

### Al and the EU skilling challenge First insights from Cedefop's Al skills survey

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## **Cedefop focus Artificial Intelligence**

Survey of **random** samples of ( $\sim$ 500) adult workers in 11 EU countries (Feb-May 2024; n = 5342)

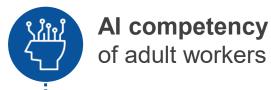
#### Better measurement of

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



## **Cedefop focus Artificial Intelligence**

### Cedefop Al skills survey





Job **skill needs** 



Al tools and systems at work



Al skill gaps & training



Job routinisation
Organisational support
Worker representation

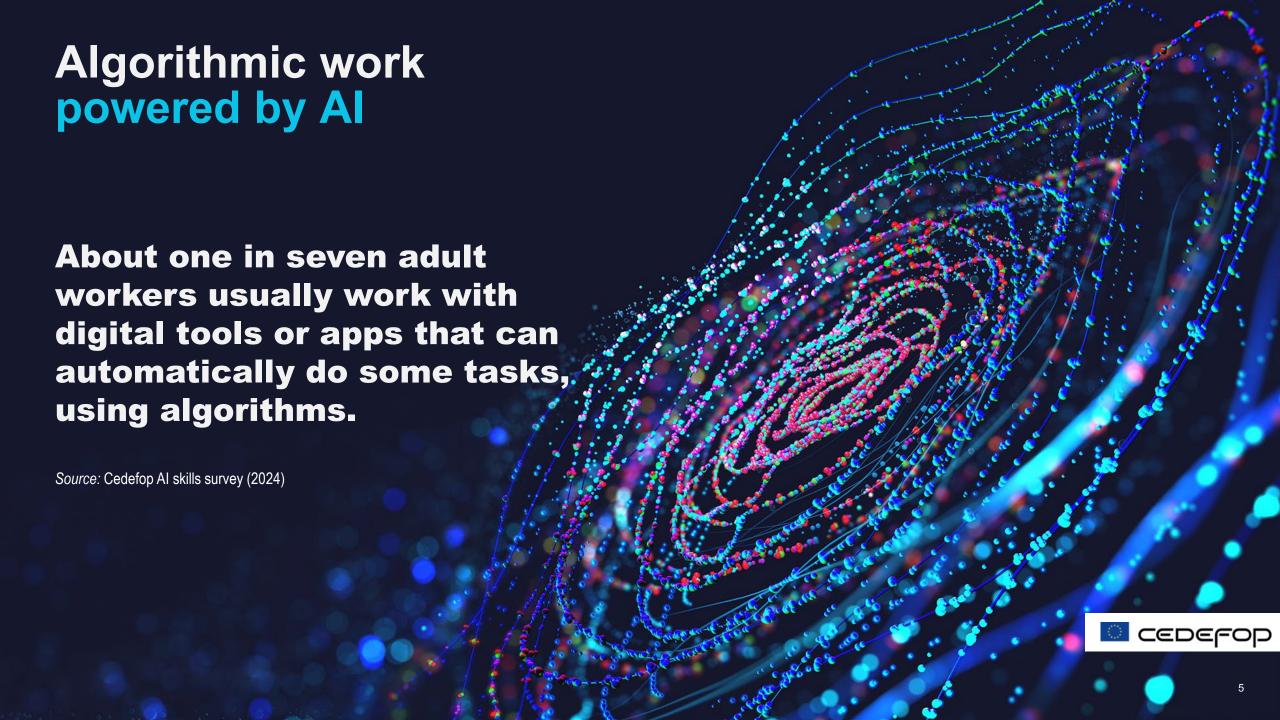


**Automation**Upskilling/reskilling
Wages







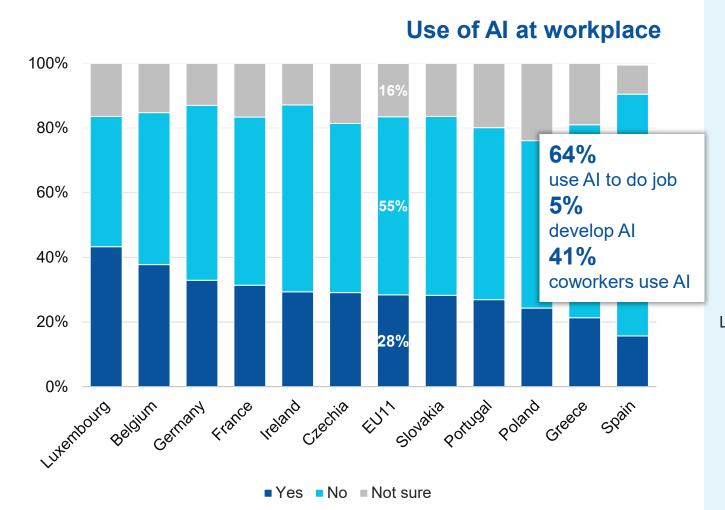


## Algorithmic work powered by Al

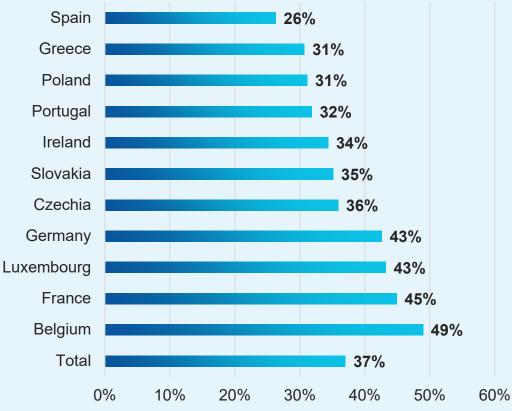
Provide directions or instructions on what tasks I should do, or how to do 17% 27% them, using algorithms 16% Monitor or evaluate my job performance using algorithms 27% Recognise patterns in data using algorithms and make predictions to help my 15% 28% work decisions 14% Detect faulty products or machines or predict their repairing needs 25% 20% Provide recommendations requiring specialised knowledge about my job 36% Provide recommendations to clients or customers about my company's 13% 22% products or services (e.g. chatbots, robo-advisors) 22% Recognise, translate, transcribe or generate text 15% Recognise, process or generate images, photos or videos 30% Recognise, process and answer questions typed online or as spoken 15% 28% commands 0% 10% 20% 30% 40% 50% ■EU11 (+sometimes) ■ EU11 (always/often)



## Al in EU workplaces Another great divergence?



#### Increasing use of Al



Source: Cedefop AI skills survey (2024)



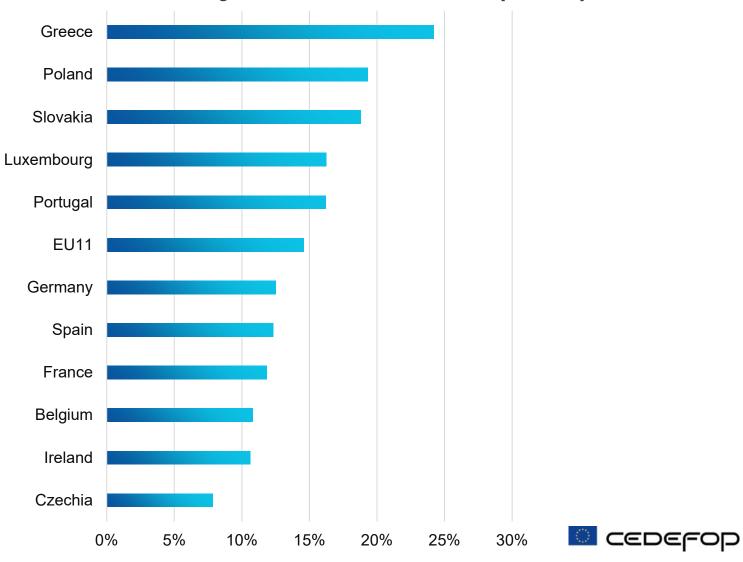
## Automation or job redesign?

#### **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?

20%
of the adult
workforce believe that
Al can do more than
a half of their job tasks

about 23% of job tasks can be automated by Al CEDEFOD

# **Automation** or job redesign?

#### Al and task automation

30%

do not do some tasks any more

67%

do some tasks faster than before

41%

now do some new or different tasks

17%

have less control over job tasks



### Al upskilling Bridging the Al skill gap



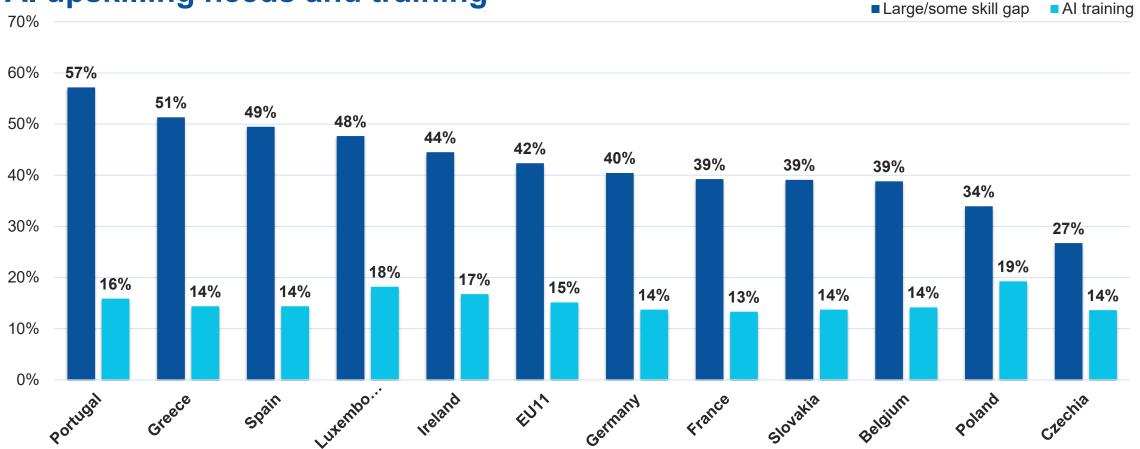
61%

will need new knowledge and skills to deal with Al impact on their work 44%
unlikely their company or organisation will provide training to workers to deal with Al



### Al upskilling Bridging the Al skill gap

### Al upskilling needs and training





Source: Cedefop AI skills survey (2024)

### **Prepared for the Al era?**

### **Pillars of AI competency**

The ethical issues raised by AI (e.g. privacy, bias, discrimination, misinformation, accountability, singularity)

The potential applications of AI and its impact on the world

The role that humans play in developing Al tools or systems

How a computer or machine learns from data using algorithms

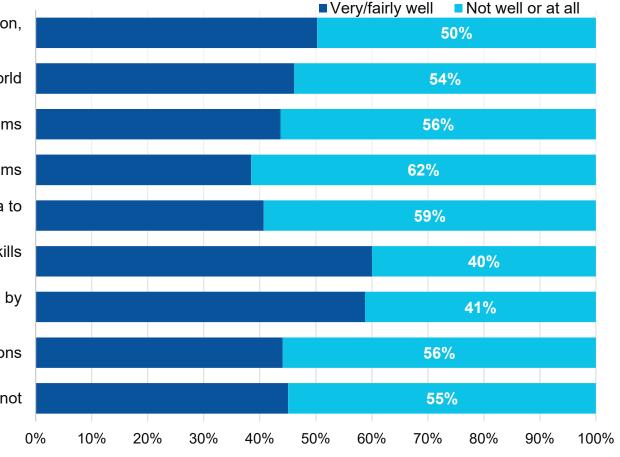
How a computer or machine recognises images, text or other input data to develop AI tools or systems

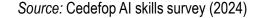
When it may be appropriate to use a computer or machine over human skills to carry out a task

Analyse data collected in a spreadsheet or database, for instance by identifying patterns, trends or correlations among variables

Interpret the results of AI applications and understand their limitations

Distinguish technologies that use AI from those that do not







## Powering the Al transition Informing VET policies

### **Al** transition = skills transition

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

### Improving AI competencies

- Major driver of AI take-up/training
- Al use is skills-based
- Al use less in unexpected work situations/ more in non-procedural jobs



## Powering the Al transition Informing VET policies

### **Empowering workers**

- Organisational support that empowers and not only paralyses with automation fear
- Higher AI training in organisations with staff representation

### Tackling the productivity paradox

- Al use associated with higher pay
- For 55% of workers, Al did not improve how to do their job
- Gender segregation (low female use)
- Low Al use/training in lower-skilled jobs



## Thank you

For more information

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