QuantumBlack
AI by McKinsey

The state and potential of gen AI and Greece's readiness to capture it

June 2024

Agenda

Deep dive into the numbers

Implications for Greece

Gen AI could have the greatest productivity impact on marketing & sales and software engineering

Gen AI productivity impact by business functions[1]

Low impact — High impact

	Total, % of industry revenue	**Total,** $ billion	Marketing and sales	Customer operations	Product and R&D	Software engineering	Supply chain and operations	Risk and legal	Strategy and finance	Corporate IT[4]	Talent and organization
Total	**1.3 - 2.1**	**2,600 - 4,400**	**760 - 1,200**	**340 - 470**	**230 - 420**	**580 - 1,200**	**280 - 530**	**180 - 260**	**120 - 260**	**40 - 50**	**60 - 90**
High Tech	**4.8 - 9.3**	240 - 460									
Retail[3]	**1.2 - 1.9**	240 - 390									
Banking	**2.8 - 4.7**	200 - 340									
Travel, Transport & Logistics	**1.2 - 2.0**	180 - 300									
Advanced Manufacturing[2]	**1.4 - 2.4**	170 - 290									
Consumer Packaged Goods	**1.4 - 2.3**	160 - 270									
Healthcare	**1.8 - 3.2**	150 - 260									
Administrative & Professional Services	**0.9 - 1.4**	150 - 250									
Energy	**1.0 - 1.6**	150 - 240									
Education	**2.2 - 4.0**	120 - 230									
Basic Materials	**0.7 - 1.2**	120 - 200									
Real Estate	**1.0 - 1.7**	110 - 180									
Advanced Electronics & Semiconductors	**1.3 - 2.3**	100 - 170									
Chemical	**0.8 - 1.3**	80 - 140									
Construction	**0.7 - 1.2**	90 - 150									
Public & Social Sector	**0.5 - 0.9**	70 - 110									
Media & Entertainment	**1.5 - 2.6**	60 - 110									
Pharmaceuticals & Medical Products	**2.6 - 4.5**	60 - 110									
Telecommunications	**2.3 - 3.7**	60 - 100									
Insurance	**1.8 - 2.8**	50 - 70									
Agriculture	**0.6 - 1.0**	40 - 70									

Note: Figures may not sum to 100% because of rounding.
1. Excludes implementation costs (e.g., training, licenses).
2. Includes aerospace, defense, and auto manufacturing.
3. Includes auto retail.
4. Excluding Software engineering

Source: McKinsey report: The Economic Potential of Generative AI: The Next Productivity Frontier
Internal experts | Databases: McKinsey Corporate Business Functions, CIS / IHS Markit, Oxford Economics, McKinsey Sales Navigator, McKinsey Manufacturing and Supply Chain 360 assessment

The gap between excitement and readiness is large

Generative AI will be a growing technology across a diverse set of organizations

57% of CxOs reported implementing generative AI to be a key priority[1]

49% of non-tech CxOs reported implementing generative AI to be a key priority[1]

14% of CxOs reported a substantial Responsible AI program

9% of CxOs feel “very prepared” to implement generative AI responsibly[2]

But many executives feel unprepared to mitigate the risks of generative AI responsibly

1. Responded either 4 or 5 to the question, "How much of a priority is the implementation of generative AI for your organization? (Please provide a rating from 1-5 where 1 represents the lowest level of prioritization and 5 represents highest level of prioritization)"
2. Responded “very prepared” to the question, " How prepared do you feel to implement Responsible AI practices and guidelines on the use of generative AI at your organization in the next year?”

Source: 2023 Responsible Generative AI survey

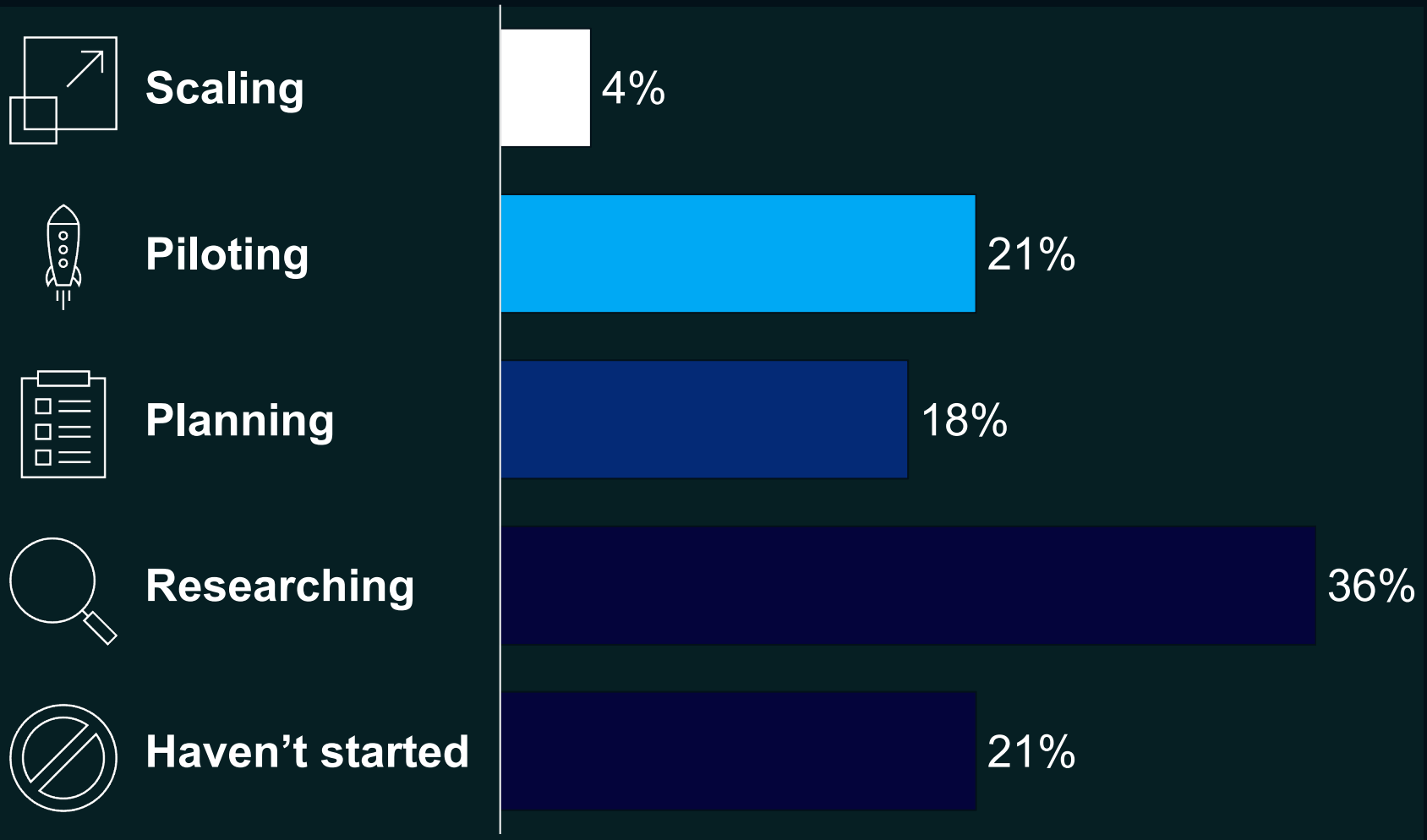
Despite spike in adoption, few cross the “death valley”

Only… **11%**

of enterprise AI applications end up in production…

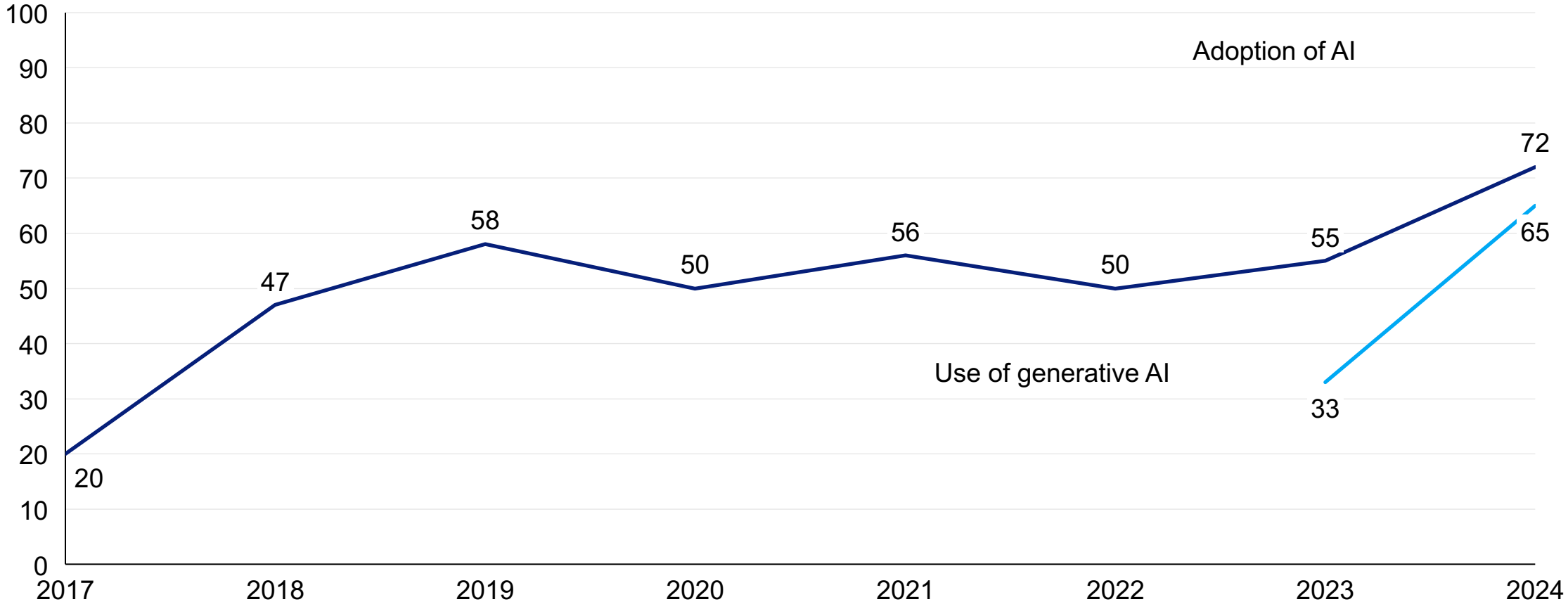
…only **3-5%**

for Generative AI



AI adoption worldwide has increased dramatically in the past year, after years of little meaningful change.

Organizations that have adopted AI in at least 1 business function,[1] % of respondents

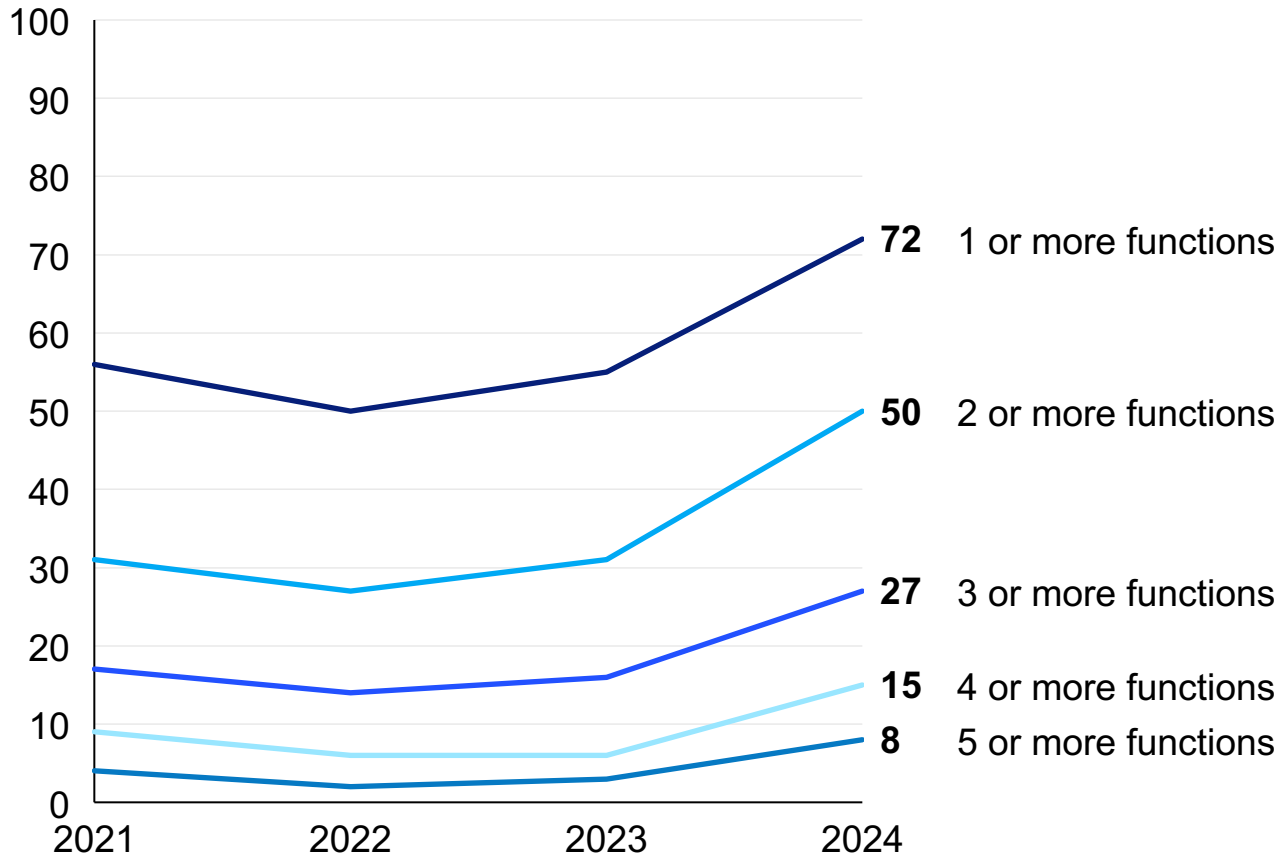


1. In 2017, the definition for AI adoption was using AI in a core part of the organization's business or at scale. In 2018 and 2019, the definition was embedding at least 1 AI capability in business processes or products. Since 2020, the definition has been that the organization has adopted AI in at least 1 function.

Source: McKinsey Global Survey, *The state of AI in Early 2024: Gen AI adoption spikes and starts to generate value*; 1,363 participants at all levels of the organization, Feb 22–Mar 5, 2024

Survey findings suggest that organizations are using AI in more business functions now than in previous years.

Business functions at respondents' organizations that have adopted AI,[1] % of respondents



1. In 2021, n = 1,843; in 2022, n = 1,492; in 2023, n = 1,684; in early 2024, n = 1,363

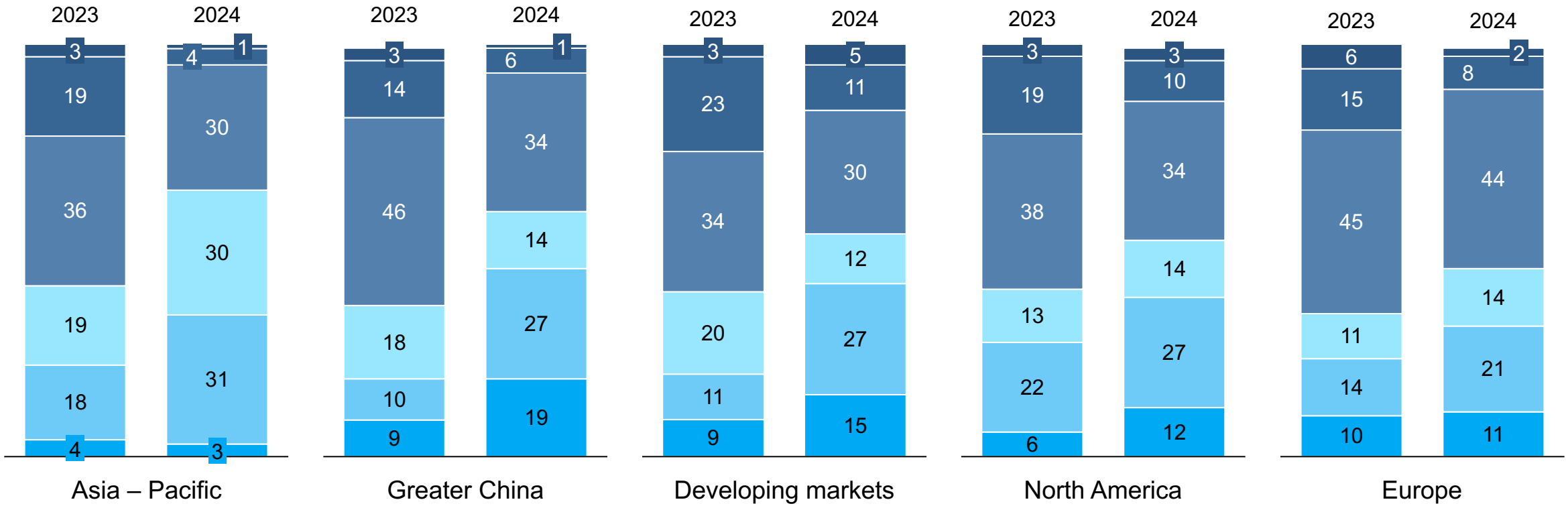
Source: McKinsey Global Survey, *The state of AI in Early 2024: Gen AI adoption spikes and starts to generate value*; 1,363 participants at all levels of the organization, Feb 22–Mar 5, 2024

Respondents are much more likely now than in 2023 to say they are using generative AI.

Total | By job title | By age | By industry | By location

Regularly use for work | Regularly use for work and outside of work | Regularly use outside of work | Have tried at least once | No exposure | Don't know

Reported exposure to generative AI tools, 2023–24, by location,[1] % of respondents



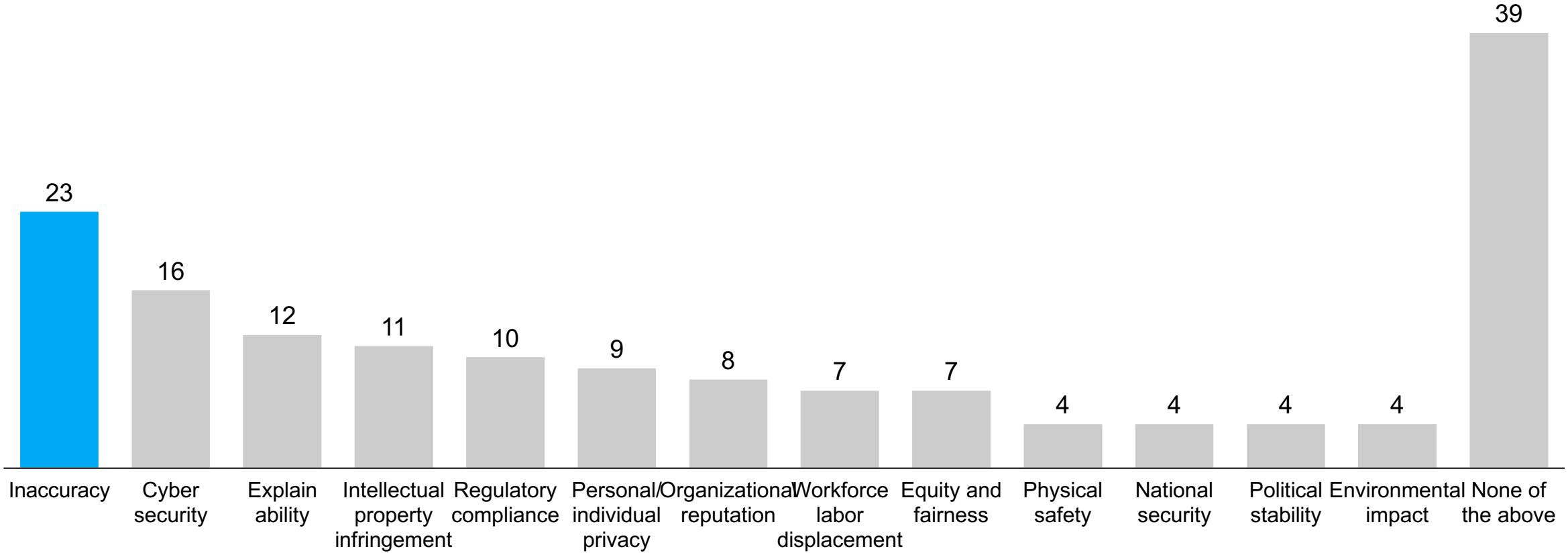
Note: Figures may not sum to 100%, because of rounding.

1. In 2023, Asia–Pacific n = 164; Europe, n = 515; North America, n = 392; Greater China (includes Hong Kong and Taiwan), n = 337; and developing markets (includes India, Latin America, and Middle East and North Africa), n = 276. In 2024, Asia–Pacific, n = 116; Europe, n = 457; North America, n = 401; in Greater China (includes Hong Kong and Taiwan), n = 153; and developing markets (includes India, Latin America, and Middle East and North Africa), n = 234.

Source: McKinsey Global Survey, *The state of AI in Early 2024: Gen AI adoption spikes and starts to generate value*; 1,363 participants at all levels of the organization, Feb 22–Mar 5, 2024

Nearly one-quarter of respondents say their organizations have experienced negative consequences from generative AI's inaccuracy.

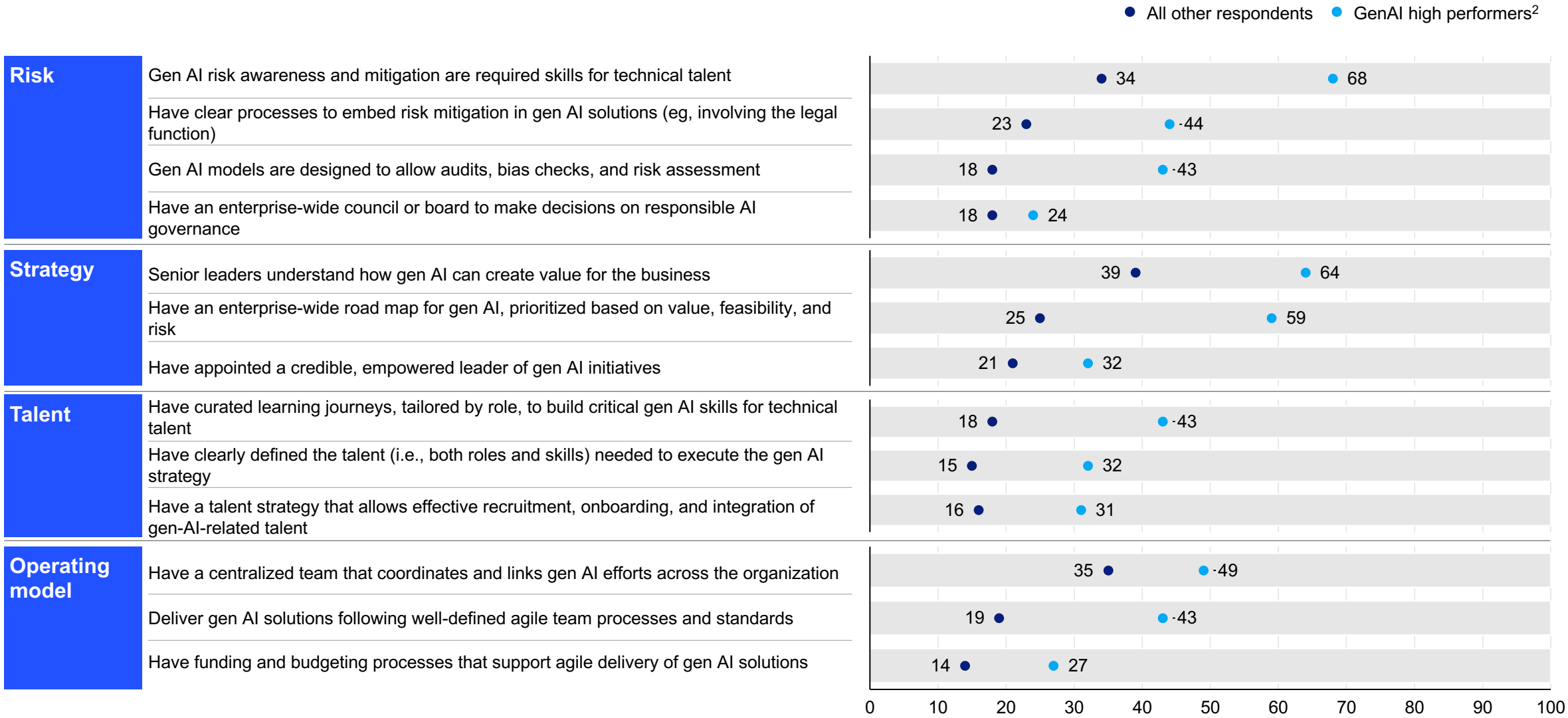
Generative-AI-related risks that caused negative consequences for organizations,[1] % respondents



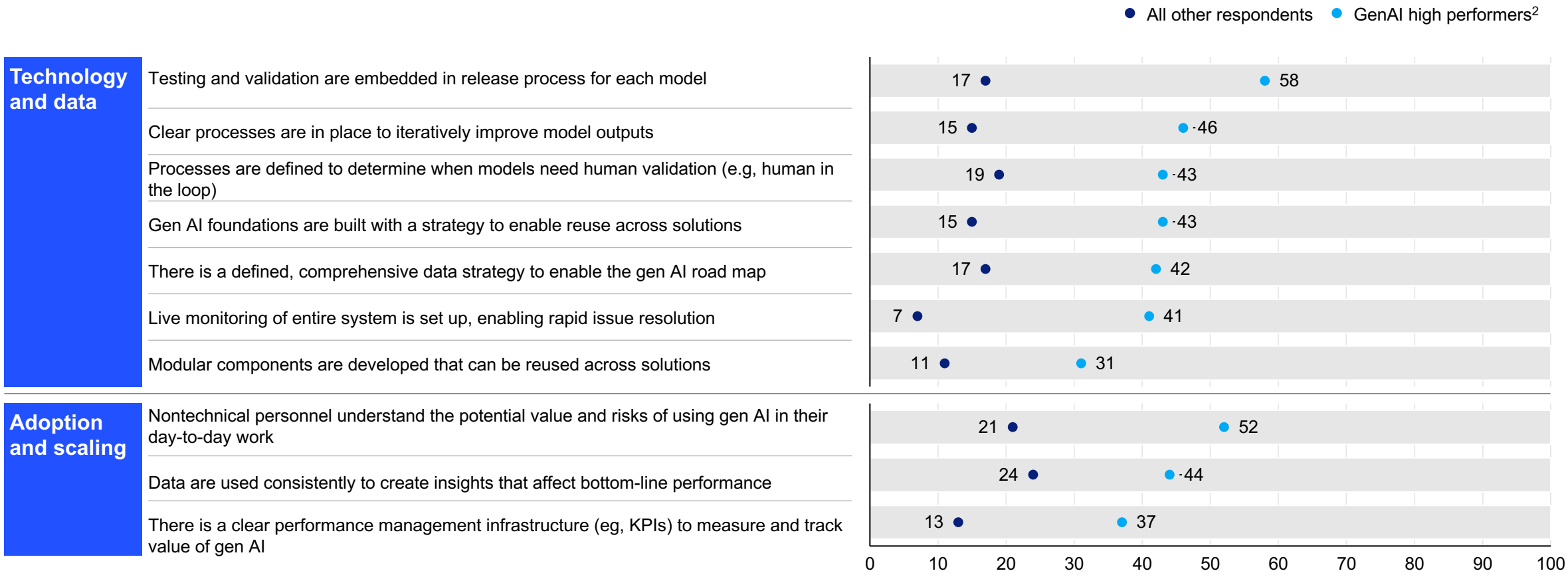
1. Question was asked only of respondents whose organizations have adopted generative AI in at least 1 function, n = 876. The 17 percent of respondents who said "don't know/not applicable" are not shown.

Source: McKinsey Global Survey, *The state of AI in Early 2024: Gen AI adoption spikes and starts to generate value*; 1,363 participants at all levels of the organization, Feb 22–Mar 5, 2024

Organizations seeing the largest returns from generative AI are more likely than others to follow a range of best practices (1/2)

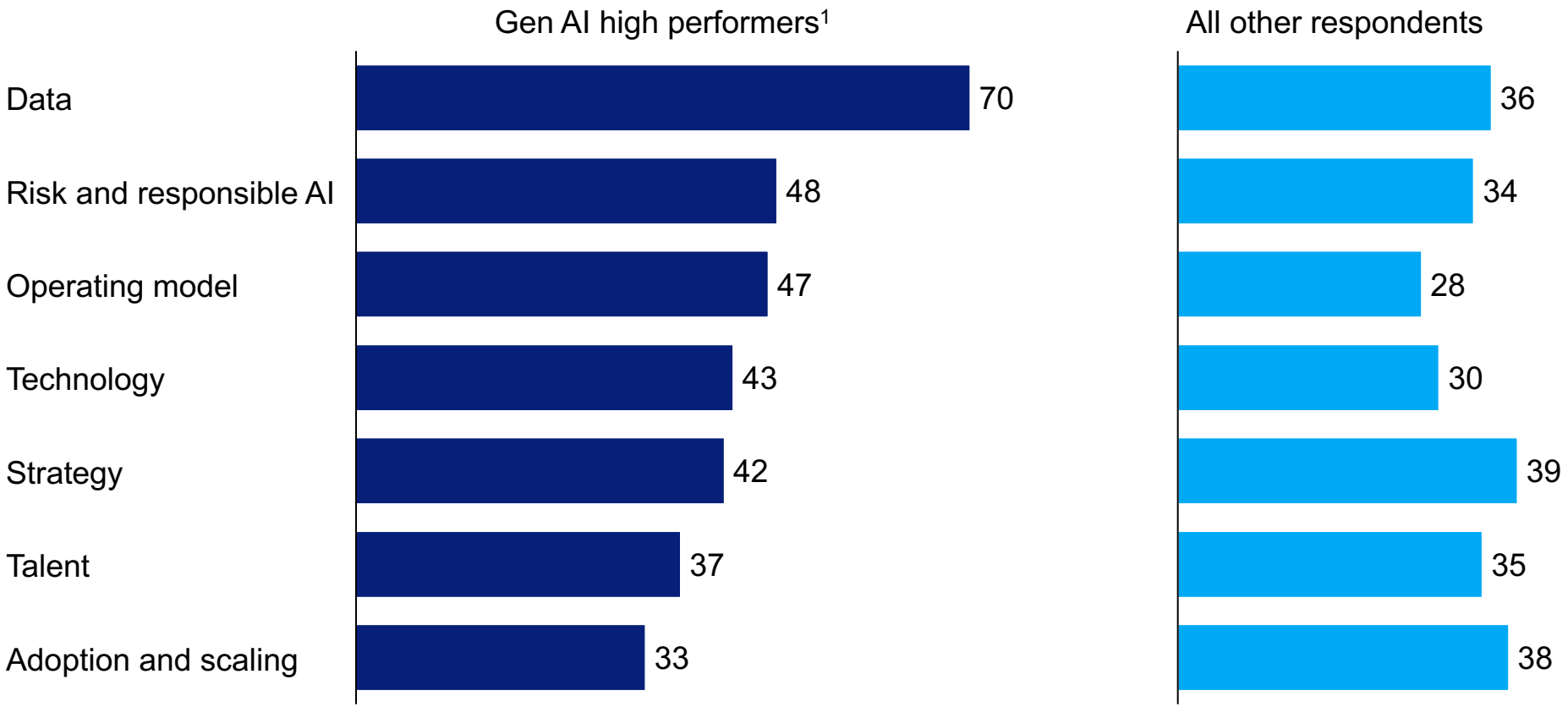


Organizations seeing the largest returns from generative AI are more likely than others to follow a range of best practices (2/2)



Generative AI high performers report experiencing a range of challenges in capturing value from the technology.

Elements that have posed challenges in capturing value from generative AI (gen AI), % of respondents



1. Respondents who said that at least 11% of their organizations' EBIT in 2023 was attributable to their use of generative AI. For respondents at AI high performers, n = 46; for all other respondents, n = 830.

Source: McKinsey Global Survey, *The state of AI in Early 2024: Gen AI adoption spikes and starts to generate value*; 1,363 participants at all levels of the organization, Feb 22–Mar 5, 2024

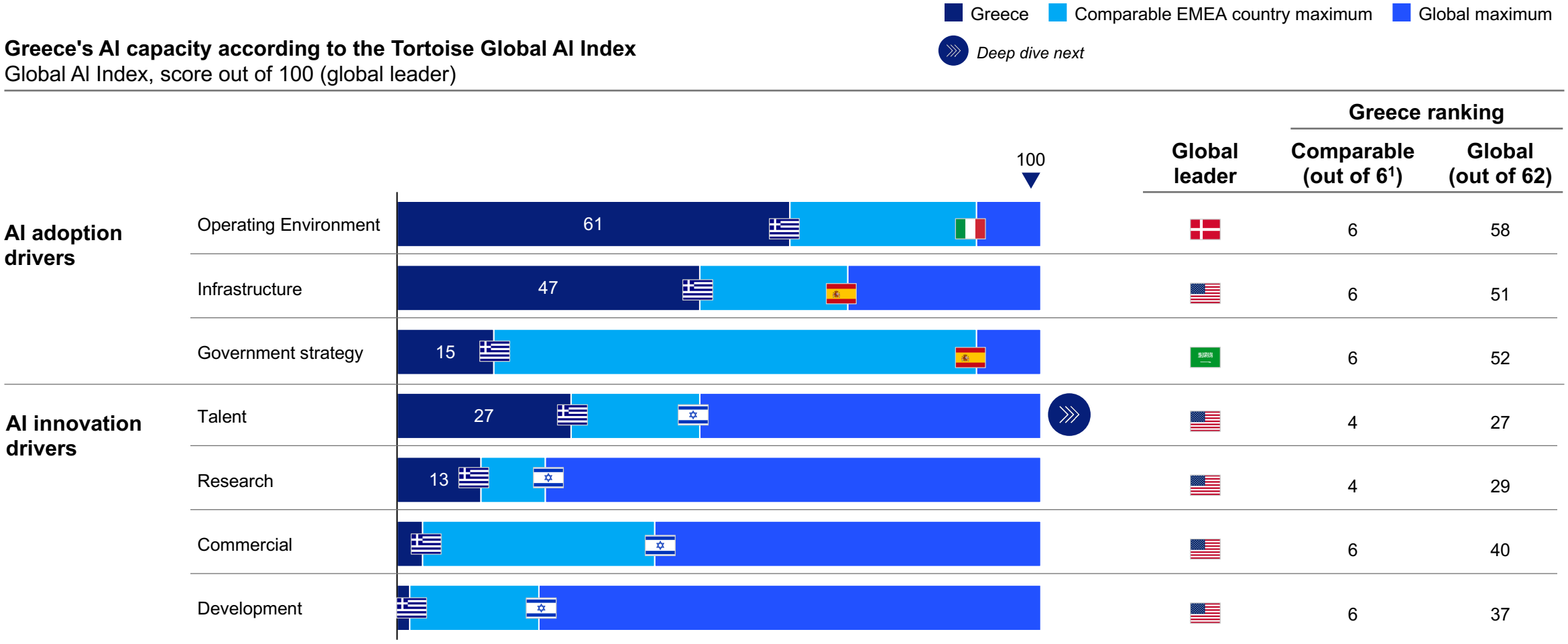
Agenda

Deep dive into the numbers

Implications for Greece

Greece is at a relatively weak starting point and will need to increase its strategic efforts, investing in skills and innovation to capture the economic opportunity of AI

Greece's AI capacity according to the Tortoise Global AI Index
Global AI Index, score out of 100 (global leader)



		Global leader	Greece ranking: Comparable (out of 6[1])	Greece ranking: Global (out of 62)
AI adoption drivers	Operating Environment		6	58
	Infrastructure		6	51
	Government strategy		6	52
AI innovation drivers	Talent		4	27
	Research		4	29
	Commercial		6	40
	Development		6	37

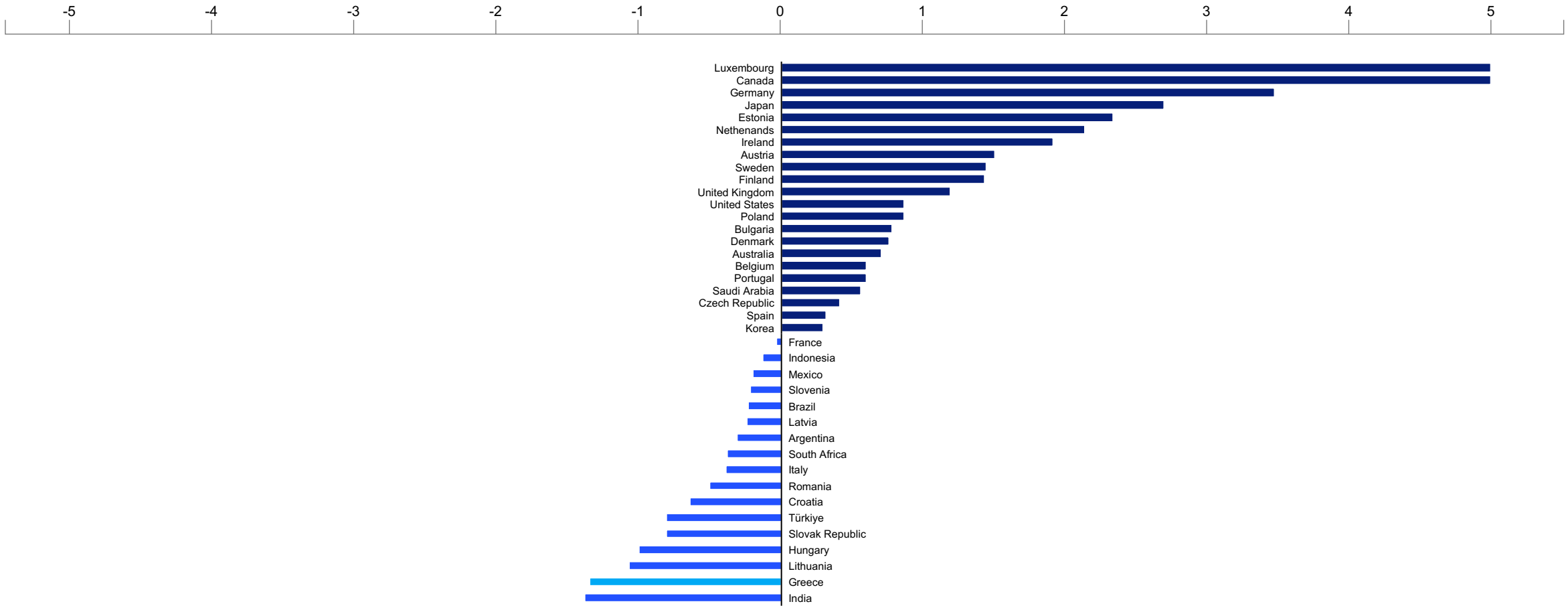
1. Greece, Spain, Italy, Portugal, Malta, Israel

Note: The Global AI Index looka at seven sub-pillars for AI capacity : talent (availablity of skilled practitioners in AI solutions, including IT and STEM graduates, data scientists, AI proffesionals etc.), Infrastructure (download speed, supercomputing capablitites etc.), operating environment (regulation, cybersecurity etc.), research (AI publications and citations etc.), development (fundamental platforms and algorithms etc.), government strategy (national funding commitments to AI etc.), and commercial ventures (AI start-up activity, investments etc.). Only 6 of the 9 comparable countriea are represented in the index.

Source: Tortoise Media Global AI index

Yet there is significant leakage of talent abroad limiting the country's ability to capture the AI opportunity

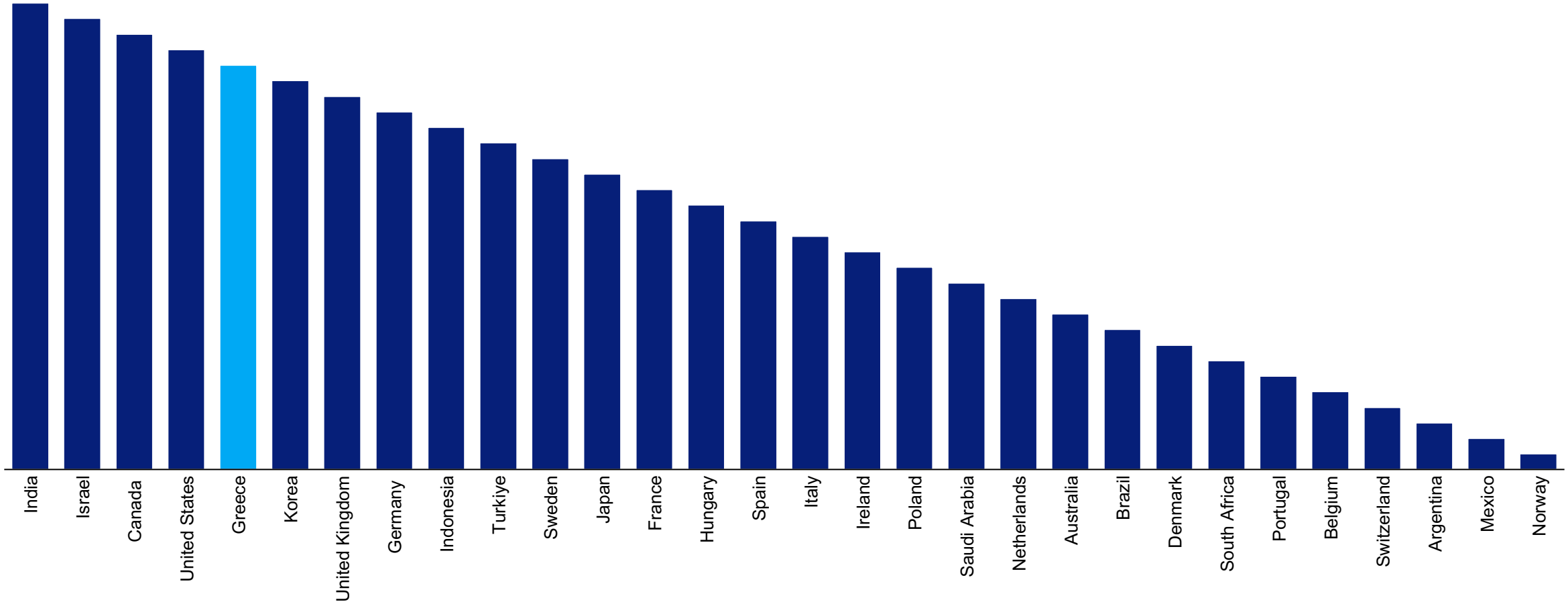
Net migration flows of LinkedIn members with AI skills, # per 10,000 linkedin members 2022



Note: Average from 2019 to 2022 for a selection of countries with 100 000 LinkedIn members or more. Migration flows are normalized according to LinkedIn membership in the country of interest. Data downloads provide a snapshot in time. Caution is advised when comparing different versions of the data, as the AI-related concepts identified by the machine learning algorithm may evolve in time. Please see methodological note for more information.

Available Greek talent appears well equipped for the AI race

AI skills penetration: Country ranking 2022

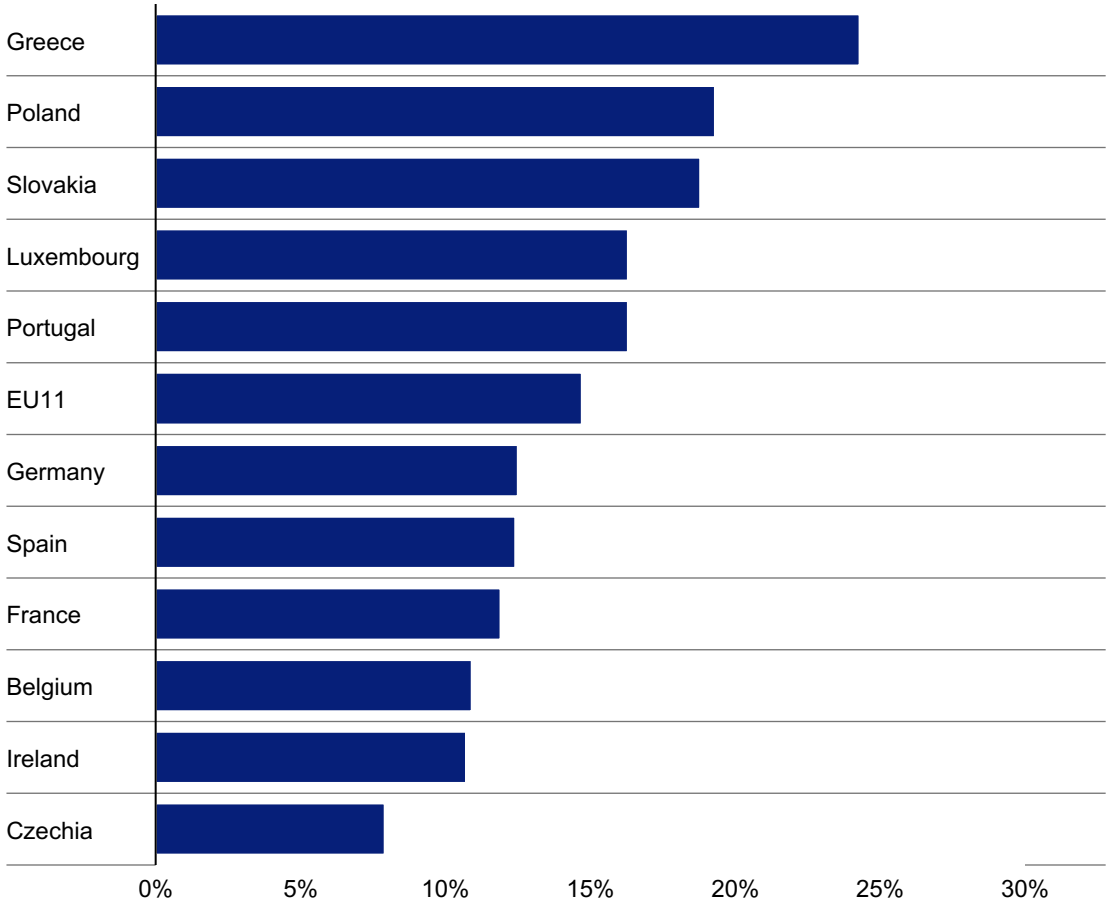


Note: Ranking of AI skills penetration for a selection of countries with 100 000 LinkedIn members or more. The ranking is calculated by estimating the ratio between a country's AI skills penetration and the average AI skills penetration of all countries in the sample, controlling for occupations. Data downloads provide a snapshot in time. Caution is advised when comparing different versions of the data, as the AI-related concepts identified by the machine learning algorithm may evolve in time. Please see methodological note for more information.

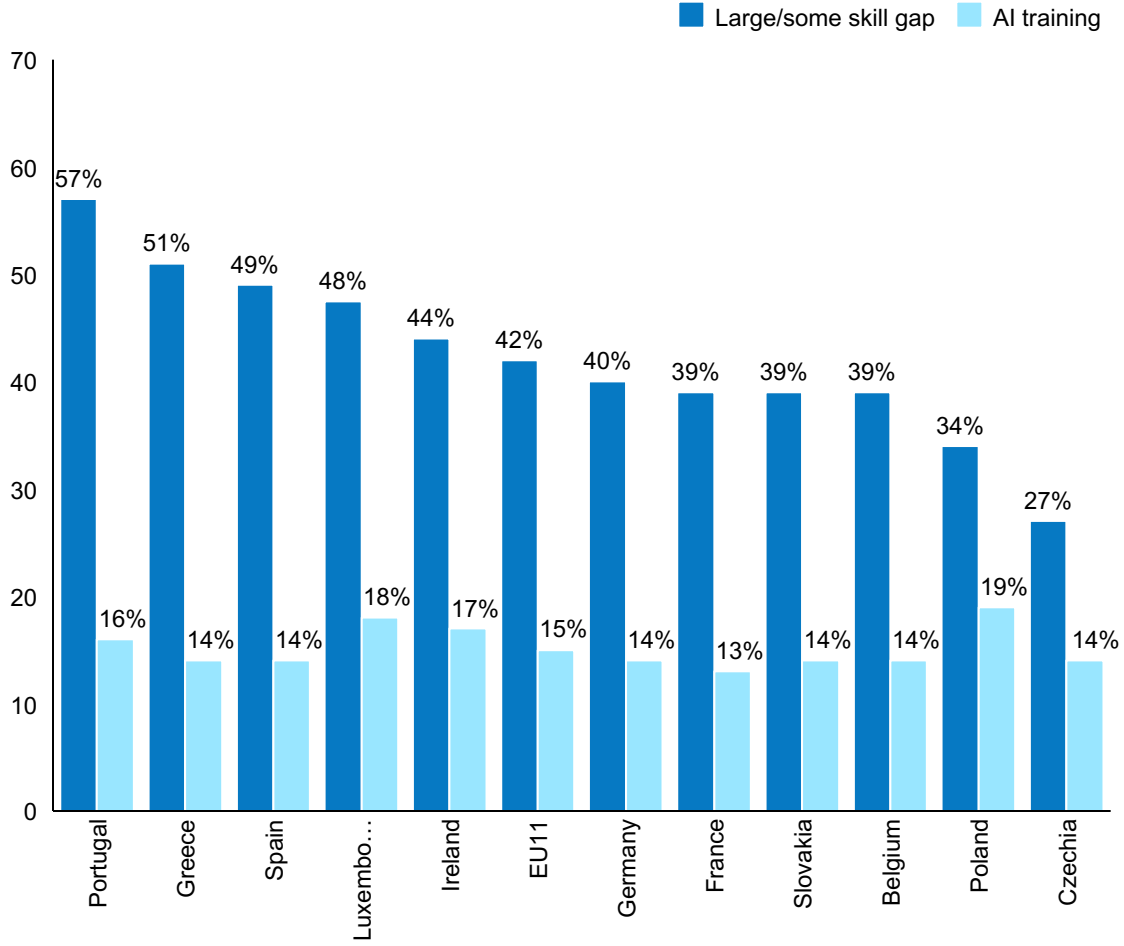
Source: LinkedIn Economic Graph.

Talent paradox: Looking at the broad talent pool, despite higher-than-average fear and need for AI upskilling, still below average is provided

Fear of job loss due to AI (%all)



AI upskilling needs and training

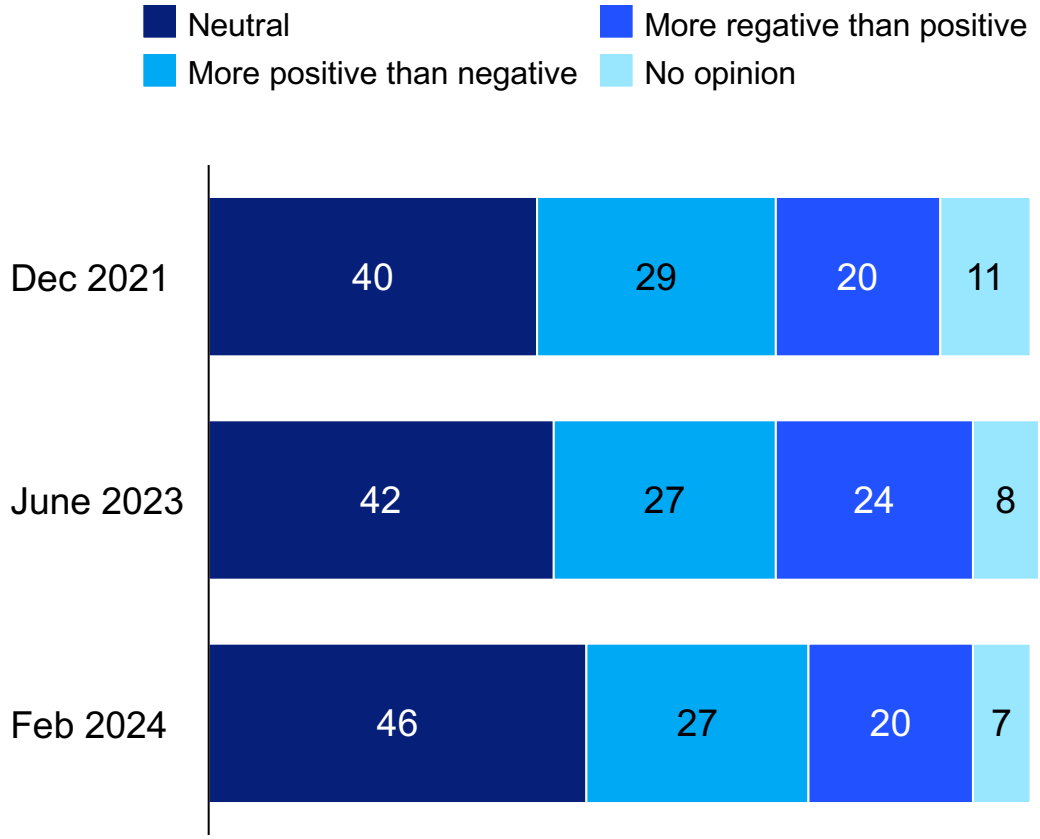


Source: Cedefop AI skills survey (2024); survey of random samples of (~500)adult workers in each of 11 EU countries (Feb -May 2024; n = 5342)

Less than a 1/3 of Greek population has a positive view of AI

View of expected impact of AI in society

% of respondents

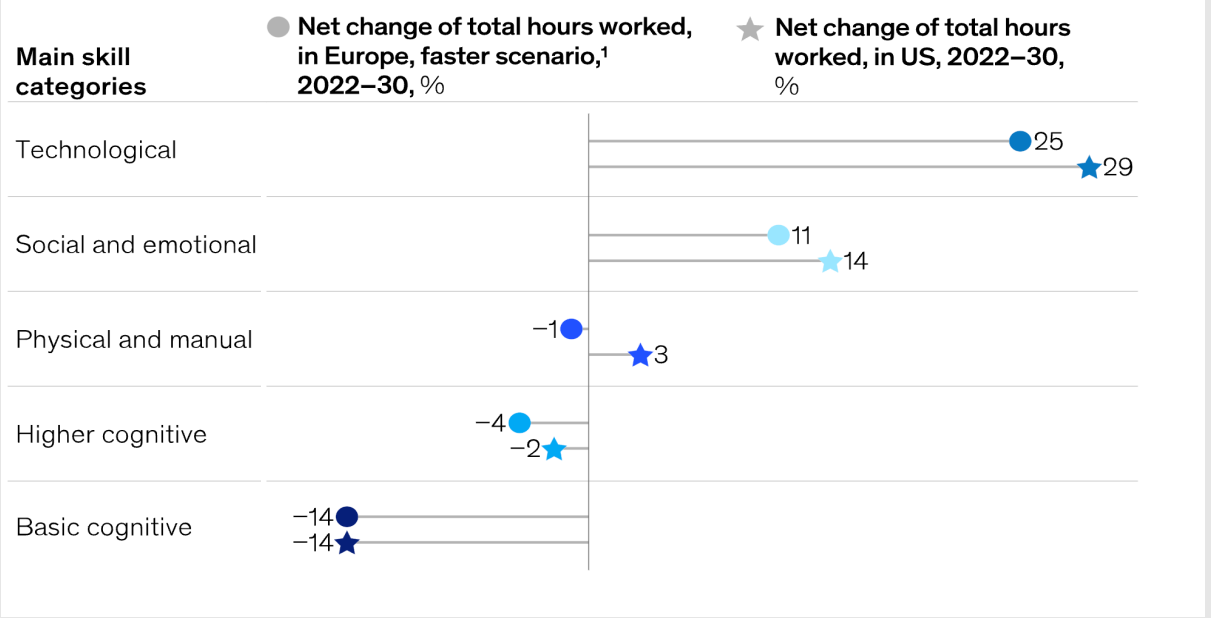


Note: Based on survey conducted in Feb 2024 with n=1,001 in Greece

Source: Focus Bari survey "Οι Ελληνες, η AI & το ChatGPT" February 2024

Global estimate of impact of AI automation by skillset

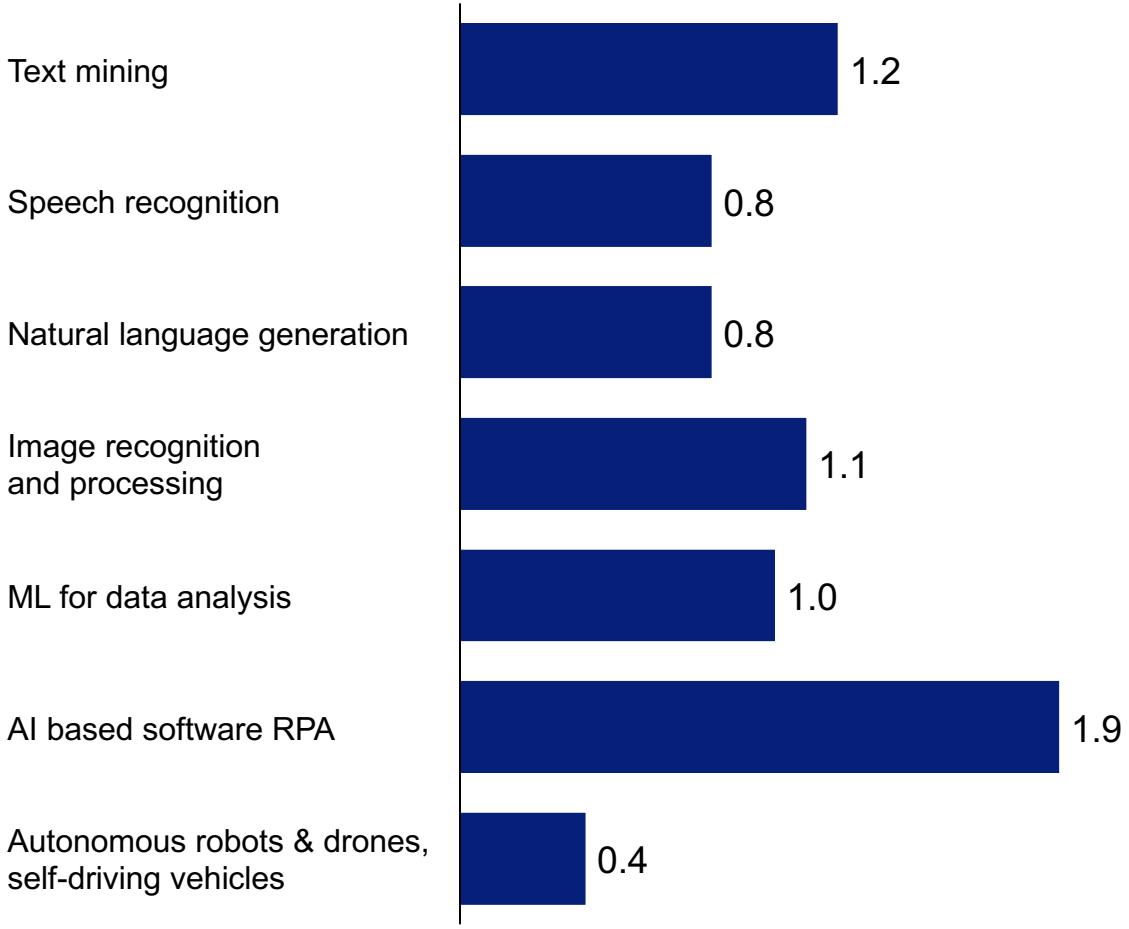
Technological, social and emotional skills will be on higher demand, while cognitive skills will be hit the h



AI adoption in Greece

Enterprises that have used AI technologies for

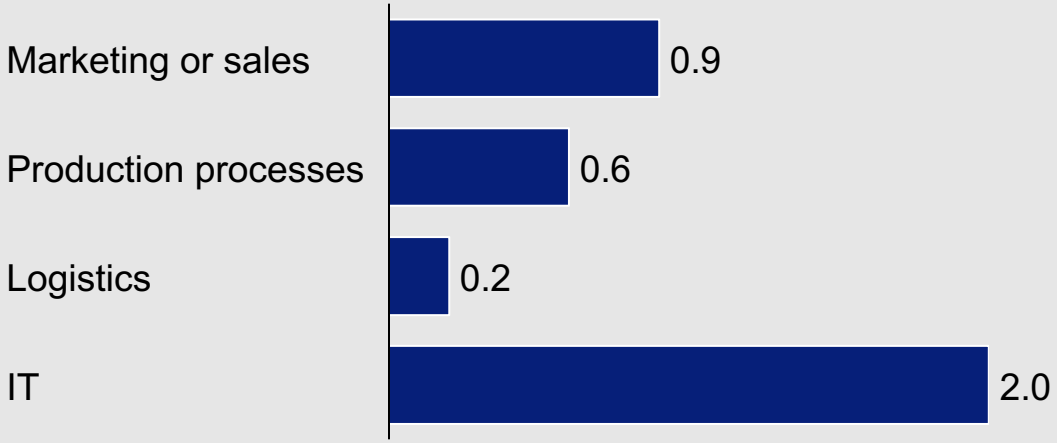
% of Greek companies with 10+ employees



Source: Eurostat

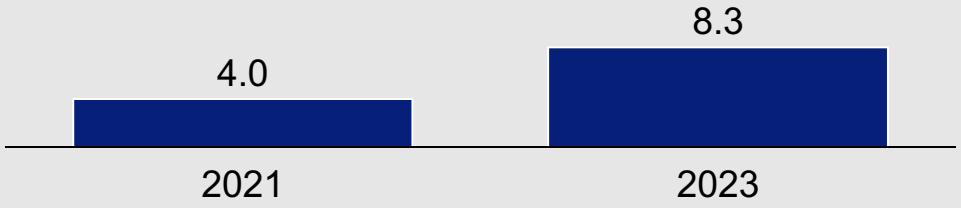
Enterprises that have used AI technologies for

% of Greek companies with 10+ employees



Enterprises that have considered using AI technologies

% of companies with 10+ employees



Questions and themes to discuss further

Q&A