

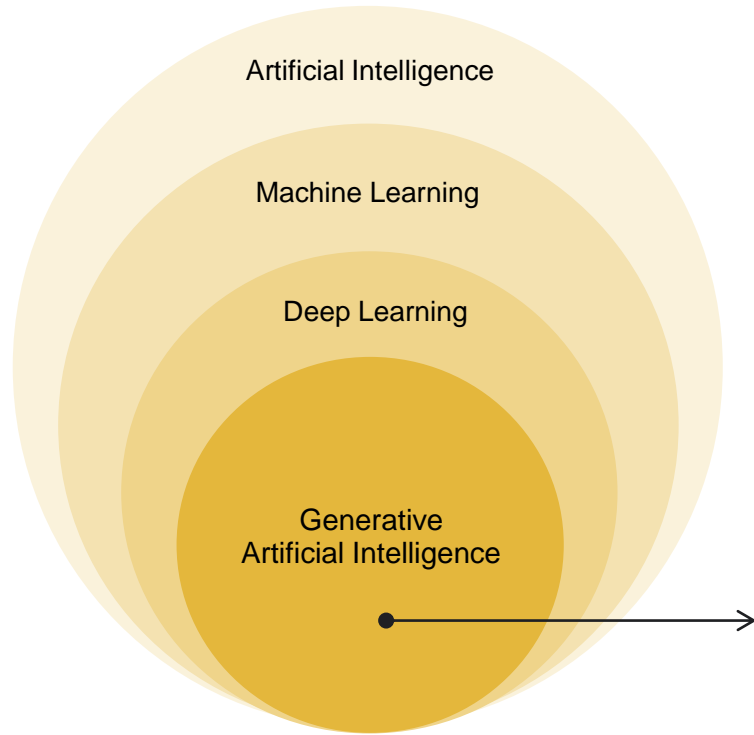


The economic opportunity of AI in Romania

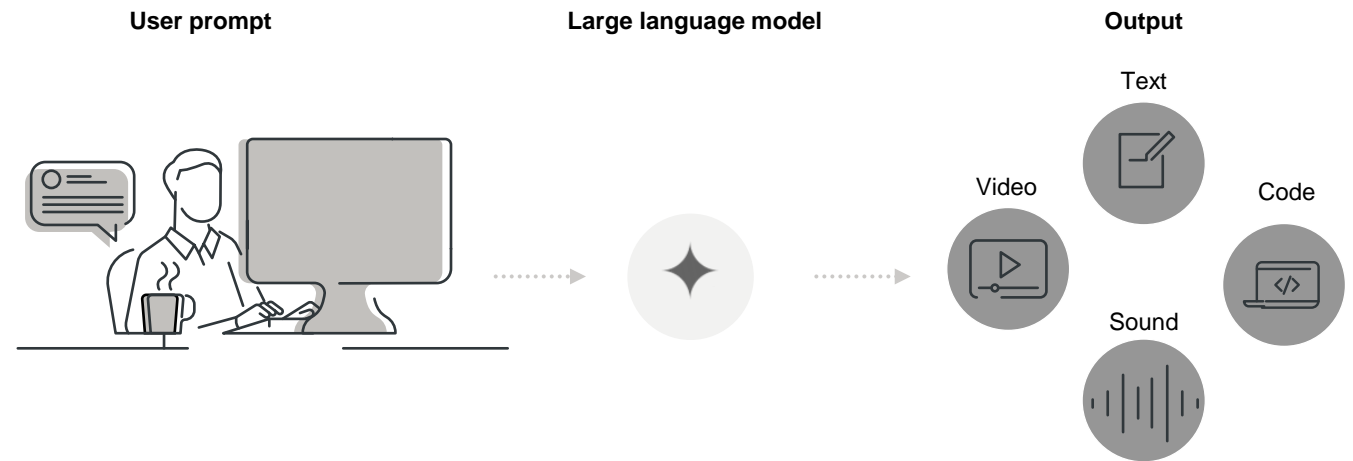
Capturing the next wave of benefits from *generative AI*

30 May 2024

AI can help humans solve tasks faster and better



Generative AI models can create original content via user prompts



01

No or low data requirements
Pre-trained models are readily available for many tasks

02

Easy to use in plain language
Not require any coding skills

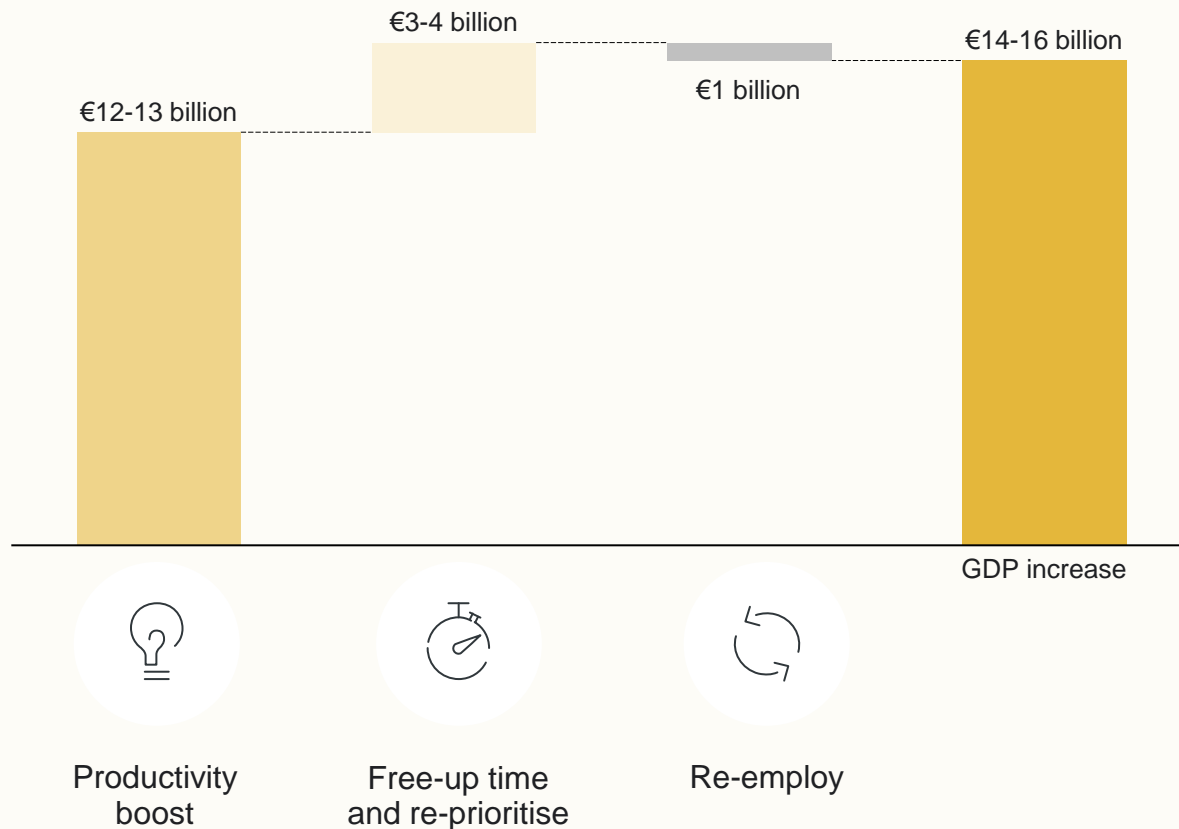
03

Online and free of charge
Not requiring local infrastructure

Generative AI offers a substantial economic opportunity for Romania

GDP potential of generative AI in Romania

€ billion annual increase from baseline GDP after a ten-year adoption period



Around ten years from now, generative AI alone could boost Romania's annual GDP by

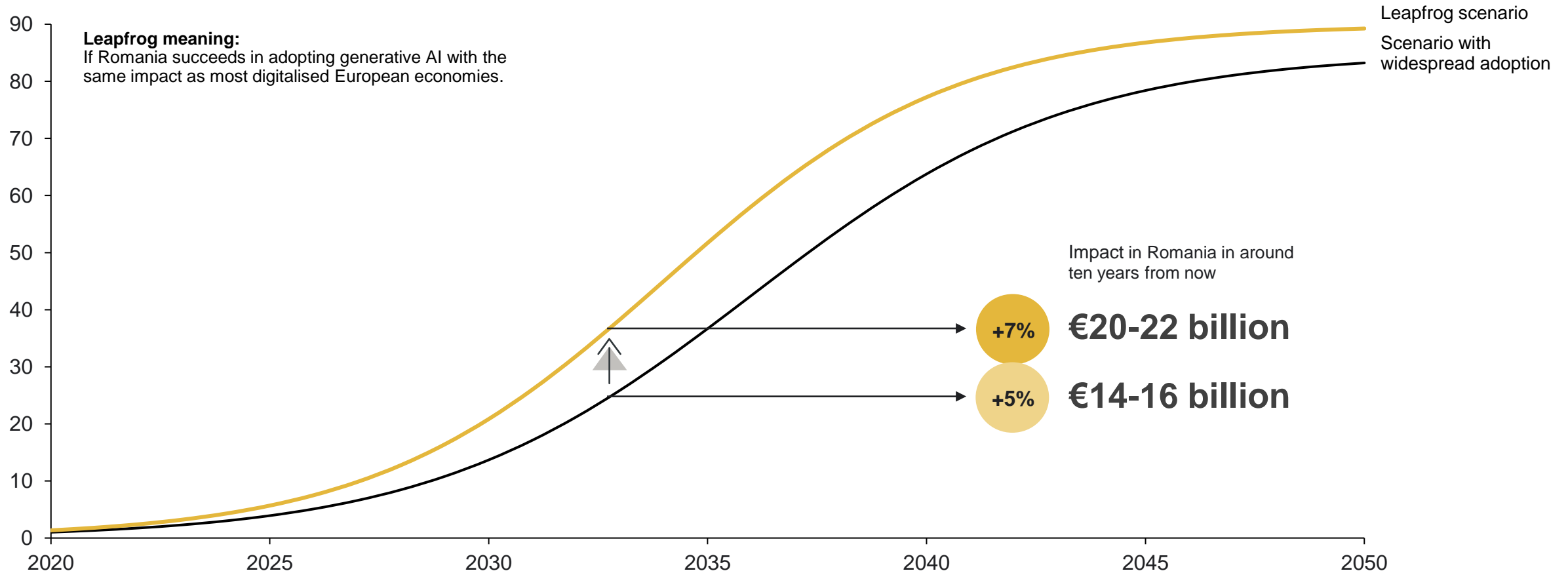
+5% GDP
annual contribution if Romania achieves widespread adoption of AI.

€14-16 billion

A leapfrog scenario could increase Romania's annual GDP potential from generative AI from 5% to 7%

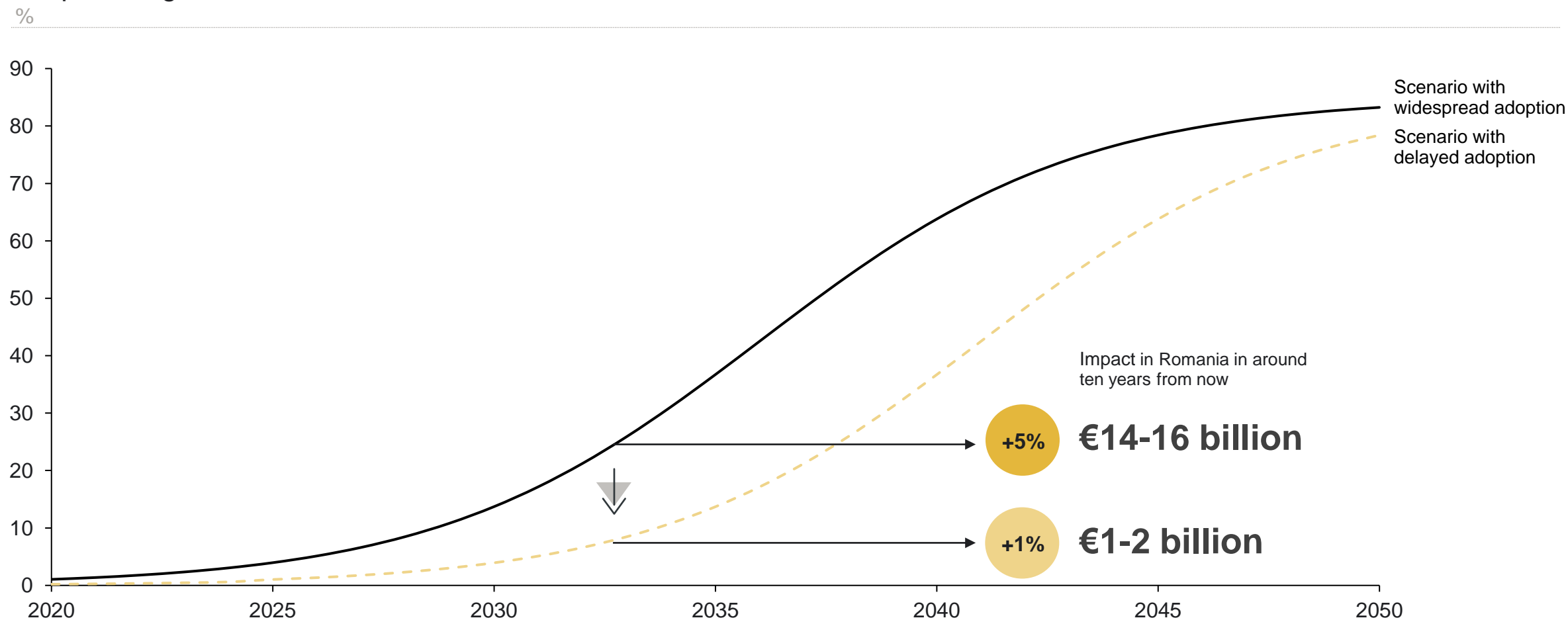
Adoption of generative AI

%



A five-year delay in the adoption of generative AI could reduce Romania's annual potential GDP gains from 5% to 1%

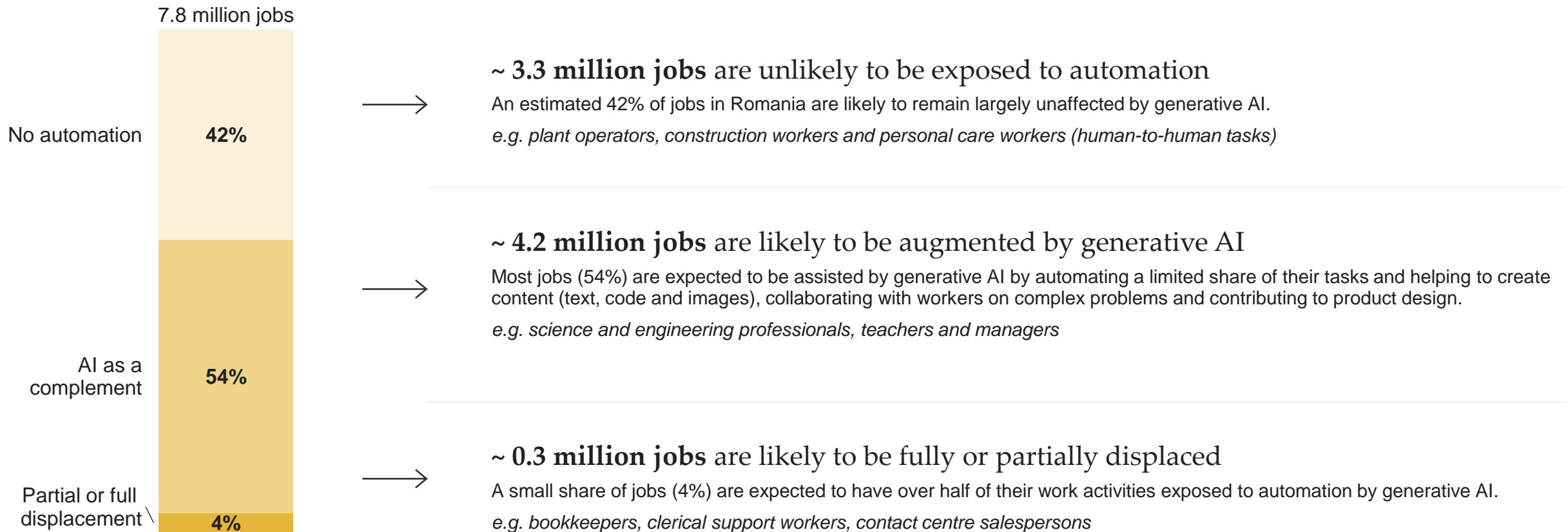
Adoption of generative AI



Generative AI is estimated to augment most jobs in Romania

Share of jobs exposed to automation by generative AI

% of total employment in Romania

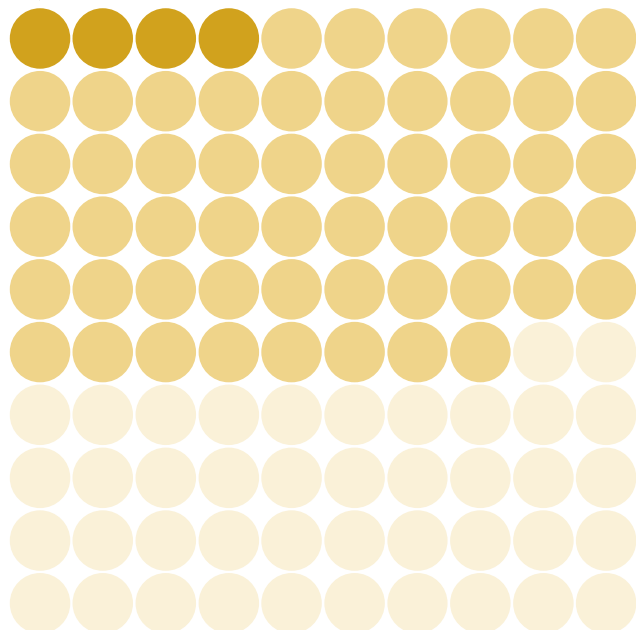


The AI-powered economy is expected to create new jobs and ensure full re-employment of potentially displaced workers in Romania

Share of jobs exposed to automation by generative AI

% of total employment in Romania

4% of jobs in Romania are estimated to be highly exposed to generative AI, leading to some job closures.



● Partial or full displacement
 ● AI as a complement
 ● No automation

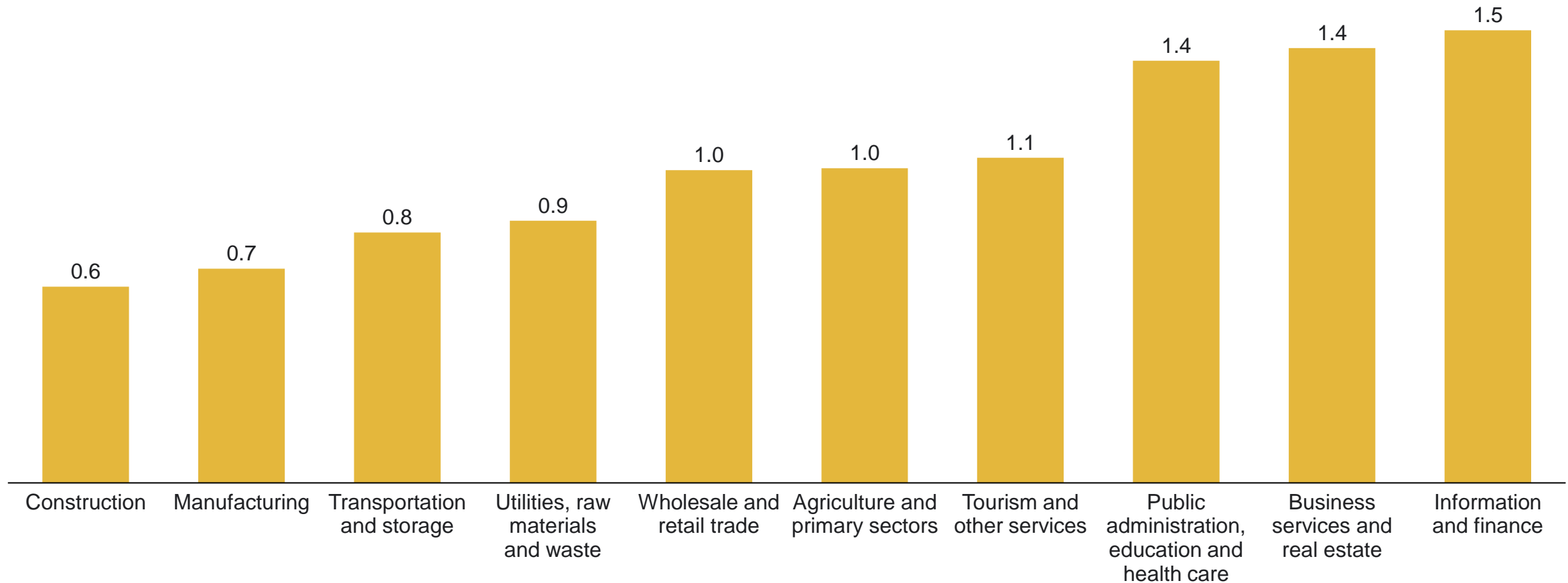
Meanwhile, 54% of jobs are expected to see a boost in productivity. This will create new jobs due to:

- I Increase in general demand for goods and services
- II Creation of new AI-related tasks
- III Demand within occupation

Generative AI can boost productivity across all sectors in Romania

Productivity boost from generative AI

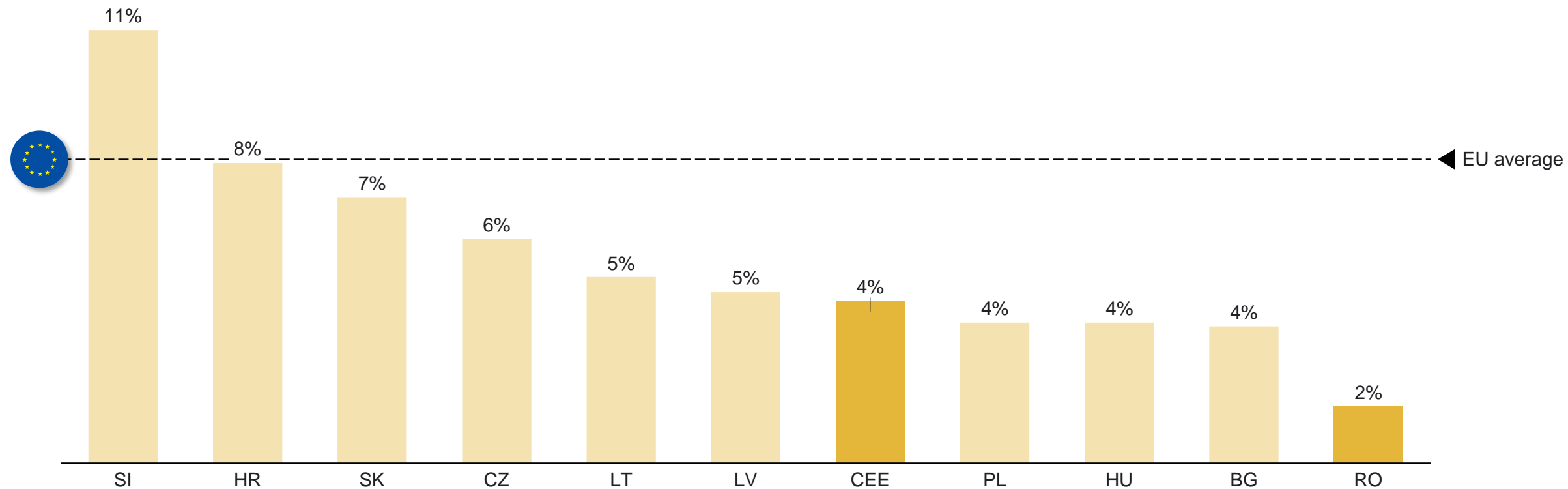
% productivity growth p.a. at peak



AI adoption in Romania is below CEE region and EU

Adoption of AI 2023

% of enterprises using at least one type of AI technology

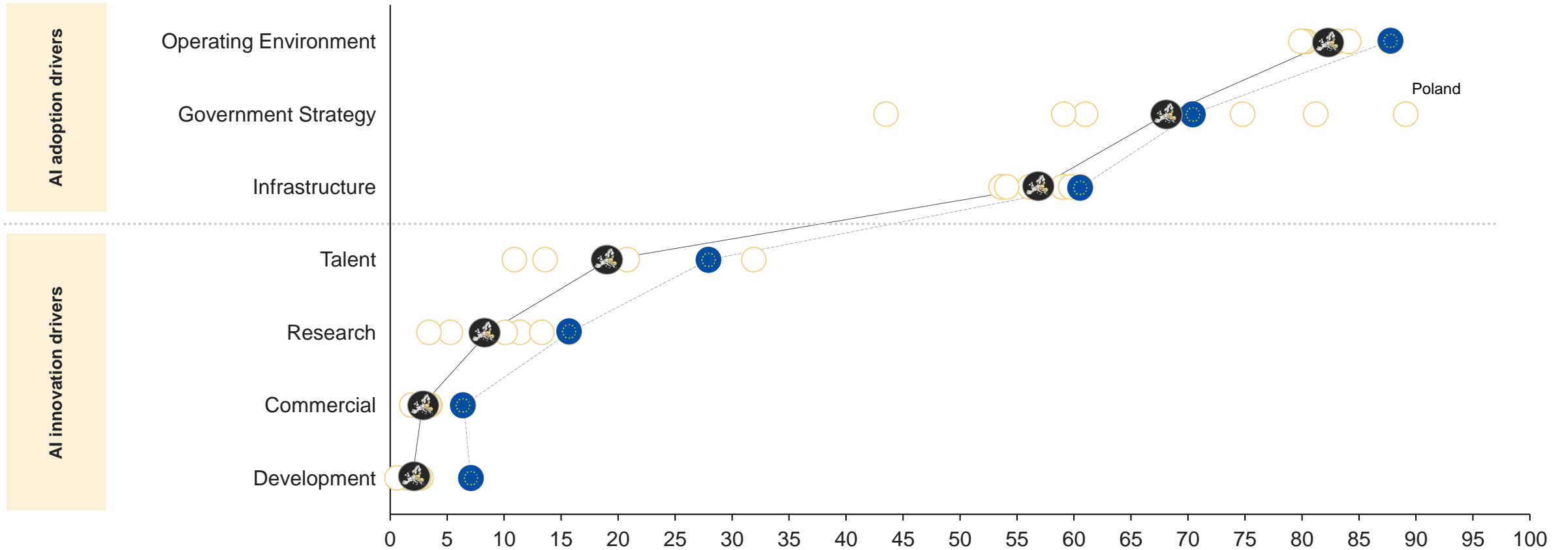


CEE is lagging behind EU on early adoption drivers and innovation drivers

CEE's AI capacity according to the Tortoise Global AI Index

Global AI Index, score out of 100 (global leader).

 CEE average  EU average



For Romania to capture the AI potential requires a balanced set of choices



Grow R&D by local innovators



Accelerate commercial uptake



Retrain and upskill workforce

How might Romania as part of CEE

focus more on research funding and collaboration across academia, industry, and government sectors.

work towards business-friendly environments, simple regulations, and favourable IP regimes to boost AI adoption.

launch initiatives that address the increased demand for skills. 31% of CEE companies believe they need enhanced general digital skills to take full advantage of AI.