



Task Force 05

**INCLUSIVE DIGITAL TRANSFORMATION**

## Governance of Algorithmic Management in Digital Platforms

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**TF05**

## Abstract

The platform economy is growing at an unprecedented rate in the G20 countries as the number of digital platforms grew from 128 to 611 in the past decade. While platforms have generated work and income opportunities for millions of workers, this digital transformation has brought implications on the working conditions of platform workers. At the heart of this technological development lies the algorithmic management of work i.e. algorithms having the ability to allocate, monitor, evaluate, and reward platform workforce. These algorithmic systems are often complex, non-transparent and hence, incomprehensible. Thus, it becomes difficult to understand the logical explanation behind any algorithmic decision. In other words, without transparency, there is a lack of necessary insights into how algorithmic systems operate. While the workers are unable to understand the rationale behind algorithmic decisions that affect their livelihood, the policy makers are unable to assess its impact on workers, businesses, and economy at large. This T20 Brasil policy brief suggests actionable policy recommendations to ensure transparency of the algorithmic systems, and also propose a governance framework to integrate efforts of workers, businesses, and government together. The recommendations are guidelines for the G20 countries to adapt to varied diversity and also technological advancements leading to economic growth. The T20 Brasil policy brief could help policy makers of G20 countries to make informed decisions and enact effective regulations that uphold fairness, transparency, and social justice to promote sustainable livelihood and businesses in the platform economy.

**Keywords:** Digital Platforms, Algorithmic Management, Transparency, Governance

## Diagnosis of the Issue

The platform economy is growing at an unprecedented rate in the G20 countries as the number of digital platforms grew from 128 to 611 in the past decade. Today, around 87% of the global investments in the platform businesses is concentrated in the G20 countries (ILO, 2021a). Estimated number of platform workers whose livelihood depends on digital platforms varies from 0.2% to 22% of the adult population in each country in Europe and Americas (ILO, 2021b ). Considering the scale and growth of the platform economy, it has been one of the major themes of G20 discussions among the labour and employment ministerial meetings. Social protection to platform workers and related work classification issues have consistently been a strong point of discussion in the G20 meetings during Saudi Arabia 2020, Italy 2021, Indonesia 2022, and India 2023. The G20 discussions under the Italian presidency touched upon a wider range of themes related to platform economy. These included transparency, decent working conditions, and compensation to workers, among others. Building on the G20 priorities for the last four years, Brasil is likely to make further developments in the area of platform economy.

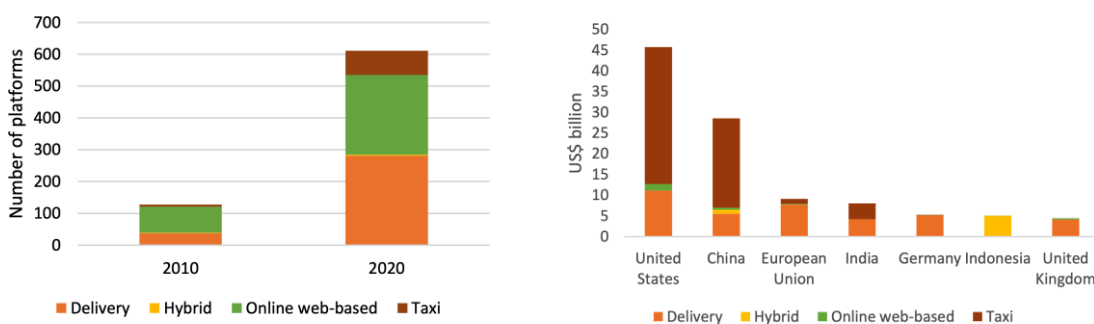


FIGURE 1: Growth and Investment Trends in Platform Economy in G20 Countries 2010-2020 (ILO, 2021a)

This is timely for G20 countries to focus on policy interventions towards an inclusive digital transformation for sustainable livelihood generation. The T20 Brasil policy brief discusses the platform economy and the related policy challenges. It then outlines recommendations to address these challenges. It also puts forward scenario outcomes and possible policy trade-offs from the suggested recommendations. Since, G20 is a diverse group of countries that are at different stages of economic development and labour market structure, the policy recommendations in this policy brief are principle based guidelines for the G20 countries to adapt to varied diversity and also technological advancements leading to varied economic growth. Thus, the policy brief suggests recommendations that could help policy makers of G20 countries to make informed decisions and enact effective regulations that uphold fairness, transparency, and social justice to promote sustainable livelihood and businesses in the platform economy.

Platforms are transforming the way work is being organised through the use of digital technologies (Poell, Nieborg, and Dijck, 2019). The literature suggests two broad areas of trends in the platform economy and labour market. On one hand, it shows the large-scale generation of work opportunities, efficiency and scale as a result of the network effects, organising work in irregular workspaces, and lowering down the entry barrier for workers in the labour market (ILO 2024, Berg et al. 2018, World Employment Confederation 2022, NITI Aayog 2022). On the other hand, it also suggests rising flexibility of work, lack of autonomy and control, social security benefits, and dissipating labor rights (Graham et al. 2017, ILO 2021b).

At the heart of these technological developments lies the algorithmic management of work. Algorithmic management is referred to as ‘giving the responsibility of assigning tasks and making decisions to an algorithmic system of control, with limited human involvement’ (ILO 2021b:33) and further ‘the use of computer-programmed procedures

for the coordination of labour input in an organization' (ILO 2022:5). In other words, platforms collect and process data for the coordination of work in ways that significantly affect working conditions and job quality of the platform labour where algorithms have the ability to allocate, monitor, evaluate, reward, and manage workforce (Graham and Woodcock 2018, Rosenblat 2018, Wood et al. 2019). For instance, whether it is deciding matching of payouts and incentives, receiving orders based on geo-location and customer rating, or facing penalties, algorithms have implications on the working conditions of platform workers. While these implications lead to large-scale matching of consumers with the service providers, efficient organisation of economic activities remotely, and standardisation of business processes, these are also leading to worker dissatisfaction with the performance evaluation using ratings based metrics, opaque decision making by algorithms leading to unclear compensation mechanisms, and work dismissals.

The challenge lies in the complex, inscrutable, and incomprehensible nature of the algorithmic systems which are often referred to as 'black box' (Pasquale 2015). From a philosophical standpoint, the lack of transparency surrounding algorithmic management raises profound concerns. How knowledge is acquired and understood within algorithmic systems, particularly concerning that algorithmic systems wield significant power in shaping various aspects of people's lives, including employment opportunities and income. Thus, it becomes difficult to understand the logical explanation behind any algorithmic decision. In other words, without transparency, there is a lack of necessary insights into how algorithmic systems operate. While the workers are unable to understand the rationale behind algorithmic decisions that affect their livelihood, the policy makers are unable to assess its impact on workers, businesses, and economy at large. The following recommendations aim to address the aforementioned challenges.

## Recommendations

### 1. Explain Allocation of Work

Allocation algorithms are responsible for assigning tasks to platform workers by matching market demand and supply. These algorithms use parameters like location, acceptance rate, cancellation rate, customer ratings and overall performance of workers to distribute tasks. Platforms should provide explanations in simple language to the workers about their performance evaluation, and its impact on work allocation to the workers. This would enable workers to understand the determinants of their work opportunities, and help them to evaluate the fairness in the work allocation process of the platforms.

### 2. Provide Transparency on Calculating Workers' Compensation

Platforms should clarify criterias for calculating workers' compensation that may include total invoice payments, base rate, variable pay, commission of the platform, subscription fee, surge pricing, bonuses, waiting charges, incentives, and taxes, if any. There is also a need for industry-wise standardisation of terminology to prevent ambiguity and mitigate any instances of algorithmic wage discrimination. Digital platforms work in an ecosystem that also involves relevant traditional businesses, and entities in the unorganised sectors. Thus, standardisation of wages should be established across the sectors where digital platforms are operating, and a parity wage should be maintained across the sector ecosystem.

### **3. Inform Data Handling Practices**

Platforms use the workers' data to run businesses efficiently through algorithms. Thus, platforms should offer transparency, and portability of workers' data to enable individual's control over their data. The General Data Protection Regulation (GDPR) in Europe sets certain standards for responsible handling of such personal data (Silberman and Johnston 2020). As of today, 137 countries have adopted some legislation to protect data privacy of individuals (UNCTAD n.d.). The G20 can encourage wider adoption of these personal data protection principles through legislative efforts, promoting trust and security in the digital age.

### **4. Humanise Grievance Redressal**

Algorithmic grievance redressal mechanisms like online forms and chat bots could be insufficient and liable to system-generated errors (Barbic et al. 2021).. Thus, grievance redressal mechanisms should undertake a combination of algorithmic and manual processes that involve human intervention and physical outreach like helplines and local offices for addressing grievances to cater to the diverse needs and preferences of workers, especially for complex or sensitive issues. Grievance handlers should also be equipped to handle worker complaints effectively, understand the nuances of algorithmic decision-making, and provide empathetic support to workers.

### **5. Audit Algorithmic Systems**

Establish regulations for periodic internal audits of algorithmic systems used in digital platforms. These audits should specifically focus on identifying potential sources of bias with special attention to machine learning algorithms, which may evolve and adapt over time as more data is fed into them (Barbic et al. 2021). Audit findings can be used to drive

continuous improvement in algorithmic systems and take corrective actions to improve the fairness and accuracy of their algorithms.

## **6. Institutionalise Framework for Social Dialogue**

Institutionalise a legal framework at the country level for social dialogue through bi-annual consultations between platforms, workers and government in line with ILO's tripartite social dialogue mechanism (ILO, 2013). This should serve as a basis for collective bargaining enabling workers to voice their concerns, provide feedback and encourage the development of participatory algorithms that involve workers in the design and implementation of algorithmic systems.

## **7. Increasing Social Protection Coverage through Innovations**

Access to social security benefits is a major challenge for platform workers as they are not covered in the social protection systems linked to standard employment. Government should extend and facilitate social protection schemes to platform workers through contributions by platforms as well. For example, BPJS Ketenagakerjaan, a public entity in Indonesia extending social security to platform workers. BPJS Ketenagakerjaan collaborates with the major digital platforms like Shopee, Grab and Gojek to extend a joint support to the workers in getting access to these benefits (Nisaputra 2023 and Afifa 2017).

## **8. Promote Fair Competition among Platforms**

Platforms use algorithms to leverage big data about demand and supply that creates market domination over the local businesses, this may lead to monopolistic or oligopolistic market conditions. There is a need to take measures to prevent unfair



practices such as price fixing, market manipulation, and potentially unfair exclusionary practices using algorithmic systems. There is a need for designing more ethical algorithms serving the market needs. This can be done by encouraging market competition as competitiveness brings price corrections, and value generation for all the stakeholders. In a newly launched initiative by the Government of India, Open Network for Digital Commerce or ONDC encourages platforms to adopt interoperability standards allowing platforms to communicate between each other and help foster competition based on quality of service (PIB 2022).

### **9. Utilise Open Data for Public Good**

Advocate for policies that encourage digital platforms to share aggregate data with relevant government agencies, researchers, non-profit organizations, and community groups for shared value gains through public good. For example, Namma Yatri, a mobility platform built an open data dashboard that provides real-time insights on demand and supply of rides (Namma Yatri 2024). While drivers can earn more in peak-demand areas and peak-time hours, customers can plan their trips accordingly. Policymakers and urban planners together can leverage such real-time and historical data to implement evidence-based policies that could enhance urban mobility, reduce congestion, and prepare for a multi-modal transportation experience.

### **10. Ensure Equal Remuneration for Equal Work**

Policy makers should encourage platforms to develop mechanisms to ensure equal remuneration for equal work in-spirit of ILO Convention number 100 (ILO n.d.). Platforms should ensure algorithms do not generate any discrimination based on the identity of the worker, and remunerate fairly for the work done taking into account



industry standards and platform-specific dynamics. Platforms should be encouraged to leverage data analytics and economic modeling techniques to analyze market dynamics, and labor trends.



## Scenario of Outcomes

The objective of the T20 Brasil policy recommendations is to enhance transparency, and fairness in the algorithmic management of work that could help in promoting sustainable livelihoods and businesses in the platform economy. As a result of the implementation of the above policy recommendations, policymakers can expect the following outcomes:

- **Building Trust through Technology:** Transparency in algorithmic management would help build trust between platform businesses and the workers, thus, ensuring a long term sustainability of the system.
- **Economic Benefits of Market Competition:** Prospering of the platform economy in a competitive market environment across the G20 countries could result in higher economic growth and sustainable livelihood opportunities at a large scale.
- **Rise of Ethical Algorithms:** Platform businesses have brought innovative solutions to solve some of the major problems in urban cities. As the platform economy matures on the basis of such policies, we could see innovations in making ethical algorithms by platform businesses that incorporate principles of fairness, and transparency, contributing to an inclusive digital ecosystem.
- **Using Data for Public Good:** Use of open data for public good outcomes for strengthening digital public infrastructure.

The policy recommendations are based on keeping the perspective of gig workers and the livelihood generation value of the algorithms. However, the recommendations do have following limitations, as well as trade-offs.

- **One Size does not Fit All:** Platform economy is an ecosystem comprising a diverse set of platform businesses. Policy recommendations would require contextualisation as per the type of platforms, and the sector of its operations in G20 countries.
- **Additional Investments Required:** Platform businesses and government may face financial challenges in implementing these recommendations due to additional investments required to build algorithms that could comply with such policies. As an alternative, G20 member countries could choose to implement the recommendations gradually in a phased manner.
- **Market Competition:** Platforms consider data and algorithms as an important tool for the survival of their businesses (Hagiu and Wright, 2020) Thus, having algorithmic audits could make platforms raise concerns related to limiting their efficiency gains, and the freedom to innovate.

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