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Regulating Digital Platforms

Toward transparency, accountability, and fair competition in a global digital economy

Sara C. Kingsley
Carnegie Mellon University
Human-Computer Interaction Institute

M. Six Silberman
IG Metall Headquarters Organization
Crowdsourcing Project, Gender Equality and Diversity Branch

Vanessa Barth
IG Metall Headquarters Organization
Chair, Gender Equality and Diversity Branch

Introduction — Digital Platforms: Characteristics, Benefits, and Challenges

Digital platforms of all kinds — from labor intermediaries and social networks to video on demand and travel services — are growing in use, significance, and influence worldwide.

While digital platforms have much in common with "pre-platform" services that offer similar functions, many platforms combine three characteristics that create the potential for both unique benefits and unique challenges. Interactions on digital platforms are typically location independent, asynchronous, and highly structured or standardized.

These three characteristics enable interactions without human intervention or facilitation on the part of platform operators. That is, to a large extent, interactions on platforms are facilitated entirely or mostly by automated systems.

Location independent, asynchronous, standardized interactions facilitated by automated means create the potential for platforms to distinguish themselves via speed, scale, and convenience. In economic terms, platforms often offer low "search and transaction costs" compared to "non platform" alternatives.

These characteristics create the potential for significant benefits for individual and organizational users of digital platforms and for society generally, including new products and services for consumers; entirely new markets; smoother interactions with government agencies and large organizations; new livelihoods for self employed persons; and new business models for organizations of all kinds. Generally speaking, digital platforms can support economic activity, social life, and political engagement.

Seen from the user perspective, digital platforms can be attractive because they make activities users were already engaging in easier, less costly, faster, or better in some other way; or because they enable entirely new kinds of meaningful or value-creating activity.

The benefits of these "enabling" aspects of digital platforms are real, significant, and well-documented, and should be protected and fostered.

At the same time, interactions on digital platforms do not always go as the parties — or platform operators — would like. Researchers and journalists have reported extensively on cases in which interactions conducted or initiated on platforms have led to fraud, assault, sexual harassment, sale of illegal goods, pressure on participants to engage in illegal activity, discrimination, psychological harm, reputational harm, and the spread of misinformation.

In individual cases, the legal responsibilities of platform operators to prevent and mitigate such outcomes are often unclear. Generally, policies that would clarify or establish these responsibilities are in the early stages of being developed. In a few cases, relevant policies exist, but their implications for such cases are nevertheless unclear or contested.

Further, some platform operators have themselves been accused of illegal or inappropriate practices, including employment misclassification; anticompetitive behavior, including price fixing; wage theft; and illegal or inappropriate use of users' personal data.

Finally, platform processes — for example, algorithmic matching and ranking systems — are often both complex and secret. Possibilities for users to contest outcomes or decisions they believe are erroneous or inappropriate, or even to receive explanations for such outcomes, are often extremely limited.

Illegal or harmful interaction outcomes, illegal or questionable behavior on the part of platform operators, and opaque, unaccountable systems and practices all erode trust in digital platforms, preventing their potential benefits to individuals, organizations, and society as a whole from being fully realized.

While most platform operators are law-abiding, and many platform operators do take voluntary measures to attempt to reduce the frequency and severity of negative outcomes, the regulatory uncertainty creates a sort of "gray zone" in which platform operators may not be adequately incentivized to substantively address the issues within their power to address. Even when platform operators do take serious efforts, many issues transcend individual platforms. In such cases, voluntary initiatives by individual platforms may be inadequate. And with respect to some issues, such as hate speech and political disinformation, even the largest platforms have called for guidance from policy makers. With respect to other issues, such as anticompetitive behavior on the part of "large players," regulators may be the only actors in a position to take meaningful action.

For these and other reasons, a general consensus appears to be emerging that new regulatory frameworks are needed to establish clear rights and responsibilities in the landscape of digital platforms.

The question of the appropriate scope and content of such frameworks, however, is vast, and touches many areas of policy. Further, as many platforms operate internationally, questions of cross-border enforcement and policy coherence come into play. As a result, many proposals for regulating digital platforms have been developed in recent years, with various goals. At the same time, it may be possible to address some of the issues with new interpretations, better enforcement, or modest adjustments of existing policy.

The remainder of the paper discusses existing and proposed regulations, legal precedents, and initiatives that may be of particular interest to trade unions and other worker organizations. The discussion is divided into seven major sections: employment and labor rights, data protection, competition, data reporting, discrimination, contract, and regulation and standards specific to particular platform types or context. In each section, we review existing and proposed regulations, precedents, and initiatives, and offer suggestions for trade union action.

Employment and labor rights

Some of the major questions pertaining to employment and labor rights in the context of digital platforms can be divided into five rough categories: "employee vs. self employed;" an "intermediate category" of worker; regulation of "home work"; collective bargaining; and occupational safety and health.

"Employee vs. self employed." Most labor platforms require workers to agree they are self employed, not employees of the platform or of any client. Some platform workers, however, have alleged misclassification, claiming that they have, in effect, the worst parts of both statuses: as ostensibly self employed persons, they have no entitlement to minimum wage or the other benefits of an employment relationship, but the platform uses a variety of incentives and punishments that erode the traditional freedoms of self employment. The outcomes of misclassification lawsuits brought by platform workers are highly divergent, and vary not only across jurisdictions but within them. With the notable exception of the US state of California, no legislation appears forthcoming that will decisively clarify the situation.

In California, a court judgment, the "Dynamex decision," is in the process of being codified into legislation. As of this writing, the draft legislation, Assembly Bill 5, appears likely to be passed and would codify the decision's so-called "ABC test." Under this test, in order for a "hiring entity" to classify a worker as self employed rather than as an employee, all three of the following requirements must be met:

- The person working must be "free from the control and direction of the hiring entity"
- The work must be "outside the usual course of the hiring entity's business"
- The person working must be "customarily engaged in an independently established trade, occupation, or business" in which they do the same kind of work.

Many observers believe that if passed, Assembly Bill 5 would make many platform based workers employees of the platforms.

In the European Union, the Socialists and Democrats Group in the European Parliament has called for the introduction of a "rebuttable presumption of an employment relationship" for platform workers. If this were to be adopted in binding legislation, platform workers would be presumed to be employees of the platforms unless the platform operator demonstrated that they met specific criteria indicating that workers were truly self employed. That is, the burden of proof would be shifted from workers to platform operators: instead of workers having to prove the existence of an employment relationship, platform operators would have to prove the existence of a true *self* employment relationship. The possibility of establishing such a rebuttable presumption is explicitly mentioned in the text of the recently passed EU Directive on Transparent and Predictable Working Conditions, but only as something EU Member States may choose to implement.

In connection with the question of employment classification within the two main categories — i.e., "employee vs. self employed" — unions can:

- Systematically investigate the contracts and concrete management practices and working conditions of platforms in their countries and sectors

- Using the general criteria and relevant case law for distinguishing "true" from "false" self employment in their national labor law, develop a set of specialized criteria for distinguishing true and false self employment in labor platforms active in their areas of organizing, and use these criteria to determine which platforms appear to be engaged in employment misclassification

- Take steps to ensure that platforms engaged in misclassification change their practices, including initiating lawsuits if necessary

- Especially if misclassification of platform workers appears common:

    - Investigate the desirability among platform workers and the political feasibility of introducing legislation that would significantly clarify or shift the criteria used to establish an employment relationship, on the model of Assembly Bill 5 in California

    - Investigate the possibility of establishing a rebuttable presumption of an employment relationship, on the model of the EU Parliament proposal

Intermediate category. While a "third" or "intermediate" category of worker "between" employee and self employed person has been advanced in some countries as a possible "solution" to the unclear legal status of some platform workers, such an "intermediate category" already exists in many countries. Whether the introduction of such a category where it does not already exist will give workers more or fewer rights depends on the definition of the category, the broader landscape of labor law and labor-management relations in the country, and the overall attitude of management in affected platform operating companies to workers. Generally speaking however labor law scholars have cautioned against introducing an "intermediate category" in countries where such a

category does not already exist, noting that introducing such a category does not usually remedy legal uncertainty but only "lower the bar" for workers alleging they have been misclassified as self employed (see e.g. De Stefano 2016). Thus unions are encouraged to:

- Scrutinize carefully any proposals for the introduction of new "intermediate" employment classifications, and, if appropriate given their political feasibility and likely effects, lobby against them

- Refrain from introducing such proposals themselves without assessing their likely effects with extreme care

Home work. Many countries have laws that govern "home work" that do not turn on the "employee vs. self employed" distinction. This practice is called by different names in different legal settings, such as "industrial homework" or "piecework" in the United States and "home work" in the Conventions of the International Labour Organization. Generally speaking, these laws and conventions cannot easily be interpreted to apply to platform work. However, some researchers and worker organizations argue that they should be updated to do so. In this context, unions can:

- Assess the state of "home work" regulation in their countries and sectors, and consider developing or supporting proposals to update this regulation to apply to platform based work, regardless of the employment status of the worker (i.e., employee or self employed)

Collective bargaining. Generally speaking, the right to bargain collectively turns on the employment classification of the worker: employees can bargain collectively with their employers, while the self employed are prohibited from collective bargaining.

We are not aware of any attempts to create exemptions to this tradition for platform workers without first changing their status to employees; the most well-known collective agreement with platform workers, between the Danish trade union 3F and the cleaning platform Hilfr, applies only to workers who are *employees* of Hilfr. The most widely discussed attempt to establish collective bargaining for self employed platform workers without first changing their status took place in the United States city of Seattle. In 2015, the city council unanimously passed an ordinance that would allow even self employed drivers working via apps such as Uber and Lyft to join a union — and would require the platform operating companies to negotiate with organized drivers under certain conditions. The US Chamber of Commerce sued the City of Seattle, arguing that the ordinance violated antitrust law. The entry into force of the ordinance was delayed by a court, and at time of writing the courts still have not decided the matter.

The emerging consensus, at least among what might be described among "worker friendly" analysts and policy makers, appears to be that misclassification is common in at least in some kinds of labor platforms, and that workers are being inappropriately denied collective bargaining rights in addition to the individual rights and benefits they would enjoy as employees. Union policy strategy relating to the collective bargaining and organizing rights of platform workers will depend on their assessment of the prevalence of false self employment among labor platforms in their countries and sectors, and the balance of power between platform operators and platform workers regardless of employment status. In

some countries, such as Germany, workers in the "third category" are provided some collective bargaining rights. Generally speaking, unions can:

- Consider, and potentially develop or support, regulatory proposals to extend collective bargaining rights to platform workers regardless of their employment status (including adjustments to competition law as needed), based on the argument that platforms have significant unilateral influence on platform workers' ability to find and get work, and the interactions they have with clients

Occupational safety and health. There are at least two relatively widely-discussed major challenges regarding occupational safety in platform based work: the interpersonal and physical dangers faced by workers performing in-person work such as household and transportation services; and the psychological harms faced by workers engaged in "content moderation" on major social network platforms.

In the case of in-person work, the typical requirement that workers agree to be classified as self employed, rather than employees of the platform, allows platform operating companies to absolve themselves to some extent of the traditional occupational safety responsibilities of employers. Thus platforms do not always collect adequate information on clients and the risks workers may face in performing in-person work for them. This had led to situations in which workers providing household or transportation services have been sexually harassed, assigned illegal tasks, or assaulted. And both kinds of work have other physical safety and health risks; for example, the risk of injury in lifting heavy items or driving a bicycle in city traffic, or the long-term health risks associated with everyday exposure to household cleaning agents. To the extent that workers in these situations are self employed, they are responsible not only for absorbing the economic risk associated with these harms but also for learning about and taking appropriate preventive measures.

The psychological harms associated with content moderation are well-documented, but in this case workers are often employees. Here the discussion — and several lawsuits — turn on the question of what the employer's responsibilities to the affected employees are or were.

Although the harms in these cases are different, they have in common that platform operators may be in a good position to mitigate them. At an absolute minimum, platform operators can educating workers about relevant risks and develop best practices for mitigating them. Ideally, however, platform operating companies would invest in worker safety by developing and implementing risk assessment and mitigation strategies. To our knowledge, research, litigation, and policy development on these topics are in relatively early phases. Unions can:

- Collect information on the most common harms and hazards facing platform workers on various platforms and in various sectors, including physical, interpersonal, and psychological harms and hazards

- Develop risk mitigation strategies and proposals in dialogue with affected workers and, if possible, clients, platform operators, researchers, and standards organizations

- Mitigation strategies could include, for example, client background checks and rating systems; worker safety training; safety equipment; psychological counseling; and mandatory paid leave

- To the extent possible and permissible by law, clients and platforms should bear most or all of the organizational burden and costs associated with ensuring worker health and safety, regardless of workers' employment status

- Explore existing policy and case law governing supply chain liability and develop litigation and/or policy strategies for using it to improve health and safety for platform workers regardless of employment status

Data protection

On May 25, 2018, the European Union's General Data Protection Regulation (GDPR) entered into force. The following month, on June 28, the California Consumer Privacy Act was signed into law; it will enter into force on January 1, 2020. Both laws have their strengths and weaknesses; from a practical perspective, the task for trade unions, other worker organizations, and other stakeholders to digital platforms in these jurisdictions for the next few years will be to familiarize themselves with the legislation and to use it to obtain information about — and, if appropriate, contest — platform decision making processes. For unions, other worker organizations, and other stakeholders in the EU specifically, the following points are worth noting regarding GDPR:

- The meaning of "personal data" under GDPR appears to be relatively broad:

    - Article 4 of GDPR defines personal data as "any information relating to an identified or identifiable natural person" and establishes the person to whom such data relates as the "data subject" and the recipient of the various rights established by the Regulation.

    - There may be some cases relating to digital platforms in which it is not clear if some data "relat[es] to" a person and thus whether or not it falls under the scope of GDPR. For example, in the context of a labor platform, the work produced by a worker may be evaluated by clients or even by the platform operator, and these evaluations may be used to influence the worker's payment and/or future access to work. As these evaluations do not directly describe the worker, it may not at first be immediately clear whether they constitute "personal data" and therefore whether or not the worker's rights regarding personal data under GDPR apply to them.

    - Relevant legal guidance, however, suggests that such evaluations — and indeed any information whose creation or processing has implications for the "data subject" — is likely to be personal data under GDPR. Opinion 4/2007 of the Article 29 Working Party (WP 136, "On the concept of personal data") sets

out three ways in which information may "relate to" a person:

- The data relates to a person by virtue of its content; i.e., it is about a person;

- The data relates to a person by virtue of its purpose; the data is used to "evaluate, treat in a certain way or influence the status or behaviour" of a person;

- The data relates to a person by virtue of its result; its use is "likely to have an impact on" a person's "rights and interests."

Assuming that data protection authorities and courts uphold this interpretation, work evaluations of platform workers seem likely to be understood as "personal data" under GDPR by virtue of their purpose and result.

- Again assuming this interpretation is applied, other thus far secret or "untransparent" data or algorithmic processes used by digital platforms to manage users and interactions could also conceivably be at least partially "unveiled" through use of GDPR inquiries on this basis.

- Specifically, it may be possible to use GDPR to require platforms to disclose information about thus far secret rating, ranking, and reputation systems.

- Additionally, GDPR requires that personal data be "accurate" (Art. 5 Para. 1 lit. d) and creates a right to rectification of inaccurate personal data (Art. 16). In cases where platform users or algorithmic systems have created ratings or other data that affect other users' access to platform functionalities (e.g., through ratings, rankings, or reputation), affected users could *conceivably* use GDPR to contest not only the accuracy of individual pieces of data but also the design of the entire part of the platform that facilitates the creation of "inaccurate" data. The success of this strategy may turn on courts' and data protection authorities' interpretation of the word "accurate" and/or their view on the extent of platform operators' responsibilities not only to correct inaccurate personal data but also to avoid designing interactions that lead to inaccurate personal data being created on an ongoing basis.

- GDPR creates rights for all natural persons inside the EU, regardless of their citizenship status and regardless of the legal or physical location of the organization processing their personal data. This means that even platforms based outside the EU must comply with GDPR when processing personal data of people inside the EU.

- Barriers to enforcement of GDPR are, at least in theory, low: organizations processing personal data are required to appoint data protection officers and there is a network of data protection authorities in the EU Member States. These entities are required to answer inquiries and complaints from "data subjects" free of charge and within

prescribed periods of time.

- Article 40 of GDPR encourages the creation of "Codes of Conduct" by associations of organizations affected by the Regulation. Such a Code of Conduct can further specify terms set forth in the Regulation for a given sector. Various types of platform operating organizations may wish to consider developing such Codes of Conduct.

With respect to data protection generally, unions can:

- Familiarize themselves with relevant data protection frameworks in their jurisdictions, and educate others as to their rights

- Work with affected workers, civil society organizations, and other stakeholders to ensure that flagrant violators of data protection law are held accountable and that existing data protection regulations are interpreted and implemented appropriately

- If they do not yet exist, advocate for the development of strong data protection frameworks

- Build international networks to support the development of strong data protection frameworks globally

- In the EU, work with platform operators and stakeholders to digital platforms to develop Codes of Conduct as provided for by Article 40 GDPR

Competition

In 2017, 2018, and 2019, regulators in the US and EU various levied fines and allowed lawsuits to proceed against Apple and Google in light of anticompetitive behavior relating to various platforms operated by the companies, including Android, Google's mobile phone operating system; AdSense, Google's online advertising platform; Google Shopping; and the Apple App Store. (See Appendix 2 under "Abuse of market power" for details.)

Potentially anticompetitive behavior is not limited to large, established platform operating companies. The legal terms of some platforms include clauses that could be construed as inappropriate impediments to competition. Some labor platforms, for example, impose constraints on the relationships workers can have with clients they meet through the platforms, even when those workers are ostensibly self employed.

In this context, unions can:

- Use existing legal protection structures to support union members who wish to initiate complaints or legal proceedings against platform operators regarding anticompetitive behavior

- Work with other stakeholders, potentially including especially employer associations, researchers, and policy makers, to proactively investigate potentially anticompetitive

behavior on the part of platform operating companies; in the event that such behavior is discovered, take appropriate legal action

Data reporting

- In the United States city of Seattle, "all taxi associations, for-hire vehicle companies and transportation network companies are required to submit quarterly electronic data reports for all requested trips" (City of Seattle). The data required by the city is quite detailed and includes:
    - For completed trips, origin and destination (postal code)
    - For trips not completed, the request location (postal code)
    - Whether a wheelchair-accessible was requested
    - The type of dispatch (street hail, phone, app-based, or other)
    - The license number of the vehicle dispatched to respond to the request
    - Optionally, the date and time of the request
    - Information about collisions, crimes, and complaints

This shows that policy makers can require data from platform operators in the service of evidence-based policy makers. In this context, unions can:

- Support and, if necessary, develop and propose regulations requiring platform operating companies generally to report policy-relevant data to policy makers and, as appropriate, social partners
- Unions may have a special interest in the context of digital platforms that act as labor intermediaries. One of the challenges in developing evidence-based policy for labor platforms is a lack of reliable and representative data. In this context, unions could:
    - Initiate a joint effort with employer associations and socially responsible platforms to develop reporting regulations. For example, labor platforms could be required to share the following aggregated information on an annual or quarterly basis with regulators, policy makers, and social partners:
        - How many workers and clients are registered and active
        - The quantitative distribution of work among active workers, active clients, and types of work, as measured by number of tasks, financial value, and estimated time

        - Quantitative and qualitative information regarding nonpayment, disputes, and other "suboptimal outcomes"

    - Work with platform workers, operators, and clients to develop appropriate standards for transparent billing. For example, a standard could be developed to ensure that platform clients receive at least the following information:

        - How much of the client's payment is kept by the platform operating company and how much is paid to workers

        - The location (at least country) of the workers who worked on the client's tasks

        - The number of tasks each worker completed, and how much they were paid for each task

        - If available, an estimate of how much time each worker spent on each task

        - Information about tasks for which workers were refused payment, and why

Discrimination

In 2016 and 2017, independent investigations found that Facebook allowed advertisers to exclude groups defined by age, race, or religion from seeing ads for housing or employment, in apparent violation of United States antidiscrimination law. In particular, older workers were commonly excluded from employment ads. After trade unions and other organizations filed lawsuits, Facebook settled and agreed to make changes to prevent the discrimination. The settlement is expected to have implications for other platforms, but only for users in the United States. (See Appendix 2, under "Discrimination," for details.) In this context, unions can:

- Work with researchers and other stakeholders to investigate the prevalence of discrimination regarding employment, housing, credit, and other relevant opportunities in advertisements distributed via digital platforms

- If discrimination is present, develop appropriate strategies for combating it, including, if necessary, litigation and policy advocacy

Contract

In November 2016, New York City passed Local Law 140, the so-called "Freelance Isn't Free Act" (NYC Consumer Affairs). The law establishes rights and obligations for freelance workers and their clients, specifically:

- For work valuing at least USD 800 within a period of 120 days, a written contract is required. The contract must include at least the following content:
    - Name and mailing addres of the hiring party and the freelance worker
    - An itemized list of all services to be provided by the freelance worker
    - The value of the services
    - The rate and method of payment
    - The date by which the hiring party must pay, or the method by which that date will be determined
- The hiring party must pay the freelance worker by the date established in the written contract, or, if the contract does not specify a date, no later than 30 days after the completion of services by the freelance worker.
- The hiring party may not reduce the amount of compensation after the freelance worker has begun to deliver the services.
- The hiring party may not retaliate or discriminate against any worker who exercises the other rights provided by this law.

The law also established complaint reporting procedures for freelance workers and enforcement mechanisms. The law entered into force on May 15, 2017. One year later, the City's Department of Consumer Affairs (DCA) reported that in the law's first year in force, 264 complaints from freelance workers had been filed, and the DCA had assisted freelancers in recovering over USD 250 thousand in lost wages (NYC DCA).

It should be noted that the "Freelance Isn't Free Act" was developed under the leadership and advocacy of the Freelancers Union, a "union-like" nonprofit organization that provides individual services to its freelance members and undertakes policy development and lobbying to advance their interests. This case shows that unions can:

- Investigate the frequency and severity of non-, late, and "lower-than-previously-agreed" payment of self employed workers
- Develop and support policy proposals and enforcement mechanisms for reducing the frequency and severity of non-, late, and "lower-than-previously-agreed" payment of self employed workers

In the German context specifically, the possibility for updating the relevant parts of the German Civil Code (BGB) (specifically, §§ 305-310) and the Unterlassungsklagengesetz — that is, the parts of German law that used to be the Law Regulating General Terms and Conditions, i.e., the so-called "AGB-Gesetz" — could be investigated. However, this should be done mindful of the recent passage and potential future evolution of the European Union Regulation Promoting Fairness and Transparency for Business Users of Online Intermediation Services (see below).

Regulation and standards specific to particular platform types or contexts

Several jurisdictions have developed regulations that apply to specific platform types. Two of these are discussed below. Additionally, there are are at least two potentially relevant standard development initiatives underway. These are named, but beyond the possibility for unions to participate in standards development, no concrete actions are recommended.

New York City: regulation of for-hire vehicle driver pay. In December 2018, the New York City Taxi and Limousine Commission, the agency responsible for regulating taxis and other for-hire vehicle services within the city, approved new pay rules for drivers. The rules apply to for-hire drivers working for "high-volume for-hire services" regardless of employment status or dispatch method. The new rules therefore include drivers working via apps such as Uber, Lyft, and Juno. The rules include a formula that sets per-trip minimum pay. The formula includes three factors: distance, time, and "utilization rate." The "utilization rate" is specific to each company, and is essentially the "opposite" of the "idle time" (i.e., time without a passenger) drivers experience when "on-duty" for that company. Companies with higher "idle time" (lower utilization rate) must pay drivers more. Therefore without counting idle time or establishing a fixed hourly rate, the pay formula incentivizes for-hire companies to design their driver and customer incentives to reduce driver idle time (NYC TLC: FHV Driver Pay Rules).

- Unions and other worker organizations representing drivers in platform-based transportation services can study the New York regulation and consider if it offers lessons for their geographic area.

- Additionally, the regulation may offer lessons for other types of labor platforms, or even other types of digital platforms generally speaking. However, the approach is complex and requires detailed study and discussion.

European Union: "Platform-to-Business Regulation." In April 2019, the European Parliament voted to adopt the proposed "Regulation Promoting Fairness and Transparency for Business Users of Online Intermediation Services" (Europarl; Adopted). The regulation creates transparency and grievance redress requirements for platforms that serve as intermediaries between "business users" and "consumers" acting in a private (as opposed to business or professional) capacity, and establishes some requirements for platforms' terms and conditions. Specifically, the regulation:

- Establishes fairness and transparency requirements for terms and conditions, and requires providers of intermediation services to notify users of any significant planned changes to terms

- Requires providers of intermediation services to give a reason if they choose to restrict, suspend, or terminate a business user's access to the services

- Explain the "main parameters" determining any rankings on their platforms (e.g., in search results)

- Requires providers of intermediation services to establish grievance and redress mechanisms to business users, including both internal complaint handling procedures and external independent mediators

- Invites groups of providers of intermediation services to develop sector-specific codes of conduct

The regulation applies only to "information society services." So-called "underlying service-attached intermediation activities," including Uber and Deliveroo, are apparently not included. They may however turn out to receive other rights depending on the outcomes of various court cases (e.g., regarding misclassification). Additionally, "business to platform to business" transactions are not included, only "business to platform to consumer" transactions. That is, if the "end customer" is active in a business or professional capacity, rather than a personal or private capacity, the regulation does not apply. This presumably means that many transactions conducted through platforms that act as intermediaries for remote work are excluded, as, while workers on those platforms are "business users" to the extent that they are self employed, many of those transactions involve the customer acting in a business rather than private capacity. They are therefore "business to platform to business" rather than "business to platform to consumer" transactions.

At the same time, the regulation provides for a review 18 months after its entry into force, and every three years thereafter. This review process could present a possibility for expansion of the regulation's scope into these areas, if the legislator sees a need for it.

- Unions inside the EU can:

    - Familiarize themselves with the regulation and determine whether it is applicable to "business users" they may be representing

    - Assess whether the regulation might be beneficial for either of the groups to which it is "almost but not quite" applicable (i.e., self employed "business users" on platforms where "business to platform to business" transactions are conducted; and workers who are users of "underlying service-attached intermediation activities" such as Uber and Deliveroo); and, if so, support or develop proposals to expand the regulation to these users

- Unions outside the EU can study the regulation and consider if they may wish to support or develop proposals for similar regulation in their own jurisdictions

National and international standards. At least two potentially relevant standards development processes are underway:

- DIN, the German national standards body, has a multifaceted standards development initiative called "Innovative Arbeitswelt" (lit. "Innovative World of Work") (DIN Innovative Arbeitswelt). The scope for this initiative is extremely broad and includes digital platforms.

- ISO, the international standards body, has established a technical committee to develop a standard for the "sharing economy." The committee is "ISO/TC 324: Sharing Economy" (ISO/TC 324 website). The committee is in the very early phases of its work but the standard appears likely to include labor platforms as well as platforms that were historically associated with the term "sharing economy" such as Airbnb and other platforms for short-term accommodation.

Appendix 1: Digital Platforms Defined and Characterized

Abstractly speaking, in the context of the digital economy – and for the purposes of this paper – a "platform" can be defined as **a digital information system made up of a collection of interconnected technologies and social arranagements that functions as an integrated entity and enables its users to interact in partially pre-defined ways**. In this definition, "social arrangements" can include financial transactions and agreements such as user fees, legal contracts such as terms and conditions, other formal rules, or even informal norms.

Four features that distinguish many contemporary digital platforms from other means of achieving the same goals are location independence, asynchronous interaction, structured interaction, and low barriers to participation. These features have further consequences that contribute both to the benefits offered by platforms and to the challenges and risks associated with them. The structured nature of interactions enabled by platforms allows in many cases for a degree of automation. That is, participants can interact and even conduct financial transactions without any human oversight on the part of the platform operator; the platform's rules are enforced, to a large extent, through software. This automation, combined with the location-independent and asynchronous nature of interactions enabled by platforms, enables platforms' three greatest distinctive characteristics from a user perspective: scale, speed, and convenience. These features are discussed with examples below.

Location independent interactions. In principle, users can use the services of a digital platform no matter where they are, as long as they have internet access. While many platforms do distinguish or discriminate between users based on their geographic location, this discrimination is not a fundamental feature of platforms; on the contrary, it takes "extra work" on the part of the platform operator to identify a user's location and treat users differently based on their locations.

- Examples:
    - Digital banking services make it possible for bank customers to meet their banking needs without visiting a bank branch.
    - Similarly, so-called e-government services may allow citizens to interact with government agencies without visiting any office in person.

Asynchronous interactions. Providers and users of services mediated via digital platforms can conclude a transaction without ever interacting directly at the same time.

- Example:
    - A traveler can book a room via Airbnb without ever talking with the host via telephone, chat, or any other "real time" medium. The traveler can book the room at their convenience and the host can reply later at their convenience.

The guest and host do not need to agree on a time to be simultaneously available.

Structured interactions enable parties to interact and transact without human intermediaries: automated matching and management. Platforms typically specialize in facilitating particular kinds of interactions. To this end, they develop data structures and interfaces appropriate to the informational requirements of the interactions that they facilitate. The interfaces are designed to automatically require the interacting or transacting parties to provide the information necessary for the interaction or transaction to conclude successfully. This allows platforms to facilitate transactions without direct human intermediation, except in cases where the parties behave unexpectedly or there is an unforeseen technological problem.

- Examples:
    - The lodging accommodation platform Airbnb has developed a specialized data structure and set of interactions that allow guests to book rooms with hosts that tend to be either "hobbyists" or small businesses. Notably, Airbnb does not offer hotel bookings, which would require a different data structure and set of interactions.
    - The "microtask" labor platform Mechanical Turk, operated by Amazon, is focused on small information tasks that are generally performed remotely. Completed work is submitted electronically via the platform. The platform offers a standard data structure and interface for posting a task to the platform and standard interfaces and procedures by which workers complete the tasks and receive payment. These structures and procedures are so standardized that the "client side" activities of posting tasks and evaluating work submitted by workers can be automated. Because the tasks are typically routine, relatively low-paying tasks, often offered in large "batches" to be completed by dozens of workers, there is no built-in mechanism for clients to offer tasks to specific workers. Additionally, there is no way for workers to distinguish themselves on the platform via public profiles, photos, or other personally identifying information, or to offer their services directly to a client. Nor can workers negotiate over prices with clients; clients set the price for a job when posting it, and workers can "take it or leave it."
    - On the "freelance" labor platform Upwork, in contrast, tasks tend to be more higher-paying and specialized. On this platform, it is not possible for clients to post "batch" jobs for dozens of workers, whose results are then reviewed by automated means. Rather, freelancers create profiles – potentially including photos of themselves and information about their qualifications and geographic location – and potential clients invite individual freelancers to bid for jobs. Clients can interview multiple freelancers before choosing one for a project, and the work is reviewed and paid manually, potentially with ongoing discussion between client and worker. Freelancers can negotiatiate prices with clients.

Low barriers to participation. Most digital platforms have low requirements for participation. Notably, those digital platforms with "non-digital counterparts" often have comparatively lower requirements for participation.

- Examples:
    - To create an account on most social media platforms, all that is needed is an email address. Notably, email addresses can be had easily in any quantity from free providers.
    - Compared to opening a hotel or purchasing an apartment to rent to a "traditional" renter (i.e., who would pay rent on a monthly basis), the legal and financial complexity involved in renting a property via Airbnb is extremely low. The legal terms are standardized and verification procedures are partially automated.
    - Compared to "marketing oneself" in the traditional "unstructured" market for freelance information work – i.e., recruiting potential clients via personal and professional networks, direct marketing, social media, etc. – or getting a "traditional" job in a company, obtaining paying work via digital labor platforms is quick and simple. On "microtask" platforms, no self-marketing is necessary at all; once one has verified one's identity and eligibility to work, one can begin working and earning money. Even on "freelance" platforms, only a short profile is required. In all cases, the legal terms are standardized, non-negotiable, and enforced by the platform, and payment procedures are standardized and payment is concluded via the platform. In some cases, the platform operator even manages disputes that may arise.

Scale, speed, and convenience enabled by location independence, asynchronous interaction, structured interactions, automation, and low barriers to participation. The combination of location independence, asynchronous and structured interaction, automated matching and management, and low barriers to participation allows large numbers of people to easily and quickly make use of the services provided through digital platforms.

Both the benefits and the risks of digital platforms arise out of these features. For example, the precise structuring and automation of interactions allows platforms to quickly process large quantities of information, allowing for the scale that makes a platform such as Airnb attractive. On the other hand, the technological complexity of the systems involved and the large numbers of people transacting over the platform makes it challenging for platform operators to intervene and make corrections when things go wrong. Additionally, technological complexity makes transparency and accountability challenging: even when platform operators want to explain decisions to users or other stakeholders, they may not themselves always be in a position to quickly and understandably explain why a certain automated decision was made.

Further still, many platforms have "network effects": the more people use a given platform, the more useful it is to the people using it. For example, if there were no hosts on Airbnb, it would not be useful to potential guests – and vice versa. The more hosts offer lodging on the platform, the more attractive it is to guests, and the more guests use it. The new guests draw new hosts in turn. But beyond a platform's user base, it is the platform's unique data structures, interfaces, and interactions that give them their value. Because most platforms are specialized and "closed," it may be difficult for a new player to establish itself in the presence of a dominant platform in a given sector. As a result, users have no meaningful alternatives to some platforms.

In addition to the "network effect," some platforms also have "lock-in effects," in which it is difficult – usually for technical reasons – for a user to switch from one platform to another, even if a meaningful alternative exists. On many labor platforms, for example, a worker's reputation may significantly influence their ability to get good work. However, if a worker wishes to switch from one platform to a similar but competing platform, they may not be able to bring their reputation with them. This imposes a potentially significant "switching cost," limiting competition between platforms for workers.

These challenges, however, are not generally inherent features of digital platforms – rather, they are accidental results of the current technical designs of platforms, the business models of the organizations that maintain them, and the regulatory environment.

Appendix 2: Selected Risks and Challenges

Selected situations from the platform economy:

In-person sexual harassment
In interviews with 80 US-based workers on platforms including Kitchensurfing and TaskRabbit, the sociologist Alexandrea Ravenelle found that workers performing in-person tasks in clients' homes were sometimes subjected to inappropriate sexual advances by clients. Because the workers are classified as self-employed, not employees, they have no protection from sexual harassment under the law. Additionally, because their future access to work on the platforms is influenced significantly by client reviews, these workers said that they often had to find a way to politely deflect these advances without angering the clients who perpetrated the harassment. Workers rarely reported the incidents to platform operators, as workers did not expect platform operators to do anything. Further, because of the "peer to peer" framing of gig economy work, some workers did not even recognize the incidents as harassment; Ravenelle (Ch. 5, *Hustle and Gig*, 2019) reports that in describing these incidents, workers sometimes simply described them as "uncomfortable" and tried to laugh them off. Yet these clients' behavior would likely have been illegal had the workers been employees. Because of their status as self-employed persons, however, and the importance of ratings which clients had – as far as workers knew – complete control over, the workers were forced to act as if the clients' behavior was merely "awkward."

Platforms as intermediaries for illegal work
In interviews with TaskRabbit workers and Uber drivers, Ravenelle (Ch. 6, *Hustle and Gig*, 2019) also found that these workers were either assigned tasks illegally mailing prescription drugs across national borders (TaskRabbit) or driving passengers in what appeared to be a series of transactions involving illegal drugs (Uber). When the TaskRabbit worker called the platform operating company to ask for advice, they were instructed to complete the task, even thought it appeared to be illegal.

Abuse of fraud reporting mechanisms
Amazon's marketplace allows independent merchants to sell products to consumers. Consumers can leave reviews for sellers on product pages. Amazon does not require reviewers to prove that they actually purchased a product from a particular merchant in order to review them, and some sellers give themselves positive reviews – or buy such reviews from third parties – in order to rise in the search results. Amazon, however, has strict policies against this; merchants found to be purchasing fraudulent reviews, for example, can have their accounts suspended or deactivated entirely. The journalist Josh Dzieza ("Prime and Punishment," *The Verge*, 2018) reports that merchants use this system fraudulently against each other, to displace competitors above them in the search results for a given search term. Differences in search result placement can result in significant differences in sales. A merchant may buy fake positive reviews *for a competitor* and then file a complaint against them. Amazon's enforcement in response to allegations of fraudulent reviews is apparently partly automated, and the requirements for having a merchant account reinstated after it has been suspended following such an allegation are not clear. As a result, a small industry of "Amazon lawyers" – specialists familiar with Amazon's appeal

processes – has developed. These specialists offer merchants assistance appealing suspension decisions – for a price. This entire "mini-industry" is the result of the lack of transparency around enforcement and appeal of Amazon's fraud controls.

Complex and unaccountable algorithmic controls

In 2017, there was an outcry that YouTube had run ads in front of extremist propaganda videos, including "American white nationalists, a hate preacher banned in the UK and a controversial Islamist preacher" (Martinson 2017). By running ads in front of them, YouTube was making money off these and other inappropriate videos. In response to this discovery, major companies began pulling all of their advertising from YouTube (e.g., Guynn 2017); they didn't want their brands to be associated with such videos as a result of an oversight on YouTube's part.

To address advertisers' concerns, YouTube made significant changes to the systems and policies they used to determine which videos would be allowed to receive ads; they also created settings that allowed advertisers finer control over the kinds of videos their ads would be shown in front of (e.g., Schindler 2017). One important change was the implementation of automated machine learning systems that would categorize videos immediately after they were uploaded. Guidelines were created for video creators about how to produce "advertiser-friendly content" (YouTube advertiser-friendly content guidelines). Creators were informed that if a video they uploaded was found to include any of a variety of types of content, it could be classified as noncompliant with these guidelines and "demonetized." Demonetized videos do not receive ad placements and their creators do not receive revenue from them. (Presumably, neither does YouTube.) Content categories deemed "not advertiser-friendly" include not only hateful content, violence, and drug-related content but also "controversial issues and sensitive events" (YouTube advertiser-friendly content guidelines). If a video is entirely demonetized as a result of being placed in one of these categories by YouTube's automated systems, the creator is notified and can request a manual review of the video.

However, at present the information received by creators is vague; generally, creators are not informed exactly which guideline was violated, or in which part of the video. As a result, they have very little guidance on how they could change the video to get it "remonetized." If the manual review does not result in reclassification of the video, the creator has lost the time and other investments they made producing it. Guidelines for manual review presumably exist, but are secret. Even if a manual review results in a change, the time during which the video was "demonetized" – which may be a few days – can lead to irretrievable financial losses for the creator. These are losses produced essentially as a result of the imprecision of the systems that perform the initial automated review. And there appear to be other "hidden" categories with effects on income that YouTube has not yet disclosed.

It was possible for YouTube to impose these major changes on video creators unilaterally because in order to participate in YouTube's "Partner Program" – i.e., to be eligible to be paid for ads placed in front of their videos – video creators must agree to a contract, written by YouTube, that includes a clause that states that YouTube may change the contract unilaterally at any time. The content of this contract is not negotiable, at least for most creators. It was therefore impossible for creators to meaningfully "consent" to the changes. This power asymmetry is further exacerbated by YouTube's dominant market position; YouTube is owned by Alphabet, the Google parent organization, and therefore has

market advantages in both server capacity and online advertising. “YouTubers” report that there is no viable competitor to YouTube.

Given these conditions, it is unclear if the current video classification system is compliant with applicable law, including competition law, the EU General Data Protection Regulation, and country-specific definitions of self employment.

Illegal price fixing?

In 2016, an Uber passenger filed a lawsuit against then-CEO Travis Kalanick alleging that, given the Uber drivers are self-employed, not employees, the mechanisms for centrally setting prices constituted illegal price fixing (*Meyer v. Kalanick*). That is, the lawsuit argued essentially that Uber was an illegal cartel. The lawsuit was forced into arbitration and the “cartel” argument was not decided by the court.

The challenge of enforcing defamation law

In September 2015, Monika Glennon, a real estate agent in the United States, became aware of false reports about her posted to the independent websites “She’s a Homewrecker” and BadBizReport.com. The person who posted the reports “claimed that she and her husband had [hired] Glennon as their realtor [to buy a house] and that everything was going great until one evening when she walked in on Glennon having sex with her husband on the floor of a home the couple had been scheduled to see” (Hill 2018). The story was completely made up, and Glennon had no idea who had written it or why. The story was posted on multiple websites and shared with her coworkers via Facebook. In the following few years, she lost hundreds of thousands of dollars as her real estate business was effectively destroyed.

After years of legal proceedings in which some of the operators of the sites to which the story was anonymously posted were required to provide the IP addresses of the author – and internet service providers were, in turn, required to provide the identity of the person associated with the IP addresses – Glennon came into contact with the woman who had fabricated the story. In truth, they had never met; they had had a brief disagreement in the comments section of an online news article. The disagreement turned into a grudge: the woman, who was at the time of the disagreement battling methamphetamine addiction, decided to destroy Glennon’s reputation, and did so by fabricating the adultery story and posting it to various websites. Glennon’s lawsuits eventually revealed the truth, but it cost her over a hundred thousand dollars in legal fees – which she was never able to recover, as the woman who posted the story had few assets (Hill 2018). She was able to rebuild her business, and some of the websites took the story down. But the story remains up on BadBizReport.com, which does not allow people who post stories to remove them. The site has defended itself against legal claims using Section 230 of the US Communications Decency Act, which generally does not hold such websites liable for content posted by their users. And as of May 2019, a Google search for Glennon’s name still returns the story on BazBidReport.com, despite a court order for search engines to de-index it.

The psychological burden of content moderation

As documented extensively by researchers including Sarah Roberts (e.g., Roberts 2019) and journalists including Adrian Chen (e.g., Chen 2014) and portrayed in the films *The Moderators* and *The Cleaners*, the “user generated content” that populates major social media and social network sites is policed by commercial content moderators, often

employees of specialized firms in the "Global South." South and southeast Asia, and India and the Philippines especially, are "hot spots" for this work, which is often outsourced by major platform operating companies. These workers spent their workdays looking at written content, images, and videos that has been flagged as in some way violating the platforms' rules, including violence, sexually explicit content, and hate speech. This work has significant psychological consequences for workers, and can cause post-traumatic stress disorder. Content moderators have filed multiple lawsuits against platform operating companies, including Microsoft (*Soto and Blauert v. Microsoft*; Levin 2017) and Facebook for failing to provide a safe workplace. The complaint in the 2018 lawsuit against Facebook contends that content moderators were "irreparably traumatized" after watching "thousands of videos, images and livestreamed broadcasts of child sexual abuse, rape, torture, bestiality, beheadings, suicide and murder" (*Scola v. Facebook*; Reuters 2018, Wong 2019).

Tip theft and complex and unpredictable wage calculations

In March 2017, the US grocery delivery app Instacart – whose workers, called "shoppers," are required to agree to be classified as self-employed, and typically earn around the US federal minimum wage – settled a class action lawsuit. In addition to a payment of USD 4.6 million, the court required Instacart to make changes to its interface. One of these was clarifying the nature of a "service fee," which many customers thought was a tip that would be paid to workers – but was in fact kept by the platform operating company (Del Rey 2017a, 2017b). Yet more than two years later, workers say the company used the occasion of making changes to their payment system to make wage calculations more complex and unpredictable – and say that their wages have fallen by as much as 30 percent (Lieber 2019).

Abuse of market power

In 2017, 2018, and 2019, regulators in the US and EU variously levied fines and allowed lawsuits to proceed against Apple and Google in light of anticompetitive behavior relating to the companies' various platforms, including Android; AdSense, Google's online advertising platform; Google Shopping; and the Apple App Store.

In the case of Apple, application developers alleged that the company used its control over the App Store – the only "place" where third-party software developers can sell applications for iPhones and other Apple mobile devices – to suppress competition. Specifically, in a complaint to the EU competition authority, two independent software developers alleged that after Apple developed a new feature with similar functionality to applications that they sold via the App Store, the company informed them that their applications would need to meet new criteria to remain eligible for sale via the App Store. These criteria, however, were not technically possible to meet if their applications were to maintain their core functionality; essentially, Apple was unilaterally terminating the developers' right to sell their apps. It remains to be seen whether the competition authority will investigate whether Apple's actions constituted an abuse of market power (Reynolds 2019). Relatedly, the US Supreme Court recently held that iPhone owners may sue Apple for allegedly monopolizing the market for third-party iPhone applications (*Apple v. Pepper*). The outcome of the actual lawsuit, however, remains to be seen (Posner 2019).

The EU competition authority has levied fines against Google for anticompetitive behavior regarding its Shopping service (EUR 2.4 billion in 2017; Boffey 2017), its Android mobile operating system (EUR 3.8 billion in 2018; Rankin 2018), and AdSense, its online advertising platform (EUR 1.49 billion in 2019; Hern and Jolly 2019).

Discrimination

In 2016 and 2017, independent investigations found that Facebook allowed advertisers to exclude groups defined by age, race, or religion from seeing ads for housing or employment, in apparent violation of United States antidiscrimination law. In particular, older workers were often excluded from employment ads (Angwin, Scheiber, and Tobin 2017). Researchers submitted a test advertisement to Facebook's housing section excluding "African American," "Asian American," and "Hispanic" users; the ad was approved (Angwin and Parris 2016). The issue was brought to Facebook's attention, and the company said they had developed a system for preventing the discrimination. But a year later, the investigators ran further tests and found that discriminatory housing ads were still approved (Angwin, Tobin, and Varner 2017). After five lawsuits brought by civil rights organizations, including the trade union Communications Workers of America, Facebook agreed, as part of a legal settlement, to limit targeting with respect to ads for housing, employment, and credit (Gillum and Tobin 2019; Jan and Dwoskin 2019). The settlement is expected to have implications for other online advertisement platform operators, including Google and LinkedIn – but even on Facebook, the changes appear thus far to apply only to users in the United States.

Ratings and rankings

The current design and use of systems for rating and ranking, especially but not only in labor platforms, raises difficult questions regarding transparency, accountability, fitness for purpose, and compliance with existing law. In 2017, for example, the reporter Caroline O'Donovan reported on the difference between passengers' perceptions of the meanings of ratings and the real effects of those ratings on ride-hail platforms. The most popular ride-hail platforms, like many other online platforms, use a five-star rating system. After a ride, the passenger has an opportunity to rate the driver: one star is the worst rating, while five stars is the best rating. (Drivers can also rate passengers, but those ratings are less important.) Many passengers think that a three-star rating is "okay," indicating acceptable performance by a driver, a four-star rating is "good," and a five-star rating indicates exceptionally great service. The reality, however, is quite different: drivers begin to receive warnings and other punitive actions when their average rating falls below the average rating of all drivers in their area. That threshold is often around 4.6 or 4.7 – and drivers whose average rating stays below the threshold for an extended period of time may be deactivated by the platform, ending their access to work. This means that any rating less than five stars is essentially a "vote" in favor of deactivating – or "firing" – the driver (O'Donovan 2017).

The mismatch between passenger perception and driver reality is made more concerning given that passengers can give negative ratings for any reason. A Twitter search for "uber 1 star," for example, reveals that passengers report punishing drivers with negative ratings for a variety of reasons that are outside their control – such as traffic – or even have nothing to do with their performance as drivers, such as taste in music or the availability of hardware allowing passengers to play music from their own phones on the driver's car speakers. Complicating matters further still, passengers may be drunk or not in a position to fairly evaluate drivers' performance for other reasons. While platforms may take these factors into consideration when deciding what action to take based on a worker's overall ratings, the use of ratings is characterized on many platforms by a lack of transparency and accountability.