



UNIVERSITAT DE
BARCELONA

Final Degree Project

**EVALUATING WHETHER THE GIG
ECONOMY IS TRANSFORMING THE
NATURE OF EMPLOYMENT RELATIONS**

*The industrial relations challenges within the
digital platform economy in the 21st century*

Francesc Almendros Viladerrams

Supervised by Prof. Mercè Mach

Bachelor's Degree in International Business

Year: 2020-2021

ABSTRACT

The rise of the gig economy has the potential to benefit all stakeholders, workers, companies, and the society. For this reason, the field of employment relations attracts the interest of scholars and practitioners by stimulating the debate about the future of labour, job regulations, and the effect of technology and working conditions. Since the last century, the field of the industrial relations has been the major discipline to study the nature of labour relationships through the interaction of its main actors: employees, employers, and the state. This research aims to study the transformation of the nature of these industrial relations, their actors, roles and employment relations within the gig economy through a comprehensive literature review of the existing industrial relations framework. We will analyse the different work perspectives, the quality of job status, forms of collective action unions, and control algorithmic management. Finally, some of the main future challenges that the gig economy rises to the society will be highlighted, and some further research needs concerning the digital platforms governance, the conditions and unions for gig workers and the impact of gig work on employment relations and industrial relations theory.

KEYWORDS: employment relations, gig economy, industrial relations, digital platform, labour standards, collective bargaining action, self-employer, trade unions

RESUM

L'auge de la economia col·laborativa té el potencial de beneficiar a totes les parts interessades de la societat; tant treballadors com empreses. Per aquesta motiu, l'àmbit de les relacions laborals atreu l'interès tant dels professionals com dels acadèmics estimulant el debat sobre el futur del treball, les regulacions laborals i l'efecte de la tecnologia i les condicions de treball. Des del segle passat, el camp de les relacions industrials ha estat la principal disciplina per estudiar la naturalesa de la relació laboral mitjançant la interacció dels seus principals actors: empleats, empresaris i l'Estat. Aquest treball té com a objectiu estudiar la transformació de la naturalesa d'aquestes relacions industrials, els seus actors, els rols i les relacions laborals dins de l'economia col·laborativa a través d'un estudi exhaustiu de la literatura existent sobre el marc de les relacions industrials existents. Així mateix, analitzarem els diferents enfoc de les relacions laborals, la qualitat del contracte del treballador, les formes d'acció col·lectiva i la gestió del control d'algoritmes. Finalment, es posaran en relleu els reptes futurs principals que planteja l'economia col·laborativa com ara la governança de les plataformes digitals, el paper dels sindicats i les condicions de treball per als treballadors i l'impacte de l'economia col·laborativa en les relacions laborals i la teoria de les relacions industrials.

PARAULES CLAU: relacions laborals, economia col·laborativa, relacions industrials, plataforma digital, normes laborals, negociació col·lectiva, autònom, sindicats.

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I. INTRODUCTION

1.1 INTRODUCTION

The rise of the gig economy has reignited the debate about the influence of new technologies in our daily lives, and specifically the gig economy in our workspace as it affects our social and labour relations, our work methodologies and our quality of work life. Nowadays, the gig economy generates \$204B in Gross Volume and is projected to grow up to \$455B by 2023, due to factors such as the evolving societal attitudes around P2P sharing and the increasing digitization rates in developing countries (MasterCard, 2019)

This digital transformation and the increased use of platforms has fuelled the debate on the subject that deserves an in-depth study. Two main approaches can be found; on one side, an optimistic scenario suggests that work on-demand can increase savings, productivity and flexibility, while a pessimistic scenario suggests large job losses, an increase of job insecurity, employee de-skilling and rising inequalities; indeed, many of the "new" work forms are seen as variations on the old forms of daily labour and non-regular employment.

Currently, the gig economy represents one of the most recently widely known labour market trends. The increasing demand for employment flexibility (Lehdonvirta, 2018), as well as labour market efficiency (ILO, 2020), in some cases aiming to increase worker flexibility (De Stefano, 2016). The gig platform-based task is one of the non-standard task types that facilitates through on-demand technology and the digital market. Despite its relatively small scale (Farrell & Grieg, 2016), the gig economy has the potential to quickly change the way work is organized and performed, change the content and quality of work, and reorganize the industry. These differing views have prompted industrial relations scholars to begin to question and study the impact of this emerging collaborative economy.

Therefore, this final degree project aims to evaluate whether the impact of the gig economy is transforming the nature of employment relations in order to identify further challenges to enhance this new digital platform era.

The manuscript is organized into four main sections. The first explores the different attempts that have been made to define the gig economy concept by adding the positive and negative approaches of the gig economy. The second introduces the existing industrial relations frameworks to help to understand the employment relations nature, workplace perspectives and the role of the main actors. The third analyses the transformation of the industrial relations framework identifying the new roles that have been adopting and shaping within the gig economy. Finally, this project summarizes and presents the main challenges that the gig economy is facing for further future research on the topic.

1.2 RESEARCH QUESTIONS, HYPOTHESIS AND OBJECTIVES

The widespread term of the gig economy in the actual society and the continuous focus on media brings up the need to analyse which problematics and challenges is presenting the gig economy related the digital platform era. Specifically, the complexity of the concept in the classical actors and perspective of work in the industrial relations leads to the following research questions (Q): (Q1) Is the gig economy transforming the nature of the employment relationship from the industrial relations framework literature? And (Q2) what are the challenges of the gig economy within employment relations?

From these questions, we infer two hypotheses (H) that will be confirmed or discarded through the analysis performed throughout the Final Project Degree. While H1 tries to answer Q1, H2 is focused on Q2.

H1: the gig economy is transforming the classical employment relations by emerging new perspectives and actors' roles within the industrial relations framework

H2: the gig economy is presenting new challenges for the industrial relations research

In order to check these hypotheses, the objectives of the project are the following:

- To understand the concept of the gig economy, its framework, and its different parts and structures in the digital platform industry.
- To define the optimistic and critical views of the emerging gig economy.
- To identify the issues and challenges within the gig economy.
- To explain the industrial relations framework, the role of the actors of the employment relationships, and the classical perspective literature of the workspaces.
- To study the nature of the role of industrial relations and analyse their function and transformation within the gig economy.
- To identify the main challenges within the gig economy.
- To provide potential solutions to the challenges of the gig economy using the industrial relations literature.
- To impulse further research questions and investigation within the gig economy through the industrial relations framework.

3.1 MATERIAL AND METHODOLOGY

The methodology used in this paperwork is the Literature Narrative Review. The narrative review is a “traditional” way of reviewing existing literature, which tends to qualitatively explain prior knowledge (Sylvester et al., 2013). In short, narrative reviews attempt to summarize or synthesize what is written about a specific topic, in this case about the industrial relations framework and gig economy literature. Narrative review does not seek the generalization or accumulation of knowledge from the reviews (Davis, 2000; Green et al., 2006). Rather, the review team often takes on the task of accumulating and synthesizing literature to test the value of a particular point of view (Baumeister and Leary, 1997). In this case, the point of view is taking as reference the classical industrial relations theory to analyse the new phenome of the gig economy. Therefore, reviewers may selectively ignore or limit their attention to certain studies to express their views. In this piecemeal approach, the selection of information from the main article is subjective (Green et al., 2006).

In this case, the literature used is from the following top academic-industrial and employment relations journals: *British Journal of Industrial Relations*; *Capital and Class*; *Economic and Industrial Democracy*; *Employee Relations*; *European Journal of Industrial Relations*; *Human Relations*; *Human Resource Management Journal*; *Industrial and Labour Relations Review*; *Industrial Relations: A Journal of Economy and Society*; *Industrial Relations Journal*; *Journal of Industrial Relations*; *New Technology, Work and Employment*; *Personnel Review*; *Politics and Society*; *Socio-Economic Review*; *Transfer: European Review of Labour and Research*; *Work, Employment and Society*; *Work and Occupations*

In this narrative review, I have used thematic analysis, conceptual frameworks, and content analysis. Firstly, this paperwork will introduce the topic of the gig economy and the contemporary conceptions about it. Secondly, we will study the theoretical classical industrial relations framework to analyse the different actors, their roles, and their perspective of works to analyse the current gig economy system. Thirdly, we will deduct, from the different roles and problematics, the main challenges that the gig economy is facing, especially, within a legal and a social framework, paying special attention to the study of the status of the “self-employed gig worker” and its collective bargaining action.

II. THE GIG ECONOMY: THEORETICAL FRAMEWORK

2.1 WHAT IS THE GIG ECONOMY?

One of the most fundamental challenges is the lack of a clear, precise, and universal definition of what tasks to include when measuring and defining the gig economy. What makes the definition of the gig economy difficult is the rapidly changing nature of technology. As businesses and consumers adopt new technologies to accomplish tasks and communicate, meaning that what is relevant one day may become obsolete the following one. Ideally, the definition of a gig economy should enable the transformation of the nature of its meaning over time. However, different scholars, researchers, and institutions provided diverse denotations for the term gig economy.

The first "gig economy" concept was coined during the harshest times of the Great Recession to describe the increasing number of people, including those who were well-educated, who had multiple part-time jobs, were employed by temporary agencies or freelancers (Brown, 2009). From that moment onwards, the term has appeared in the media alongside other concepts such as 'social or inclusive economy', 'circular economy', 'functional economy', 'green economy', 'blue economy', 'economy of solutions', 'horizontal economy', 'on-demand economy', 'platform economy' and 'gig economy' (European Economic and Social Committee, 2016).

Even so, industrials-employee relations scholars and researchers have been studying these types of temporary work arrangements since the beginning (Wood, Graham, Lehdonvirta, & Hjorth, 2019; Connelly & Gallagher, 2004; Stefano, 2015; Gandini, 2018; Stanford, 2017; Stewart, 2017; Todolí-Signes, 2017; Woodcock, 2020) and more aspects to bring up a definition of the concept "gig economy" that started to appear in recent years. The operational definition of the gig economy has begun to converge to a new type of "temporary" gig work: electronic intermediary employment agreements, where businesses connect them with customers through websites or mobile applications to find short-term tasks or projects and process the payment.

Friedman (2014) describes the term 'gig economy' as the establishment of a capital-labour relationship between a worker and a digital platform. This mediates the supply of workers and the demand of the consumer or professional to carry out a small task or 'gig' and operates as a market intermediary (Gandini, 2018). Or, in other words, Taylor et al. (2017, p. 23) defined the gig economy as "people using apps, also known as platforms, to sell their labour". It is also important to highlight the type of contingent work is inside the gig economy: "To labour markets that are characterized by independent contracting that happens through via, and on the digital platform, the kind of work that is offered is contingent: casual and non-permanent work." (Woodcock & Graham, 2020, p. 10)

Alex De Ruyter and Martyn Brow argue the gig economy as a form of self-employment, strictly speaking, "a contemporary labour market phenomenon analogous to the current century" (2019, p. 39). However, it has a long series of historical precedents, dating back to the pre-capitalist period in Europe. In the course of the 1980s and 1990s, non-standard and contingent forms of work, in which we include gig working as an example, the percentage of employment in the entire industrialized economy began to increase. The cause of this growth was a mixture of supply and demand factors. In essence, these were the feminization of the workforce, especially with increased employment in the part-time employment and service sectors — integrated with advances in the labour market and commodity market regulation, emphasis has been placed on market-driven regulation, reduction of trade barriers, and privatization of state-owned assets (Bosch, 2004). We can see that the current "on-demand economy" has created a new cyberspace framework that seems to make the classical employee relations (employer

- subordinate worker) less necessary. These companies are dedicated to connecting customers directly with individuals service providers (Todolí-Signes, 2017).

In short, the gig economy defends a more rational use of the resources at our disposal, enabling the members of a community to meet their needs on a timely basis without being obliged to acquire ownership of these assets. It should be borne in mind that ownership often entails a series of costs that can be significant (in the case of a vehicle, we can think of insurance, circulation permits, periodic inspections, etc.). But beyond the interest that a definition of the gig economy may have, it seems that what is decisive will be to carry out a characterisation of it, to be able to identify when we are dealing with a true gig service and when we are dealing with a more or less interesting use of the gig ideal by private companies. Although we will deal with the issue in greater detail later, it should be noted that, according to the Economic and Social Committee¹, the following are the characteristics that must be present in an activity to be considered gig:

— *it does not result in the ownership or joint ownership of goods, but in pooled use,*

The ownership idea will be suitable for the pooled use. This will permit to society use goods and services at a lower price, and it will reduce the extra cost of the possession of goods.

— *an intermediary platform — which is usually electronic — to put a significant number of people offering goods or services in touch with a significant number of users,*

The vital key elements in this economy are the digital platforms. They are the structures where the buyers and suppliers are in permanent contact. These digital platforms will create a new framework truly particular for employee relations. (*We will analyse it deeper in the next part.*)

— *a common objective to make better use of goods and services by sharing them, and*

One of the main ideas behind the sharing economy is the awareness that resources are limited. Therefore, society must create a rational use of them. In this case, the sharing economy creates a new economic framework with sustainable and social attributes.

— *the final parties to these complex three-way transactions are primarily peers (P2P) and are never part of a business to customer (B2C) contractual relationship.*

The last point refers to the transactions that occur between subjects in the same level position in sharing economy. These are nominated P2P relationships. That fact gains relevance because it breaks away with the traditional B2C relationships in which one part is the classical employer/ provider of a service, and the other is the simple consumer.

Hence, the intention of this paper is to debate the nature of the gig work. Due to this, we analyse how widespread the gig economy is and who carries it out. In addition, we also critically explore what is “new” about the gig economy. *Per se*, we debate the discourse about it in concepts of two polar views: gig economy as self-employed and flexible employment versus gig economy as a return on-call labour reminiscent of the anterior industrial era. Eventually, we regard some of the inferences of the gig economy from taxation and welfare to employment industrial regulation.

¹ Opinion of the European Economic and Social Committee on the ‘Sharing economy and self-regulation’ (exploratory opinion) (2016/C 303/05)

2.2 CLASSIFICATION OF GIG WORKS

So, after defining and conceptualizing the characteristics of now gig economy we can identify the different typologies of works that can be classified as “gig works” in the sharing economy.

One of the most important concepts in the gig economy is the platform. The new role of this structure will be discussed deeper in this work. However, we precise to delineate its definition now and distinguish the different platforms that exist and how these platforms shape the classification of gig works.

- *What is a digital platform?*

Digital platforms are digital infrastructures that enable two or more groups to interact, and which position themselves to extract data (Wood, 2020).

Digital labour platforms are a distinctive part of the digital economy (ILO, 2021). They allow an individual or corporate clients to organize rides, order food, or find freelancers to develop websites or translate documents, among many other activities and tasks. By connecting companies and customers with workers, they are changing work processes and have a huge impact on future jobs.

Moreover, digital job platforms can be divided into two categories: web-based online platforms and location-based platforms. On a web-based online platform or “crowd work”, a term by De Stefano (2015), they operate online through platforms that connect a large number of customers, organizations, and companies, and they operate along cross-national borders. Since crowd work is carried out online, an unlimited number of employees and customers are usually scattered over long geographic distances. These tasks may include translation, legal, financial, and patent services; software design and development on independent and competition-based platforms; solution to complex programming or data analysis problems on competitive programming platforms within a specified time; or completion of short-term tasks such as annotating images, reviewing content, or transcribing videos on the microtask platform.

Tasks on the location-based platform or work on-demand via apps by Stefano (2016) are performed by workers in specific physical locations and geographically limited work, including taxis, delivery, and door-to-door services (such as plumbers or electricians), housework, and caregivers. The structure of the work directly affects a variety of factors, including the concentration of workers, the ability of workers to develop alliances within the platform, and the extent to which alliances can be formed between workers and consumers. These variables cause digital platform workers and location-based platform workers to use different strategies.

In recent years, location-based platforms like Deliveroo, Glovo, and Uber have received a lot of attention, especially in developed countries. Web-based online platforms (Green, Walker, Alabulththim, Smith, & Phillips, 2018) are also becoming increasingly popular with businesses. Many freelancers and competitive programming platforms, such as Upwork and Topcoder, although not well known, have been around for more than two decades.

These tasks can be divided into two types depending on their provenance and execution (Sutherland & Jarrahi, 2017): the local-based gig economy and the remote-web based one (Wood, 2020). Specifically and for the study of this paper, we can identify inside the local gig scenario five broad industries categories (Gandini, 2018): digital labour (e.g.: Freelancer), driving (e.g.: Uber), delivery (e.g.: Deliveroo), domestic work (e.g.: TaskRabbit), and accommodation (Airbnb).

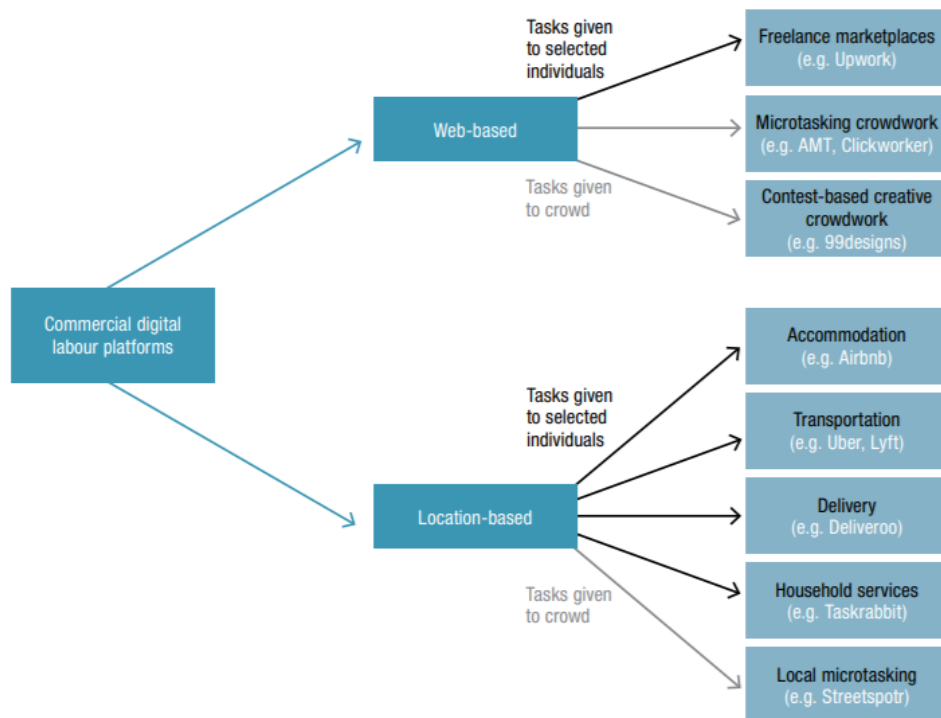


Figure 1. Categorization of digital labour platforms. Source: Adapted from Schmidt (2017)

- Online web-based labour platforms

Online web-based labour platforms offer varied services to both individual customers and business clients. For instance, freelance and contest-based platforms enable workers to connect with clients for specific tasks ranging from translation to graphic design, while medical consultation platforms allow individuals to access medical advice from doctors online. Web-based online platforms are becoming increasingly popular among businesses because they do not only allow them to outsource tasks to a global workforce at a lower cost, but also complete tasks faster than traditional outsourcing models (Krishnamurthy, Jegen, & Brownell, 2009). Among the online web platforms, the focus is on the independent and competition-based programming and the micro-tasking platforms, which are one of the main platforms that facilitate the exchange of work between employees and customers.

Freelance platforms link customers and employees to a specific task, based on a proprietary database that includes metrics like ratings and reviews, and facilitate customer-employee relationships. The nature of the services offered varies between these platforms, ranging from a wide range of activities and skills (e.g. Freelance) to those that provide specialized skill sets or goals (e. g. Toptal).

Contest-based platforms are specialized in providing customers with creative or artistic services and products, including graphic design, hosting competitive design contests in talent pools (e.g Hatchwise).

The micro-task platform is specialized in short-term tasks, such as tasks related to the verification of short video posting data items, and access to additional content of keywords to classify products for purposes of artificial intelligence and machine learning.

Competitive programming platforms is a space where a community of software developers and programmers can compete to deliver business and research solutions related to artificial intelligence, data analysis, software development, and other technology fields, winning the client's choice at a specified time frame.

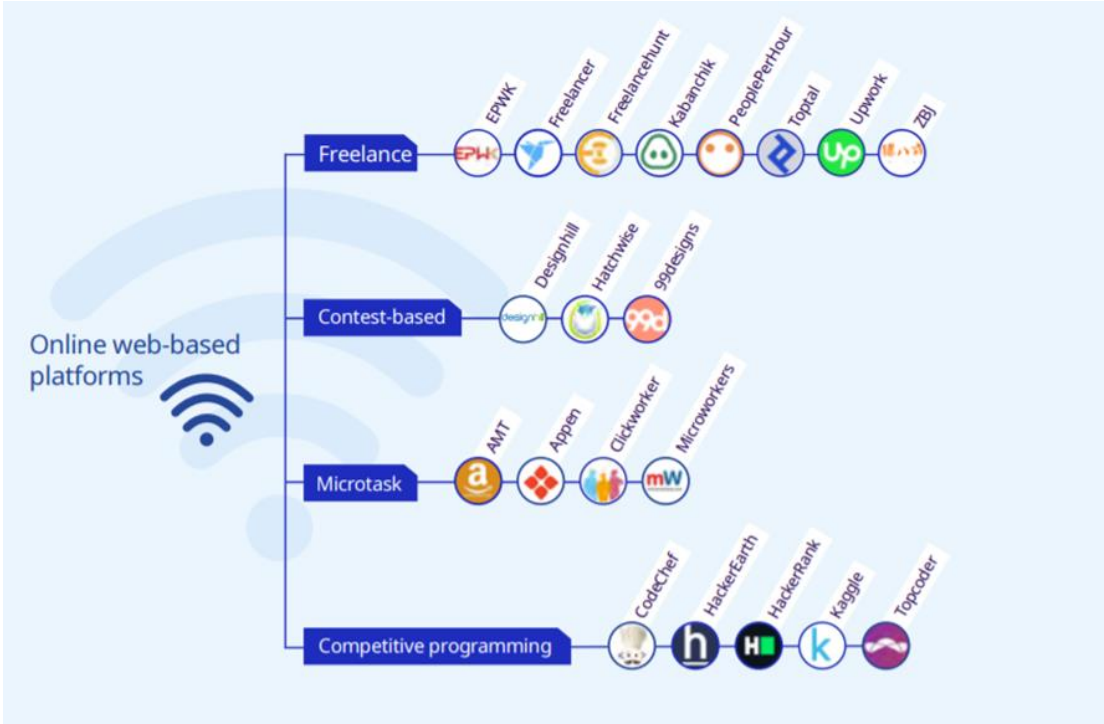


Figure 2. Online web-based platforms. Source: ILO (2021) World Employment and Social Outlook

- Location-based platforms

Location-based platforms use technology to broker various services such as taxi and delivery services. These services operate in parallel with the existing labour market and continue to be numerous. Other such intervention services include housekeeping, nursing, and home services, where individual workers provide labour services in the individual client's home. Digital labour platforms are allowing activities that have relied on traditional employment relationships to be reconfigured into work performed by independent contractors or self-employed people. As often jobs are executed on-demand, the logic of a “just-in-time” inventory system is applied to the labour process (Vallas, 2018). Workers who are defined as self-employed based on high income to be compensated must provide their own capital equipment (Stanford 2017; Drahokoupil & Fabo, 2016). Platform workers are usually classified as independent contractors, but in many cases, they lack the freedom and autonomy to organize their work. (*This concept will be developed deeper in the analysis part with the industrial relational literature*). It also uses innovative platform practices, such as algorithm management, to manage, supervise, and remunerate workers who assign tasks.

Transport platform, such as taxi platforms, use data and algorithms to combine passengers and drivers in real-time, disrupting established transportation business models (Clewlow & Mishra, 2017). Uber, for example, entered the highly regulated taxi market. The role of digital labour platforms in transforming the world of work in the United States is to provide low-cost composition fares and vehicles provided by individuals who do not have a taxi driver's license (Horan 2019). The surge in Uber's entry into the market has also been broadly funded by venture capital funds despite losses

incurred since Uber's inception. Uber promotes the dispatch service by connecting the workers who provide the service with the customers who request a ride through the platform. Customers are provided with updated approximate expectations, estimated fares and ride times at every step, and can track drivers and rides in real-time via the mobile application.

Delivery platforms like Deliveroo or Glovo, facilitate transactions with customers, employees, and business customers (e. g. restaurants, supermarkets, pharmacies). They offer a wide range of clients to businesses with a wider network of customers by offering them a variety of products at competitive prices without leaving their physical location.



Figure 3. Examples of online web-based platforms. Source: ILO (2021) World Employment and Social Outlook

Accommodation platforms, such as Airbnb, are online marketplaces that connect people who want to rent a house and those who are looking for accommodation in the area.

The local-based platforms have been, during the recent months, the most critical topics on the gig economy. We have seen several protests over the world. In this paper, we will explore why these protests are occurring, what the gig workers are claiming, and which are the structures of the industrial relations and employee relationships inside these new gig works.

2.3 THE OPTIMISTIC VIEW OF GIG WORK

The discussion on the advantages of platform work is supported by the concept of technological change, namely liberation and empowerment in the creation of the so-called "network economy" (Becker, 1999). Hall and Krueger (2018) argued, based on their study in Uber drivers, that the low barriers to entry and considerable autonomy afforded by gig work offer opportunities for income smoothing and supplemental wages to meet immediate needs. For example, Ruyter et al. (2018) claim that in this somewhat utopian description of the gig economy, some people believe that companies can “enjoy the many benefits of working with freelancers, such as a mobile workforce that adapts to changes, wider access to super-professional talent, cost savings and increased productivity” (Ruyter, Brown, & Burgess, 2018, p. 42). Additionally, freelancers located in emerging economies can reap huge economic benefits by reaching clients in rich countries. (Kuhn & Galloway, 2019).

- Workers' perspective

The gig economy could improve in different aspects the work conditions for the workers. For instance, in:

Flexibility. Many freelancers in the temporary economy find that their status gives them a lot of flexibility. Many times, the worker will be assigned a task with a deadline, and how and when to complete the task depends on him. Employees usually have the flexibility to work in remote offices or at home. This is usually attractive to people trying to adapt to the family schedule.

Independence. Many contracts or gig economy workers find that they can do their jobs independently. Being out of the office can help this independence. Without anyone looking back, gig economy workers may find that they have been assigned a task and they have to complete it all alone. This can greatly boost confidence and enable workers to complete their work in the best way they could contemplate.

Variety. Workers in the gig economy may find that they have a variety of tasks to complete. It is not a similar and monotonous task that must be completed every day: each project or concert can be filled up with different elements to make the work more interesting.

- Employer's / Business perspective.

In the gig economy, organizations can reduce costs through time and money. The company will not hire all the privileges of fixed-term employees (such as paid holidays or health insurance, which is the case in some countries). This allows them not only to save money but also to get the best people to join in a short period, because it may become too expensive in the medium- long term. This is especially true for jobs that require technical knowledge.

In addition, companies can save time on lengthy recruitment and selection processes. With today's smartly built and intuitive digital platforms and applications, no matter where you are working, you can easily find talented people who are right for the job. In this way, companies can benefit from scalability because they can keep operations central while turning to external experts when necessary. This allows them to be a more agile and better deal with market unpredictability. Now they can quickly convene a team of different experts, such as mechanical engineers, designers, and lawyers, to jointly carry out a short-term project.

- Market perspective

The gig economy creates a larger scale economy. The digital matchmaking platform has established a huge network of connected users and created a transparent marketplace where buyers and sellers can meet with just a few clicks (McKinsey, 2016). For events that do not require face-to-face services, given the ubiquity of connected and smart digital devices, the potential market size is global.

Better and faster matching from real-time information. The digital platform speeds up matchmaking. Efficient search algorithms can match specific characteristics of the tasks, commodities or assets provided or searched. They can be combined with real-time information to enable smoother and more efficient coordination between the two parties performing the transaction, including coordination in time and place.

Richer information signals and auxiliary services. Digital platforms allow employees and customers to share personal data and recognition; in many cases, the data collected by the platform itself helps provide credibility to freelancers and their customers before and after transactions. Buyers and sellers can

immediately build trust because ratings and reviews are aggregated from past interactions. They also eliminate risks by establishing payment infrastructure and agreements that must be followed as conditions for participation.

The marginal cost is almost zero. The cost of adding more participants is negligible for the platform itself, and the threshold for new employees to join is equally low. People can easily create a profile on platforms such as Freelancer.com, and immediately start looking for tasks. Freelance craftsmen can open a store on Etsy for free and advertise for 20 cents per person.

2.4 THE CRITICAL VIEW GIG ECONOMY

Contrary to the somewhat optimistic views described above, other authors have emphasized a more critical view of the utility of contract jobs, especially for the workers themselves. These writers often come from the Marxist labour process, but there are also economic geographers and labour law experts who criticized their appeal from a casual job's perspective, thinking that it is essentially the latest development of unstable forms of work. For these writers, technological change, instead of necessarily liberating workers, can lead to new forms of labour control and commodification. (Gandini, 2018)

Most of the public debate surrounding freelance work is polarized. This change occurs (Lobel, 2019) in the context of widespread concerns about the quality of work and how digital technology will change everyone's work world, and this fact further strengthens this. Freelancers are most sensitive to some of the concerns raised in this debate, but other concerns apply more broadly to a world where traditional workplaces offer fewer job security and comprehensive benefits lists.

Braverman (1974) argues that technological change will disqualify the workforce because technological advancement is often used to automate manufacturing processes that previously required complex mechanical knowledge, complex and manual processes.

This argument is very relevant in today's quirky work economy, as technology has been seen as a key factor in simplifying once complex processes, reducing the need for human intervention because "processes can be put in the hands of intelligent machines, and then optimized. For example, Eichhorst et al. (2017) have identified that automate job matching, using digital platforms such as work-on-demand apps, help reduce job search costs and are suitable for businesses (Eichhorst, Hinte, Rinne, & Tobsch, 2017). Empowering workers (De Stefano, 2015) as self-employed, can serve to reinforce labour commoditization and subvert existing labour standards. This re-commoditization is in turn enhanced by similar applications that allow platform owners to enhance process monitoring and surveillance work. Instead of reducing the role of internet intermediaries, technological change has served to re-intermediate the working relationship between companies and workers, a process referred to in the literature of the gig economy as disintermediation.

Therefore, we can point out that non-independent contractors who are also referred to as "dependent self-employment" are defined as self-employed and usually have normally only one client. Besides, they do not have any autonomy: they receive detailed instructions on how to complete the work. The borderless world of online platform work allows the widespread use of outsourcing and subcontracting in countries with lower wages in emerging economies. Gig work can be seen as a new form of subcontracting and outsourcing, without job security, where employment and income are unpredictable. It coexists with forms of temporary and informal work that often have an ambiguous employment situation and erode working conditions (Stewart & Stanford, 2017). Many gig workers engage in multiple jobs or in odd jobs while engaging in other activities.

The nature of gig work makes it not only difficult to measure, but also difficult to monitor. There are no standard working conditions such as minimum wage and basic non-wage benefits; when the employment situation is not clear, it is difficult to collectivize and collective bargaining; For the same reason, it is difficult for these workers to apply for taxes, benefits, and insurance. Becoming a gig worker will largely have no protections or rights attached to it traditionally.

- Workers' perspective

From the workers' perspective three clear critical points could be identified:

There is a lack of adequate regulation: it often happens that technology develops much faster than legislation can respond. This has happened with these new businesses models that allow second-hand goods to be sold, extra rooms to be rented or car sharing.

Worker Status. The “fake” autonomous worker status is the main problem nowadays for gig workers. This paper will study deeply this point in the following chapters.

Stress. Workers in the gig economy must work regularly to find their next “gig” or to prepare for changes in their current jobs. This can be stressful because most people like to feel safe and stable at work. Workers in the contracting economy sometimes face unexpected changes in their jobs, from being fired to wage changes.

- Employers' / Business perspective

The temporary condition of the “gig” work makes that the company normally will not invest training and knowledge into gig workers. In addition, the gig work reduces the incentives of workers to do a great job so that if something happens, they can easily switch to another company.

Ethical Issues. Ethically, the performance economy has been questioned many times. If the company thrives on an ethical reputation, then it should pay attention to the performance economy. Employment is casual, and since employee benefits are not given, an ethical dilemma can arise when it comes to the treatment of workers.

- Market perspective

Unfair competition: another problem derived from the lack of regulation is the unfair competition of some of these businesses with legally constituted companies. The two most frequent controversies are those of the hotel sector with Airbnb and taxi drivers with platforms such as Uber. If we were to start taking them as incorporated companies whose growth seems to be going upwards, laws could be made to allow them to offer their services while being subject to the same regulations as regular companies.

2.5 GIG ECONOMY: THE ISSUES AND CHALLENGES IN EMPLOYMENT RELATIONS

The gig economy has brought several revolutionary mechanisms of work organisation. As exposed before, the gig economy has created increased flexibility, both on the part of employers and workers (De Stefano, 2015). Furthermore, the gig economy can economically benefit socially marginalized groups, including the unemployed, geographically isolated, refugees, and people with disabilities (De Stefano, 2015). According to Hall and Krueger (2015), since there is no fixed schedule, workers can offer their services whenever they want (De Stefano, 2015). It also allows matching work with the performance of other work activities (moonlighting), family, study, or leisure activities (De Stefano, 2015). On the other hand, from the business model of the companies' viewpoint, the technological

innovation and flexibility allow reducing labour and transaction costs, either in staff costs, holidays costs or fired costs, and one of the most important handicaps the dependency on the algorithms digital platforms (Johnston & Land-Kazlauskas, 2019).

Nonetheless, the gig economy presents more drawbacks than benefits. According to De Stefano (2015), and Peck and Theodore (2012) pointing out the “optimistic” and “critical” view reported before, the gig economy can negatively impact the workers since they have unpredictable scheduling, inconsistent earnings, low wages and long-term perspective unreliable (Johnston & Land-Kazlauskas, 2019). In addition, according to Rogers (2015), the workers require a significant ‘emotional labour’ to show kindness to customers to get a higher rating and feedback (Gandini, 2018). Wood et al. (2018) report that, then, ‘workers with best scores tend to receive more work due to client’s preferences and platforms’ algorithmics ranking’ or in the worst-case workers can lose their jobs if they get a low average rate. Moreover, they don’t have access to a major part of employment protection, such as maternity leave, sick pay, paid holidays, full unemployment benefits (De Stefano, 2015), and these are a few of the multiple problems that workers are dealing with daily. So, is the gig economy creating precarious employment jobs, creating new jobs, or both?

One of the main pieces of evidence of the drawbacks exposed from the gig economy is the huge number of demonstrations that are occurring around the world.

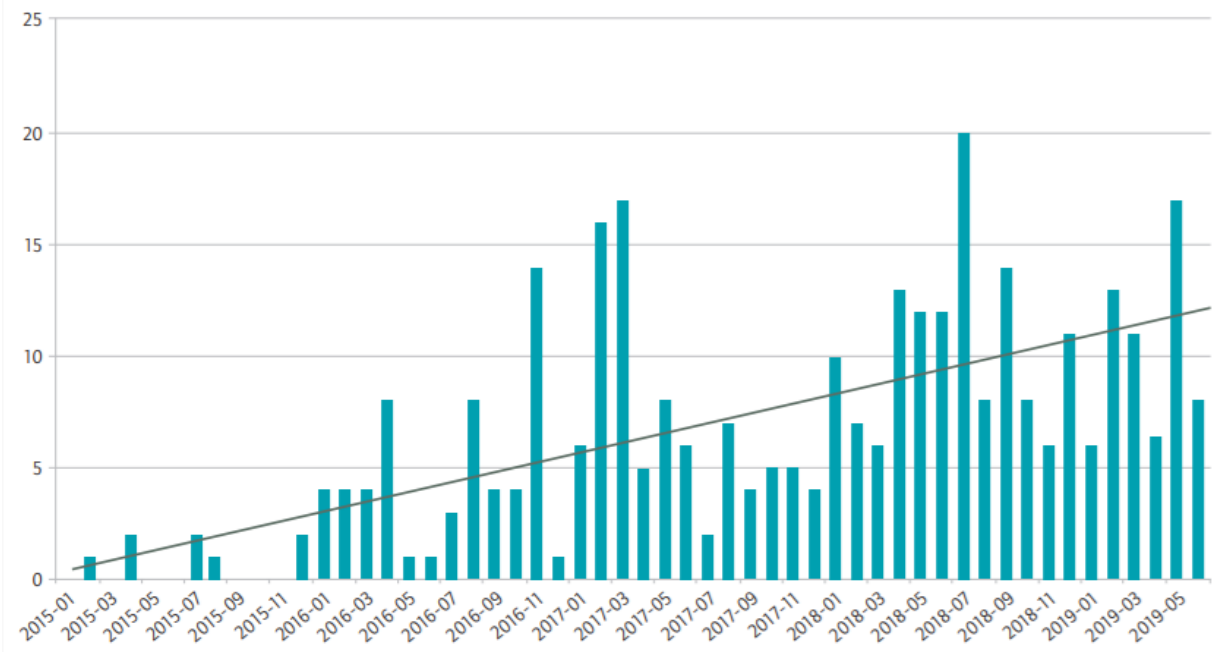


Figure 4. The global total of platform worker protest, January 2015-July 2019. Source: Leeds Index (2020)

The main concern identified as a reason for these several protests by the riders is the status of “(provisional) self-employed” workers (Heyes & Hastings, 2017) and the platform decision-making and reduced social employment protection (Forde et al. 2017). Besides, the other objects of the demonstration are the working conditions itself of the platform: often the low wages, the underwork and overwork, the constant customer rating, the risk of “unsoundness” due to the platform algorithms and the lack of accountability.

Another important fact when gig workers engaged in protests is their ability to collectivize their voice. There are many difficulties in applying collective bargaining to workers on platforms under the existing legal framework. Especially for online web-based platforms, the difficulty is terrible because the workers are physically distributed, and they do not have structures and mechanisms for uniting such as the classical trade unions.

In many jurisdictions, workers that are not in an employment relationship cannot bargain collectively. This is because the collective bargaining law does not apply to self-employed people (Beaudonnet, 2020). But a more fundamental problem is that many competition (antitrust) laws prohibit the private sector from engaging in concerted negotiations on the grounds that it would constitute a cartel (Gramano, 2018). The EU provides a vivid example of how competition law can prevent collective bargaining by independent platform employees. The legislation of the Court of Justice of the European Union generally prohibits negotiation by self-employer who are considered to be "committees" (Schiek & Gideon, 2018). This is problematic because some gig workers are reliable self-employed, but not all; a great majority show a considerable degree of economic dependence on employees (McCrystal, 2014).

So, from all this data and literature we can deduce two significant concerns about gig workers according to their employment relationship: the status "self-employed" of a gig worker and its collective voice power. These two concepts will be the base of examination of this paper in order to analyse: the challenges, roles, and nature of the industrial relations behind the gig economy.

III. EVALUATING THE NATURE OF EMPLOYMENT RELATIONS WITHIN THE GIG ECONOMY

In the following part, this paper studies the different structures prevailing in the industrial relations framework from the classical employee relations theory, and how the gig economy is transforming the role of its actors and the perspective of work. This is a fundamental part to understand the challenges for the future of the gig work. The further analysis takes as core reference the most relevant works of the industrial relations field such as *Industrial Relations Theory and Practice* by Paul Edwards (2003), *Industrial Sociology and Industrial Relations* written by Fox (1966) and the seminal book *Industrial Relations Systems* from Dunlop's (1958).

Dunlop populated the structure of the industrial relations system by describing its key features and processes. Dunlop (1958) summarized his theoretical framework as concisely as possible in one paragraph:

Every industrial-relations system involves three groups of actors: (1) workers and their organizations, (2) managers and their organizations, and (3) governmental agencies concerned with the workplace and the work community. Every industrial-relations system creates a complex of rules to govern the workplace and work community. These rules may take a variety of forms in different systems—agreements, statutes, orders, decrees, regulations, awards, policies, and practices and customs. The form of the rule does not alter its essential character: to define the status of the actors and to govern the conduct of all the actors at the workplace and work community. The actors in an industrial-relations system are regarded as confronting an environmental context at any one time. The environment is comprised of three interrelated contexts: the technology, the market or budgetary constraints, and the power relations and statutes of the actors. The system is bound together by an ideology or understandings shared by all the actors. The central task of a theory of industrial relations is to explain why particular rules are established in particular industrial-relations systems and how and why they change in response to changes affecting the system. (pp. 8-9)

To understand better these systems, Kerr et al (1963) defined that every industrial relations system, irrespective of its form, fulfil at least three fundamental functions in industrialised societies: *Firstly*, it defines the duties and responsibilities of workers, managers and the state; it defines and establishes the relations of power and authority. The state defines and establishes the relations of power and authority; *Secondly*, it controls and keeps within tolerable limits the reactions of industrial workers and managers to the dislocations, frustrations, and uncertainties inherent in the process of industrialisation; and *Thirdly*, it establishes the complex of rules, practices, and regulations, both substantive and procedural, necessary for the workplace and the working community. These three are interdependent functions but they are not necessarily performed in the same way, or according to the same in different industrial relations systems.

So, taking these theoretical employment relations frameworks we can start to analyse the nature of the employment relations within the gig economy. We are able to compare if the roles and relations inside this structure have varied or emerged in new configurations.

3.1 INDUSTRIAL RELATIONS: THEORETICAL FRAMEWORK AND CLASSICAL LITERATURE

During the 1920s the term "industrial relations" (IR) became widely used in Europe, especially in the United Kingdom, and North America. Afterwards, it has been adopted by personnel management (PM) and since the 1980s, human resource management (HRM) scholars. All three represent a practical activity of "people management", as well as a field of academic study (Edwards, 2003). The studies in the three fields take as their starting point the corporate assertion that "people are the most important asset". To avoid confusion in the term of Industrial relations some writers prefer to use the term "employment relations" or "employee relations" as well. In this paper, the three terms will be used indistinctly.

The labour relationship is the study of the regulation of the labour relationship between employers and employees, either collectively or individually, and identifying substantive and procedural issues at the industrial, organizational, and labour levels (Ross, 2008). According to the powerful definition of Kaufman (2010), the IR is:

"Industrial relations is viewed as the process of rulemaking for the workplace (Dunlop, 1958); job regulation (Flanders, 1965); social regulation of production (Cox, 1971); the employment relationship as structured antagonism (Edwards, 2005); social regulation of market forces (Hyman, 1975); the process of capitalist production and accumulation and the derived political and social class relations (Caire, 1996, as cited in Kaufman, 2010); conflict of interests and pluralist forms of workplace governance (Kochan, 1998); class mobilization and social justice (Kelly, 1998); the advancement of efficiency, equity, and voice in the employment relationship (Budd, 2004); collective representation and social dialogue (European Industrial Relations Observatory, 2002)" (pp. 75-76).

- *Analysing the Classical Employment Relationship*

Components of industrial relations: state, employers, and unions

What does the IR say about how we can analyse such problems? The employment relationship has two parts, the market relationship, and the management relationship (Flanders, 1974). The first includes the cost of labour, which incorporates not only the basic salary but also the hours worked, holidays and pension rights. In this respect, labour-power is like any other good, the price of which represents the total cost of its use. However, labour-power differs from all other commodities in that it is valued in its use and expressed in people. The machinery in a factory is also appreciated for its use and what it can produce. However, how it is used depends only on its owner. The "owner" of the work, the employer, must convince the worker, who is the person with whom the work is incorporated, to work.

The second, the management relationship, is the one that defines how this happens: the market relationship sets a price for a given number of hours worked, and the management relationship determines how much work gets done each time. During that time, at specific tasks, the manager has the authority to define tasks and modify a particular set of duties and what penalties will be imposed if these obligations are not met. Thus, a standards text defines IR as "the study of the rules governing employment" (Clegg 1979, p. 1). The importance of this definition is developed below.

The employment relationship is, by definition, a relationship between an employee and an employer. This direct relationship may be arbitrated by the two other key institutions to IR, the trade union (or more rarely a non-union collectively representing employees) and the state.

Before analysing the proper type of soft relations among the different agreements in IR and then within the gig economy, we will define properly from the literature how have these actors been understood from the classical industrial relations framework. After that, we will study the managerial relation from a pluralist perspective among them and how the gig economy is transforming the natural role of the actors.

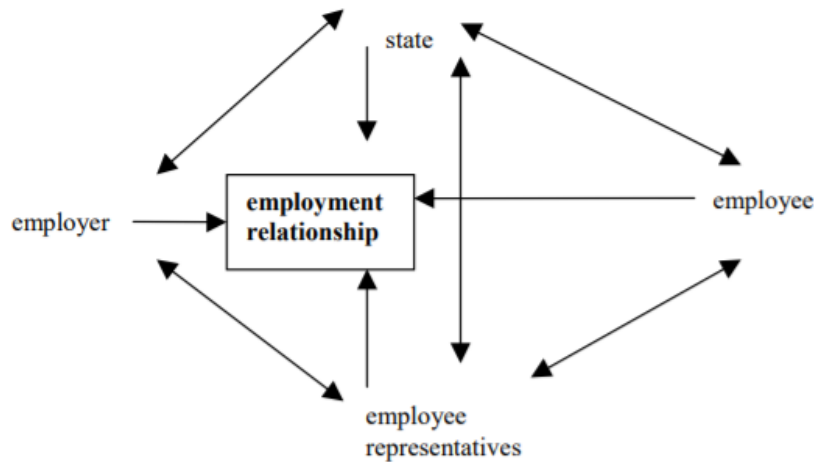


Figure 5. The employment relations (Edwards, 2003)

The actors that create the industrial relations system are:

- a hierarchy of managers and their representatives in supervision,
- a hierarchy of workers (non-managerial) and their representatives, and
- specialised governmental agencies (the State) and specialised private agencies created by the first two actors, concerned with workers, enterprises, and their relationships.

- The role of employers / workers

The role of the worker is to provide the necessary skills to produce goods and services while the role of the employer is to procure the raw materials including human and financial resources to produce the goods and services.

Employees are those who work part-time or full-time in an organization or company and receive compensation for services provided in the form of salary. However, not all individuals who provide their services to an organization or company receive compensation for the services provided. Employees are hired for a particular job or simply to provide a workforce and work for other entities (most employers). The main difference between an employee and a contractor is that the employer controls the employee's activities, but the contractor does his job independently. Employees have certain salaries and wages and are bound by written, explicit or implied employment contracts. It is managed by the organization that employs the employee's services or otherwise has the right to control what the employee does and how it works.

An employer is an organization or company that puts, hires, or employs an employee's services into a job. Employers can also be individuals, small businesses, government agencies, professional services companies, shops, agencies, or non-profits. The employer is obliged to indemnify for the services provided by the employee in a manner agreed upon by both parties to the employment contract or in accordance with the policies of the organization. Such methods have a salary, hourly, daily, or weekly wages and other employment benefits provided by the employer as required by local law.

In the workplace represented by the union, the employer is obliged to pay under the contract negotiated by the union. Employers reserve the right to terminate an employee's employment if they do not meet the standards expected in hiring an employee, or if there is a violation of rules established by the employer.

Mutual dependency. Employers and employees depend on each other to achieve a defined goal and therefore both gain something from each other. It is an important factor in creating sustainability. Employers depend on employees to perform specific tasks and therefore will help them achieve their business goals and keep the business running smoothly. On the other hand, workers depend on their employers to pay them agreed wages or salaries and thus they can financially support themselves and possibly their families. If either party feels that it does not have enough at the end of the negotiation, the relationship is likely to end. Employers may decide to fire an employee if they are not satisfied, or else the employee may simply resign or quit.

- *The role of trade unions*

Trade unions or the employee representatives, which play the most basic role, represent a particular part of a group of workers in relation to a single employer. The role of the union can be measured by density, mobilization, extent, and scope (Minter, 2017).

Density. The proportion of union members in the determined constituency.

Mobilization. The extent to which the union determines the common interests of its members persuades members to understand what the interests are and organizes to pursue the interests of members. Unions are faced with the question of how much they represent their members and integrate their interests into a common policy.

Scope. It refers to the extent to which all aspects of the employment relationship are within the scope of the union: it can only negotiate wages and working hours or include working conditions, or further extend to training, job classification positions, and workplace discipline systems.

Union extents. It refers to constituency scope: a union can represent a small group of employees in a location, or all employees of a profession, or all employees of a union.

Unions (Clegg, 1967) engage employees by trying to organize them and by mobilizing around need groups, and specifically with collective bargaining power. They can also interact with the state, for example by promoting legislation or committing to more sustainable forms of accommodation.

This theoretical trade unions framework shows us the importance of organizing the collective bargaining power from the employees. The questions that in this situation raised stand: “Are trade unions taking action in the gig economy?”, and “Which is the role of the trade unions in this digital platform economy?”.

- *The role of the state*

The state directly affects the employment relationship through laws on wages (e. g. minimum wage), working conditions (e. g. working hours) and many other matters and through the role of itself as an employer in the public sector. It also has a wide range of indirect effects. It maintains relations with unions, either through legislation on union government or through bilateral agreements.

The role of the government and its agencies is to provide an enabling environment to produce goods and services. Each of these actors performs their duties with the expectation of receiving certain rewards for their services. For example, workers and their unions expect good wages and other favourable working

conditions in return for their services, while employers and their unions expect good profits. So, at this point, the main concerns to study in this paper from the government role are: How is the government acting in under the gig economy? Is the state taking action within the gig economy rules and policies?

3.2 CONFLICT, POWER AND FRAMES OF REFERENCE

Apprehending the nature of rules in the workplace and among the actors can be developed by considering three perspectives on rules, often referred to as frames of reference. The origin of the frame of reference for debate is Fox's (1966) distinction between unitary and conflict approaches: pluralism and radicalism.

Employment relationships cannot be understood as just a market exchange. It is a power relationship that is embedded within social relations; it is a power relationship between workers and managers. For this reason, it is so important to study these industrial relations and understand these relations. One important aspect is that these relations are not only occurring in the workplace: they are also happening in wider societal processes and economic forces.

In this case, they are existing in the current capitalist system. Capitalism is driven by the search for profit. The main source of profit is labour. This profit is sourced and generated by a surplus form of labour, so this source of profit is the difference between the value of what labour produces and the level at which it is rewarded (the source is how much the workers are producing and how much they are being paid, the difference between the two). The potential for conflict between workers and employers over the distribution of surplus created by the work but also over the organization of work enables the creation of a surplus (Edwards, 1986).

Perspectives on work refer here to how people regard the nature of different interests in the employment relationship. 'Perspective' is an expression that could be used interchangeably by 'frame of reference' or 'ideology'. It describes a set of supporting ideas and beliefs that informs an individual's presumptions about how society works and influences their attitudes and behaviour. In terms of perspectives on employment, our main focal point is how people regard the nature of separate interests and the distribution of power and control within the employment relationship. Three perspectives on work will be examined: 1) the unitary perspective; 2) the pluralist perspective, and 3) the radical perspective.

- *Unitarist perspective*

The unitarist approach is associated with the integration of workers, which means promoting the conception of the enterprise as a community of shared interests between capital and labour and thus creating a common identity in the company. The idea of participation then had the meaning of creating the necessary conditions to stimulate the motivation of workers. In other words, in a way, it was about overcoming the mechanistic view of the Taylorist organisation of work that had hitherto been promoted by employers and engineers. The aim was therefore twofold: to reduce conflict and increase productivity, hence in Europe this trend became known as "human relations policy to increase productivity" (Bolle de Bal, 1973, p. 33).

- *Pluralism perspective*

The pluralism approach is a new way of looking at the independence of the industrial relations system begins. It does not only take into consideration the understanding between the parties, but also the

conflict situations that arise in the work environment. The workers and employers are seen as having conflicting interests (Cató, 2007).

The pluralist approach - closely linked to the Oxford School - arose as a reaction to the process of centralisation of state power that was taking place, the action of interest groups and the correction of the asymmetry of power between capital and labour; the means and procedures that guarantee freedom and the counterbalancing of powers are sought, and the importance of secular ethics and morality is underlined as a necessary condition for achieving social cohesion.

For his part, Dithurbide (1999) points three fundamental characteristics of the pluralist approach: first, insistence on the centrality of collective bargaining as a form of regulation and rebalancing of employment relations in democracies; second, acceptance that the interests of workers and employers are divergent and that, consequently, there are conflicts which are understood as a collective, endogenous, inevitable and natural phenomenon that can be channelled institutionally; and third, a consideration that conflicts originate in the clash of organisations (trade unions, employers) that possess their source of power and authority.

In the pluralist company, these principles are translated into what has come to be called industrial constitutionalism, that is, the recognition of a series of fundamental workers' rights (the right to unionise, to express oneself, to strike, etc.), with the company being conceived as an unstable political equilibrium where conflicting interests come together. The company is now perceived as a coalition of interest groups led by a management that seeks to serve all parties (workers, shareholders, consumers, community, national interest) and to maintain a balance between the sometimes divergent and conflicting demands of the participants, and in which trade union action has a place as an institution of social dialogue. In this scenario, trade unions can be seen as a normal institution of capitalist societies, whose function would be to act as a corrective element in the face of the failures generated by the market, aimed at ensuring a better situation for wage earners. They are no longer seen as enemies in the company, but as legitimate representatives of the workers and valid interlocutors, whose function is to channel conflicts. Workers and trade unions define their interests and objectives in a very restrictive way in terms of their immediate efficiency and order not to come into conflict with the basic principles of the capitalist system. Finally, both parties need each other to generate that surplus – a kind of “dependency” is created in the framework that conditions workers and employers in the business model (Gil, 2012).

- *The structured antagonism*

The core of the employment relationship is the conflict factor. This is called "structural antagonism" (Edwards, 1986) to distinguish conflicts in the sense of open disputes of basic principles. Managing the employment relationship is a process of dealing with inherent contradictory forces. Hostility is the basis of the relationship between the two parties, although cooperation is also important today. This point of view is superior to the point of view of conflict of interest because the latter implies that the real or fundamental interests of capital and labour are opposed, leading to a point of view that is clear and easily rejected. Structured antagonism is a basic aspect of the employment relationship. It determines the way the daily relationship is handled, but it is not something that directly cultivates the interests of all parties. Companies must find ways to maintain a surplus. If they do not, they and their workers will suffer. Balancing the needs of control personnel and ensuring commitment ultimately depends on ensuring that surpluses continue to be generated. Workers are likely to be interested in its production, but this should not conceal the fact that they are being exploited (Edwards, 2008)

Concluding that workers and employers are not only in potential conflict for their “interests” if not the structural relationship inside this capitalist system emerge this antagonism relation among them. This

concept will be analysed deeper in the following part analysing how this structure occurs in the gig economy but adapted to the current digital era effects.

- Radicalism perspective

Radical views come from broader Marxist political views. Radicalism perspective assumes that the workplace reflects society and contains all unfairness, contradictions and potential conflicts of interest. On this point, he agrees with the pluralist view, but unlike the pluralist frame of reference, the radical view holds that the conflict of interest between employers and employees is irreconcilable (there is no substitute for capitalism). This key factor distinguishes radical views from single and multiple views. Although there are differences between the two, both assume that a stable and orderly relationship between employers and workers is normal, which is obviously desirable (Hyman, 1975).

The contributions that the radical approach makes to the analysis of labour conflicts can be summarised as follows: 1) the labour conflicts are associated with inequality of power in the social structure, they are permanent in nature; 2) the conflicts of interest between capital and labour are structural antagonisms, because of the effort that employers and workers have to make to control and resist in the labour process; 3) they attend to the diversity of the labour market and the diversity of the social structure; 4) it takes into account the different forms of expression of labour conflict (formal, informal, latent) in the informal, latent production process; and 5) it aims to develop a theory to explain the issue of latent conflict, based on empirical observation of concrete practices, the analysis of concrete cases and the development of analytical concepts on the basis of the conflict.

It is sometimes difficult to draw a clear line of demarcation between neo-Marxist theoretical models and radical approaches. In this sense, Edwards (1990) points out that the difference between radical and Marxist approaches is methodological rather than conceptual. Radicalism can be said to seek material or sociological explanation of labour conflicts in the very reality of work and to analyse the concrete ways in which labour conflicts in the very reality of work and to analyse the concrete ways in which labour conflicts are expressed in practice. For the radical perspective, it expresses them in practice.

IV. ANALYSE OF THE INDUSTRIAL RELATIONS IN THE GIG WORKPLACE

After defining and describing the different work perspectives we could now identify the gig economy and extract some interpretations of the theoretical IR framework within the gig economy.

So, following the theoretical framework exposed about perspective, I discard the “unitary” perspective for the analysis of the role and nature of employee relations in the gig economy for the following reasons:

Firstly, employees and employers share an interest in labour and capital matters. This is not the case in this digital business. The enterprise in this case is just focusing on capital accumulation forgetting the labour for the gig workers. Meanwhile, the workers are having a different interest in the labour perspective.

Secondly, the unitary view, for example, underlies the postulates of human resource management (HRM) and goes on to characterize many management lessons on motivational techniques and methods. In the gig economy, this managerial perspective cannot be accomplished since that the “human” factor of the manager role is being transformed and adapted into the digital platform. It cannot be a “human factor” in the digital role of the “gig platform”.

Thirdly, this view assumes that management can be trusted as leaders who will protect employees' interests. If an employer fails to do so, it is thought that the free market will correct any short-term mistakes in the long run. For instance, if the employer is uncaring and the employee is underpaid, the employee is theoretically free to seek employment elsewhere. This is not what happens in the gig workspace.

Fourthly, therefore, unions are not seen as having a certain effective role (as in a pluralist view), but as potential "dissident instigators" who can provoke discord where they do not exist. Therefore, from this perspective, union representation is neither necessary nor desirable, because conflicts in the employment relationship are considered pathological rather than inevitable. If employees resist management logic or take opposing positions, they will be seen as violating the interests of the "team" and it is best to exclude them; in other words, they may not be the type of employees the organization wants to have. This is not the case in the gig economy phenomena. The gig workers are using collective power to raise their voices and fight for their rights that are not heard inside the “team” of the business.

In conclusion, from the perspective of the unit, the role of the manager is "leadership", "information", "consultation" and "education". It is assumed that once the manager explains the cause of the problem to the employee, any obvious conflict of interest will disappear. Therefore, a unitary frame of reference can support managers' considerable attention to informing and consulting employees. But it is important to distinguish it from the negotiation process discussed under the heading of pluralism: negotiation is a process of two-way communication, and the final decision is with the employer. This is different from negotiation, which is the joint negotiation and decision-making of both parties. The unitary view does not reflect the reality of workers' interests or experiences within the gig economy.

The pluralist and radical perspectives seem to be more accurate respecting the reality of the gig workers life. Firstly, the pluralist considers the role of managers present in the employer relationships however they have a potential conflict they need each other to grow up in the system. Furthermore, the pluralist view considers the unions as a mechanism to raise and negotiate the voice and conditions of the workers,

the reality shows us that gig workers are using unions and their group representation to bargain and negotiate with employers.

The radical perspective is referred to as the Marxist approach. Van Gramberg (2002) states that the Marxist view is to achieve the annihilation of the suppressive social order and unions are seen as vehicles of this social revolution. Based on radical perspective, a belief is that almost certainly remains that conflict will constantly take place between the employer and the workers due to the occurrence of basic disparities. In this perspective, employers and workers are opposed to cooperating and a hostility principle prevails. Workers distinguish themselves as “us employees against those employers”, which shows that resistance to working together (Williams & Adam-Smith, 2005)

So, after analysing the gig economy business models and the gig workers opinions the radical views are not fitted at all. The radical vision is stating the gig worker and the employer will never cooperate, and this is not true at all. We have seen some cases of law modifications and employer changes to progress in the workplaces. Mutual dependency will always make both actors work jointly to grow in the system.

Therefore, the most accurate view to analyse the role of each actor would be from a mixt of the pluralist identification of the employee and managers roles and relations underpinning the Marxist views of the existing inequality in the capitalist system within the gig economy.

In this case, we will approach the gig economy nature from the current framework called: Radical pluralists (materialists). Radical pluralists were inspired by the theoretical ideas of Marxism but kept their distance from the "political" Marxists who posited that revolution was possible the ability to overthrow the broader socio-economic system that dominates and the ability to impose totalitarian governance (Segal, 2018; Gold, 2017; Watson, 2017).

4.1 IDENTIFYING THEIR ROLES AND NEW ROLES IN THE GIG ECONOMY

Once we identified the industrial relations workplace perspective to analyse concord the gig economy, in this part we will study the identification of the role’s employee and manager of the conflict theories within the gig economy.

This first era of employee relations is linked with the pluralist perspective on work (Blyton and Jenkins, 2007). In this framework, the most conflicting interests of employers and employees are the wage-effort bargain itself. “It became the dominant perspective in Britain, particularly in the 1960s” (Fox, 1996). The most important part of this type of employee relations was the topic of power orientation. Pluralistic perspective recognises two sub-groups: the managers and the subordinate worker-trade unions. Hence, organizations operating within the latter perspective accept that there is a legitimate role for the collective organization of employees in trade unions and that collective bargaining is an appropriate mechanism for agreeing on wage rates. Within the pluralist framework, it is the role of management to manage, rather than suppress, conflict and one way to do this is to engage in negotiation with the union. As the industrial relationship literature showed with the pluralist perspective (Rose, 2004), the employment relations roles in the industrial relationships for the growth of the enterprise are: the role of the managers (and self-employer) and the employee workers figure that uses collective organizations in the nature of employment relations as the role of the trade union.

The first framework we must analyse is the relationship between the actual actors within the gig economy. The most mature common feature of services is customer participation, the well-known "service triangle" (Leidner, 1996; Korczynski, 2002; Berker et al., 2006; Dunkel and Kleemann, 2013; Holtgrewe and Kerst, 2002a; Havard et al., 2009): a service organization or service provider that signs

employment contracts with employees and signs service contracts with customers. Therefore, service workers usually have two employers: the ones who work for the company (or public or non-profit organization), and the ones who work for the organization's clients-or work with the organization's clients. That is, payments, interactions, control relationships, information exchanges, and searches for individual and collective interests are negotiated in this triangle.

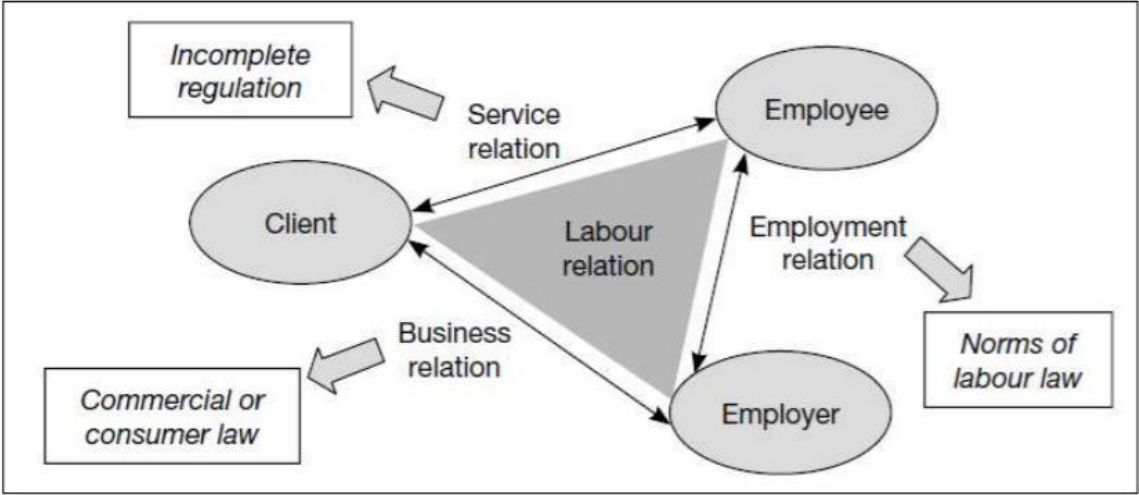


Figure 6. The triangle of relations in services. Source: Harvard et al., 2009, p. 259

Harvard et al. (2009) explore the "service triangle" in the context of the system and discuss various configurations of power and control, in which employers can retain control over employment relationships or control can be passed on to customers. They discussed the extent to which the labour law can extend from the formal employment relationship to the subordinate employee/subcontractor relationship.

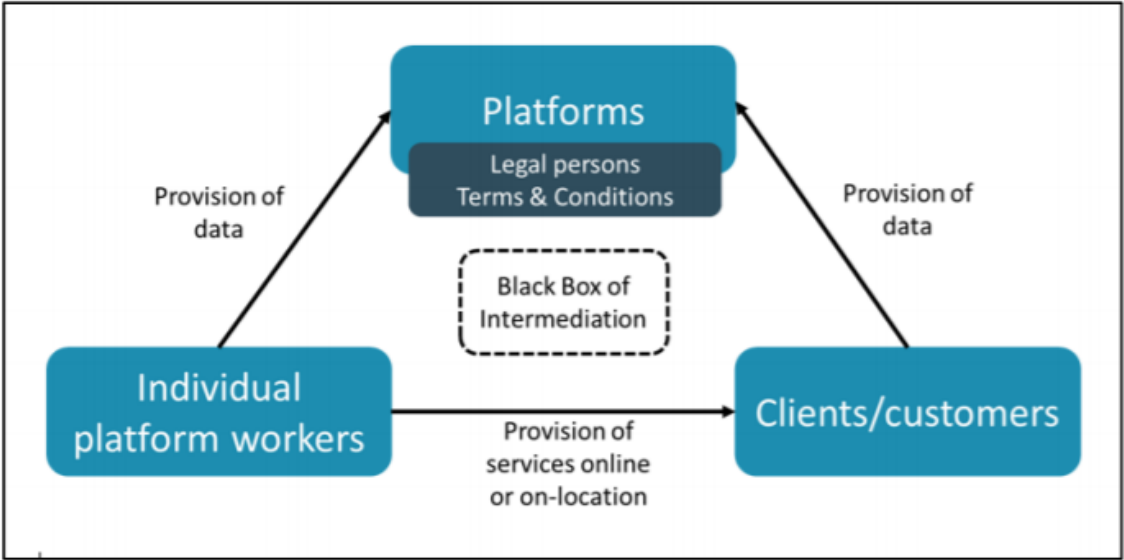


Figure 7. The conceptualisation of platform work. Source: Hauben, Lenaerts, & Waeyaert (2020),

Hence, we have the triangle for the relationships of the gig economy (Wood, 2019). The first insight we can observe is the fact that the employer *per se* is not represented as the classical role. The

employers/manager role of the triangle of relations in services are transposed, at a first sight, take the role as the platform actor in the gig economy triangle. Furthermore, the “employment” relationship in the classical triangle is created between the employer and the employee. It makes sense since the moment the employer is responsible to rate, certificate, provide material to the employee. However, in the gig economy, this relation is transposed to the client directly. In the following sections of this study, we will see how within the gig economy the client through the platform will be the one who rates the employee (self-employed by law) using the algorithms apps.

- *The virtual and automated managers*

At that point, the questions that came to my mind in the employment relationship among the manager, employers, and workers are: Who are the managers within the gig economy? Are the gig workers supervised by managers? Who has the role: the employer or the manager? What role is taking the platform?

The core manager role tasks are labour control, technical control, task allocation, direct control, surveillance, and hegemonic control. Taking the example of Lyft, we see that the rider “self-employee” is not taking this role. The role of monitoring remains automated on the platform taking the “role” of the manager. In this case, we can extract from this argumentation the first interpretation of the gig economy transforming the role of the classical employee relationships. In such circumstances, the gig atmosphere is not creating a new role or eliminating an actual one at all; it is shaping the manager role to the digital era.

Algorithmic management, within the gig economy, helps to preserve marginal and labour costs moderately low (Schmidt, 2017), and can save a lot of costs from the platform that acts as an automated virtual manager, thereby eliminating the need for human managers and supervisors (Lee et al., 2015). Application workers are usually managed through customer tracking and rating mechanisms, which is one of the basic principles of the recruitment economy, because most of the core HR processes (i.e., task allocation and performance evaluation) are executed by one of two groups of users, namely workers, or the client, through the app work platform (Schmidt, 2017).

For example, Uber and Deliveroo drivers are not directly supervised, nor are they required to wear uniforms or post organizational posters on their vehicles. However, it is well known that platforms can provide drivers with precise instructions or guidelines on cleaning the workspace, how to act around customers, and maintaining proper hygiene (Steinberger, 2018). Similarly, both platforms monitor the quality of work based on the anonymous ratings of customers (Wood & Steinberger, 2018).

Algorithmic management tracking, discipline and setting expectations for workers without supervision or human resources can often undermine social protection (Vandaele, 2018). Through its own purposes, algorithm management eliminates more of the interpersonal and empathy aspects of personnel management. Without organizing partners to advocate for their needs and maintain a balanced working relationship (Gilbert, De Winne & Sels, 2011), application workers may lose confidence and sense of security, leading to a decline in happiness. As a means of exercising control, algorithms essentially automate management practices.

However, this does not extend to protecting workers or promoting their so-called autonomy: platforms determine the qualifications of workers (for example, the novelty of vehicles is a factor in cooperation with Uber and Lyft; some platforms allow staff to rate customers. However, these ratings rarely affect the ability of customers to use the platform, and the level of demand and time pressure on many platforms means that staff have fewer options to work exactly on their own schedule (Kuhn & Maleki,

2017). Algorithm management is also extended to payment, and many application work platforms allow workers to conduct transactions anytime, anywhere. The platform then relies on an algorithmic “economic impulse” (Rosenblat & Stark, 2016) in the form of sudden prices (Gandini, 2018), called “impulse”—attracting workers to high-demand areas, a process that Woodcock and Johnson (2017) proposed as the “gamification”.

- *Unclear employment status: employee or self-employee*

“Industrial relations literature thus excludes domestic labour and also the self-employed and professionals who work on their own account: the contractual relations between a self-employed plumber and his customers are not ‘industrial relations’” (Edwards, 2003, p. 2). The reason is that self-employed individuals are considered to be an equal part of the people they hire, so the terms and conditions are determined by the market. Self-employment is considered to imply a purely market relationship rather than a managerial relationship (Sisson, 2008). This is an important statement for the gig worker status regarding its conditions and collective bargaining power. The status of employees is vital and important because most labour and social protection are related to it, too. Countries have adopted various methods to classify gig workers, usually caused by litigation, and the methods involving employment are in a very wide and very narrow range.

In the absence of a management relationship, self-employed are unwilling to create a structure that maintains inherently antagonistic relationships. Actually, they do not need it: dissatisfied “employers” can easily use the “exit” to remedy working conditions they find unpleasant. Certainly, Hirschman’s framework “Exit, Voice, Loyalty” (1970) explains the two vital “concepts” to rapidly identify the “self-employed” and “worker” status.

Firstly, the “Voice” factor. The only actor that would need its “voice” to claim for its rights is the one who is subordinated by the rules of an absolute ruler. In this case, the worker is the one who needs to “collective voice” to protest and claim its rights if they are not accomplished. Even so, the “Exit” concept refers to the ease to exit a relationship. In that case, if you are the “employer” or “owner” of a firm, you won’t have problems deciding whether you leave one relationship with a client or a provider. Thus, could we argue if the gig worker is truly “self-employed” people if they started to claim rights? Why are they not leaving its “employee relationship”? Following this reasoning, the employer or self-employed people benefits from different rights (as the “exit”). Are the gig workers taking advantage of these benefits? So, is the gig economy based on fake “self-employed”?

The platform work practices of global for-profit companies blur the lines between the traditional concepts of “worker” and “self-employment”, resulting in the unclear status of most platform workers who are considered autonomous in practice, with a low degree of protection (Donovan et al., 2016). Platform workers not only do not have a real choice in the position of the labour market, but are often automatically pushed into the most unfavourable position in the labour market without negotiation, with higher risks and costs, and are rarely resort to collective action. For professional platform workers, this is certainly a problem. Thus, platform work can exacerbate labour market segmentation (Brancati et al., 2019; Eurofound, 2019b), and the most vulnerable platform workers will endure the most unstable environment.

In platform work, the qualification of subordinated employment is particularly difficult to establish, as work allocation and organisation are atypical and based on the use of technologies rather than human decisions. Platform workers have greater autonomy in the choice and performance of their jobs. It is not always clear which of the parties in the platform work relationship is exercising control over the platform

worker (Eurofound, 2018a; Lenaerts et al., 2018). Few Member States in the EU use economic dependency as a criterion for determining the existence of an employment relationship.

Dependency is an interesting phenomenon that is occurring in the gig economy through the platform (Wood & Lehdonvirta, 2020). Three sources were identified by Wood and Lehdonvirta who call this relationship "labour platform" and demonstrate that it contains "structural antagonism" which manifests itself as a perceived conflict of platform rates, wage rates, and lack of worker's voice. Therefore, this creates a desire for platform representation, increased voice, and even unionisation while maintaining an entrepreneurial attitude towards clients. By refocusing industrial relations on structural antagonism (pluralist perspective) rather than labour relations, we can understand conflicts, protests, and organizing in new and diverse forms of work.

Networks effects

One characteristic of multilateral markets like gig works is that the needs of both parties are interdependent (Rochet & Tirole, 2003): the more customers, the more useful the platform is to workers, and vice versa. These so-called positive cross-network effects may cause the platform market to "dump" into a single, near-monopolistic platform. At the same time, the more users on each end of the platform, the more competition between projects and workers, which will have the same negative impact on the network. Therefore, platform strategy involves managing the growth of both parties, such as subsidizing one party by charging the other one.

Data-lock in

The second reason for relying on a single platform is data congestion. Srnicek (2016) pointed out that by using itself as an intermediary, the platform can create data about the behaviour of its users. These data can be very valuable. In the case of labour economics, what is particularly valuable to workers is their online reputation. The reputation of the platform comes from customer feedback on employee performance. Without a good reputation based on the platform, it is difficult to acquire customers.

Price gouging

Due to the aforementioned potential dependencies, these platforms are in a good position to know that workers' ability to respond to withdrawals is limited and can charge high fees. Although some workers accept platform fees as the price for using their services, a more important topic in the interview is how platforms are viewed as exploiting worker dependence. The platform will use its monopolistic position to participate in price increases or price gouging.

. I would like to highlight here a recent legislative procedure in Spain regarding this topic. The new 'Rider' law states :

“Disposición adicional vigesimotercera. Presunción de laboralidad en el ámbito de las plataformas digitales de reparto. Por aplicación de lo establecido en el artículo 8.1, se presume incluida en el ámbito de esta ley la actividad de las personas que presten servicios retribuidos consistentes en el reparto o distribución de cualquier producto de consumo o mercancía, por parte de empleadoras que ejercen las facultades empresariales de organización, dirección y control de forma directa, indirecta o implícita, mediante la gestión algorítmica del servicio o de las condiciones de trabajo, a través de una plataforma digital. Esta presunción no afecta a lo previsto en el artículo 1.3 de la presente norma.”

It regulates, firstly, the working conditions of delivery people through digital platforms such as Deliveroo, Just Eat, Uber Eats, Glovo or Stuart. The so-called "Rider" law will oblige these workers to be hired for a maximum of three months, so that from August 2021 they will no longer have autonomy.

And, secondly, the new 'Rider' law recognises the right of the works council to be informed by the company itself of the parameters, rules and instructions on which algorithms or artificial intelligence systems affect decision-making and may impact on working conditions, including access to and maintenance of employment and profiling, are they based.

However, this new law agreed has not been approved by the trade unions and workers representatives, even not by the gig workers, who claim that there are still missing important issues. Among the solutions put forward by the Spanish doctrine (Saenz de Buruaga Azcargorta, 2019; Lopez-Gandía, 2014) to protect workers in the "gig-economy" without weakening its key aspects, two alternatives have been suggested: self-regulation and the creation of a new special employment relationship for service providers through digital platforms. The first, as it has already been noted, is not an encouraging option, since the absence of collective representation of workers would tilt self-regulation to the side of the platforms, the latter imposing the rules that best meet their economic interests. On the other hand, the option of special labour regulation would be a suitable alternative, as long as it allows protecting workers' rights, proposing improvements in collective bargaining, and contributing to the development of the industry.

Furthermore, ideally, this regulation should provide mechanisms to alleviate the precariousness that, as we have seen above, workers in the "gig-economy" sometimes suffer (Saenz de Buruaga Azcargorta, 2019). To this end, the issues on which the regulation should necessarily pronounce itself are the following:

Freedom of working hours and working time: The regulation should provide the worker's freedom to set his or her working hours. The employer, for his part, should be able to set a maximum (but not a minimum) number of working hours per week. At the same time, the regulation should establish a mandatory maximum working week in order to avoid overwork. This maximum working time limit should be global, i.e., it would be applied per worker, taking into account all the hours worked on the different virtual platforms on which he or she provides services.

Freedom to work on several platforms: In order to promote freedom of entry into the market, the regulation should prevent exclusivity agreements from being signed with these workers.

Liability for workers' damages: As a result of the lack of subordination in the performance of work, companies could not be held liable for the actions of workers. Therefore, moving away from the classical criterion, workers should be liable for negligence committed during their provision of services, including accidents at work or damage to customers and even damage to the brand or reputation of the virtual platform.

The minimum wage for the time they provide services: The company should pay a minimum wage for the time the employer is actually providing a service to a client. However, the controversy, in this case, is what happens with waiting times. In the case of Uber, drivers must be active and on the move to find customers, so an equitable solution for this time may be to consider it as time at the employer's disposal, but unproductive. This time, according to Article 30 of the Workers' Statute, must be paid as working time. However, the special regulation could keep this regulation in force, but allow collective bargaining to modify it. In this way, collective agreements could reduce the pay for waiting time below the minimum or even eliminate all pay if they deem it appropriate.

Compensation of costs: The special regulation should allow companies to set requirements for non-consumable goods that the worker must possess in order to be part of the platform. Thus, they could be required to own a telephone, a car, a computer, so that these goods are not paid for by the company. However, consumable goods that are necessary for the execution of work, as well as expenses related exclusively to the provision of the service, should be paid for by the company.

Therefore, if this regulation is passed, this special labour regulation would not only protect workers in the "gig-economy" but also adapt to the new employment challenges of the digital age.

- *Challenges for the gig workers status and doctrine*

Analysing the general overview situation is clear that the status of the gig workers is a vital aspect to improve the employee relations among the actors. At the same time, the state and the public institutions are playing a crucial role in this classification. The first challenges and conclusions that I came up with according to the literate studies are:

Firstly, gig workers have low income, fragmentation, instability, lack of backup options during the intermittent period of their gigs works; secondly, the gig workers have inadequate protection of their working conditions, including little or no opportunity for training and professional development; thirdly, exposure to specific platforms; fourthly, those risks specifically related to the work of platform (income replacement benefits in case of work accidents, unemployment and illness and income support programs) have low protection social coverage; and fifthly, very low level of representation and collective labour rights.

In the existing literature reviewed for the purpose of this research, the differences in risk exposure and the relative importance of instability risks can not only be distinguished between different types of employment relationships between platform staff and platforms and/or customers, but also different types of employment relationships. Low-skilled locations and online platform jobs face high risks when executed for for-profit global platform companies. These people have little or no choice in contract terms and labour market conditions and have little or no recourse and representation opportunities.

The greatest risk of instability is observed in platforms that promote online collaborative work. Work on such platforms is usually unlimited, so all services are provided "cross-border" and face challenges related to the free movement of workers, social security coordination, taxation, and undeclared work. It is also one of the least studied types of platform work. Highly skilled platform workers also face considerable risks of instability, especially when working on online platforms. They are more likely to be (true) non-dependent self-employed, and their risk is related to their employment status as self-employed.

According to different countries, self-employed individuals usually have fewer employment opportunities and protection levels. Platform workers hired by more local or operating platforms or worker-owned cooperative platforms are better protected because the latter is easier to ensure fair working conditions, including decent wages and income security, access to social protection, and prevention of arbitrary behaviour or excessive surveillance (Schultz, 2016).

- *Worker bargaining power and collective action*

On the other hand, the managerial relationship with employment is supposed to create a "structured antagonism": an inherent dynamic that creates a persistent and/or latent conflict on the distribution of the surplus generated by employment but also linked to the organization labour that creates the surplus (Edwards, 1986). In particular, control systems can give rise to conflict when workers have an inherent

effort towards autonomy to realize their interests and identities (Ackroyd & Thompson, 1999). In some cases, this structured antagonism produces collective action (Edwards, 1986). The reluctance of self-employed workers to participate in collective activities explains their exclusion from IR. But in the odd-job economy, we see collective action unfolding.

In this gig economy scenario, the role of the trade union is vital. We have found that gig workers have the essential features of a classical subordinate worker relation. So, it makes sense that the trade unions consider them inside their structures. However, gig workers have handicaps in terms of association: “workers often labour independently, in isolation, over geographically expansive areas, and in direct competition with one another. Additionally, gig work is often short term or task-based and online labour platforms have high worker turnover rates” (Farrell & Greig, 2015). A plus point for trade unions is that gig workers got used to the digital platforms; so ‘the Internet may enhance the revitalisation of trade unions through “mobilisation” effects’ (Upchurch & Grassman, 2016) and through embryonic solidarity. One example is the creation of the app support UpTop.

Trade unions have played a vital role in assisting workers in organizing and providing collective bargaining for years. Collective bargaining has been fundamental to guarantee labour benefits. They have been a fixed element in the political and labour spheres with lobby actions, direct activities and community association. The recent changes in the employment relations within the gig and platform work suggest new challenges and demands for the trade union movement. The trade unions have to adopt a new role or readapt the actual ones (De Stefano, 2016) facing three different approaches in leading gig workers.

The first one is conducting a legal strategy to worker misclassification claims; the second one is the progress of organizations and communities who render service and lobbies to gig workers, and the third approach is forcing the legal and regulatory reform at the metropolitan and national level to advocate association and bargaining rights for gig workers.

The challenging classification of workers attempts to place platform workers and gig workers under the protection of existing regulations governing the employment relationship, immediately providing corresponding protections and benefits. An equally important benefit of employee status is the clear ownership of the employer and thus the counterpart to collective bargaining. In the gig economy, most digital job platforms are seen as *de facto* opponents of bargaining, although these relationships are sometimes ambiguous. Some countries have launched legal challenges based on the misclassification of workers. Although some class-action lawsuits were originated outside the union movement (Lane & Daus, 2012), unions have played a central role in challenging the classification of workers.

Nonetheless, gig workers started to collect their bargain power through independent digital platforms on their own. Gig workers have not stopped to explore more options forward trade unions like online forums, workers centres and workers cooperatives (Fine & Gordon, 2010) to protect their rights.

- *New unions and workers' communities*

In many industrialized and post-industrialized countries, unions’ contact with non-standard workers focuses on applying existing collective bargaining frameworks to new workers. At the same time, alternative organization work is underway, including the formation of new independent unions by non-standard workers. These examples are often rooted in community and worker empowerment and characterized by a lack of collective bargaining (Fine, 2015; Morris, 2005).

There is also significant overlap between the emergence of “independent” trade unions and the revitalization efforts of established trade unions and efforts to establish a broad and inclusive labour

movement. The concepts of minority and independent unionism are not entirely popular. Some critics expressed their concern that minority unionism could lead to inter-union competition for representation (Harcourt et al., 2014). Others worry that ethnic minority unions are vulnerable to company influence or even bribed (Fine, 2015).

Regardless of disputes between the membership model and certified majority unions in the workplace, minority unionism can provide a direct way to influence workplace politics and the economy and working conditions elsewhere. The handling of minority unionism varies from region to region. Some independent minority unions follow externally established guidelines to obtain formal recognition; however, it is more common for them to identify themselves as unions and set their own thresholds of representation. Because of their independence and self-direction, ethnic minority trade unions often operate outside the regulatory framework governing the operation of traditional trade unions. Meanwhile, traditional trade unions need to work more on non-standard employment (NSE) to integrate the gig workers into its structure within the employee relation framework.

New unions and worker organizations appeared like the Independent Workers Union of Great Britain (IWGB). For instance, IWGB had already had a big impact inside the gig economy as a minority union. In August 2016, when Deliveroo declared the decrease of the pay rates (Osborne & Butler, 2016) IWGB was helping supporting and encouraging workers, instead of direction.

Milkman (2013) claimed that “IWGB as contemporary minority union tactics direct action like the organization before the New Deal Era when associated labour turned to lob actions” (p. 2). The concept of independent unions is not welcomed at all. Some critics (Harcourt et al., 2014) express that can lead to competition between the traditional unions for representational rights. However, from my point of view, I disagree with that because emerged independent union could be integrated in the future in the traditional structures with a specialisation in non-standard employment while the traditional one is not taking action. For these reasons, the organization and the collective bargaining power within trade unions are essential to make pressure on the monopoly-dependency scenario that is creating these platforms.

Digital online forums

The impact of the rating system on app-based employees suggests that employees should develop strategies to reduce the impact of these rating tools or should establish mechanisms to successfully navigate the rating system. Although the rating tool is primarily used to monitor and discipline employees, Esther Lynch, the federal secretary of the European Trade Union Federation, helps employees reuse this technology to rate the applications they work with. She claimed that "like qualification workers, some employees started providing qualifications to employers. I think all of these strategies are good because they provide opportunities to interact with workers." (ILO, 2019, p. 14). Lynch believes the classification system that encourages worker participation provides a potential entry point for subsequent organizations and class action.

This is especially common among crowdsourcing workers, who are often geographically dispersed and work in isolation on the internet. Forums can help staff distinguish between fair and exploitative applicants to maximize revenue and share their expertise. Participation in the forum has improved the ability of workers to choose better jobs with clear expectations and higher wages (Berg, 2016); however, there is still a huge power gap between workers and platforms in how to use the classification system. The triangular nature of the platform further complicates this as staff, platforms, and applicants participate in the exchange. Apps use ratings to punish and fire workers, while worker forums that aim

to change industry standards must take activities to force crowdsourcing platforms and applicants to treat workers fairly. The effectiveness of the platform's rating system remains largely unknown

Workers Centres

In the past two decades, worker centres have evolved into a new type of agency advocating for worker rights, primarily in the United States. They operate independently, generally within a limited geographic area, and provide social services and labour resources for wage earners in various sectors (Fine & Gordon, 2010). The emergence of worker centres helps fill organizational gaps in sectors where atypical forms of employment dominate (Peck & Theodore, 2012; Ness, 2010; Cobble & Vosko, 2000; Heery, 2009).

In industries where workers face formal union barriers, they provide a forum to seek personal support services and establish agents (Rosenfeld, 2006). Many departments currently active in worker centres have yet to make a leap in digital work processes or digital labour markets, but some successful methods adopted by worker centres to improve the conditions of their membership are expected to be applied in the gig economy. I believe that these apps may be particularly useful for those working on platforms that facilitate on-demand work through apps and may not be helpful for crowdsourcing workers.

Increased cooperation between workers' centres and trade unions, the development of specific industry networks, and legislative and regulatory interests provide some indications of the ability of these groups to provide services while addressing macro issues (Fine, 2015). The Worker Center Network encourages groups to pool resources and share strategies strategically across regions. This method is very suitable for widely dispersed workers operating under the same company platform.

Workers cooperatives

Few organizational models can promote worker's voice and control more than cooperatives (ILO, 2016). Workers' cooperatives are a type of cooperative in which the majority of the workers are owners and participate in the running of the company. Its main task is to create and maintain sustainable employment opportunities (CICOPA, 2005). Workers' cooperatives have been established in all sectors of the economy and have "effectively resolved deficiencies in legal and social protection and poor working conditions common in atypical employment" (Esim & Katajamaki, 2017, p. 2). This section briefly analyses issues related to worker management and owned cooperative enterprises in the labour economy. Cooperative development of the gig economy has taken two different approaches: the first one is to create platform cooperatives, which typically compete with standard work and concert platforms, and the second method is to develop cooperatives so that gig workers and platform workers can pool resources and improve services and benefits.

- *Collective actions and Trade Unions Challenges*

The purpose of this research project is to identify and analyse examples of collective bargaining between workers and employers in the platform economy. It is difficult to find specific examples of "mature" collective bargaining, which can be attributed to four factors.

First, the platform economy is a new development: the novelty of the digital labour market shows that, according to the traditional definition, collective bargaining has not yet been fully established, including through the signing of collective agreements.

Second, the shift in collective bargaining may be consistent with the relative importance of the gig economy in the overall labour market. Despite extensive media coverage, gigs, and platform work account for only a small part of the total labour force.

Third, some labour platforms actively resist workers' efforts to join trade unions and collective bargaining. For example, in addition to Uber's opposition to Seattle's "collective bargaining"

regulations (Uber, 2017), Uber's global leader Amit Singh recently stated that collective bargaining is incompatible with your business.

The fourth challenge faced by gig workers in achieving collective bargaining is that the organized activities of independent contractors may be seen as a violation of competition regulations or other antitrust laws. The vast majority of platform workers are regarded as independent contractors. This employment situation not only makes it difficult to determine their bargaining opponents, but even though collective bargaining is recognized as a basic right, some people think that the collection agency they set up is illegal. To a large extent, it excludes their collective ability to negotiate, the right to participate in comprehensive collective bargaining and freedom of association.

Judging from the analysed cases, in order to reach a bargaining power, the self-employed must face a series of obstacles, including firstly, promoting the common interests of workers-overcoming competition; secondly, determining one (or more) gathering points -virtual, or preferably real-to overcome isolation; thirdly, identifying the negotiating partner, and lastly, pointing out the source of power to make a collective claim.

V. CONCLUSIONS

Q1) Is the gig economy transforming the nature of the employment relationship from the industrial relations framework literature? Hypothesis 1 that tried to answer Q1: the gig economy is transforming the classical employment relations emerging new perspectives and actors' roles within the industrial relations framework.

Using the industrial relations literature and analysis of the current actor and roles we have observed that the H1 is supported. The gig economy is changing the classical view that we understood as employment relations, the interaction between the employees, employer, managers, unions, and the state. The current situations are creating structural changes in the dynamics of the labour and social workspaces, questioning the definitions and relations established in the industrial relations literature, such as the term of the self-employed and the freedom of unionisation of workers, as well as the extension of their bargaining and negotiating power and action.

In addition, the gig economy is still contemplated as an emerging employment relation that challenges the standard employee relations, norms and the blended conjectures and regulations in the capitalist system. With the industrial relations theories, we had an overview vision to understand the new roles emerging in the gig economy and how the study and consideration of new regulations and workers collective voice can shape this gig system to a forward decent one, this new digital era is time to fundamentally restructure many regulations related to labour, workplace, taxation, and security. The industrial relations framework helped us to define the challenges behind the digital economy using the pluralist-radical perspective to comprehend gig economy actors' relationships.

As we move forward, the potential of the digital economy, especially the digital workforce platform, can be critical to promoting sustainable development, creating an enabling environment for business, and promoting decent work conditions for all. However, it is also crucial to address the challenges posed by the rise of digital labour platforms and to shape the changes in the world of work in ways that benefit both companies and workers. Overcoming the challenges and seizing the opportunities before will require new law regulations, specifically, hard law and soft law public policy, and regulatory frameworks to fully address the unprecedented complexity of today's digital economy, in which labour regulation can play a critical role. This approach also requires a comprehensive response from other legal and political areas, such as competition, artificial intelligence, and taxation, all related to the labour perspective. Given the diverse and immature nature of many regulatory responses to platform work, some form of international regulatory dialogue and policy coordination will help clarify some regulatory uncertainties and reiterate the applicability of universal labour standards.

Q2) What are the challenges of the gig economy within employment relations? On the one hand, gig work is indicative of the opportunities and challenges created by the platform economy. On the other hand, it represents a change of past work arrangements associated with the previous industrial relations era. The joint efforts of multiple international forums and organizations are essential to ensure that the digital labour platform is further developed in a way that vigorously promotes inclusive and sustainable development.

The core of this supervisory dialogue and coordination process should be efforts to ensure that basic principles and rights in the implementation of national laws and other key legal provisions, such as those related to safety, health, and social security in work, apply to all workers, including workers on the digital labour platform. Given the scope of relevant stakeholders and policy areas, the best progress can

be achieved through social dialogue between relevant stakeholders, especially digital labour platforms, platform workers and their representatives, and the government. With proper participation and preparation, your efforts can produce a clearer understanding and more effective and consistent methods at the corporate, national, and international levels over time, with a view to:

1) *Managerial and algorithm challenge.* Firstly, ensure fair competition and create an enabling environment for sustainable enterprises; secondly, require and promote the conditions for the participation of workers and companies and clear and transparent contractual agreements, including those reflected in labour law and consumer law; thirdly, ensure that the employment status of workers is correctly classified and comply with the national classification system; fourthly, ensure the transparency of the qualification or classification of workers and companies using digital platforms (such as online networks, location-based and e-commerce platforms); fifthly, ensure the transparency and accountability of employees and company algorithms; and lastly, protect workers personal and labour data, as well as data related to the company and its activities on the platform.

2) *State and public policy regulations challenges.* First, ensuring that all workers (including platform workers) receive adequate social security benefits by expanding and adjusting the policy and legal framework when necessary; second, ensuring a fair dismissal process for platform personnel; third, ensuring access to an independent dispute resolution mechanism; fourth, ensuring the operation of the platform the staff may choose to appeal to the courts of their jurisdiction; fifth, providing wage protection, fair pay, and working hour standards; sixth, allowing platform staff to move freely between platforms, including promoting the portability of staff data, for example in relation to ratings; and last, effectively tax the digital economy, including platforms, customers and workers, and their transactions.

In addition, Stewart and Stanford (2017) suggestion on a number of alternatives to improving or extending the regulation of gig work is relevant. The five alternatives they propose are: 1) confirming and enforcing existing employment laws; 2) clarifying the uncertainty and ambiguity around employment arrangements associated with gig work; 3) creating a new category of the independent worker; 4) establishing rights for all workers rather than just employees, and 5) and re-conceptualizing the meaning of an employer.

3) *Trade unions challenge.* Various organizational structures are helping workers create opportunities for agency, voice, representation and power in the concert and platform economy. Trade unions, worker centres, cooperatives and online forums represent a number of initiatives aimed at fostering communication and contact between workers, contact with employers, increasing political and legal awareness of workers and improving the standards in the workplace. In order to promote collective action and increase worker representation opportunities, each one has adopted many different strategies to give workers a voice in the workplace to safeguard rights and advance interests.

However, the cases reviewed show that, whether at the industry or company level, workers can obtain substantial benefits related to employment conditions, which is promising for geographically localized on-demand work. Many mature unions have recognized the need to create concert and platform-based membership opportunities for workers based on a broader outreach strategy. Participating in non-employee-related contractor debates through litigation and regulations, a structure that allows individual worker affiliation until a formal union recognition agreement is established is and will continue to be an important part of the comprehensive strategy.

The development of organizations, agencies, voices, and worker representatives, as well as expression through collective bargaining, is the most reliable and democratic way to achieve the future work we want. When benefits are obtained through collective bargaining between the union and the employer or

its organization, tripartite dialogue between the employer and the employer's organization, and the union and the government, we can ensure that the results are long-lasting and the interests of all the parties are represented.

In conclusion, the gig economy has shaped the nature of the industrial relations roles into a new digital scenario that is constantly changing and being adapted to social necessities. This confirms our second hypothesis: **H2: The gig economy is presenting new challenges for industrial relations research.** In response to the challenges posed by this new way of working, many governments have adopted regulatory measures to address issues such as the employment relationship, health and safety standards, and insufficient social protection. Private, non-state actors and employers' and workers' organizations have also taken initiatives. However, these changes in regulatory response have brought further challenges. This issue becomes more complicated because many digital work platforms operate across multiple borders and jurisdictions. The result is regulatory uncertainty among workers, companies, and the government.

The digital labour platform has the potential to benefit workers and companies and to benefit the entire society through them. However, only if they provide good job opportunities they realize this positive potential and help us achieve our sustainable development goals. It will be crucial to ensure that all workers, regardless of their contract status, are protected by key labour standards, as will socially dialogue. Therefore, it is important to have a clearer understanding of how digital work platforms work efficiently and consistently. Using the industrial relations framework and perspective helped us to identify the principal conflicts and to expose challenges for further research. International policy discussions and coordination are required, which may ultimately lead to a clearer understanding and a more effective and consistent approach to the global digital labour platform and the gig economy era.

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