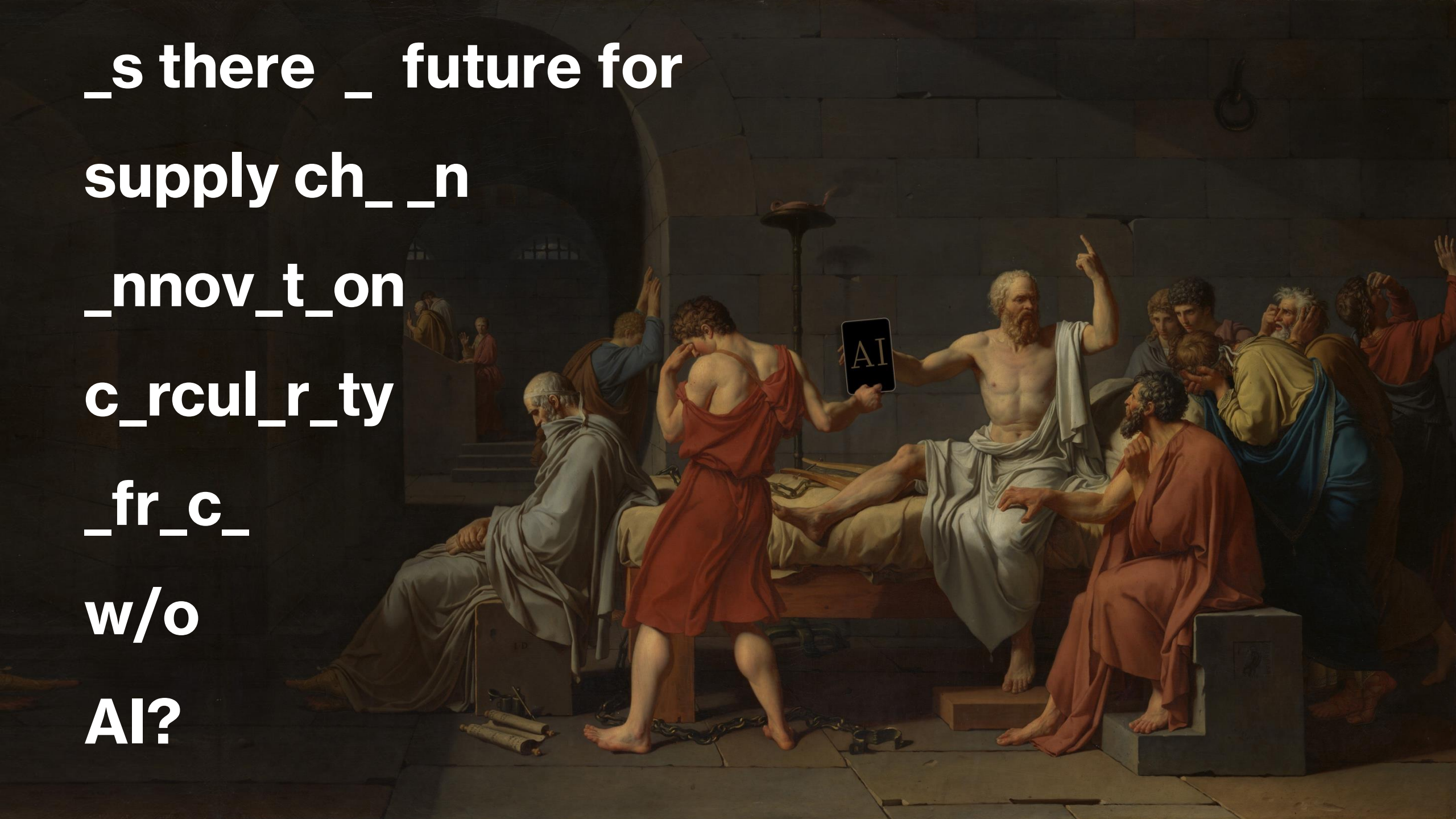
making innovation real:
delivering africa’s supply ch**AI**n value to the future

SAPICS 2025

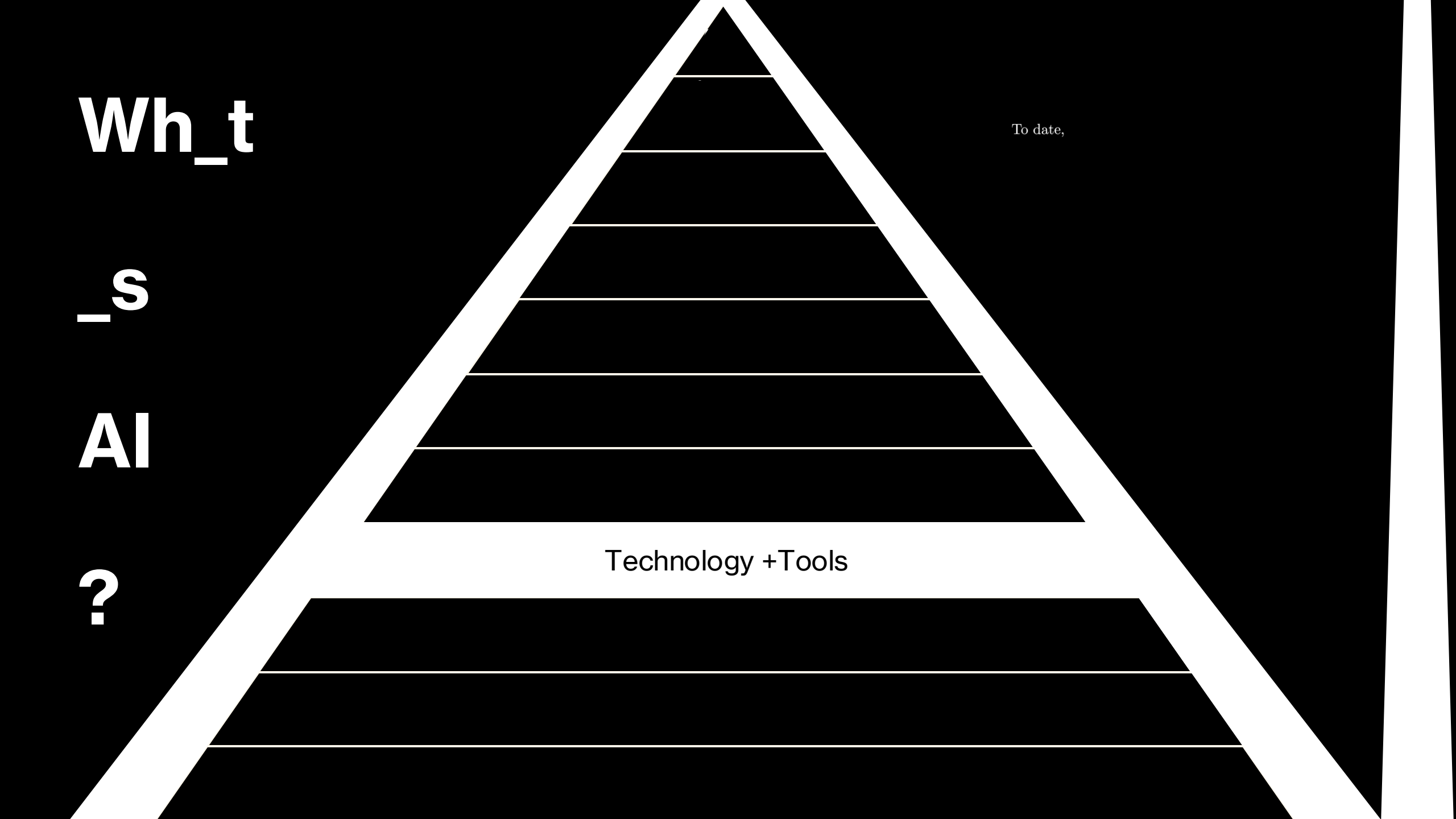
Kevin Meredith


_s there _ future for
supply ch_ _n
_nnov_t_on
c_rcul_r_ty
_fr_c_
w/o
AI?
AI

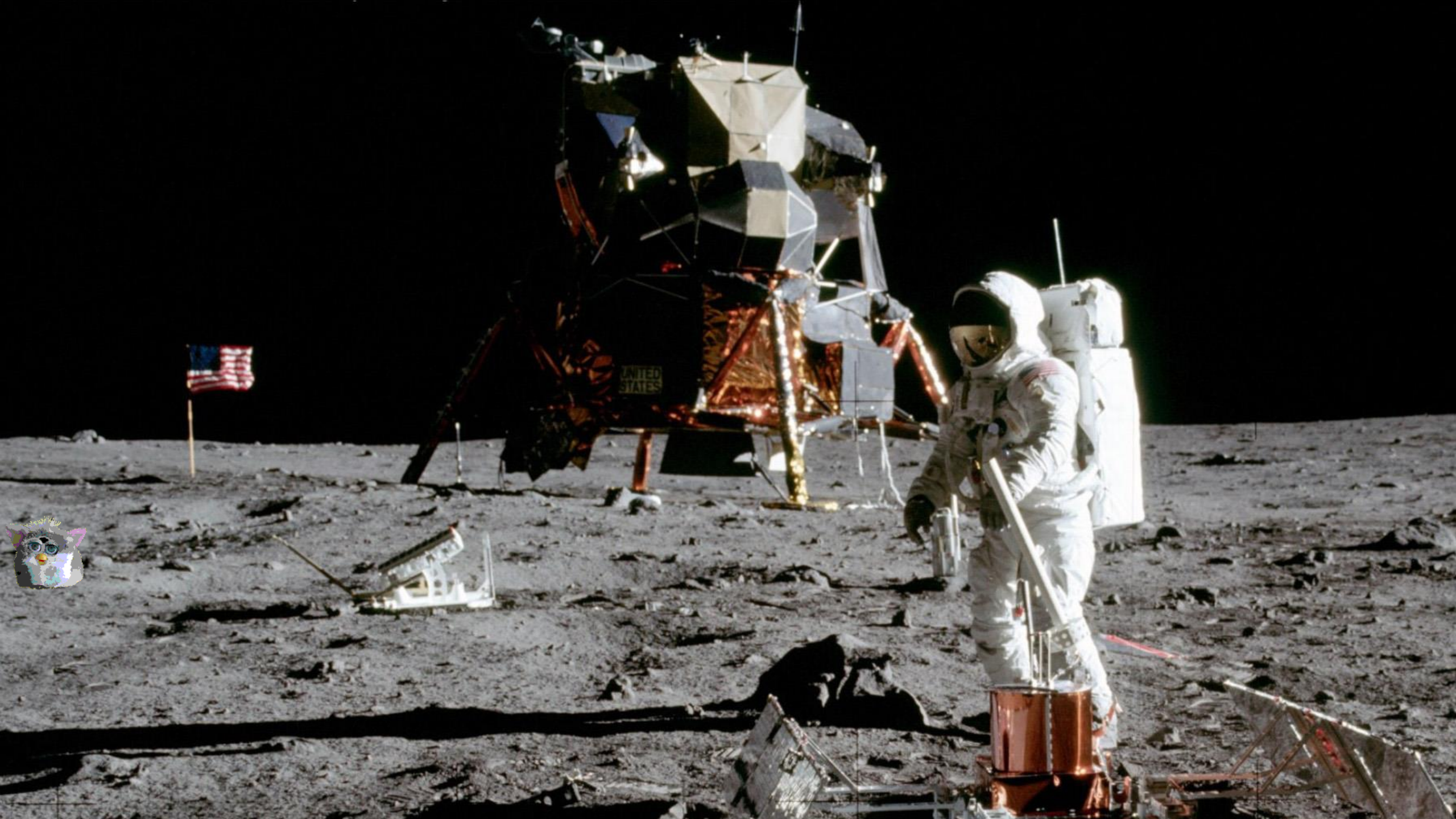

How much
do you
bel_eve
_n
_nnov_t_on ?

Wh_t _s AI ?

To date,




Does
tech
enh_nce
or
erode
hum_n
c_p_b_l_ty?
USGS
06/03/2019 13:05 00°C


UNITED
STATES

Wh_t

sh_pe

best

descr_bes

tod_y’s

econom_c

system?

Linear Economy

Stripped Down to the Core

LINEARITY DOES NOT END THE RIGHT WAY

Take - *Extract resources*

Make - *Produce stuff*

Consume - *Buy/use stuff*

Doom - *Terminate value*

Wh_t

_mp_ct

does th_s

h_ve on

_fr_c_?

- **Today:** ~$30–40/barrel captured domestically
- **With vertical integration:** ~$120–160/barrel
- **Uplift ratio: 3–5x more value per barrel** possible

Extractive Value

Africa holds

90% of global platinum reserves

70% of cobalt

40% of gold

30% of bauxite

12% of global oil production
(Nigeria, Angola, Libya, Algeria)

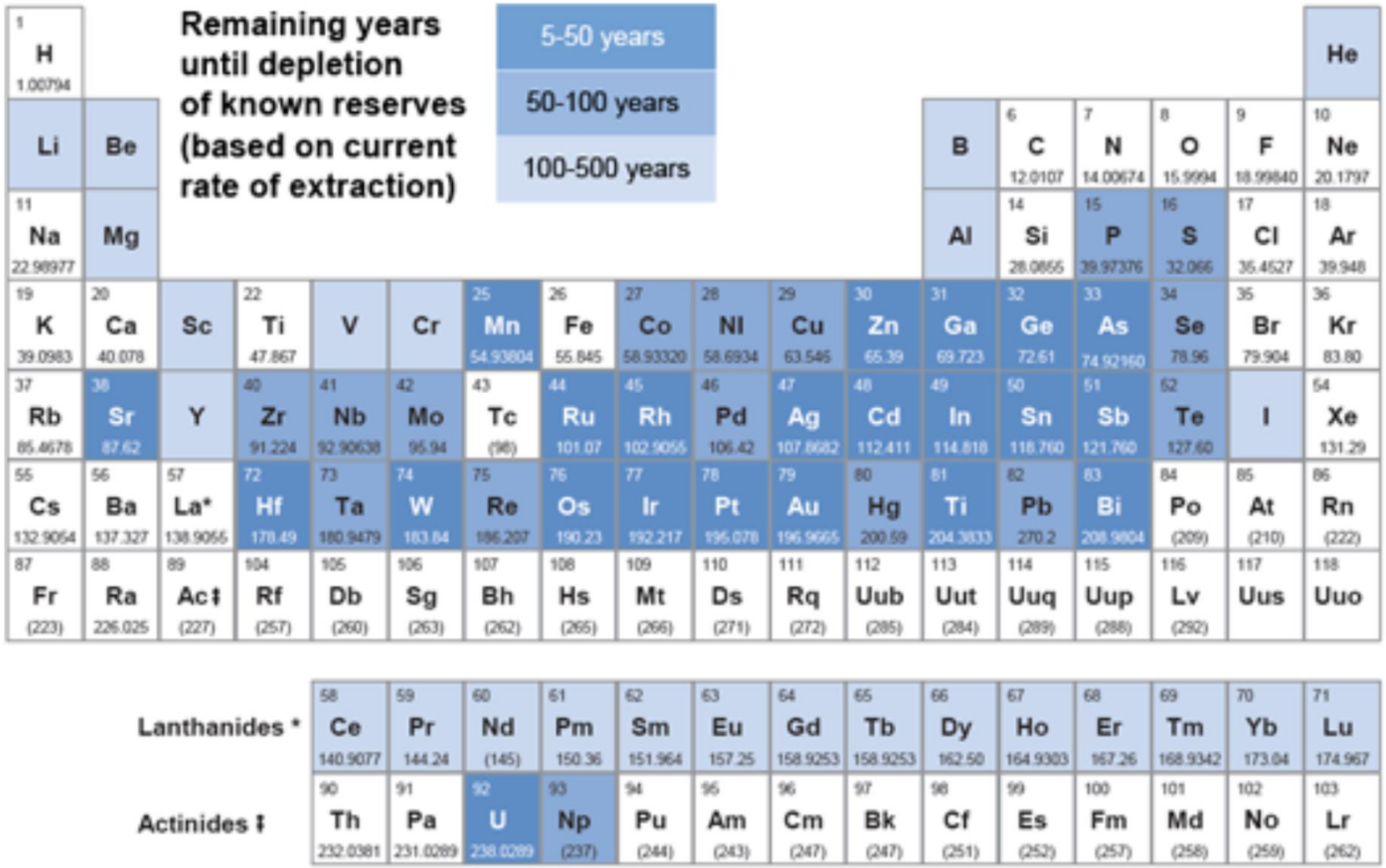
We Are

Silver

Zinc

Manganese

Tungsten

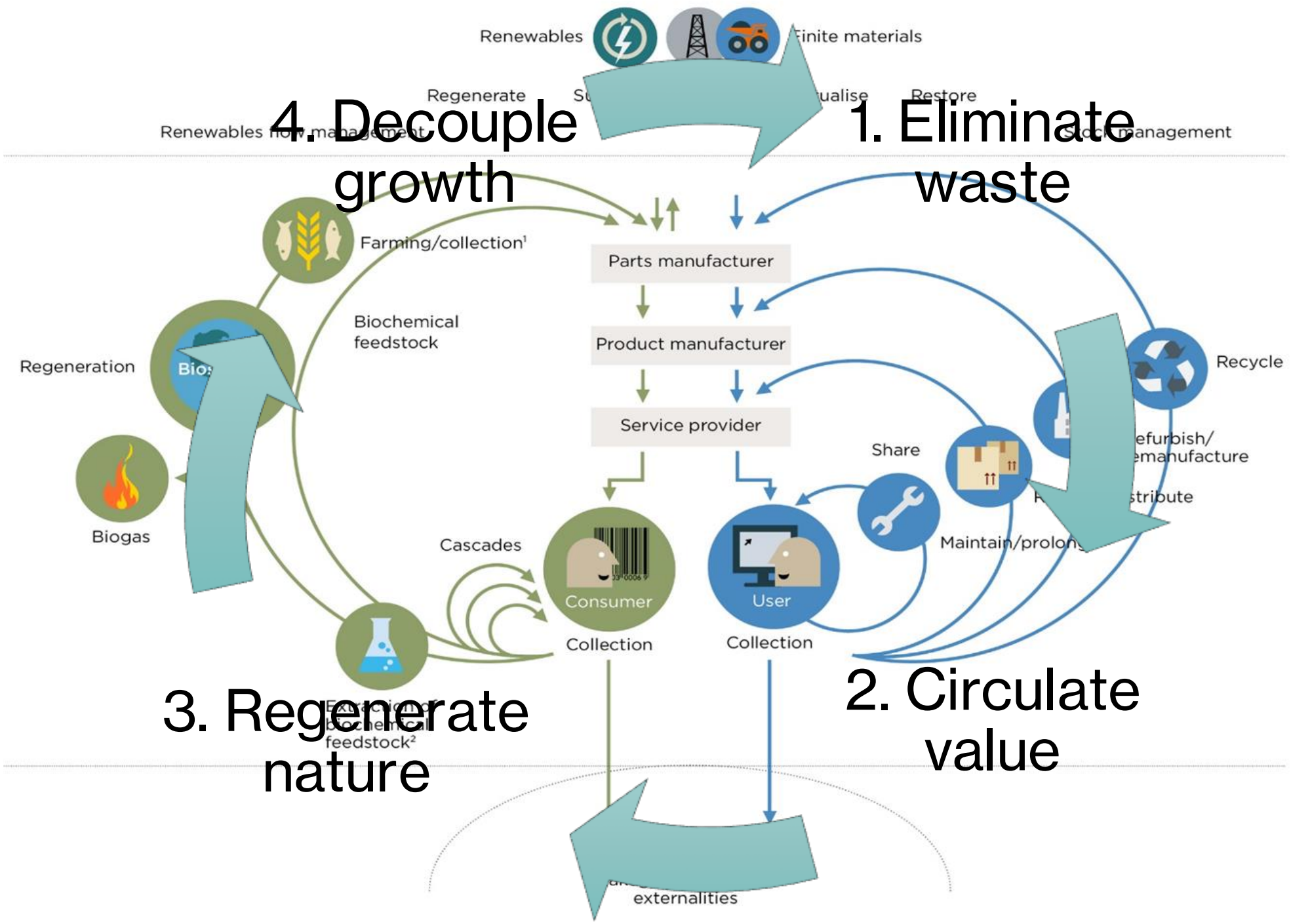


Platinum

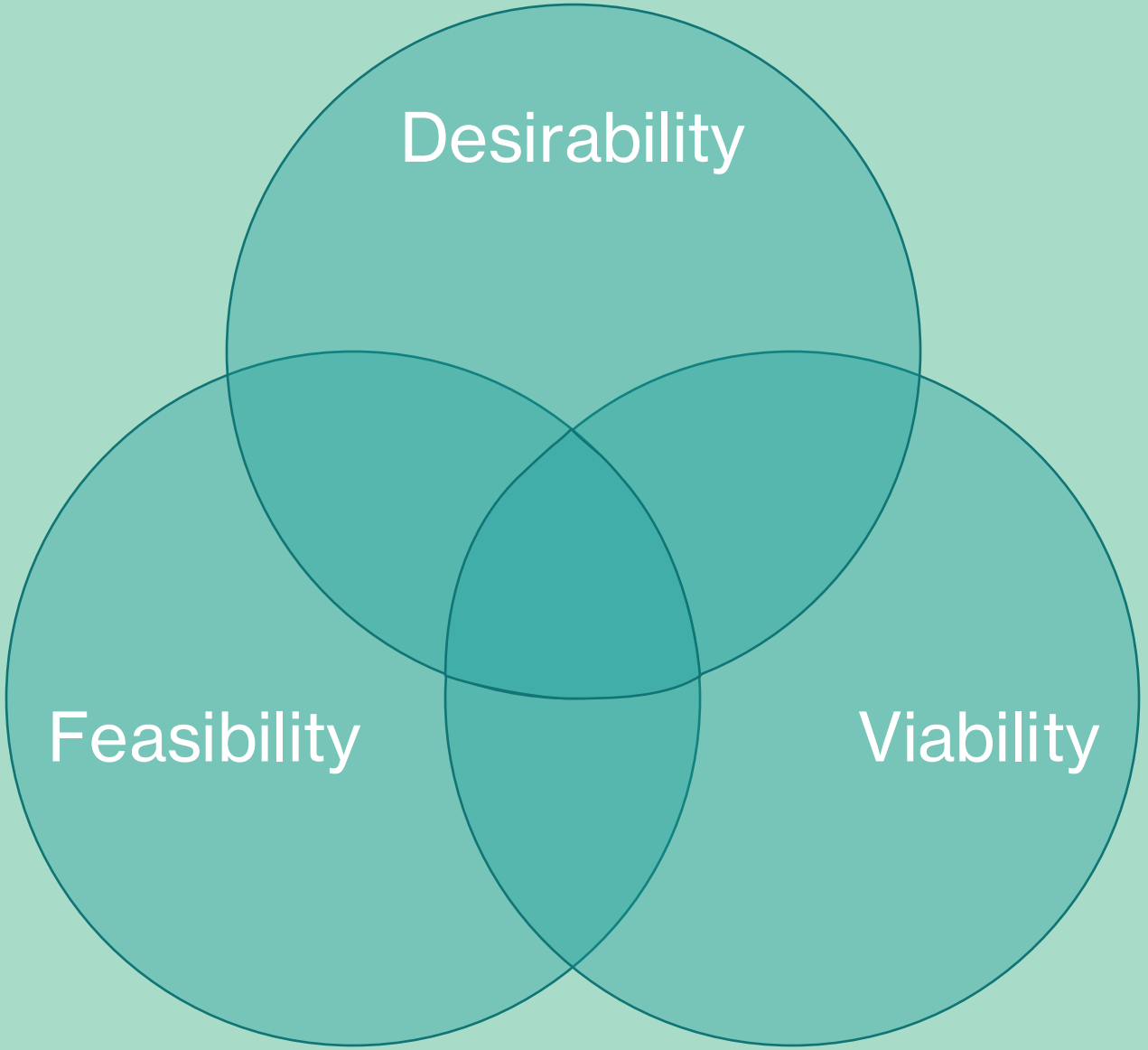
Gold

Tin

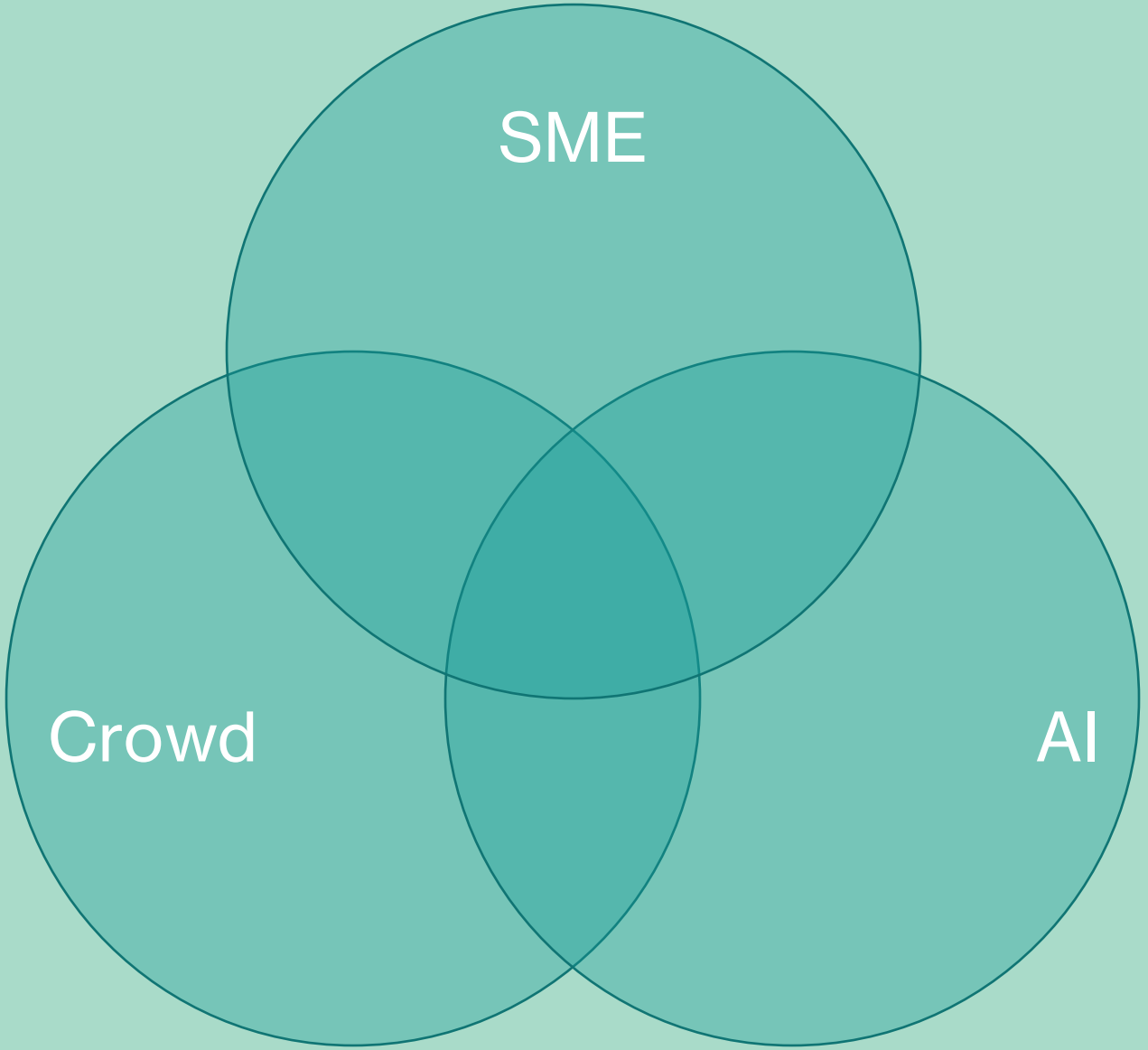
Running Out


Renewables
Finite materials
Regenerate
Restore
Renewables flow management
Stock management
4. Decouple growth
1. Eliminate waste
Farming/collection¹
Parts manufacturer
Biochemical feedstock
Product manufacturer
Regeneration
Recycle
Service provider
Share
Biogas
Cascades
Consumer
User
Collection
Collection
Maintain/prolong
3. Regenerate nature
2. Circulate value
externalities

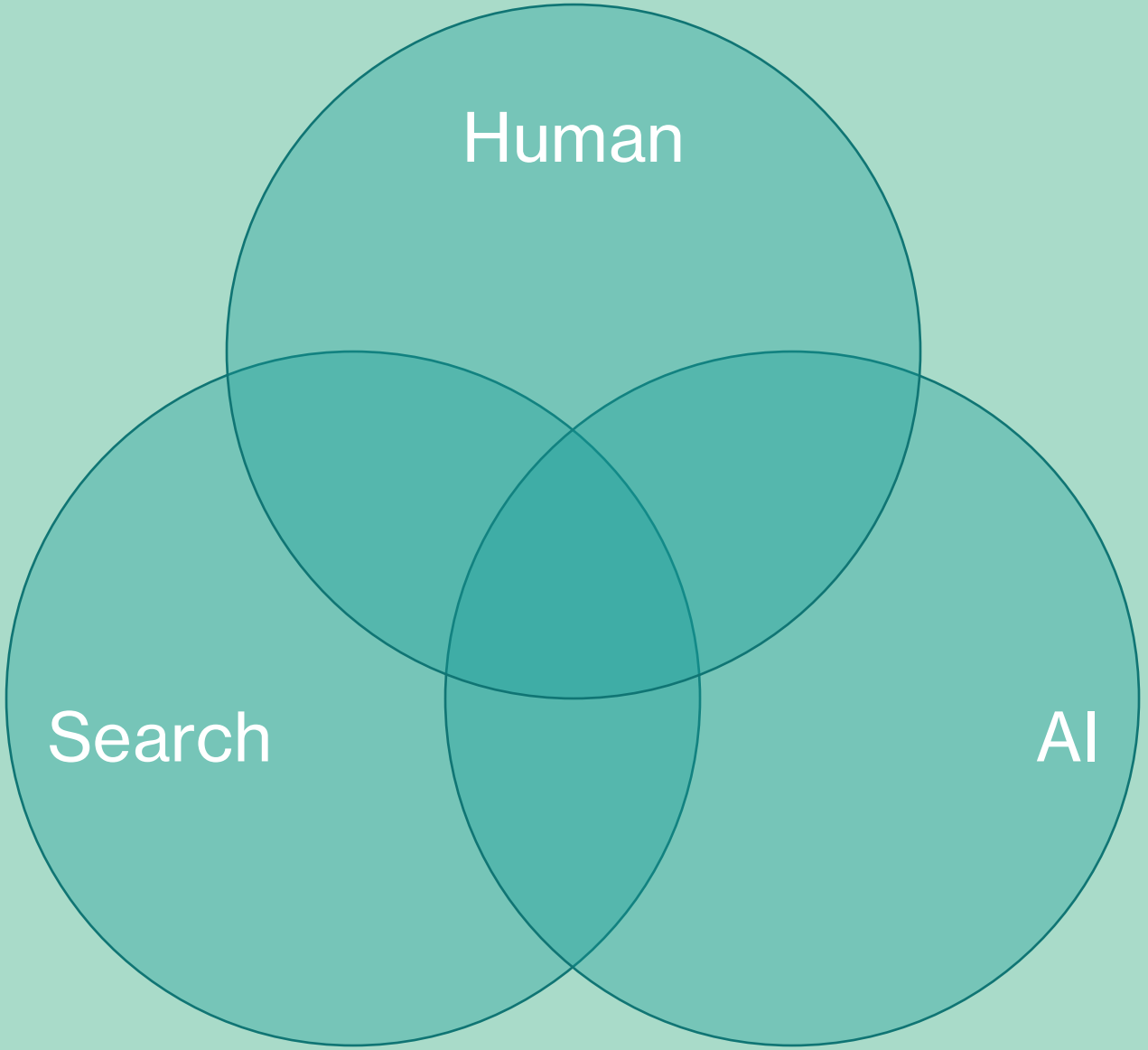
Where should _ st_rt?



Where should _ st_rt?



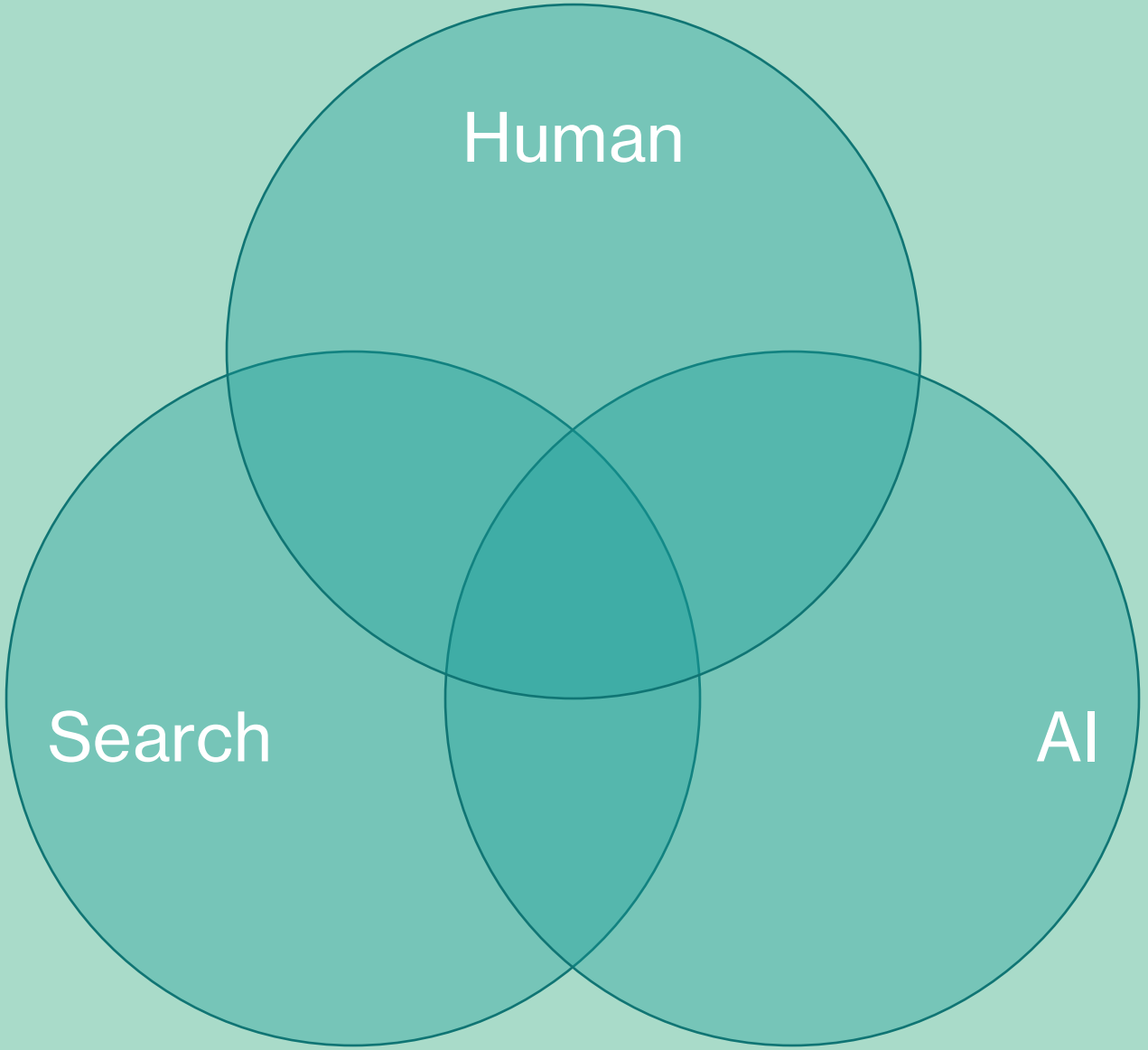
Where should _ st_rt?



Which

_s

better?



Your search - **what is missing from this statement "Is there _ future for contr_ct m_n_gement supply ch_ _ ... - did not match any documents.**

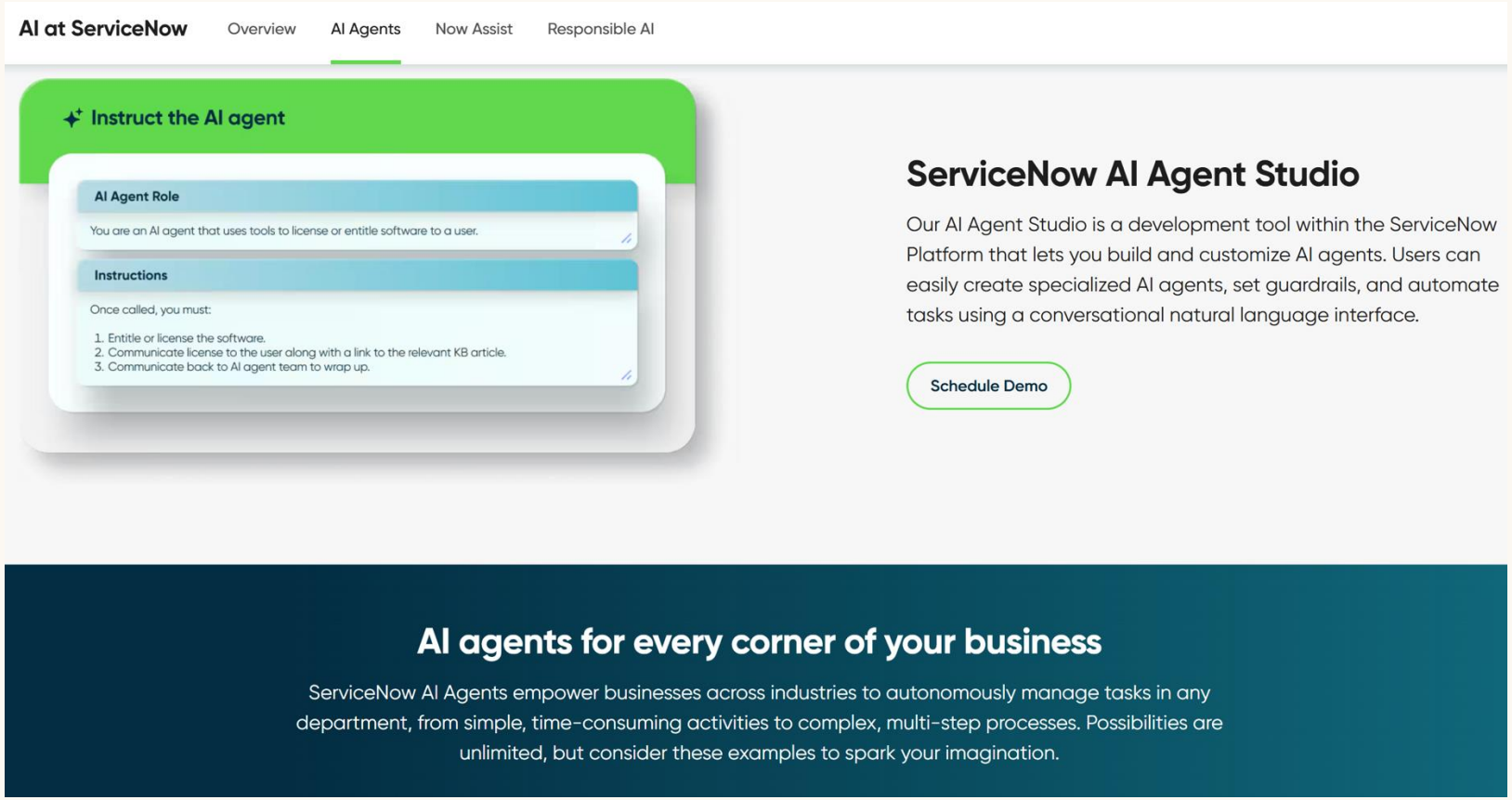
Suggestions:

- Make sure all words are spelled correctly.
- T
- T
- T

What is the capital of South Africa?

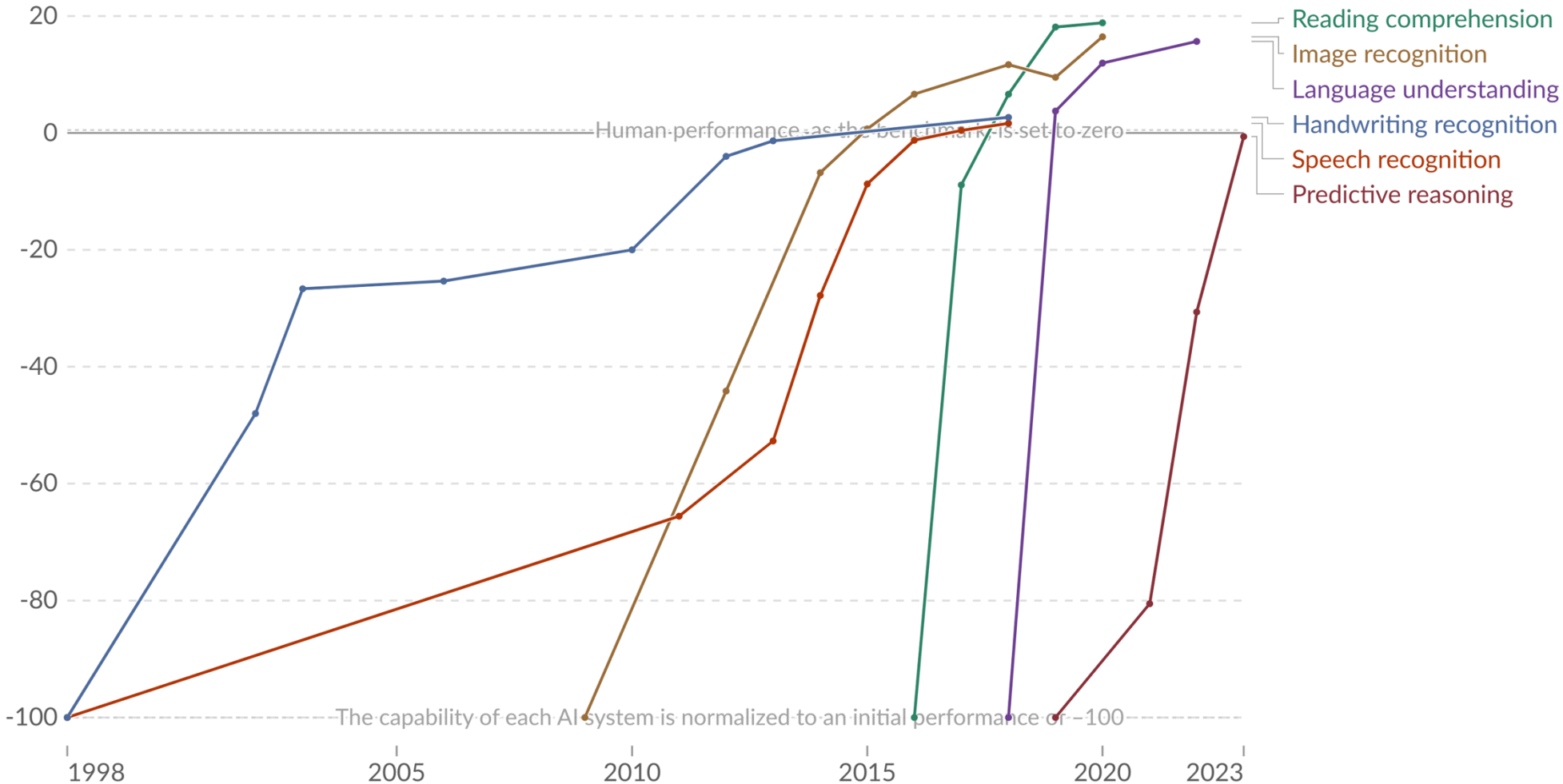
_s
Al
better
th_n

_
hum_n?



Test scores of AI systems on various capabilities relative to human performance

Within each domain, the initial performance of the AI is set to −100. Human performance is used as a baseline, set to zero. When the AI's performance crosses the zero line, it scored more points than humans.



Data source: Kiela et al. (2023)

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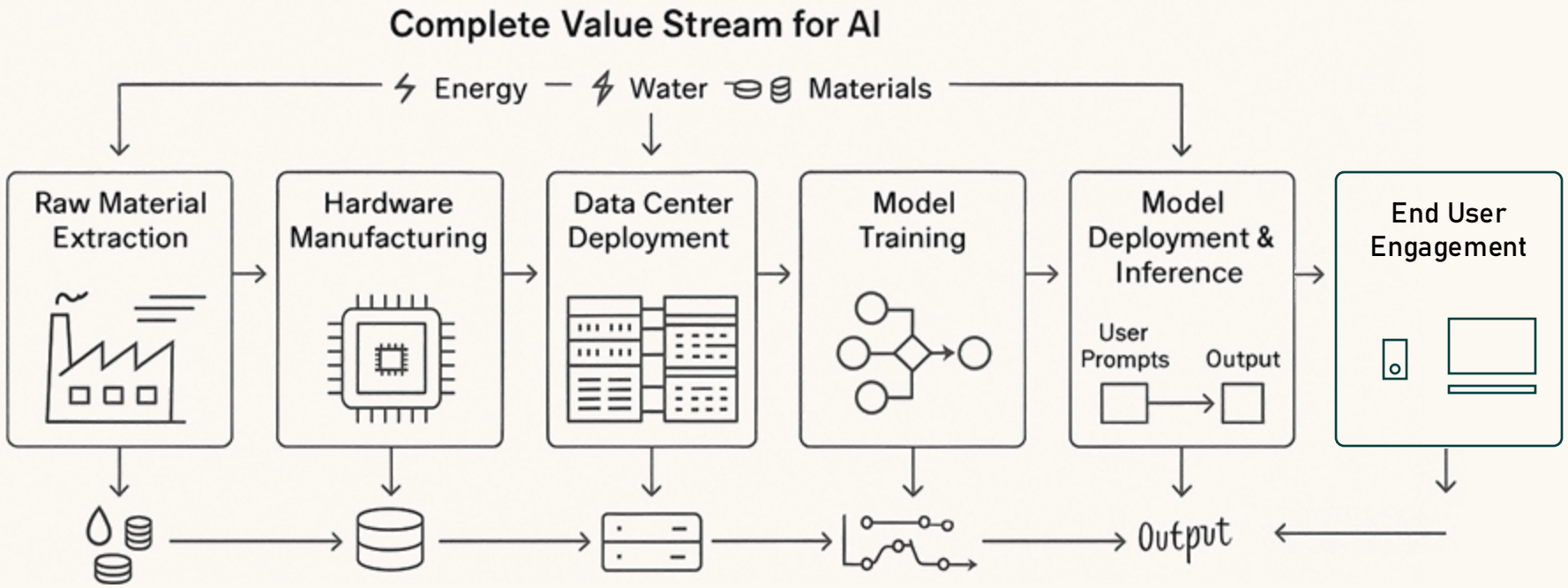
Note: For each capability, the first year always shows a baseline of −100, even if better performance was recorded later that year.

Wh_t _s the supply ch_ _n of AI?



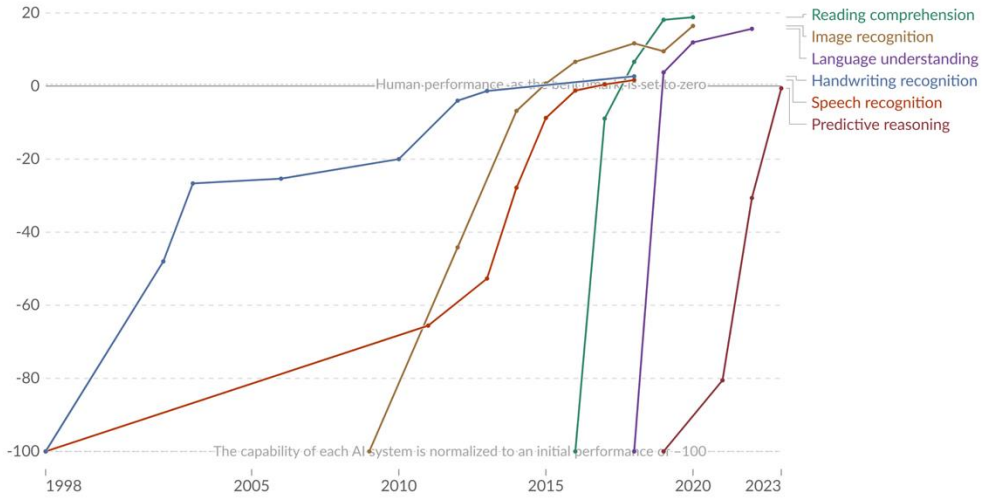
Impact Area	Contribution (% of AI Total)
Training	~30–40%
Data Centers	~40–50%
End Devices	~10–20%

Resource	Estimated Use
Electricity	200–300 TWh/year (by 2026, per IEA forecasts)
Water	1.5–2 billion liters/year for cooling top 100 data centers
CO_2 Emissions	100–200 million metric tons/year (training + inference + infra)
Land Use	>100,000 acres globally dedicated to AI-related infra
E-waste	AI contributes to ~10% of global data center-related e-waste

Test scores of AI systems on various capabilities relative to human performance

Our World in Data

Within each domain, the initial performance of the AI is set to −100. Human performance is used as a baseline, set to zero. When the AI's performance crosses the zero line, it scored more points than humans.



Data source: Kiela et al. (2023)

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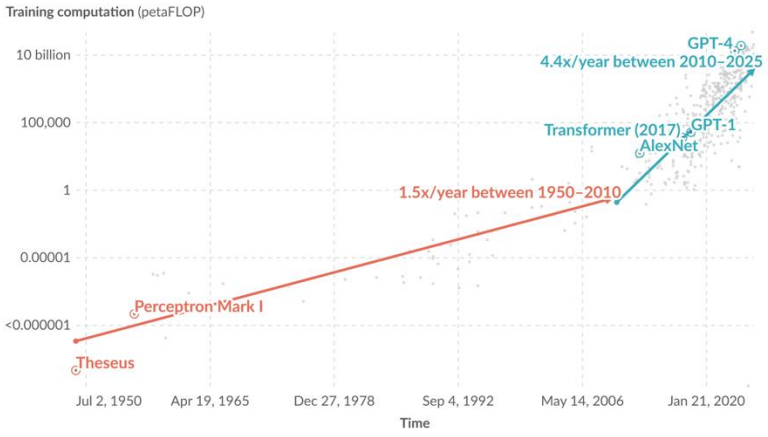
Note: For each capability, the first year always shows a baseline of −100, even if better performance was recorded later that year.

Exponential growth of computation in the training of notable AI systems

Our World in Data

Computation is measured in total petaFLOP, which is 10^{15} floating-point operations[1].



Data source: Epoch (2025)

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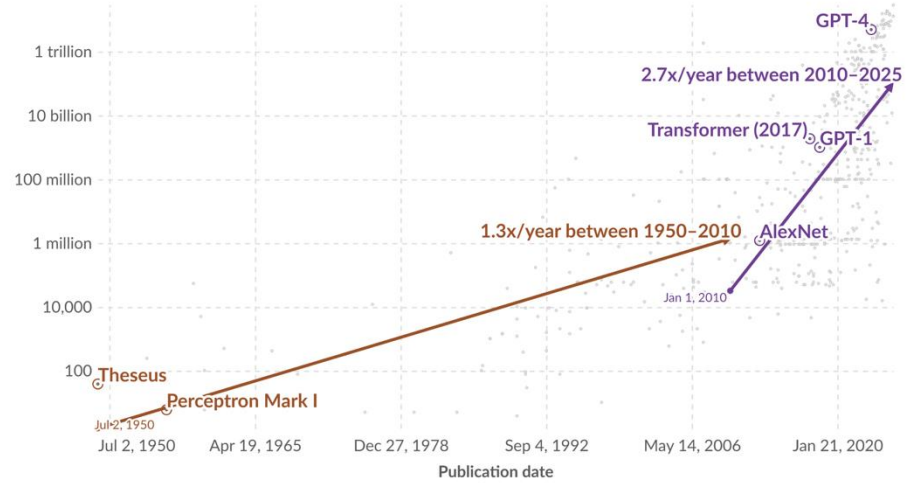
Note: Estimated from AI literature, accurate within a factor of 2, or 5 for recent models like GPT-4. The regression lines show a sharp rise in computation since 2010, driven by the success of deep learning methods that leverage neural networks and massive datasets.

1. Floating-point operation A floating-point operation (FLOP) is a type of computer operation. One FLOP represents a single arithmetic operation involving floating-point numbers, such as addition, subtraction, multiplication, or division.

Exponential growth of datapoints used to train notable AI systems

Our World in Data

Each domain has a specific data point unit; for example, for vision it is images, for language it is words, and for games it is timesteps. This means systems can only be compared directly within the same domain.



Data source: Epoch (2025)

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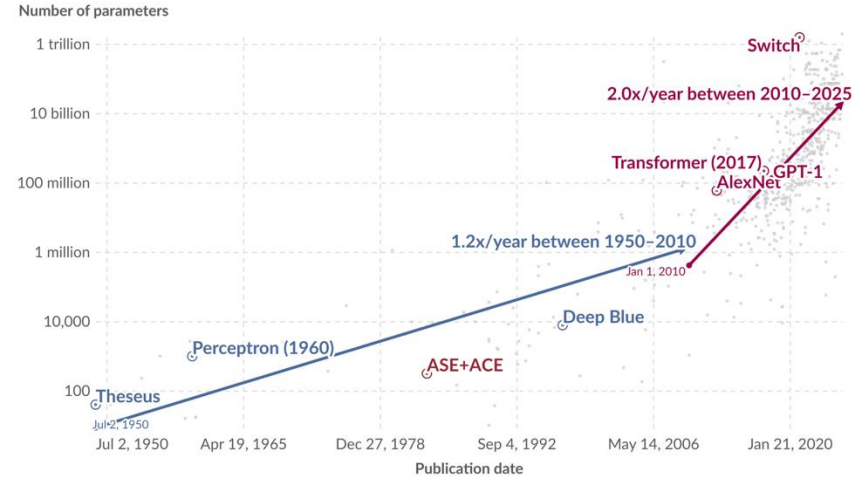
Note: The regression lines show a sharp rise in data used to train AI systems since 2010, driven by the success of deep learning methods that leverage neural networks and massive datasets.

Exponential growth of parameters in notable AI systems

Our World in Data

Parameters are variables in an AI system whose values are adjusted during training to establish how input data gets transformed into the desired output; for example, the connection weights in an artificial neural network.



Data source: Epoch (2025)

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Note: Estimates are based on AI literature with uncertainty up to a factor of 10. The regression lines show a sharp rise in parameters since 2010, driven by the success of deep learning methods that leverage neural networks and massive datasets.

How

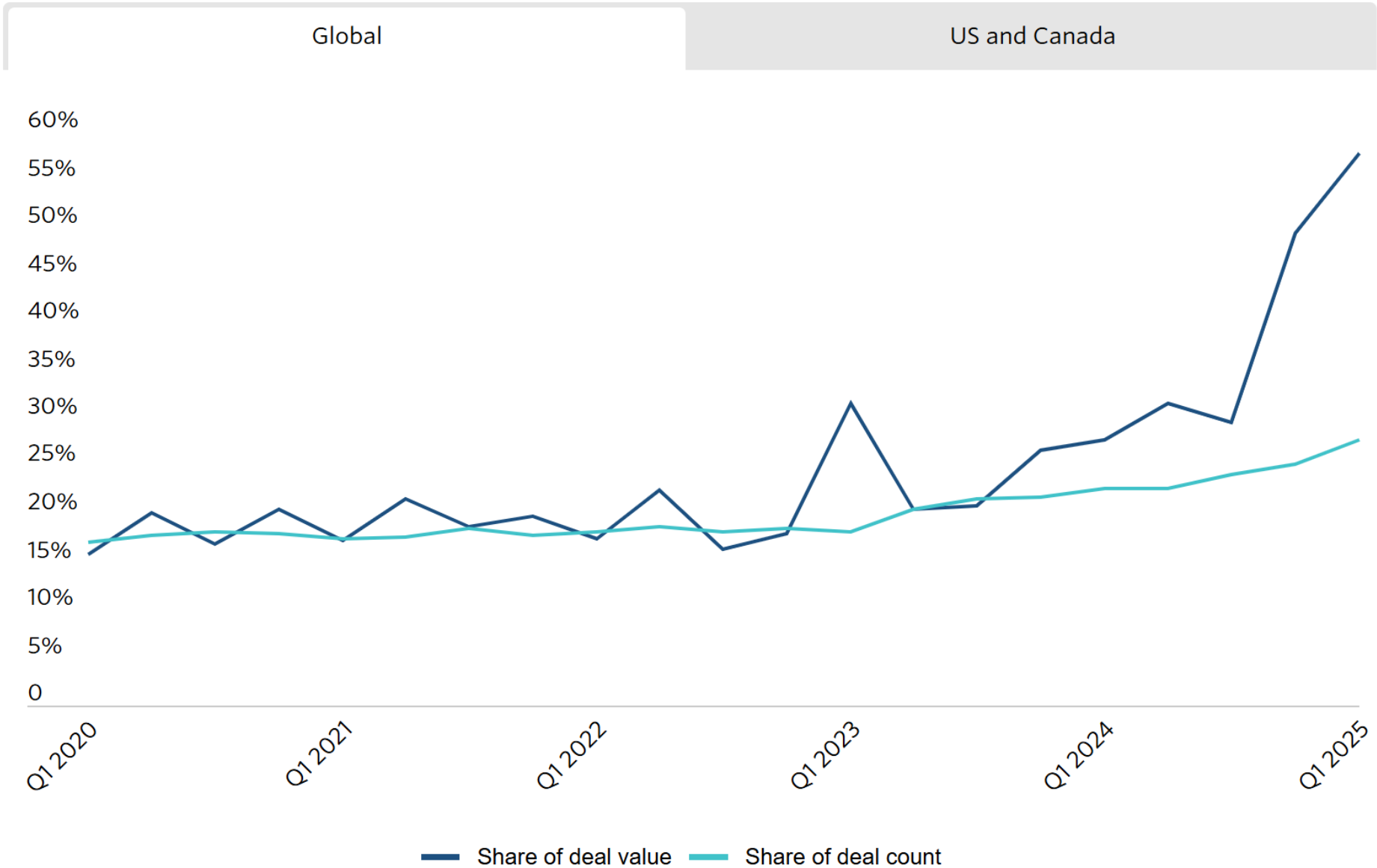
would you

_nvest $60B

_n

_fr_c_?

AI & ML deals as a share of all VC deal activity



Source: PitchBook-NVCA Venture Monitor

How

would you

_nvest $2.0T

_n

_fr_c_?

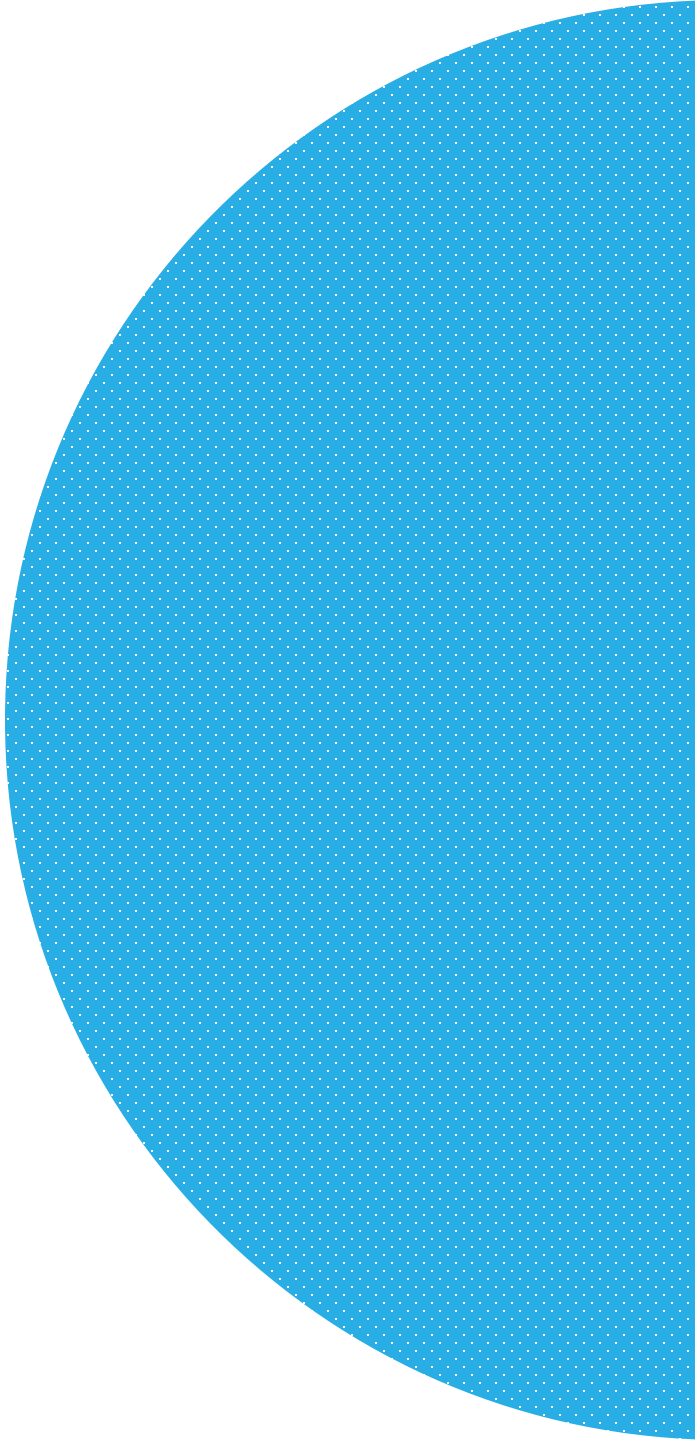
C_n

_

m_ke

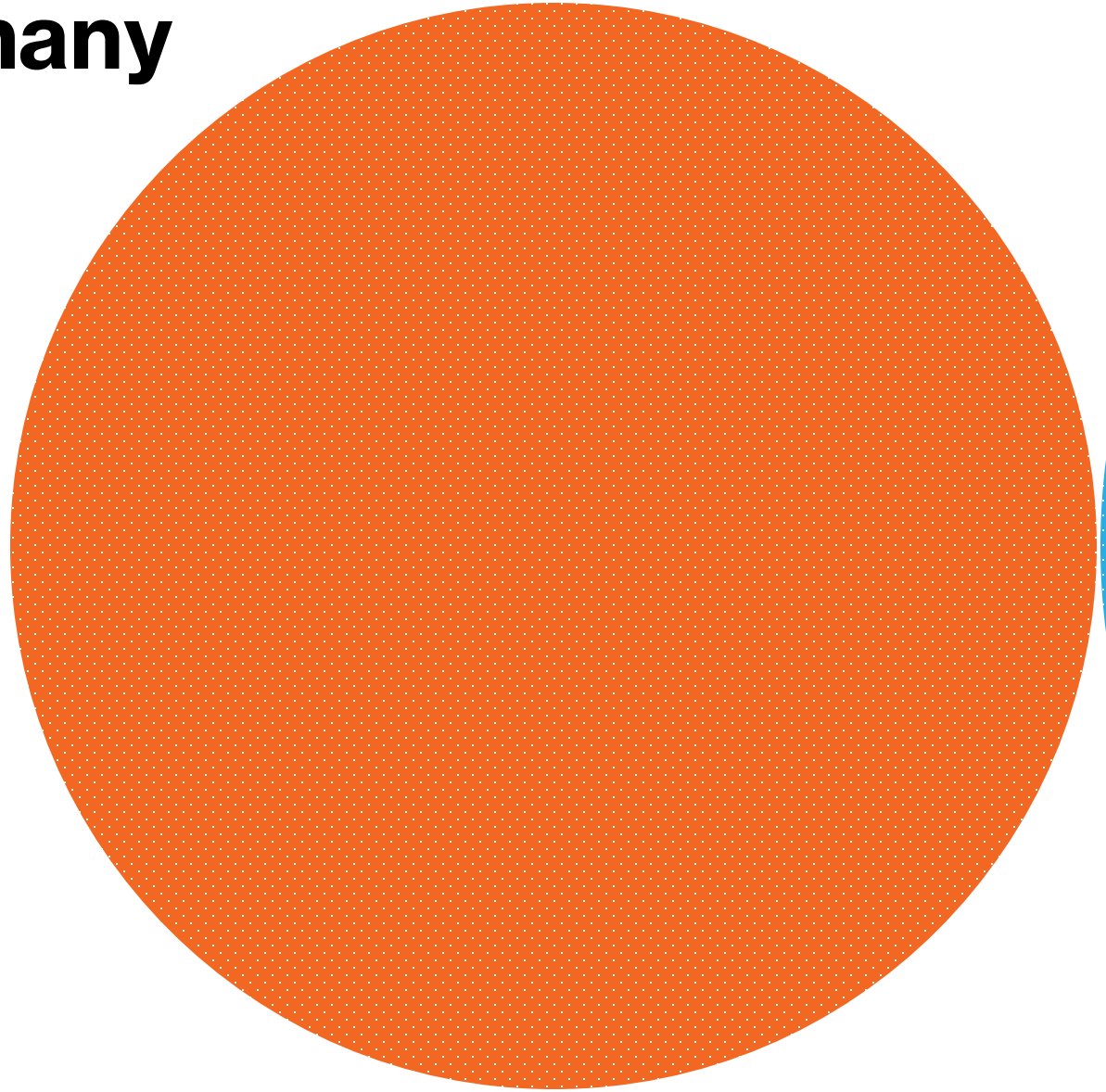
_

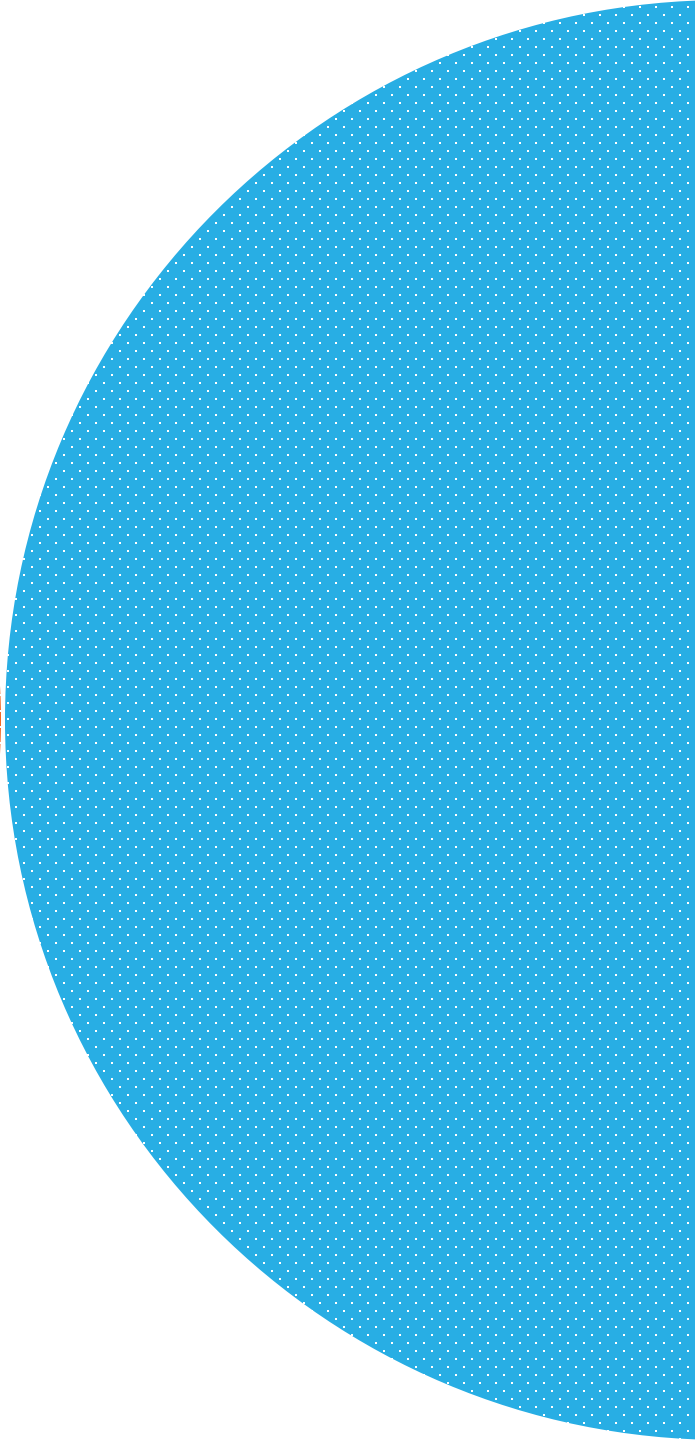
d_fference ?

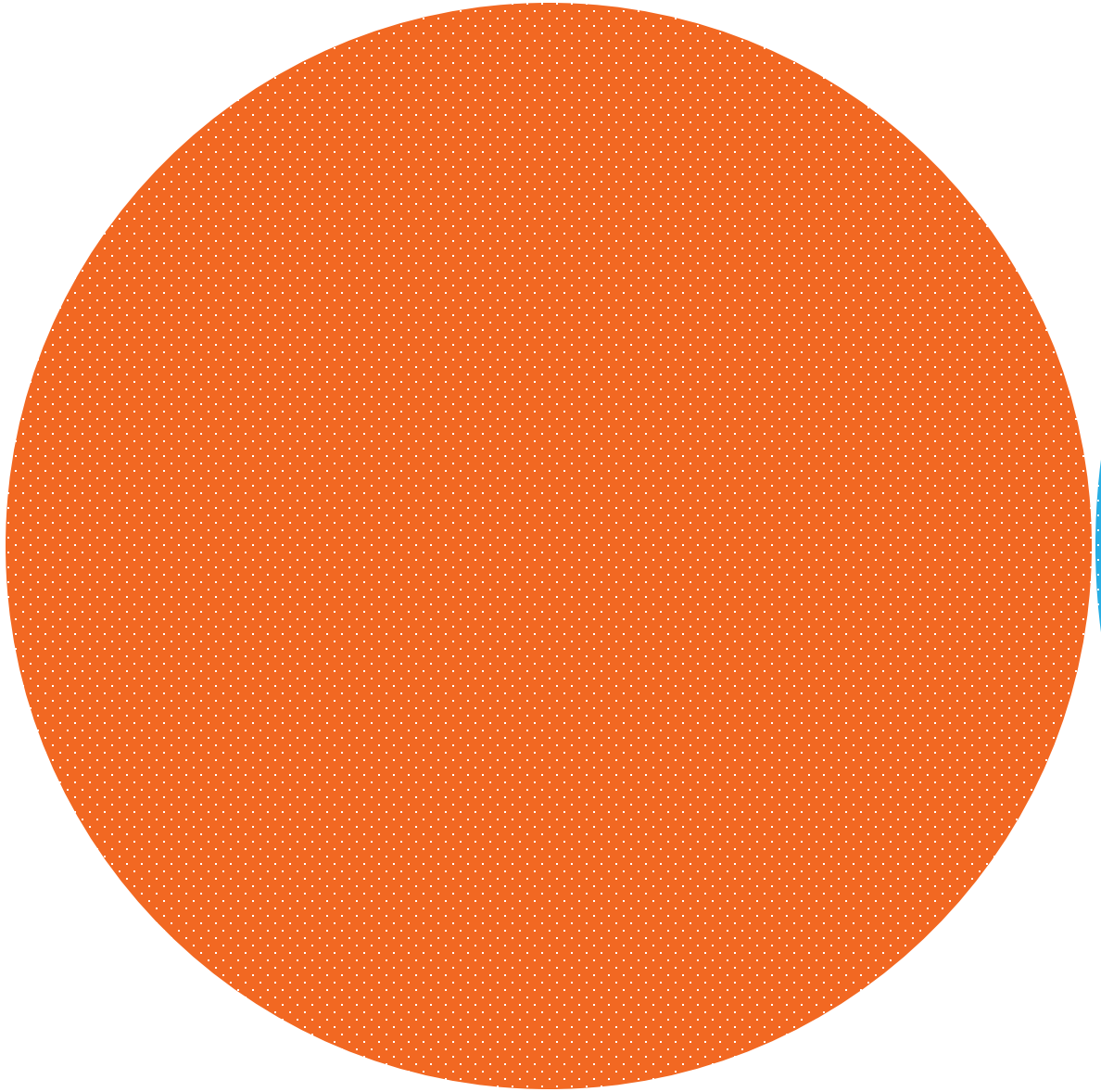


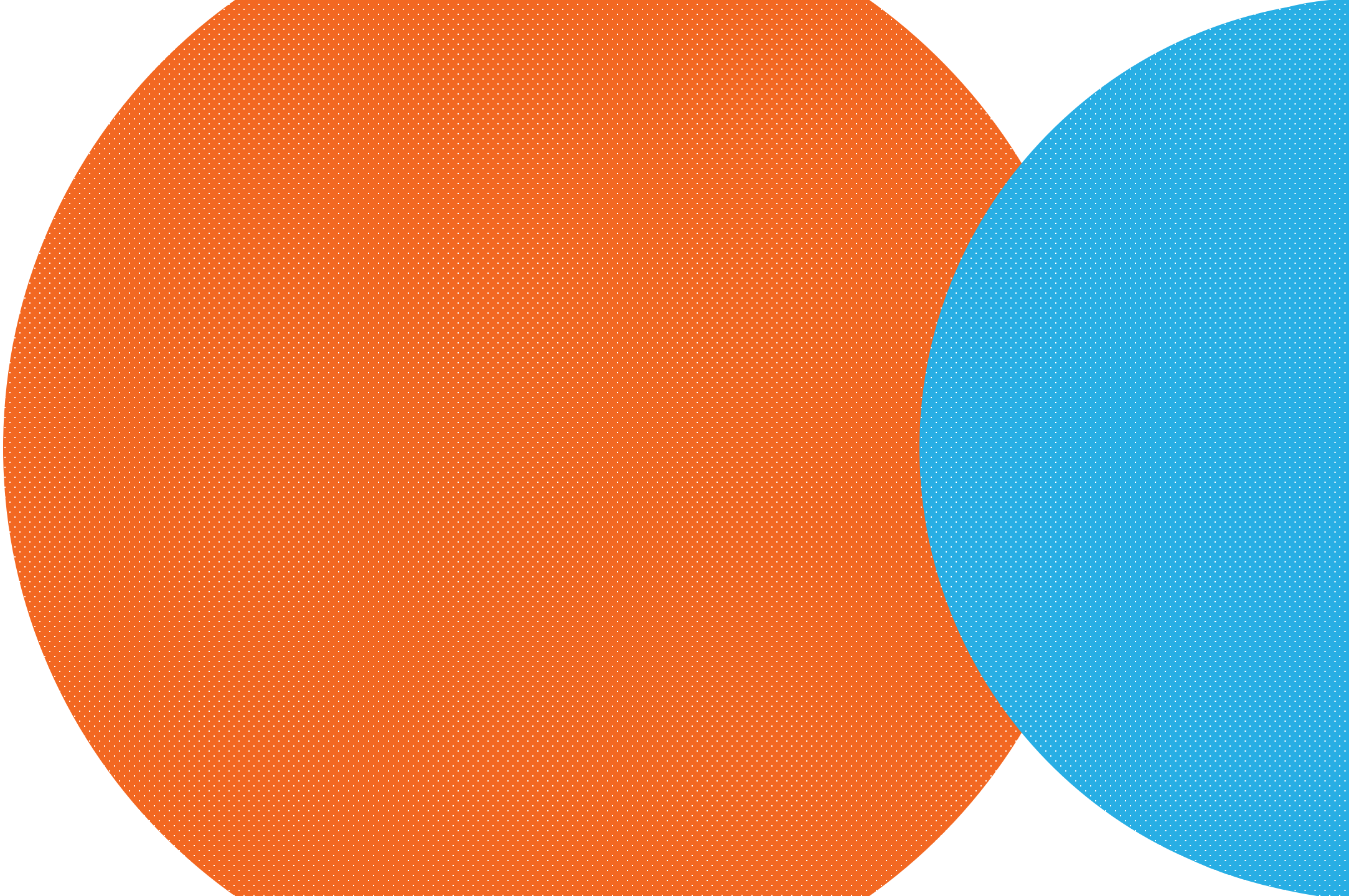
Impact of one

Impact of many





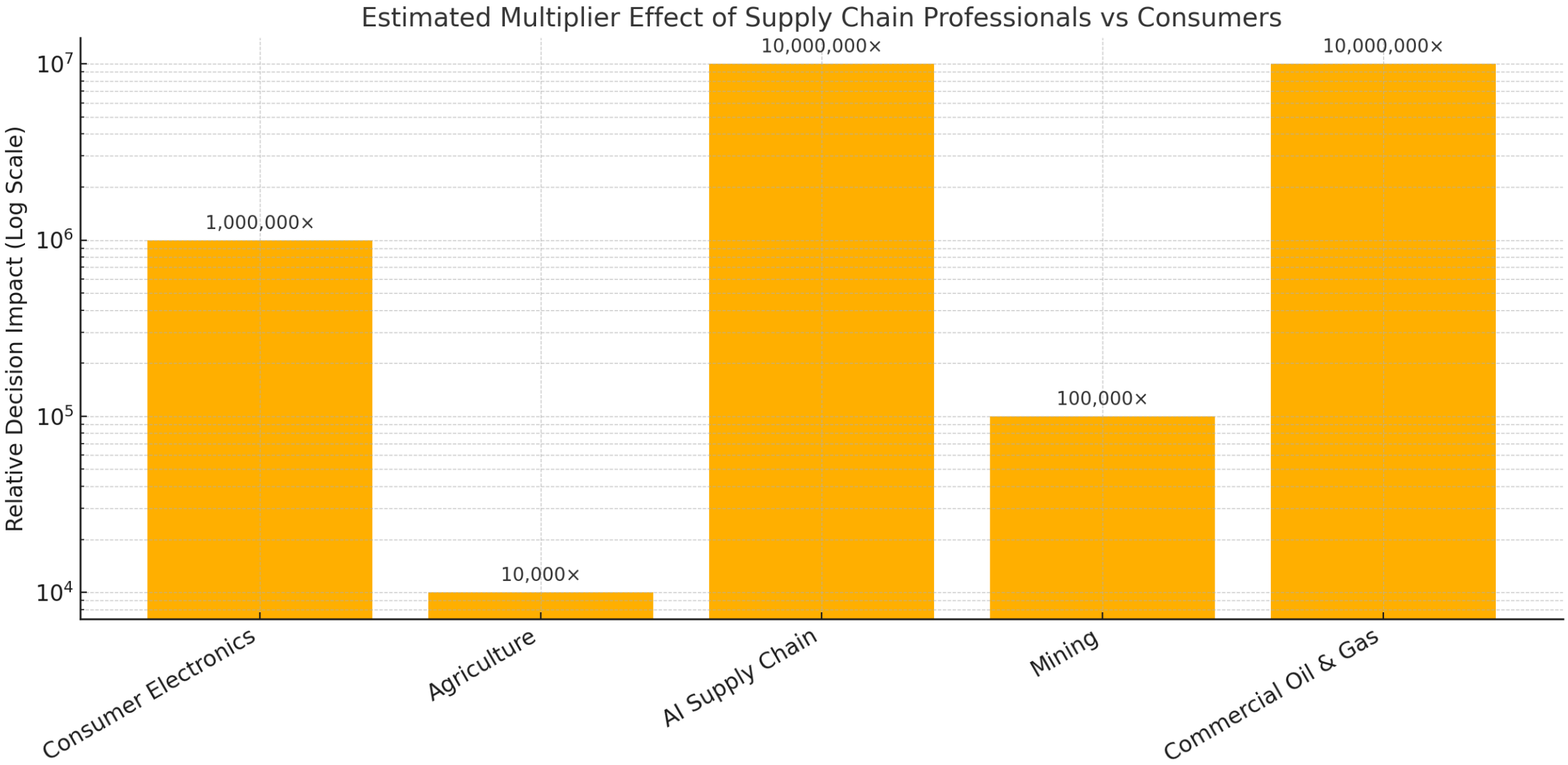




Little Circle

Big Circle

You have so much power



Wh_t future

w_ll

you

cre_te

w/o

AI?

Let's Stay Connected

LinkedIn

Kevin Meredith

Kevin Meredith

Helping to uncover, connect and convert ideas to value.

Kevin Meredith

kevin@4thsi.com

833-459-3733