

CENTRING RIGHTS IN THE PLATFORM WORKPLACE

Understanding Legal Frameworks around Algorithmic
Management and Upholding Worker Rights

IT FOR CHANGE & CENTRE FOR LABOUR STUDIES,
NATIONAL LAW SCHOOL OF INDIA UNIVERSITY, BENGALURU

December 2023



Acknowledgements

Authors: Shreeja Sen, Sreyan Chatterjee, Sonakshi Agarwal and Amoha Sharma

Conceptualization: Anita Gurumurthy, Babu Mathew, Nandini Chami, Mohan Mani, Sony Pellissery, Shreeja Sen, Sreyan Chatterjee, Sonakshi Agarwal, Amoha Sharma and Jasoon Chelat

Research Support: Shreya Bali and Sourav Kumar

Copyediting & Proofreading: Intifada P. Basheer

Design Support: Purnima P. Vijaya

The authors would like to thank all research participants – app-based gig workers in the ride-hailing and food delivery sectors, researchers, and labour activists – who took out the time to answer their research questions.

This study is sponsored by Rosa Luxemburg Foundation e.V. with funds of the Federal Ministry for Economic Cooperation and Development of the Federal Republic of Germany.

The Rosa Luxemburg Stiftung (RLS) is a German-based foundation working in South Asia and other parts of the world on the subjects of critical social analysis and civic education. It promotes a sovereign, socialist, secular, and democratic social order, and aims to present members of society and decision-makers with alternative approaches to such an order. Research organisations, groups working for social emancipation, and social activists are supported in their initiatives to develop models that have the potential to deliver social and economic justice.



This report is licensed under [Creative Commons License Attribution-ShareAlike 4.0 International \(CC BY-SA 4.0\)](https://creativecommons.org/licenses/by-sa/4.0/).

Table of Contents

1. Introduction.....	1
1.1 Understanding the platformised workplace.....	2
2. Understanding the Algorithm	4
3. Methodology.....	8
4. Limitations of this Study	9
5. Findings	9
5.1 Findings from legal review of legislations and cases across jurisdictions	10
5.2 Findings from interviews	22
6. Emerging Legal Positions in India.....	29
7. Recommendations	34
7.1 Identifying rights implicated by the algorithm	34
7.2 Regulating the platformised workplace.....	35
7.3 Model law on platform worker rights	36
7.4 Recognising collective bargaining rights	37
7.5 Identifying alternatives to the dominant model of platform work	38
8. Conclusion.....	39
References.....	40

1. Introduction

The world of work and social engagement changed when words like ‘google’, ‘uber’ and ‘swiggy’ evolved from nouns to verbs, reflecting the ubiquity of these platforms. This change also mirrored the relentless growth of an ever-hungry goliath of a market, seemingly creating numerous job opportunities in the service sector. But what exactly do digital platforms, specifically digital labour platforms do?

Digital labour platforms function in markets by “matching...the supply of and demand for paid work through an online platform” (Eurofound, 2018). This definition lends itself to a number of mobile application-based platforms – often referred to as location-based platform services – that operate in the sectors of ride-hailing, food delivery, and other services, including housekeeping, beauty, and repair. These application-based or location-based services usually function within the confines of a geographical location – ranging from an area or block in a city to an entire town or city – in order to be able to carry out a high number of tasks so as and fulfil the platform’s proffered functionality (De Stefano et al., 2021). These types of digital labour platforms enable consumers to avail one or more of these services through the platform and allow workers to be matched to those tasks. For instance, a food delivery platform enables a worker to be matched on a request from the collection of an order from a restaurant to the consumer who has placed the order. One of the major ways in which these matching platforms function is through algorithms, which collect vast amounts of data, both from the workers and their customers, in order to ostensibly optimize their services continuously. Furthermore, scholars have pointed out that this data is simultaneously used for its speculative value on these platforms, i.e., capturing the value of the data generated on these apps in addition to the rent charged for using the app, thus establishing a dual funnel for value extraction (Van Doorn & Badger, 2020).

Over the past few years, India’s gig economy has witnessed a massive boom, so much so that a June 2022 report from the country’s apex policy think tank, NITI Aayog, predicted that by 2030, 6.7% of the economy would rely on such work (NITI Aayog, 2022). Given the increased digital push brought about by the Covid-19 pandemic and the tangible unemployment crisis, on-demand platform work seems to be providing much-needed succour. In fact, online work is being touted as the pathway to access the benefits of digitalisation for developing countries, with nearly 67% of gig workers belonging to Asian countries on the top five platforms (Gurumurthy, Zainab & Sanjay, 2021).

The questions that must be posed, then are: Has platform work really helped create more jobs? Or is it plugging in a wider jobs crisis temporarily, while also increasing precarity in an unequal work ecosystem? Lastly, is there scope to move towards an equitable solution that safeguards the rights of workers?

1.1 Understanding the platformised workplace

As early as in 2000, the common statement issued at the Meeting of Experts on Workers in Situations Needing Protection noted that the transforming nature of work meant that the focus on employment relationships was impacting workers negatively.

...the global phenomenon of transformation in the nature of work has resulted in situations in which the legal scope of the employment relationship (which determines whether or not workers are entitled to be protected by labour legislation) does not accord with the realities of working relationships. This has resulted in a tendency whereby workers who should be protected by labour and employment law are not receiving that protection in fact or in law. (ILO, 2000)

This precarity only intensified during the last decade of ubiquitous platformisation and gig-ification of the workplace. Given that these work structures are considered to be more task-oriented and contractual, they move away from traditional labour protections, including wage guarantees, social security, allocated work hours, and more. Research and experience of union workers show that platform work, especially through algorithmic management and governance, is increasingly becoming opaque, subjecting workers to seemingly arbitrary action (Vipra, 2022). Courts and adjudicatory bodies themselves have noticed the seeming disparity of the new work mode. The Australian Fair Work Commission, in the case of *Joshua Klooger v. Foodora Australia* (2018), observed that “There may be a need to expand and modify the orthodox contemplation for the determination of the characterisation of contracts of employment vis-à-vis, independent contractor, as the changing nature of work is impacted by new technologies.”

Work on digital platforms has frequently been characterised as digital piecework (Dubal, 2020) or a technologically mediated version of industrial ‘putting out’. Piecework or putting out is a practice in manufacturing industries (particularly in garments and footwear manufacturing sectors) wherein cost savings and flexibility in product demand are obtained by outsourcing large parts of work to invisible homeworkers outside the factory who are not paid regular wages for their time but are paid by each piece of work that they complete. Labour regulation, as it exists in theory, is well-suited to combat this by ensuring companies do not invisibilise or outsource critical parts of their production process while enforcing equivalent minimum wages for piecework. However, Zodi and Torok (2021) argue that this is an insufficient way to look at labour regulation for platform work because while there are elements of digital piecework, it is also true that platform work brings with it specific characteristics that are not present in piecework. For one, algorithmic management and data-based organisation of work are new phenomena in the world of work. Secondly, platform work has a tripartite structure of platforms, workers, and customers, all of whom interact closely during a transaction. Thirdly, network effects on

both the customer side and the worker side of the platform introduce a new dynamic of monopolisation in the marketplace and poor conditions in the workplace. It is because of these reasons that innovative legal approaches through delineating platform-specific rights alongside traditional labour protections are required. This is a significant deviation from legislative attempts to classify platform workers as employers and bring them within the ambit of labour law.

Jarrahi et al. (2021) note the general characteristics of algorithmic management as it is applicable to platforms as well as to standard (non-platform) workplaces. Unlike standard workplaces, where algorithmic management is added onto an existing layer of organisational hierarchies, dynamics, and information processes and styles of management, the platform workplace experiences a *sui generis* imposition of the algorithmic logic in its workflows – the workplace is conceptualised with the algorithm at its base and is run by it. Furthermore, a point of difference between platform and standard workplaces emerges in that the roll-out of algorithms in the workflows is in the nature of a mass-roll-out, while in standard workplaces the roll-out is more of a process-by-process nature. Notwithstanding the organisational sensemaking of platform workplaces, i.e., how they're structured vis-a-vis traditional workplaces, in both there is an understanding of the effect of algorithms as a socio-technical construct. What this means is that only a technological understanding of the algorithm is myopic as, in practice, its operations are heavily intertwined with human choices, behaviours, and decision-making (explicit or implicit). Jarrahi et al. (2021) show a twin effect of algorithms at the workplace – increasing the power of managers over workers while at the same time increasing the distance of both line managers as well as the workers from control over the workflow. This kind of management, in the medium- to long-run, entrenches the deeply centralised nature of digital sector intelligence of modern labour platforms, while throwing light on the opacity of digital intelligence which remains hidden from most of the platform's core employees as well.

Not only does algorithmic management reconfigure the power dynamics in the workplace but it also embeds itself in pre-existing power and social structures of the organisation. In short, the deployment of algorithmic management in organisational work introduces novel 'human-machine configurations' that could transform relationships between managers and workers and their respective roles. (Jarrahi et al., 2021)

Viewed as socio-technical entities, regulation of each workplace/work-process algorithm needs to thus focus less on issues related to substitution or replacement of workers with algorithms, and more on balancing, oversight, monitoring, and remediation of undesirable outcomes (such as an unfairly terminated account of a platform worker). It is also true that the vertical organisation that platforms offer workers – through algorithmic management – can operate post regulation through processes that can enhance worker dignity and not just violate worker rights. Lamers et al. (2022) use Amartya Sen's

capability approach of capacities and functionings to argue that an Aristotelian notion of contingent dignity (dignity outcomes that are offered to workers which are contingent on them achieving or proving their capacities) can emerge even in a paradigm of algorithmic management. Assessments of algorithmic systems through private or public audits can indicate where and how these systems prove a threat to decent work and where such systems can help conditions of decent work emerge.

De Stefano et al. (2021) note that various jurisdictions have attempted to address the evident concerns with the issue of classification of platform workers within employment categories in the following ways: by recognising the need for their inclusion within social security schemes and tax obligations (Belgium), promoting transparency and fairness for the business users of online intermediation services (European Parliament and Council under Regulation 2019/1150), providing insurance to safeguard against work accidents (France), introducing a draft law to regulate economically dependent platform workers (Colombia), and presumption of employment between platform and drivers (Portugal and Spain), to name a few.

In the Indian context, there are further consequences of this understanding of platform work. The catchment of the workforce that ends up on the platform for most geographies in India is usually informal workers, many of them being migrant workers of various kinds (inter-state, as well as intra-state migrants). Platforms, in such contexts, tend to exploit the deeply entrenched acceptance of workers towards *ad hoc* and informal work arrangements. Scholars have pointed to the natural pull of informal workers to platforms – usually entering the workplace with the hope of formalisation but remaining with informalisation entrenched through a number of platform-based processes. While platforms, to some extent, provide a homogeneous identity to workers which can offer a layer of protection from human-mediated discrimination, biases in the algorithm have also been demonstrated to result in unfair dismissals, reduction in work, loss of wages, as well as lack of access to remedy for the above.

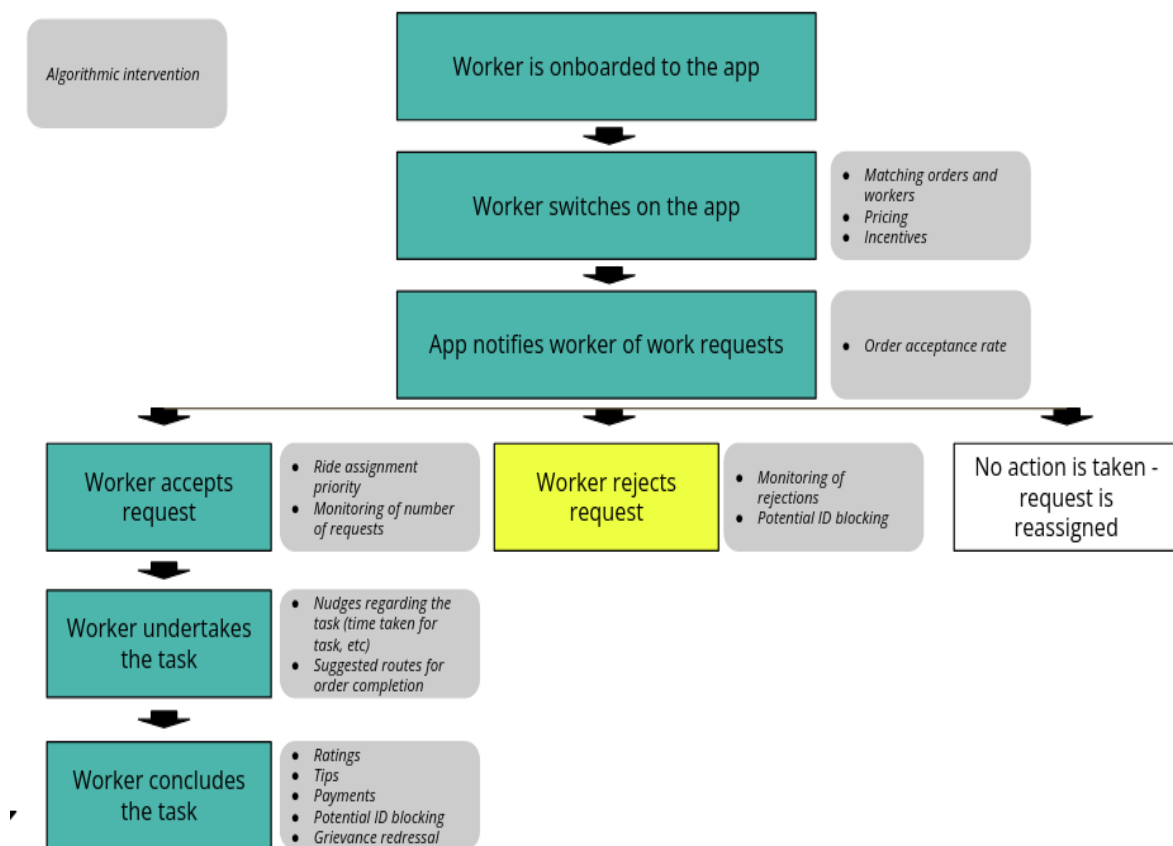
2. Understanding the Algorithm

This study focuses on the impact of the algorithm on the platform workplace. “Algorithmic management can be defined as “a diverse set of technological tools and techniques to remotely manage workforces, relying on data collection and surveillance of workers to enable automated or semi-automated decision-making” (Holubova, 2022). Algorithmic management has been referred to as a “derivative form of scientific management”, seen throughout the history of organisation of work (Baiocco et al., 2022). [A]lgorithms that assist or implement management functions potentially have two main implications in terms of organisational tasks and roles: the shrinking of middle management and the atomisation of work across occupations” (Biaocco et al., 2022).

In order to understand the intersection of the algorithm with the platformised workplace, this study has relied on workflow maps created using primary interviews with union workers and platform workers. These are focused on two sectors: ride-hailing and food delivery. The inputs here match experiences from other jurisdictions as well, as can be seen in cases of *Uber BV v. Aslam* (2021), *Joshua Klooger v. Foodora Australia* (2018), and others discussed later in this study.

At the generic level, the workflow map of most platforms is likely to look like below.

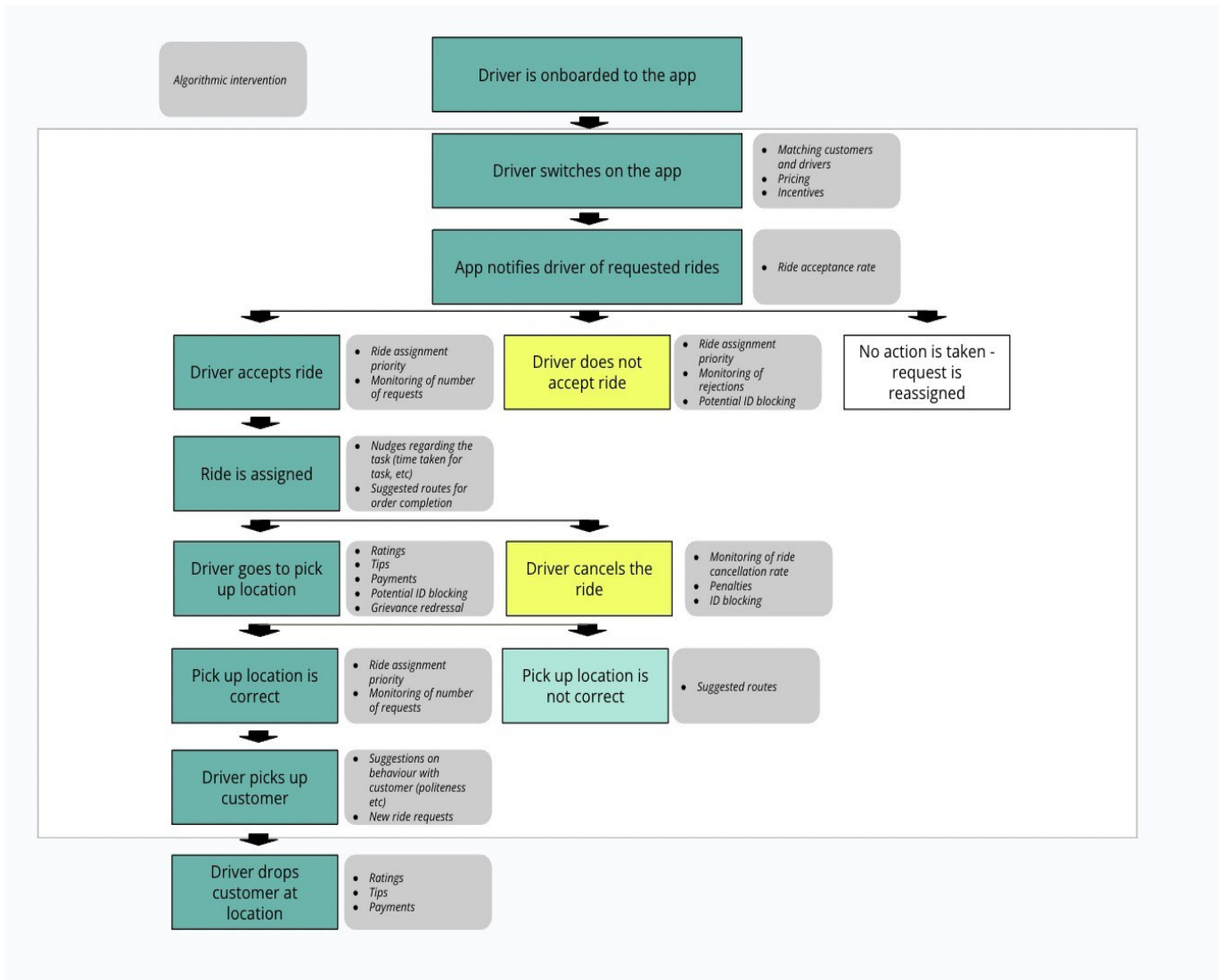
Figure 1. Generic workflow map of algorithmic intervention on platform workplaces



Source: IT for Change

For the ride-hailing sector, there are some specific changes that are incorporated.

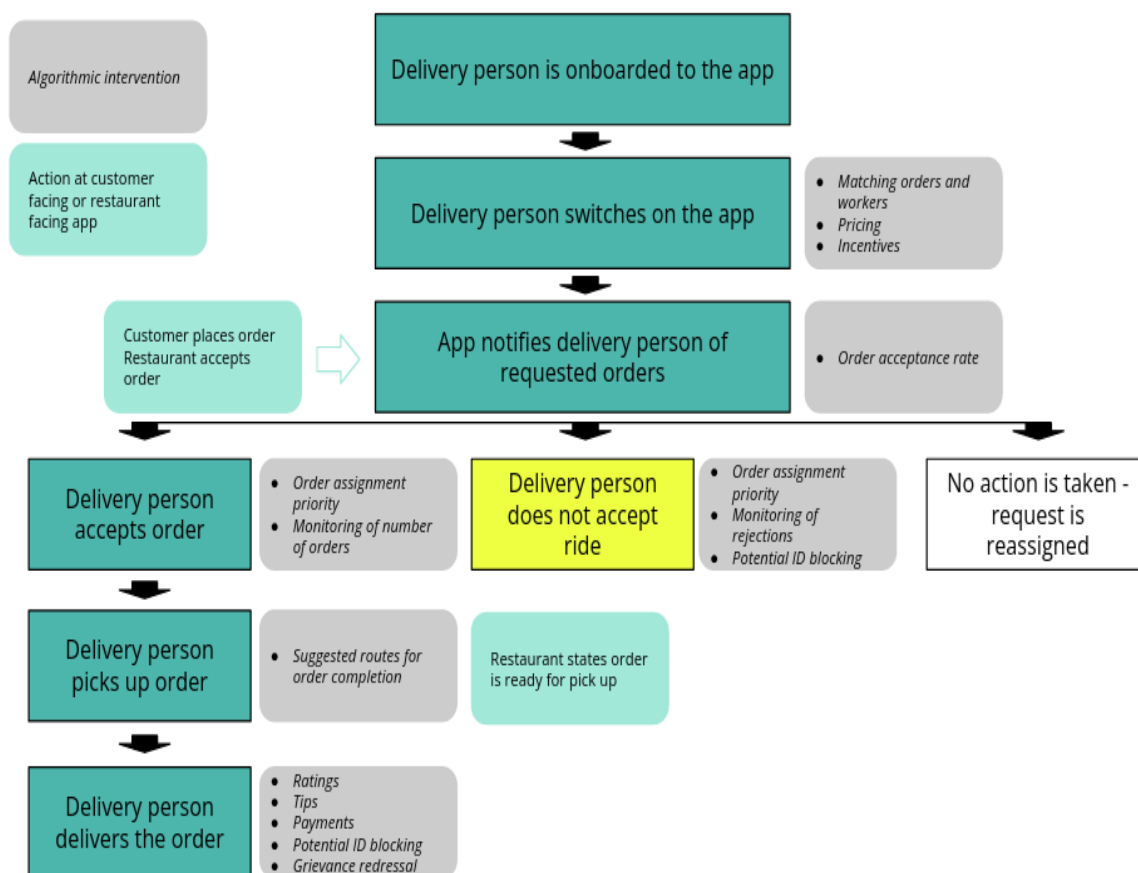
Figure 2. Workflow map of the ride-hailing sector



Source: IT for Change

In the food delivery sector, while the workflow maps are similar, there are some contextual changes.

Figure 3. Food delivery workflow map



Source: IT for Change

In light of these insights, this study focusses on the laws and cases that protect various aspects of labour's interaction with the platformised workplace and the rights that are sought to be protected.

With the understanding that algorithms play a significant role in the platform-mediated workplace, this study has sought to explore the impact of algorithms through a legal analysis of existing laws and judicial decisions across jurisdictions, and understand worker perspectives through primary interviews. The below section recounts the methodology employed. Section 5 delves into the findings of this study – both from the legal review of laws and cases as well as from interviews. In section 7, the study outlines recommendations on how to move the needle on the legal and policy frameworks around regulating platform-mediated and algorithmified workplaces with a focus on worker rights.

3. Methodology

The goal of understanding the role of algorithms in the platform-mediated workplace and the rights implicated therein has been addressed in this study through a two-pronged approach: legal research into various jurisdictions, their laws, and a few key cases on the one hand; and some key interviews with union workers and platform workers in order to glean the Indian context.

The mapping of the laws, rules, guidelines, and policy directives around platform work offered a view into the paradigm of rights needed for worker protection that need not be attached solely to the existence of an employment relationship. The cases offered legal interpretation into the different rights that need to be protected for workers. The litigation around platform work is often focused on employment relationships, since access to benefits are often based on the establishment of this relationship (De Stefano et al., 2021). As such, similar research has been conducted in other jurisdictions and our research takes the same approach further and contextualises it for India and its unique challenges. The study also offers insights into some of the larger challenges faced by platform workers across different jurisdictions.

The interviews enabled this study to be rooted in the Indian context, specifically focussing on the issues of marginalisation and the influx of migrant labour into this type of work. Interviewees have been anonymised to protect their identities. Several studies (De Stefano, 2019 quoting Pasquale, 2015 and Noble, 2018) have established that algorithms can perpetuate discrimination against vulnerable and marginalised groups based on data collected from past behaviours. This can lead to backlash against already marginalised groups who participate in ride-hailing and food delivery services. There have been several news reports about attacks on marginalised religious and caste groups (Gurmat, 2022). Such attacks can be exacerbated by apps because of the ease of tracking and identification of these vulnerable groups.

For the purposes of this study, fieldwork was conducted in Hyderabad and Jaipur. Six interviews were conducted in person, along with five others virtually. There was also one focus group discussion held with six participants. Additionally, two interviews with experts, who are named in this study, were also conducted.

The laws and the cases mapped and studied led to inductive categories of rights emerging as the key areas of contention in platform labour rights. These themes and the interviews led this study towards a set of recommendations that focus on worker rights, with data rights at the core.

4. Limitations of this Study

This study limits itself to two sectors: ride-hailing and food delivery services. In the Indian context, this refers to cab services like Uber, Ola, and Rapido, primarily; and Swiggy and Zomato for the latter. This limits the study's ability to probe the impact of algorithmic control in other areas of platform work, as well as in traditional work arrangements that are witnessing the impact of digitalisation. Additionally, the opacity of platform businesses has made it impossible for adequate investigation into the functioning of these algorithms. As a result, this study has primarily relied on inferences from the experience of workers. The full scope of necessary legal actions, however, will need a proper examination of the source code, the human interventions that take place within the algorithmic processes, algorithmic audits, and other similar measures.

Another limitation of this study is the focus on Eurocentric legislations and cases, given these jurisdictions have seen more development in this subject matter. In order to mitigate the impact, this study has attempted to contextualise the emerging worker rights discussed in light of India's unique labour conditions.

5. Findings

The focus of this study is to review a set of legislation, rules, amendments, and bye-laws that have sought to regulate working conditions and social security on digital labour platforms in India and across the globe. As discussed in the introductory section, such an effort is aimed squarely at delineating the contours of a state-level, sector-specific legislative instrument which can serve as guidance for a slew of new laws and rules for platform workers that are under consideration (and even passed in Rajasthan) in India. At its core, the proposed legislative framework should be able to set a benchmark for labour vis-à-vis the following broad categories: an adequate formulation of worker status, if not a final determination of their employment status; promotion of transparency and privacy rights both individually and collectively for workers (and consumers); economic fairness and accountability in algorithmic management in platform work; and enablement of all network participants to support the conditions for the sustainable growth of digital labour platforms in ride-hailing and food delivery sectors (derived from EU Platform Work Recitals).

At the first instance, it was noted that several of the instruments reviewed were not fully contained legislations or rule sets or guidelines in themselves, but rather they aimed at amending or modifying the existing regime of protective labour legislations to cover the workplaces of the platform economy. Prominent examples of this include California's AB5 law and Spain's Riders' Law. Another set of legislations deal with the employee classification question but establish themselves strongly on the side of regulation-free innovation – holding that workers on platforms are not employees and the laws

specifically declare the same. A third type of legislation focuses on defining what platform work (or sectoral platform work in many cases) is and laying down a framework of workplace rights (commonly limited to social security) for such work. In this third type, a few legislations have started to differentiate between various strata of platform work – usually by their dependency on the platform in question, although the evidence of its effectiveness is yet to be established. A prominent example of this type of legislation would be the proposed platform law in Chile. The focus of this study, in line with the goal of ensuring basic protections to workers, is on legislative rights that can apply irrespective of whether they are preceded by a definitive universal consensus on the classification question for platform workers generally.

This study yielded two important outcomes. First, the legal aspects of the study identified crucial rights that require safeguarding in future legislation. Second, through primary interviews with key informants, the study provided valuable insights into the current market dynamics in India.

Furthermore, the study's findings are structured around certain core rights identified through the mapping of legislations and cases. Core rights that require attention in these can be categorised as:

- Rights based on the question of worker classification
- Social protection, wage, and operational safety and health
- Data and information rights
- Protection against reprisals

5.1 Findings from legal review of legislations and cases across jurisdictions

5.1.1 Rights based on the question of worker classification

5.1.1.1 Legislative overview

a. California, US

In 2019, the California state legislation introduced changes in the state labour codes through the California Assembly Bill No 5, 2019 (AB5) to ensure that the verdict of the California Supreme Court in the case of *Dynamex Operations West v. Superior Court* (2018), which established a three-pronged test to determine whether a worker was an independent contractor, was encoded into legislation. The recitals to the law framed the need for the legislation as a response to the loss of social security and worker welfare in the face of rampant mis-classification by platforms. Indeed, this law is focused on the classification question – laying down a simplified test for classification as employees, and if this test is fulfilled then the presumption of employment lies with the workers and their representatives. The test, based broadly again on the regulation of atypical employment (such as contractual employment) (ILO, 2016) for classification as a non-employee is as follows: (a) the worker is free from managerial control

as suggested both through facts and contractual position, (b) the work performed is out of the usual work of the employer, and (c) the worker has an independent trade or business which functions without the platform. Importantly, while managerial control is an important addition, this law does not go as far as the EU's Platform Work Directive (European Union Proposal for a Directive on Improving Working Conditions in Platform Work (Directive), 2021) or the Spanish Riders' law, both of which (in varying degrees) provide for algorithmic management forming a big part of the rebuttable presumption of employment.

b. European Union

In the European Union Proposal for a Directive on Improving Working Conditions in Platform Work (Directive), 2021, the most important features are the: (a) legal presumption of employment, and (b) focus on algorithmic management and automated decision-making. Articles 4 and 5 of the Directive lay out the above-mentioned legal presumption of employment – this is decided based on certain parameters of control (including through algorithmic means), and the onus is placed on the platform to prove that a worker is not eligible to be treated as an employee. Similar to long-standing regulatory principles of contractual work, the Directive mentions that classification should be carried out in light of “facts relating to the actual performance of work, taking into account the use of algorithms in the organisation of platform work, irrespective of how the relationship is classified in any contractual arrangement that may have been agreed between the parties involved”.

In terms of algorithmic management and automated decision-making, Article 6(2) of the Directive provides a broad set of information rights to platform workers explicitly: automated monitoring systems (which evaluate and supervise work performance), as well as automated decision-making systems (which directly or indirectly affect workers' wages or working conditions). For monitoring systems, the right of information relates to the fact of introduction as well as the types of actions monitored. For decision-making systems, the workers are entitled by the Directive to obtain the parameters of decision-making, and for decisions having direct effect on rights, such as access and payment, workers are entitled to know on what grounds such a decision has been made. This information is also made available to worker representatives as well as regulators under Article 6(5). The Directive further lays down a human review of significant decisions, as part of a human-in-loop approach to algorithmic decision-making. Further, the Directive has an explicit moratorium on the processing of certain types of personal data (such as emotional state, health, or private conversations), as well as on collection of data while off work. In terms of restrictions on algorithmic management, the Directive puts a duty on platforms to evaluate risk, put in safeguards, and also restricts automated decision-making systems from putting “undue pressure on platform workers” or endangering their “physical and mental health”.

The law envisions, under Article 9, providing trade unions the necessary support to be informed and consulted with for changes in automated monitoring and decision-making systems. Expenses for experts to assist trade unions are mandated to be borne by the larger platforms operating in a given country (platforms with more than 500 workers). Meanwhile, Article 12 provides an explicit provision for data sharing with regulators and worker representatives at six-month intervals. The data-sharing mandate rests on two main thrusts: one, data related to the number and type of platform workers engaged on the platform and, two, on unilateral contractual terms that the platform has in place with its workers. These provisions enumerating collectivising and data access are significant since they provide a strong basis to claim workplace rights, including those of accessing social security benefits. In addition to this, communication channels between workers and their representatives are protected through Article 15, which mandates platforms to provide digital infrastructure to workers without collecting or processing any of the data on such a protected channel. Articles 17 and 18 protect workers from reprisals for legitimate activity to enforce rights under the Directive, including a right specifically not to be dismissed.

The Directive is in the advanced stages of its implementation and progressing through the trilogues stage. Our analysis in the previous section was based on the Commission draft available in February 2023. Since there has been significant progress during the time of the analysis and the publication of this study, we are providing a short update on the present state of the draft. On 12 June 2023, the process for trilogues between the European institutions was kicked off by the acceptance of the general approach to the Directive by the European labour ministers. Scholars have pointed out that there is dilution in terms of worker rights at the behest of pro-platform legislatures such as France, Sweden, Estonia, and Latvia, particularly around the core feature of the Directive – the presumption of employment for platform workers. Platforms have consistently pushed to structure the test for employment in order to create several strata within the workplace. This not only creates problems for trade unions trying to find common ground among workers, but several studies have shown that this type of test of employment makes the test ineffective in terms of being able to bring a majority of workers under its protective ambit (Brave New Europe, 2023). Upgraded protections could have been in the nature of providing a clear unit for collective bargaining, more specific information and consulting rights for trade unions, as well as effective scope for workplace democracy which are missing in all of the drafts. At the same time, pro-worker legislatures in the EU such as Spain, Netherlands, and Belgium have accepted these changes in order to “keep the legislative process on track” (General Secretariat of the European Council, 2023). This is a significant compromise but perhaps one that was ultimately unavoidable in the long and complex process of the drafting of the EU legislation.

Some of the changes between the February draft and the June draft are as follows:

- a. There is an expansion from 2 criteria to 7 criteria in the Council draft, as well as the proposal for a general presumption of employment by the European Parliament draft which has not been considered. The analysis is that this change makes it significantly more difficult for platform workers to access their rights through the classification route.
- b. Intermediaries like sub-contractors are now part of the Directive and usage of such intermediaries will not dilute the application of the law for workers. This has been seen as a positive move.
- c. A number of opt-outs have now been built in for national authorities to not use the employment presumption either through alternative national legislative frameworks governing platform work or through tax, social security, or similar legal regimes. This is being interpreted as a significant setback to workers.
- d. Legal burden of proof remains with platforms. This is unchanged from the Commission and Parliament drafts.

Further compromises seem probable as both sides of the debate try to reach an agreement before the European elections slated for 2024.

c. Chile

In 2021, Chile introduced a legislative instrument with a new chapter for platform work. This instrument provides a good example for regulating platform work without delving explicitly into the classification debate. It buckets workers in two: dependent and independent workers. Most rights in the relevant chapter are reserved for dependent workers but some rights in the realm of working conditions, pay, and protection against discrimination have been extended to independent workers as well. Coming to the law itself, dependent workers receive premium protection. One significant novelty is that dependent workers get to choose their payout model, either it be through commission on trips or through an hourly model subject to maximum working hours of 10 hours per day, and effectively, this is also a right to disconnect. Further rights included for dependent workers are (a) a right to a payment per trip which is over and above the statutory minimum wage, (b) an official human-serviced grievance redressal mechanism, and (c) payments to include waiting time and other unaccounted costs.

Meanwhile, for independent workers, the legislation provides a lighter version of some information rights relating to making wages and contractual terms transparent and accessible. Payment terms should include a rider to ensure that the right to disconnect be enforced for 12 hours in each 24-hour period. Further, a clause to ensure fundamental rights under the Chilean labour code are applicable to

independent workers is commendable. However, this provision has come under criticism for being arbitrary and unwilling to provide a universal flow as it mandates a minimum working time of 30 hours per week even for independent workers to be eligible. Another prominent criticism of this approach has been that it provides a ready-made incentive to platforms to discriminate between workers and use algorithmic management (and traditional Taylorist management) to push workers from the dependent category to the independent category (Aliosi & De Stefano, 2022).

d. Spain

In August 2021, the Spanish government put into force an agreement with major trade unions and business associations to amend labour law provisions to provide for operational health and safety (OHS) norms on platforms in the delivery sector. These changes were impactful and focussed on two main thrusts to ensure OHS outcomes: (a) the classification question, wherein a presumption for dependent employee relationship is created for all platform workers in the delivery space, and (b) algorithmic transparency through providing information to the works council (the primary negotiation platform in Spain) on algorithms that “may affect working conditions, and access to and maintenance of employment, including profiling”. Although scholars have noted that some parts of this law need to be clarified through case law interpretation, the legal presumption for employer control is activated as soon as there is a demonstration of an algorithmic setting of service conditions and working conditions. This is clear from the language of Additional Provision No. 23 of the Spanish Workers Statute, and such clarity is certainly commendable on the part of the drafters.

By application of the provisions of Article 8.1., the activity of persons who provide paid services consisting of the delivery or distribution of any consumer product or merchandise, by employers who exercise business powers of organisation, management and control directly, indirectly or implicitly, by means of algorithmic management of the service or working conditions, through a digital platform, is presumed to be included within the scope of this law.

e. Philippines

In the Philippines, Senate Bill No. 1373, or the Protektadong Online Workers, Entrepreneurs, Riders, at Raktera Act, 2022 (POWER Act) was introduced as a draft legislation to regulate working conditions in delivery work as well as online freelance work. While this is still a draft legislation, it has a number of relevant rights which provide a good starting point for our purposes. For instance, Section 5 of the draft POWER Act provides for a presumption of employment that is driven by the actual facts of control and remuneration in the working relationship and not the contractual wording.

5.1.1.2 Insights from cases

a. Understanding the contours of control by algorithms

Several cases have arrived at a determination of an employment relationship through the various layers of control that emerge from platforms and their algorithms. A landmark decision in this regard towards safeguarding worker rights was the 2021 verdict from the UK Supreme Court in the case of *Uber BV v. Aslam* (2021), which established that drivers were workers of Uber London, Uber BV's London local office. The court upheld a decision of the employment tribunal order which established that Uber drivers were workers within the meaning of the Employment Rights Act, 1996, the National Minimum Wage Act, 1998, and the Working Time Regulations, 1998. Uber appealed these decisions at the Employment Appeal Tribunal and at the Court of Appeal and lost, after which they approached the Supreme Court. The key question to be decided at the Supreme Court was whether the drivers had performed services for Uber London under their contracts or for the passengers, as was Uber's claim. The Supreme Court was cognisant of the power differential between employers and workers, and the ability of the former to enter into agreements which were onerous. "It is the very fact that an employer is often in a position to dictate such contract terms and that the individual performing the work has little or no ability to influence those terms that gives rise to the need for statutory protection in the first place," the court noted adding that all agreements of work had to be considered in a purposive manner beyond mere text. On aspects of control, the court observed that the Uber app fixed the fares for each ride (and not a regulator), it monitored drivers' rate of acceptance and cancellation of trips, directed drivers to the pick-up location and then the destination of the passenger, and controlled the rating system that requires drivers to maintain a certain high average. It also found that the coercive action taken by Uber of blocking drivers' access to the platform for not meeting minimum working hours reflected that drivers were, in fact, working for the company. Each of these features, maintained by Uber's proprietary algorithm, enforces a certain expected behaviour from the drivers, and thus, rightly held to be a factor in establishing that drivers were workers.

Another leading case is the decision of the Court of Justice of EU in *Asociación Profesional Elite Taxi v. Uber Systems Spain SL* (2017), where the court ruled that Uber provided transport services and not digital intermediation services. This led to the court assessing the kind of control the corporation exerted on drivers – in the nature of determining the maximum fare, incentivising reaching a target number of trips, using the rating system to provide better trips to certain drivers, or block access to the app for others. As De Stefano et al. (2021) note, the key in this decision was the opinion of the Advocate General in this case, who noted, "[I]ndirect control such as that exercised by Uber, based on financial incentives and decentralised passenger-led ratings, with a scale effect, makes it possible to manage in a way that is just as – if not more – effective than management based on formal orders given by an

employer to his employees and direct control over the carrying out of such orders.” This was also adopted in other cases in the EU.

b. Control over elements of work

The Fair Work Commission (FWC) in Australia, in the case of *Joshua Klooger v. Foodora Australia* (2018), established an employer-employee relationship between the food delivery company Foodora and one of its delivery personnel. This was on the grounds that the delivery person’s work was integrated into the business of the food delivery company and Foodora had significant control over this work, including fixing the place of work and deciding the start and end times of the shifts. Foodora also instituted a batching system to rank delivery personnel, which required meeting certain criteria like minimum number of deliveries, etc., to keep a high ranking. In fact, the FWC went a step forward to state that corporations often try to relinquish their responsibility as an employer by creating contractor systems only in name

...the corporation (Foodora) stipulated the requirement for individuals to obtain an Australian Business Number and to create, at least the appearance, that the individual operates a business of their own. The corporation then avoids the many responsibilities and obligations that it would normally have as an employer. The responsibility for compliance with many important regulatory obligations including but not limited to taxation, public liability insurance, workers compensation insurance, statutory superannuation, licensing and work health and safety, is transferred from the corporation to the putative contractor. (Ibid.)

5.1.2 Social protection, wage, and operational safety and health

The Indian Code on Social Security, 2020, which is not enforceable yet, makes explicit provisions to extend social security for platform and gig workers within the broader ambit of unorganised workers through Section 114 and Schedule IX. These provisions are broadly aimed at providing for a central government-initiated National Social Security Board with the power to frame social security schemes for platform workers at the federal level. The Code leaves limited scope for state governments to frame targeted schemes for platform workers as the contrast between the framing of Sections 109 and 114 demonstrates. While social security schemes for unorganised workers are framed in this law as dual responsibility on the union and the state governments, similar room has not been provided for platform workers. This would certainly affect how legislations and corresponding schemes for platform workers are to be framed as they run the risk of falling afoul of the Code of Social Security when it is brought into effect through rules and guidelines.

In broad alignment with the Codes but without specific links being explicitly narrated, regulators at the central and the state level have come up with a number of sectoral attempts at regulation of labour

conditions on digital platforms. One is the sector-specific guidance that exists in the form of the Motor Vehicles Aggregator Guidelines, 2020 (MVAG), released by the Ministry of Road Transport and Highways to serve as model roles for state governments to frame licence requirements for digital platform companies looking to operate in the ride-hailing space. The second effort that is relevant is the Karnataka On Demand Transportation Technology Aggregators Rules, 2016 (KODTTAR). The third effort is the West Bengal On Demand Transportation Technology Aggregators Rules, 2022 (WBODTTAR). In all of these three legislative instruments (namely one union government guidance and two state-level rules), there is a commonality of rights, protections, and compliances that we observe. For simplicity, we analyse the MVAG primarily along with additional features present in the rules.

At the outset, in continuance of the pre-platform era regulation of commercial transportation, a licensing framework is laid down for ride-hailing platforms (RHP) without which they are not permitted to function. In practical regulatory terms, the enforcement by non-grant or withdrawal of licence to operate. Further, through Guideline 5(2), MVAG lays down the provisions to mandate both a skill test as well as an induction training (equivalent to 30 hours of instruction) for every new driver being onboarded on a RHP – this induction training has to be linked to the standards laid down in the National Skill Qualification Framework. The obligation to conduct refresher training for the workforce finds mention in 7(2)(c), however, there is no explicit provision that bars RHPs from using skill training as a disciplinary tool (for example by linking it to ratings). Through Guideline 7, MVAG suggests minimum standards for drivers to adhere to, including ‘know-your-customer’ requirements, minimum driving experience of two years, and routine medical checkups at the expense of the RHP.

It is important to note two important impacts on workplace rights at this stage:

- a. through Guideline 7(1)(g), law enforcement officials are allowed access to RHP’s API for verification of the drivers’ identity and ensure lack of criminal records, but this access has no explicit safeguards to ensure the siloing of personal information between RHP’s databases and law enforcement databases or purpose limitation thus creating a new vector of risk, and
- b. through Guideline 7(1)(h), the execution of a valid and enforceable contract between RHP and driver is mandated, but no contours for such an agreement beyond “all necessary terms and conditions” or any requirement to share such terms with regulators or worker representative organisations have been laid down.

Guidelines 7(2) (a) and (b) lay down obligations for RHPs to provide term and health insurance individually for drivers, set at a quantum of INR 5 lakhs per annum cover and with a fixed increase of 5% (as opposed to an inflation linked marker) in value each year. Guidelines 7(2)(d) and (e) lay down a

basic right to disconnect from work¹ for the drivers, in terms of obligating RHPs to enforce a limit of 12 working hours every calendar day, including login time and across multiple platforms. Again, two limitations are of note in this formulation: (a) there needs to be a protection against misuse of this provision to deny access to wages or social security as the standard may be, and (b) details of how the off-platform time is monitored by RHPs is necessary and, if needed, mediated through a regulatory platform to ensure data rights remain secure at the workplace. Further, with regard to working hours, MVAG deviates from KODTTAR wherein it provides a formulation of eight working hours per day as well as 48 hours per week as a limit. Extension of the workday should be adequately explained and negotiated, particularly where road safety and driver health are rising concerns for the regulator. Workplace data protection rights are extended only to customers and not to workers through Guideline 9(4), and although data localisation is mandated for state governments, it is not explicitly translated into privacy protections for workers. Algorithmic accountability and transparency around charges and fares find reference in Guideline 9(6), although details about operations or the access for workers to this data are not clarified. Further, RHPs are obligated to provide a 24x7 multilingual helpline for drivers and customers for grievance redressal within specific timelines as well as a control room for constant monitoring. Oversight of these positive measures remains unclear from the text.

In terms of price-setting, MVAG in Guideline 13 provides for: (a) link to the wholesale price index (WPI) calculated inflation to set a base fare, (b) counting of wait time and dead mileage (counted as equivalent to 3 kms fare), (c) a range of below 50-150% of the base fare, and (d) a maximum commission for the RHP at 20% of the fare. While Guideline 13(3) refers to dynamic pricing and asset allocation as the underlying rationale for providing a wide range of fares to operate in, there is ample to consider whether this holds true for every situation. For example, allowing negotiated prices through consultative approaches (involving worker representatives, antitrust regulators, and RHPs) with mandated revisions linked to the WPI could be a better approach. While the Karnataka legislation is silent on price-setting, the West Bengal law links the base fare back to the city taxi prices notified earlier. Again, an explicit link to the inflation benchmark remains missing.

In August 2021, the Spanish government put into force an agreement with major trade unions and business associations to amend labour law provisions to provide for OHS norms on platforms in the delivery sector. Meanwhile, the Chilean law provides insurance for worker owned-equipment, and the provision for safety kits by platforms is a welcome and novel addition.

¹ The right to disconnect upholds the liberty of people to disconnect from work and work-related communications (e-mails, messages, etc.) after normal working hours. It endorses the fact that workers should be allowed to be offline without apprehensions of employer retribution. See, <https://thewire.in/rights/is-it-time-for-a-right-to-disconnect>

5.1.3 Data and information rights

The next relevant legislation for our purpose is the Ontario state law, Digital Platform Workers' Rights Act (2022) (Working for Workers Act/ Ontario law). Section 7 lays down the right to information for workers on a number of parameters at the point of onboarding as well as at the point of acceptance for each task:

- a. A breakdown of pay calculation and tips collected
- b. A description of recurring pay period and recurring pay day
- c. A description of factors used to assign work and their mode of application
- d. A description of the performance rating system if that is in effect and its application, particularly in cases where workers are dismissed on its basis.

Section 11 provides a right of written explanation for termination and two weeks' notice if the removal of access to the platform lasts for more than 24 hours. Section 14 provides for record-keeping and retention of data which is open to inspection. These data points include but are not limited to details relating to:

- a. Name and address of the worker
- b. Payments made per transaction
- c. Task timing at the start and end of the transaction
- d. Onboarding and termination

Meanwhile, the Philippines POWERR Act in Sections 6(d) and (e) provide for algorithmic transparency using the construct of Article 6(2) of the Platform Work Directive.

Moving to the EU, the General Data Protection Regulation, 2016, (GDPR) continues to be a legislation that enables workers access to their data. The Court of Amsterdam, in a series of cases, protected the rights of workers as data subjects who had a right to their data under the GDPR. The court decided at least three different cases between drivers and ride-hailing apps, such as Uber and Ola, on different aspects of the rights governing personal data and its processing in March 2021.² A significant case in this regard is that of the Italian Data Protection Agency, which fined a food delivery app – Foodinho, a subsidiary of Glovo – €2,600,000 for using discriminatory algorithmic practices and not providing transparent information regarding its reputational rating system for delivery persons.³

² These cases have been analysed using the unofficial English translations found on the website of the lawyer for the drivers, available at <https://ekker.legal/en/2021/03/13/dutch-court-rules-on-data-transparency-for-uber-and-ola-drivers/>

³ This case was taken from the translation available at [https://gdprhub.eu/index.php?title=Garante_per_la_protezione_dei_dati_personali_\(Italy\)_-_9675440](https://gdprhub.eu/index.php?title=Garante_per_la_protezione_dei_dati_personali_(Italy)_-_9675440)

Lastly, the Chilean law provides two major clauses with regard to data and information rights of different types. First, is the mandate to provide transparency and information to individual workers, particularly on payments, ratings, and performance along with a right to portability of the data for each worker from platform to platform that is shared through this route. However, collective information rights are missing as well as information rights relating to the functioning and outcomes of algorithmic management. Secondly, there is a bar on discriminatory behaviour by automated decision-making systems.

a. Right to access personal data is broad

In two separate cases related to questions of transparency, one each against Uber⁴ and Ola⁵, the Court of Amsterdam noted that the right of workers to access their data under the GDPR did not need to be qualified by any reason in particular for accessing that data. In fact, in the Uber case, the court noted that the subsequent use of that data for employment and other purposes, including gathering evidence against the claimant – in this case, Uber – did not amount to abuse of their rights.

However, the court clarified that the right to access data under Article 15, read with Recital 39 of the GDPR, requires the request for data access to be specific and not general, especially when a large amount of data is collected by the controller. Additionally, the court found that personal data access under Article 15 did not extend to the goal of understanding the algorithm for price determination, as intended by the applicants (workers). This is especially true when passenger information is intertwined with this information and protection of their personal data becomes a competing interest. Similar findings were observed in the Ola case on transparency as well.

What this reflects is that approaching data access requests purely from a personal data perspective, while important, has its limitations. It is relevant for worker data rights to include a collective right to understand fare determination, which includes a right to explanation of how the algorithm arrived at the fare (Gurumurthy et al., 2022).

b. Personal data includes ratings, location data, and information about creation of risk profiles

In what is a definite positive, however, in the Ola transparency and data access case, the Court of Amsterdam went on to clarify that driver ratings, that is an assessment from the passenger of their performance, forms part of personal data accessible to them. Of course, this has to be done while protecting passenger privacy and that individual ratings are not traced back to passengers.

The court also found that location data also could be classified as personal data under Article 4 of the GDPR.

⁴ For more information, see https://gdprhub.eu/index.php?title=Rb._Amsterdam_-_C/13/692003/HA_RK_20-302

⁵ For more information, see https://gdprhub.eu/index.php?title=Rb._Amsterdam_-_C/13/689705/HA_RK_20-258

In addition to this, the court ruled that if Ola created risk profiles of drivers in order to arrive at a ‘fraud probability score’, which predicts their reliability and behaviour, it had to provide the personal data used to determine these profiles. The drivers were within their rights to check if the personal data used was correct.

c. Imposing discounts or fines counts as automated decision-making

The Court of Amsterdam, in the Ola case, held that imposition of discounts or fines had a significant impact and counted as automated decision-making under Article 22 of the GDPR, which meant that Ola was prohibited from following such decisions. “Ola must provide [applicants] with information that makes the choices made, data used and assumptions on the basis of which the automated decision is [made] transparent and verifiable,” the court ruled.

Algorithmic management straddles the sphere of partial and conditional automation, where there is some human intervention and the algorithm also makes some decisions (Baiocco et al., 2022). The opacity of the decision-making process through algorithms enables potential unjust decisions, even by human managers, to be passed off as an automated one (Ibid.).

5.1.4 Protection against reprisals

Section 13 of the Ontario law, Bill 88, referred to as ‘Working for the Workers Act’, 2022, extends protections against reprisals for legitimate activity to enforce rights under the legislation for both individuals and collective organisations.

The POWERR Act also provides for a human-interfaced grievance redressal for significant decisions (whether algorithmic or not) as well as data localisation for a period of five years. Section 6(e) of the Act provides for portability of social security schemes across platforms, while 6(f) provides for strong freedom of expression rights by protecting legitimate collective activity from reprisals.

While the Chilean law protects collective bargaining, it does not do so by recognising or registering worker-representative organisations. This represents a major oversight as it does not acknowledge the role of enabling legislation for worker-representative organisations to equalise inequality of bargaining positions. A simple opening for “unregulated collective bargaining” is not expected to change much in terms of outcomes as it does not protect legitimate trade union activity from reprisals (Simonet & Garcia, 2022).

In the *Joshua Klooger v. Foodora Australia* (2018) case, the FWC also noted that dismissal because of the delivery person’s complaints about his workplace rights and entitlements in the public domain was not defensible, and the worker had to be protected against such reprisal.

The *Uber BV v. Aslam* (2021) case had an element of protection from reprisal as well. Aslam had sought protection under the Employment Rights Act, 1996, against detrimental treatment for being a whistleblower and making protected disclosures.

5.2 Findings from interviews

5.2.1 Increased contractualisation in the Indian ride-hailing and food delivery sectors

Even as jurisdictions in the EU and countries like Australia enable platform workers to access labour rights, the Indian ride-hailing and food delivery sectors are witnessing increasing contractualisation. The emergence of fleet owners – management-level partners of the platform who are responsible for the drivers – creates a second level of distance between the worker and the platform. It also allows the fleet owner to have a lot more control, while not having any responsibilities as such. It enables the platform to also not take accountability for drivers on their app, since now there is a fleet owner in the middle.

5.2.2. Emergence of fleet owners and third-party delivery services

Despite the promise of enabling direct contact between service providers and gig workers, subcontracting has crept up in platform-based gig work over the years. This section provides an overview in relation to two major cases in the app-based transport sector observed through the interviews conducted.

Some important insights into the inner workings of fleet owner companies during our focussed group discussions (FGDs) with app-based transport workers are presented below.

Fleet owners have a different app through which they can onboard vehicles and de-platform drivers. Fleet owners can also control the incentives – if the driver says he completed 10 rides, fleet owners can remove some of them [incentives]. Fleet owners are being used as controllers [by proxy] by platforms. Platform companies are isolating their relationship with the drivers as much as possible and shifting the liabilities and responsibilities. - Union worker A.

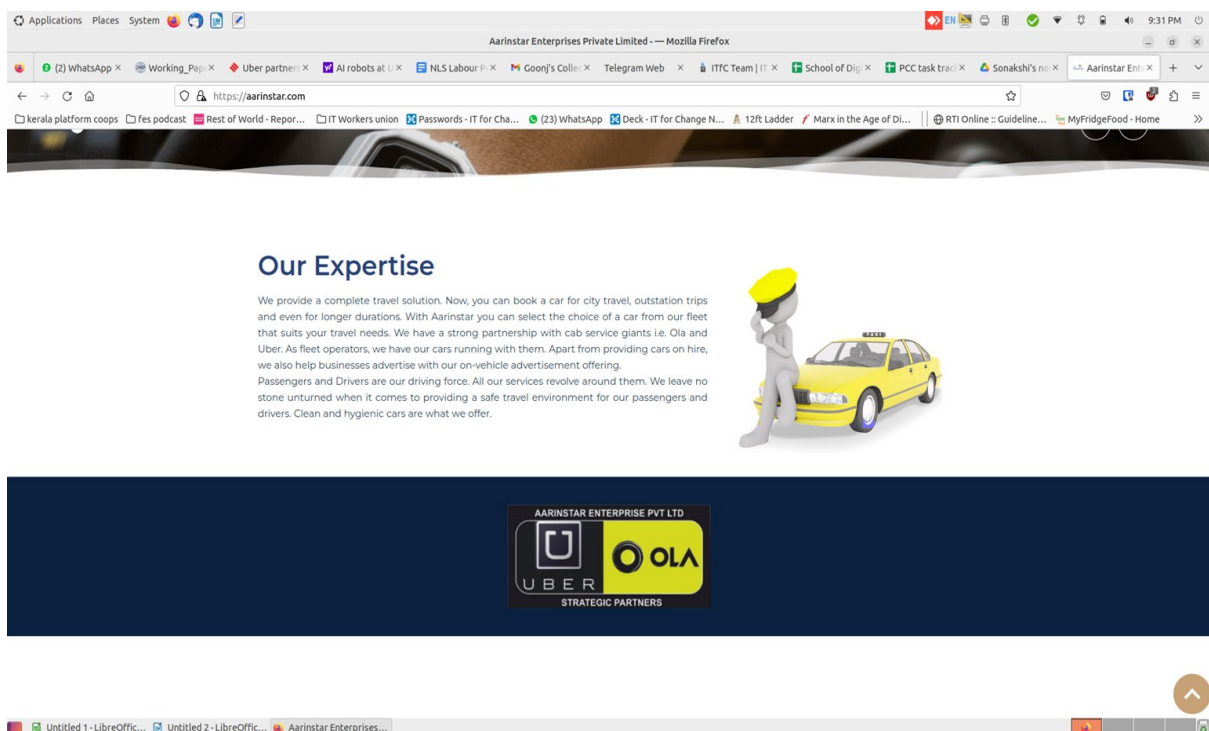
Drivers working with these ride-hailing apps are familiar with these fleet companies. One of the drivers explained the process, saying that anyone who can show that they own a minimum of 10 cars, and has a good track record of work, can register on Uber as a fleet owner. They also pointed towards a marked difference in the terms of work for a driver engaged with a fleet company when compared to one engaged directly with the primary ride-hailing app.

“First preference is always given to fleet owners, then we get rides. That is a given now. First *gharvaala* (family) then *baharvaala* (outsiders),” one of the informants said. This perception was resonant among other informants as well. “Fleet owner’s drivers get a different fare from us. They get more fare,”

another informant added. “I think fleet drivers get more long-distance drives,” was what one other informant said. While it was not very clear how this differentiation is done, one of the drivers seemed to think that the app differentiates at the time of registration itself.

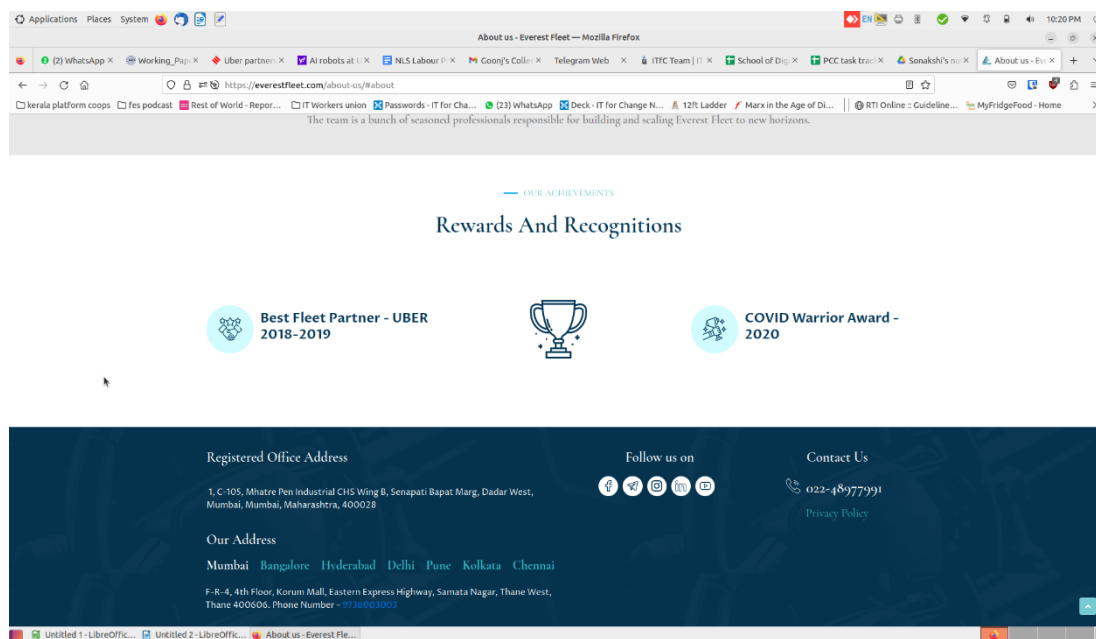
At the same time, the drivers we interviewed also pointed out that drivers employed under fleet owners have their own share of problems. Their per km fare, for example, is lower compared to the fare of the independent drivers.

Figure 4. Screenshot from the homepage of Aarinstar’s (a fleet-owning company) website, claiming to be a “strategic partner” for Uber and Ola



Source: Aarinstar

Figure 5. Screenshot from Everest Fleet Solutions Ltd. Website – Awarded “Best Fleet Partner – Uber” for 2018-19



Source: Everest Fleet Solutions Ltd.

These fleet companies have their own internal logistics systems and processes. For example, Everest refers to its drivers as “pilots”, onboards new drivers through a referral system, and also has facilities like provision of accommodation to out-of-station drivers. One major issue that emerges from the point of view of policy and regulation, is the allegation that terms of work and application of the algorithm work differently for the drivers working via fleet solution companies, as compared to others driving independently. This not only goes against the fundamental idea of the direct-to-customer service, but also creates a loophole or opacity of sorts, creating scope for classic labour rights issues.

5.2.3 Subcontracting in food delivery

Subcontracting has become prevalent in the food delivery sector as well, and in our research, we found this being done in two ways. One, via an additional layer of a platform app itself, where workers sign up with this subcontracting app instead of the main service provision app; and two, through delivery gigs that are routed via the subcontracting app. The biggest example of this that emerged from our research, was a company called Shadowfax.

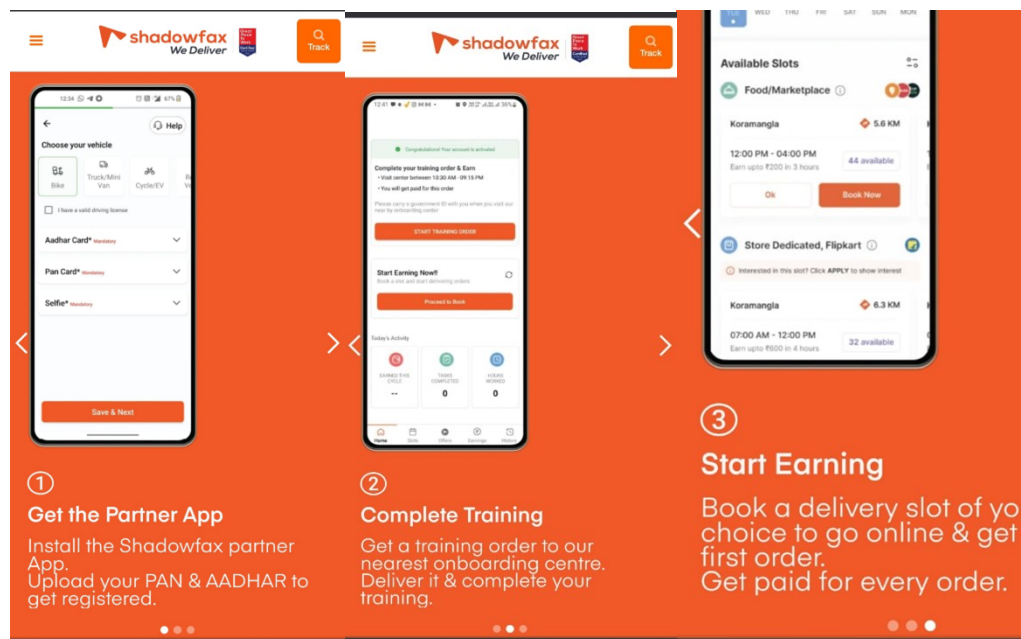
a. Shadowfax

A logistics management company, Shadowfax calls itself a “hyper local delivery solution” offering options for delivery workers as well as aggregator companies to work with them. Shadowfax is capturing the last-mile delivery market, employing delivery workers on its platform, tying up with

consumer-facing apps such as Swiggy and Flipkart, and then providing gigs to these delivery workers who are “Shadowfax workers”. While Shadowfax started off in the food delivery as well as e-commerce delivery businesses, our interviews revealed that the share of food delivery in its total business has rapidly increased compared to the latter.

The three-step process for gig workers to join Shadowfax, as advertised on their website, is as follows.

Figure 6. Onboarding process for Shadowfax



Source: Shadowfax

It is notable that the process is very similar to that of joining a customer-facing delivery app like Zomato or Swiggy (in fact, usually without the second step of ‘training’). One of our interviewees, Anushka Mittal, who researched the app in 2022, in an email response, said that the process of onboarding was completely digital.

All documents are uploaded on the app in a photograph format. Further, there are mandatory boxes to tick and consent to in order to proceed with the process. In this digital onboarding, the workers are often assisted by representatives of companies which conduct group onboarding. How I understand this is that they go to a place to get people onboarded as they may otherwise face difficulties. - Anushka Mittal, Independent Researcher

Our interviews revealed that the second step of training does not always take place, and workers often rely on each other to get oriented. However, Shadowfax does have a physical office which enables the gig workers’ access to a management structure for queries and grievance redressal. An ex Shadowfax member explained that if there was ever an issue with work, it used to be resolved via a conference call

between the worker, a service executive, and the hub manager.

For joining, Shadowfax asks for a driver's license, Aadhaar card, and a PAN card, which is similar to the process of any principal food delivery platform, like Zomato or Swiggy.⁶ In fact, the Aadhaar number has become a significant identity marker. "I was told that Aadhaar is a *de facto* mandatory document for onboarding now," Mittal said. She described the onboarding process as follows, based on her research.

The rider must open the app, fill in the data such as name, DOB, father's name, and other basic details. On the next page, documents indicating age and address proof must be submitted such as DL (driver's licence) and Aadhaar card. In each field, either of the two must be put in. The third page would require bank details to credit salary. Then it will remain pending for verification at our [Shadowfax's] end. So, if we [Shadowfax] enter the mobile number of the rider on the portal then we can see all details filled by the rider. So, then we cross check and match all details, if it's all correct, then it is approved. If not, then it will be rejected and the rider must upload the documents again.

Shadowfax has also begun to charge a "joining fee" of INR 800 which is a new development in the past one year, as our research interviews with Shadowfax workers revealed. As they explained, "The joining fees amount to INR 1,500, including the uniform and bag charges, and this is deducted from the first payment of the gig worker."

Terms of employment for these workers are different. While on the consumer-facing app most workers are paid by the gig with no formally stated expectation to be logged in for a specific number of hours, on Shadowfax, the workers have a more formalised work arrangement wherein they log in to the platform for a certain number of hours every day and are expected to complete the gigs that they receive. They are paid weekly. Mittal's research on Shadowfax, and interview with an employee at the organisation, on the condition of anonymity, corroborated this finding. "[The Shadowfax] app doesn't provide [partner client name redacted] slots. There are shifts here, morning (6 AM-3 PM) and afternoon (1 PM-10 PM). If they want to earn beyond this then they can, if they come early," the employee said, according to Mittal's email.

The employee went on to add that Shadowfax orders are not customer-dependent and allowed workers to choose time and location of their liking.

⁶ A principal food platform is the primary application that connects restaurants, customers, and deliver workers. Through the course of this study, we found an added layer of contractualisation to applications that provide workers to these principal platforms.

The app shows for marketplace and food where you can choose time and location, it depends on you as a partner. I can do part time for this if I am working elsewhere. I can book a time and choose location and can start working. But I have orders all the time, every 30 minutes there is an order, there are also slots available all the time. It is not dependent on the customer ordering because there is already an order. Since I joined Shadowfax, I have been handling [partner client name redacted] and have not approached another client. – Shadowfax Employee

Payment terms also vary. While on customer-facing platforms the payment amount is a combination of a base fare and a per km rate, Shadowfax pays a flat rate to the workers for each delivery irrespective of distance travelled. Though there is a system of hubs similar to principal platforms and therefore gigs are received within a certain km radius, occasional long-distance deliveries also come in. Furthermore, similar to the principal platform Swiggy, Shadowfax also offers a system of financing two-wheel vehicles for gig workers.

An ex-Shadowfax worker also revealed that during 2017 when he worked with the company, there was also a minimum wage of INR 400 rupees per day paid to the gig workers irrespective of the number of deliveries done, and a promise of earning INR 40,000 per month, along with a required acceptance rate of eight deliveries per day. When these deliveries stopped coming his way, and the wages reduced to below INR 400 per day to effectively INR 80-120 per day after fuel costs, he eventually stopped working with the organisation. However, whether or not this system still continues is not known.

To the extent of transparency, workers are made aware of which principal app the particular delivery is part of (it appears on the app interface itself, and a worker also mentioned having been informed during his interview about the company with which Shadowfax has a tie up).

The workers observe that principal apps tied up with third-party apps like Shadowfax to manage human-resource costs when the number of orders dipped, however, once the number of orders soared, the number of deliveries going to Shadowfax reduced.

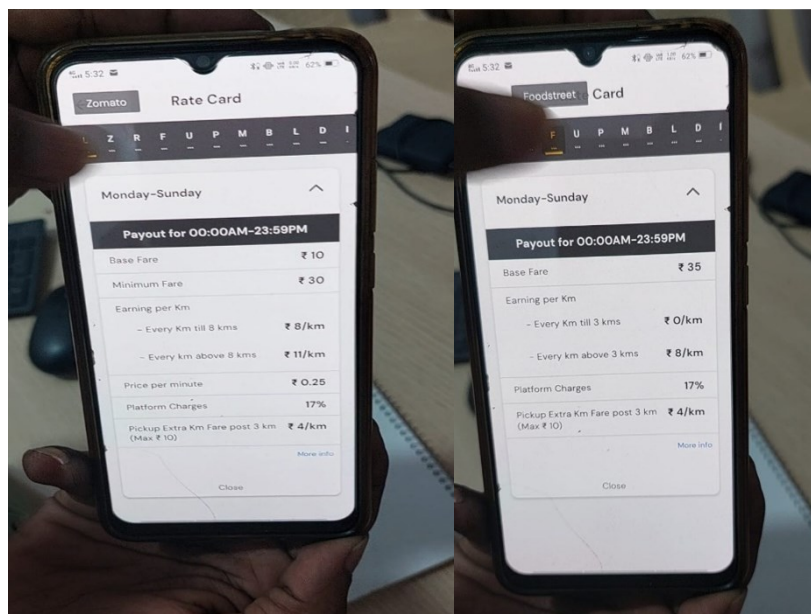
Furthermore, another worker observed that the food delivery business of Shadowfax has expanded over time, and therefore the true scale of these tie-ups with third-party apps needs more exploration.

b. Rapido

Rapido, the popular ride-hailing app, has also entered the space of subcontracting delivery orders, but has a system different from that of Shadowfax. Rapido has simply created a separate section on its transport app, and all available delivery gigs at any given time are displayed, with details of name of the principal platform, type of delivery (food, groceries, e-commerce, etc.), the exact amount payable, and the payment breakdown. Rapido has adopted a system of leveraging the existing pool of

autorickshaw and bike drivers for these subcontracted delivery gigs. Looking at the Rapido interface was also a revelation about the sheer number of such platforms offering some kind of delivery service, and this sprouting may, at least partially, explain the evolution of the third-party platform economy. Another reason contributing to this might be the extremely low wages that are not enough to sustain gig workers, leading to this cross-platform economy in which the workers navigate as many gigs as possible.

Figure 7. Rapido third-party delivery interface - rate cards of two gigs at Zomato and Foodstreet



Source: Rapido

5.2.4 Impact of contractualisation

It is clear that further contractualisation in an already precarious sector only helps distance the larger platforms, some of which are global corporations, from their responsibility towards workers. By creating a layer of sub-contracting, these large corporations divest themselves of any need for accounting for providing social security, or other data rights to workers. Smaller firms, like Rapido or Shadowfax, that may be more local or regional, may not have the same capacity or requirement for compliance in light of their size and impact. This is not to say that these platforms should be exempt from responsibility either – however, it may require that the contractual terms between the larger firms and these labour supply firms contain certain basic labour provisions of social security and operational safety and health, that must be incorporated in the agreement.

6. Emerging Legal Positions in India

The Indian legal system is fast changing with new laws coming into place specifically to regulate the digital. The much-anticipated data protection law, which has been in the works since 2017, was passed in August 2023. The Digital Personal Data Protection Act, 2023, creates new obligations for entities collecting personal data. However, it has to be considered what kind of obligations this creates on digital labour platforms that often monitor and collect data on workers' activities on the digital labour app, as preliminary analysis suggests broad exemptions for workplace data collection and processing. Another key legislation is the proposed Digital India Act, which is intended to regulate aspects of the digital market, especially establishing an accountable internet, including issues of e-commerce and intermediaries, with a focus on algorithmic accountability (Ministry of Electronics and Information Technology, 2023). This has the potential to impact labour platforms, which function fundamentally through the mode of algorithmic management. In fact, algorithmic accountability is significant for all platforms, including those which are consumer-facing, but also particularly so for labour platforms.

The other significant legal development is around the raft of social security-related legislations that are likely in the works following the passing of the Rajasthan Platform Based Gig Workers Act that received the state governor's approval in September 2023. This law is set to become the first law that sets up a permanent fund for providing social security to gig workers and establishes a tracking mechanism for transactions through a central monitoring system. Other states have also been contemplating regulation of digital labour platforms to enable workers to get adequate welfare cover. These legislative interventions have been made possible due to the collectivising efforts of workers.

The formation of IFAT (Indian Federation of App-based Transport Workers – a union) was a result of the willingness and engagement of the drivers to organise and do something to improve their life conditions. The three-pronged strategy was: one, organising the drivers and riders on the ground, because, ultimately, that is what is going to make people turn around and talk to us or make us sit across the table; two, policy intervention and policy influencing; and three, of course, was legal and legislative interventions. -Sangam Tripathy, National Advisor to IFAT.

Table 1. A Victory for Platform-based Gig Workers – The Passage of the Rajasthan Platform Based Gig Workers (Registration and Welfare) Act

In July 2023, the Rajasthan Platform Based Gig Workers (Registration and Welfare) Bill was passed in the Rajasthan Assembly, solidifying crucial social security protections for gig and platform workers in the state. The new law extends important rights to gig and platform workers, such as being registered with the state, having access to general and specific social security schemes, and having an opportunity to be heard for any grievance, among others. An important provision from the regulatory point of view is the provision to set up a centralized tracking and management system that shall function as a common portal for all financial transactions taking place on the aggregator’s platform. The breakdown of individual invoices into constituent parts, i.e., fare charged/service costs for the customer, payment made to the platform worker, cess fee deducted, etc., will be reflected in the centralized tracking and management system at the transaction level. This marks a significant victory for long years of consistent efforts to bring some recognition and protection to this newly emerging, vulnerable workforce.

It is noteworthy that this law does not recognise the gig workers as employees or workers as per the labour codes’ definition, but does move the needle towards recognition of gig work as a separate sector.

Table 2. Developments in other states that are considering policies for gig workers

Delhi

In July 2023, gig workers protested along with their Union representative, forming a committee named, National Co-ordination Committee, at Jantar Mantar. They asked for better working conditions and working hours. They also asked for improved communication and grievance redressal as their termination simply involves a unilateral process of blocking their ID; the workers are not heard. They further asked for a survey and recognition as employees, or if they are indeed ‘partners’ as termed by the company, then a share in the profit. Lastly, they demanded social security and enactment of law with a tripartite board.

Karnataka

A welfare scheme for gig economy workers became an important election issue for the recently concluded Legislative Assembly Elections, in which the Congress Party promised to set up a welfare board for gig workers and ensure hourly wages for them (The Economic Times, 2023). As a follow-up to the announcements made in the course of the campaign, three recent law and policy developments regarding the gig and platform economy in the state of Karnataka are noteworthy.

First, the launch of the Karnataka government's dedicated insurance coverage scheme for gig and platform workers of the state, accessible through the *Seva Sindhu* portal launched on 16 December 2023 (Karnataka State Unorganized Social Security Board, n.d.). As per this scheme, for which the gig workers are not being charged any premium, provision of INR 4 lakh to the gig worker in case of accidental death, up to INR 2 lakh in case of a permanent disability, and up to INR 1 lakh for reimbursement of hospital expenses in case of accidents has been made. The scheme will ensure all registered workers for INR 2 lakh. The registration process is mandatorily linked to the Aadhaar which raises questions about data protection and privacy concerns of Aadhaar linkage when it comes to access to government schemes (Ibid.).

Second, the Karnataka government has announced that they will table a bill to regulate gig and platform workers in the state, in the next upcoming legislative assembly session in February 2024. A draft of this bill has not yet been circulated for consultation (Kaur, 2023).

Third, and most recent, is the Karnataka's government's announcement that the Transport department and the E-governance department are collaborating with the Adarsh Auto and Taxi Worker Union to launch another alternative ride-hailing app by February 2024 (Devaiah, B.P., 2023). In the context of the recent exit of the Auto and Rickshaw Drivers' Union from the Namma Yatri app management team, how this new effort shapes up and what lessons it learns from its predecessors, will be important to track.

Kerala

There have been several protests from youth as well as middle-aged workers employed either full-time or part-time in the gig economy in Kerala, in recent times, to demand better terms of work from the companies and the government. A significant protest of late was the seven-day strike in November 2022, by Swiggy workers, which concluded when Swiggy agreed to increase the wages of its delivery partners to INR 25 for the first 2.5 km and INR 6 per additional km after two days of talks (Johny, 2022). However, Swiggy workers were forced to strike work again in August 2023 to protest the non-implementation of this promise by the company (Neelambaran, 2023).

As a response to these protests and to the momentum in other parts of the country, the state government is working on framing a policy to regulate the gig economy to ensure fair wages and better working conditions for online platform-based workers.

As part of this effort, the Kerala Institute of Local Administration is conducting background studies to frame a policy on the gig economy, as well as planning to consult expert delegates from the ILO. The lack of access to the complicated algorithms that platform companies use, has been emphasised as a challenge that the government faces, in working out a system of social security benefits for these gig workers who have a work model different from the traditional informal economy. A policy is promised by the government in the near future (The Hindu, 2023).

Maharashtra

Maharashtra has seen important developments when it comes to improving the conditions of work for gig and platform workers' rights, with some of the first instances of agitations by gig workers taking place in the city of Mumbai back in 2015 (Singh, 2015).

Several unions, local as well as nationally affiliated, are taking root and unionising gig workers in the state. More recently, workers have protested 'No Zomato guy allowed inside' posters that are often displayed outside buildings. Unregulated long working hours have also been criticised.

There has been no announcement of a gig workers' law in the state of Maharashtra so far, but workers' unions have been demanding regulation of this sector. Large-scale protests were held in this regard, in Mumbai and Pune in October 2023 (Sanzgiri, 2023).

Maharashtra is one of the few states in which the process of forming rules for the Motor Vehicle Aggregator Guidelines, 2020, has been underway. These guidelines contain several positive measures to regulate the gig work sector, placing important transparency and compliance requirements on the platform companies. Via a consultation process initiated by a government panel, gig workers' groups also submitted their recommendations for these rules in May 2023.

In another significant step towards recognition of gig workers in the state, the Maharashtra Building and Construction Board registered an employee of Urban Company in Mumbai in March 2023, making him the first gig worker registered by a welfare board in Maharashtra (Gaur, 2023).

Tamil Nadu

In Tamil Nadu, the trade union federation, CITU, has been pointing towards the fundamental problem of platform workers not being recognised as workers and how this doesn't bring them under the ambit of Trade Unions Act. Additionally, according to the CITU Tamil Nadu President, A. Soundarajan, they haven't been able to form trade unions or voice their demands and concerns in

the state (Sruti, 2023). Further, K C Gopikumar, President of Tamil Nadu Food Delivery Workers Association reiterated the same demands to *Indian Express* and highlighted that they have been struggling since 2016 (Express Web Desk, 2023).

These people (gig workers) are also providing services. When a person who works in a hotel can be considered as a ‘worker’ under our labour laws, why can’t the same be applied to gig workers? In our earlier discussions with the government, we have demanded that a tri-party discussion involving the labour department and the company representatives should take place before the final draft of the measures is framed. This is because we need our demands, including the compensation, working hours and other grievances of the workers, to be a part of the draft. - K C Gopikumar, President of Tamil Nadu Food Delivery Workers Association

In this context, Tamil Nadu Chief Minister M K Stalin’s announcement in August 2023, that the government would constitute a separate Welfare Board for gig workers, was a significant positive step towards the recognition that gig workers demand (Ibid.). While the government hasn’t provided any details as to the formulation of the welfare board, it has hinted towards looking into Rajasthan’s platform worker’s welfare Act. A policy regarding the constitution of a welfare board for gig workers is expected soon.

Telangana

Telangana Gig and Platform Workers Union, ahead of the 2023 Assembly Election, demanded for a tripartite social security board, jobs, and physical safety of workers. They also asked for a welfare fund. While the state’s then IT and Industries Minister K T Rama Rao didn’t promise or announce anything, he talked about leading from the front and setting an example for the whole country. “We should ensure that they feel secure, and their livelihoods [and] families are protected. It’s our duty to see to it that they are not affected by factors extraneous and beyond their control. We should build credibility and aspiration among youngsters to work in the e-commerce sector,” he said (Hans News Service, 2023). However, despite struggles from the gig economy workers, no legislation or policy is in sight for the workers of Telangana State, for now.

7. Recommendations

The findings of this study lend themselves towards some key next steps that are important to secure a just and equitable working environment for workers in the platformised workplace, as well as having a free, fair, and functional digital economy for all. There is an urgent need to standardise labour rights that are recognised in India in terms of platform-mediated workplaces. In the current context, the central Social Security Code has references to platform work and workers, and the Rajasthan law is a significant step in the right direction. However, it is important to have a law that recognises a holistic set of rights for platform workers beyond merely social security considerations.

From this understanding flows the need to ensure decent work conditions for platform workers, which includes need-based minimum wages, secure employment, safe working conditions, social protection for the worker and their families, and freedom to express their concerns and organise themselves. While an uphill task, this study argues for attaining a base fare that corresponds to living wage for platform workers. This will ensure that they can meet their living requirements without having to perform 15-16 hour shifts.

This study focuses on the following broad recommendations:

- a. Identifying the rights implicated by the platform
- b. Regulating the platformised workplace
- c. Considerations for a model law for platform worker rights
- d. Recognising collective bargaining rights
- e. Identifying alternatives to the dominant model of platform work

7.1 Identifying rights implicated by the algorithm

The legal framework of laws and cases examined in this study as well as the primary interviews conducted lay down the foundation for identifying core labour rights that provide the base for a robust set of regulations in the platformised workplace run by the algorithm. These rights are enumerated below. Each of these rights protect against arbitrary algorithmic decision-making in the following manner:

- a. Right of access to the platform.** Workers' right to the platform must be protected, especially since the algorithm is able to suspend or block the IDs of drivers/delivery persons as a means of disciplining them. This impacts their access to livelihood without any redress.
- b. Right to need-based minimum wage.** Algorithms determine the fare for each trip for ride-hailing and food delivery workers, and are often opaque, especially when related to surge

pricing and incentives. For workers who are fully dependent on platform work for their livelihood, this algorithmic practice denies them predictability of earnings. Provision of a minimum wage that is dependent on the location, working hours, annual bonuses, tips, working non-standard hours, etc., must be considered (ILO, n.d.)

- c. Right to social security, which is not only limited to the number of hours that a platform worker has worked.** Algorithms map and monitor the number of hours a worker spends on the platform, however, this fact should not be a threshold barrier to social security.
- d. Right to information and data, including access to personal data and right to data portability.** Algorithms collect, store, and process vast amounts of data for each worker, which subsequently is used to create risk profiles, as modes of disciplining through suspensions and blocking. These data points should be accessible to workers for confirming accuracy, preventing a lock-in, and allowing workers to share the benefits of digital intelligence.
- e. Right to explanation of the functioning of automated monitoring and automated decision-making system.** Decisions made by algorithms need to be explainable, but this is often not the case since algorithms are able to consider many factors to arrive at a decision which are not easily explainable. However, when these decisions impact worker livelihoods, explainability of algorithms is a first order requirement.
- f. Right to have a human-in-the-loop for review of automated decisions.** In keeping with the above, there needs to be a human point of contact in cases where algorithms make decisions which have rights-impact, for example, blocking IDs of workers.
- g. Right to disconnect.** Algorithms already map the number of hours spent on the app, but there must also be the ability to disconnect from the app without reprisal which should be in tandem with the right to a living wage.

These rights have been recognised in different contexts as necessary statutory protections to enable platform workers to be protected (DeVault et al., 2018).

7.2 Regulating the platformised workplace

The next significant recommendation is with regard to regulating the platform workplace itself, with the rights of workers identified and acknowledged. In the platform workplace, Prassl et al. (2023) argue that regulation lacks in three important areas when it comes to algorithmic management: worker agency, information asymmetry, and privacy harms. To this we add that regulation has also not managed to engage with the right of workers to the data commons and the data intelligence that is generated by the platforms through these commons.

A regulatory mechanism for algorithms backing the platforms must ensure that there are adequate safeguards against such automated monitoring, tracking, and subsequent decision-making. This would include data access to pay and time-on-the-app; explainability of platform decisions, including those mediated by facial recognition algorithms or routing algorithms when they have an effect on wages and working conditions; and protections against disciplining by the platform for aspects like rejecting rides or engaging with collectivising processes.

The next aspect of platform work regulation is about creating a set of sector-specific guidelines to account for unique challenges. For instance, in the food delivery sector, workers require additional protection with regard to entering and accessing customers' residences, often in gated societies, and need waiting areas in and around restaurants to avoid having to stand on the roadside. On the other hand, the ride-hailing sector has its own challenges, like the scope to be blocked by the app in case of three refusals to take up a trip and losing access to means of livelihood. Sector-specific norms will ensure that these concerns are addressed.

7.3 Model law on platform worker rights

Drawing from the last section on how best to regulate platforms, a way forward is to draft a model law for platform workers which not only upholds their rights, but also places responsibility squarely at the doorstep of platforms. This law can look akin to the EU Platform Work Directive, which despite its critique (Bertolini et al., 2022), is able to recognise some key guarantees for workers. The following are some provisions, based on the rights recognised above, that must be a part of the model law, to ensure that the requisite safeguards are encoded.

- a. Employment guarantees:** While the question of classification of workers remains contentious, and often litigious, a model law on platform work should establish certain criteria that when met, establishes an employment relationship. This, of course, creates additional obligations on the platforms to ensure the well-being of their workers. However, the model law must also account for potential perverse outcomes of this guarantee – platforms may force workers to take on more precarious models of work to evade meeting the employment standard, which they have been known to do (Bertolini et al., 2022). In fact, in cases like the Rajasthan law, the definition of a platform-based gig worker expressly excludes traditional employer-employee relationships. All of these considerations must be harmonised for the model law to have the right impact. In fact, these guarantees must go beyond even contractual terms of agreement. It is significant to note that mere affordances of contractual employment terms do not guarantee upholding of rights of workers. As noted in a recent study conducted by the Foundation for European Progressive Studies and UniEuropa, for quick commerce delivery workers in Europe who did have contractual terms of employment, the squeeze for profits, in the absence of

strong regulation, was in fact done on the backs of workers (Rolf, Garben & Hunt, 2023).

We found significant evidence of low pay and wage theft, disrespect for workers' contractual terms – such as on sick leave and holiday pay – and health-and-safety violations. Relations between managers and workers were often poor and based on frequent disciplinary measures, while work was intensified through algorithmic management of delivery-time targets and orders per delivery. (Rolf, Garben & Hunt, 2023)

- b. Wage and social security benefits:** A model law for platform workers must also provide for wage and social security guarantees that aren't necessarily tied to the contentious issue of employment status. In fact, in the balance of scales between employment guarantees and providing basic labour right guarantees, the model law may well do to provide the latter to empower workers to have an assured livelihood, not based on the number of hours the worker has worked as per the app.
- c. Data and information rights:** A key right that needs to be guaranteed through the model law is the ability of workers to access their data, in the nature of access to ratings for the driver/delivery person, location data of the driver/delivery person in aggregate, creation of risk profiles, and decisions around fares and incentives. Additionally, this right needs to also be recognised for the collective – for trade unions and worker collectives – to ensure that the individual is not burdened with taking on data access requests on their own. The Worker Info Exchange is a worker-led initiative that supports data access requests for workers, and a collective right for data access may be modelled on this initiative.

7.4 Recognising collective bargaining rights

Collective rights like freedom of association and collective bargaining rights are significant aspects of viewing labour rights from a human-rights lens (De Stefano, 2019). The EU Platform Work Directive is progressive in that it expressly provides protection against reprisals (Article 17) as well as dismissals (Article 18). Protection of workers from adverse action by platforms has also been recognised by courts as seen in the *Joshua Klooger v. Foodora Australia* (2018) case. The Directive also creates scope for platform workers to establish solidarity systems among themselves and have representatives in order to secure rights.

Within the interviews conducted for this study, it was observed that there is no support that unions receive from the platforms themselves. "Officially, platforms don't allow unions to exist and have

discouraged unionisation,” said B,⁷ a former food delivery worker.

Sangam Tripathy, of IFAT, also noted the concerns of establishing a union for platform work.

Something as basic as registering a union has been and is still an uphill task. We still get the labour commissioner's office or the trading registrar's office people saying, '*nahi nahi ye gig aur platform worker register nahi ho sakta hai* (no, gig and platform worker cannot be registered as union). But we have registered unions in Telangana and Maharashtra, so we have a foot in the door. - Sangam Tripathy, National Advisor to IFAT.

7.5 Identifying alternatives to the dominant model of platform work

The issues of incumbent digital platforms in the workplace have now been widely captured in literature, particularly from the perspective of worker and customer experiences. In this situation, as regulation is rolled out in various iterations across the country for each sub-sector in the platform economy, business-thinking has attempted to innovate around such visible bottlenecks. Arising from the national government's policy push towards digital public infrastructure, a number of applications are finding space in the ride-hailing as well as e-commerce space. Namma Yatri, Kochi Open Mobility Network, as well as the Open Network for Digital Commerce are various sectoral and national platforms that have been built on the open source, Beckn Protocol, and in the case of Namma Yatri, it operates on a no-commission basis (albeit from September 2023, it started charging a subscription fee from the drivers (Express News Service, 2023)). As scholars have pointed out, just openness in protocols or lack of direct commissions is not enough to ensure fair outcomes and it remains to be seen whether these businesses can sustain themselves in the medium term and whether a layer of digital public infrastructure can be embedded deep enough to deter large-scale privatisation of digital intelligence built from the data commons of the platform economy (Chib, Bentley & Smith, 2020).

It is also pertinent to mention some other alternative business models which have emerged to try and dislodge the incumbents in the ride-hailing and e-commerce sectors. Start-ups like in-Drive provide a user interface where workers and consumers can bid to a mutually acceptable amount while the platform itself charges a flat fee. Other start-ups offer electric vehicles to workers to reduce costs, as well as to attract sustainability-oriented consumers, acquire their vehicle fleets themselves, and sometimes even choose an employment model (in addition to a digital platform) for their workers to ensure closer control. It remains an open question as to whether such entrants can disrupt the incumbents and whether such disruption is sufficient to bring workers and regulators closer to decent work standards. A recent report by BoomLive (2023) analyses the worker experiences on one of these platforms to show that ultimately management practices of the incumbents are bleeding into the

⁷ Name of interviewee hasn't been disclosed to protect privacy.

newer platforms as well, and thus, provide no consistent protection to the workers. Regulatory mechanisms need to focus in a holistic manner on the source of platform power and not on one or two aspects of platform work, such as employment status or presence of platform commissions or the use of open-sources network infrastructure.

8. Conclusion

As a conclusion to this study, it is imperative that the next steps in recognising platform work and labour rights enable safeguards both in law and in practice. In the unique feature of platform work, it is imperative that rights of workers become a central consideration to ensure that regulation does not hurt them. As acknowledged by the ILO, social justice requires development of a “human-centred approach to the future of work, which puts workers’ rights and the needs, aspirations, and rights of all people at the heart of economic, social and environmental policies” (ILO, 2019). Techno-solutionist fixes in the name of regulation will not be enough to guarantee decent work on platforms.

The dominant platform model is not sustainable in its current form, as it works on the backs of workers in precarious working conditions, as well as venture capital investments – which is drying up (Teare, 2023). The need for regulating platforms and securing worker rights is thus imperative. The impact of regulation or court orders in certain jurisdictions has also witnessed the threats from platforms of exiting or price hikes (Morris, 2023; Espinoza, 2023). However, it is said that if platforms cannot provide just and fair working conditions, it may not be appropriate for them to function at all (IT for Change, 2023). It is thus the best-case scenario for a robust digital economy which provides employment to millions to have regulations that hold platforms responsible and protect its workers.

References

- Aliosi, A., & De Stefano, V. (2022). *Your Boss is an Algorithm: Artificial Intelligence, Platform Work and Labour*. Bloomsbury Publishing.
- Baiocco, S., Fernandez-Macias, E., Rani, U., & Pesole, A. (2022). *The Algorithmic Management of work and its implications in different contexts*. Background Paper Series of the Joint EU-ILO Project “Building Partnerships on the Future of Work”. https://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_849220.pdf
- Bertolini, A., Alyanak, O., Cant, C., Lopez, T., Aguera, P., Howson, K., & Graham, M. (2022). *Gaps in the EU Directive Leave Most Vulnerable Platform Workers Unprotected*. Medium. https://medium.com/@reshaping_work/gaps-in-the-eu-directive-leave-most-vulnerable-platform-workers-unprotected-6c1f2af3b58b
- Bourgerly, T., & Bourgerly-Gonse, T. (2023). *EU countries nail down common position on platform workers directive*. Euractiv. <https://www.euractiv.com/section/gig-economy/news/eu-countries-nail-down-common-position-on-platform-workers-directive/>
- Brave New Europe. (2023). *Gig Economy Project – Is Belgium’s platform work law “a dead letter”?* <https://braveneweuropa.com/gig-economy-project-is-belgiums-platform-work-law-a-dead-letter>
- Chib, A., Bentley, C.M., & Smith, M.L. (Ed.). (2020). *Critical Perspectives on Open Development: Empirical Interrogation of Theory Construction*. MIT Press.
- Devaiah, B.P.D. (2023). *Karnataka likely to launch State-owned ride-hailing app by February 2024*. The Hindu. <https://www.thehindu.com/news/cities/bangalore/karnataka-likely-to-launch-state-owned-ride-hailing-app-by-february-2024/article67662965.ece>
- DeVault, I.A., Figueroa, M., Kotler, F.B., Maffie, M., & Wu, J. (2018). *On-Demand Platform Workers in New York State: The Challenges for Public Policy*. ILR Worker Institute. <https://archive.ilr.cornell.edu/sites/default/files/OnDemandReport.Reduced.pdf>
- De Stefano, V. (2019). “Negotiating the Algorithm”: Automation, Artificial Intelligence and Labour Protection. *Comparative Labor Law & Policy Journal*, 41(1). <https://dx.doi.org/10.2139/ssrn.3178233>
- De Stefano, V., Durri, I., Stylogiannis, C., & Wouters, M. (2021). *Platform work and the employment relationship*. ILO Working Paper 27. https://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---travail/documents/publication/wcms_777866.pdf
- Dubal, V. (2020). *Digital Piecework*. Dissent Magazine. <https://www.dissentmagazine.org/article/digital-piecework>

Espinoza, J. (2023). *Uber warns of threat to drivers under EU gig work plan*. Financial Times.

<https://www.ft.com/content/1d2ca0e1-b3f0-4fcb-b0c0-a2504b48b605>

Eurofound. (2018). *Employment and working conditions of selected types of platform work*. Publications Office of the European Union, Luxembourg.

https://www.eurofound.europa.eu/sites/default/files/ef_publication/field_ef_document/ef18001en.pdf

Eurofound. (2021). *Riders' Law. Platform Economy Database*.

<https://apps.eurofound.europa.eu/platformeconomydb/riders-law-105142>

Express Web Desk. (2023). *TN gig workers welcome CM Stalin's announcement to set up separate welfare board*. Indian Express. <https://indianexpress.com/article/chennai/tn-gig-workers-cm-stalins-announcement-separate-welfare-board-8896838/>

Express News Service. (2023). *Namma Yatri to charge subscription fee for drivers from September 1*. Indian Express. <https://indianexpress.com/article/cities/bangalore/namma-yatri-karnataka-subscription-fee-8907021/>

Gaur, N. (2023). *Maharashtra registers first gig worker under governing board*. NewsClick.

<https://www.newsclick.in/maharashtra-registers-first-gig-worker-under-governing-board>

General Council of the European Council. (2023). *Proposal for a Directive of the European Parliament and of the Council on improving working conditions in platform work - Joint Statement by Belgium, Luxembourg, Malta, the Netherlands, Portugal, Romania, Slovenia and Spain*. Council of the European Union. <https://data.consilium.europa.eu/doc/document/ST-10107-2023-ADD-2/en/pdf>

Ghosh, T. (2023). *The Dark Side of "green" cab hailing app BluSmart*. BoomLive.

<https://www.boomlive.in/decode/the-dark-side-of-green-cab-hailing-app-blusmart-22437>

Grønsund, T., & Aanestad, M (2020). *Augmenting the algorithm: Emerging human-in-the-loop work configurations*. *The Journal of Strategic Information Systems* 29(2):101614

Gurmat, S. (2022). *India's gig workers blame platforms for ignoring a wave of religious attacks*. Rest of World. <https://restofworld.org/2022/indias-gig-workers-religious-attacks/>

Gurumurthy, A., Chami, N., Chatterjee, S., & Shah, S. (2022). *Workers' Data Rights in the Platformized Workplace: A New Frontier for the Labor Agenda*. IT for Change.

https://itforchange.net/sites/default/files/2159/ITfC-Workers%E2%80%99-Data-Rights-Platformized-Workplace_1.pdf

Gurumurthy, A., Zainab, K., & Sanjay, S. (2021). *The Macro Frames of Microwork: A study of Indian women workers on AMT in the post-pandemic moment*. IT for Change.

<https://itforchange.net/sites/default/files/1739/The-Macro-Frames-of-Microwork-Full-Report-ITfC-2021.pdf>

Hans News Service. (2023). *Flipkart expands footprint in Telangana with new fulfillment centre*. The Hans India. <https://www.thehansindia.com/telangana/flipkart-expands-footprint-in-telangana-with-new-fulfillment-centre-795599>

Holubova, B. (2022). *Algorithmic Management: Awareness, Risks and Responses of Social Partners*. Friedrich Ebert Stiftung. <https://library.fes.de/pdf-files/bueros/bruessel/19524.pdf>

ILO. (2000). *Report of the Meeting of Experts on Workers in Situations Needing Protection*. <https://www.ilo.org/public/english/standards/relm/gb/docs/gb279/pdf/mewnp-r.pdf>

ILO. (2016). *Non-standard employment around the world: Understanding challenges, shaping prospects*. https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_534326.pdf

ILO. (n.d.). *What is included in a minimum wage?* https://www.ilo.org/global/topics/wages/minimum-wages/definition/WCMS_439069/lang--en/index.htm

IT for Change. (Forthcoming). *Event Report: Worker Data Rights in a Digital Economy*.

ILO. (2019). *ILO Centenary Declaration for the Future of Work*. [ilo.org/wcmsp5/groups/public/@ed_norm/@relconf/documents/meetingdocument/wcms_711674.pdf](https://www.ilo.org/wcmsp5/groups/public/@ed_norm/@relconf/documents/meetingdocument/wcms_711674.pdf)

Jarrahi, M. H., Newlands, G., Lee, M. K., Wolf, C. T., Kinder, E., & Sutherland, W. (2021). *Algorithmic management in a work context*. *Big Data & Society*, 8(2), 205395172110203. <https://doi.org/10.1177/20539517211020332>

Johny, A.K. (2022). *Kochi's Swiggy strike: Another chapter in the continuing struggle of gig workers*. Newslandry. <https://www.newslandry.com/2022/11/25/kochis-swiggy-strike-another-chapter-in-the-continuing-struggle-of-gig-workers>

Karnataka State Unorganized Social Security Board. (n.d.). *Karnataka State Gig Workers Insurance Scheme*. <https://ksuwssb.karnataka.gov.in/info-2/Karnataka+State+Gig+Workers+Insurance+Scheme/en>

Kaur, L. (2023). *Gig workers' welfare bill likely in next session of Karnataka Assembly*. Deccan Herald. <https://www.deccanherald.com/india/karnataka/gig-workers-welfare-bill-likely-in-next-session-2808365>

Lamers, L., Meijerink, J., Jansen, G., & Boon, M. (2022). A Capability Approach to worker dignity under Algorithmic Management. *Ethics and Information Technology*, 24(1). <https://doi.org/10.1007/s10676-022-09637-y>

Ministry of Electronics and Information Technology. (2023). *Proposed Digital India Act, 2023: Digital India Dialogues*.

https://www.meity.gov.in/writereaddata/files/DIA_Presentation%2009.03.2023%20Final.pdf

Morris, C. (2023). *Lyft and Uber threaten to leave Minneapolis unless mayor vetoes bill giving drivers a minimum wage*. Fortune. <https://fortune.com/2023/08/18/uber-lyft-minneapolis/>

Neelambaran, A. (2023). *Kerala gig workers warn of indefinite strike against Swiggy*. NewsClick.

<https://www.newsclick.in/kerala-gig-workers-warn-indefinite-strike-against-swiggy>

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-](https://www.niti.gov.in/sites/default/files/2022-06/25th_June_Final_Report_27062022.pdf)

[06/25th_June_Final_Report_27062022.pdf](https://www.niti.gov.in/sites/default/files/2022-06/25th_June_Final_Report_27062022.pdf)

Rainone, S. (2023). *More than Formal Recognition?: Collective Labour Rights in the Platform Work Directive*. Verfassungsblog. <https://doi.org/10.17176/20230720-012101-0>

Rolf, S., Garben, S., and Hunt, W. (2023). *Quick commerce—not turning a fast buck*. Social Europe.

<https://www.socialeurope.eu/quick-commerce-not-turning-a-fast-buck>

Sanzgiri, V. (2023). *Pune gig workers go on 24-hour strike in demand of legal rights*. MediaNama.

<https://www.medianama.com/2023/10/223-gig-workers-24-hours-strike-pune/>

Simonet, R.A., & Garcia, J.L. (2022). *Chile's Legislative Solution for Platform Work: Does It Fit the Bill?*

Dispatch no. 45 - Chile. <https://cllpj.law.illinois.edu/content/dispatches/2022/Dispatch-No.-45.pdf?v2>

Singh, D. (2015). *Logistics staff go on strike, Flipkart, Myntra in a fix*. Indian Express.

<https://indianexpress.com/article/business/companies/logistics-staff-go-on-strike-flipkart-myntra-in-a-fix/>

Sruti, M.D. (2023). *Tamil Nadu CITU demands legal protection for gig workers*. NewsClick.

<https://www.newsclick.in/tamil-nadu-citu-demands-legal-protection-gig-workers>

Teare, G. (2023). *Global VC Funding Falls Dramatically Across All Stages In Rocky Q1, Despite Massive OpenAI And Stripe Deals*. Crunchbase.

<https://news.crunchbase.com/venture/global-vc-funding-falls-q1-2023/>

The Economic Times. (2023). *Rahul Gandhi meets gig workers in Bengaluru, takes a scooter ride with delivery agent*.

<https://economictimes.indiatimes.com/news/elections/assembly->

[elections/karnataka/rahul-gandhi-meets-gig-workers-in-bengaluru-takes-a-scooter-ride-with-delivery-agent/articleshow/100055240.cms](https://www.thehindu.com/news/national/kerala/kerala-to-frame-policy-to-govern-gig-economy-to-ensure-fair-wages-better-working-conditions/article66698577.ece)

The Hindu. (2023). *Kerala to frame policy to govern gig economy to ensure fair wages, better working conditions*. <https://www.thehindu.com/news/national/kerala/kerala-to-frame-policy-to-govern-gig-economy-to-ensure-fair-wages-better-working-conditions/article66698577.ece>

Van Doorn, N., & Badger, A. (2020). *Platform Capitalism's Hidden Abode: Producing Data Assets in the Gig Economy*. Wiley Online Library. <https://onlinelibrary.wiley.com/doi/10.1111/anti.12641>

Vipra, J. (2022). *Changing Dynamics of Labor and Capital*. In *State of Big Tech 2022*. IT for Change. <https://projects.itforchange.net/state-of-big-tech/changing-dynamics-of-labor-and-capital/>

Zodi, Z., & Torok, B. (2021). Constitutional Values in the Gig-Economy? Why Labor Law Fails at Platform Work, and What Can We Do about It?. *Societies*. 11(3), 86. <https://doi.org/10.3390/soc11030086>

Court Cases

- *Joshua Klooger v. Foodora Australia* [2018] FWC 6836
- *Dynamex Operations West v. Superior Court* [2018] 4 Cal. 5th 903
- *Uber BV v. Aslam* [2021] UKSC 5
- *Asociación Profesional Elite Taxi v. Uber Systems Spain* [2017] SL C-434/15, EU:C:2017:981

Legislations

- California Assembly Bill No 5., 2019 (US)
- European Union Proposal for a Directive on improving working conditions in platform work, 2021
- Protektadong Online Workers, Entrepreneurs, Riders, at Raktera Act, 2022 (Philippines)
- Bill 88, "Working for the Workers Act" 2022 (Ontario)
- Code on Social Security, 2020 (India)
- Karnataka On Demand Transportation Technology Aggregators Rules, 2016 (India)
- West Bengal On Demand Transportation Technology Aggregators Rules, 2022 (India)
- General Data Protection Regulation, 2016 (India)
- Motor Vehicles Aggregator Guidelines, 2020 (India)
- Rajasthan Platform-based Gig Workers Act, 2023 (India)

