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Emerging Patterns of Collective Action in India's Platform Economy: A Study of Drivers and Delivery Workers

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Résumé de l'article

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Summary

Research Objective

The objective of this study was to analyze collective action in the platform economy in a context where standard employment relationships are the exception, rather than the rule. To this end, I sought to answer two questions:

1. How is collective action in the platform economy different from what is seen in the informal economy?
2. What factors are responsible for the differences in patterns of collective action?

Methodology

This study is based on the analysis of a subset of 60 interviews from a larger sample of 135 in-depth interviews conducted over 3 years (2018-2021). By sampling for range (Weiss, 1995), I could identify the similarities between platform models and how they lead to shared material conditions. In my sample, 27% of the delivery workers and 52% of the drivers had worked for more than one platform company. I could thus corroborate their narratives of managerial control and information about changing conditions of work.

Conclusions

I found that the way work is organized and managed in the platform economy enables collective action by platform ride-hailing and delivery workers in ways not seen among informal workers. Algorithmic allocation of work means that workers are directed by apps to wait for orders or rides at common locations around the city. These shared physical spaces allow workers to meet and communicate with each other in ways not intended by platform companies.

Relatedly, companies attempt to increase their visibility, and thus secure new customers, through mandatory use of branded uniforms and equipment by workers. Workers can thus easily recognize each other. Control through company apps rather than direct managerial control also encourages communication between workers as they turn to each other to deal with day-to-day questions and shared concerns. Through WhatsApp groups and physical spaces, workers develop a shared antagonism toward platform companies.

With the platform company identified as the de facto employer and target of contention, platform workers can make wage and incentive-based demands, in addition to the advocacy and welfare-based demands traditionally made by informal sector workers.

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Abstract

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Keywords: platform economy; collective action; informal economy; India; work; algorithmic control; union; mobilization

1. Introduction

Organization of work in the platform economy has been theorized to be isolating and atomizing, separating workers from each other and from a place of work where they might come together to articulate common material interests. Platforms are designed such that the worker can communicate only with the company and sometimes the customer but not with another worker. The company frames the worker as a micro-entrepreneur who uses the platform to sell services, and uses gamification to push the worker into packing as many orders or rides as possible into each day (Mason, 2018) with little time left to build connections.

However, recent work has shown that platform workers have begun to make collective demands. Strikes, mass logoffs, online protests and legal action against platform companies have all been recorded with increasing frequency in countries around the world (Stuart et al., 2022; Trappmann et al., 2020). Platform workers are concerned about material conditions, like income and working conditions (Frymorgen, 2016; Lei, 2021; Tassinari & Maccarrone, 2017).

Here, using data from 60 interviews with delivery workers, drivers, platform company managers and government officials, I found in the same vein that workers do engage in forms of resistance despite evident barriers. These actions are inconsistent with the low unionization and contention seen among informal workers in India across a wide range of occupations, such as domestic work, construction and home-based work (Agarwala, 2006).

Informal work is a useful baseline for comparison because it is the status quo ante for most workers entering platform work. Through this comparison, I will make two arguments that show how work organization in the platform economy can *enable* collective action, which is much less common in the informal sector. First, I will argue that platform work organization makes the platform company visible to workers as the de facto employer[1], thus making collective action possible. In the informal economy, layers of middlemen often obscure the employment relationship.

Second, platform workers address their demands to two targets: the employer and the state. Informal worker unions have no single, identifiable employer and traditionally confine their demands to the state.

Section 1 will provide a brief comparison of platform work with informal work in the Indian context, specifying how platform work can be conceived of as a type of informal work but with important differences that enable collective action. In Section 2, I will use existing studies to elaborate on the challenges to collective action in the platform economy. Following a description of the data and methods in Section 3, Sections 4 and 5 will present my two arguments. In Section 6, I will discuss the challenges of collective action and what alternatives might be available to platform workers. I will then conclude with a discussion of the implications of my study, and directions for future research.

2. How Is Platform Work Different from Informal Work?

This study focuses on on-demand, location-based platforms, specifically those offering ride-hailing and delivery services. Barring some regulated segments, these are largely informal services (Nayyar, 2012).[2] Therefore, informal work provides the most appropriate point of comparison for

platform work in India. Unlike the U.S., where 10.1% of workers are in nonstandard work (Applebaum et al., 2019), 67.5% of India's non-agricultural workforce is in the informal economy (Deakin et al., 2019), which has no regulatory oversight.

Like most informal work, platform work is performed on-demand, the workers are paid for each job they complete (Stanford, 2017)using their own tools and equipment, to perform the productive work associated with the supplied service. The expansion of this business model has led some to proclaim that traditional 'jobs' will come to an end. Some welcome this development, others fear its consequences for the stability and quality of work – but most see it as driven primarily by technology, and therefore largely 'inevitable'. This article provides historical and theoretical perspective on the expansion of digitally mediated work, to better understand the range of forces (technological, economic and socio-political and the prices for services are set by intermediaries who charge a commission on every transaction (Moore & Joyce, 2020). Just like informal workers, platform workers lack the protection of labour laws and the benefits of standard employment relationships, such as pensions and insurance (Nayyar, 2012). These similarities may suggest that platform workers are no different from other informal workers (Chen, 2018).

However, platform work organization is different from conventional informal work in three ways: algorithmic work allocation; existence of an employer that makes efforts to be more visible; and use of algorithmic control rather than direct managerial control. These differences are central to the emergence of collective action among platform workers.

3. Barriers to Collective Action in the Platform Economy

As with other types of nonstandard work, there is much skepticism about the possibilities for collective action in platform work. Platform work, especially driving and delivery, has low entry barriers that require little education or skill. Because the work is deskilled and homogenous, platform companies find that workers are fungible. Most companies can afford to lose workers because they have access to large reserve armies of un- and under-employed workers (Irani & Silberman, 2013). For workers, platform work is attractive because well-paying employment opportunities are lacking in local labour markets (Gray & Suri, 2019). Absence of support from the state can also dissuade workers from choosing to resist platform work (Anwar & Graham, 2020).

The option of leaving platform work altogether is also often unviable. Those permanently displaced from their villages and marginal farms have few sources of nonwage income to rely upon (Schmalz et al., 2018; Webster, 2016). Unlike some digital platform workers who gain marketplace bargaining power as they gather more experience (Anwar & Graham, 2020; Wood & Lehdonvirta, 2021), drivers and delivery workers have no opportunities to progress to a better structural position.

In addition, the platform companies frame platform workers as self-employed entrepreneurs (Graham et al., 2017). This framing erases the employment relationship, which has long been considered the basis of the antagonism between labour and capital (Wright, 2000). Labelled self-employed, the workers are far less likely to blame the platform company.

The feeling of being entrepreneurs is enhanced by algorithmic management where workers and managers rarely (if ever) share the same physical space (Cant, 2019). Without an employer in sight to serve as the object of contention, and with no place of work, the workers cannot disrupt the process of production and thus have less bargaining power.

There are few opportunities to build solidarity in the course of platform work (Irani & Silberman, 2013). Platform workers thus cannot build associational power, which comes from expression of worker solidarity through unions, associations and other collectives (Silver, 2003; Wright, 2000). They work by themselves and perform jobs for customers via the platform. The absence of a place of work also hinders the formation of networks among workers (Gray & Suri, 2019; Salehi, 2016).

Despite these impediments, my research indicates that collective action is prevalent among drivers and delivery workers on platforms. New forms of work organization might curtail some sources of worker power, but they also bring with them new opportunities for contention.

4. Data and Methods

This study is based on analysis of a subset of 60 interviews from a larger sample of 135 in-depth interviews conducted over 3 years (2018-2021), in the city of Hyderabad, a metropolitan area that is the capital of the state of Telangana in India. I interviewed 29 delivery workers, 25 drivers, 2 government officials and 4 managerial staff from delivery companies. Both government officials were (one currently, one formerly) associated with the Transport Department in the state of Telangana. Of the managerial staff, one worked for a food delivery company, one for a grocery delivery company and two for multi-service platforms.

By sampling for range (Weiss, 1995), I could ensure inclusion of workers from food and grocery delivery, hybrid services (food, groceries and package delivery, bike rides for customers, tasks such as shopping) and different types of driving jobs. This sampling strategy enabled me to identify the similarities between different platform models and how they led to shared material conditions among workers.

The delivery workers worked in the largest food delivery (Zomato, Swiggy), grocery delivery (Big Basket, Grofers), and hybrid service (Dunzo, Rapido) companies in India. In addition to the two ride-hailing companies Uber and Ola, the drivers I interviewed worked as contract workers for IT companies, as drivers for private households and as freelancers for travel companies. Nine workers were associated with the Indian Federation of App-Based Transport Workers (IFAT), a regional affiliate of the International Transport Workers Federation (ITF). The IFAT was established in November 2019 and organizes platform workers in 10 Indian states.

While the sample is not statistically significant and cannot claim to be representative of the platform economy as a whole, purposive sampling can be used to capture the *variation* in platform work organization. This approach enabled me to identify emerging *patterns* of collective action and deduce the common and underlying *processes* that lead to such action in different circumstances. Because driving and delivery are the largest segments of the platform economy in terms of number of workers employed currently and employment potential (NITI Aayog, 2022), the findings of this study are important indicators of what might be expected from India's platform economy as it continues to grow.

Two other limitations are important to note. First, the findings of this study are applicable to on-demand, location-based platform workers and not to digital workers, whose conditions of work are far removed from those described here. Second, the comparison with informal workers is based on existing literature rather than on collection of primary data.

In my sample, 27% of the delivery workers and 52% of the drivers had worked for more than one platform company, either consecutively (moving from one company to the next in response to attractive incentives) or concurrently (switching between multiple apps to capitalize on daily and

weekly incentives). I could thus corroborate their narratives of managerial control and information about changing conditions of work.

I contacted the workers through apps and asked for interviews at their convenience after informing them of their right to refuse. All of them were interviewed except for one driver and three delivery workers who did agree but ultimately did not participate. The interviews lasted about an hour and a half on average.

I analyzed the interviews using ATLAS.ti, coding systematically for forms of communication with other workers, for membership in WhatsApp groups and for participation in different forms and levels of collective action identified in a review of the literature on platform workers. I also coded for awareness of collective action even if the interviewee had not participated in any such action. The names of all interviewees have been changed to ensure confidentiality.

Before turning to analysis of how platform work organization encouraged collective action, it is worthwhile to describe the patterns of such actions. Nearly 26% of the workers in the sample had participated in some form of collective action against platform companies. By collective action, I mean taking action in concert with other workers, and making clear demands that are directed at the platform company.

The workers described the processes by which they came together. They would talk to fellow workers they met in the course of the day or to members of their WhatsApp groups about problems, such as lack of jobs and falling pay rates per order. Where WhatsApp groups were not already present, they would exchange numbers and create groups for communication and mobilization. Conversations on these groups would eventually crystallize into concrete plans. The planned actions primarily took the form of banding together and going to the company headquarters to make demands. Once there, they would speak to the managers, usually to little effect.[3] Some managers would be placatory and others dismissive or rude. The workers who took the lead in articulating the group's demands would continue to play a role in later actions.

In one instance, workers protested near a group of restaurants where they usually gathered to wait for orders. While a worker who participated in this action saw it as an effective strategy to disrupt company operations, it also came with greater risks, as when the police detained several members of his group following a complaint from a restaurant owner.

Despite the lack of response from companies, all the workers who had participated in collective action had made multiple visits to company headquarters. The actions were invariably short (≤2 days), bringing together anywhere between 15 and 100 workers. Although such groups usually disbanded soon after, the WhatsApp groups continued to exist as venues for sharing tips and strategies.

With the emergence of IFAT and similar unions, the scope of actions became broader, as seen in the city- and country-wide actions taken by workers across ride-hailing and delivery platforms (Rakheja, 2020; Ranipeta, 2020). However, union officials told me that local WhatsApp groups continued to be central to the union's mobilization and recruitment strategy. For instance, the 9 IFAT members I interviewed came to be associated with the union only after having participated in local actions—a sign of organic, grassroots mobilization. How, then, did such actions initially come about?

5. Collective Action and the Employer

It has been argued (Agarwala 2006:426) that, 'Informal employment...disperses the site of production through home-based work, complicates employer-employee relationships through multiple subcontracting arrangements, and atomizes labor relationships by eliminating the daily shopfloor gathering of workers.' With several levels of middlemen and contractors, informal workers often do not have an identifiable employer.

Arguably, platform workers ought to face a similar predicament—absence of an employer to unite against and a worksite to congregate at. This handicap is mitigated, however, by three features of platform work organization not seen in informal work: algorithmic allocation of work; mandatory use of company-branded uniforms and equipment; and control through company apps rather than through direct managerial control. These features lead to the creation of physical and virtual spaces where workers can congregate, develop relationships of solidarity, and mobilize against platform companies. I thus found what Silver labels "Marx-type" labour unrest—contentious politics that are an unintended outcome of the capitalist mode of production in which workers participate (Silver, 2003, p. 20).

5.1. Algorithmic Work Allocation

Platform companies are faced with a recurring challenge: controlling how many workers will be available to meet the demand for work at any point of time, given that the workers are not employees and cannot be compelled to be available (Mason, 2018). Unlike informal workers, they cannot be coerced through threats from subcontractors, withholding of work, withdrawal of credit, pressure from kin networks or other personalistic means (Basole & Basu, 2011; Mosse, 2002).

Instead, platform companies offer incentives in the form of special bonuses and surges, or use punitive measures to ensure that workers log on to the app and wait for jobs (Benjaafar & Hu, 2019; Griesbach et al., 2019; Guda & Subramanian, 2019). The workers seem to be given an opportunity to make more money, but the opportunity is usually associated with several conditions. They need to sign up for shifts, accept a high percentage of the jobs they receive, remain logged on for longer periods and maintain high ratings (Rosenblat & Stark, 2016).

In the informal economy, most workers earn piece wages and thus lengthen the working day in order to increase their income (Basole & Basu, 2011). Similarly, platform workers are made to believe that, as entrepreneurs, the only limit on their income is their ability to work hard (Posada & Shade, 2020).

The key difference emerges when algorithms guide workers to "hotspots" where they are more likely to get leads. Ride-hail drivers are directed to wait near high traffic areas (airports, malls, transit hubs), and delivery workers to wait near restaurants. These areas are thus transformed into spaces where otherwise isolated workers can encounter each other. Informal workers, on the other hand, continue to work by themselves or in small groups overseen by supervisors.

5.2. Employer Visibility

In addition to the problem of matching workers with customers, platform companies, like all companies, need to acquire customers and retain them by maintaining service quality. Companies see insignia and uniforms as ways to raise the consumer's awareness of their business and standardize the consumer's experience of their services. A manager told me that they were considering providing branded toolkits to the plumbers, electricians and carpenters registered on the platform to improve the consumer's experience.

'I had to go to the Swiggy office one time, to get the bag and t-shirt they will compulsorily call you in. And it costs 1800 Rs[4] (~21 USD) in Zomato and 1100 Rs (~ 13 USD) in Swiggy... They won't give us orders till we do this,' said Abdul, an Uber and Ola driver who now works at Swiggy and Zomato, and who also operates a bike taxi for Ola Bike.

It is also a way to impose managerial control on workers without involving a human manager. Delivery workers are expected to post selfies to the platform app, thereby proving that they are dressed appropriately in the company uniform and (during COVID-19) wearing masks and gloves. Thus, platform workers must conspicuously display their association with the company.

There is, however, an unanticipated effect. When workers encounter each other in the hotspots or in waiting areas, they can easily identify others who work for the same platform company. In the informal economy, companies instead try their best to remain invisible to evade regulation, and workers lack any means of identification.

Thus, platform work enables workers to come together in physical spaces around the city, and also enables easy mutual recognition. As they wait for leads, most regular platform workers form connections with each other. 'If we drop someone there, we park there and we see each other's car and ask each other, "Hey brother, how's it going?" In the city, every day we meet other drivers,' Rahmatullah, an Uber driver told me.

5.3. Algorithmic Control

Next, like Lei (2021) and Tassinari and Maccarrone (2017), I found that algorithmic control itself encourages workers to form peer connections. Workers can register on platforms remotely after watching in-app training videos, answering any related questions and uploading the required documents through their phones. Delivery workers and drivers are almost never required to go to the platform company office (other than to pick up branded uniforms). None of the interviewed workers had gone to the company head office more than twice in their entire tenures. In every case, the second visit was necessitated by a blocked ID or similar disciplinary measure.

Without regular managerial contact, workers turn to each other with questions about work. The nature of platform work precludes inter-worker communication. Platform apps can be used to communicate with the platform or the customers, but not with other workers. However, in being forced to wait together, workers are afforded the opportunity to exchange information in a space relatively free of direct managerial control. In the informal economy, while the employer might not be present at the worksite, middlemen loom large over the labour process and may threaten to withhold raw material, credit or payments (Boeri, 2018).

Through encounters in algorithmically determined areas, newcomers learn how to avoid penalties and how to negotiate with the customers and restaurants (in the case of delivery workers) and how to deal with issues of withheld payments or wrongful deductions by using the company helplines. Workers also share information about various platform companies, about incentives on offer or about changes to a company's rate cards which specify the rates per kilometre or per order. Tassinari and Maccarrone (2020) classify these encounters as expressions of solidarity that signify the emergence of a group consciousness among workers.

'When we are working in our own (delivery) zone, what happens is we used to make these WhatsApp groups, and if someone found a new route to get somewhere then they would let everyone know that this is the way you need to go,' Ashfaq, a delivery worker told me.

These WhatsApp groups are made either organically by the workers themselves, as Ashfaq's was, or at the urging of union members. Rahim, an Ola driver turned delivery worker, told me that he was part of a WhatsApp group of Uber-Ola-IT company cab drivers created by an IFAT member,

Salman. After Rahim quit Ola due to the loss of his car, he created a similar group for delivery workers in his area at Salman's request.

'I made a WhatsApp group of Zomato riders. It has a minimum of 150 kids in it. If they have any problem, they put it in the group. I'm the admin of that group. So people help each other. If customers do something or if some other problem happens then nearby riders can go and help that kid...If someone doesn't know how to raise a ticket, he might post on the group saying that his incentive hasn't come in, so someone can help him chat with the company and raise a ticket for his problem. Salman Bhai said, "Whatever the problem is, bring it to our knowledge and if it's something we can solve, we'll try to do it."'

WhatsApp groups have become important virtual spaces of mobilisation for collective action. Uber and Ola driver and IFAT member Srikanth told me how he uses WhatsApp groups to reveal company strategy: 'They announce that they have increased rates but they hide the fact when they cut the rates. You need to think how and where did that happen and if you check the background you will find out where they're cutting rates. I found out where they had cut the rate from 2 Rs/min to 1 Re/min and I shared that screenshot with ten WhatsApp groups. Then everyone finds out about it.'

In line with the idea that direct managerial contact makes workers less likely to take collective action (Lei, 2021; Pollert & Charlwood, 2009), I found that the platform company managerial structure can determine the course of workers' actions. For instance, at Zomato, the Team Leader (TL), a local manager in the administrative hierarchy, is supposed to check in with workers periodically. The TL is expected to supervise the area as a whole, rather than each worker closely. Most workers might never meet the TL of their area. In fact, only those who had participated in collective action had sought out and met their TL. Several others mentioned wanting to meet their TL but being unable to reach him. Although the workers knew that TLs had no power to acquiesce to their demands, they nevertheless always approached these representatives first before escalating the protest. Workers reported two such instances where a manager's presence within easy reach appeared to act as a safety valve and thus allowed them to vent their frustrations without resorting to collective action.

By extension, platform work, where algorithms replace direct managerial control, unintentionally encourages workers to communicate with each other and create shared spaces, either physical or virtual, which have no equivalent in the informal economy. These spaces are relatively free of direct managerial control and are necessary for collective action but do not guarantee it (Polletta, 1999). So what does *trigger* resistance at the collective level?

5.4. What Precipitates Collective Action?

Platform workers resort to collective action for three reasons: falling incomes and rising costs made worse by the pandemic; the company's unwillingness to take responsibility for its workers; and the workers' awareness of their individual vulnerability against the backdrop of a glut in labour supply.

Around the world, the main impetus for collective action by platform workers appears to be falling rates of pay (Barik, 2021a; Frymorgen, 2016; Lei, 2021; Stuart et al., 2022; Tassinari & Maccarrone, 2020; Trappmann et al., 2020); Trappmann et al., 2020. Workers I spoke to identified a standard strategy of platform companies: high per mile/kilometer rates and high per delivery rates when workers first join, perhaps when a platform is first launched in a market, or simply as a promotional offer to entice workers and create a glut in supply (Ongweso Jr., 2021).

These rates inevitably drop over time as companies try to cut costs, undercut competitors, avoid losing customers to cheaper competitors or respond to investor pressures (Frymorgen, 2016). Foodora couriers in Italy and Deliveroo drivers in London experienced falling pay rates and changing payment systems that reduced their overall incomes (Frymorgen, 2016; Tassinari & Maccarrone, 2020)2020. These changes pushed them to take collective action. In India too, workers recognize the unfairness of the platform business model. Collective action has been triggered by changes to rate cards, commissions and other company deductions, or by lack of orders/rides on apps.

'And once their models, their business gets set up and is standing on its own, they make it less, less, less. We started working at 2000 Rs (~24 USD) per day, and today even 500 Rs (~6 USD) is not possible,' Jeetender, a delivery worker and IFAT member told me. 'In March 2020 petrol was 68 Rs (~0.80 USD), now [June 2021] it's 105 (~1.2 USD). But on the rate card, the amounts just keep decreasing—per order has decreased, per km has decreased. Before March 2020, an order for which the base fare was Rs 35, the base fare for that is now Rs 15. So petrol has increased 35 to 40% and income has come down over 50%. So what kind of work is this?'

The platform company seeks to make its workers feel responsible for their income (Posada & Shade, 2020). While workers reported feeling like entrepreneurs, they still identified the company as being responsible for them. Most platform workers had few illusions about who benefitted from their labour. Those who participated in collective action exhibited a high degree of knowledge of changing company policies on pay and incentives. They were aware of how much time they spent waiting each day, the fuel costs of "dry runs" (distance to the restaurant or to the customer, for which they were not paid) and how apps never calculated the additional distance they needed to travel because of one-way roads. This undermines the idea that the opacity of algorithmic management makes it difficult for workers to understand how platforms work and thus makes worker contention less likely (Rosenblat & Stark, 2016).

Even when belonging to different networks and having not participated in actions together, the workers could still report their grievances with the same degree of detail. They knew not only how much their own platform paid but also how much others paid—a sign of a higher degree of communication between workers than would be expected, given the atomizing nature of platform work (Collier et al., 2017; Webster, 2016).

Workers even used company rhetoric to frame their demands. 'Uber and Ola call us partners. OK, you put in the investment and we are doing the hard labour, so if we are partners, we should share the profits and the losses right? You put in the investment and you managed the IT and development so OK, if we earn a total of 100 Rs, take 60% and give drivers 40%...Or else give us shares, you called us partners right? Or if we are not partners but we are workers, we are logged in for this long, then give us salaries,' Srikanth said.

The COVID-19 pandemic deepened the workers' sense of being exploited and pushed them to articulate their shared grievances. At first, the pandemic affected drivers and delivery workers differently in terms of workplace bargaining power. Before the pandemic, drivers possessed a degree of workplace bargaining power by virtue of being an important part of the urban infrastructure that keeps middle-class IT professionals mobile. During the pandemic, due to remote working rules, drivers lost this power.

However, as critical, last-mile links in supply chains, delivery workers came to be recognized as essential workers without whom lockdowns could not be sustained (Friedland & Balkin, 2023). But this increase in power was an artefact of the pandemic rather than an inherent feature of delivery work. As the number of delivery workers increased, the leverage and greater earnings generated by lockdowns dissipated (Hasegawa et al., 2022; Ravenelle et al., 2021).

When pandemic restrictions began to ease up, many office workers continued to work from home, but far fewer were dependent on home deliveries. With rides and jobs hard to come by, drivers and delivery workers could no longer afford their costs: monthly installments on vehicle loans; fuel costs; road and other taxes; and vehicle maintenance. Their resentment about falling pay rates was compounded by companies continuing to take commissions on the few rides or deliveries they did get, thereby lowering income even more.

'They take 25 to 30%...and the bookings have gone down too...Whatever bookings they give, they always take this percentage,' Raju, a driver for Ola told me. 'They were taking the same commission four years ago and even now, in times of COVID, they are still taking the same commission.'

The workers hold platform companies responsible for their health and well-being and feel abandoned. Ashok, an Uber driver, told me, 'The biggest thing is that since last April, we haven't received any help from the company...no assurance, no help. We have struggled so much...even for food and water...but the companies did not help. What security do we have, you tell me?'

All the major companies also announced COVID-19-specific policies and funds for workers, while asking for donations from customers and their own employees, as well as from executive-level managers. Lack of transparency in disbursement of these funds to workers led to discontentment and further aggravated workers who felt that the companies were using the pandemic to benefit themselves (Bhalla, 2020).

All the interviewees who drove for food delivery companies and ride-hailing companies told me about the decline in pay rates and work incentives. This decline was an issue for most (~83%), while the remainder felt it was only natural given the large numbers of new workers joining platforms. Yet not all who complained participated in collective action. What differentiated those who participated was their conviction that they could do nothing by themselves since each of them is replaceable.

Fareed told me that the companies do not value workers or fear them because hundreds of "new boys" join each day. The workers understood that this glut in supply of labour reduced their incomes and bargaining power. A few of them logging off or not delivering food was thus unlikely to make any difference to the companies. Therefore, acting collectively was the only way to make the companies negotiate. Participants in collective action also used injustice frames more frequently than those who did not.

Faced with falling pay rates, a trend worsened by the pandemic, and feeling abandoned by their companies, the workers subjectively interpreted their circumstances as being unjust (McAdam, 1982). Qureshi, an Ola driver, likened platform companies to the trading company that led the way for British colonization of India, saying, 'It's like with the East India Company, what we heard from our elders, that kind of slavery. It's our work, our car, EMI[5] interest is ours to pay, and we have to do all the hard work, but they take the commission, we are barely getting anything. And the maintenance is also on us, the tax too! We are not even able to earn as much as the company is making as commission.'

Delivering for Zomato and Swiggy, Jagadish felt the same way, 'The mobile phone costs are on us, the petrol costs are on us. Everything is ours. Only the app is theirs. And they manage everything through that. They just sit there and earn so much, and we roam and roam and sweat so much and still earn nothing.' This sense of injustice in turn came to be articulated and took on collective meaning when workers communicated with each other in the course of mobilization (Atzeni, 2009).

Unlike informal work, where the employer is often too obscure to identify, platform work leads to greater employer visibility through algorithmic work allocation and control. Platform workers can thus direct their growing consciousness and collective contention towards platform companies. In contrast, informal workers direct their grievances at the state. The following section will show that the state also plays an important role in platform worker strategies.

6. Contesting the State, Contesting the Employer

Through their unions, informal workers address their demands to the state rather than to their employer because the employer is hard to identify (Schmalz et al., 2018; Schurman & Eaton, 2012) and because the state influences their working conditions and everyday lives through its policies (Spooner & Mwanika, 2018)and the transformation processes of the Amalgamated Transport and General Workers' Union (ATGWU. Even when informal workers do have more structural power, as in the case of urban transport workers, their actions of withdrawing labour are directed at the state. Their demands push the state to deliver reforms that do not challenge the growth of informalization (ibid.). Informal worker movements in India's construction industry exemplify this strategy of moving away from conflicts with capital and toward pressuring the state through welfare boards created for this purpose (Agarwala, 2006). Because welfare boards do not address the structural factors responsible for the material conditions of informal workers, the state is more willing to accept this non-confrontational form of labour organization (ibid.).

In contrast, platform workers direct their resistance at two distinct contenders. Because platform companies are visible as employers, the workers can address their demands directly to them. However, the state continues to be an important contender. Platform workers are compelled to pay taxes that informal workers do not pay. To receive rides and orders on platforms, they need to upload evidence of having paid their taxes or risk being deregistered by the platforms. Since they pay taxes, they feel that the state is also responsible for their well-being.

An Uber driver, Rakesh, told me, 'We are also paying 4500 Rs (~54 USD) every 3 months tax right? So the government should care for us right? … If we don't pay that, then Uber will disconnect us. So if taxi drivers are correctly paying the government, how come the government is not caring for us even 1%?'

Unlike with informal worker unions, the strategy here is not limited to addressing welfare demands to the state. Instead, wage and incentive demands are addressed both to employers and to the state. Union members I spoke to held that it is the state's responsibility to push platform companies to publish standard rate cards and to carry out reforms, such as transforming platform workers into employees. Such reforms are not in the financial interest of the platform companies and are thus unlikely to be carried out by them of their own volition, union members told me. Because platform companies are more visible as employers, platform workers find it easier to base their demands on the work relationship, rather than only on their status as citizens.

During the pandemic, platform workers themselves gained visibility because they were thrust into the frontlines of food and transportation infrastructure, being used by several state governments to deliver supplies to locked-down urban populations (Surie, 2020). However, being recognized and utilized as essential workers did not lead to any substantive state support for platform workers during or immediately after the pandemic. The pandemic thus increased platform workers' sense of themselves as a cohesive group that suffered like other groups, such as migrant workers, but did not receive similar state assistance.

Without assistance from the state or from platform companies, platform workers turned to each other for support, further building collective identity. Salman, another IFAT member who organized food aid for drivers' families throughout the pandemic told me, 'These workers have seen such bad days. They are still seeing such bad days. They [the government] are paying attention to every sector... Government has said we need to give them something for them to make ends meet, but where were we, nobody knew?'

7. Discussion

7.1. The Costs of Organizing and the Way Forward

Having identified themselves as a group with common material interests, and with common identifiable contenders, can platform worker movements continue to grow in strength? In this section I will identify several challenges that impede such growth and discuss plausible alternatives.

The risks and rewards of collective action are different for capitalists and for workers, with the latter bearing the brunt of the costs of organizing (Offe & Wiesenthal, 1980). This was apparent from conversations with platform workers, who explained the challenges of striking when livelihoods are as precarious as they are in the platform economy. The workers also understood there are few better-paying alternatives to platform work for those without a college degree or vocational training. There are few kinds of work, other than casual labour, where one can sign up and start earning money immediately.

Companies, knowing workers' vulnerabilities, often use a two-pronged strategy to deal with collective action. They increase pay rates and work incentives temporarily to get workers back to work and then block the IDs of those who have participated in strikes. Fear of having one's ID blocked was thus prominent in worker narratives.

Platform workers also had to contend with the prospects of imprisonment and legal action. When women workers protested changes to their terms of service by conducting a sit-in near the headquarters of Urban Company, a home services platform, it filed a petition against them, requesting the court to force them to vacate the site of their protest (Barik, 2021b). Divisions between workers, based on religion and region, also hindered collective action. Local workers felt that migrants from other states were willing to put up with low pay rates and long working hours and were therefore unlikely to join protests or strikes.

What then is the alternative to collective action? According to the Leeds Labour Index, legal action has been the most prevalent form of contention in North America and Australia, where platform workers' collective rights are most often curtailed because of their status as independent contractors (Stuart et al., 2022; Trappmann et al., 2020). However, the absence of laws regulating platform worker employment has also made bargaining via direct action more likely (Cant & Woodcock, 2020).

In India, although labour laws have been blamed for creating inflexible labour markets that make it difficult for businesses to thrive (Sharma, 2006), in practice even formal sector workers rarely benefit from the rights associated with a standard employment relationship. At present, platform workers are viewed as distinctive from formal sector employees. This is substantiated in the Code on Social Security, 2020 (PRS Legislative Research, 2020)—an umbrella legislation that the Union (i.e., federal) government passed to provide a social security net for India's informal workforce.

Platform workers are defined as those who engage in a 'work arrangement outside of a traditional employer-employee relationship in which organisations or individuals use an online platform to access other organisations or individuals to solve specific problems or to provide specific services.' Thus, the state takes *ab initio* the position that platform workers are not employees of platform companies. Reinforcing this position further, platform companies are called "aggregators," which the Code defines as 'a digital intermediary or a marketplace for a buyer or user of a service to connect with the seller or the service provider.'

Most labour laws are based on the existence of an employment relationship, as are policies on social security benefits. Employment status, duration of employment and monthly income are some of the criteria used to determine eligibility for social assistance and the amount to be paid (ASSOCHAM, 2020). The latter two criteria vary widely for platform workers month to month. Thus, even if labour rights and social security entitlements were to improve in India, there are likely to be legal challenges as to how these rights and entitlements apply to platform workers (Ramaswamy, 2019).

When legal action is not feasible, collective action outside institutionalized channels will appear attractive to workers trying to improve their conditions (Frymorgen, 2016; Lei, 2021). This is the position in which platform workers find themselves in India. As with digital platform workers (Salehi et al., 2015), sustaining larger, longer-term actions is challenging. Nevertheless, I found more than just personal networks of mutual support (Gray et al., 2016). Workers came together, if only briefly, even when not connected by such networks.

Despite the challenges of sustaining collective action, unions see organizing as an essential first step in building towards legal contention. 'We didn't have the strength before, we were not organized before…but now we are in 22 cities through IFAT. I have the data of about 35,000 delivery workers. I can do a legal fight now, and I feel a favourable wind is blowing. I feel the legal route is possible only if we are organized first. Platform workers have been added to the Social Security Code…we have at least been counted for the first time…the name of this sector has been taken somewhere, right? That's progress,' Cyril from IFAT told me.

8. Conclusion

In this paper, I compare collective action in the informal economy with that of workers on delivery and ride-hailing platforms. I argue that work is organized and managed in the platform economy such that platform workers can act collectively in ways quite distinct from those of other types of informal workers.

Because platform companies use algorithmic allocation of work and attempt to ensure that supply exceeds demand, workers are directed by apps to wait for orders or rides at common locations around the city. These shared physical spaces allow the workers to meet and communicate with each other in ways not intended by the companies.

Relatedly, platform companies attempt to secure customers by increasing their visibility through mandatory use of branded uniforms and equipment. This enables workers to easily recognize each other. Control through company apps rather than through direct managerial control also encourages workers to communicate with each other as they deal with day-to-day questions and shared concerns. Through WhatsApp groups and physical spaces, they develop a shared antagonism toward platform companies that forms the basis for mobilization, either through small groups or, on a larger scale, through platform worker unions.

With the platform company identified as the employer and target of contention, platform workers can make demands for better pay and incentives, in addition to the advocacy and welfare-based demands traditionally made by informal sector workers. Thus, their demands are addressed not solely to the state, as is the case with other informal workers.

Platform workers' sense of shared identity has also been accentuated by the pandemic as they struggled to make ends meet. It has fed their collective outrage at platform companies and at the state, whom they recognize as exploiters who benefit from their labour and have done little to help in their hour of need.

The complicated terrain of Indian labour law stymies the potential of institutional paths toward rights. Lacking such means, platform workers are likely to depend on associational power as they struggle against platform companies (Vandaele, 2022). While they have displayed the ability to come together in short bursts of collective action, workers recognize that to truly leverage their structural position to win against platform companies (Silver, 2003), they need to mobilize in larger numbers and over longer periods of time.

However, while some features of platform work enable collective action, others act as barriers to the possibility of sustained collective action. The platform companies I studied for this paper do not require their workers to have any special skills, nor do they invest in worker training. At a time when unemployment is historically high in India, platform workers are easily replaceable by others from a vast reserve army.

Without the resources to sustain strikes over long periods, platform worker unions have taken to using social media to amplify their struggles and to mobilize public opinion in their favour. Future researchers could seek to understand how campaigns are carried out on social media in conjunction with actions in physical spaces and what factors result in successful campaigns. Tracking platform workers' movements in this manner could offer insights into how newly formed networks of solidarity fare on digital media.

Notes

[1] Platform companies are not legally employers and no legally enforceable employment relationship exists between platform workers and companies. However, research has shown that platform companies are more akin to employers than to intermediaries (Dubal, 2017; Friedman, 2014; Sprague, 2015). As such, in the remainder of the paper, I will refer to platform companies as employers, by which I mean de facto, rather than de jure employers.

[2] These services are also characterized as being largely meant for final consumption (by the end user), having high potential for employment generation by virtue of low entry barriers, low capital and low skill intensity (*ibid*.).

[3] It is important to note that although the workers I interviewed did not make any gains through their actions, such outcomes do not impugn the fact that they did undertake collective action.

[4] Rs refers to the Indian Rupee. 1 USD ~ 83 Rs.

[5] Easy Monthly Installments – monthly mortgage payments.

References

Agarwala, R. (2006). From Work to Welfare—A New Class Movement in India. *Critical Asian Studies*, *38*(4), 419–444.doi : https://doi.org/10.1080/14672710601072996

Anwar, M. A., & Graham, M. (2020). Hidden transcripts of the gig economy: Labour agency and the new art of resistance among African gig workers. *Environment and Planning A: Economy and Space*, *52*(7), 1269–1291. (https://doi.org/10.1177/0308518X19894584) doi : https://doi.org/10.1177/0308518X19894584

Applebaum, E., Kalleberg, A. L., & Rho, H. J. (2019, February 28). Nonstandard work arrangements and older Americans, 2005–2017. *Economic Policy Institute*. (https://www.epi.org/publication/nonstandard-work-arrangements-and-older-americans-2005-2017/) doi : https://doi.org/10.1080/05775132.2019.1619043

Atzeni, M. (2009). *Searching for injustice and finding solidarity? A contribution to mobilisation theory*. https://doi.org/10.1111/j.1468-2338.2008.00510.x' (https://doi.org/10.1111/j.1468-2338.2008.00510.x%27)] doi : https://doi.org/10.1111/j.1468-2338.2008.00510.x

Barik, S. (2021a, October 8). Exclusive: Urban Company's women workers strike against alleged exploitation. *Entrackr*. (https://entrackr.com/2021/10/exclusive-urban-company-women-workers-protest-against-companys-exploitation/)

Barik, S. (2021b, December 21). Exclusive: Urban Company sues women gig workers protesting against the company. *Entrackr*. (https://entrackr.com/2021/12/exclusive-urban-company-sues-women-gig-workers-protesting-against-the-company/)

Basole, A., & Basu, D. (2011). Relations of Production and Modes of Surplus Extraction in India: Part II - "Informal" Industry. *Economic and Political Weekly*, *46*(15), 63–79.

Benjaafar, S., & Hu, M. (2019). *Operations Management in the Age of the Sharing Economy: What Is Old and What Is New?* 18.doi : https://doi.org/10.2139/ssrn.3373511

Bhalla, K. (2020, April 18). Where's The Relief Fund, Beleaguered Cab Drivers Ask Ola, Uber. *Inc42 Media*. (https://inc42.com/buzz/where-is-the-relief-fund-beleaguered-cab-drivers-ask-ola-uber/)

Boeri, N. (2018). Challenging the Gendered Entrepreneurial Subject: Gender, Development, and the Informal Economy in India. *Gender & Society*, *32*(2), 157–179. (https://doi.org/10.1177/0891243217750119) doi : https://doi.org/10.1177/0891243217750119

Cant, C. (2019). *Riding for Deliveroo: Resistance in the New Economy | Wiley*. Wiley. (https://www-wiley-com.proxy.library.nyu.edu/en-us/Riding+for+Deliveroo:+Resistance+in+the+New+Economy-p-9781509535507)

Cant, C., & Woodcock, J. (2020). Fast Food Shutdown: From disorganisation to action in the service sector. *Capital & Class*, *44*(4), 513–521. (https://doi.org/10.1177/0309816820906357) doi : https://doi.org/10.1177/0309816820906357

Chen, J. Y. (2018). Technologies of Control, Communication, and Calculation: Taxi Drivers' Labour in the Platform Economy. In P. V. Moore, M. Upchurch, & X. Whittaker (Eds.), *Humans and Machines at Work* (pp. 231–252). Springer International Publishing. (https://doi.org/10.1007/978-3-319-58232-0_10) doi : https://doi.org/10.1007/978-3-319-58232-0_10

Collier, R. B., Dubal, V. B., & Carter, C. (2017). *Labor Platforms and Gig Work: The Failure to Regulate* (SSRN Scholarly Paper ID 3039742). Social Science Research Network. (https://papers.ssrn.com/abstract=3039742) doi : https://doi.org/10.2139/ssrn.3039742

Deakin, S., Marshall, S., & Pinto, S. (2019). *Re-Imagining Labour Law for Development: Informal Work in the Global North and South* (D. Ashiagbor, Ed.). Hart Publishing. (https://doi.org/10.5040/9781509913138)

Dubal, V. B. (2017). Winning the Battle, Losing the War: Assessing the Impact of Misclassification Litigation on Workers in the Gig Economy. *Wisconsin Law Review*, *2017*(4), 739–802.

Friedland, J., & Balkin, D. B. (2023). When gig workers become essential: Leveraging customer moral self-awareness beyond COVID-19. *Business Horizons*, *66*(2), 181–190. (https://doi.org/10.1016/j.bushor.2022.05.003) doi : https://doi.org/10.1016/j.bushor.2022.05.003

Friedman, G. (2014). Workers without employers: Shadow corporations and the rise of the gig economy. *Review of Keynesian Economics*, *2*(2), 171–188. (https://doi.org/10.4337/roke.2014.02.03) doi : https://doi.org/10.4337/roke.2014.02.03

Frymorgen, T. (2016, September 7). *The Rise of the Unorganizable*. (https://jacobinmag.com/2016/09/the-rise-of-the-unorganizable/)

Graham, M., Lehdonvirta, V., Wood, A., Barnard, H., Hjorth, I., & Peter Simon, D. (2017). *The Risks and Rewards of Online Gig Work At the Global Margins*.

Gray, M. L., & Suri, S. (2019). *Ghost work: How to stop Silicon Valley from building a new global underclass*. Houghton Mifflin Harcourt.

Gray, M. L., Suri, S., Ali, S. S., & Kulkarni, D. (2016). The Crowd is a Collaborative Network. *Proceedings of the 19th ACM Conference on Computer-Supported Cooperative Work & Social Computing*, 134–147. (https://doi.org/10.1145/2818048.2819942) doi : https://doi.org/10.1145/2818048.2819942

Griesbach, K., Reich, A., Elliott-Negri, L., & Milkman, R. (2019). Algorithmic Control in Platform Food Delivery Work. *Socius*, *5*, 2378023119870041. (https://doi.org/10.1177/2378023119870041) doi : https://doi.org/10.1177/2378023119870041

Guda, H., & Subramanian, U. (2019). Your Uber Is Arriving: Managing On-Demand Workers Through Surge Pricing, Forecast Communication, and Worker Incentives. *Management Science*, mnsc.2018.3050. (https://doi.org/10.1287/mnsc.2018.3050) doi : https://doi.org/10.1287/mnsc.2018.3050

Hasegawa, Y., Ido, K., Kawai, S., & Kuroda, S. (2022). Who took gig jobs during the COVID-19 recession? Evidence from Uber Eats in Japan. *Transportation Research Interdisciplinary Perspectives*, *13*, 100543. (https://doi.org/10.1016/j.trip.2022.100543) doi : https://doi.org/10.1016/j.trip.2022.100543

Irani, L. C., & Silberman, M. (2013). Turkopticon: Interrupting worker invisibility in amazon mechanical turk. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, 611–620.doi : https://doi.org/10.1145/2470654.2470742

Lei, Y.-W. (2021). Delivering Solidarity: Platform Architecture and Collective Contention in China's Platform Economy. *American Sociological Review*, *86*(2), 279–309. (https://doi.org/10.1177/0003122420979980) doi : https://doi.org/10.1177/0003122420979980

Mason, S. (2018, November 20). *High score, low pay: Why the gig economy loves gamification*. The Guardian. (http://www.theguardian.com/business/2018/nov/20/high-score-low-pay-gamification-lyft-uber-drivers-ride-hailing-gig-economy)

McAdam, D. (1982). *Political process and the development of Black insurgency, 1930-1970*. University of Chicago Press.

Moore, P. V., & Joyce, S. (2020). Black box or hidden abode? The expansion and exposure of platform work managerialism. *Review of International Political Economy*, *27*(4), 926–948. (https://doi.org/10.1080/09692290.2019.1627569) doi : https://doi.org/10.1080/09692290.2019.1627569

Mosse, D. (2002). Brokered Livelihoods: Debts, Labour Migration and Development in Tribal Western India. *The Journal of Development Studies*, *38*(5), 59–88.doi : https://doi.org/10.1080/00220380412331322511

Nayyar, G. (2012). *The Service Sector in India's Development*. Cambridge University Press.doi : https://doi.org/10.1017/CBO9781139095860

NITI Aayog. (2022). *India's Booming Gig and Platform Economy: Perspectives and Recommendations on the Future of Work*. (https://www.niti.gov.in/sites/default/files/2022-06/Policy_Brief_India%27s_Booming_Gig_and_Platform_Economy_27062022.pdf)

Offe, C., & Wiesenthal, H. (1980). Two logics of collective action: Theoretical notes on social class and organizational form. *Political Power and Social Theory*, *1*(1), 67–115.

Ongweso Jr., E. (2021, July 8). *Uber and Lyft Can't Find Drivers Because Gig Work Sucks*. (https://www.vice.com/en/article/7kvej4/uber-and-lyft-cant-find-drivers-because-gig-work-sucks)

Pollert, A., & Charlwood, A. (2009). The vulnerable worker in Britain and problems at work. *Work, Employment and Society*, *23*(2), 343–362. (https://doi.org/10.1177/0950017009106771) doi : https://doi.org/10.1177/0950017009106771

Polletta, F. (1999). "Free Spaces" in Collective Action. *Theory and Society*, *28*(1), 1–38.doi : https://doi.org/10.1023/A:1006941408302

Posada, J., & Shade, L. R. (2020). *Platform Labour Discourse: How Hyr Targets the "Bucket List Generation" | Democratic Communiqué*. (https://journals.flvc.org/demcom/article/view/121300) doi : https://doi.org/10.31235/osf.io/2dbeh

Rakheja, H. (2020, September 1). Ola, Uber Drivers Strike To Demand Extension Of Moratorium, Fare Hike & More. *Inc42 Media*. (https://inc42.com/buzz/ola-uber-drivers-strike-to-demand-extension-of-moratorium-fare-hike-more/)

Ranipeta, S. (2020, June 9). App-based drivers, delivery executives protest for adequate safety gear, better income. *The News Minute*. (https://www.thenewsminute.com/article/app-based-drivers-delivery-executives-protest-adequate-safety-gear-better-income-126197)

Ravenelle, A. J., Kowalski, K. C., & Janko, E. (2021). The Side Hustle Safety Net: Precarious Workers and Gig Work during COVID-19. *Sociological Perspectives*, *64*(5), 898–919. (https://doi.org/10.1177/07311214211005489) doi : https://doi.org/10.1177/07311214211005489

Rosenblat, A., & Stark, L. (2016). Algorithmic Labor and Information Asymmetries: A Case Study of Uber's Drivers. *International Journal of Communication*, *10*(0), 27.

Salehi, N. (2016). The future of work. *XRDS Crossroads*, *23*(2).doi : https://doi.org/10.1145/3021505

Salehi, N., Irani, L. C., Bernstein, M. S., Alkhatib, A., Ogbe, E., Milland, K., & Clickhappier. (2015). *We Are Dynamo: Overcoming Stalling and Friction in Collective Action for Crowd Workers*. 1621–1630. (https://doi.org/10.1145/2702123.2702508) doi : https://doi.org/10.1145/2702123.2702508

Schmalz, S., Ludwig, C., & Webster, E. (2018). The Power Resources Approach: Developments and Challenges. *Global Labour Journal*, *9*(2), Article 2. (https://doi.org/10.15173/glj.v9i2.3569) doi : https://doi.org/10.15173/glj.v9i2.3569

Schurman, S. J., & Eaton, A. E. (2012). *Trade Union Organizing in the Informal Economy: A Review of the Literature on Organizing in Africa, Asia, Latin America, North America and Western, Central and Eastern Europe* (p. 88).

Sharma, A. (2006). Flexibility, Employment and Labour Market Reforms in India. *Economic and Political Weekly*, *41*(21), 2078–2085.

Silver, B. (2003). *Forces of Labour: Workers' Movements and Globalization since 1870* (1st ed.). Cambridge University Press.doi : https://doi.org/10.1017/CBO9780511615702

Spooner, D., & Mwanika, J. M. (2018). Transforming Transport Unions through Mass Organisation of Informal Workers: A Case Study of the ATGWU in Uganda. *Global Labour Journal*, *9*(2). (https://doi.org/10.15173/glj.v9i2.3347) doi : https://doi.org/10.15173/glj.v9i2.3347

Sprague, R. (2015). *Worker (mis) classification in the sharing economy: Trying to fit square pegs in round holes*.doi : https://doi.org/10.2139/ssrn.2606600

Stanford, J. (2017). The resurgence of gig work: Historical and theoretical perspectives. *The Economic and Labour Relations Review*, *28*(3), 382–401. (https://doi.org/10.1177/1035304617724303) doi : https://doi.org/10.1177/1035304617724303

Stuart, M., Bessa, I., Joyce, S., Neumann, D., Trappmann, V., Umney, C., & International Labour Organization. Research Department. (2022). *A global analysis of worker protest in digital labour platforms*. ILO. (https://doi.org/10.54394/CTNG4947) doi : https://doi.org/10.54394/CTNG4947

Surie, A. (2020). Seeing like a state – what is the platform? Evidence from on-demand platforms in urban India during the COVID19 pandemic lockdown. *Data and Society - Against Platform Determinism Workshop*.

Tassinari, A., & Maccarrone, V. (2017). The mobilisation of gig economy couriers in Italy: Some lessons for the trade union movement. *Transfer: European Review of Labour and Research*, *23*(3), 353–357. (https://doi.org/10.1177/1024258917713846)
doi : https://doi.org/10.1177/1024258917713846

Tassinari, A., & Maccarrone, V. (2020). Riders on the Storm: Workplace Solidarity among Gig Economy Couriers in Italy and the UK. *Work, Employment and Society*, *34*(1), 35–54. (https://doi.org/10.1177/0950017019862954) doi : https://doi.org/10.1177/0950017019862954

Trappmann, V., Bessa, I., Joyce, S., Neumann, D., Stuart, M., & Umney, C. (2020). *GLOBAL LABOUR UNREST ON PLATFORMS*. 17.

Vandaele, K. (2022). *Will trade unions survive in the platform economy?* (p. 35) [Working Paper]. ETUI, The European Trade Union Institute.

Webster, J. (2016). Microworkers of the Gig Economy: Separate and Precarious. *New Labor Forum*, *25*, 56–64.doi : https://doi.org/10.1177/1095796016661511

Weiss, R. S. (1995). *Learning From Strangers: The Art and Method of Qualitative Interview Studies*. Simon and Schuster.

Wood, A., & Lehdonvirta, V. (2021). *Antagonism beyond employment: How the 'subordinated agency' of labour platforms generates conflict in the remote gig economy*. SocArXiv. (https://doi.org/10.31235/osf.io/y943w) doi : https://doi.org/10.31235/osf.io/y943w

Wright, E. O. (2000). Working-Class Power, Capitalist-Class Interests, and Class Compromise. *American Journal of Sociology*, *105*(4), 957–1002.doi : https://doi.org/10.1086/210397