



# Digital transitions, job quality and skill mismatch

New evidence from Cedefop's ESJS2

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Powering the European digital transition  
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# Cedefop surveys make it possible to analyse jobs and skills mismatch from various angles



# 2nd European skills and jobs survey

## Digitalisation and skill mismatch

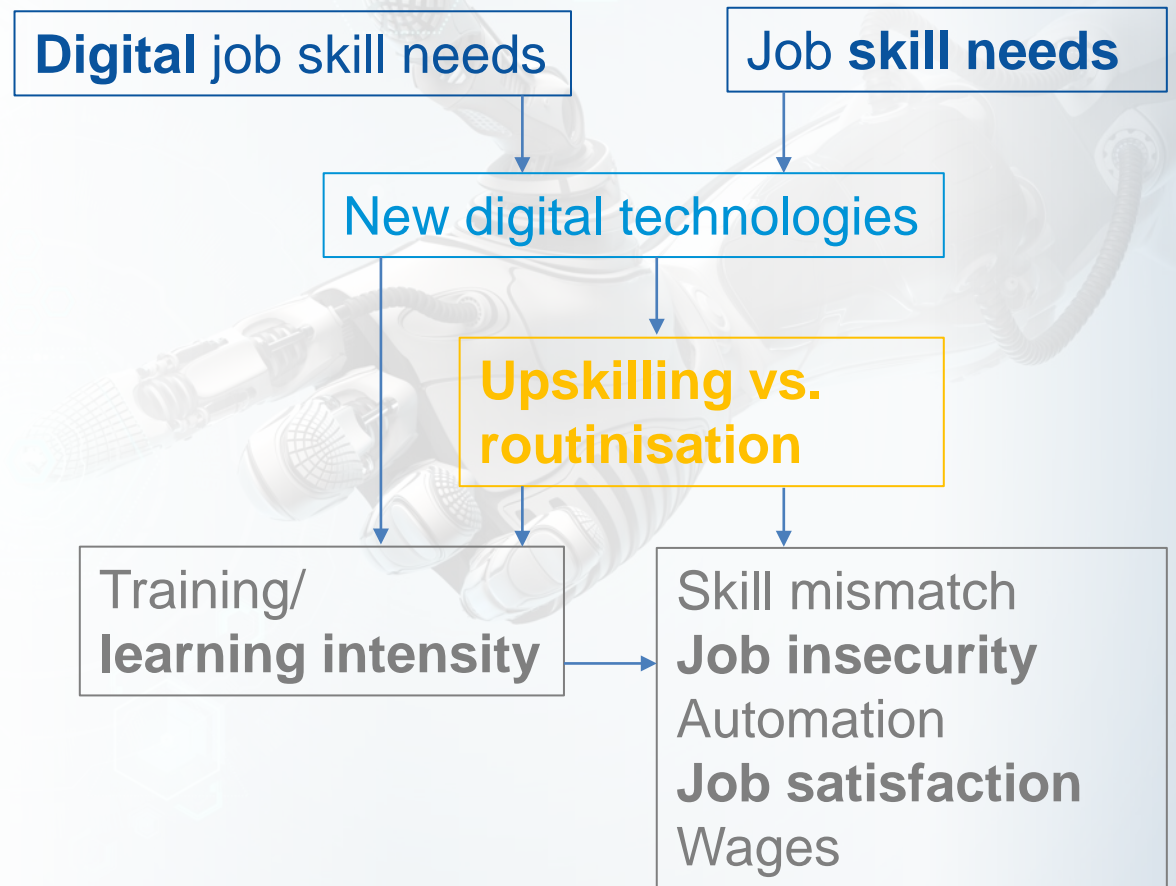
### Main research questions:

- What do EU workers do at work?
- Basic or complex(digital) skills use?
- New digital technologies?
- Skill gaps and remedial learning?

### Better measurement of:

- Job-skill requirements
- Digitalisation/digital work
- (Digital) skills complexity
- Work routinization
- Skill mismatches

### Pillars and conceptual design



# Digital transition **key ESJS2 findings**

#ESJS2



## Covid 19

pandemic and the digital transformation

*Compared to pre-pandemic, more use of...*

**46%**  
Digital communication

**39%**  
Digital technologies for some work tasks

**29%**  
Worked more away from employer's premises

**36%**  
Online job-related learning



## Digitalisation

Technological change in EU+ job markets

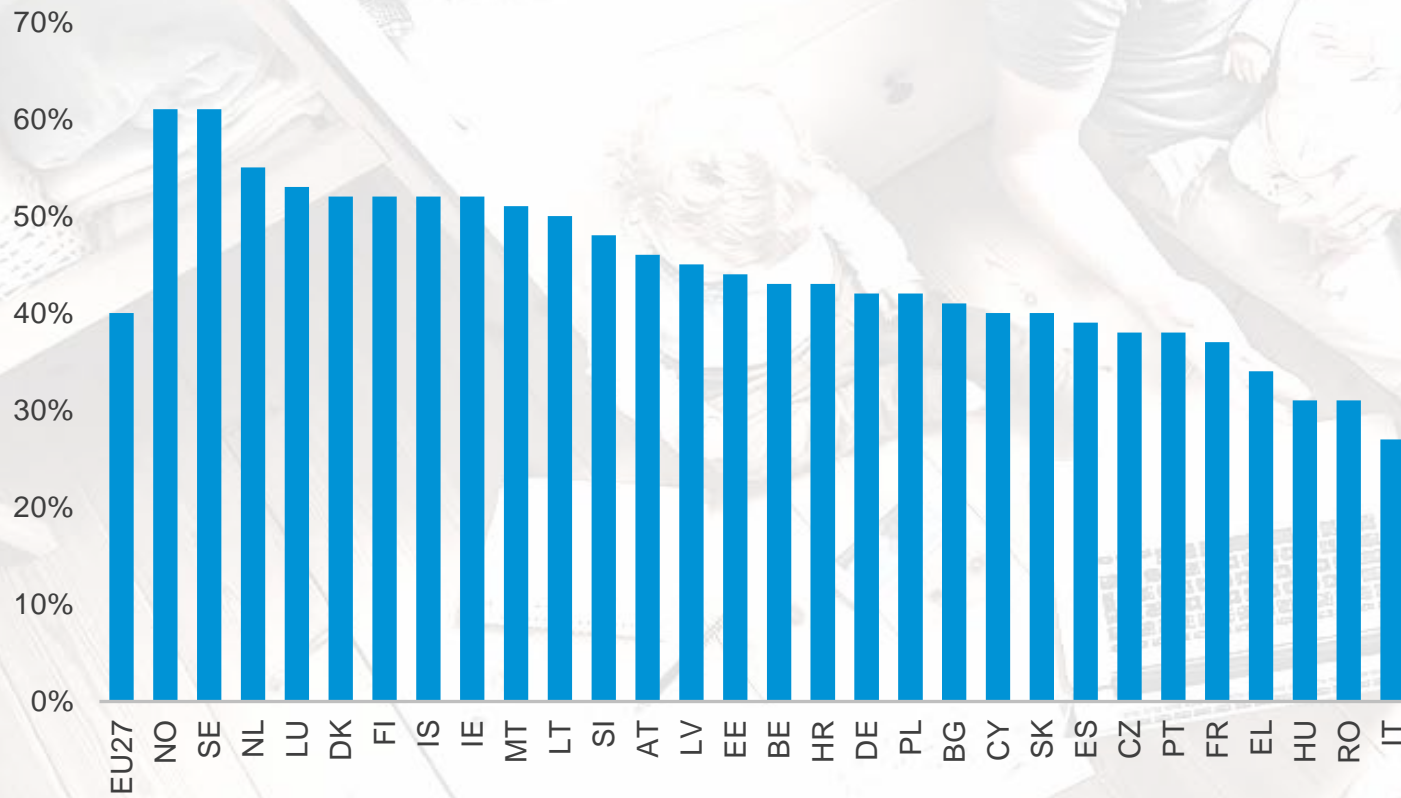
**87%**  
Adult EU+ workers **using digital devices** at work

**44%**  
New digital technology introduced in workplace

**35%**  
Digital upskilling to sustain job performance

# Remote work: the new digital divide

39% of EU+ adult employees worked away from their employer's premises in 2020-21



WFH heightened labour market inequalities

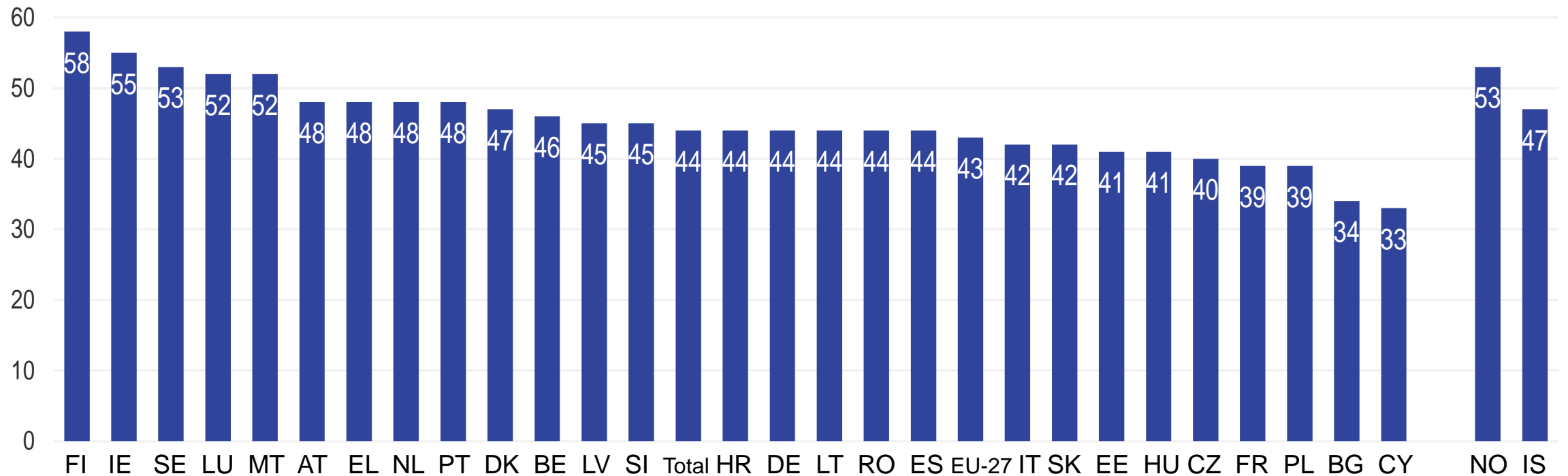
- Low- (18%) vs. high educated (41%)
- High WFH:
  - ICT (63%),
  - financial (54%),
  - professional services (46%)
- Low WFH:
  - accommodation & food services (12%),
  - utilities (19%),
  - health and social work (17%)
- Pre-COVID19 laggards smallest WFH rise

# Digital upskilling of EU workforce

35% of EU+ adult employees had to learn to use new digital technologies to do their main job in 2020-21

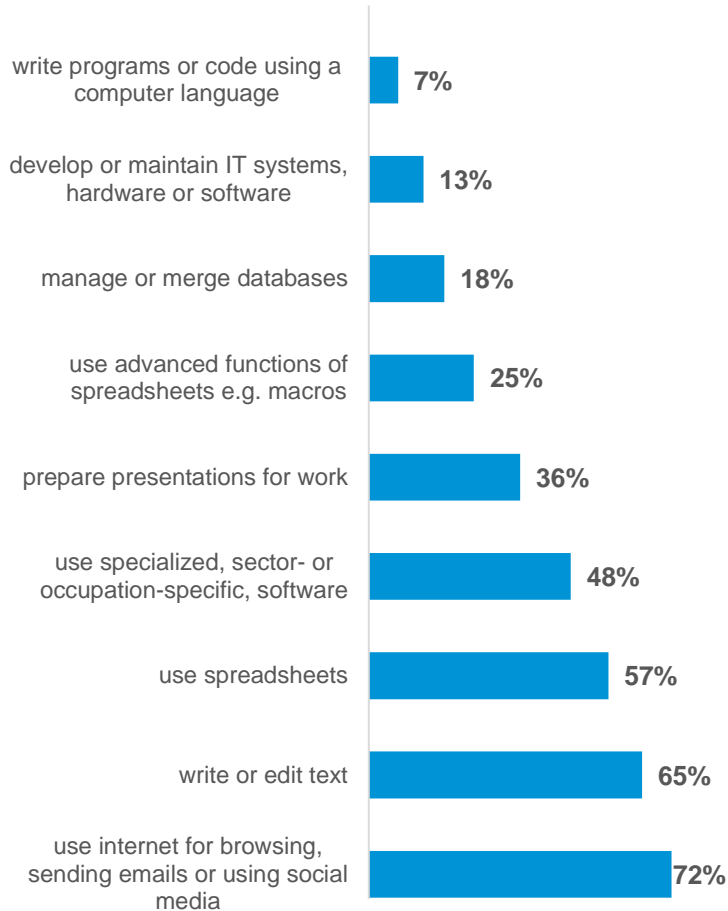
**ESJS2:** In the last 12 months, did any of the following changes take place in your workplace?

New digital technologies i.e. new computer systems/computer devices/computer programmes (Total, %)

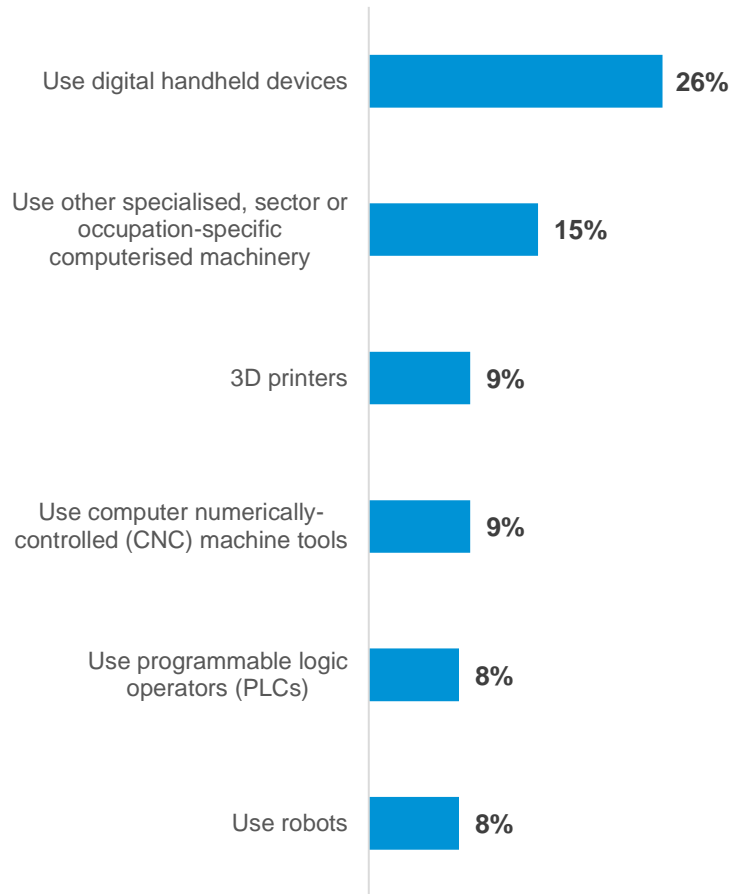


# Digitalisation in EU jobs

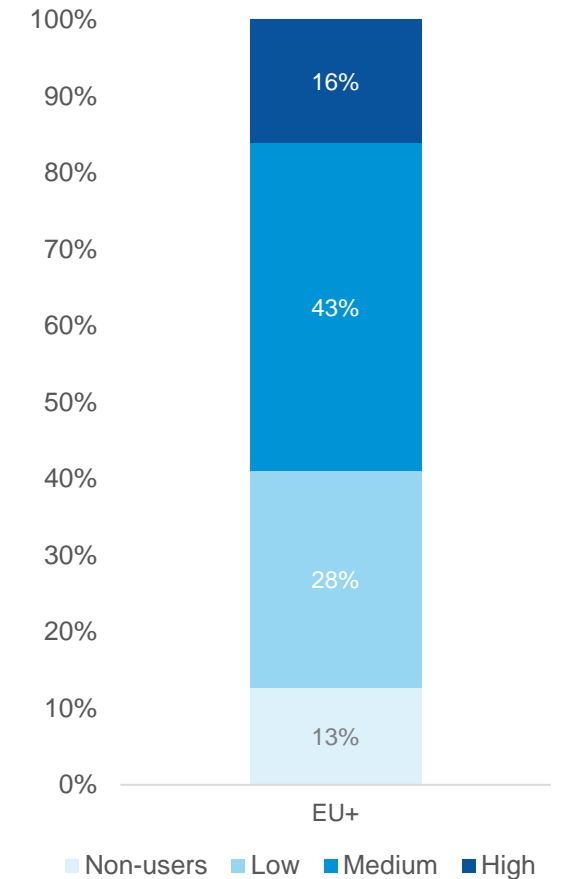
Did you use any of the computing devices mentioned earlier to do the following activity as part of your main job in the last month?



As part of your main job, did you work with or operate any of the following computerised machinery in the last month?



Cedefop Digital Skills Intensity (DTI) index, EU+ countries



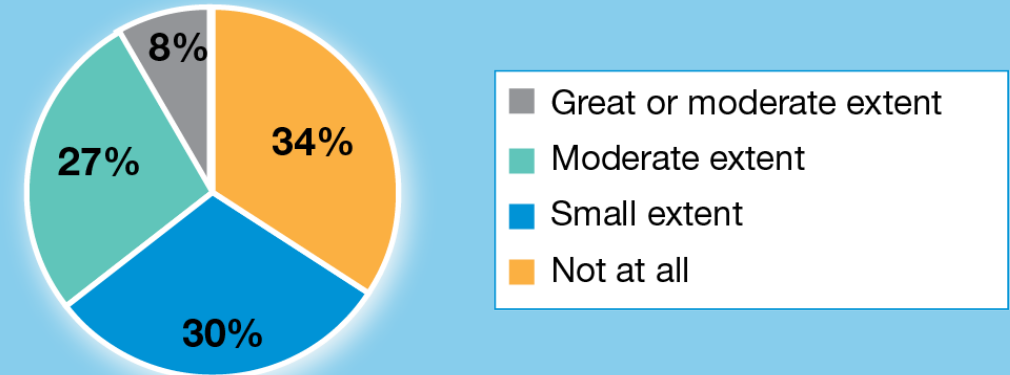
# Task automation

45% of the EU+ workforce believe that they need or will need new knowledge and skills because of the new digital technologies in their workplace

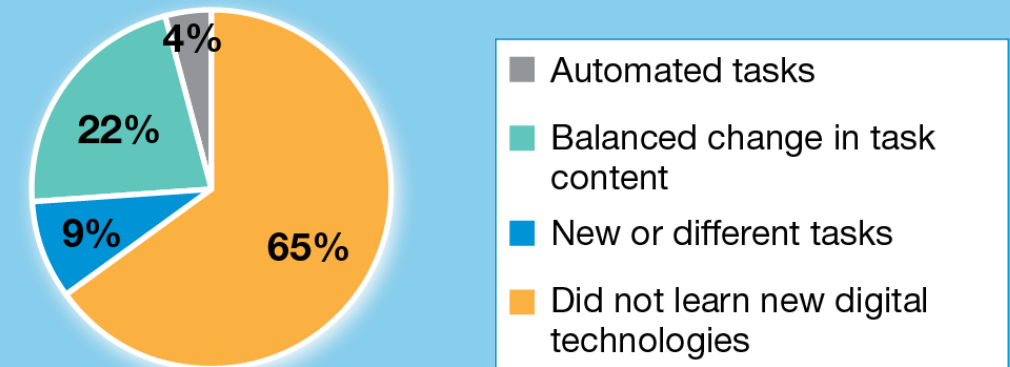
## Mostly affected by task automation

- Males
- Lower-educated
- Manual and low-skilled, elementary, jobs
- Routine jobs
- Larger-sized firms
- Agriculture, finance, utilities sectors

(a) Extent to which adults think digital technology can or will do their main job partly or fully

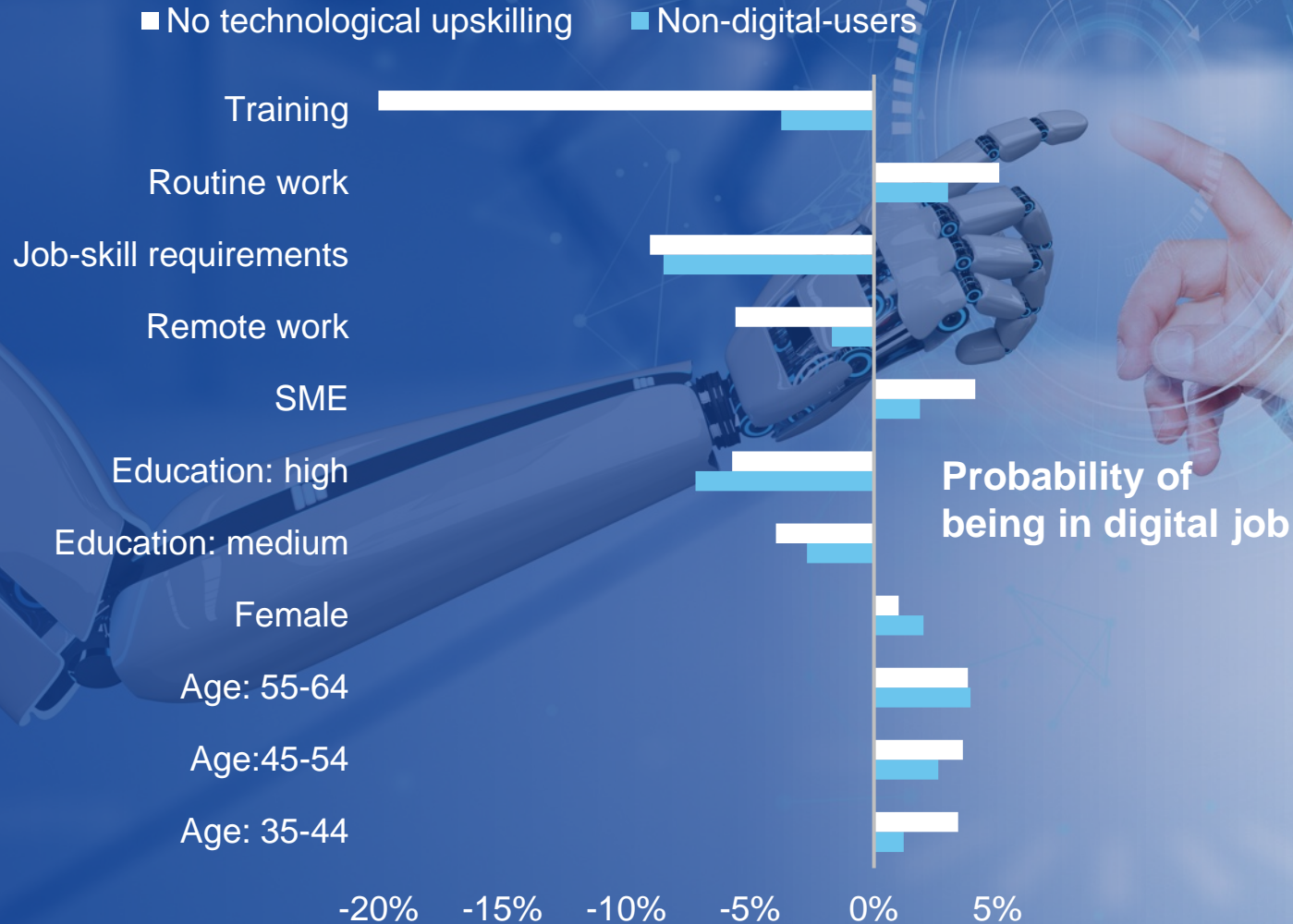


(b) Actual change in job tasks resulting from new digital technology



# Priority target groups

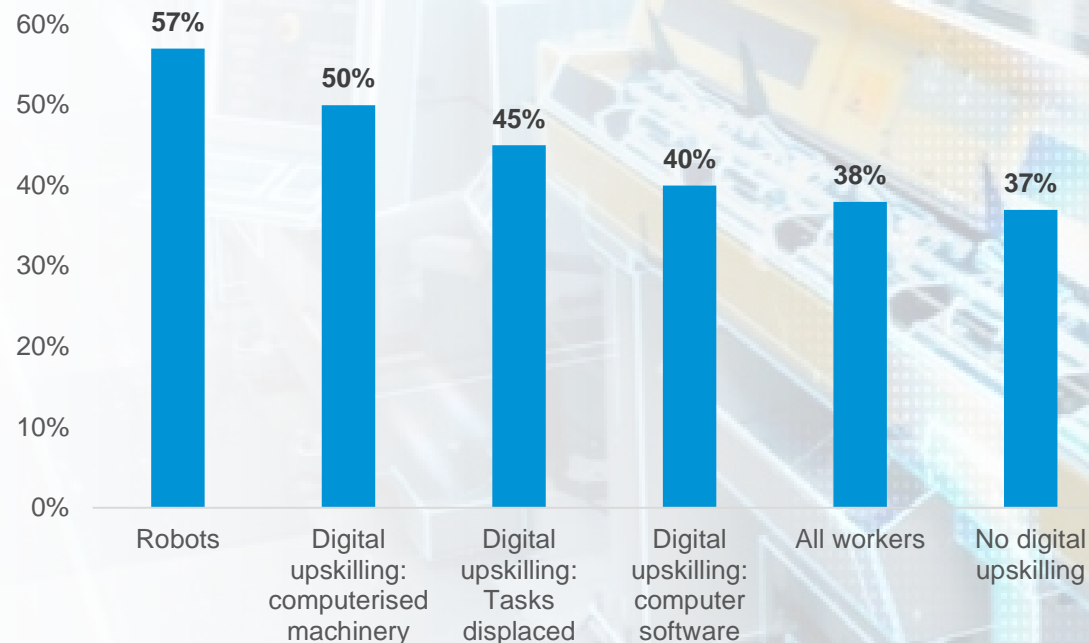
## Digital skills training



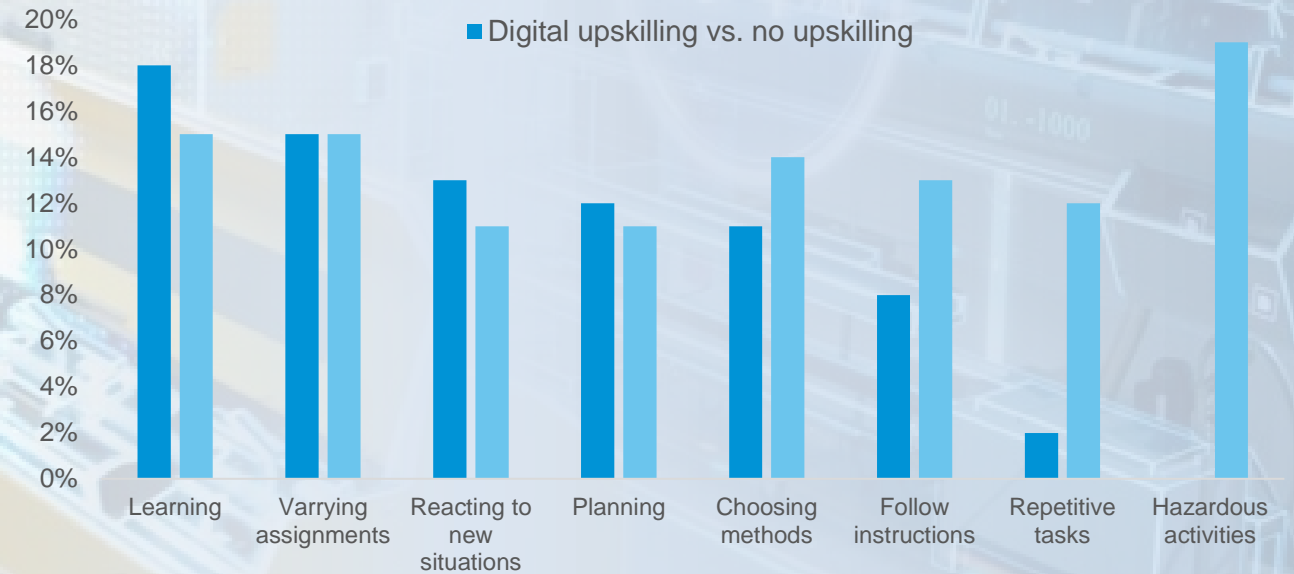
# Policy challenges of the digital transition

- (Some forms of) digital technology increase work routinisation & job insecurity
- Non users oblivious to automation risks & low technology acceptance
- Skill underutilisation linked to less digitalisation at work

## Fear of job loss



## Net change in time spent on work activity (2020-21)



# Digital (micro)credentials: a new passport?

A quarter of the EU+ workforce earned at least one certificate or award after completing online education or training in 2020-21

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**ESJS2:** Have you earned at least one certificate or award after completing an online education or training activity? **(Total, %)**

## Micro-credentialism in EU+ job markets

- 6 in 10 EU+ workers mainly did online education and training
- 69% of them earned an officially recognised qualification by national authority or other online certificate/digital online badge as visual token of person's learning

# Thank you



For more information

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