



AI and the EU skilling challenge

First insights from Cedefop's AI skills survey & foresight study

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Expert

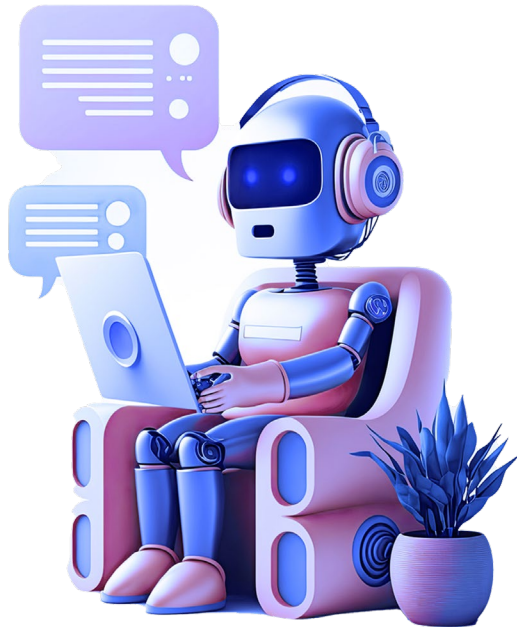
EARLALL, Advanced Manufacturing Sector Skills Analysis
19 March 2025



Cedefop focus: Artificial Intelligence

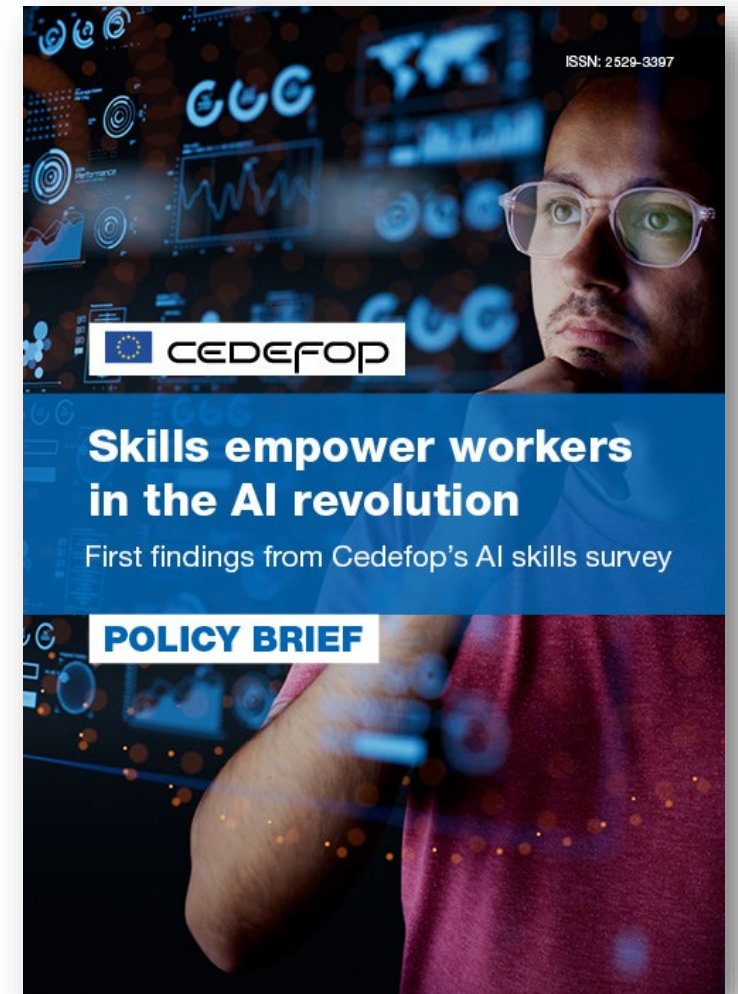
Cedefop AI skills survey

Representative survey of 5342
adult workers in 11 EU countries in 2024



Measurement of

- AI use at work
- AI competency/skill gaps
- Automatability of jobs
- Organisational support
- AI outcomes



<https://www.cedefop.europa.eu/et/publications/9201>

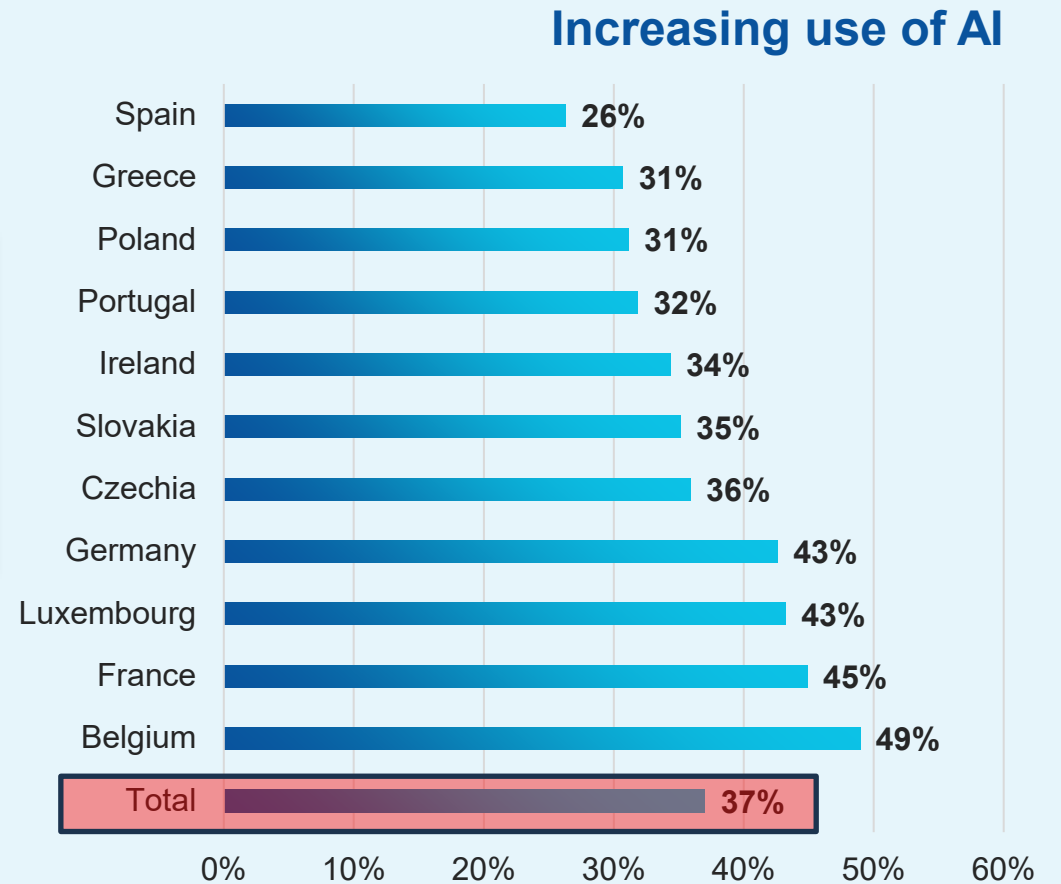
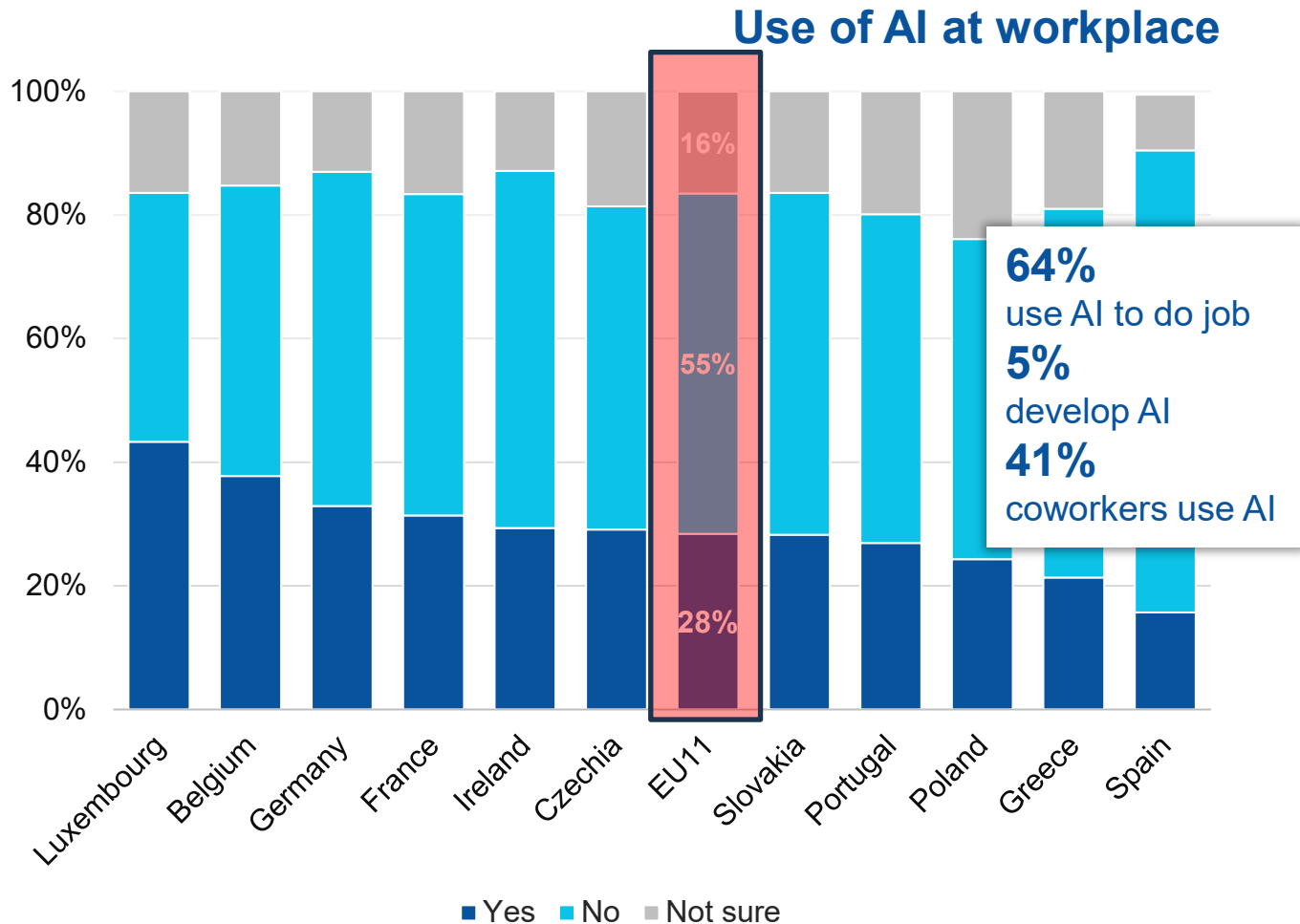
Algorithmic work powered by AI

About one in seven adult workers usually work with digital tools or apps that can automatically do some tasks, using algorithms.

Source: Cedefop AI skills survey (2024)

AI in EU workplaces

Another great divergence?



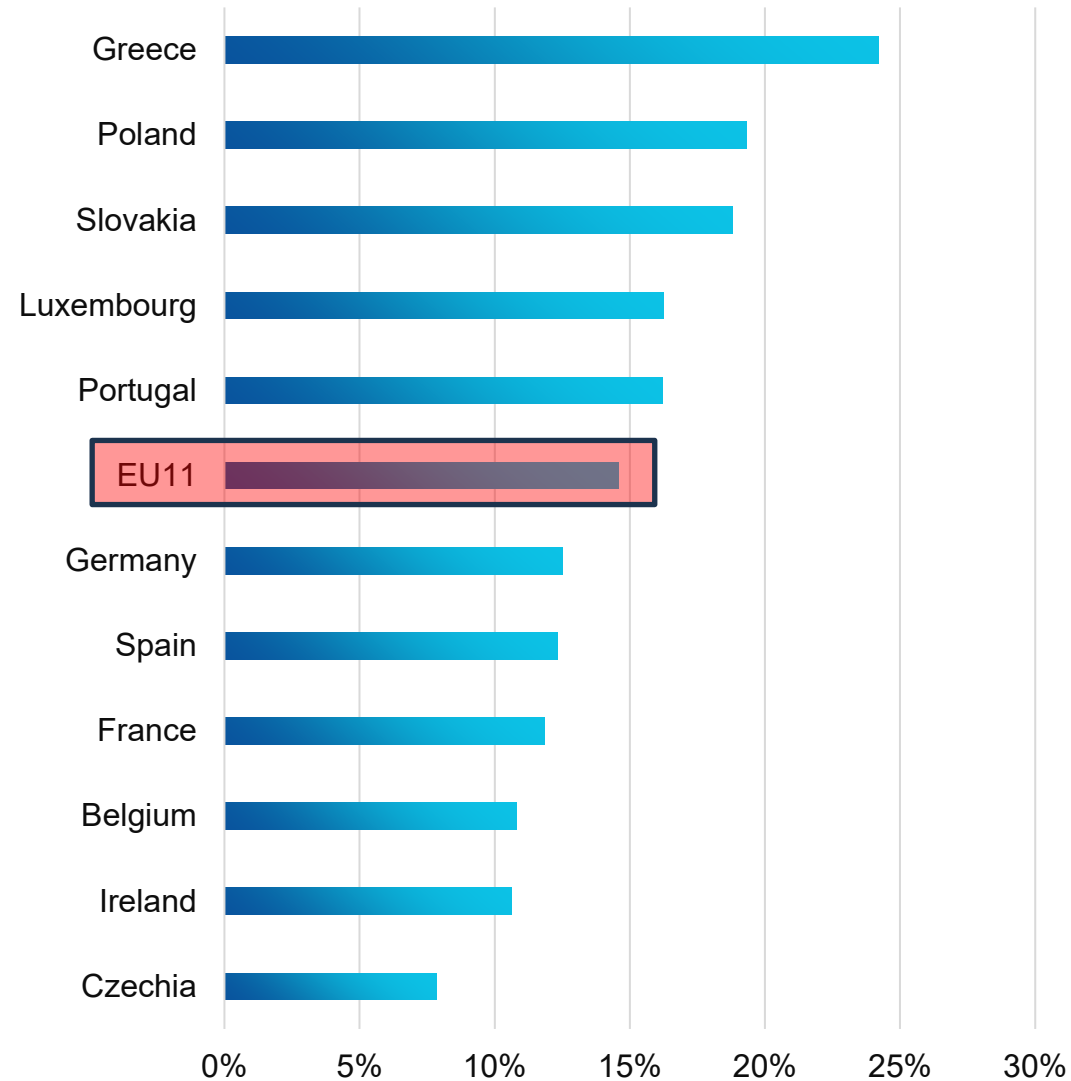
Automation or job redesign?

Job automation

highest in routine,
precarious,
middle-skilled jobs
using machines



Fear of job loss due to AI (% all)



Source: Cedefop AI skills survey (2024)

Automation or job redesign?

AI and task automation

30%

do not do some
tasks any more

41%

now do some new
or different tasks

67%

do some tasks
faster than before

17%

have less control
over job tasks



AI upskilling

Bridging the AI skill gap



61%

will need new knowledge and skills to deal with AI impact on their work



44%

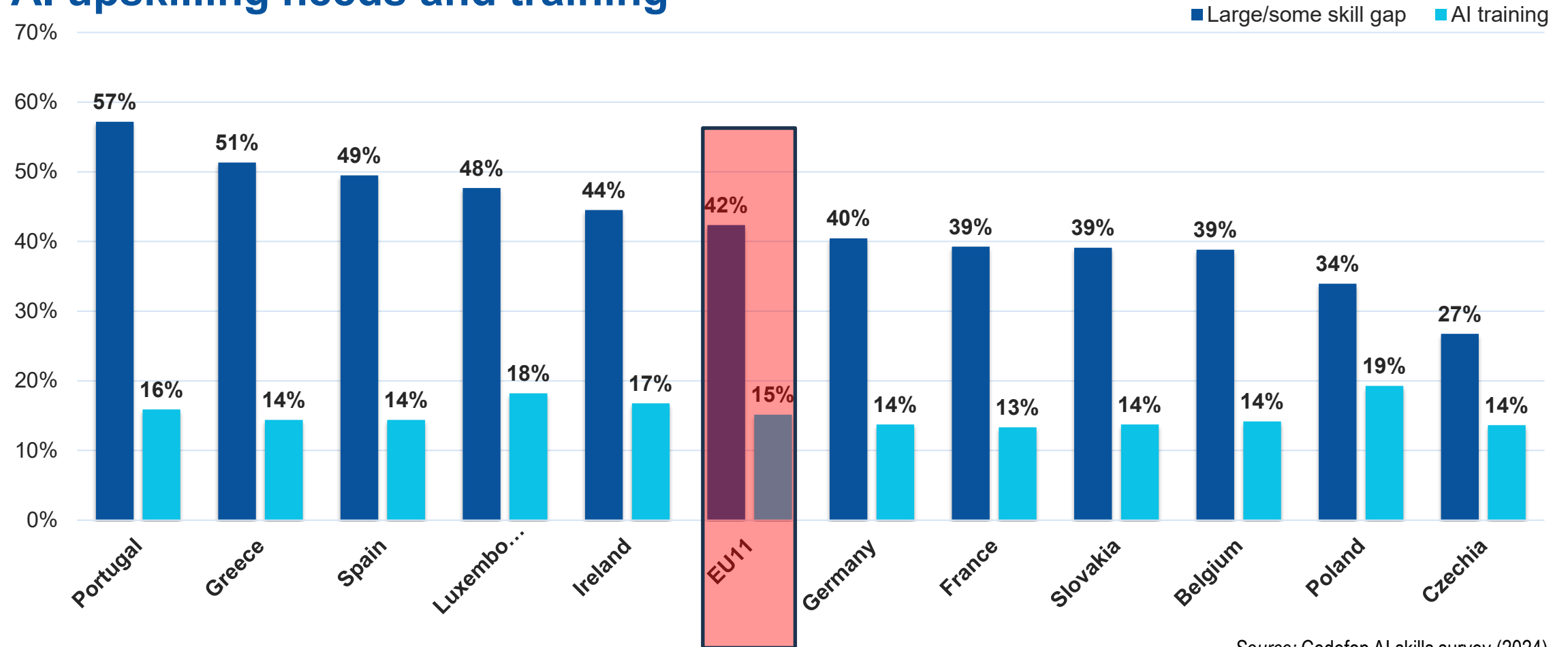
unlikely their company or organisation will provide training to workers to deal with AI



AI upskilling

Bridging the AI skill gap

AI upskilling needs and training

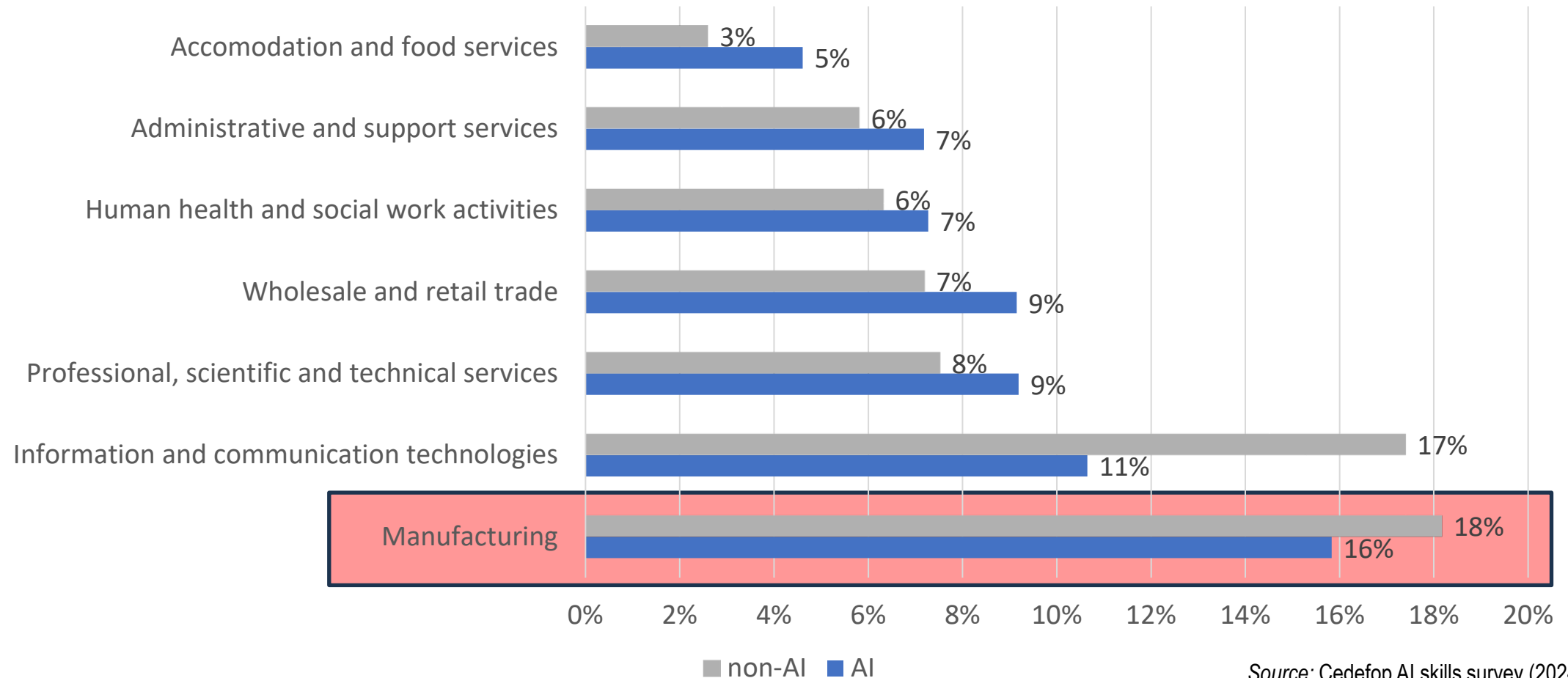


Source: Cedefop AI skills survey (2024)

AI upskilling

Bridging the AI skill gap

AI and non-AI programmer workforce by sector (% of workforce)



Powering the AI transition

Informing VET policies

AI transition = skills transition

Target AI use and upskilling
to older, female workers in
SMEs

Improving AI competencies

- Major driver of AI take-up/training
- AI use is skills-based



Next steps: AI in EU Workplaces

Purpose of the study

- Conduct three medium-term foresight exercises
- Collect relevant qualitative data

Main aims

- Explore factors affecting AI adoption & diffusion
- Identify effect for future skill gaps & workers' needs

Time frame

- 2024-2026



Sectors of the foresight study

Automotive

- AI in autonomous driving & production optimisation
- Challenges: global competition & supply chains



Geriatric nursing

- Aging population & labor shortages; human contact
- Potential of advanced humanoid robots



Creative industries

- Leveraging AI to enhance creative processes
- Balancing AI innovation with traditional expertise



First results for the automotive sector

AI adoption and regulation

- AI complements human labour, needing human oversight
- Slow AI adoption hinders innovation compared to the USA / China
- Balance between regulation and innovation

Education and Industry Challenges

- Education systems fall short for skilled workers; public-private approach needed
- Cost factors and geopolitical shifts impact industry more than AI adoption



Thank you

For more information

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