Internet
Maker Economy
Money 2.0
Circular Economy
Artificial General Intelligence
Institution 2.0
Logistics Internet
Empowerment Economy
Human 2.0
Decentralization of Everything
Human-Machine Convergence
Democracy 2.0
Artificial Super Intelligence
Radical Life Extension
Future Scenarios
Innovation Accelerators
Technology Foundation
FRANK DIANA

But I work in blended learning…
How does this relate to me?

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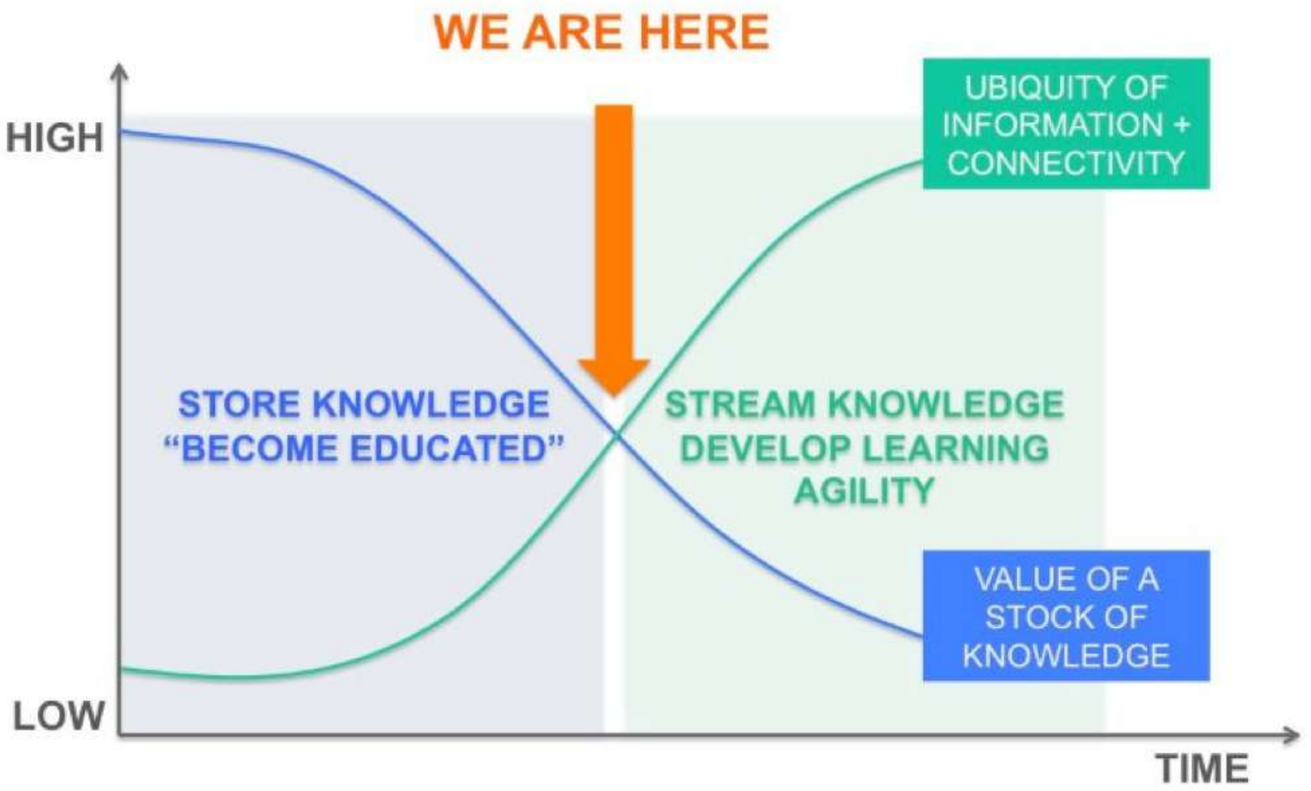

Credits: John Hagel @Jhagel for Stocks of Knowledge Concept and Laurence Van Elegem for the Stream Knowledge Concept

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It is now possible to reach millions of people with relevant, personalized learning experiences with have rich analytics.

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one last thing...

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Synthetic learning.

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Google DeepMind

49 VIDEO GAMES

They didn't teach it "how to play video games," but *how to learn to play* the games.
They encouraged Deep Mind to improve using Unsupervised Learning.

KEVIN KELLY

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"By the end of hundreds of rounds, the neural network could play the game as well as human players, sometimes better.

In every sense of the word, it learned how to play the games."

KEVIN KELLY

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"Once learning can be synthesized it can be distributed into all kinds of ordinary devices and functions.

It can be used to enable self-driving cars to get better, or for medical diagnosing programs to improve with use."

Kevin Kelly
January 2016

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DeepMind Health

LAUNCHED ON 24 FEBRUARY 2016

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Everything is going to be OK*

* As long as we respect one another with dignity and humanity.

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Thanks for listening.

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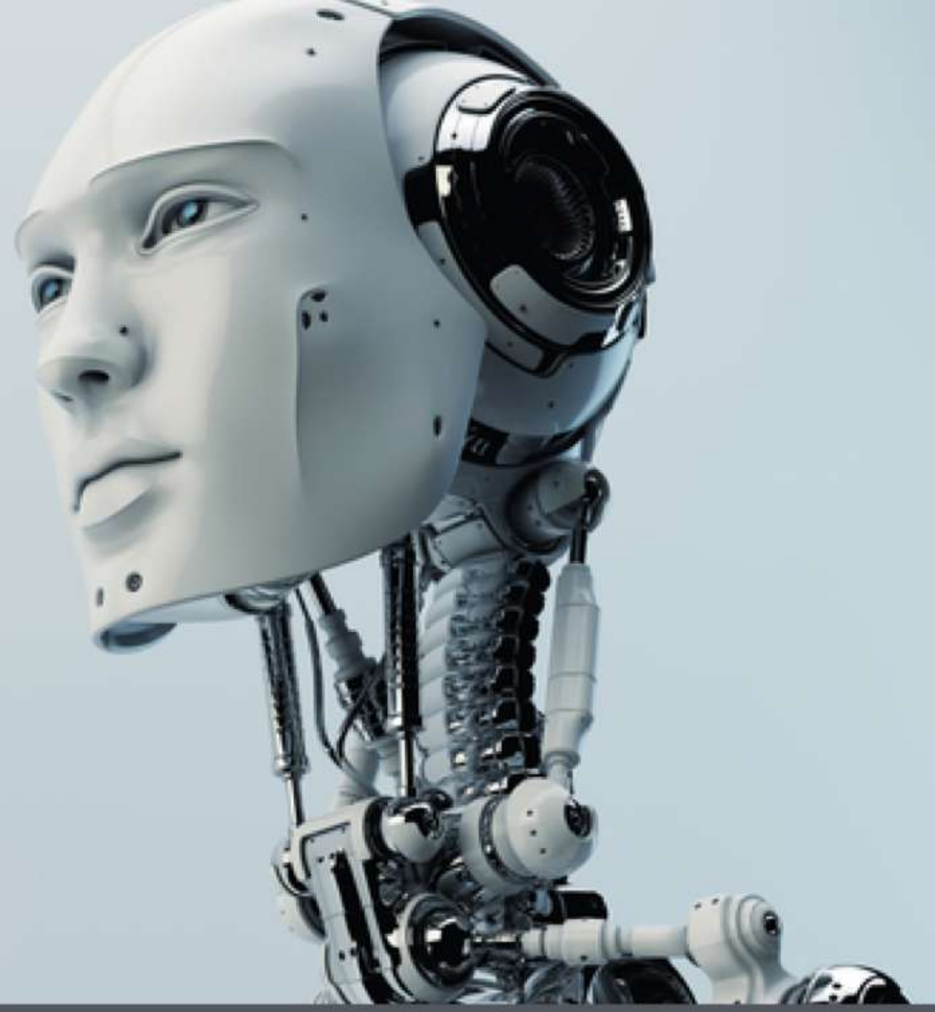
The Future Of Work & The Work Of The Future



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