

OMEGA-NET Training school:

Non-standard Employment, Work Environment and Health

Digital labour platforms and challenges for job quality and safety

Christophe Vanroelen

Interface Demography, Department of Sociology

Vrije Universiteit Brussel

cvroelen@vub.be



Lecture outline

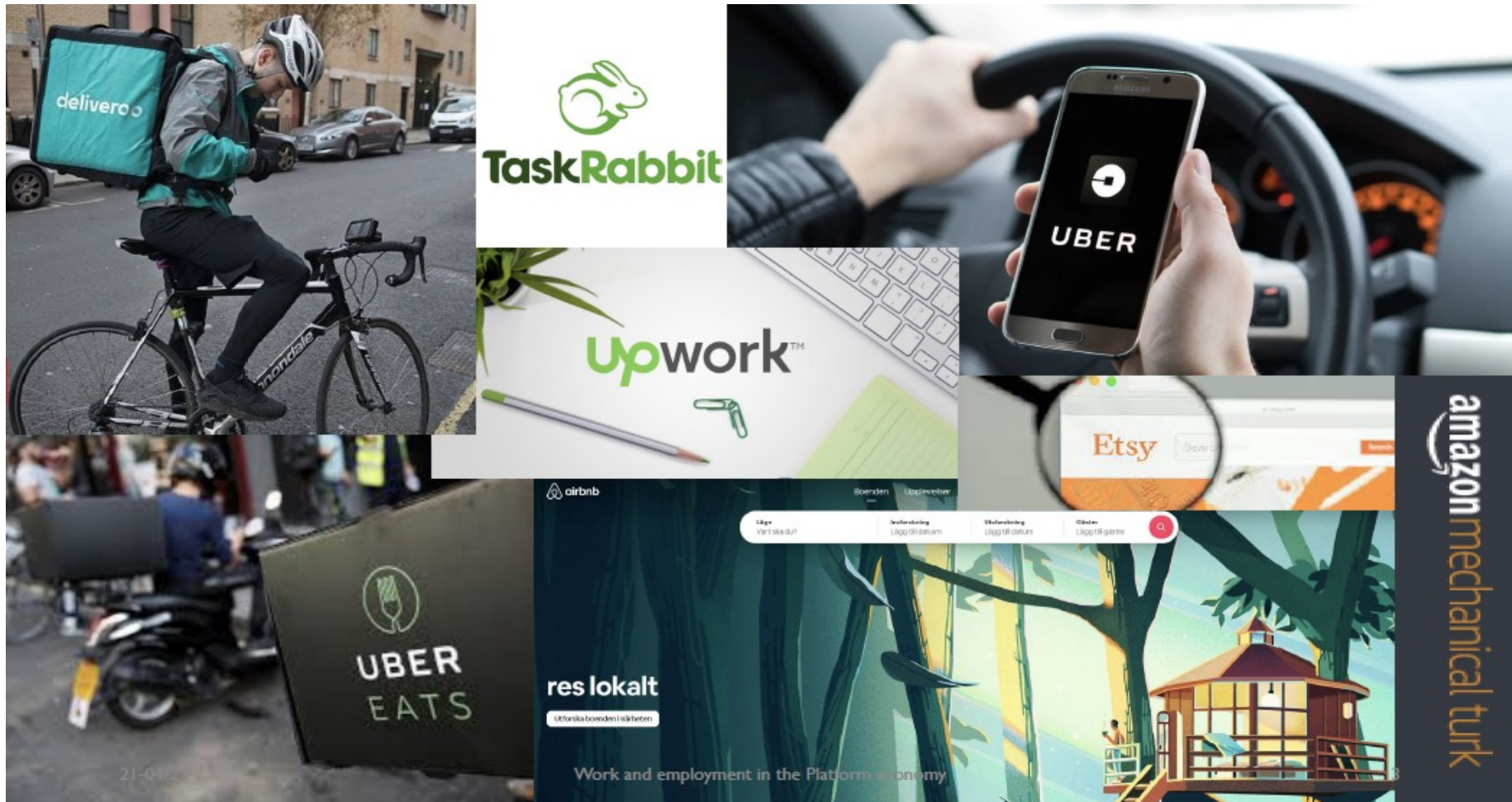
- Defining Digital Labour Platforms
- Frequency and characteristics of platform labour(ers)
- Digital labour platforms and the quality of work
- OHS challenges for Platform work
- Conclusions and Policy recommendations

Selected reading

- Brodersen, M. (2020). *Mapping the platform economy – Review and research agenda*. Working Paper SEAD-project. (<https://sead.be>)
- Piasna, A., Zwysen, W., & Drahokoupil, J. (2022). The platform economy in Europe Results from the second ETUI Internet and Platform Work Survey. ETUI Working Paper 2022.05. (<https://www.etui.org/publications/platform-economy-europe>)
- Kilhoffer, Z., De Groen, W. P., Lenaerts, K., Smits, I., Hauben, H., Waeyaert, W., ... Robin-Olivier, S. (2020). *Study to gather evidence on the working conditions of platform workers*. <https://ec.europa.eu/social/BlobServlet?docId=22450&langId=en>
- Lenaerts, K., Waeyaert, W. , Gillis, D., Smits, I., Hauben, H. (n.d.). *Digital platform work and occupational safety and health : overview of regulation , policies , practices and research*. EU-OSHA (<https://osha.europa.eu/en/publications/summary-digital-platform-work-and-occupational-safety-and-health-overview-regulation-policies-practices-and-research>)

Defining digital labour platforms and the platform economy

Defining digital labour platforms and the platform economy



Digital Labour Platforms: Generic Characteristics

- Use of **algorithmic matching** to coordinate economic transactions
- Acting as **intermediaries** between heterogenous actors.
 - Tendency to define themselves as intermediaries (3th party), not as employers, and move away from the traditional employment relationships
 - **Extract value** from ‘intermediary-activities’
 - Is main distinction from not-for-profit initiatives, cooperatives, collaborative and sharing projects.
- The **externalisation** of labour and means of production
 - Part of a wider (and older) trend
 - Individualise the workforce they use and externalise risk
 - In ‘lean platforms’, capital investment is decentralised towards platform users.
- Exercise of some level of **control** over the organisation and execution of the productive process.
 - Some examples of platforms with ‘decentralized’ forms of control.
 - Platform *ownership* and their intervention in transactions, matching and pricing impact power structures.
- For-profit monetized activity

ETUI: Internet work and Platform work

- Internet work:
 - Activities aimed at generating income through the use of online platforms, apps, websites
 - Activities: digitally mediated services, sale of goods, renting of assets
 - No long-term commitment
 - Internet work is not necessarily 'mediated' by online platforms
- Platform work:
 - Subset of internet work: focus on services
 - Additional criteria:
 - Match supply and demand
 - Provide a set of tools and services to facilitate that transaction in exchange for compensation
 - Setting rules of governance
 - So somewhat narrower

Figure 1 Internet and platform work

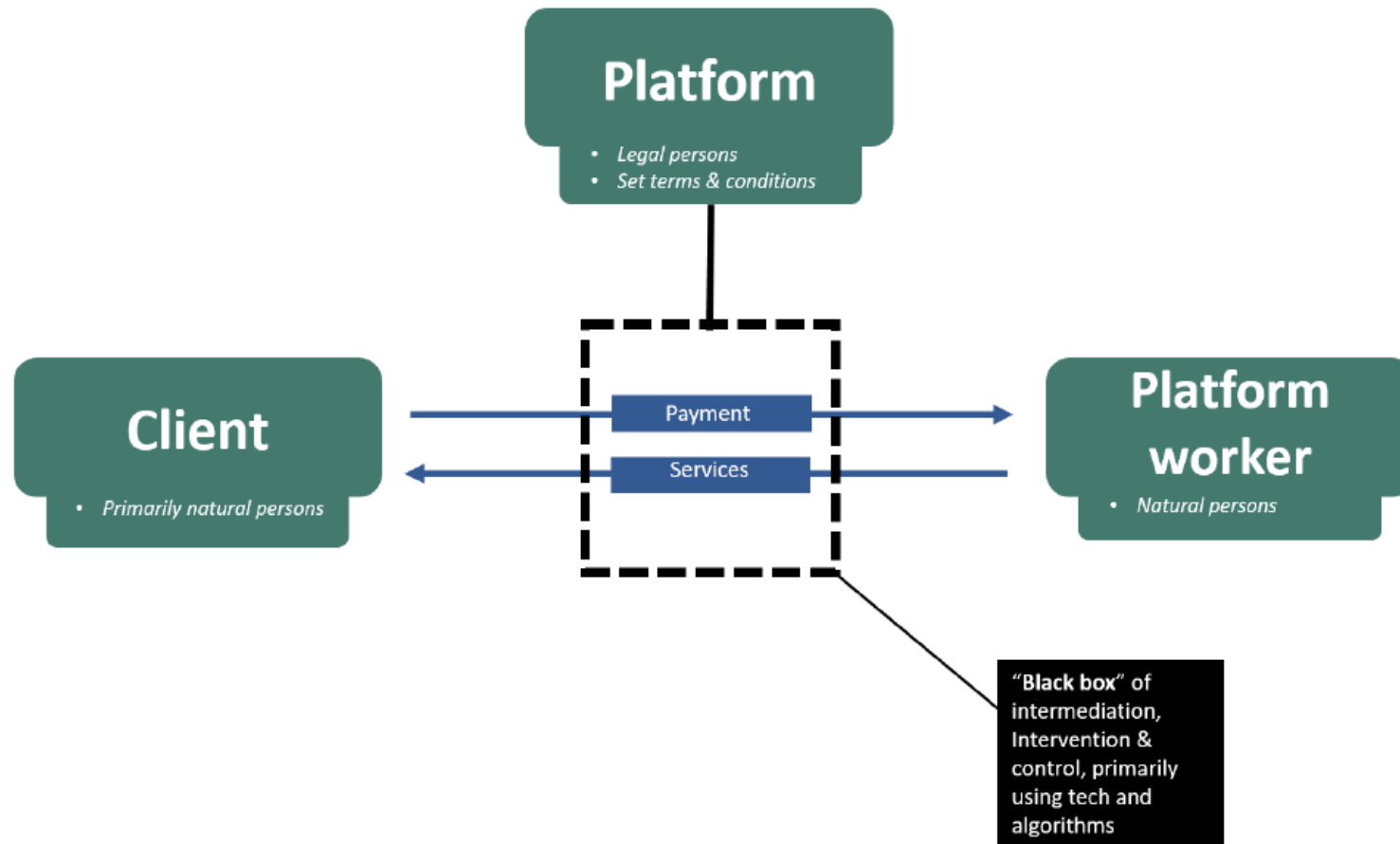
Internet work	Platform work
	Activities 1-5 and 10 if performed through digital labour platforms
1. Remote clickwork	
2. Remote professional work	
3. On-location work	Platform work
4. Transport	
5. Delivery	
6. Influencer	
7. Renting	
8. Sell self-made products online	
9. Sell or re-sell other products online	
10. Other freelance services or tasks	Platform work

Source: Piasna, A., Zwysen, W., & Drahokoupil, J. (2022). The platform economy in Europe Results from the second ETUI Internet and Platform Work Survey. ETUI Working Paper 2022.05.

Defining Platform Work

- Digital platform worker:
 - An individual person providing labour intermediated with a greater or lesser extent of control via a digital labour platform, regardless of that person's legal employment status.
- Digital labour platform:
 - An online facility or marketplace operating on digital technologies (including the use of mobile apps) that are owned and/or operated by an undertaking, facilitating the matching between the demand for and supply of labour provided by a platform worker.

Defining Platform Work



Source: Kilhoffer, Z., De Groen, W. P., Lenaerts, K., Smits, I., Hauben, H., Waeyaert, W., ... Robin-Olivier, S. (2020). *Study to gather evidence on the working conditions of platform workers*. <https://ec.europa.eu/social/BlobServlet?docId=22450&langId=en>

Digital Labour Platforms: Dimensions

Core dimensions:

- Location: Locally bound (home or urban space) vs Digitally bound
- Skill level of the worker: Higher skill, Complex tasks vs. Lower skill, Simple tasks
- Level of control: High, moderate, low

Additional dimensions:

- Organisational and economic model: for-profit, cooperative, social
- Employment model: employee, freelance, consumers, volunteers, ...
- Types of activities: only services? Or also goods and assets?

Digital Labour Platforms: Examples

Dimensions	Location			Skill level		Level of Control		Economic model	Employment model
	Urban	Home	Digital	Higher	Lower	Higher	Lower		
Uber Drive (Taxi services)	X				X	X		For-profit	Freelance, second income
Upwork (Online freelance services)			X	X			X	For-profit	Mostly Freelance
Bsit (Babysit, nanny services)		X		(X)	X		X	For profit	Students
RingTwice (Handyman services)		X		X			X	For profit	Freelance, second income
Clickworker (Online gig jobs)			X		X	X		For profit	Mostly second income
Smart.coop (Professional services)			X	X			X	Cooperative	Mostly Freelance

'Disruptive' implications

- Blurring lines between markets and corporations
- Blurring lines between employees and entrepreneurs
- Blurring lines between workers and consumers
- Blurring lines between employers and labour intermediaries

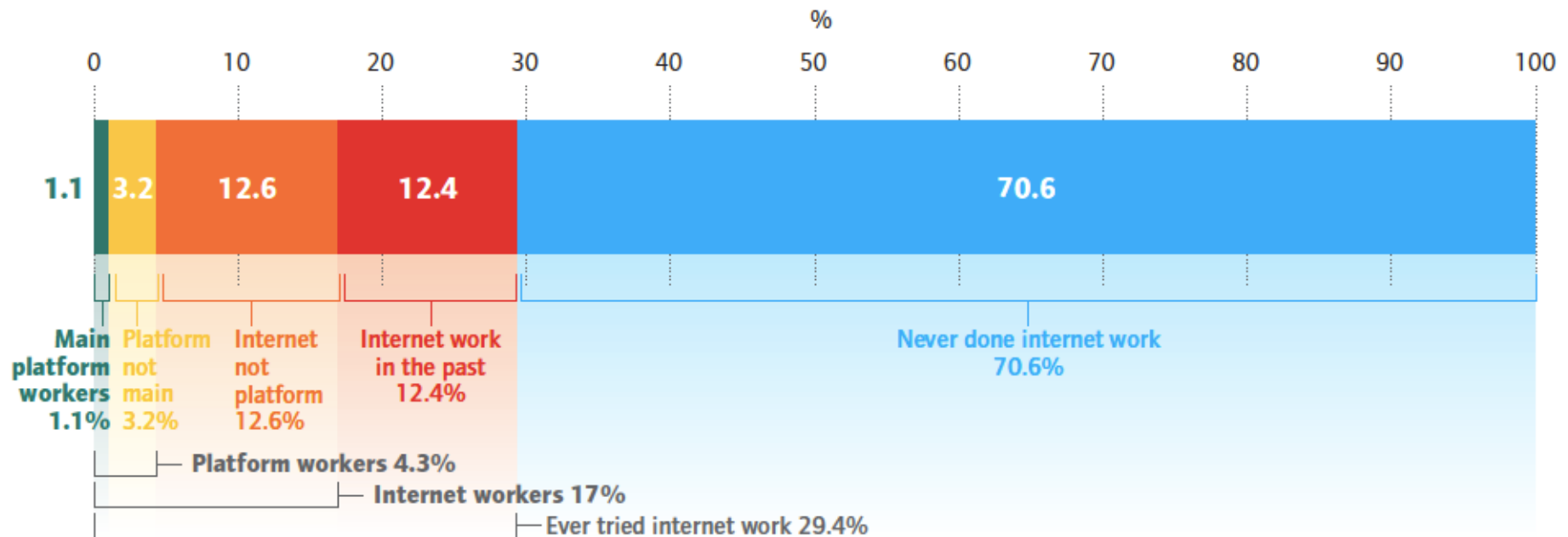
- Blurring of managerial role through algorithmic steering
- Evaporation of workers' notions of community

BUT: continuity with larger tendencies (e.g. de-layering, flexibility, individualising of labour relations, ...)

Frequency and characteristics of platform labour(ers)

Frequency of internet and platform work (general)

Figure 2 The extent of internet and platform work



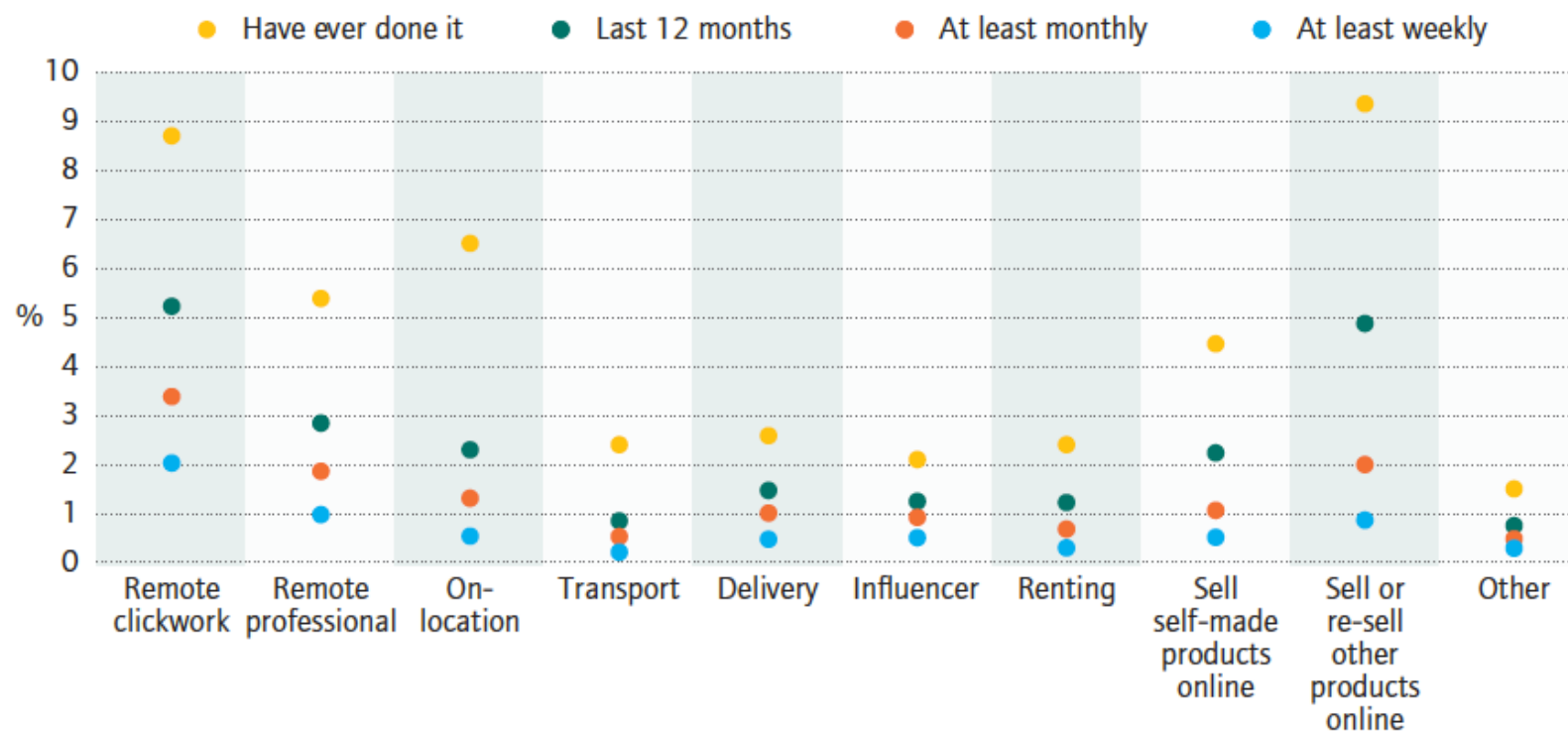
Note: Average across 14 EU countries. All working age adults.
Source: ETUI IPWS.

Countries: Austria, Bulgaria, Czechia, Estonia, France, Germany, Greece, Hungary, Ireland, Italy, Poland, Romania, Slovakia and Spain.

Source: Piasna, A., Zwysen, W., & Drahokoupil, J. (2022). The platform economy in Europe Results from the second ETUI Internet and Platform Work Survey. ETUI Working Paper 2022.05.

Frequency of internet and platform work (types)

a) Main types of internet work

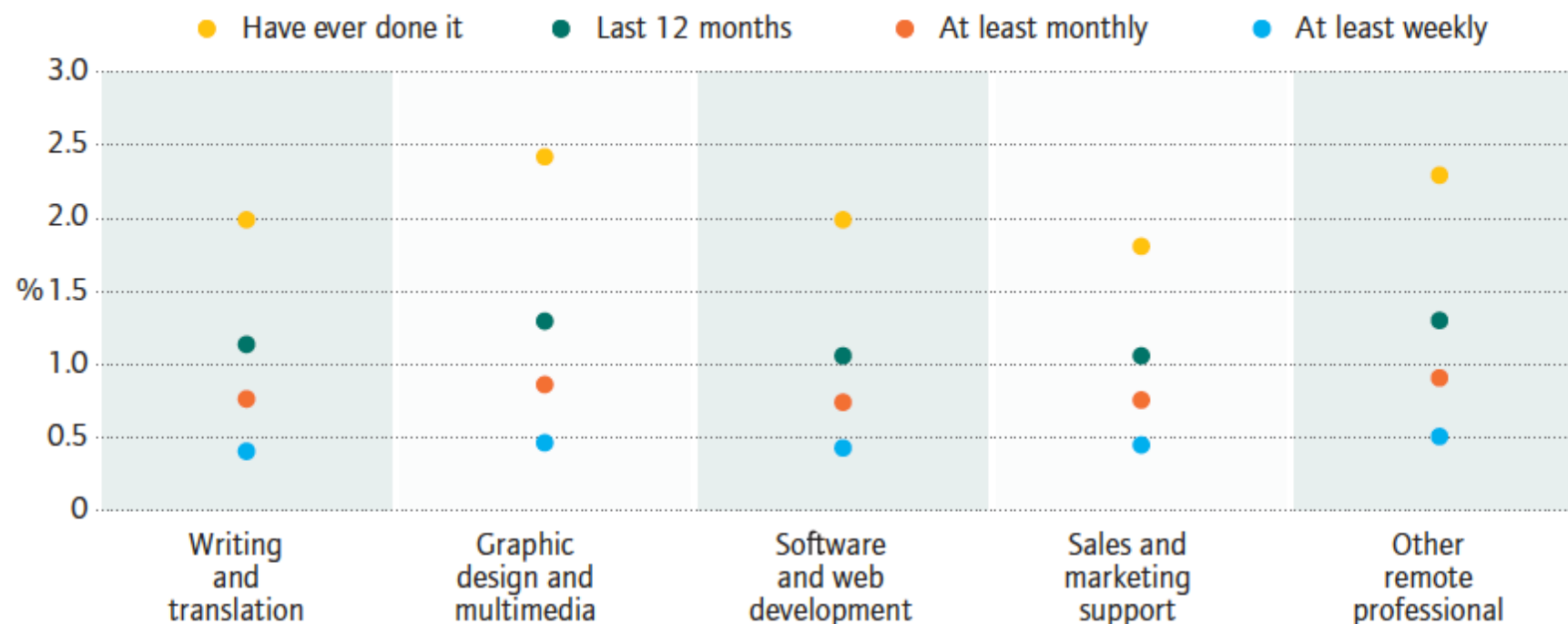


Countries: Austria, Bulgaria, Czechia, Estonia, France, Germany, Greece, Hungary, Ireland, Italy, Poland, Romania, Slovakia and Spain.

Source: Piasna, A., Zwysen, W., & Drahoukoupil, J. (2022). The platform economy in Europe Results from the second ETUI Internet and Platform Work Survey. ETUI Working Paper 2022.05.

Frequency of internet and platform work (types)

b) Types of tasks in remote professional work

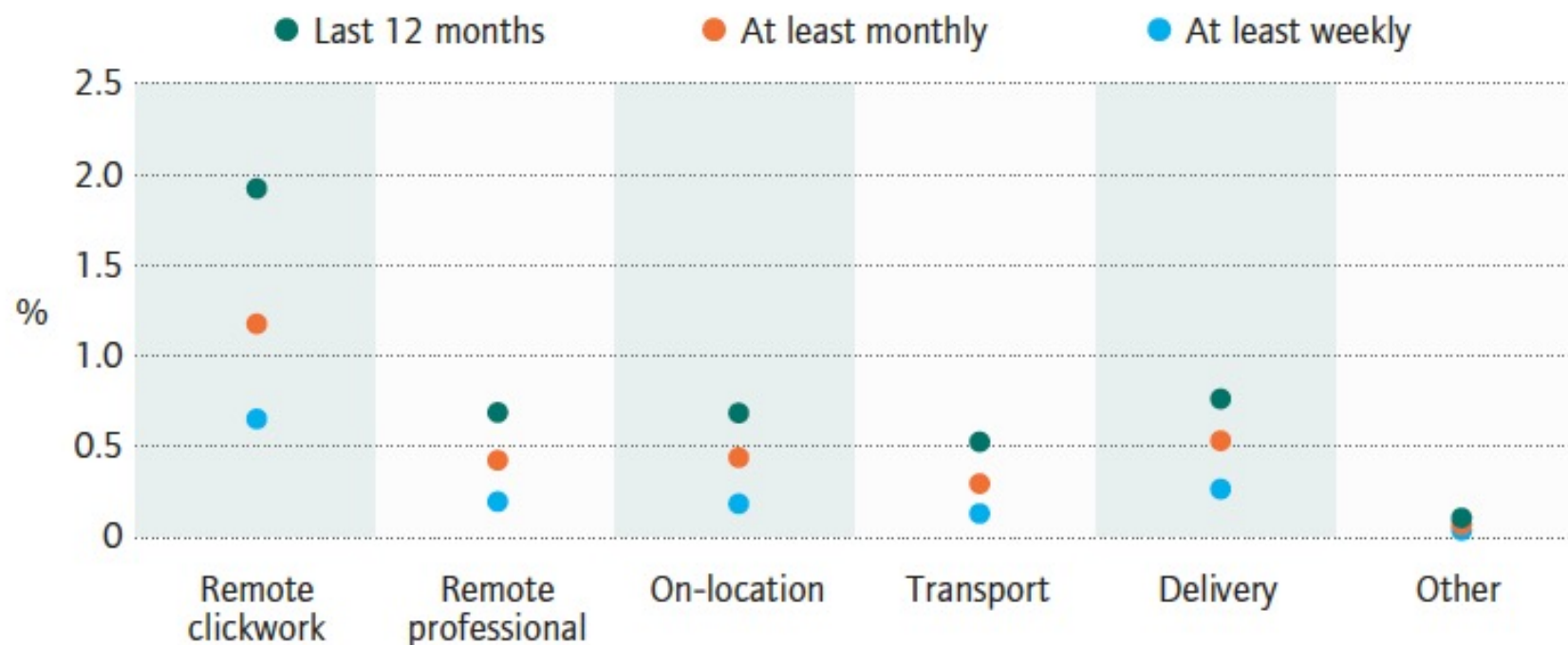


Countries: Austria, Bulgaria, Czechia, Estonia, France, Germany, Greece, Hungary, Ireland, Italy, Poland, Romania, Slovakia and Spain.

Source: Piasna, A., Zwysen, W., & Drahokoupil, J. (2022). The platform economy in Europe Results from the second ETUI Internet and Platform Work Survey. ETUI Working Paper 2022.05.

Frequency of internet and platform work (types)

Figure 4 Platform work, by type of activity (%)



Countries: Austria, Bulgaria, Czechia, Estonia, France, Germany, Greece, Hungary, Ireland, Italy, Poland, Romania, Slovakia and Spain.

Source: Piasna, A., Zwysen, W., & Drahokoupil, J. (2022). The platform economy in Europe Results from the second ETUI Internet and Platform Work Survey. ETUI Working Paper 2022.05.

Who are the platform workers?

- On average: young, male, migrant, slightly lower educated and urban-located...
 - BUT: large internal variation!

Figure 15 Internet workers, by type of activity and gender

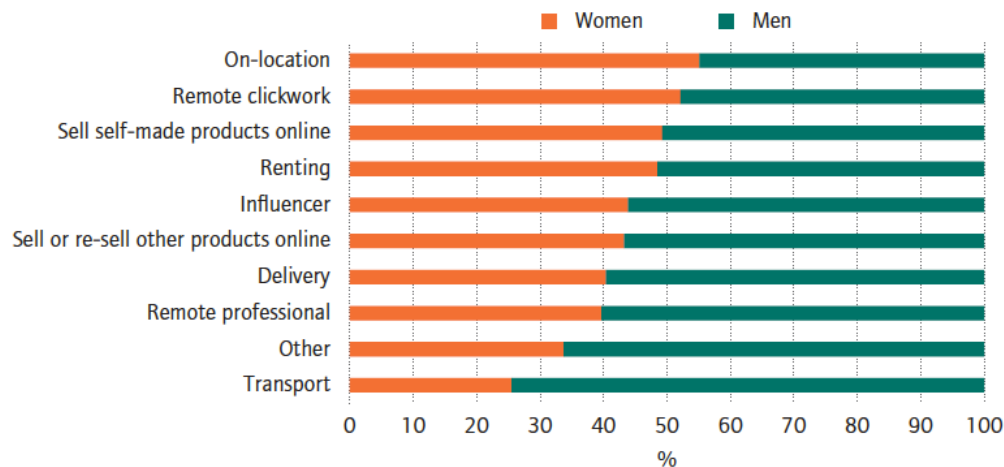
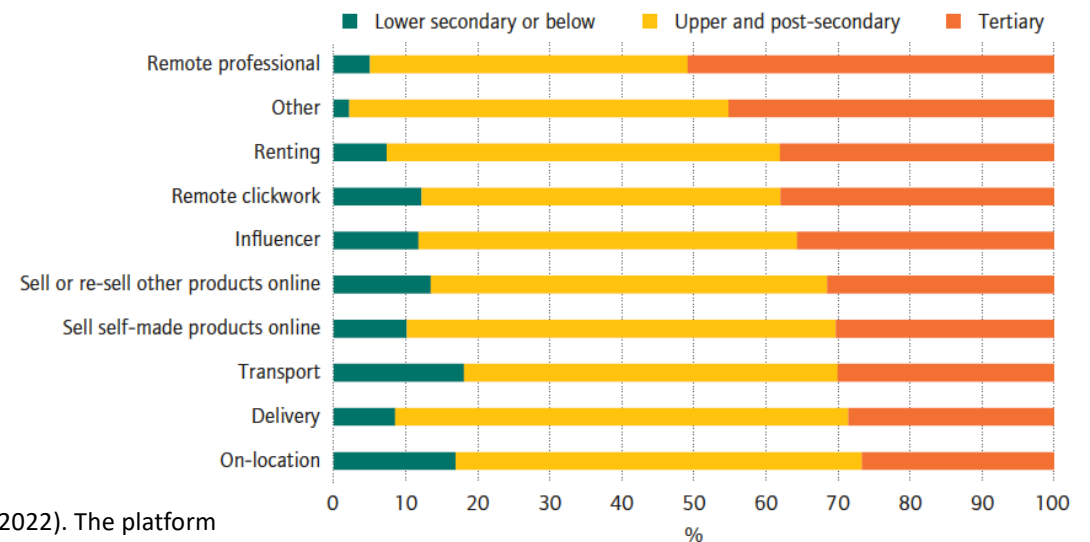


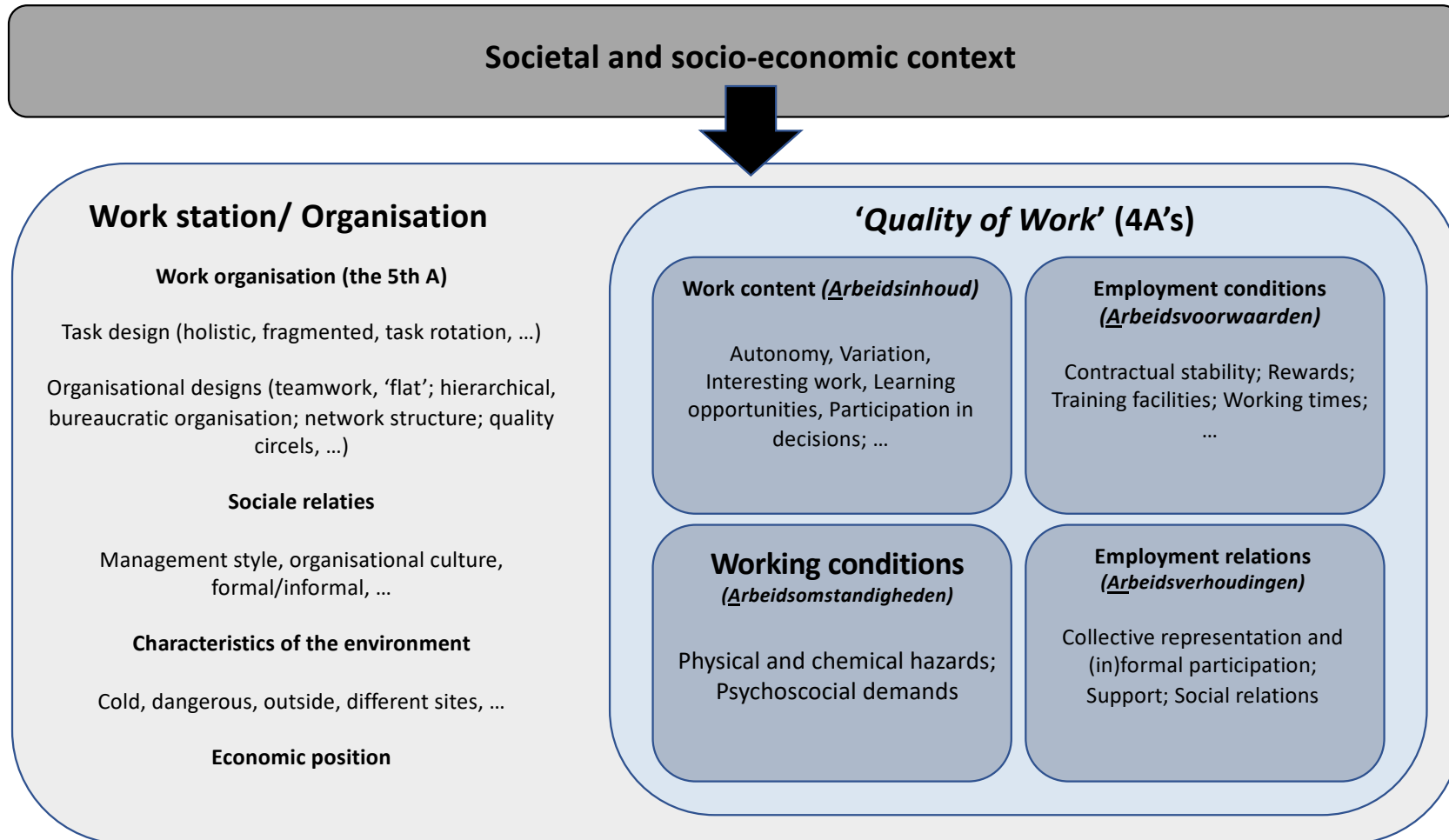
Figure 24 Educational attainment of internet workers, by type of activity



Source: Piasna, A., Zwysen, W., & Drahokoupil, J. (2022). The platform economy in Europe Results from the second ETUI Internet and Platform Work Survey. ETUI Working Paper 2022.05.

Digital Labour Platforms and Quality of Work

The Quality of Work Framework



Large heterogeneity

- Wide range of situations, organisations, types of work
- Variety of terminology associated with platform work
 - "digital labour"
 - "collaborative economy",
 - "Sharing Economy"
 - "collaborative consumption" (prosumption)
 - "peer-to-peer"
 - Gig economy
 - ...
- Words matter: terminology is not insignificant:
 - Sharing, collaborative VS Digital labour platform
 - Normative, ambivalent, controversial
- Deliberate) confusion between
 - a) collaborative initiatives aimed at mutualising resources and
 - b) commercial enterprises that centralise trade, rentals or on-demand services

Challenges for QoW in platform work

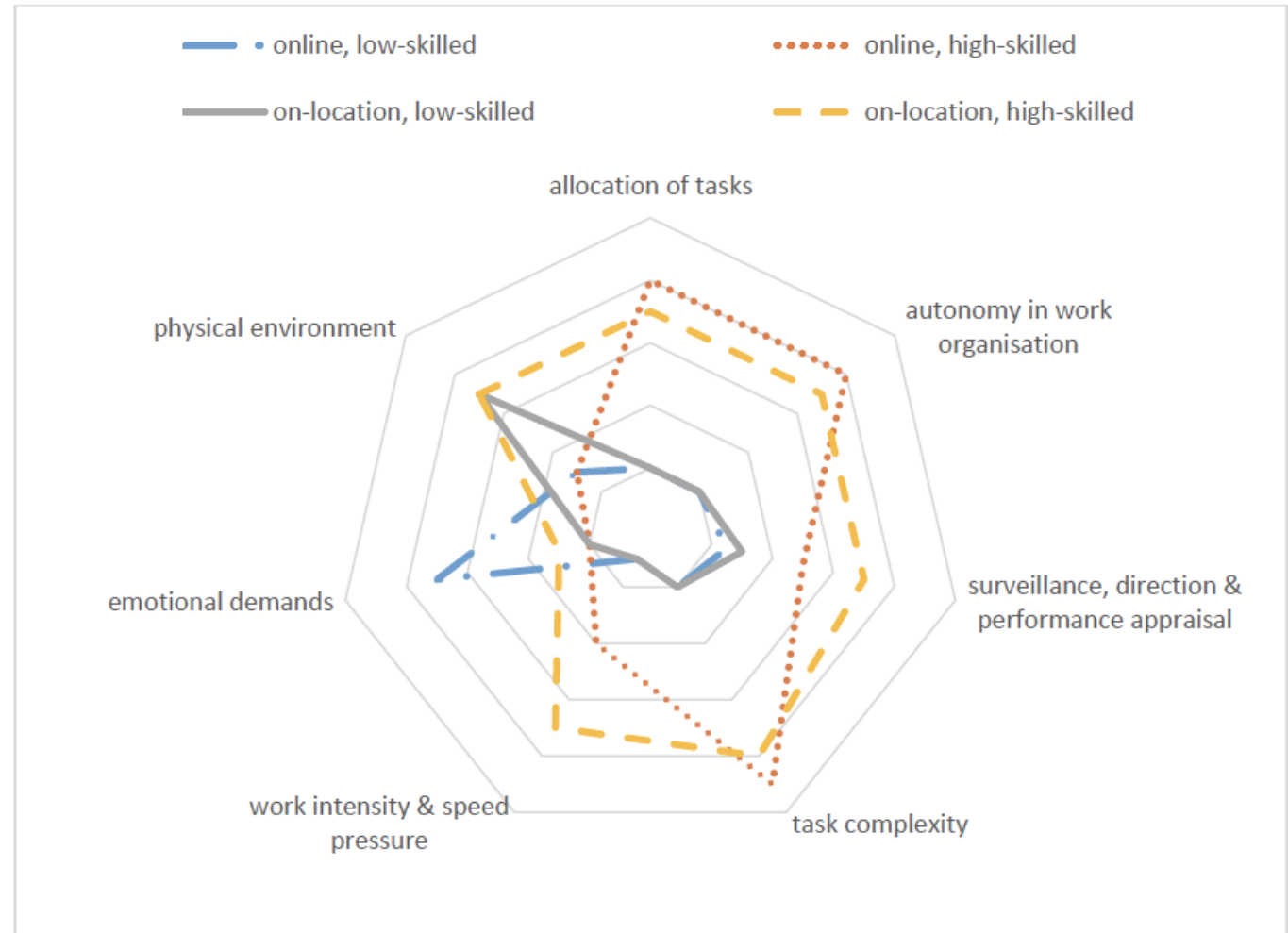
- Many work tasks are essentially the same as in traditional jobs:
 - Driving, cleaning, handyman work, routine administrative work, ...
 - Although, skewed towards more dangerous and unhealth work
 - Although, additional work (work for labour), differently organised tasks
- Also, series of assumed advantages of DLP's:
 - Autonomy
 - Worker-determined job content
 - Worker-determined temporal flexibility
 - Entrepreneurship as a (desired) objective - e.g. 'being your own boss'

Challenges for QoW in platform work

- BUT, series of complicating wide-spread characteristics of DLP's:
 - Work-task intrinsic issues:
 - Low skilled and routine work
 - e.g. monotonous (digital) tasks, cleaning and personal services, ...
 - Constant evaluation on performance affects task load and hampers 'right to say no'
 - e.g. performance and availability ratings
 - Unpersonal (algorithmic) management and digital surveillance:
 - 5 managerial control systems: surveillance; automatic evaluations; automated decisions; automated messaging systems; and digital choice architecture
 - Build-in competition via performance monitoring, online-bidding, ... → work pressure
 - Physical risks, dangerous situations, toxic environments and lack of training/experience
 - e.g. traffic, construction works
 - Lack of awareness or engagement with OHS-issues by platform workers
 - Lack of supporting institutional framework

Challenges for QoW in platform work

Variation in work task-related challenges



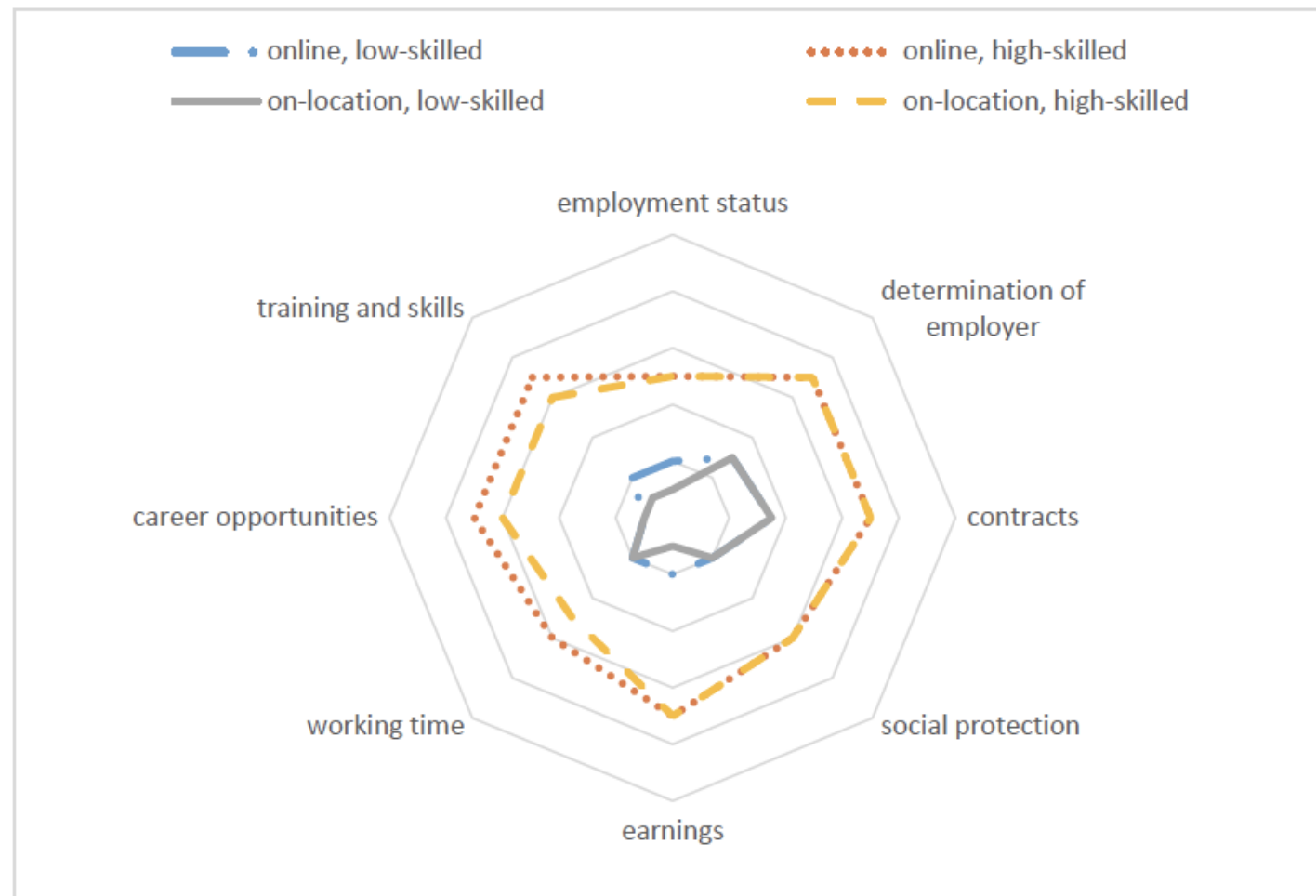
Source: Kilhoffer, Z., De Groen, W. P., Lenaerts, K., Smits, I., Hauben, H., Waeyaert, W., ... Robin-Olivier, S. (2020). *Study to gather evidence on the working conditions of platform workers*.

Challenges for QoW in platform work

- BUT, series of complicating wide-spread characteristics of DLP's:
 - Issues related to the 'employment conditions':
 - 'Long working times push', constant availability pressure
 - e.g. rating systems, work for labour
 - Low wages and hours under-employment
 - e.g. work availability at slack moments, unique reliance on one platform, costs related to platform
 - Low career and wage predictability
 - e.g. gig-based payments (piece-rate)
 - e.g. individualisation of training and development responsibility
 - Ambiguous employment status (blurring boundaries) and contractual arrangements
 - Formal self-employment, but economic dependency and discipling (= bogus self-employment)
 - Low/lacking social protection, lacking OHS regulations and surveillance
 - e.g. personal protection couriers, ...

Challenges for QoW in platform work

Variation in employment related challenges



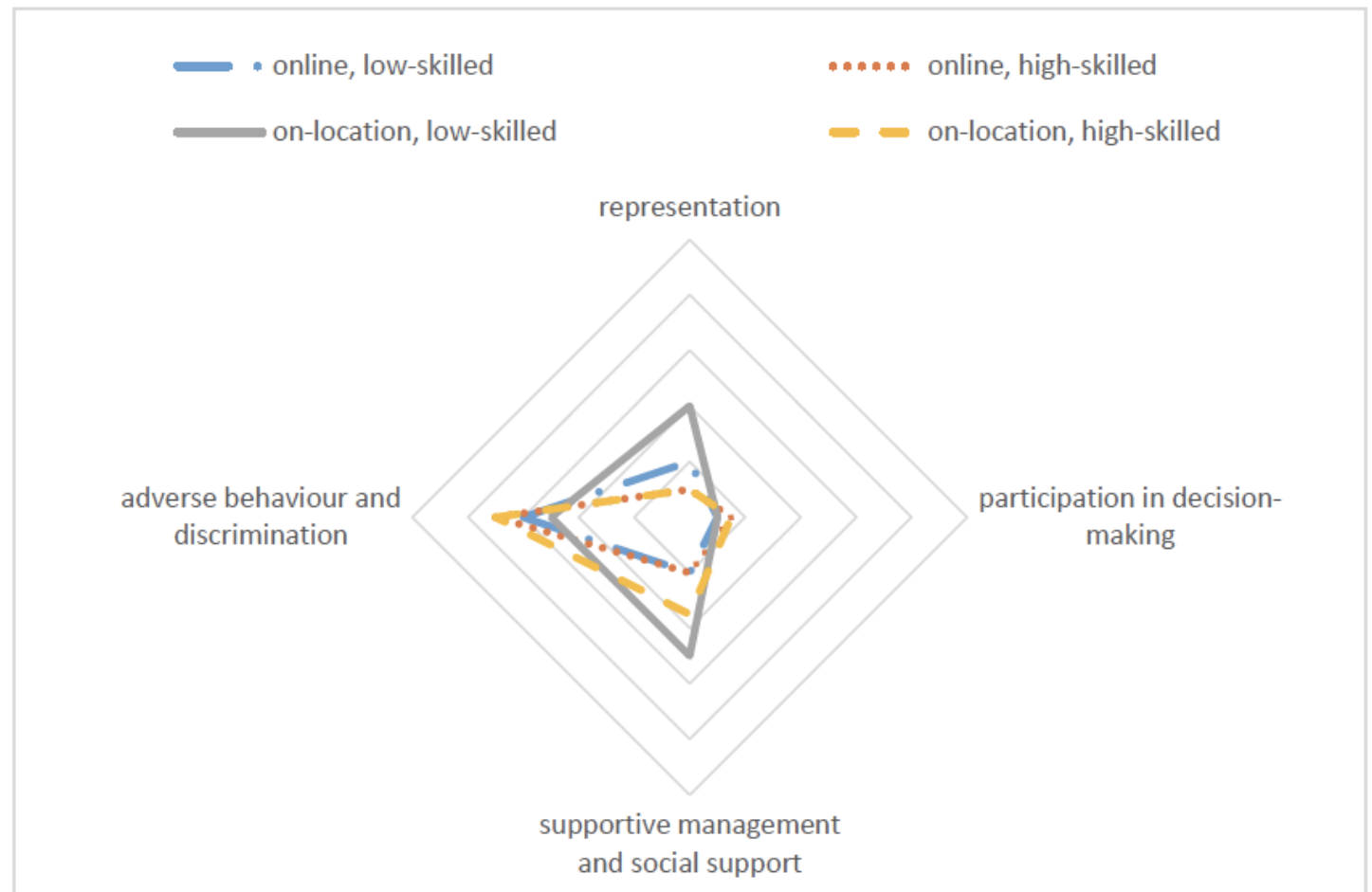
Source: Kilhoffer, Z., De Groen, W. P., Lenaerts, K., Smits, I., Hauben, H., Waeyaert, W., ... Robin-Olivier, S. (2020). *Study to gather evidence on the working conditions of platform workers*.

Challenges for QoW in platform work

- BUT, series of complicating wide-spread characteristics of DLP's:
 - Issues related to social relations and employment relations
 - Professional isolation, lack of support
 - e.g. online professional work
 - Absence of personal interaction with 'management':
 - e.g. complaints against mistakes or decisions taken
 - Problematic interaction with 'third actors' (and ways to deal with them)
 - e.g. aggressive/unsatisfied clients, harassment in interpersonal domestic services
 - Fragmentation of work force: difficult to organise collective action, enforce workers' rights
 - e.g. rights of couriers against their platform

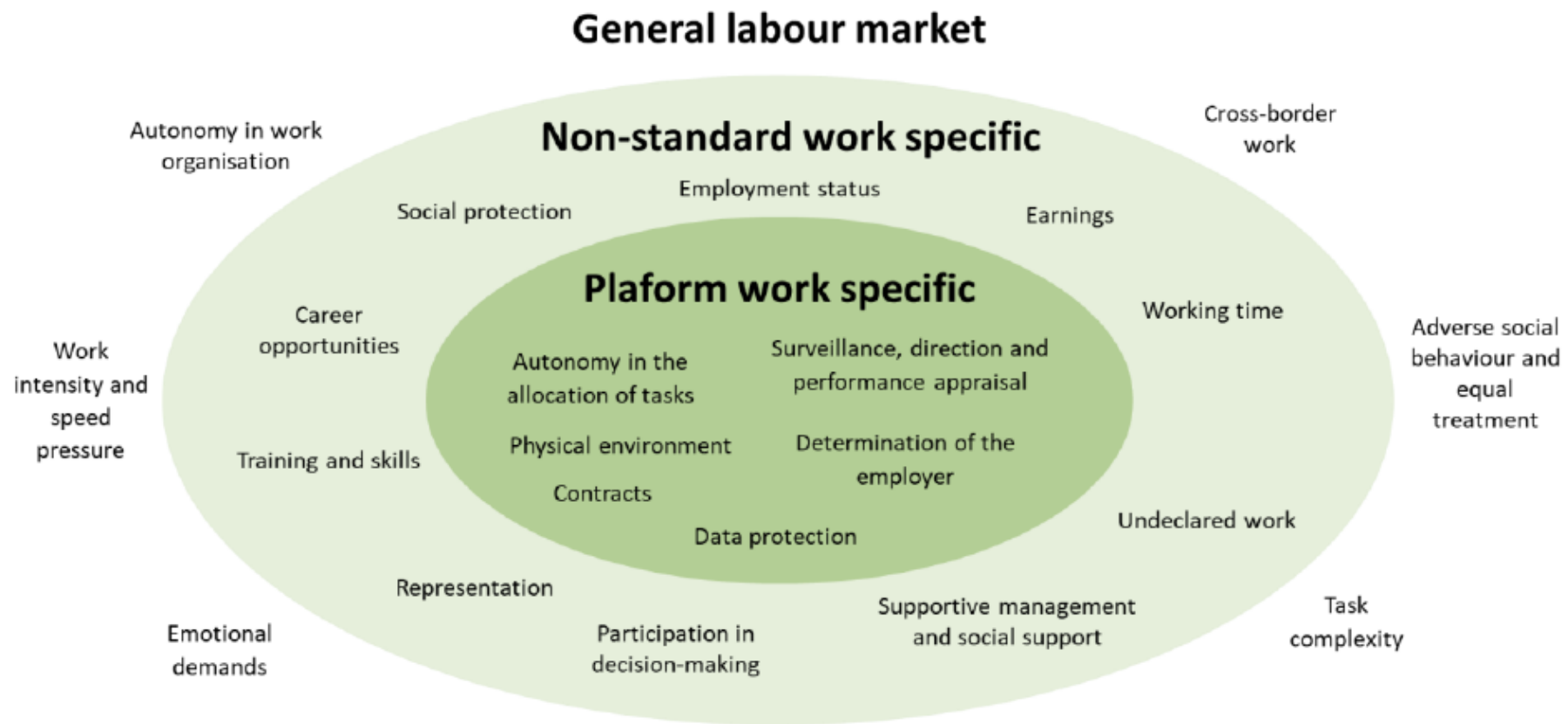
Challenges for QoW in platform work

Variation in social and employment relations related challenges



Source: Kilhoffer, Z., De Groen, W. P., Lenaerts, K., Smits, I., Hauben, H., Waeyaert, W., ... Robin-Olivier, S. (2020). *Study to gather evidence on the working conditions of platform workers*.

Challenges for QoW in platform work: Summary



Source: Kilhoffer, Z., De Groen, W. P., Lenaerts, K., Smits, I., Hauben, H., Waeyaert, W., ... Robin-Olivier, S. (2020). *Study to gather evidence on the working conditions of platform workers*.

Platform work and OHS

OHS risk in four types of platform work

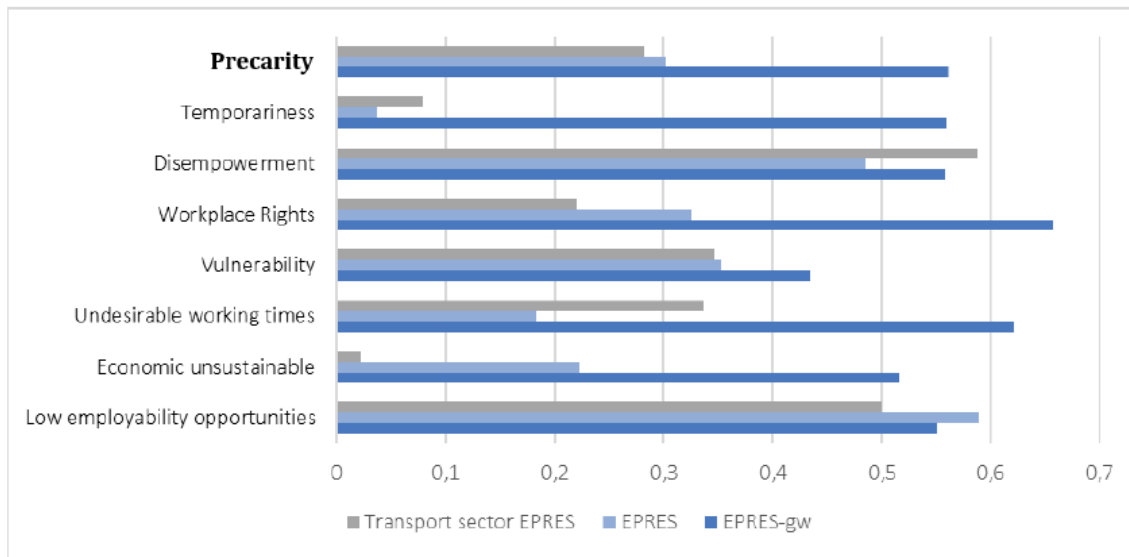
Platform work type	Physical risks	Psychological risks
Parcel delivery	<ul style="list-style-type: none"> Ergonomic risks, related to physical overexertion or repetitive manual tasks Vehicle or bicycle accidents Slips, trips and falls Workplace violence Exposure to extreme weather temperatures Exposure to hazardous substances or biological materials... 	<ul style="list-style-type: none"> Excessive workload Working hours Isolation Bullying, verbal use, harassment ...
Handywork	<ul style="list-style-type: none"> Exposure to hazardous substances (e.g., lead, asbestos, etc.) Working in awkward positions or postures, increasing the risk of MSD's Lifting heavy or awkward objects Exposure to electricity, extreme temperatures or noise Working at heights Slips, trips and falls Working with various tools (hazardous, non-ergonomic) 	<ul style="list-style-type: none"> Excessive workload Working hours Isolation Bullying, verbal abuse, harassment ...
Online content review	<ul style="list-style-type: none"> Ergonomic issues, due to inappropriate setting of the workstation, including the visual display unit, keyboard, desk and chair Prolonged sitting and sedentary behaviour Excessive screen time 	<ul style="list-style-type: none"> Exposure to violence, crime, abuse and illegal content when working Isolation Excessive workload and time pressure
Remote programming	<ul style="list-style-type: none"> Ergonomic issues, due to inappropriate setting of the workstation, including the visual display unit, keyboard, desk and chair Prolonged sitting and sedentary behaviour Excessive screen time 	<ul style="list-style-type: none"> Isolation Excessive workload and time pressure

Source: Lenaerts, K., Waeyaert, W., Gillis, D., Smits, I., Hauben, H. (n.d.). *Digital platform work and occupational safety and health : overview of regulation , policies , practices and research.*, EU-OSHA

Food couriers, precarious work and mental health

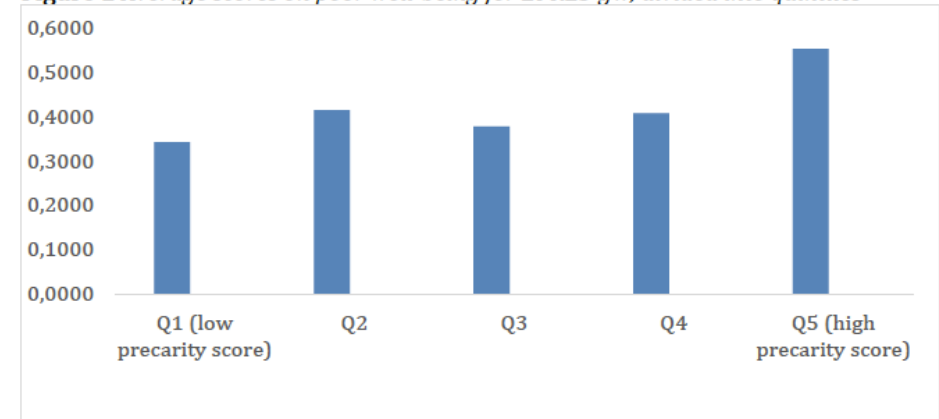
Pilot study among 123 food couriers in Belgium, adopting a survey including an adapted version of the EPRES-scale

Figure 3 A comparison between EPRES transport sector (n=50), EPRES (n=2332) and EPRES-gw (n=99)



Source: EPRES-gw survey (own analysis).

Figure 2 Average scores on poor well-being for EPRES-gw, divided into quintiles



Source: EPRES-gw survey (own analysis).

Source: Vandevenne, E. (2021). *Measuring employment precariousness among platform-based food couriers in Brussels . A pilot study combining fieldwork with survey data.* Master thesis. Vrije Universiteit Brussel.

Challenges to OHS-prevention and risk management

Area of OSH management	Challenges of digital platform work
Conducting a risk assessment (Articles 6(.3) and 9(.1).(a) OSH Framework Directive)	Platforms defer responsibility of risk assessment to platform workers, which implies that collective assessments are replaced by individual assessments. Virtualisation of work and lack of a common protective workplace complicates risk assessments. Digital platform workers lack the knowledge and training on how to properly conduct risk assessments.
Implementing preventive and corrective measures (Articles 6(.1) and 6(.2) OSH Framework Directive)	Digital platforms defer responsibility of the implementation of preventive and protective measures to digital platform workers. The prevention dimension is often poorly considered, as compensation and efficiency of the work done are prioritised. Collective measures are marginalised in digital platform work.
Providing information to and consulting workers (Articles 10, 6(.3)(c) and 11 OSH Framework Directive)	OSH issues are rarely communicated to digital platform workers. Digital platform workers are not consulted on OSH issues, mainly because of the lack of representation and collective organisation.
Training workers (Article 12 OSH Framework Directive)	Digital platforms provide little or no training on safety and health.
Adequate controls and supervision (Articles 6(.3)(c) and 11 OSH Framework Directive)	Blurred responsibilities between digital platforms, digital platform workers and clients complicate the enforcement of OSH obligations. Triangular relationship, virtualisation of work, the dispersed and diverse workforce and high turnover of labour complicate enforcement by labour inspectorates.

Source: Lenaerts, K., Waeyaert, W., Gillis, D., Smits, I., Hauben, H. (n.d.). *Digital platform work and occupational safety and health : overview of regulation , policies , practices and research.*, EU-OSHA

Policy agenda

Conclusions (EU-OSHA)

- DPW perform work activities that are similar to traditional workers and thus face similar OSH risks BUT risks are aggravated due to the nature and conditions of platform work:
 - Unclear employment status and contractual issues (atypical forms of employment)
 - Algorithmic management (continuous tracking and evaluation, automated decision-making)
 - Professional isolation, lack of social support, and work-life conflicts
 - Work transience, boundaryless careers and job and income insecurity
- OSH challenges and opportunities associated with digital platform work are poorly understood by key stakeholders
 - Lack of awareness and data about OSH risk prevention and management
- Measures to address OSH challenges are mostly absent and, if not absent, often insufficient or narrow in scope

Policy recommendations (EU-OSHA)

- 6 Take-aways:
 - Get better understanding of OSH challenges and opportunities by gathering knowledge and data
 - Reduce or eliminate information asymmetries and power imbalances between digital labour platforms and digital platform workers
 - Increase awareness about OSH risk prevention and management and foster respect for fundamental OSH principles
 - Increase transparency in order to facilitate the work of OSH actors (government, workers and workers organisations)
 - Strengthen monitoring and enforcement of OSH regulations
 - Inform and involve platform workers and their representative organisations in OSH risk prevention and management