

Oxford Internet Institute
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Artificial Intelligence: Should You Be Worried?

Luciano Floridi

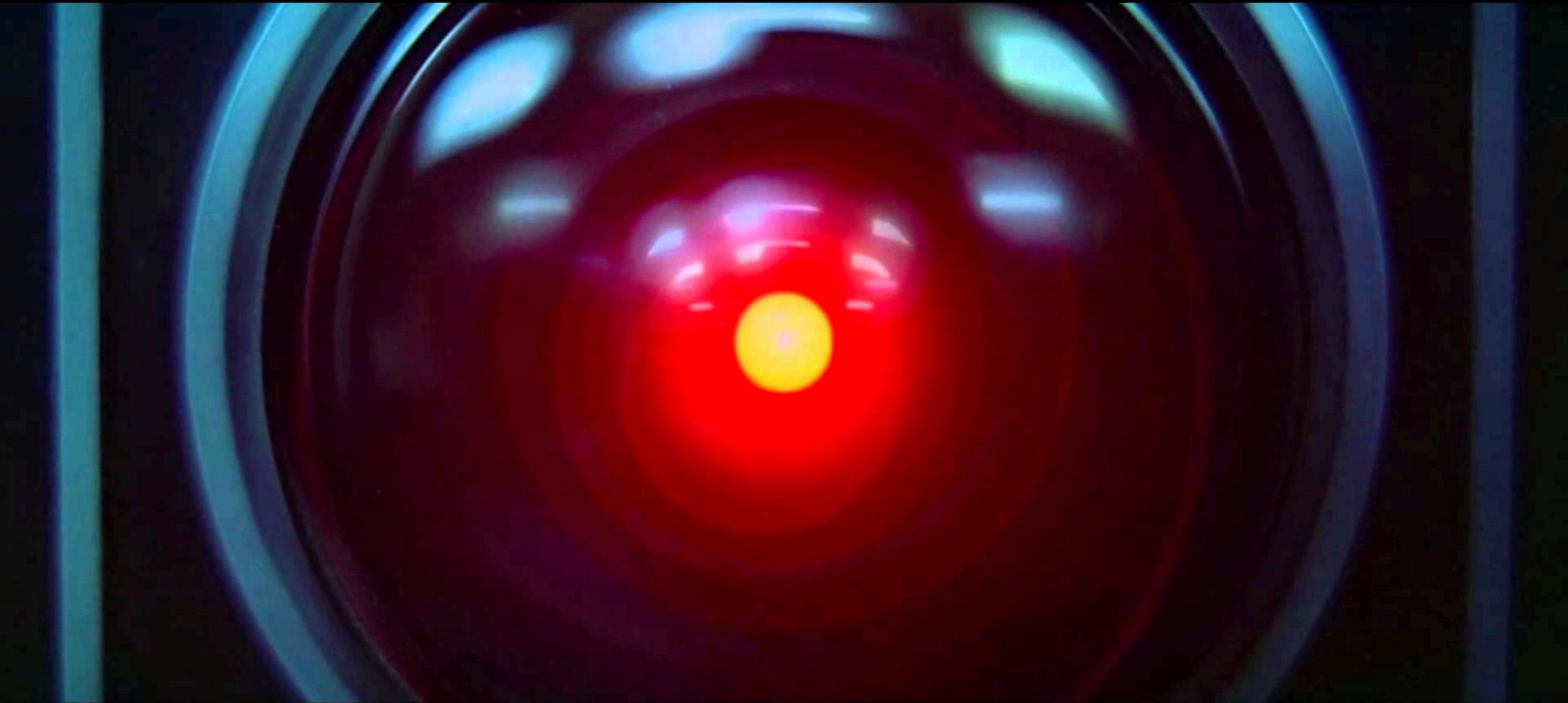
Professor of Philosophy and Ethics of Information
Director of Research

... he was making twenty tripods that were to stand by the wall of his house, and he set wheels of gold under them all, that they might go of their own selves to the assemblies of the gods, and come back again, marvels indeed to see.

Homer, *Iliad*, Book XVIII



Sci-Fi



IF → THEN



COULD

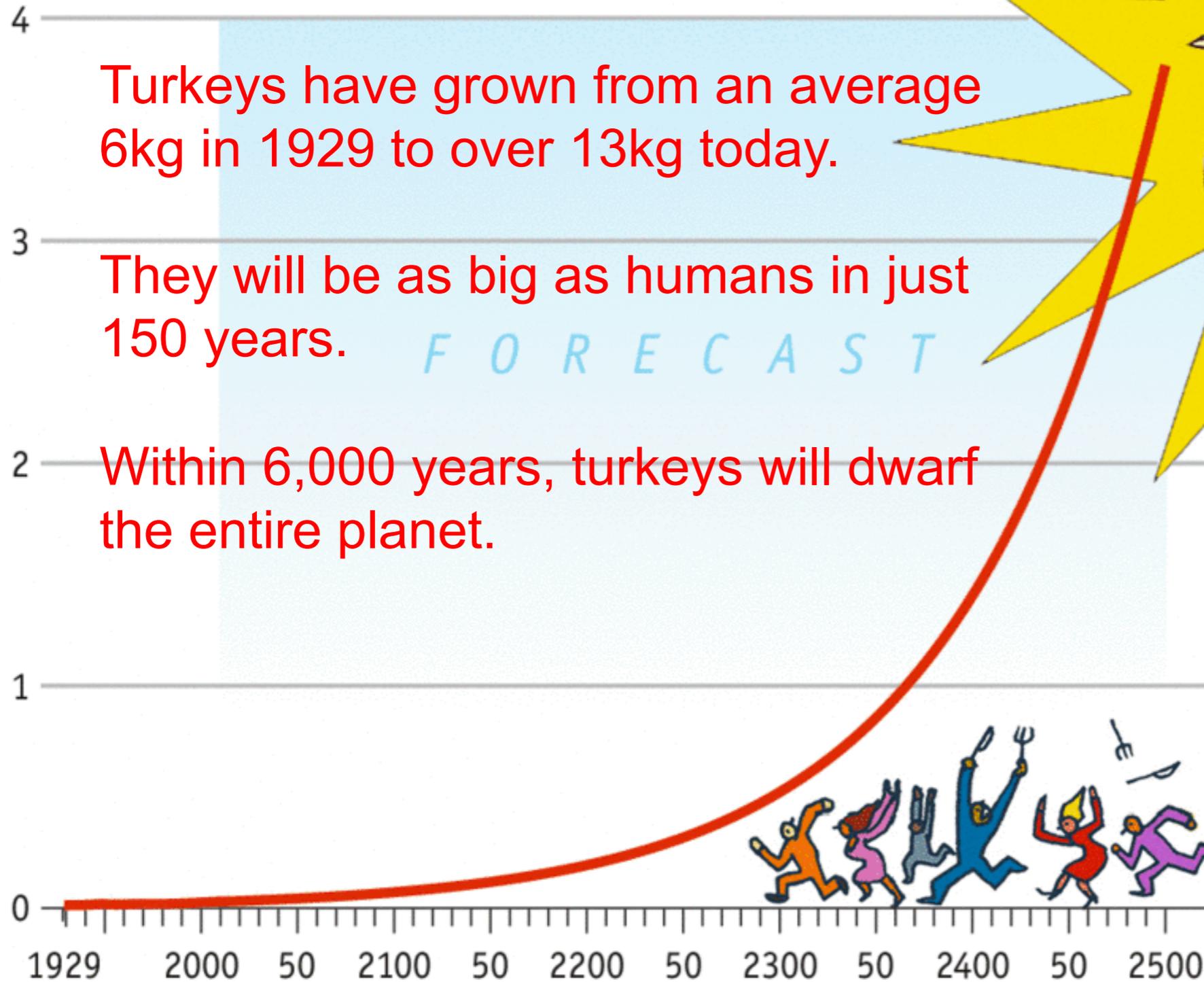
Dear Friend...



EXPONENTIAL

Average weight of a turkey*

US, '000 lb



Turkeys have grown from an average 6kg in 1929 to over 13kg today.

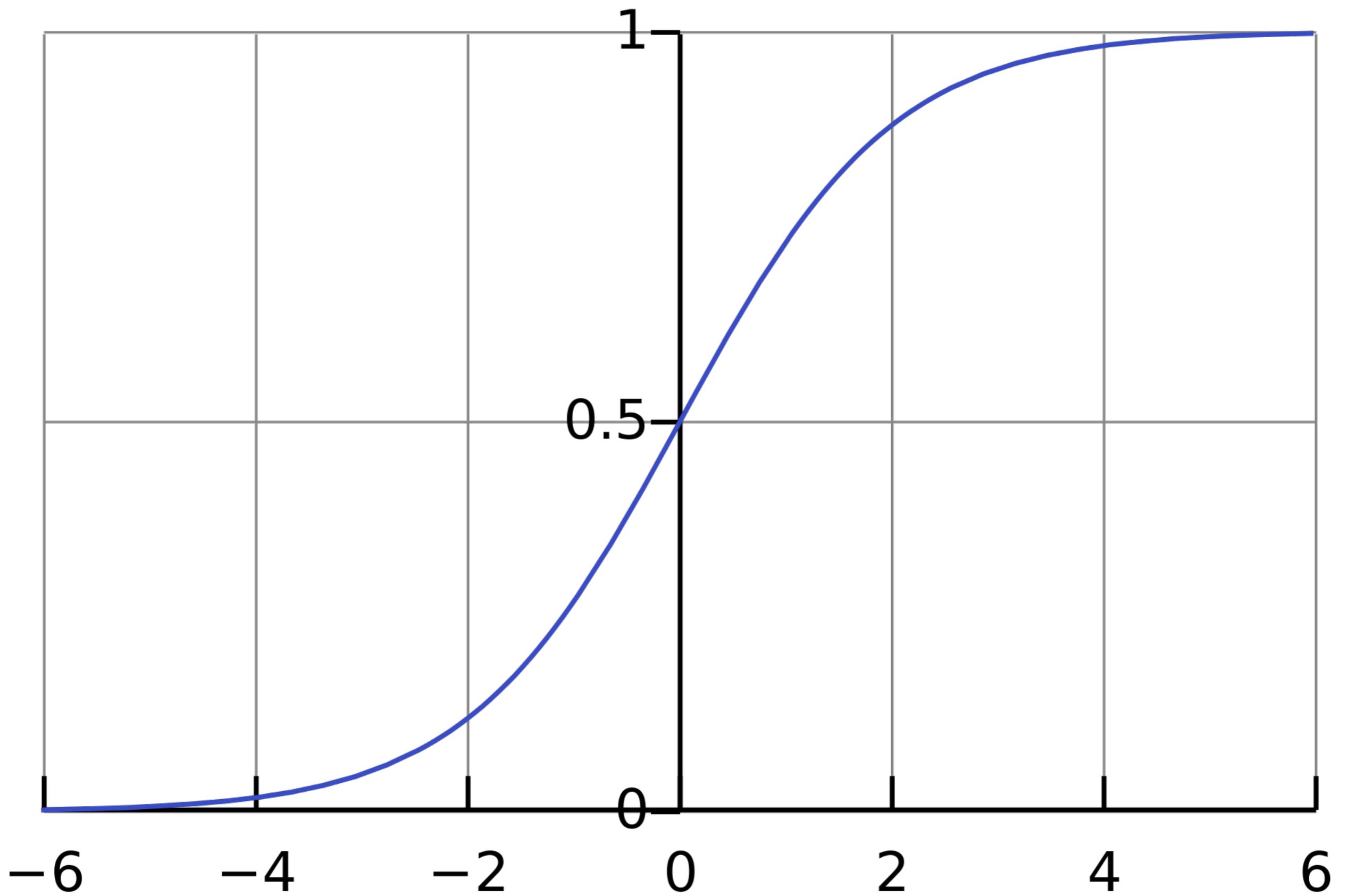
They will be as big as humans in just 150 years.

Within 6,000 years, turkeys will dwarf the entire planet.



Sources: US Department of Agriculture; *The Economist* Illustration: Satoshi Kambayashi

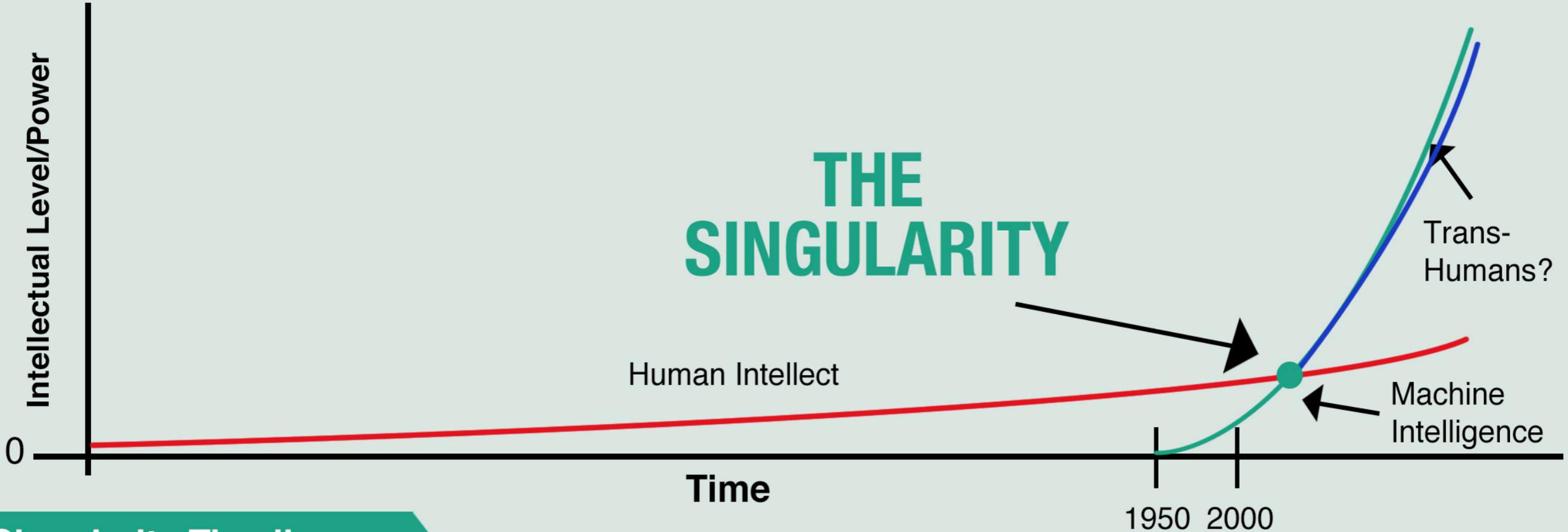
* Turkey sizes can go down as well as up



Graph of Logistic Curve (a typical sigmoid function, wikipedia)

SOONER or LATER

THE SINGULARITY



Singularity Timeline

SAFE > SORRY



WRONG BEFORE



EXPERT SURVEY



NOT YET

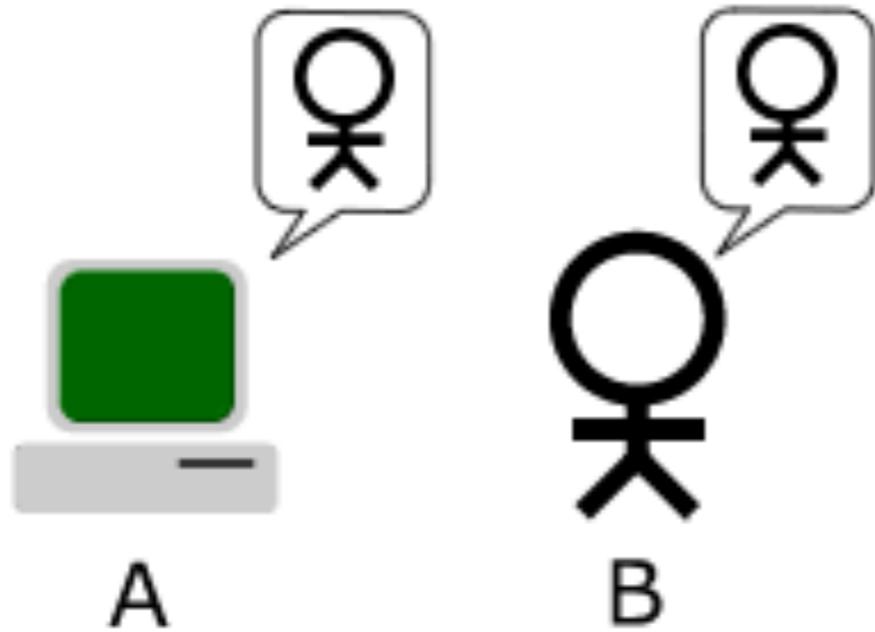
I HATE
FRIENDLY
FIRE!!!!

53:33 697

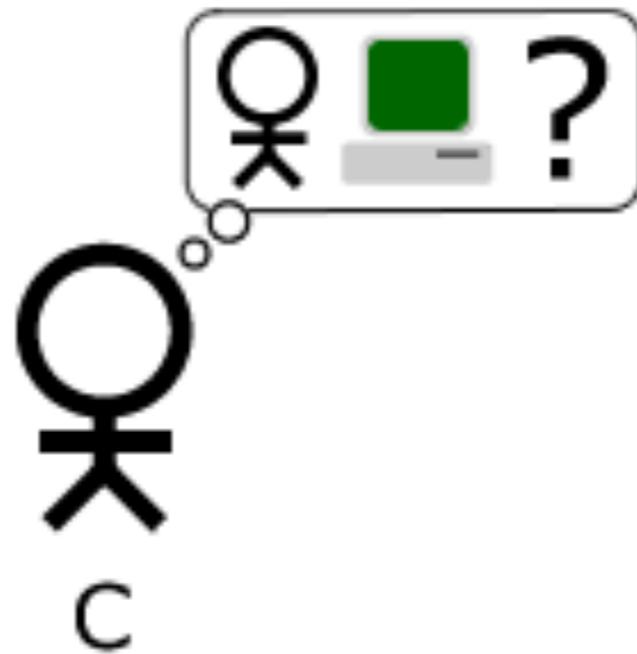


AvoFreak

X14



70% of the time
5min





The car could not fit
in the parking space
because it was too small.
What was too small?



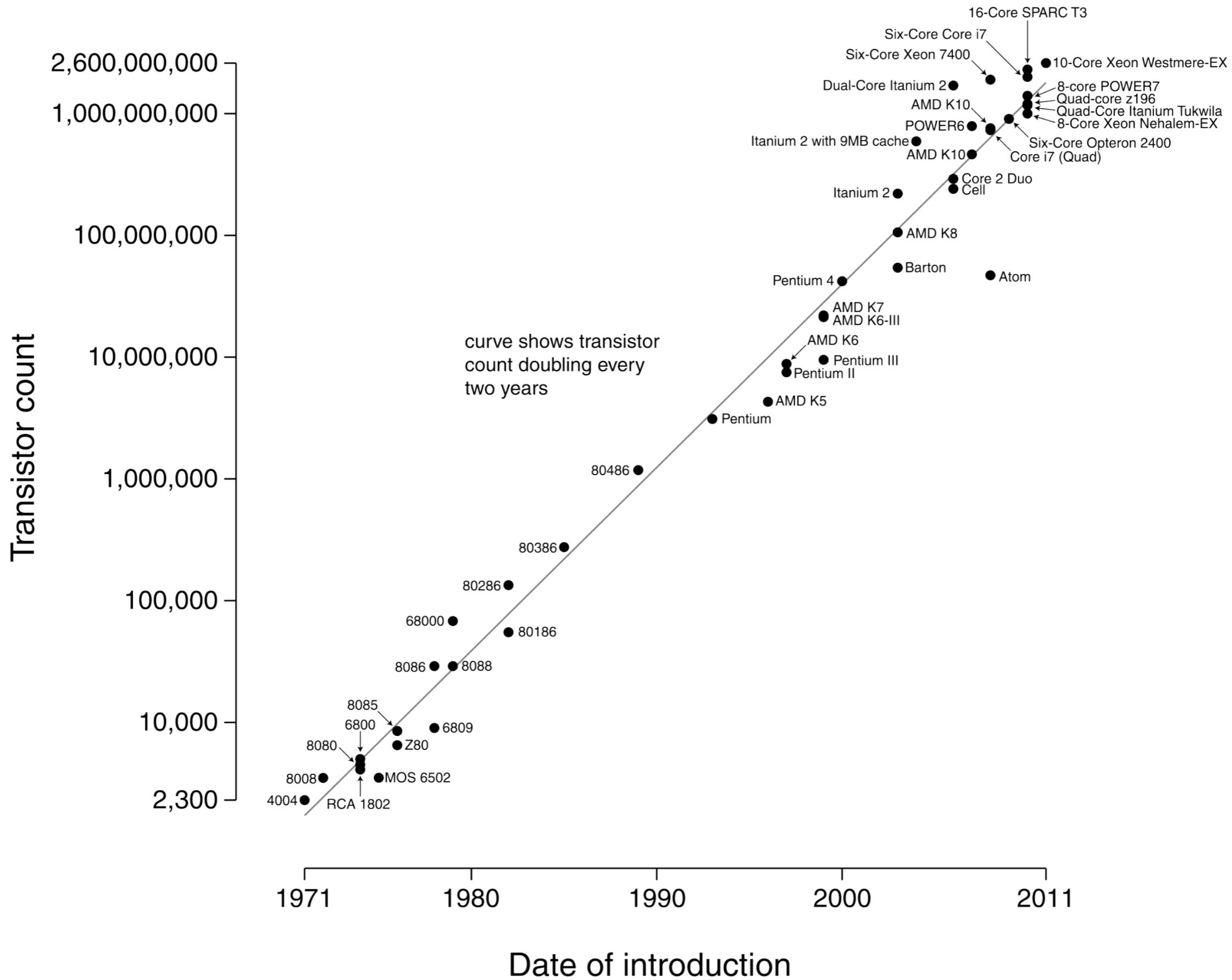
I'm not a walking
encyclopedia you know.

The Aubergine Challenge



Reality

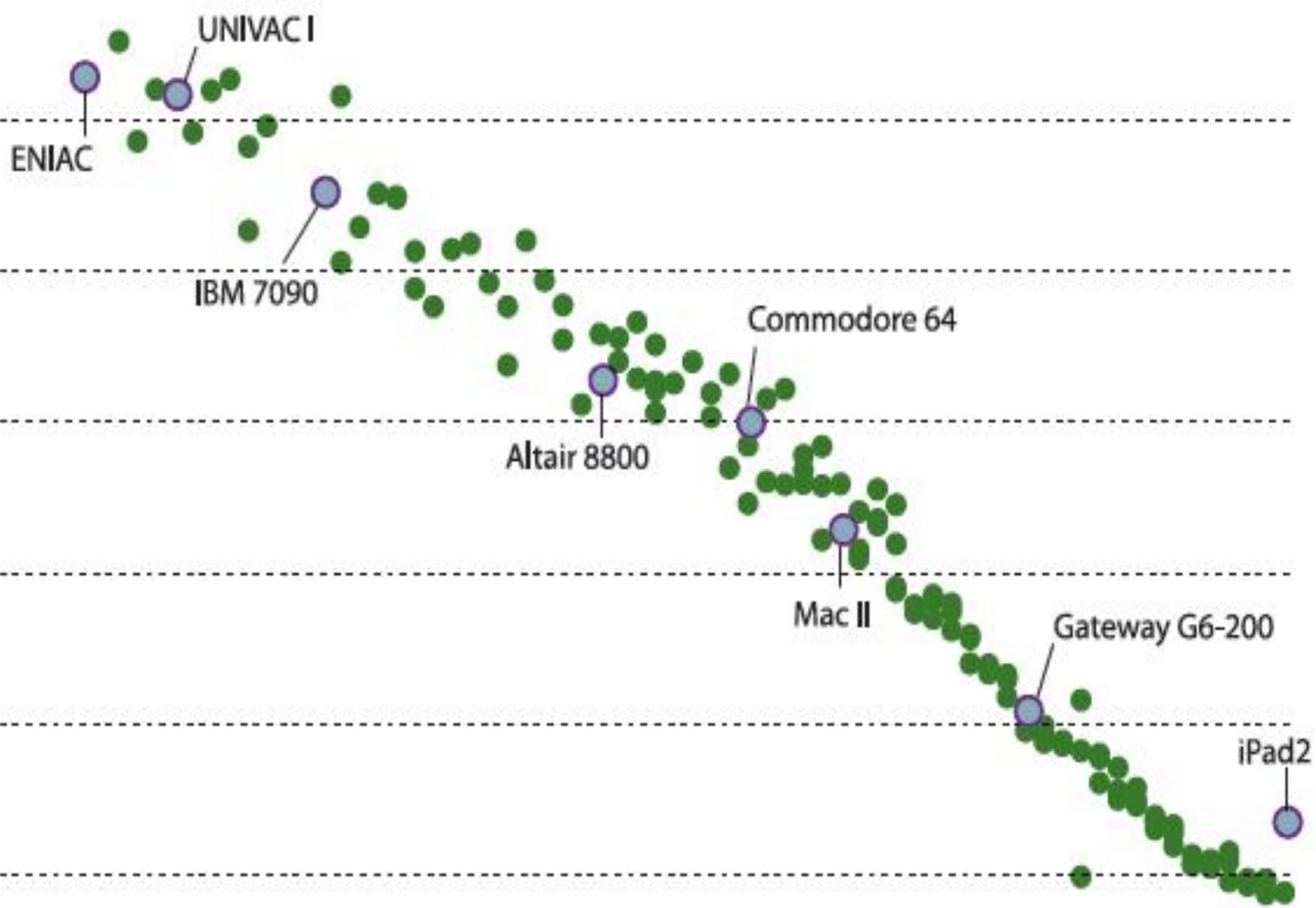




2010 Dollars (Log Scale)

\$100,000,000,000,000
\$1,000,000,000,000
\$10,000,000,000
\$100,000,000
\$1,000,000
\$10,000
\$100
\$1

1940 1950 1960 1970 1980 1990 2000 2010



GROWTH OF
GLOBAL DATA
(zettabytes)

2011
1.9

2015
7.9

2020
35

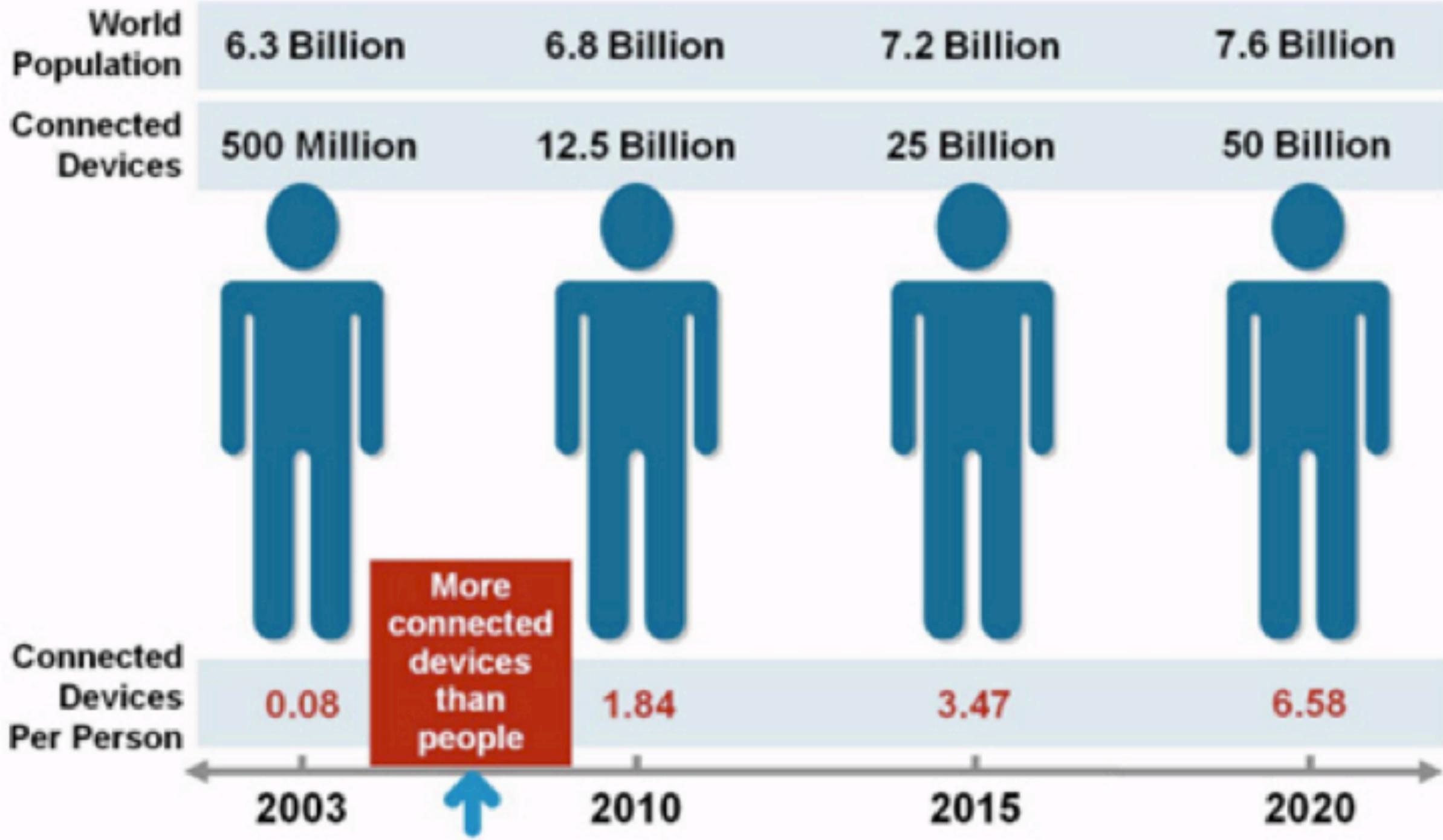
STORAGE COST
PER GIGABYTE
in US\$

18.9

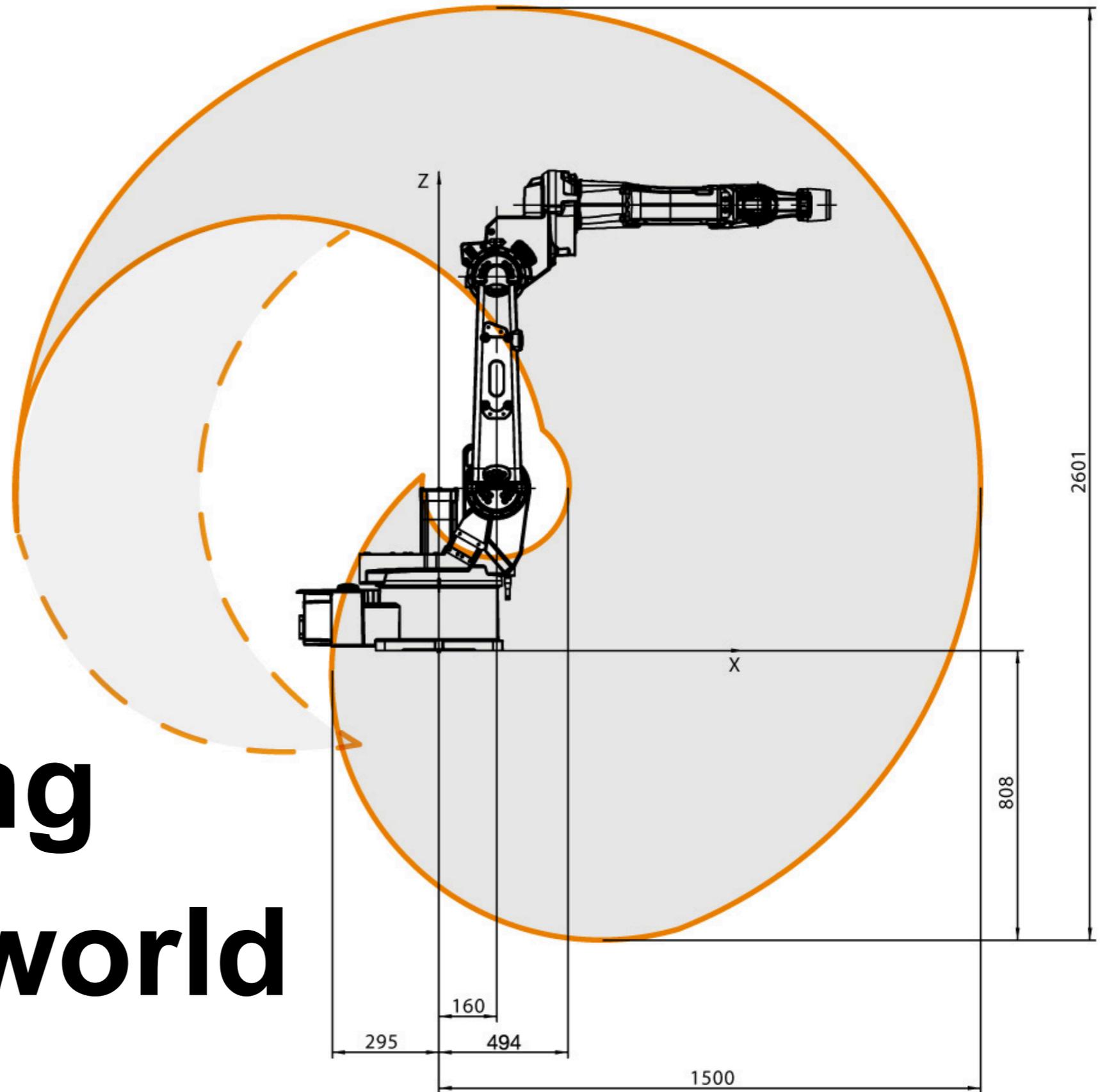
1.6

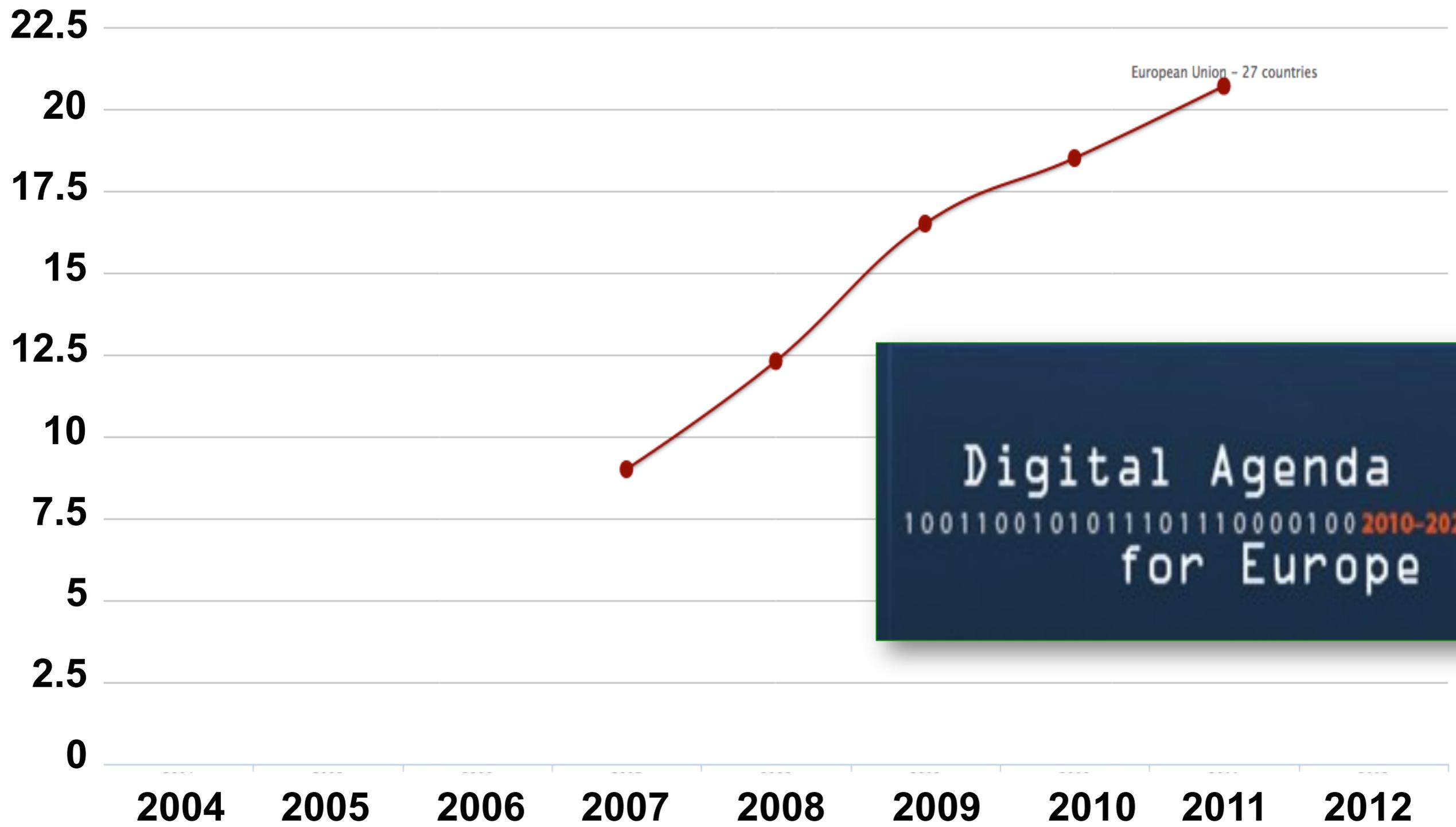
0.7

Big Data



**Enveloping
the world**





Digital Agenda
1001100101011101110000100 2010-2020
for Europe

European Union - 27 countries



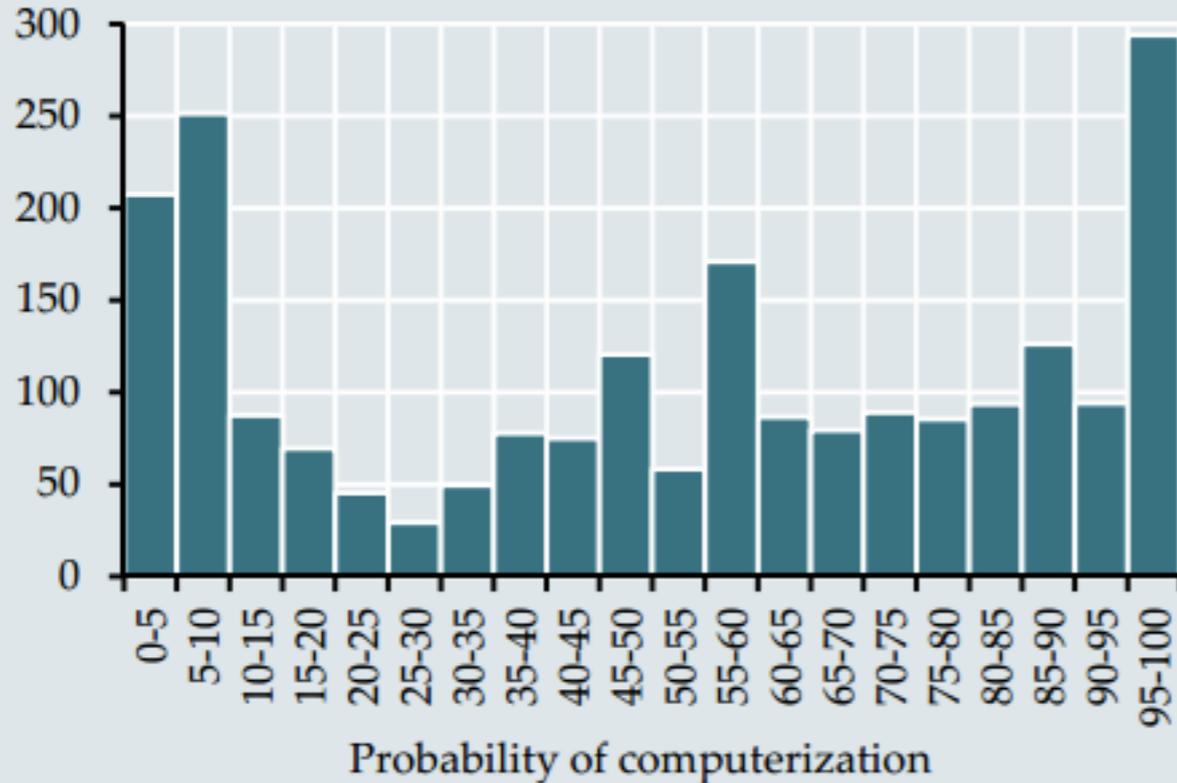
Four real challenges ...

Replaceable agency

2

Finland: The distribution of occupational employment over the probability of computerization, 5%-point intervals

No of workers, thousands



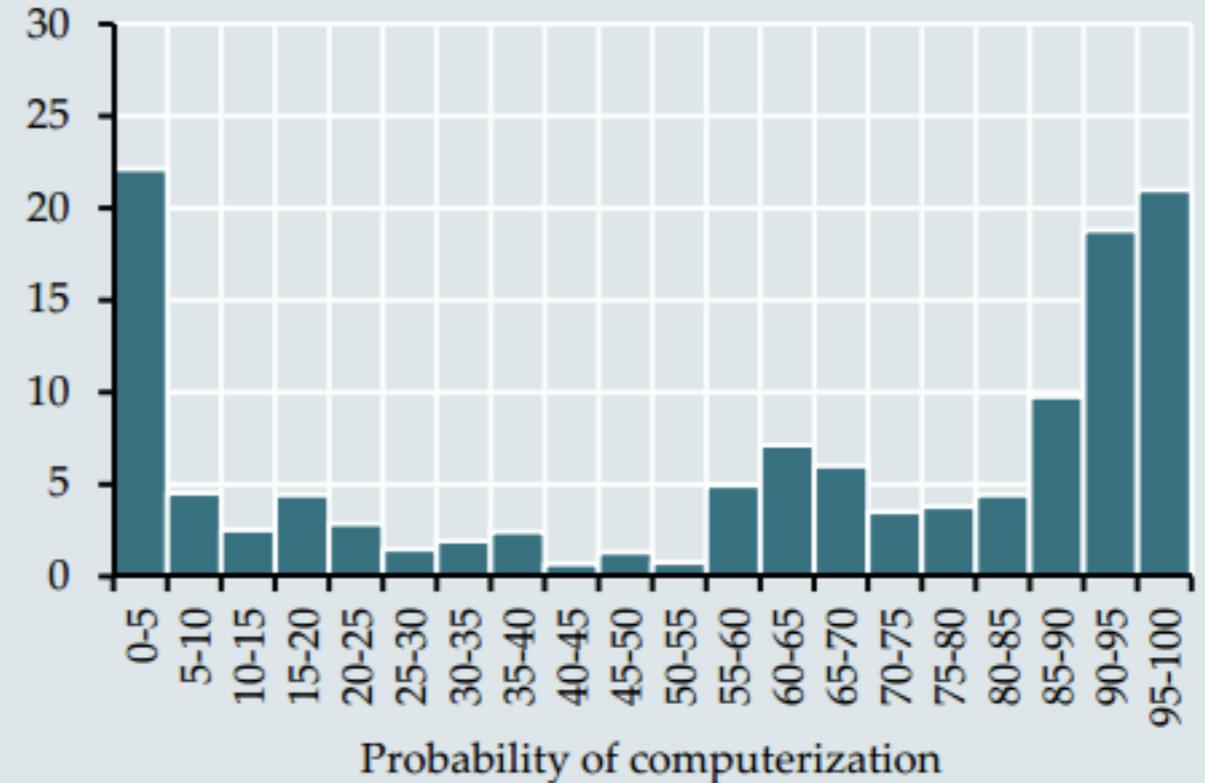
Data sources: *Statistics Finland* and *Frey & Osborne (2013)*.

ETLA

4

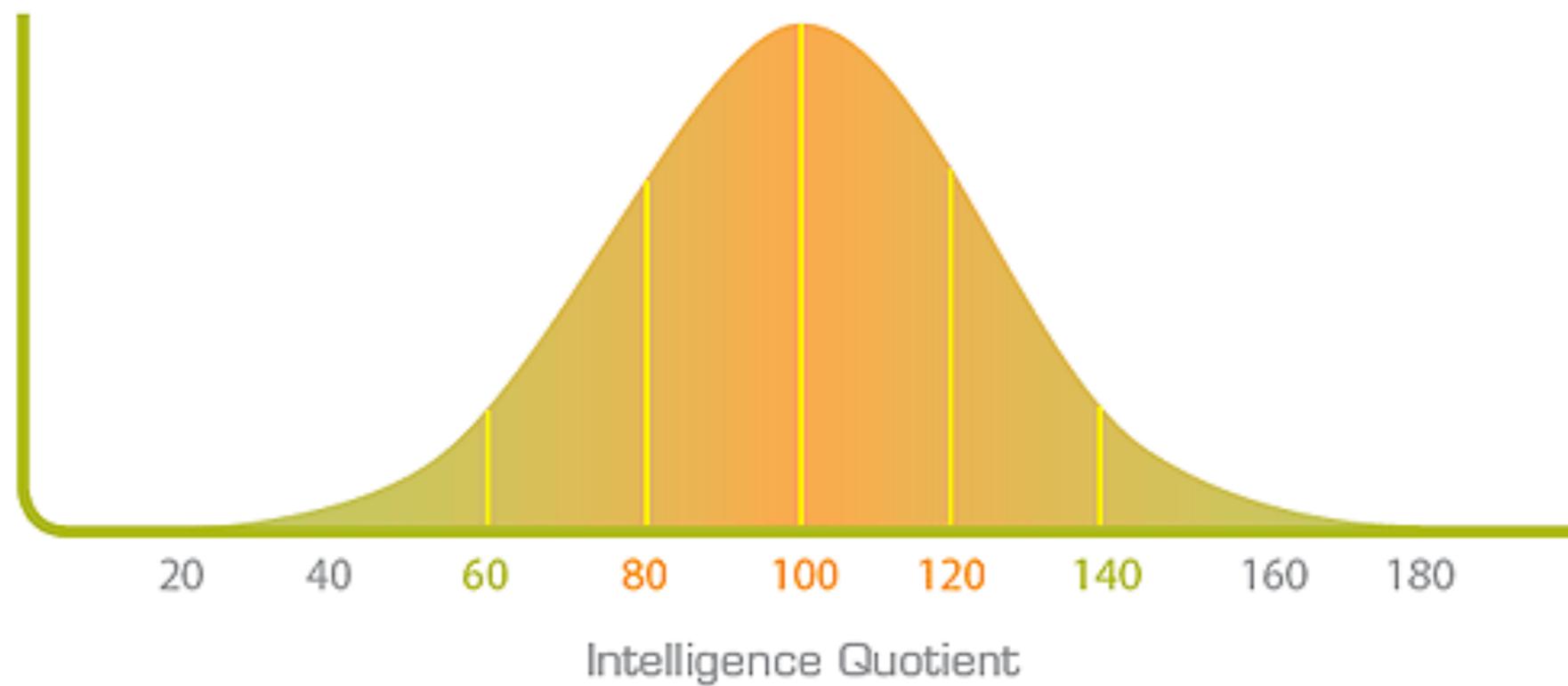
USA: The distribution of occupational employment over the probability of computerization, 5%-point intervals

No of workers, millions



Data sources: *Bureau of Labor Statistics* and *Frey & Osborne (2013)*.

ETLA



0-90	(below average)	111-121	(above average)	131-141	(gifted)
90-110	(average intelligence)	122-130	(highly intelligent)	142 +	(genius - top 1%)*

Predictable freedom

DEPARTMENT OF CRIMINOLOGY

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[PEOPLE](#)

[UNDERGRADUATE](#)

[GRADUATE](#)

[COURSES](#)

[ABOUT US](#)

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Philadelphia Courts Begin Using Computer Forecasts to Predict Future Criminal Behavior

February 7, 2013

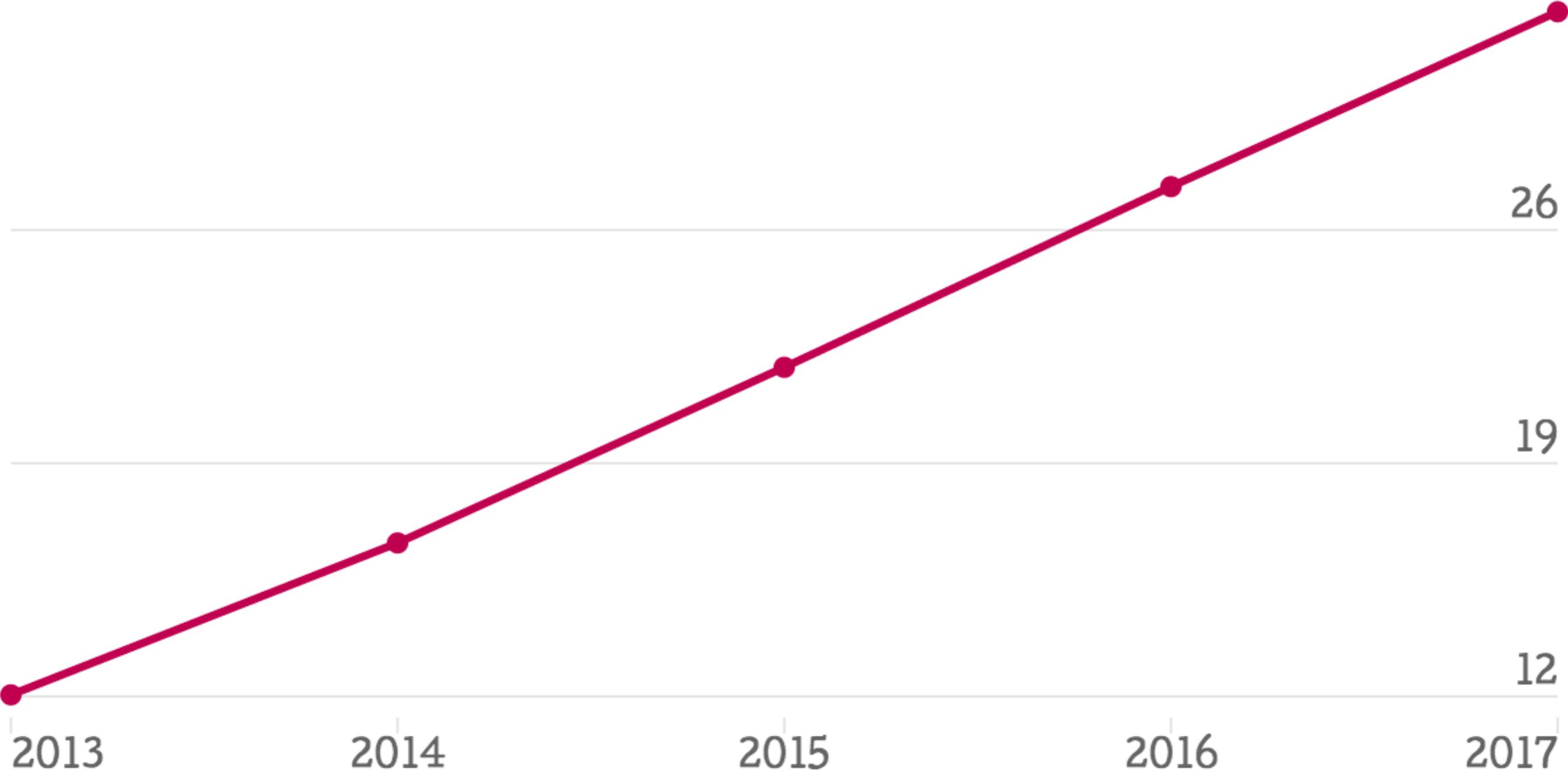
Computer forecasts created by Professor Richard Berk are now being used in Philadelphia Courts.

483 McNeill Building • 3718 Locust Walk • Philadelphia, PA. 19104-6286 • tel (215) 573-9097

• [Penn WebLogin](#)

Influential autonomy

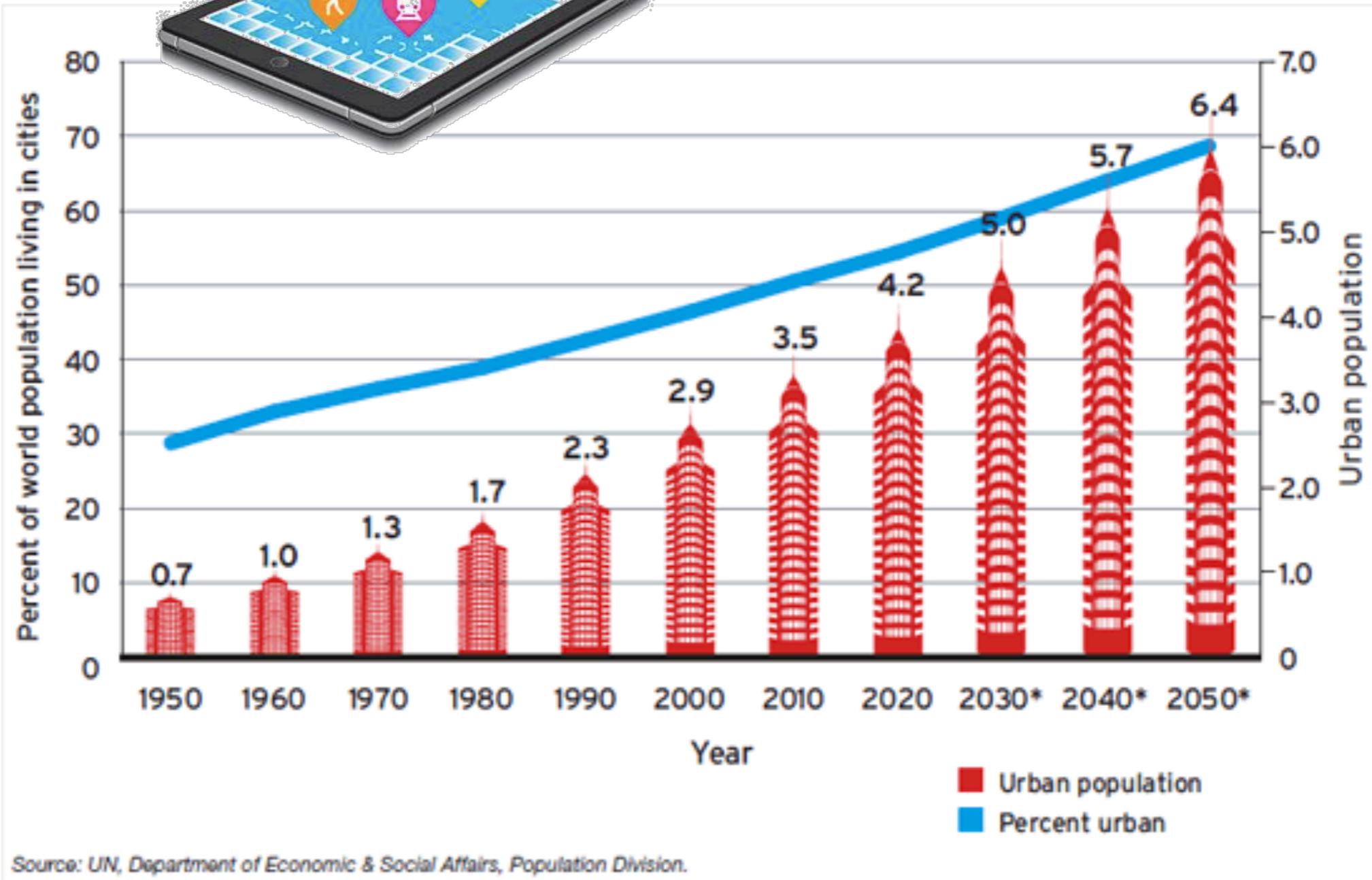
Worldwide programmatic advertising



Data: Magna Global

Dependent delegation

smart city



What infosphere?

What human project?

Think deeper

Design better

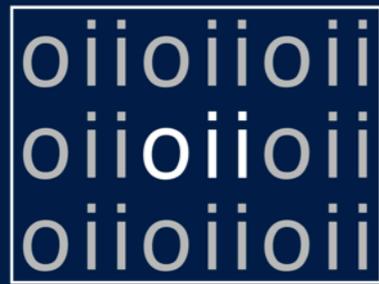
Be mindful

Men at some time are masters of their fates.

The fault, dear Brutus, is not in our stars.

But in ourselves, that we are underlings.

Shakespeare, *Julius Caesar* 1.2



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ACKNOWLEDGEMENTS. This research was supported by a John Fell major grant.

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