

This is the peer reviewed version of the following article:

High-skilled platform jobs in Europe: Trends, quality of work and emerging challenges / Pais, I.; Borghi, P.; Murgia, A.. - In: SOCIOLOGIA DEL LAVORO. - ISSN 0392-5048. - 160:160(2021), pp. 203-223. [10.3280/SL2021-160010]

*Terms of use:*

The terms and conditions for the reuse of this version of the manuscript are specified in the publishing policy. For all terms of use and more information see the publisher's website.

06/05/2026 14:45

(Article begins on next page)

# **High-skilled platform jobs in Europe: Trends, quality of work and emerging challenges**

*Ivana Pais*, Department of Sociology, Catholic University of the Sacred Heart, [ivana.pais@unicatt.it](mailto:ivana.pais@unicatt.it)

*Paolo Borghi*, Department of Social and Political Sciences, University of Milan, [paolo.borghi@unimi.it](mailto:paolo.borghi@unimi.it)

*Annalisa Murgia*, Department of Social and Political Sciences, University of Milan, [annalisa.murgia@unimi.it](mailto:annalisa.murgia@unimi.it)

The final (edited, revised and typeset) version of this paper will be published in *Sociologia del lavoro*, vol. 160, by Franco Angeli. All rights reserved. © Franco Angeli, 2021.

## **1. High-skilled jobs in the platform economy**

In recent years, several scholars have been engaged in classifying the growing variety of digital labour platforms (DLPs). Among the various classifications, only a few have explicitly taken into account the skill levels required by DLPs.

The first classification, proposed by De Groen and colleagues (2016), distinguished between high-skilled and low-to-medium-skilled work. The authors discriminate between providers of virtual/global services, performed at distance, and physical/local services, which are required to be performed locally. The second classification, developed by Eurofound (2018), classifies platform jobs into three main groups: high-skilled; low/medium-skilled; and low-skilled, showing the stratification of skills in the digital labour market.

More recently, a third typology (Mexi, 2019) has been developed, by using the same classification criteria proposed by De Groen and colleagues (2016). In this case, however, the work performed online is classified in more detail into three further sub-groups: microtasking, macrotasking, and contest-based digiwork. This has the advantage of distinguishing the two main types of DLPs in which high-skilled jobs are performed: *macrotasking digiwork*, where DLPs (like Upwork and Freelancer) distribute macrotasks as data analytics and mobile app programming; and *contest-based creative digiwork*, where DLPs (like 99designs, Jovoto or InnoCentive) distribute a creative task, such as designing a logo, to a specialised group of workers who participate in a contest. This article focuses on both types of platform work.

By referring to these classifications, it is worth remembering that these are analytical distinctions that often correspond to hybrid empirical forms, in which it is difficult to distinguish between online and offline work, and in which high-skilled workers perform unskilled tasks while workers without formal qualifications carry out activities traditionally undertaken by professionals.

## 2. Attempts to measure high-skilled platform work

Despite the growing volume of research investigating the heterogeneity of platform workers, at both global and European levels, drawing a clear picture remains difficult (Pais, 2019; Elmer *et al.*, 2019). Without any claim of being exhaustive, a selection of the existing data is presented below, with the aim of shedding light on the specific category of high-skilled platform jobs in Europe.

According to Fabo and colleagues (2017), 16% of the platforms operating in Europe involve high-skilled workers, and another 6% involve workers with medium-high skills. Therefore, despite the large majority of DLPs offering tasks for low-to-medium-skilled workers, around one quarter of DLPs operating in Europe involve a relevant proportion of medium-high-skilled workers.

Another source of information is the Online Labour Index (OLI)<sup>1</sup> (Kässi and Lehdonvirta, 2018), which provides an updated picture of the main occupations in the five largest English-language online platforms worldwide, which are actually predominantly high-skilled tasks. OLI shows that about one third of the offers are in software and development technology (33.9%), more than a quarter in creative and multimedia occupations (27.5%), 11.9% are tasks related to writing and translation, and 8.5% concern professional services.

Further interesting information comes from the Colleem survey (Pesole *et al.*, 2018; Brancati Urzi *et al.*, 2020). Although data does not show clear trends towards country specialisations in relation to the services provided through DLPs, some differences across countries emerge. At one extreme, Croatia and Romania are shown to be the countries with the highest provision of non-professional services, while France and the Netherlands stand out for a high rate of services, such as software development, professional consulting and teaching services, that require high professional skills. Finally, this survey shows that platform workers are better educated than the average population, suggesting they might be overqualified with respect to the task carried out. Although this article focuses on high-skilled jobs – and not high-skilled workers – it is in any case relevant to underline how platform work is reinforcing the already present risks of deskilling.

---

<sup>1</sup> OLI: <https://ilabour.oii.ox.ac.uk/online-labour-index/> (Last consultation: January 2020).

### **3. The quality of work: Putting platform work in the picture**

#### *3.1 The EU debate on the quality of work*

The vast literature on the quality of work presents heterogeneous approaches aimed at defining what “quality” actually means and how it can be measured. The early debate, started in the late 1960s, was strictly connected with a discussion on the quality of life indicators (Burchell *et al.*, 2014). In this frame, the neo-Marxist and the liberal perspectives strongly differed in relation to general theories on social dynamics and on what the well-being of employees was, but they both converged on crucial determinants of well-being, such as «the scope for initiatives in carrying out the job, the variety of work, the opportunities for learning, and the ability to participate in decision-making» (Gallie, 2003, p.62).

Over the decades, the debate on the quality of work has made several attempts to define what a “good job” is. In doing so, relevant dimensions influencing the quality of work, both physical and cognitive, have been identified. Significant attention has also been devoted to workers’ perceptions in order to measure their job satisfaction. Nevertheless, a purely subjective approach has been questioned because job characteristics could be evaluated differently according to workers’ preferences. Thus, over time, objective and subjective dimensions have been combined.

In recent years, several attempts to set relevant dimensions that can describe job quality have been promoted. According to Burchell and colleagues (2014), the seven indices of job quality developed by Eurofound (2012, 2017) can be considered the most relevant attempt to obtain a reliable conceptual framework to measure “job quality” in Europe (see Tab. 1). The aim of the seven indices is «to capture how workers perform their work and under what conditions» (Eurofound, 2017, p.36). These indices refer to observable job features, which – according to epidemiological studies – have a direct and causal effect on workers’ health and well-being. Below is a synthetic table of the seven indices and related indicators:

Tab. 1 Indices and indicators of job quality (Eurofound, 2012; 2017)

<i>Physical environment</i> Posture-related (ergonomic) Ambient (vibration, noise, temperature) Biological and chemical	<i>Social environment</i> Adverse social behaviour Social support Management quality
<i>Work intensity</i> Quantitative demands Pace determinants and interdependency Emotional demands	<i>Skills and discretion</i> Cognitive dimension Decision latitude Organisational participation Training
<i>Working time quality</i> Duration Atypical working time Working time arrangements Flexibility	<i>Prospects</i> Employment status Career prospects Job security Downsizing
<i>Earnings</i>	

The limit of the indices proposed by Eurofound is that they exclusively concern the work activity. Since the 1980s, a series of theoretical and empirical contributions have broadened the scope of studies on the quality of work, paying more attention to the multidimensionality of the quality of work and to the quality of the relationship between work and life. The two growing areas of interest have then been embedded in the so-called *quality of working life* approach (Gallie, 2012; Gosetti, 2015).

To be able to fully understand the overlapping of work and life, three additional significant dimensions – connected to the quality of work-life relationship – have been added to the approach of the quality of work (Gosetti, 2015). The first is the work-life balance, conceived as the compatibility between work and life choices, which affects especially vulnerable groups. The second is social protection, which is the possibility to plan a working life that relies on continuity and sustainability over time, included periods of unemployment due to various reasons (health, care duties, etc.). The third one is social participation, in other words the opportunity to take an active part in social life through involvement in collective groups and organisations.

In the next section, after highlighting how the analysis of platform work can contribute to the conceptual framework aimed at understanding the quality of work in contemporary society, we combine the seven indices developed by Eurofound with the three relevant dimensions identified by Gosetti (2015) to explore the connection between work and life. We also include an additional dimension, which has been overlooked in the debate on working conditions, but which is crucial when considering increasingly isolated and individualised workers: collective representation. In doing so, we discuss the relevance of the selected dimensions for high-skilled platform jobs in comparison with both other platform jobs and offline jobs performed by self-employed workers.<sup>2</sup>

### *3.2 The disruptive rise of platform work calls for a renewed toolbox for the evaluation of work*

Platform work is quite a recent phenomenon that emphasises the already existing trends, on one hand, toward disintermediation and re-intermediation of work, and on the other, toward work deregulation in neo-liberal global economies. The rise of platform work has been fostered by multiple factors, such as a legal vacuum that allowed new forms of work intermediation at local and transnational level without any kind of regulation, a disruptive reorganisation of work strongly supported by digital technologies, and a vigorous recourse to self-employment (both genuine and bogus) with a significant impact on employment relations. In this section, we briefly illustrate these factors in order to underline the importance of renewing the toolbox for assessing the quality of work.

First, as far as the legal vacuum is concerned, Wouters (2018) shows how ILO's Convention on private employment services (PREA) is often restrictively applied, according to national laws, only to agencies offering job opportunities to potential employees (excluding the self-employed), but it could also be applied to DLPs. Indeed, their claim to be simply neutral facilitators of two-side marketplaces is in contrast with the fact that, «considering one of the primary ways in which a platform makes revenue, a connection can be made between DLPs and pre-digital PREAs» (Wouters, 2018, p.4) in relation to the service fees they charge to clients who pay workers. In addition, platforms «can provide either mediation services between worker and “employer”, (...) so as to engage a subordinated or self-employed worker, or between a worker and consumer» (Wouters, 2018, p.6). The legal vacuum that results from a restricted application of ILO's Convention at national level allows DLPs to outsource risks and duties to workers instead of taking care of them.

---

<sup>2</sup> The analysis was partially conducted within the SHARE project, which has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme (Grant agreement No. 715950)

Second, DLPs are conceived to manage on-demand work at global scale for services provided online, at local level for those provided offline. The spread of on-demand work contributes to increasing trends toward casualization and commodification of work (Bergvall-Kåreborn and Howcroft, 2014; Wood *et al.*, 2019) since a transnational institutional regulation does not exist. Platform work, therefore, despite offering flexible job opportunities and a viable alternative to economic exclusion (Wood *et al.*, 2019), fosters competition between workers favouring price dumping when workers of different countries compete for the same tasks, as well as price dumping and free work in order improve rating and visibility (Bastrakova and Kharchenko, 2018; Aleksynska *et al.*, 2019).

Third, the juridical vacuum and a disruptive re-organisation of work go hand-in-hand with the rise of specific employment relations connoted by an extremely unbalanced power relation between platforms and platform workers, the former concentrating all the power, the latter only able to accept the conditions imposed or refuse to work through the platform. Relying on a formally self-employed workforce, DLPs deny workers the ability to enjoy freedom of association and collective bargaining rights (De Stefano and Aloisi, 2018). In this way, DLPs prevent the more effective role of trade unions, which are also limited in their actions by the fact that platforms through which work is performed online manage workers spread across different countries, whereas the action of trade unions is primarily conceived within a national horizon.

The combination of these critical factors can significantly impact workers' livelihoods. Indeed, platform workers, highly commodified and fragmented, suffer from a lack of rights and representation that contributes to increasing the uncertainties that already characterise contemporary work. Consequently, even when platform work, such as in Europe, is mainly a side-job (Pesole *et al.*, 2018), it complicates the achievement of stable earnings and careers with consequences on individual and family life plans. Studies on platform work can thus contribute to highlighting the need for a renovated toolbox for the evaluation of the quality of work in order to tackle the emerging challenges fostered by the growth of non-standard and self-employed work, in general, and platform work, in particular.

### *3.3 The quality of work in the platform economy*

After having discussed high-skilled platform work from a quantitative point of view and having considered the extensive debate on the quality of working life, we shift our attention to the quality of working conditions experienced by platform workers performing high-skilled jobs. However, we are aware that the boundaries between low- and high-skilled are in some cases blurred, as the same people can perform both low- and high-skilled jobs at the same time. Moreover, even the distinction between online and offline is only useful for analytical purposes, since – as described in the initial sections – the number of people working both online and offline continues to grow.

As anticipated, the seven dimensions of job quality identified by Eurofound (Eurofound, 2012, 2017) are discussed and implemented with four additional dimensions. Three dimensions refer to the relation between work and life (Gosetti, 2015). The fourth additional dimension has been drawn from the analysis of the current debate on platform work and relates to the presence (or more often the non -presence) of forms of collective representation. Adopting this approach, we highlight the specificities of qualified platform work with respect to both other platform work and offline freelance work according to extant literature on the topic. In this way, we want to realise a twofold purpose. First, we make a contribution to the debate on the relevant dimensions of the quality of working life considering specific jobs – done through platforms – that are performed mainly by self-employed workers, and not by employees, who are the traditional reference point in the literature on job quality. Second, we aim to highlight commonalities and differences, continuity and breaking points with other platform jobs (requiring medium and low skills) and similar high-skilled jobs performed without the intermediation of DLPs.

*Tab. 2 – Indices of quality of work in the platform economy*

---

Physical environment  
Work intensity  
Working time quality  
Earnings  
Social environment  
Skills and discretion  
Prospects  
Work-life balance  
Social protection  
Social participation  
Collective representation

---

*Physical environment:* This dimension assesses physical risks in the workplace. Compared to other forms of platform labour, high-skilled services are mainly provided remotely, through online labour markets, and they do not require proximity between workers and their clients (Fabo *et al.*, 2017). The available research does not allow for estimations of the spread of work carried out from home, although it can be assumed that it is the prevalent form, with its associated risks in terms of social isolation. On the other hand, it has favoured the spread of two phenomena that do not just concern platform workers but are certainly of interest them: coworking (Spinuzzi, 2012) and digital nomadism (Reichenberger, 2018). Compared to freelance workers, video terminal work is more common in platform work, with the associated risks related to posture and visual disturbances. Pesole and colleagues (2018) do not detect differences between high and low-skilled platform workers based on the perception of safety in the work environment. Both categories report around 70% satisfaction, despite the fact that «both the platforms and the platforms' clients tend to discharge themselves of any responsibility with respect to the conditions of work and employment of the independent contractors» (Pesole *et al.*, 2018, p.8).

*Work intensity:* This dimension measures the level of work demands in the job: for instance, working at high speed and under time pressure, and experiencing emotional demands. This aspect is largely linked to the specificities of the organisational model of the platforms which, on the one hand, presents blurred boundaries between work and non-work (Arcidiacono *et al.*, 2019) and, on the other, enables new forms of control while reproducing a rhetoric of individual responsibility (Miele and Tirabeni, 2020). Regarding this dimension, the working conditions for high-skilled jobs are generally better than those for other platform workers. Even in high-skilled jobs, the phenomenon that characterises all platform work is well-known: the possibility of unbundling tasks into small packages. However, when these require very specialised skills there is an increase of productivity and wages for specialised workers (Gomez-Herrera *et al.*, 2017). Moreover, the vast majority of platform workers performing high-skilled jobs tend to have longer engagements and often require a significant amount of communication with the client (Kalleberg and Dunn, 2016; Sutherland *et al.*, 2019). Compared to freelancers who work off-platform, the presence of reputational algorithms determines a stronger pressure both in terms of timing and in managing customer relationships (Schörpf, Flecker and Schönauer, 2017).

*Working time quality:* This dimension measures the incidence of long working hours, scope to take a break, atypical working time, working time arrangements and flexibility. Pesole and colleagues (2018) show that platform workers are presented with a certain freedom in their decisions over working hours, regardless of the level of qualification. This is a distinctive element of platform work compared to offline work. On the other hand, respondents who predominantly provide professional services face stressful situations more frequently, while «non-professional platform work is associated with more routine tasks and less learning opportunities, but also less stressful situations» (ibid, p.47). This trend towards acceleration of working times is highlighted in general by the literature on professional markets (Bellini and Maestripieri, 2018), and the evidence of the first Colleem survey (Pesole *et al.*, 2018) shows that the level of stress and routine increases with the intensity of platform work.

*Social environment:* This dimension measures the extent to which workers experience support social relationships, as well as adverse social behaviour. The main problem for platform workers is the former. These are people who work remotely and, differently from tele- or smart-workers, with few organisational references. Petriglieri and colleagues' (2019, p.152) study argues that «lacking the anchors and buffers that an organization provides renders work identities precarious and personalized». Platform workers also often use the aforementioned coworking spaces or meetups and workshops as a way of socialising and networking with others (Sutherland *et al.*, 2019), even if the competitive dimension always seems to prevail over the collaborative one. In comparison to other platform workers, those who perform high-skilled jobs have more articulate relationships with clients, having the opportunity to dispel their doubts and lack of trust. At the same time, they can quite frequently experience clients' misgivings about their competence or integrity (D'Cruz and Noronha, 2016). Due to the difficulty of meeting in person, digital spaces can become particularly relevant for building trust and solidarity (Laplante and Silberman, 2016; Lee and Staples, 2018) and can turn into spaces where innovative forms of collective action can be experimented with (Irani and Silberman, 2013; Silberman and Irani, 2015).

*Skills and discretion:* This dimension measures learning and training opportunities in the job. Platform workers performing high-skilled jobs declare a high degree of autonomy. Despite the rhetoric that disintermediation has contributed to underestimating the role played by DLPs, recent research has shown that, for example, Upwork regulates job offers, rejecting the profiles of workers with skills already available on the platform. Furthermore, it activates lock-in mechanisms to keep the surnames of professionals on the platform obscured and does not allow profiles to link to sites on personal or other platforms (Sutherland *et al.*, 2019). In addition, this DLP requires workers to sign a non-circumvention clause that prohibits them from working with any client who identified the worker through the Upwork site for 24 months (Kalleberg and Dunn, 2016). A particularly delicate issue concerns regulated professions, with a professional register, a requirement that is often not verified by the platforms, with a displacement effect of expert knowledge.

*Prospects:* This dimension combines several indicators, including prospects for career advancement and the likelihood of losing one's job. The possibilities of working and improving one's position are linked to the organisational system of the platform. First, to the international competition enabled by the platform itself. If offshoring in the 1970s and 1980s mostly affected low-skilled blue-collar workers, in the current platform society, people in the Global South can also perform high-skilled jobs at a much lower cost than workers in the Global North (Beerepoot and Lambregts, 2015). The direct visibility of competitors is what differentiates the online job marketplace from the earlier examples of global labour markets. Research has shown, however, that the "death of distance" hypothesis in online markets was overoptimistic (Gomez-Herrera *et al.*, 2017). Focusing on the CoContest platform, Maselli and Fabo (2015) discussed how, within skilled jobs, the pay gap between high- and medium-income countries can give the latter an advantage. Furthermore, the reputational system strongly influences job opportunities and future employment prospects, despite the proven ineffectiveness of these tools (Origgi and Pais, 2018). As for the likelihood of losing one's job, all platform works are characterised by the risk of account termination or deactivation, without the right to an explanation from the platform (Forde *et al.*, 2017).

*Earnings:* This dimension measures the monthly income of workers. Platform workers performing high-skilled jobs obviously receive higher compensation than other online jobs (Florisson and Mandl, 2018; Pesole *et al.*, 2018), but lower than their offline counterparts (Kalleberg and Dunn, 2016). In addition, as for other types of platform work, there is a strong Matthew Effect, with few profiles that manage to reach important numbers and many that earn little (Fabo *et al.*, 2017). Moreover, platform workers spend a significant amount of time, which is unpaid, searching for tasks or projects. As with online contests, workers performing this type of work must prove their skills by carrying out part or all of a task before knowing whether they will be selected as winners and therefore get paid (Eurofound, 2018). For this reason, earnings are unpredictable, and can hardly be the main source of income. The integration between multiple jobs, as already mentioned, is a typical trait of all platform work.

*Work-life balance:* regarding the compatibility of work with other life realms, in principle, platform work provides workers with a high degree of flexibility in terms of working time, place and tasks selected, thus favouring a positive work-life balance, especially for those who have to work at home for health or care reasons (Forde *et al.*, 2017; Berg *et al.*, 2018). Nevertheless, according to the extant literature, platform work shares similar characteristics with casual work, as well as with extreme forms of non-standard work (Cherry and Aloisi, 2016; De Stefano, 2016), therefore raising similar issues in relation to work-life balance. A recent study on online gig work at a global level (Graham *et al.*, 2017) reported that work-life balance could be hard to achieve for a significant portion of low-skilled platform workers who experience overwork. Considering that platform work, and especially high-skilled platform jobs, is often a side activity (Pesole *et al.*, 2018; Brancati Urzi *et al.*, 2020), its impact on work-life balance is mainly connected to how individuals can combine different types of work (online and offline) in order to obtain sufficient income. The more platform work is essential for the worker's overall income, the more it could have an impact on their work-life balance.

*Social Protection:* non-standard workers have in general more limited access to schemes and reception of insurance-based benefits in comparison to employees (De Stefano, 2016; ILO, 2016; Matsaganis *et al.*, 2016). This condition is further exacerbated for the self-employed who, according to the type of working arrangement and national social protection scheme (Bennaars, 2019; Murgia *et al.*, 2020), receive different treatment even within the same country (Spasova *et al.*, 2017; MISSOC, 2019). Moreover, recent ILO research (Berg *et al.*, 2018) showed that, among unskilled platform workers, less than 10% regularly paid social security contributions. A similar trend is also presumed to be observed in skilled work. Thus, the growth of platform work is reproducing gaps in the coverage of social protections for the self-employed, which have already been recognised as a growing problem across employment more generally (Forde *et al.*, 2017). This implies limited possibilities for platform workers to access protection measures during periods of unemployment, when they exist for the self-employed. Nevertheless, since platform work is often a side activity in Europe (Brancati Urzì *et al.*, 2020), social protection, as well as other rights, needs to be considered by combining the multiple working positions of individuals in the labour markets.

*Social participation:* being one of the building blocks of modern democracies (Van Deth, 1997; Zorell and van Deth, 2020), social participation is a relevant element that contributes to individual and social growth and affects the quality of work and life (Gosetti, 2015). Work is therefore conceived as an opportunity to satisfy the human need to be part of a wider social sphere, which includes local or national projects on common goods (Gosetti, 2014). Social participation refers, more generally, to a need for meaning that links work to society at large, by embedding work in a shared social dimension. The specific working conditions of platform workers performing high-skilled jobs, working predominantly remotely, reduces the possibilities for direct interactions with colleagues, limiting therefore the opportunities for social participation. Together with this, finding a meaning of work that goes beyond the thresholds of commodification seems more complicated due to the specific organisation of platform work in comparison to offline freelance work (remotely regulated interactions, fragmentation of tasks in some cases, on-demand requests, and limited or no sharing of the ultimate purpose of the tasks to be performed). Indeed, in markets governed by unsustainable competition and cost reduction logics, an imagined common good is difficult to conceive. However, an interesting debate is currently ongoing based on the idea of “platform cooperativism” (Scholz, 2014, 2016), which aims to find alternative ways to manage DLPs and guarantee the protection and engagement of both workers and consumers. Although still limited in the European context, some cases are beginning to be reported (Martinelli *et al.*, 2019) about worker-owned cooperatives and consumption and multi-stakeholder cooperatives experimenting with forms of platform cooperativism.

*Collective representation:* this dimension focuses on the presence of trade unions, work councils or other collective actors focused on platform work; activities of lobbying or bargaining in favour of platform workers; and specific initiatives aimed at mobilising and organising this specific category of workers. Regarding the types of collective actors that are trying to approach platform workers performing high-skilled jobs, as for other categories of freelancers working offline, we can find a range of different organisations, which includes informal groups of workers (Sutherland *et al.*, 2019), traditional trade unions (Lenaerts *et al.*, 2018), and new associations and cooperatives (Johnston and Land-Kazlauskas, 2018). Being mainly self-employed, in several European countries platform workers are not included in collective bargaining agreements (Eurofound, 2018; Fulton, 2018). An exception is represented by the so-called “Nordic model” (Söderqvist, 2017), where part of the extant DLPs consider workers to be employees. Apart from sporadic exceptions, however, platform workers suffer from a relevant lack of representation (Lenaerts, *et al.*, 2018; Vandaele, 2018). Indeed, focusing on organising activities, the only groups of workers who seem to mobilise – and who are more often discussed in the academic debate – are mainly the low-skilled (Aloisi, 2019), such as drivers of private hire vehicles and food delivery riders (Brugière, 2019; Leonardi *et al.*, 2019; Tassinari and Maccarrone, 2019). With the exception of the abovementioned Nordic Model and specific initiatives such as Fair Crowd Work <sup>3</sup> that also involve high-skilled workers, instead they tend to mobilise less to improve their working conditions.

## Discussions and conclusion

In this article, a number of significant issues affecting high-skilled platform jobs in general, and in Europe in particular, have been addressed.

First, an overview of the most recent attempts to classify platform workers was presented. The focus on high-skilled jobs allowed us to show the improvements in mapping professionals that are progressively involved in DLPs. In fact, both traditional professions (consulting, legal, teaching, etc.) and new professions (IT, creative, multimedia, etc.) are playing a significant role in the platform economy. Working through DLPs can be an occasional activity, a way of supplementing a main income, or the main professional activity. However, the studies discussed in this chapter show that, in the European context, DLPs are more often conceived as opportunities for professional survival than as a context for professional development.

Second, trends and numbers gathered through different surveys were presented. Despite the lack of information from public statistics, the variety of data sources and the different sampling strategies, the available studies show that high-skilled platform workers in Europe are playing a relevant role in remote work.

Third, the quality of working conditions of high-skilled platform jobs, compared to other platform jobs and those performed offline by self-employed (Tab. 3), highlighted several criticisms.

---

<sup>3</sup> Promoted by IG-Metal, Unionen (Sweden), OGB (Austria) and the Austrian Chamber of Work, the project aims to support transparency among DLPs, promoting the evaluation of DLPs among platform workers: <http://faircrowd.work/>

Tab. 3 – Quality of high-skilled platform jobs compared to both other platform jobs and jobs performed offline by self-employed

	<i>Comparison with other platform jobs</i>	<i>Comparison with offline jobs performed by self-employed</i>
Physical environment	Remote work is more widespread - risks associated with social isolation	Video terminal work is more widespread - risks related to posture and visual disturbances
Work intensity	Advantage: longer-lasting projects	Pressure dictated by the reputational system
Working time quality	More stress	Advantage: greater freedom in the choice of working hours
Social environment	Fewer opportunities for peer face-to-face interaction	Similar for building intentional organisations (coworking); the online community is more relevant
Skills and discretion	Advantage: greater autonomy	Regulatory role of the platform (e.g. lock-in)
Prospects	Greater international competition	Greater international competition - direct visibility; impact of the reputational system; risk of account deactivation
Earnings	Advantage: fees higher than other platform works; unpredictability of earnings (contest)	Greater fragmentation, slash workers
Work-life balance	Better when performed as a side activity and has a low relevance in the earning strategy	Similar, when based on structured engagements with frequent interaction with clients
Social protection	Similar to low-skilled (low)	Lower, because social contribution is particularly ignored by DLPs
Social participation	Lower opportunities due to work isolation	Similar in relation to the difficult planning of working and non-working periods
Collective representation	Lower than specific groups of low-skilled workers (riders, drivers)	Lower because platform work is just partially tackled by existing organisations

Source: Our elaboration based on EWCS dimensions (Eurofound, 2012, 2017) and Gosetti (2012a)

Compared to other platform jobs, high-skilled tasks present the following critical points: workers mainly perform their tasks online and are thus more exposed to risks related to posture and visual disturbances as well as to social isolation and stress. This also reduces the chances of collective representation. However, traditional actors are experimenting, in some limited cases, with innovative ways of involving workers and platforms and reporting social risks.

Moreover, all work mediated by DLPs is governed by the logic of a global competition, which can lead to accepting low compensation or even working for free, as in the case of online contests in the creative sector. When the job is organised through contests, the impossibility of providing for compensation is in fact frequently reported. On the other hand, high-skilled platform jobs often involve longer-lasting projects that can be organised with greater autonomy.

Compared to other self-employed, high-skilled platform jobs present the following critical points: video terminal work is more widespread; and control is exercised through reputational systems, which have numerous limits in terms of reliability and is strengthened through lock-in mechanisms that slow down professional growth paths. Moreover, the fees are more fragmented, and this imposes the need to carry out multiple activities, also unrelated to the area of specialization. This makes the construction of a professional identity and forms of collective representation of interests even more difficult. On the other hand, platform jobs usually imply greater freedom in the choice of working hours. Platform work is often chosen by highly skilled workers because it makes it easier to match job supply and demand, so in some cases it is perceived as an opportunity to compensate for a lack of social capital. This is an aspect absent from traditional studies on the quality of work, because they refer to the actual job and pay less attention to the transitions between one job and another. However, this is a central factor, because this also frequently implies the acceptance of worse working conditions, in the face of a greater opportunity of finding work.

The dimensions examined here allow us to assess the vulnerability of risks at work (work accidents, unemployment), which add up to more general social risks (old age, illness, having children). Social protection in European countries is strictly linked to employment status. As of the end of 2019, none of the EU Member States had clear regulations specifying the employment status of platform workers. Terms and conditions of the platform often determine their employment status and – in formal terms – these workers are almost invariably categorised as self-employed or independent contractors (Eurofound, 2019). This categorization has often been criticized with reference to low-skilled jobs (De Stefano and Aloisi, 2018), while it is commonly accepted for high-skilled jobs because being a freelancer is already socially codified and accepted (see the celebrative literature of the creative class: Florida, 2005; Friebe and Lobo, 2006). Moreover, platforms can change their features over time, affecting vulnerability factors with limited possibility for workers to negotiate the changes (Allaire *et al.*, 2019).

In addition to the legal and statutory coverage from social risks, the issue of effective coverage must also be considered: the majority of workers use digital platforms only marginally or sporadically – often they do not declare their working activities and in any case, they are under national thresholds regarding tax and social protection contributions (Eurofound, 2019). The fact that they carry out other activities can be a protection factor, if they get social insurance through other sources, but often the fragmentation of such activities prevents this and even their main job is based on a non-standard form of employment. Forde and colleagues (2017) show that in the case of low -skilled workers the greater the level of financial dependence on platform work, the lower the access to social protection; it can be assumed that the same also applies to high-skilled workers.

Access to social security has become a policy priority at EU level, through the European Pillar of Social Rights (Bogliacino *et al.*, 2019), and platform work – although still numerically not very significant – can represent a particularly interesting area in which to test the solutions proposed for self-employment.

To conclude, the available evidence on platform workers performing high-skilled jobs in Europe, in terms of trends, quality of working conditions, and lack of representation, shows that a great effort is necessary to address the fragilities that characterise this group of workers. An in-depth study of the needs and requirements of the platform workers is needed, paying attention to their internal differences and starting from the level of qualification. At the moment, platform work is configured as a lower quality job, especially in terms of social protection, chosen by weaker workers in the traditional labour market. Precisely for this reason, it is important to recognize and protect platform workers and, at the same time, analyse the transitions from the digital to the online labour market and back. In this sense, the dilemma that characterised the first studies on temporary agency work, intended as an alternative between trap and trampoline, is proposed again, even for the most qualified workers. This also leads to challenge the dimensions of the quality of work, which have hitherto been built on individual jobs, while a quality of working life is increasingly intended as the synthesis of several jobs, in different contexts, online and offline. Platform work is a frontier on which capital tests new forms of work organisation. This therefore calls for a general renewal of the toolbox to assess the quality of working life that considers trends toward work fragmentation, multiple and nonlinear careers, unstable labour markets and an unbalanced power relationship between capital and workers.

## References

- Aleksynska M., Bastrakova A., Kharchenko N.N. (2019). Working Conditions on Digital Labour Platforms: Evidence from a Leading Labour Supply Economy. IZA Discussion Papers, No. 12245. Bonn: Institute of Labor Economics (IZA).
- Allaire N., Colin N., Palier B., Tran L. (2019) *Covering risks for platform workers in the digital age*. Paris: SciencePo. Available at: <https://www.sciencespo.fr/public/chaire-numerique/wp-content/uploads/2019/05/covering-risks-plateform-workers-digital-age.pdf>. (accessed: 15/12/2020).
- Aloisi A. (2019) Negotiating the Digital Transformation of Work: Non-Standard Workers' Voice, Collective Rights and Mobilisation Practices in the Platform Economy. (June 12) EUI Working paper MWP 2019/3. Available at: <https://ssrn.com/abstract=3404990> (accessed 15/12/2020). DOI: 10.2139/ssrn.3404990
- Arcidiacono D., Borghi P. and Ciarini A. (2019). Platform Work: From Digital Promises to Labor Challenges, *Partecipazione e conflitto*, 12(3): 611-628. DOI: 10.1285/i20356609v12i3p611
- Bastrakova A. and Kharchenko N. (2018). *Work on digital labour platforms in Ukraine*. Geneva: ILO.
- Beerepoot N. and Lambregts B. (2015). Competition in online job marketplaces: towards a global labour market for outsourcing services?. *Global Networks*, 15(2): 236–255. DOI: 10.1111/glob.12051
- Bellini A. and Maestripieri L. (2018). Professions within, between and beyond. Varieties of professionalism in a globalising world. *Cambio. Rivista sulle Trasformazioni Sociali*, 8(16): 5-14. DOI: 10.13128/cambio-24947
- Bennaars, H. (2019) Social protection for the self-employed: an EU legal perspective. In Conen, W. and Schippers, J. (Eds). *Self-Employment as Precarious Work*. Cheltenham: Edward Elgar Publishing.
- Berg J., Furrer, M., Harmon E., Rani U. and Silberman M. S. (2018). *Digital labour platforms and the future of work Towards decent work in the online world*. Geneva: ILO.

- Bergvall-Kåreborn B. and Howcroft D. (2014). Amazon Mechanical Turk and the commodification of labour. *New technology, work and employment*, 29(3): 213-223. DOI: 10.1111/ntwe.12038.
- Bogliacino F., Codagnone C., Cirillo V. and Guarascio D. (2019). Quantity and quality of work in the platform economy. GLO Discussion Paper, No. 420. Essen: Global Labor Organization (GLO).
- Brancati Urzi C., Pesole A. and Fernandez-Macias E. (2020). *New evidence on platform workers in Europe*. Luxembourg: Publications Office of the European Union.
- Brugière F. (2019) Faire face à la dépendance économique et au contrôle numérique: des résistances aux mobilisations professionnelles des chauffeurs des plateformes, *La nouvelle revue du travail*, (15). Available at: <http://journals.openedition.org/nrt/5653> (accessed 15/12/2020). DOI: 10.4000/nrt.5653
- Burchell B., Sehnbruch K., Piasna A. and Agloni N. (2014). The quality of employment and decent work: Definitions, Methodologies, and ongoing debates, *Cambridge Journal of Economics*, 38(2): 459-477. DOI: 10.1093/cje/bet067
- Cherry M.A. and Aloisi A. (2016). Dependent Contractors in the Gig Economy: A Comparative Approach. *American Univ. L. Rev.*, 66: 635. Saint Louis U. Legal Studies Research Paper No. 2016-15.
- D’Cruz P. and Noronha E. (2016). Positives outweighing negatives: the experiences of Indian crowdsourced workers. *Work Organisation, Labour and Globalisation*, 10(1): 44-63. DOI: 10.13169/workorgalaboglob.10.1.0044
- De Stefano V. (2016) *The rise of the «just-in-time workforce»: On-demand work, crowdwork and labour protection in the «gig-economy»*. Series No.71. Geneva: ILO.
- De Stefano V. and Aloisi A. (2018) *European Legal Framework for ‘Digital Labour Platforms’*. Luxembourg: European Commission.
- Elmer M., Herr B., Klaus D. and Gegenhuber T. (2019). Platform workers centre stage! Taking stock of current debates and approaches for improving the conditions of platform work in Europe. Working Paper Forschungsförderung No.140. Available at: <http://hdl.handle.net/10419/216060> (accessed 15/12/2020)
- Eurofound (2012). *Trends in job quality in Europe: a report based on the fifth European Working Conditions Survey*. Luxembourg: Publication Office of the European Union.
- Eurofound (2017). *Sixth European Working Conditions Survey – Overview report*. Luxembourg: Publication Office of the European Union.
- Eurofound (2018). *Employment and working conditions of selected types of platform work*. Luxembourg: Publications Office of the European Union.
- Eurofound (2019). *Digital age Platform work: Maximising the potential while safeguarding standards?* Luxembourg: Publications Office of the European Union.
- Fabo B., Beblavý M., Kilhoffer Z., and Lenaerts K. (2017). *An overview of European Platforms: Scope and Business Models*. Luxembourg: Publications Office of the European Union.
- Florida, R. (2002). *The rise of the creative class*. (Vol. 9). New York: Basic books.
- Florida, R. (2005) *Cities and the creative class*. New York: Routledge.
- Florisson R. and Mandl I. (2018). *Platform work: Types and implications for work and employment-Literature review Employment and working conditions of selected types of platform work*. Dublin. Available at: [www.eurofound.europa.eu](http://www.eurofound.europa.eu). (accessed 15/12/2020)
- Forde C., Stuart M., Joyce S., Oliver L., Valizade D., Alberti G., Hardy K., Trappmann V., Umney C., Carson C. (2017). *The Social Protection of Workers in the Platform Economy*. Brussels: European Parliament.
- Friebe H. and Lobo S. (2006) *Wir nennen es Arbeit: Die digitale Bohème oder Intelligentes Leben jenseits der Festanstellung*. Munich: Heyne.
- Fulton L. (2018). *Trade unions protecting self-employed workers*. Brussels: ETUC.
- Gallie D. (2003). The quality of working life: is Scandinavia different? *European sociological review*. Oxford University Press, 19(1): 61-79. DOI: 10.1093/esr/19.1.61
- Gallie D. (2012). La qualità del lavoro: una visione d’insieme della ricerca britannica, *Sociologia del lavoro*, 127: 73-91. DOI: 10.3280/SL2012-127006
- Gallino L. (1985). *Informatica e qualità del lavoro*. Torino: Einaudi.
- Gomez-Herrera E., Martens B. and Mueller-Langer F. (2017). Trade, Competition and Welfare in Global Online Labour Markets: A ‘Gig Economy’ Case Study. (No.05). *JRC – Working Paper*.
- Gosetti G. (2012). Dalla qualità del lavoro alla qualità della vita lavorativa: persistenze e innovazioni nel profilo teorico e nelle modalità di analisi. *Sociologia del lavoro*, 127: 17-34. DOI: 10.3280/SL2012-127003
- Gosetti G. (2014). *Lavorare nell’impresa artigiana. Cultura del lavoro e qualità della vita lavorativa: Cultura del lavoro e qualità della vita lavorativa*. Milano: FrancoAngeli.
- Gosetti G. (2015). Lavoro, qualità e sicurezza: la prospettiva degli operatori della prevenzione, *Studi Organizzativi*, (1): 124-153. DOI: 10.3280/SO2015-001006
- Graham M., Hjorth I. and Lehdonvirta V. (2017). Digital labour and development: impacts of global digital labour platforms and the gig economy on worker livelihoods. *Transfer: European Review of Labour and Research*, 23(2), 135-162. DOI: 10.1177/1024258916687250
- De Groen W.P., Maselli I. and Fabo B. (2016). *The Digital Market for Local Services: A one-night stand for workers? An example from the on-demand economy*. Luxembourg: Publications Office of the European Union. DOI: 10.2788/536883

- Huws U., Spencer, N.H. and Coates M. (2019). *The platformisation of work in Europe*. Brussels: FEPS.
- Irani L.C. and Silberman M.S. (2013). Turkopticon: Interrupting worker invisibility in amazon mechanical turk. In *Proceedings of the SIGCHI conference on human factors in computing systems*. ACM, 611–620.
- Jesnes K. (2019). Employment Models of Platform Companies in Norway: A Distinctive Approach? *Nordic Journal of Working Life Studies*, 9(S6). DOI: 10.18291/njwls.v9iS6.114691
- Johnston H. and Land-Kazlauskas C. (2018). *Organizing on-demand: Representation, voice, and collective bargaining in the gig economy* Conditions of Work and Employment Series No. 94, Geneva: ILO.
- Kalleberg A.L. and Dunn M. (2016). Good jobs, bad jobs in the gig economy. *LERA for Libraries* 20, 20(1–2).
- Kässi O. and Lehdonvirta V. (2016). *Online Labour Index: Measuring the online gig economy for policy and research.*, In, *Internet, Politics and Policy*. Munich Personal RePEc Archive – MPRA Paper No. 86627. Available at: <https://mpra.ub.uni-muenchen.de/86627> (accessed 15/12/2020)
- Kässi O. and Lehdonvirta V. (2018). Online labour index: Measuring the online gig economy for policy and research. *Technological Forecasting and Social Change*, 241–248. DOI: 10.1016/j.techfore.2018.07.056
- Laplante R. and Silberman M.S. (2016). Building Trust in Crowd Worker Forums : Worker Ownership, Governance, and Work Outcomes. In *Weaving Relations of Trust in Crowd Work: Transparency and Reputation Across Platforms*. Hannover, Germany.
- Lee H. and Staples R. (2018). Digitale Solidarität unter Arbeitnehmer\* innen. *Industrielle Beziehungen*, 25(4): 495–517. DOI: 10.3224/indbez.v25i4.06
- Lenaerts K., Kilhoffer Z. and Akgüç M. (2018). Traditional and new forms of organisation and representation in the platform economy. *Work Organisation, Labour and Globalisation*, 12(2): 60–78. DOI: 10.13169/workorgalaboglob.12.2.0060
- Leonardi D., Murgia A., Briziarelli M., Armano E. (2019). The ambivalence of logistical connectivity: a co-research with Foodora Riders, *Work Organisation, Labour & Globalisation*, 13(1): 155–171. DOI: 10.13169/workorgalaboglob.13.1.0155
- Martinelli F., Bozzoni S., Caroli S., Tamascelli F., Guerini G. (2019). *Platform cooperativism in Italy and in Europe*. 27. Liège: CIRIEC International.
- Maselli I. and Fabo B. (2015). *Digital workers by design? An example from the on-demand economy*. Brussels: Centre for European Policy Studies.
- Matsaganis M., Özdemir E., Ward T., Zvakou A. (2016). *Non-standard employment and access to social security benefits*. Social Situation Monitor Research note 8. Brussels: European Commission.
- Mexi M. (2019). *Social Dialogue and the Governance of the Digital Platform Economy: Understanding Challenges, Shaping Opportunities*. Geneva: ILO.
- Miele F. and Tirabeni L. (2020). Digital technologies and power dynamics in the organization: A conceptual review of remote working and wearable technologies at work. *Sociology Compass*, 14(6): e12795. DOI: 10.1111/soc4.12795
- MISSOC (2019) *Self-employed, Mutual Information System on Social Protection*. Available at: <https://www.missoc.org/missoc-database/self-employed/> (accessed 10/6/2019)
- Murgia A., Bozzon R., Digennaro P., Mezihorak P., Mondon-Navazo M., Borghi P. (2020). Hybrid Areas of Work Between Employment and Self-Employment: Emerging Challenges and Future Research Directions. *Frontiers in Sociology*, 4: 1-8. DOI: 10.3389/fsoc.2019.00086
- Origg G. and Pais I. (2018). *Digital reputation in the mutual admiration society*, *Studi di sociologia*. Oslo: Nordic Innovation.
- Pais I. (2019). La platform economy: aspetti metodologici e prospettive di ricerca. *Polis*, 33(1): 143-162. DOI: 10.1424/92922
- Pesole A., Urzì Brancati M.C, Fernández-Macías E., Biagi F., González Vázquez I. (2018). *Platform workers in Europe evidence from the COLLEEM survey*. Luxembourg: Publications Office of the European Union.
- Petriglieri G., Ashford S. J. and Wrzesniewski A. (2019). Agony and Ecstasy in the Gig Economy : Cultivating Holding Environments for Precarious and Personalized Work Identities. *Administrative Science Quarterly*, 64(1): 124–170. DOI: 10.1177/0001839218759646
- Reichenberger I. (2018). Digital nomads—a quest for holistic freedom in work and leisure, *Annals of Leisure Research*, 21(3): 364–380. DOI: 10.1080/11745398.2017.1358098
- La Rosa M. a cura di (1983) *Qualità della vita e qualità del lavoro*. Milano: Franco Angeli.
- Røtnes R., Ingerød Steen J., Røed Steen J., Jesnes K., Røtnes R. (2019). *The knowledge-intensive platform economy in the Nordic countries*. Oslo: Nordic Innovation.
- Scholz T. (2014). Platform cooperativism vs. the sharing economy. In Douay N. and Wan A. (eds). *Big data & civic engagement*. Milan-Rome: Planum.
- Scholz T. (2016). *Platform Cooperativism. Challenging the Corporate Sharing Economy*. New York: Rosa Luxembourg Stiftung.

- Schörpf P., Flecker J. and Schönauer A. (2017). On Call for One's Online Reputation-Control and Time in Creative Crowdwork. In Briken, K., Krzywdzinski, M., and Chillias, S. (eds) *The new digital workplace: How new technologies revolutionise work*. London: Palgrave.
- Silberman M.S. and Irani L. (2015). Operating an employer reputation system: lessons from Turkopticon, 2008-2015. *Comparative Labor Law & Policy Journal*, 37: 505. Available at: <https://ssrn.com/abstract=2729498> (accessed 15/12/2020)
- Söderqvist F. (2017). A Nordic approach to regulating intermediary online labour platforms. *Transfer: European Review of Labour and Research*, 23(3): 349–352. DOI: 10.1177/1024258917711375
- Spasova S., Bouget D., Ghailani D. and Vanhercke B. (2017). *Access to social protection for people working on non-standard contracts and as self-employed in Europe*. Brussels: European Commission.
- Spinuzzi C. (2012). Working alone together: Coworking as emergent collaborative activity. *Journal of business and technical communication*, 26(4): 399–441. DOI: 10.1177/1050651912444070
- Sutherland W., Jarrahi M.H., Dunn M. and Nelson S.B. (2019). Work Precarity and Gig Literacies in Online Freelancing. *Work, Employment and Society*, 1–19. DOI: 10.1177/0950017019886511
- Tassinari A. and Maccarrone V. (2019). Riders on the Storm: Workplace Solidarity among Gig Economy Couriers in Italy and the UK. *Work, Employment and Society*, 34(1), 35–54. DOI: 10.1177/0950017019862954
- Van Deth J. W. (1997). *Private groups and public life: Social participation and political involvement in representative democracies*. London: Routledge.
- Vandaele K. (2018) *Will trade unions survive in the platform economy? Emerging patterns of platform workers' collective voice and representation in Europe*. Brussels: ETUI.
- Wood A.J., Graham M., Lehdonvirta V. and Hjorth I. (2019). Networked but commodified: The (dis) embeddedness of digital labour in the gig economy. *Sociology*, 53(5): 931-950. DOI: 10.1177/0038038519828906
- Wouters M. (2018). Directing labour market outcomes: why are digital labour platforms not deemed private employment agencies? Working paper presented on 5 September 2018 at the 22nd ISLSSL Conference in Turin.
- Zorell C. and van Deth J. W. (2020). *Understandings of Democracy: New Norms and Participation in Changing Democracies*. SocArXiv. May 6. DOI: doi:10.31235/osf.io/bmrxf.