Skills, AI and algorithmic management

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CVET happens **informally** at work

* Channels of **skill formation,** adult EU workers

69% Interacting with colleagues at work
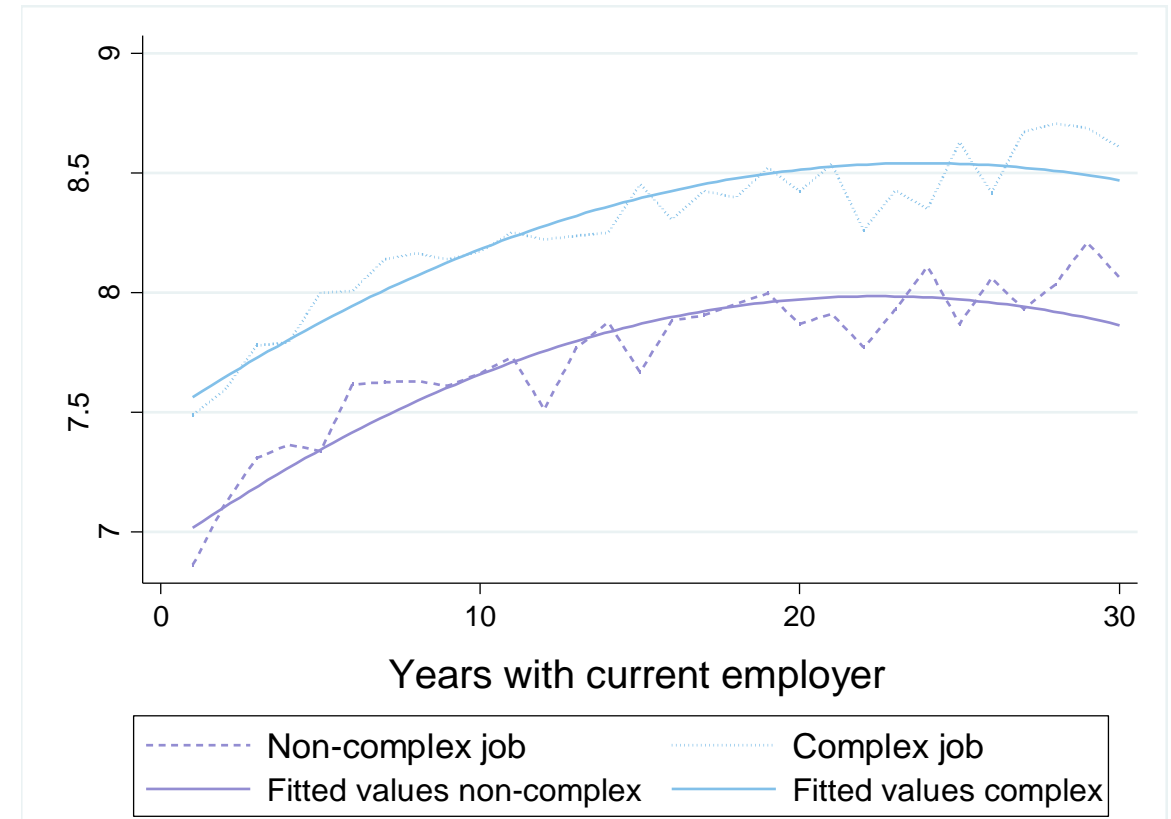
63% Attending non-formal training courses

59% Learn by trial and error

…but a large share of EU jobs have low job-skill requirements

Mean skill growth by tenure and job complexity

Years with current employer

- - - - Non-complex job .... Complex job
——— Fitted values non-complex ——— Fitted values complex

Source: Cedefop 1st European skills and jobs survey (2014)

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Bundling **workplace practices** drives **workplace learning**…

9% — EU firms that offer comprehensive training and learning opportunities
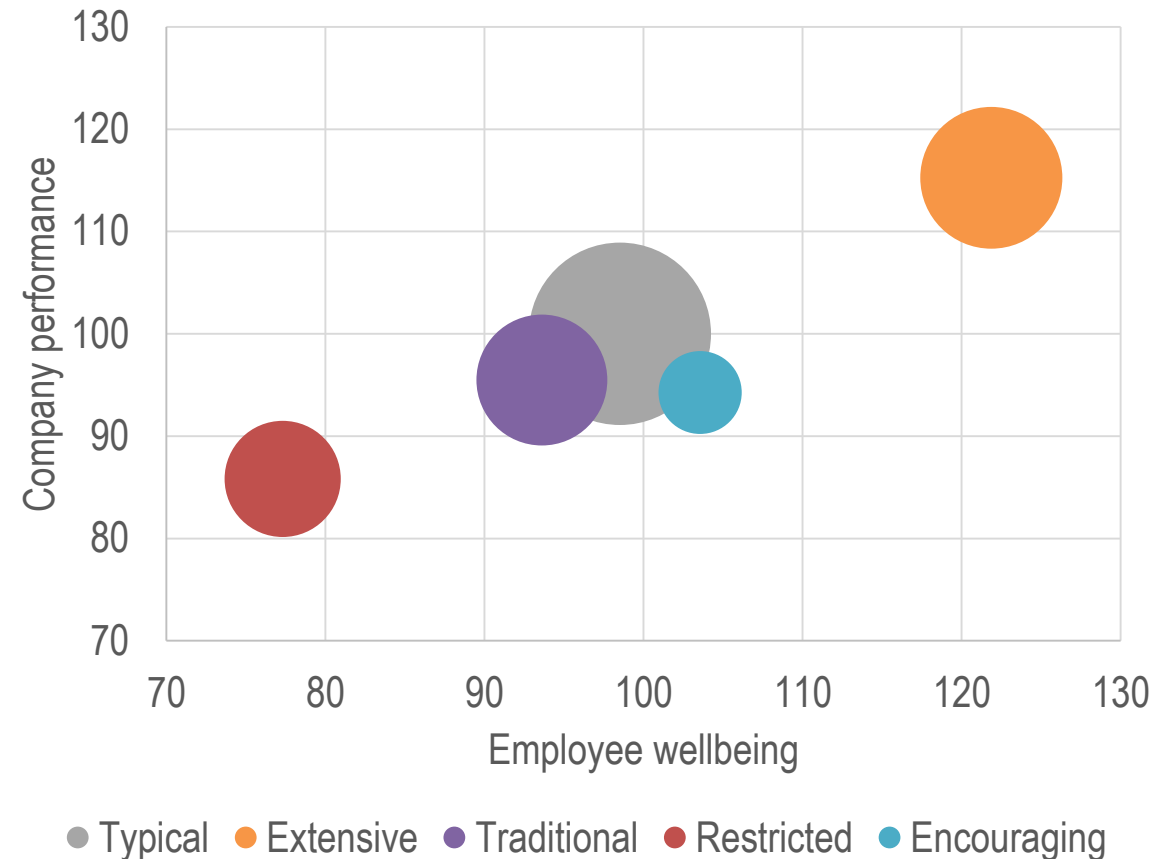
20% — Bundle workplace practices that offer

Job autonomy

Employee voice

Learning opportunities

…and extensive learning fosters higher employee wellbeing and company performance

Company performance (y-axis): 70, 80, 90, 100, 110, 120, 130
Employee wellbeing (x-axis): 70, 80, 90, 100, 110, 120, 130

● Typical ● Extensive ● Traditional ● Restricted ● Encouraging

Skill development in the platform economy

Algorithmic management and the future of skills formation and matching?

- Algorithmic vetting

- Algorithmic ranking (prioritisation for tasks/rewards/punishment)

- Personalised and quick (algorithmically determined) learning

- Client feedback/ratings

- Limited portability due to algorithmic non-transparency
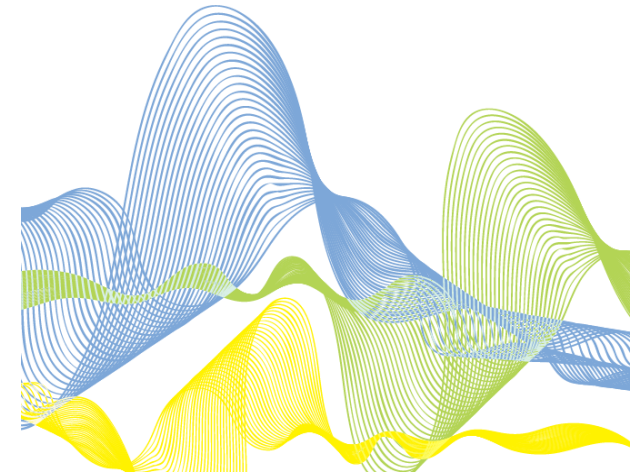
Source: Cedefop CrowdLearn studies

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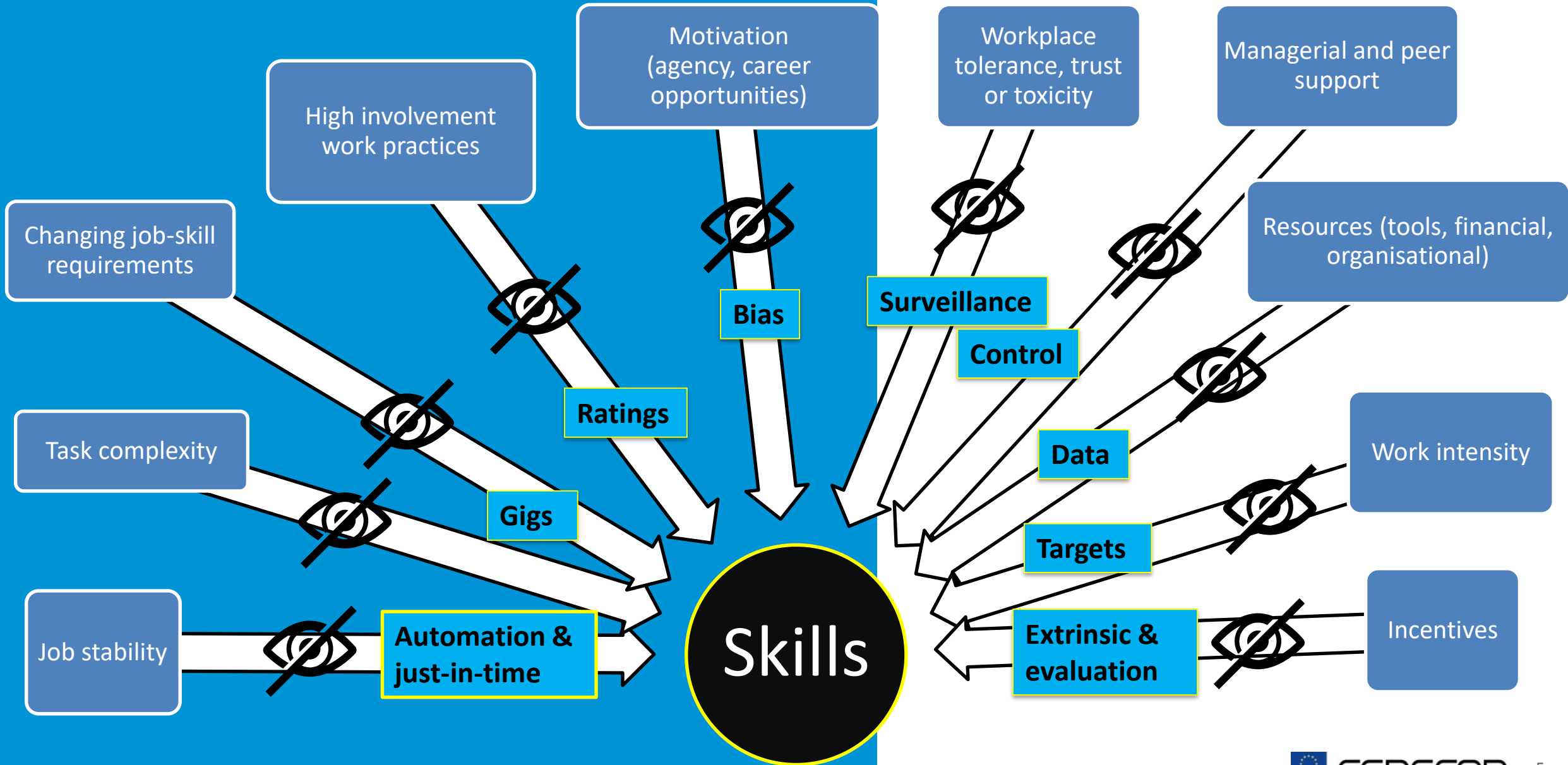EN

Developing and matching skills in the online platform economy

Findings on new forms of digital work and learning from Cedefop's CrowdLearn study

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Skills vs. algorithms?

High involvement work practices

Motivation (agency, career opportunities)

Workplace tolerance, trust or toxicity

Managerial and peer support

Changing job-skill requirements

Resources (tools, financial, organisational)

Bias

Surveillance

Control

Ratings

Task complexity

Data

Work intensity

Gigs

Targets

Job stability

Automation & just-in-time

Extrinsic & evaluation

Incentives

Skills

CEDEFOP

Thank you

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