



WHAT DOES AI MEAN FOR INCREASING INEQUALITY IN SOUTH AFRICA?

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Human Sciences Research Council

19 May 2023

Pitfalls of Artificial Intelligence – An
NSTF/proSET Discussion Forum



“AI is as fundamental as the microprocessor, the pc, the internet and mobile phone”

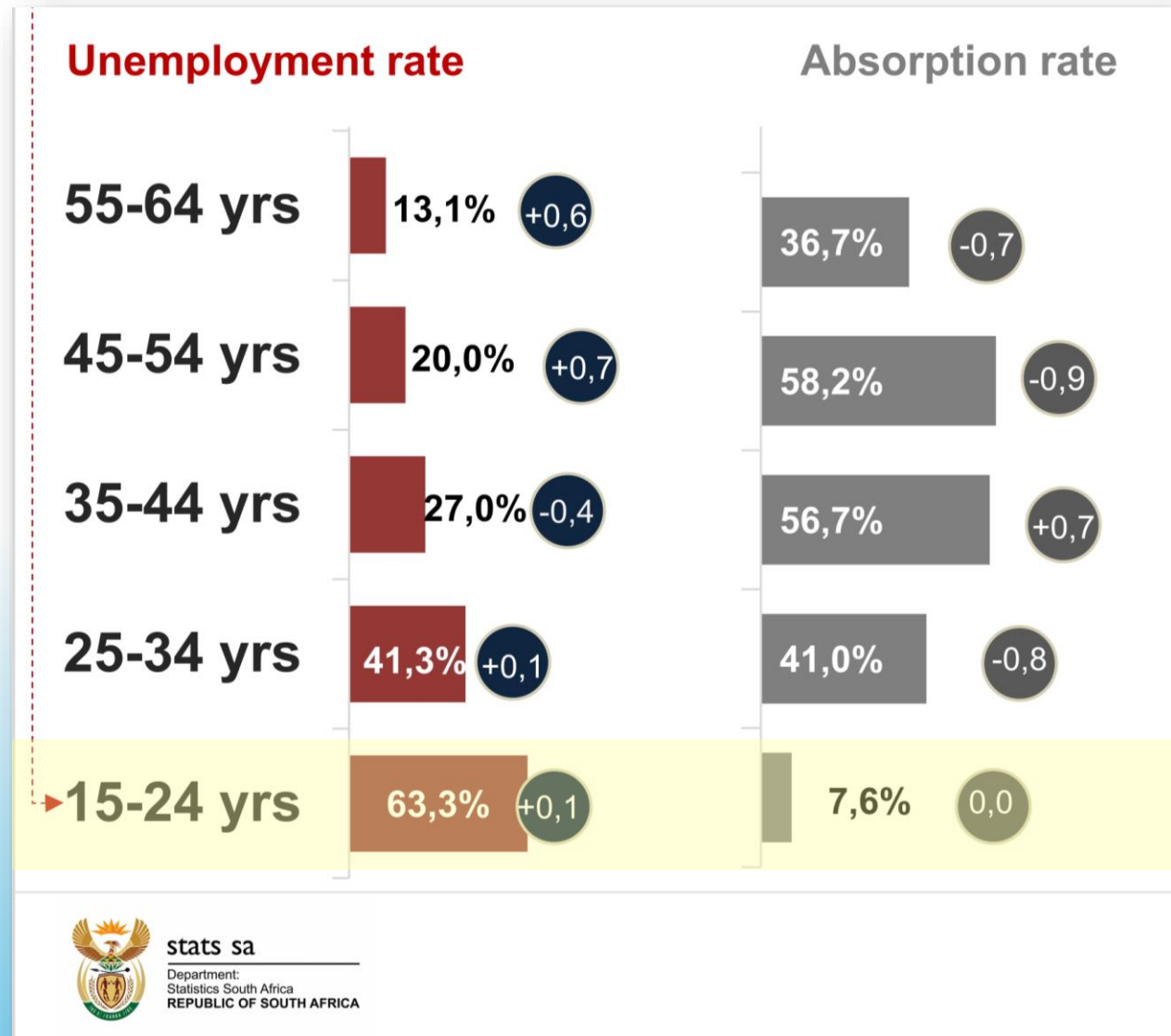


DIGITAL INEQUALITY IN SOUTH AFRICA



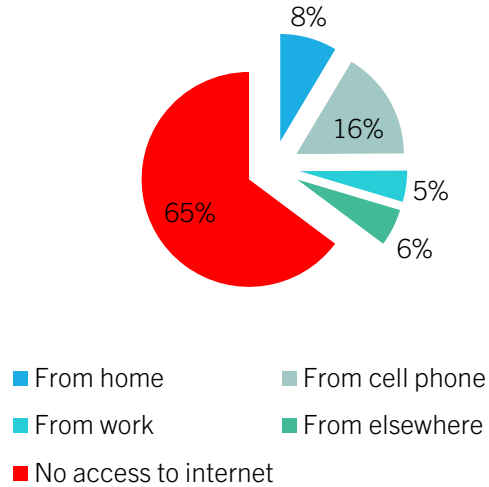
SOUTH AFRICA'S YOUTH UNEMPLOYMENT CRISIS

- 63% unemployed among 15-24 year olds in 2021
- Narrow Definition!!
- Only 7.6% in productive work

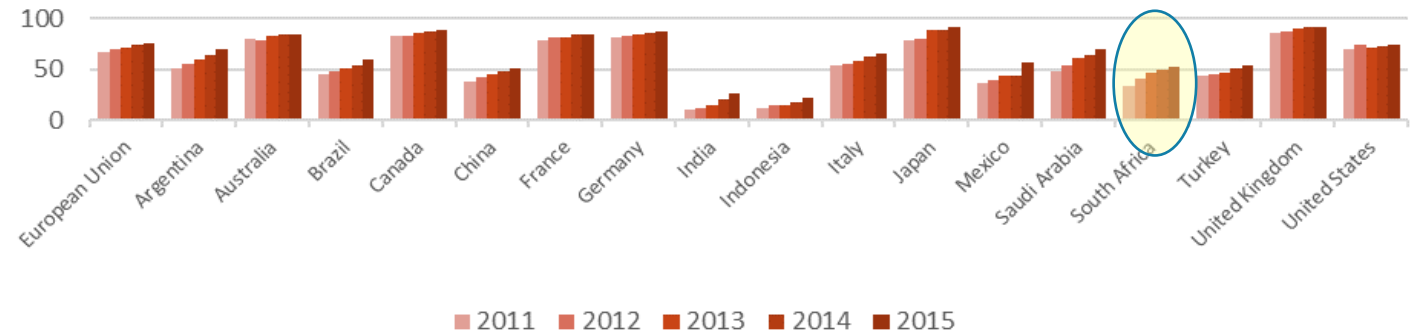


UNDERSTANDING THE DIGITAL DIVIDE

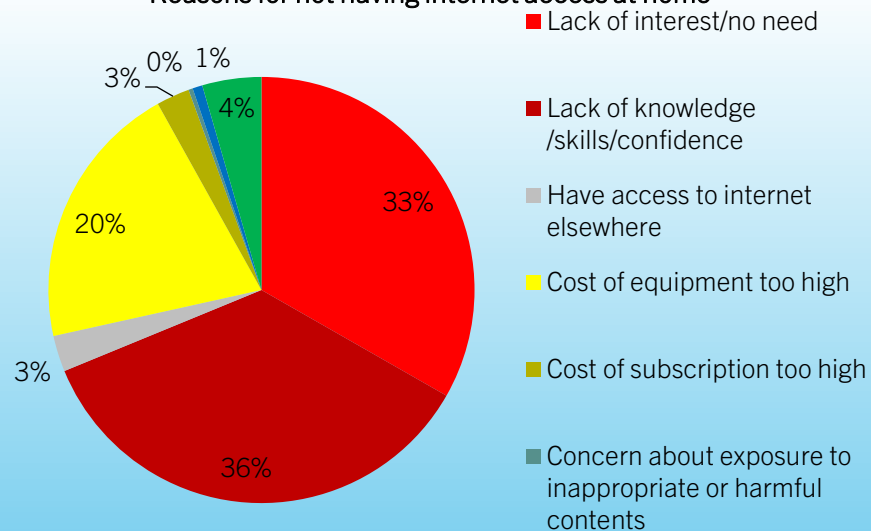
Household Access to the Internet (2018)



G20 Member States - Percentage of Internet Access



Reasons for not having internet access at home



- 65% HHs in SA have no access to the internet
- Growth in accessing the internet via a Cell Phone
- 36% don't access the internet due to a lack of knowledge
- 33% have no interest in the Internet

THE DIGITAL DIVIDE

Tiago Forte, Founder of Forte Labs and author of "Building A Second Brain"

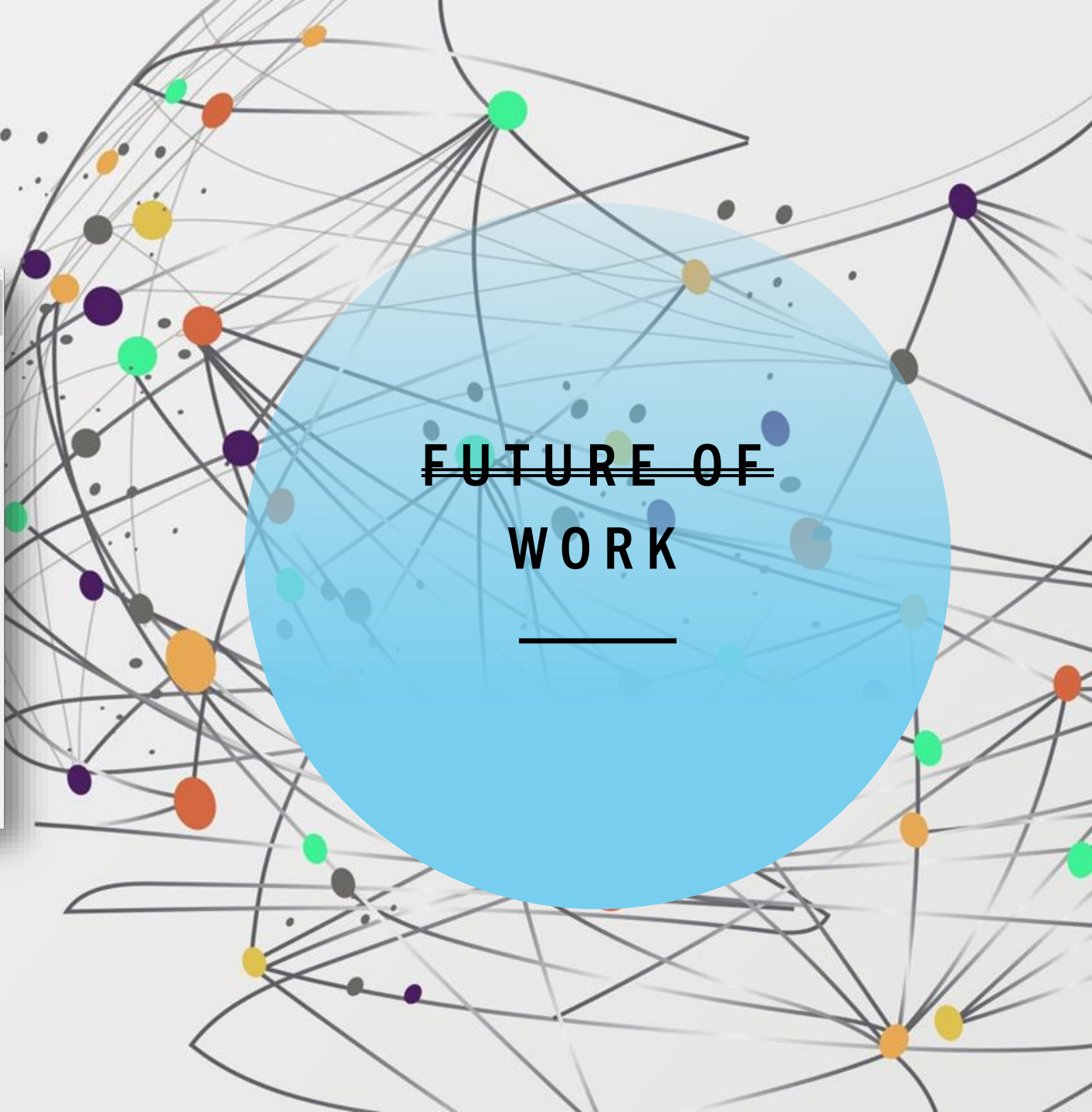


B

When Predicting the Future, Remember, You're Probably Wrong

Will Hitchen · March 7, 2023

History remains the best guide to predicting the future — but such predictions are still more likely than not to be wrong. Those who postulate and prognosticate on the future of warfare, and those consuming their output, would be well served by keeping this in mind. Such is the nature of predicting the future writ large, and this applies in the realm of warfare. The future is inherently unknowable as will be demonstrated through reviewing the general experience of prediction and then confirming this phenomenon applies to predicting future warfare. Acceptance of the

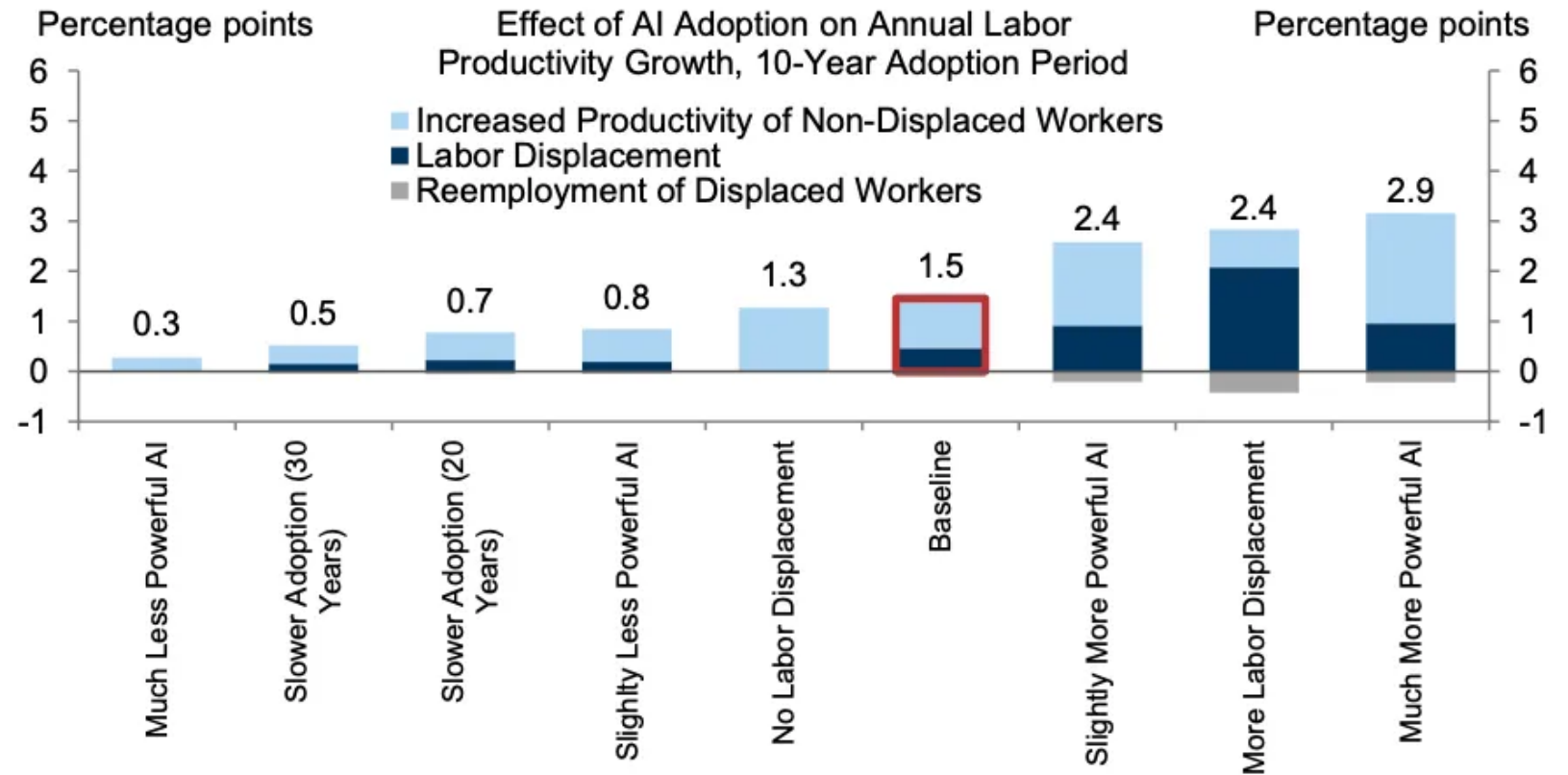


~~FUTURE OF~~
WORK

US PROJECTED ECONOMIC GROWTH

Source: Goldman Sachs Global
Investment Research (2023)

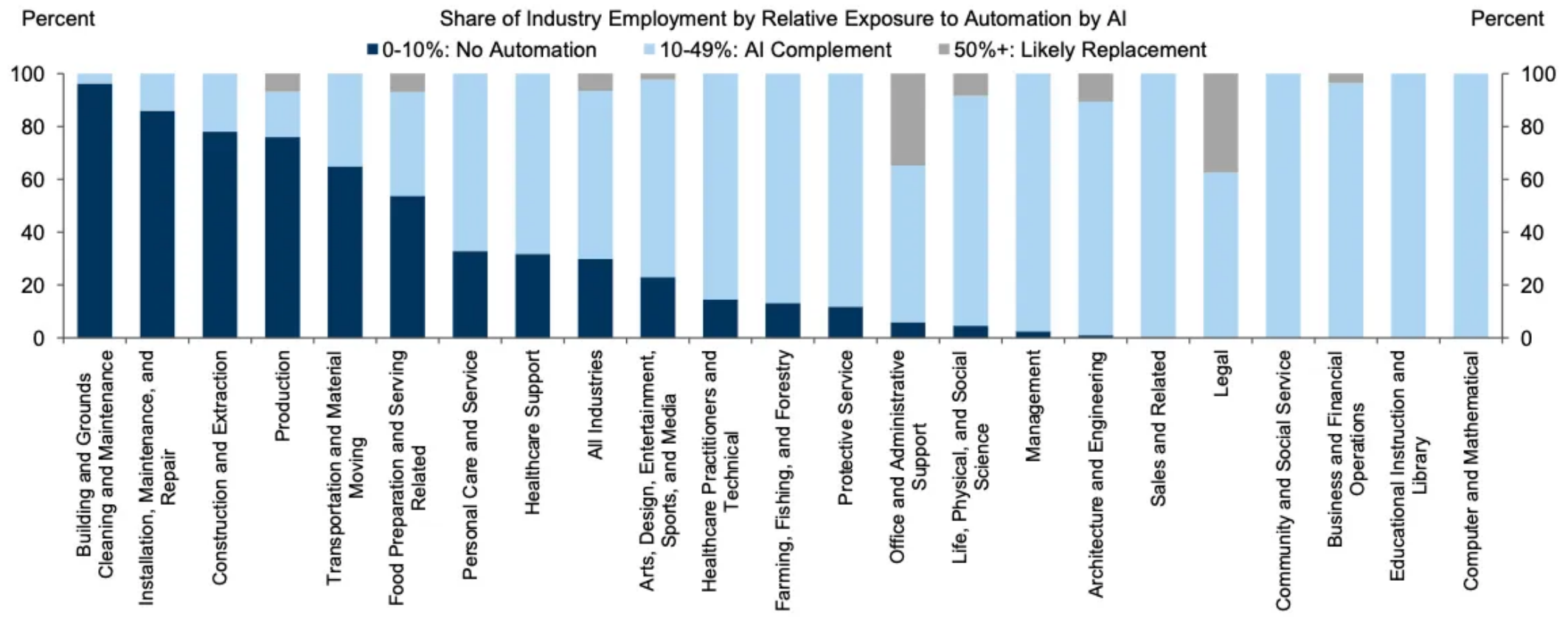
Exhibit 13: We Estimate That Generative AI Could Boost Aggregate Labor Productivity Growth by 1.5pp in the US, Although the Size of the Boost Will Depend on AI's Capability and Adoption Timeline



Source: Goldman Sachs Global Investment Research

AFFECTED OCCUPATIONS IN THE US

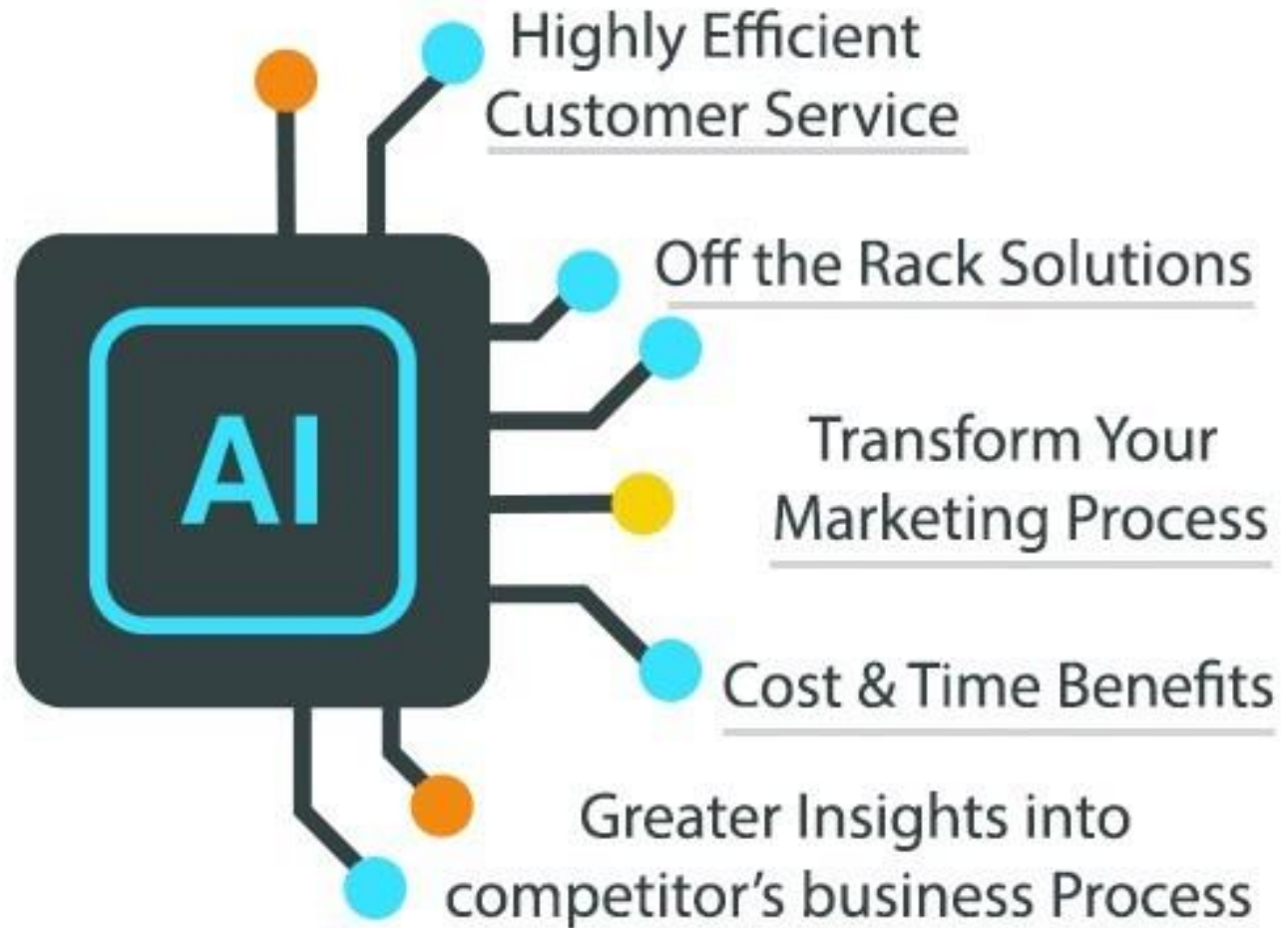
Exhibit 8: Replacement in Legal and Administrative Fields, Little Effect in Manual and Outdoor Jobs, and Productivity-Enhancement Everywhere Else



Source: Goldman Sachs Global Investment Research

OPPORTUNITIES FOR THE SMALL BUSINESS

Benefits of **AI** for **small businesses**



AI SKILLS YOU NEED
RIGHT NOW

PROMPT ENGINEERING



**GENERATIVE AI -
ACCELERATED KNOWLEDGE
DIFFUSION**



btTV

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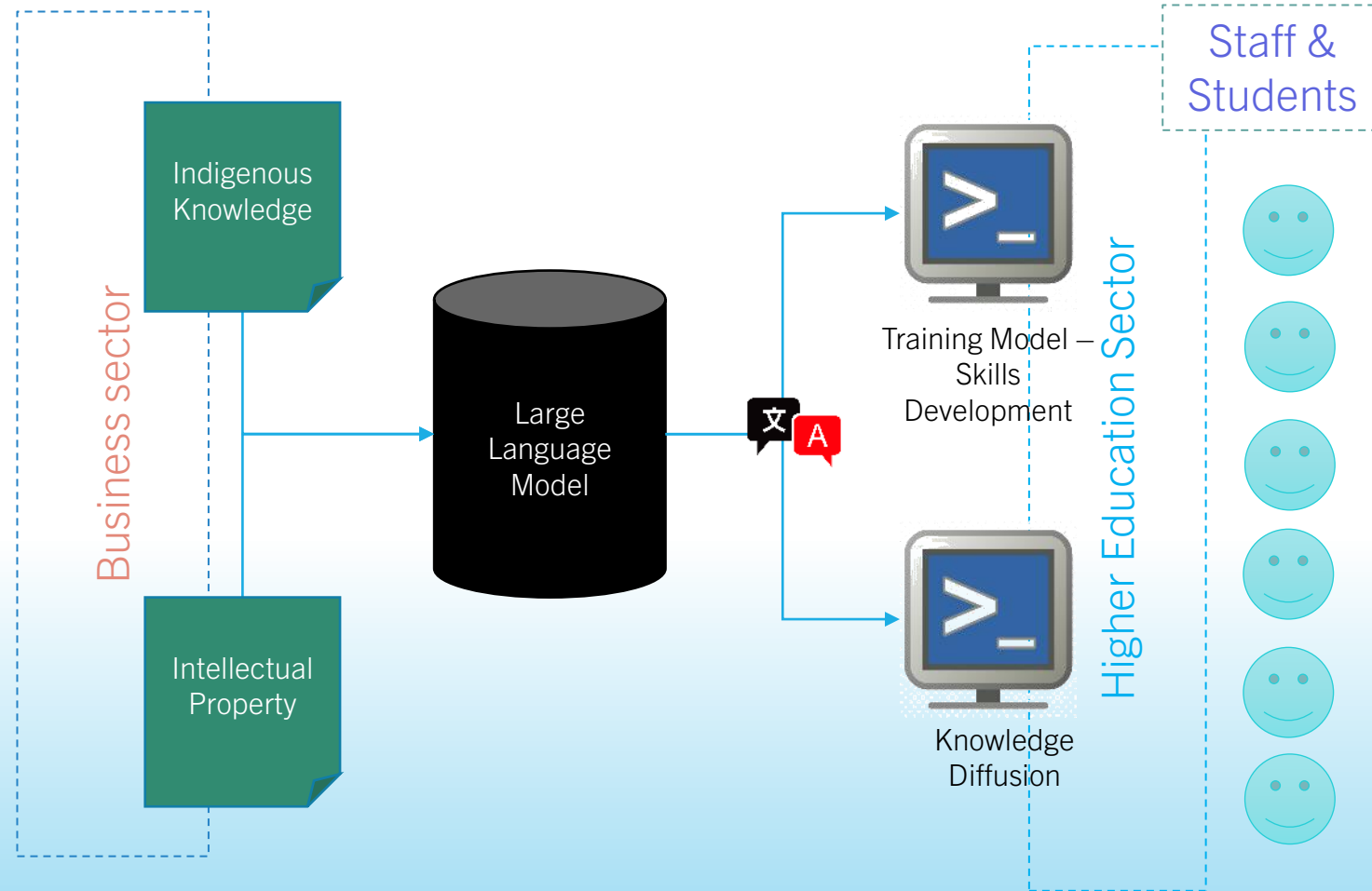
NADELLA

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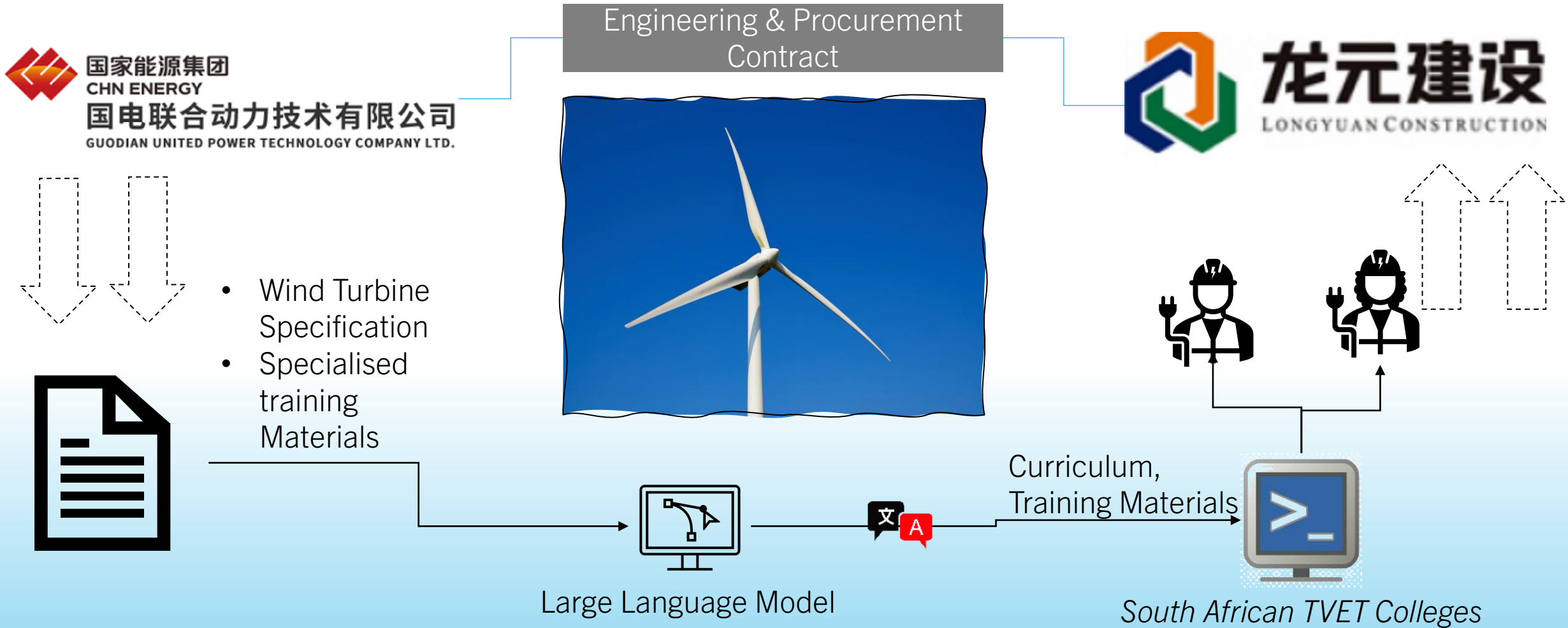
Satya Nadella, Microsoft CEO

CONNECTING BUSINESS TO TVET SYSTEM

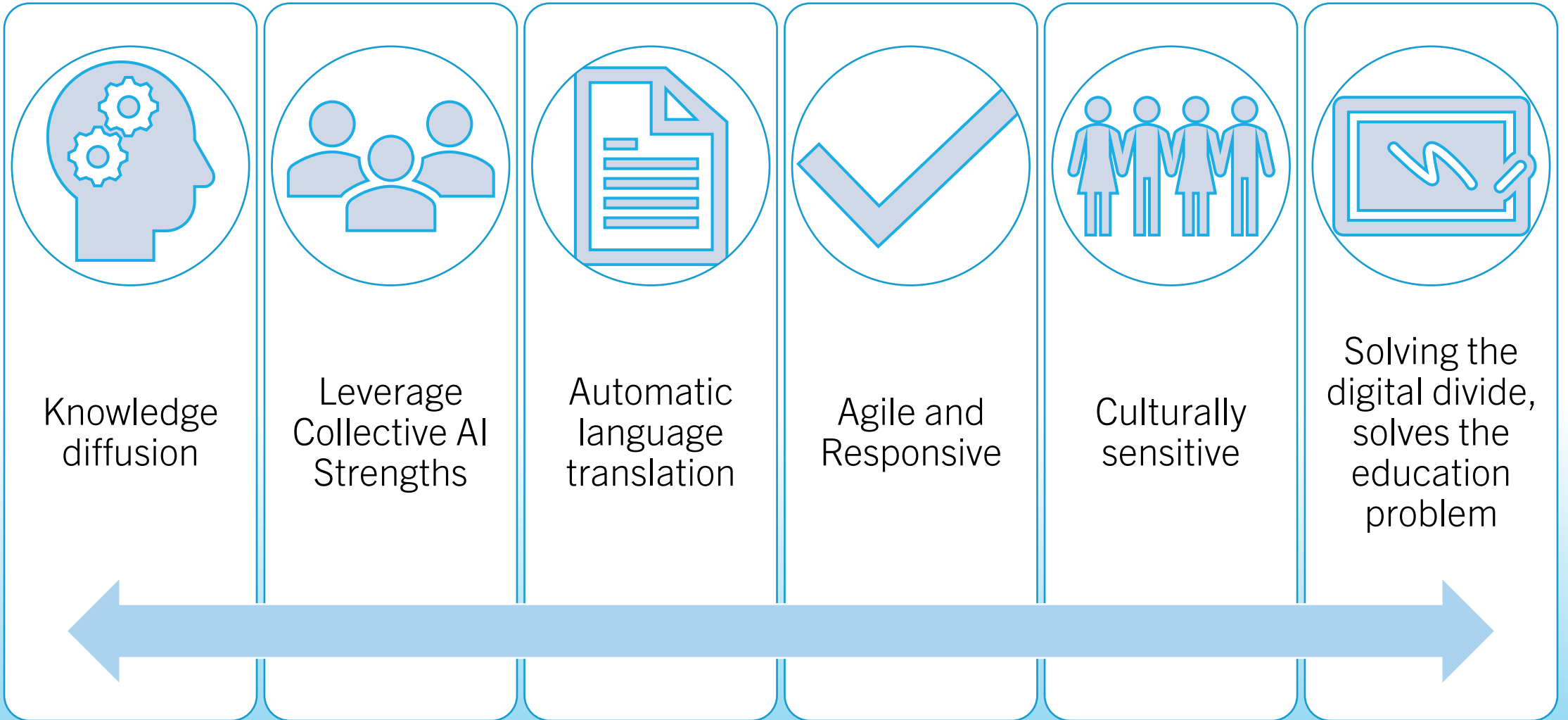
- Business has specific skills requirements and knowledge
- Requirements are changing faster than education system can respond to
- Traditional method of updating curricula is outdated
- How can Education System access Business Knowledge in time?



EXAMPLE: SPECIALISED WIND TURBINE TECHNICIAN / ENGINEER



KNOWLEDGE SHARING THROUGH A LARGE LANGUAGE MODEL

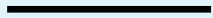


USING GENERATIVE AI IN THE CLASSROOM

Eg: Khan Academy

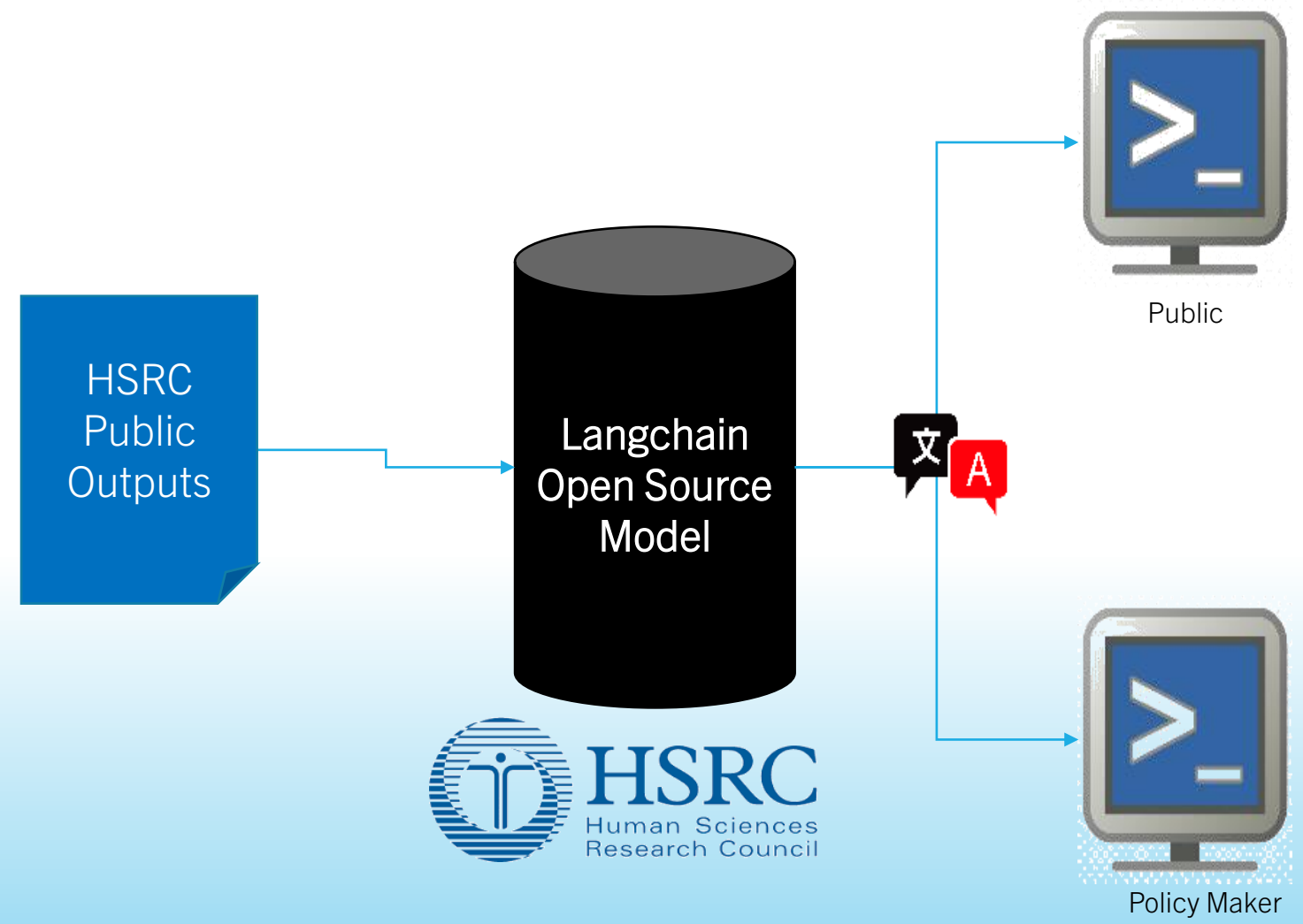


HSRC RESEARCH CHATBOT

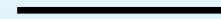


HSRC MODEL

- How do we boost the impact of our research?
- How do we promote Community Engagement?



THANK YOU



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