



AI and Economic Development

Shahrukh Wani, International Growth Centre, LSE; August 2026; Kampala, Uganda

A few questions for the room. By 2035, do you think that:

AI will be widely used by Ugandan citizens in their everyday lives and work?

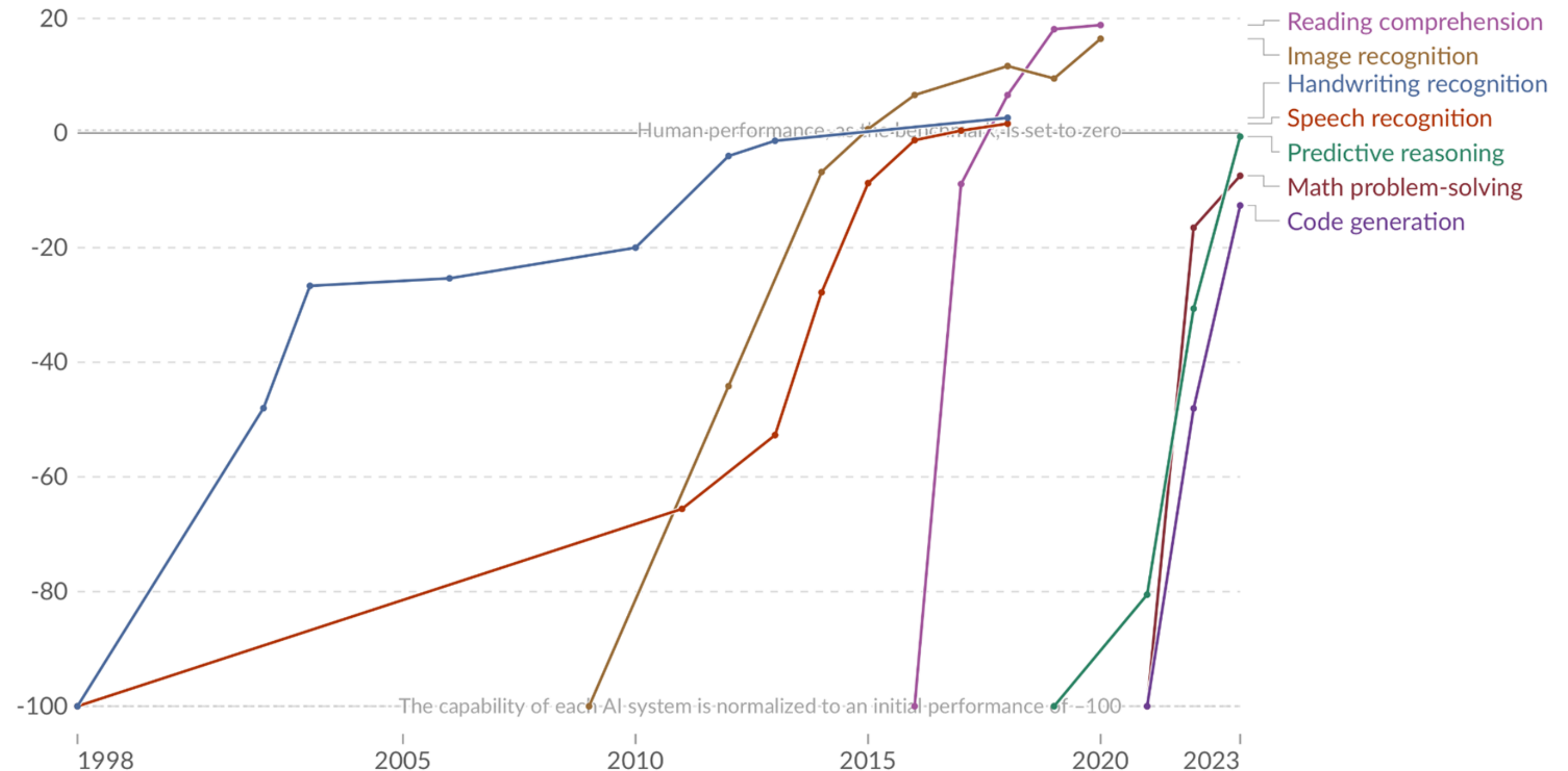
AI will be widely used by the Ugandan government to improve the delivery of public services (areas such as health and education)?

AI will have helped narrow the economic gap between developing and developed countries?

Why should we think (more) about AI

AI is becoming more capable than humans at many tasks

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.



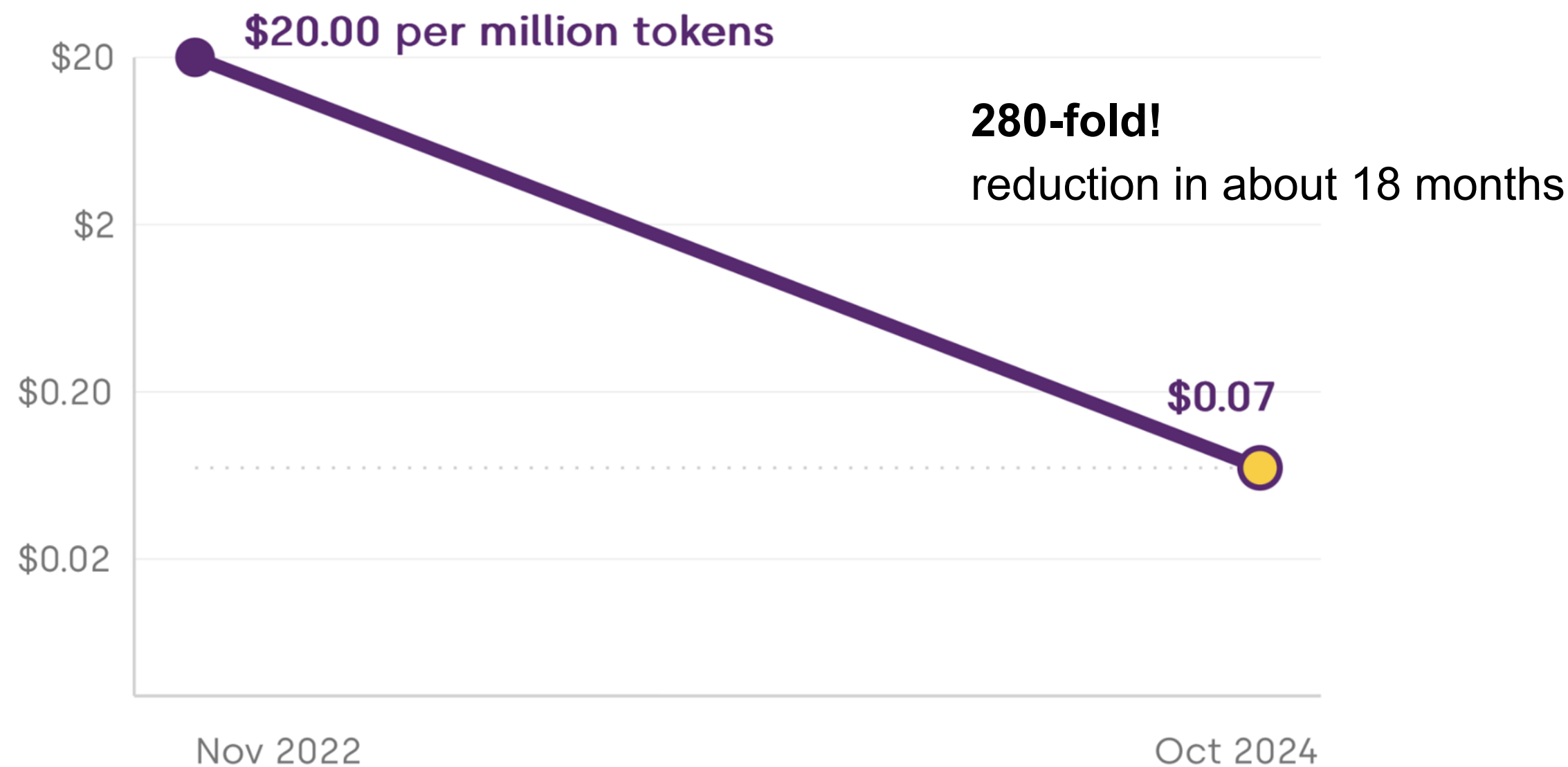
Data source: Kiela et al. (2023)

OurWorldinData.org/artificial-intelligence | CC BY

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

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

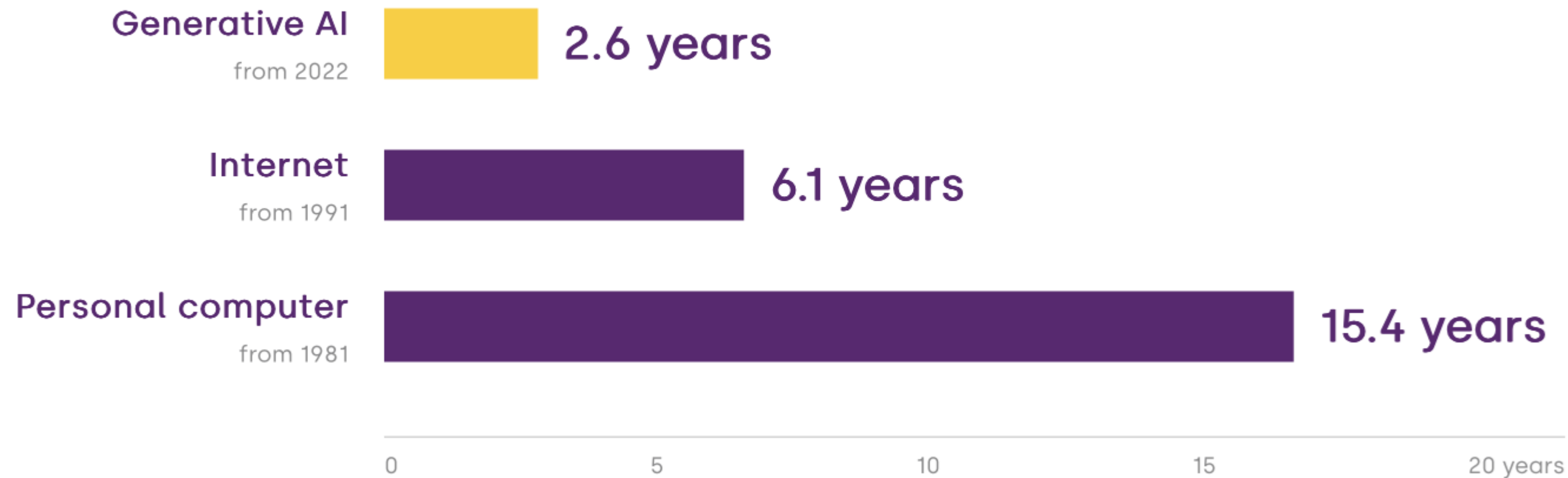
Cost of using AI is falling dramatically



Price of GPT-3.5-level performance, USD per million tokens, log scale. [Source](#).

AI diffusion is growing quickly (in the U.S.)

Years from the introduction of the first mass-market product to a 50% adoption rate.

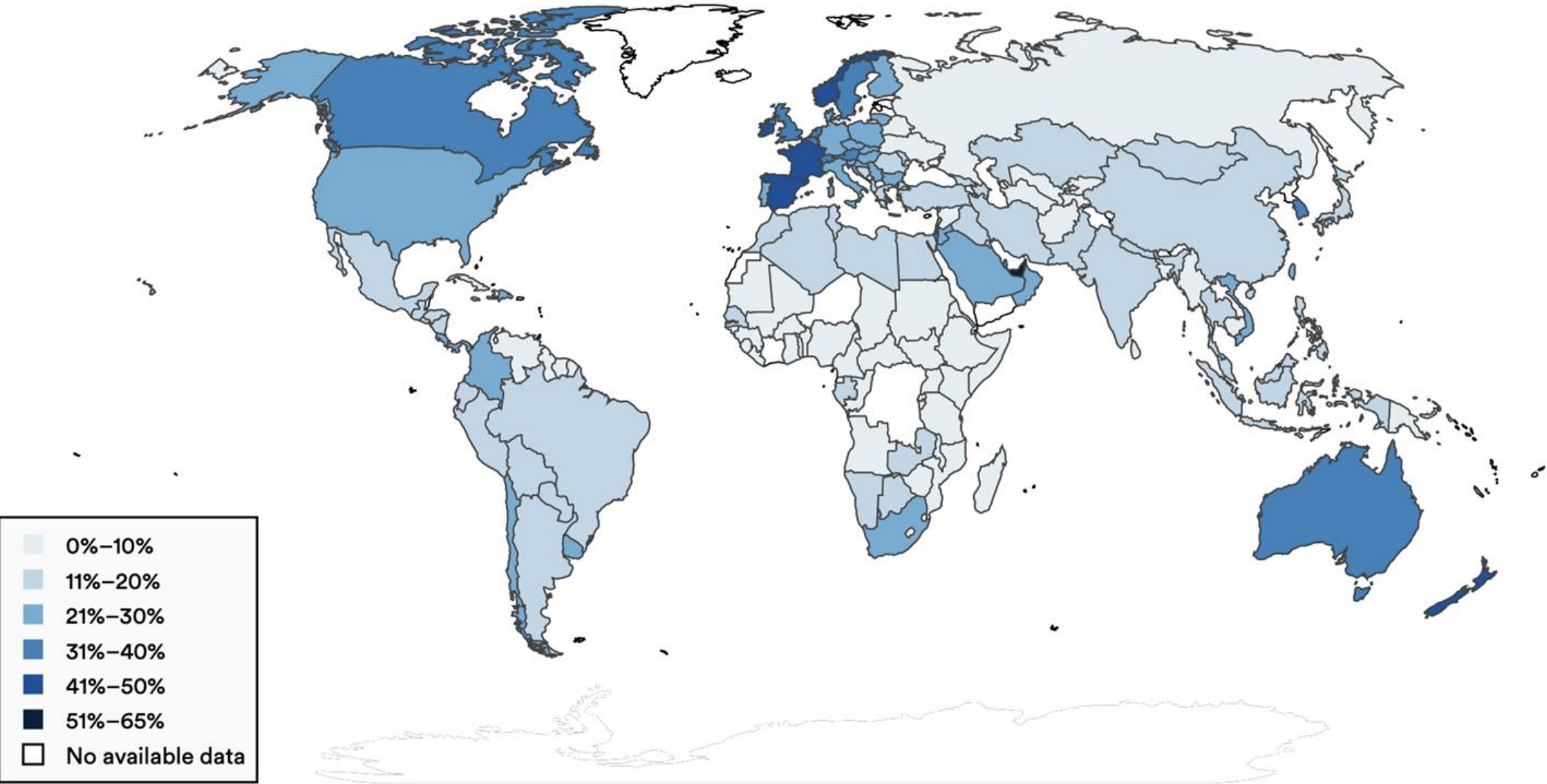


Created using data from The Project on Workforce at Harvard, 2025, as charted in the 2026 AI Index report. Generative AI uses the RPS series, personal computer the CPS series, internet the ITU series. Each value is linearly interpolated between the observation years either side of the 50% threshold.

But AI adoption is very unequal globally (and correlates strongly with per capita income)

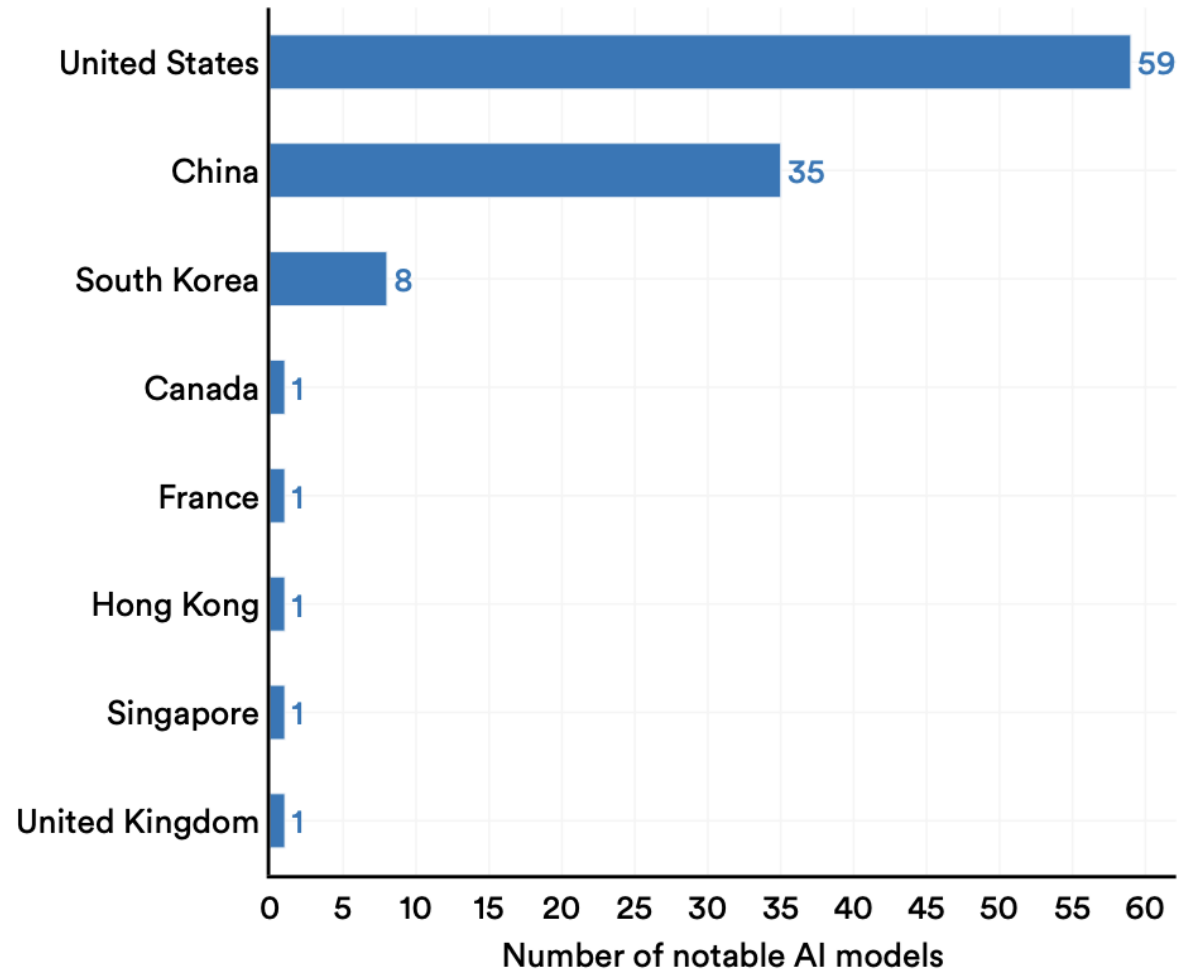
AI diffusion by geographic area, second half 2025

Source: Microsoft AI Economy Institute, 2025 | Chart: 2026 AI Index report



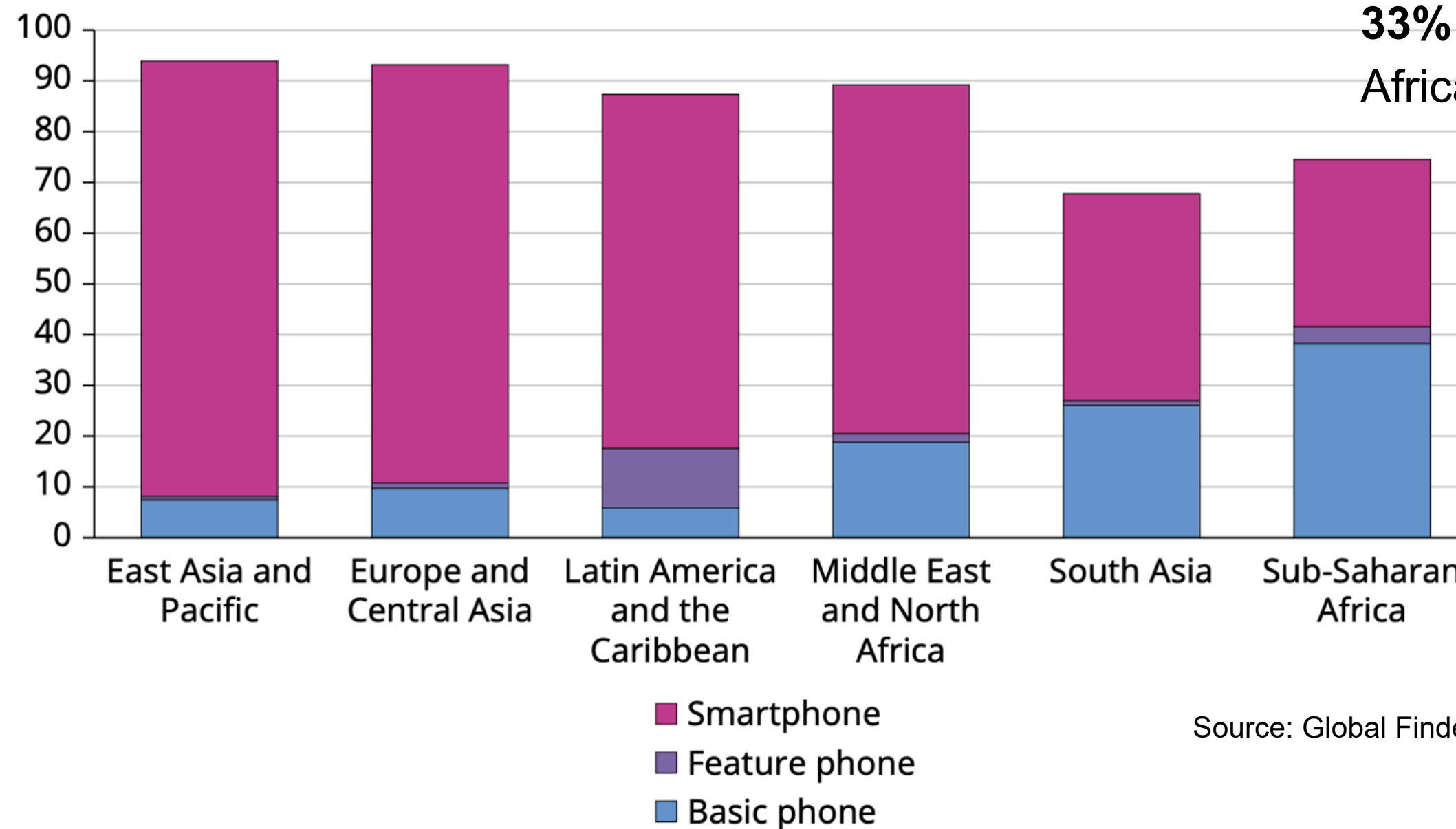
Number of notable AI models by select geographic areas, 2025

Source: Epoch AI, 2026 | Chart: 2026 AI Index report



Let's pause - how many people in sub-Saharan Africa do you think have a smartphone?

Adults with a phone (%), 2024



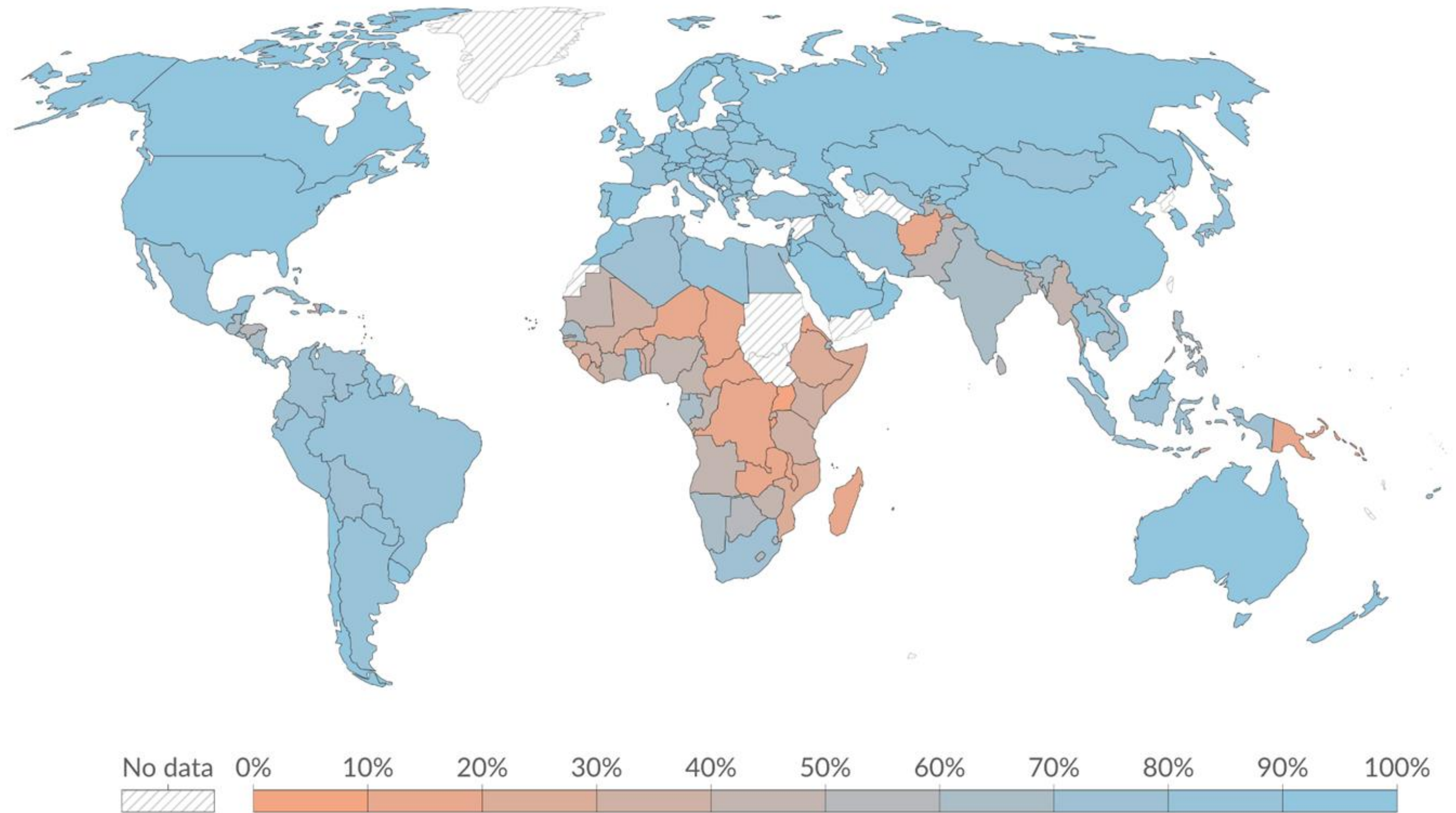
33% of adults in Sub-Saharan Africa own a smartphone

Source: Global Findex Database 2025, World Bank

There are many bottlenecks to AI use in LMICs: internet, energy, and types of jobs

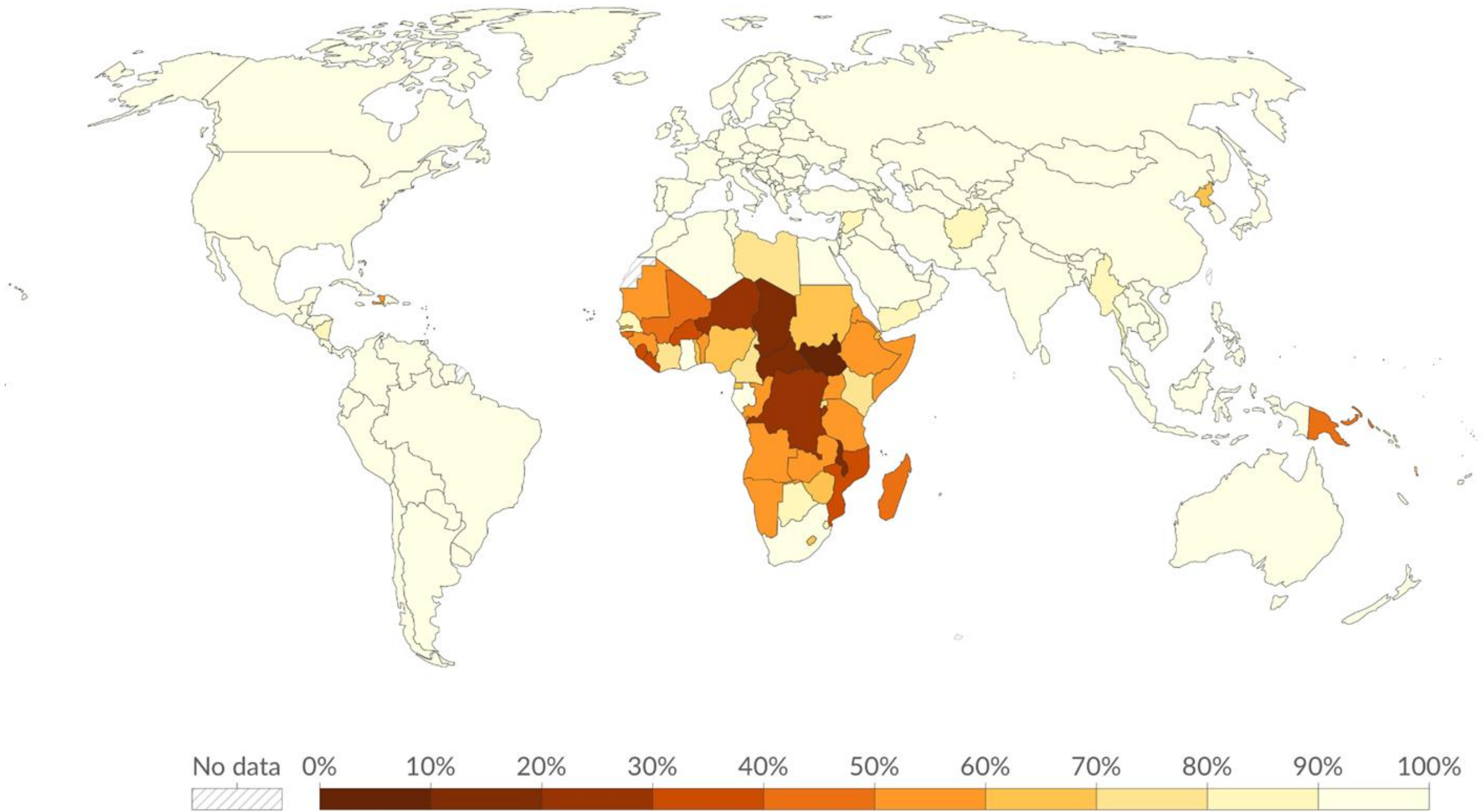
Share of the population who used the Internet in the last three months

Source: Our World in Data



Share of the population with access to electricity 2024

Access to electricity means having an electricity source that can provide very basic lighting, and charge a phone or power a radio for 4 hours per day.

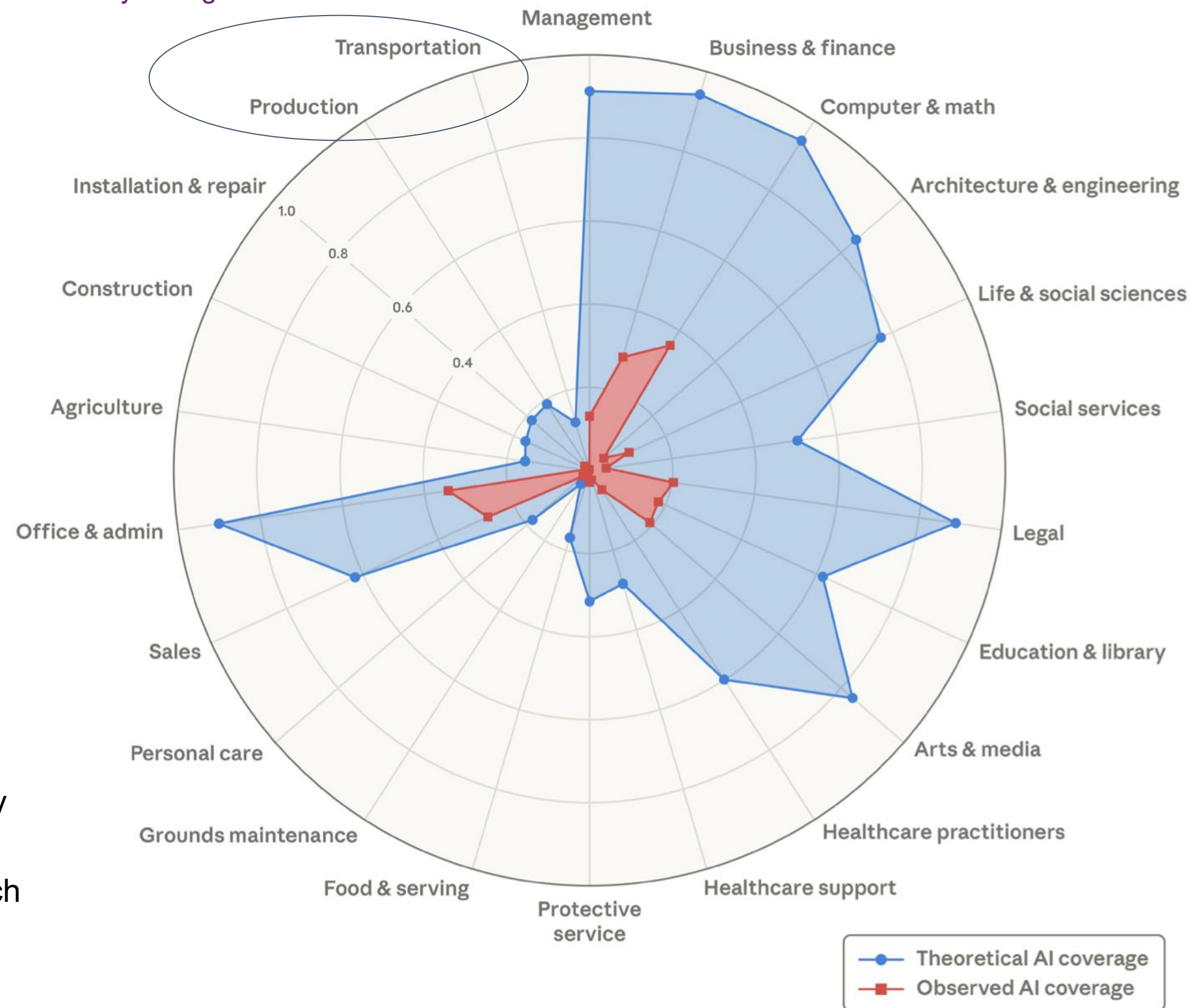


Data source: Data compiled from multiple sources by the World Bank

OurWorldinData.org/energy | CC BY

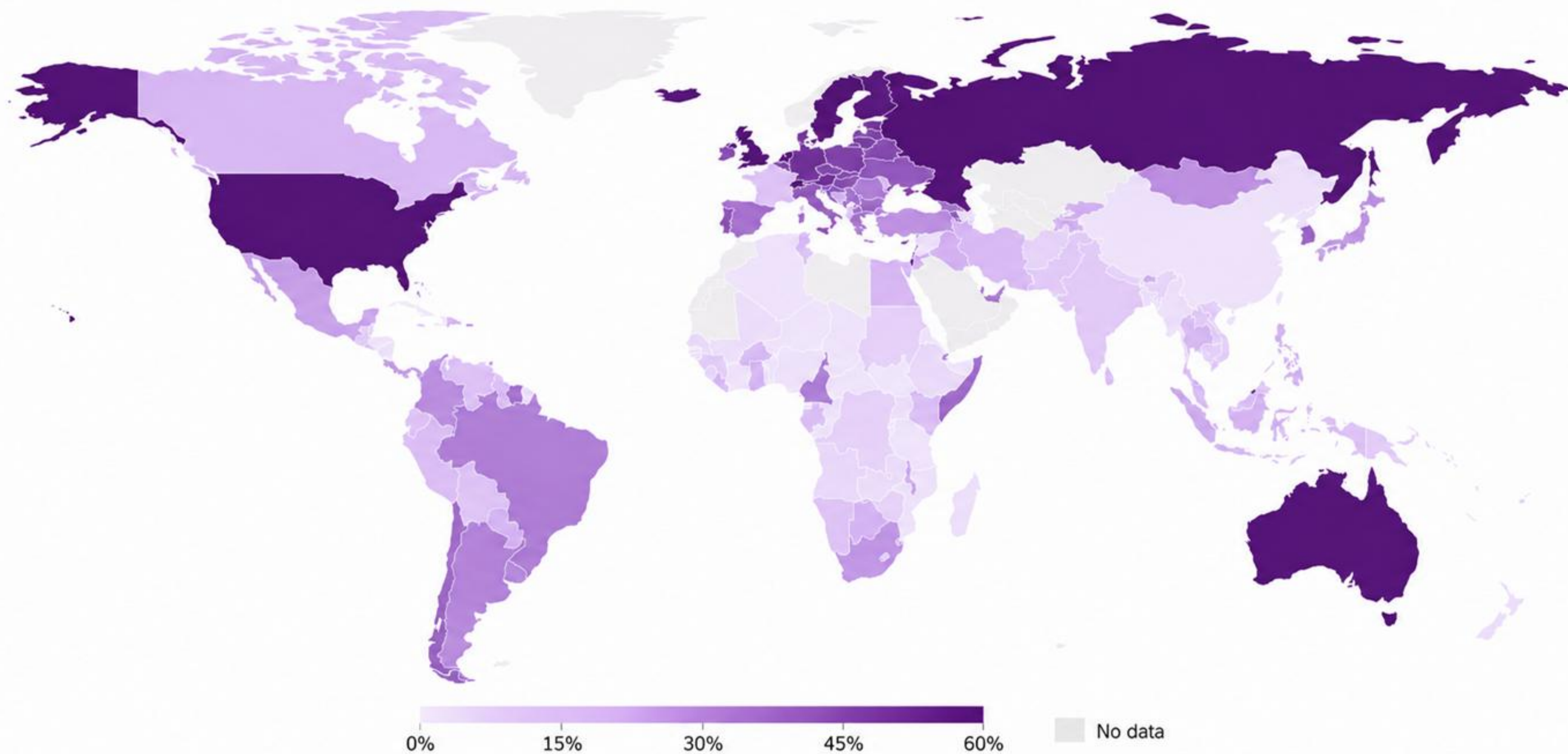
The jobs most exposed to AI are less common in LMICs

This may change with robots



Source: Massenkoff, Maxim, and Peter McCrory (2026), Labor Market Impacts of AI: A New Measure and Early Evidence, Anthropic, 5 March 2026.

Share of employment in high-skill occupations (managers, professionals, technicians)



Source: [DEENA MOUSA] (<https://substack.com/@deenamousa>) using ILOSTAT data

Under Development · Deena Mousa

What AI could change

What will happen depends on a few questions:

- How large will the economic gains from AI adoption be in countries at the technological frontier (esp the U.S.)?
- Which tasks will AI automate, which workers will be affected, and how large will the labour-market shock be?
- Who will (continue to) own and control the critical parts of the AI supply chain, and capture the resulting value? How big will that value be?
- How quickly will governments, firms and individuals in LMICs adopt AI?
- How will policy choices in the United States and China shape AI development and global access, particularly to frontier and open-weight models?

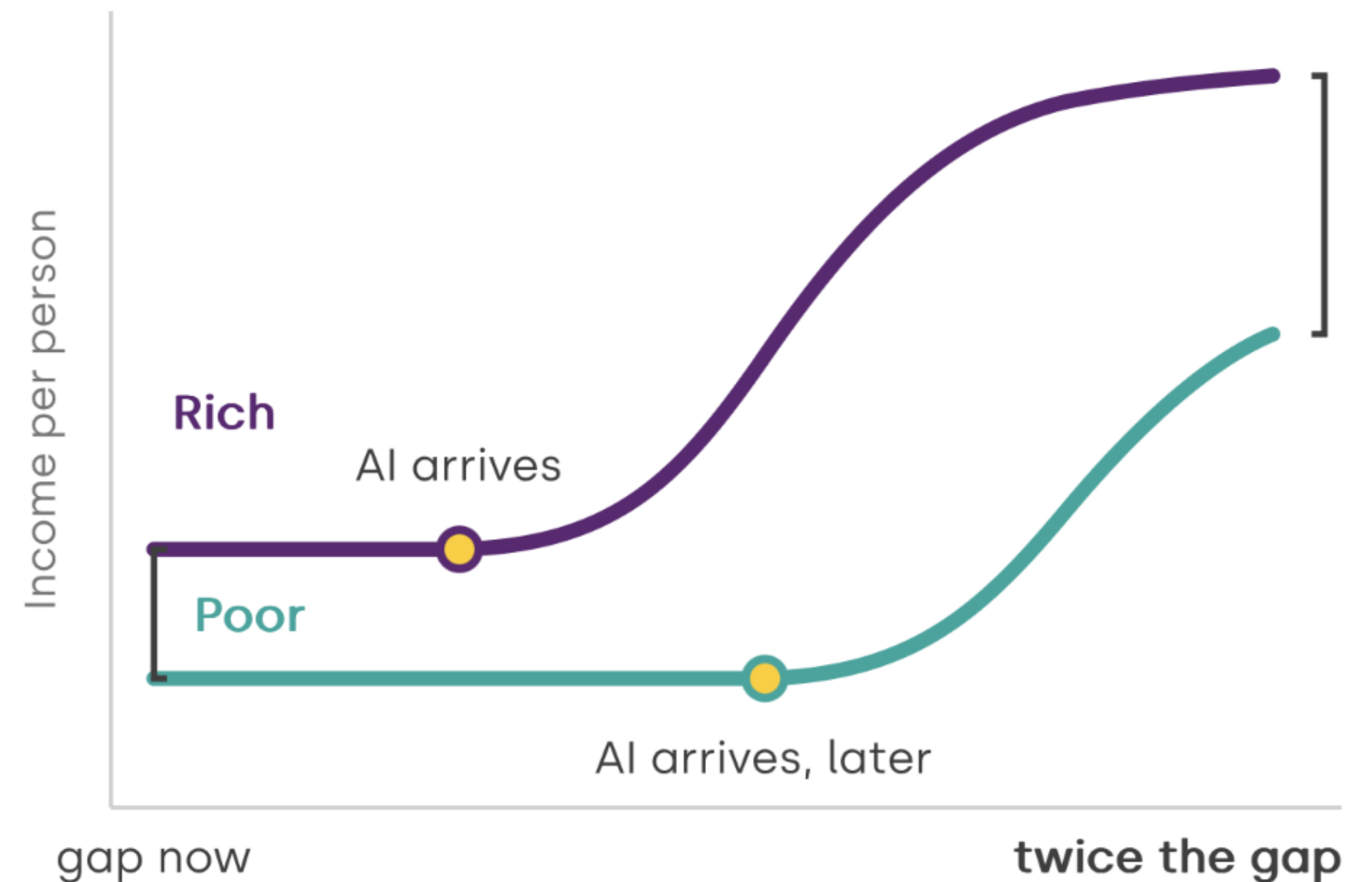
We don't have firm answers to any of these, but we can speculate

Speculation 1: AI will widen the gap between rich and poor countries

Frontier economies automate first because their output is concentrated in cognitive tasks, machines are cheaper relative to wages, and the complementary electricity, connectivity and management already exist.

Once the leader accelerates, a fixed lag in years becomes a widening gap in income.

Source: Rafael Proenca, The staggering welfare consequences of catch-up growth after AI, ChatGDP, 2026, central scenario of a 15-year takeoff and a 10-year adoption lag



Speculation 2: AI could change the jobs countries expected to create



How to respond

Plan against three scenarios

Slow

AI keeps improving but remains a productivity tool used alongside workers.

Fast

AI performs a growing share of cognitive tasks and reorganises firms and occupations.

Transformative

AI automates large parts of cognitive and production work and materially accelerates frontier growth.

Invest in no-regrets investments

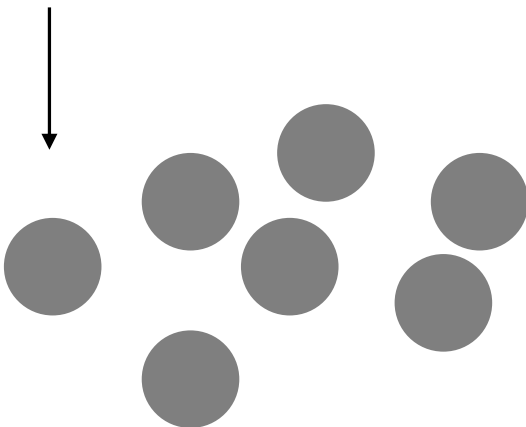
Better economic data	Stronger technical and managerial skills
Reliable electricity and connectivity	Procurement capability
Digitisation of firms, markets and public services	Rules for data access, privacy and evaluation
Government teams able to understand and use AI	

Governments can be early, big adopters of AI

Understand

Identify emerging problems, forecast needs and interpret complex data.

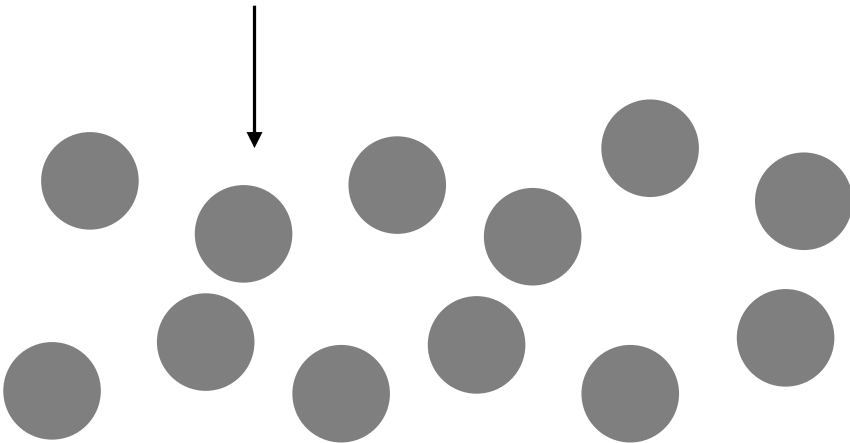
Which tariff or product code best describes this imported item?



Decide

Help officials compare options, target support and allocate scarce resources

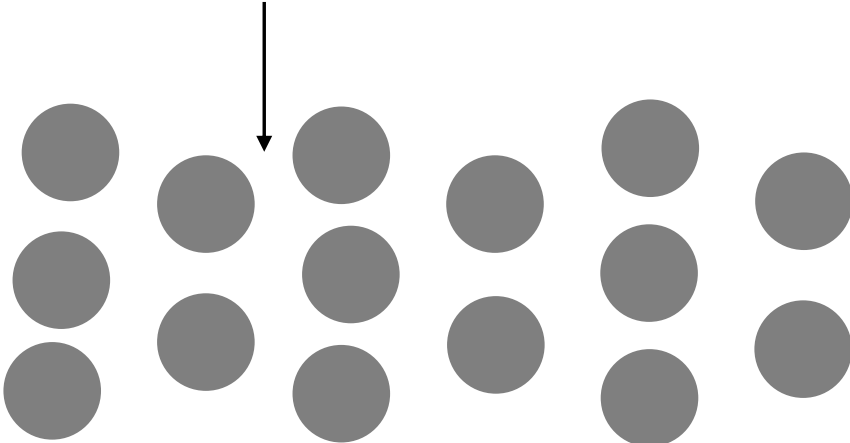
Does this chest X-ray show signs that require further TB testing?



Deliver

Process routine cases, support frontline workers and personalise public services

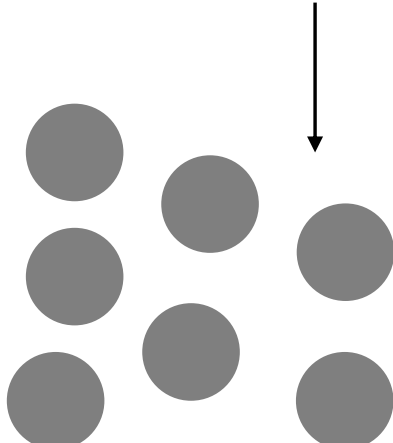
Which transactions differ substantially from this firm's normal activity?



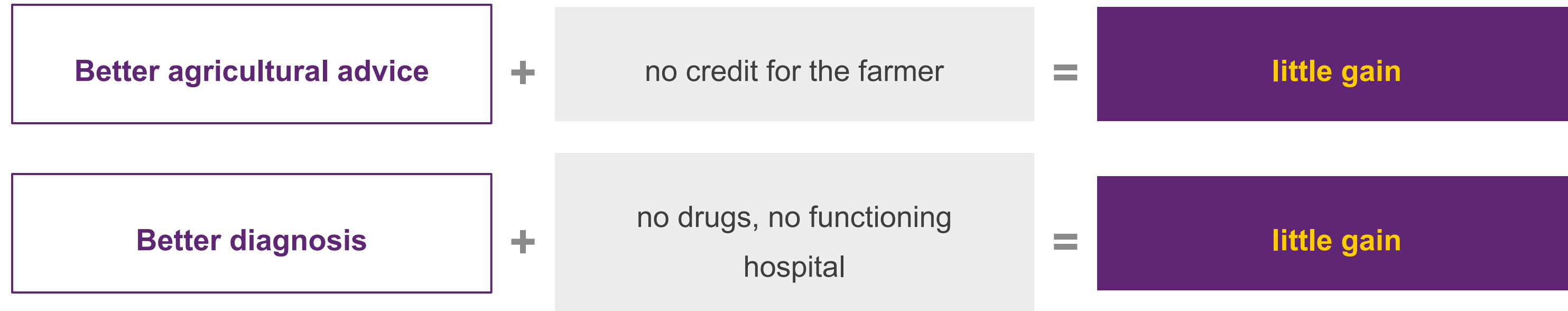
Learn and improve

Monitor results, analyse citizen feedback and identify what should change

What are the most common problems reported in these complaints?



But, technology only pays off at the binding constraint



Technologies require complementary infrastructure, skills, management and institutions.

Two examples of AI use

ADALAT AI, INDIA

Courts cannot keep up with their caseload

50m pending cases, and **20 judges per million** people against 150 or more in rich countries.

How. Real-time transcription and translation in the courtroom, case scheduling and digitised files. Adopted through State High Courts and now taught in judicial academies.

IMPACT

30 to 50% shorter case timelines

4,000 courtrooms, 20% of the judiciary

LABOUR FORCE SURVEY, ZAMBIA

Labour statistics arrive late and miscoded

Coding by hand from **436 job codes** in a 433-page book and **419 industry codes** in another.

How. ZamStats and the IGC built an LLM pipeline that reads the spoken answer and assigns the codes automatically, up to 17pp more accurately than enumerators.

IMPACT

99% less processing time

50,000 staff days saved a year, under \$5,000, if scaled throughout all surveys

Five mistakes to avoid

- 1** Relying heavily on external suppliers without building adequate state capacity
- 2** Policies that discourage internet/AI adoption among people and firms (digital taxes, etc.)
- 3** Blanket localisation and data-export restrictions can limit access to digital services
- 4** Banning or licensing AI as a single category
- 5** Building digital walls through internet shutdowns and “great firewall” approaches

Five moves (I think) that make sense under every scenario

- 1** Invest in no-regrets complements (energy, internet, skills, data infrastructure)
- 2** Use AI where there are relevant problems to solve, especially in the public sector
- 3** Measure the emerging economic impacts (esp on labour market, trade, etc.)
- 4** Experiment with policies that accelerate productive diffusion (what can help firms use AI more?)
- 5** Plan against scenarios rather than one forecast (no one knows for sure what will happen)

References and Further Readings

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