

SIGNATURE VOLUME - EDITION 5 | MAY 2023

# Empowerment or Exploitation

**Global Perspectives  
on Women's Work in  
the Platform Economy**

*Edited by Sabina Dewan and Kaushiki Sanyal*



## Acknowledgments

This signature volume, part of a regular series curated and edited by the JustJobs Network, seeks to provide varying perspectives on the opportunities and challenges that technology, particularly digital platforms, poses for women's work. We are grateful to the International Development Research Centre, Canada for their support of its production.

The JustJobs Network would like to thank all the contributing authors for their insightful essays. We are grateful to Raghav Chakravarthy, Devesh Taneja, and Venkatesh Bilvam for helping with data, insights and infographics. Venkatesh and Tulika Patel are responsible for this volume's thoughtful assembly and poignant design. Our thanks to Shreya Ramnath for her valuable editing support.

## How to cite this report

Dewan, S., & Sanyal, K. (Eds.). (2023, May). Empowerment or Exploitation: Global Perspectives on Women's Work in the Platform Economy. JustJobs Network. [https://www.justjobsnetwork.org/files/empowerment-or-exploitation-global-perspectives-on-womens-work-in-the-platform-economy\\_may-2023.pdf](https://www.justjobsnetwork.org/files/empowerment-or-exploitation-global-perspectives-on-womens-work-in-the-platform-economy_may-2023.pdf)

# Empowerment or Exploitation?

## Global Perspectives on Women's Work in the Platform Economy

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*Edited by Sabina Dewan and Kaushiki Sanyal*

# Foreword

The “future of work” is a popular catchphrase that describes the frenetic obsession with trying to prepare for an uncertain future. Yet too often we fail to learn from past mistakes, or to address the weak fundamentals of today. We have become accustomed to trying to build strong economies on weak foundations. Nowhere is this more obvious than in the world of work where growing precarity is accepted under the guise of flexibility, efficiency, and progress.

This is why the JustJobs Network has always focused on the fundamentals of work — even in this era of rapid, large-scale change.

Digital platforms are increasingly becoming *the* sites for the global and local exchange of goods, services, and information. Labour platforms and e-commerce platforms are subsets of the larger platform economy. They rely on human labour for the production of goods, or the provision of services, to consumers; a digital interface mediates this relationship between the consumer and the provider of the good or service. This new emerging ecosystem of digital work is profoundly restructuring labour markets.

Across the globe, a growing contingent of workers are relying on these labour and e-commerce platforms for income. On the face of it this seems like a welcome development, especially in the Global South where job creation has not kept pace with swelling youth populations; where a large share of workers are in informal employment, beyond the purview of labour regulations and protections; and where women, often constrained by socio-cultural norms and a disproportionate burden of household work and care responsibilities, need flexibility to participate in the labour market.

But a closer look beneath the surface of this platform-mediated work reveals a different picture. Labour platforms provide “gig work” – that is, they break what was traditionally one job into smaller tasks and spread them around more workers. Understood this way, *more gig work* is not the same as *more jobs*.

The notion that this form of work provides a path for workers in informal employment to formality is flawed. Gig workers that are considered to be self-employed contract workers, and the digital entrepreneurs that produce goods to sell through e-commerce platforms, are beyond the purview of regulations including labour and social protections; this is the very definition of informal employment. As the incidence of gig work and digital entrepreneurship rises, so will informal employment.

Finally, many believe that the seemingly flexible world of platform-mediated work will create more opportunities for women. But merely bringing more women into the labour force does not improve gender equity nor does it harness the benefits of female labour force participation. Realising these goals is equally contingent on whether the work leads to better economic outcomes and empowerment for women. Whether the quality and conditions of work are optimal to utilise the full capacities and potential of women and provide pathways for professional growth are all critical considerations if we want to reap the economic and social benefits of women’s economic participation.

On these dimensions, gig work falls short. Evidence suggests that online labour markets are replicating many of the same offline biases that have long led to suboptimal employment outcomes for women. Nearly every essay in this volume, documenting experiences of women in the platform economy from across the globe, underscores this message.

So where do we go from here? The role of policy and regulation is key. The fear that regulation will stifle business innovation and progress often prevails over the prioritisation of workers that power the global economy. In this, the vital contributions and potential of women workers are often neglected and underestimated even more. As the platform economy continues to evolve, the JustJobs Network is mindful of how this new paradigm affects the opportunities and outcomes for women. But there is a need to also consider how policies and regulations at-large account for gender equity and empowerment. This is the central aim of our soon to be launched Centre for Gender Analysis.

Good, effective regulation *will* prioritise public interest accounting fully for commercial interest too. A strong economy can only be built where the foundations of the world of work are solid. We must embrace this as the most important principle when the world confronts the unprecedented challenges posed by technological transformation, climate change, shifting demographics, global pandemics, and other major forces reshaping our world.



A handwritten signature in black ink that reads "Sabina Dewan".

**SABINA DEWAN**  
President & Executive Director  
JustJobs Network

# Executive Summary

Although the platform economy is a relatively new phenomenon, it is abundantly clear that it is profoundly transforming the world of work. Given impetus by the COVID-19 pandemic, the gig economy has witnessed exponential growth, especially in developing countries, where estimates suggest that the share of gig workers can range from five to as high as 12 percent.<sup>1</sup> An increasing number of people are joining the gig workforce; a seemingly attractive option for women seeking flexibility alongside earning opportunities.

Considering women are disproportionately burdened by existing gender disparities, what is their experience of platform work? Do policy, platform design, and institutions enable women to reap the benefits of the digital economy, or do they further entrench exploitation? Does technology facilitate empowerment, or erect new gender-based barriers? This volume brings together essays analysing different aspects of work mediated through the platform economy—including e-commerce, location-based and online-based work—through the perspective of gender across different geographies. It explores if and how the platform economy furthers women's empowerment and looks at the ways in which platform work can be made more equitable and inclusive.

The digitally-mediated platform economy harbours the potential for improving female labour force participation. This volume begins with a typology to understand the diverse landscape of platforms and how women engage in income generation through digital labour and e-commerce platforms. However, while low barriers to entry, flexible working hours, and the promise of higher earnings facilitate women's entry, one must ask: does access alone translate into improved livelihoods, greater autonomy, equal opportunity and greater empowerment? Evidence from across the world points to the fact that platforms also *reinforce* gender stereotypes relating to occupations, the burden of unpaid household work, and the pricing of services. Women are disproportionately affected, often compelled to juggle multiple jobs to earn a living.

Donhathai Sutassanamarlee's essay explores this aspect of the platform economy in Thailand by building on the famous fox-and-hedgehog analogy. In Thailand, digital platforms provide women access to a wide range of flexible work opportunities, giving rise to a new kind of digitally-savvy, multifunctional fox—individuals who utilise online platforms to diversify their livelihoods. Worker welfare, however, takes a beating with rising multifunctionality, with women living lives of significant economic precarity and struggling to achieve a healthy work-life balance.

The debilitating impact of platform work on women's welfare is not confined to Thailand. The story is not dissimilar in Sri Lanka, where the much-touted promise of flexibility of platform-mediated work also has disadvantages for women. Ayesha Zainudeen and Anha Adhlee find that while flexibility is a key motivator, it also results in women working below their skill levels, impacts career progression and earning potential, and has them bearing the double burden of paid work and care work in ways that may affect their wellbeing.



Indeed, the challenge of unpaid care work has global resonance. Megan Ballesty and Ramiro Albrieu find that women's experiences are similar in Latin America, despite a lower prevalence of gig work than in Asia. The platform economy neither meaningfully diversifies work opportunities for women, who lack the skills, resources and time to capitalise on available opportunities in the digital realm, nor does it facilitate their entry into traditionally male occupations. Additionally, exploitative work conditions, discriminatory practices embedded into platform design, and loose labour regulations make platform work particularly perilous for women.

How does technology affect women's labour force participation? Widely assumed to be gender-agnostic, digital platforms are expected to level the playing field for women. This assumption is challenged in Angeline Wairegi's essay, which analyses the macroeconomic trends in women's participation in the African labour market. She demonstrates how women's participation on platforms in African countries is constrained by limited access to the internet and low connectivity. Wairegi finds that women are either in mismatched occupations, or concentrated in occupations that have lower levels of formal employment. Not only are women relegated to specific gendered occupations on platforms, education itself is gendered. Limited access to skilling and low demand for women in high-skilled occupations means that women risk being left behind with inevitable technological advancement.

Women's empowerment is also inextricably linked to platform design itself. In India, in which a booming platform economy absorbs many women otherwise reluctant to join the traditional labour market, Anita Gurumurthy and Anuradha Ganapathy examine the condition of women who participate in the digital economy as small scale entrepreneurs. Based on data collected from select enterprises that provide women entrepreneurs with a platform, the authors find that women continue to face technological, financial and social barriers rooted in the design of the platforms. Importantly, platforms that are mission-driven as social enterprises or modelled as co-operatives, which focus expressly on reducing power asymmetries between the owners of the platform and its users, are most responsive to gender-related challenges.

Like design, platforms' marketplace models and business strategies also inform women's empowerment. Aditi Surie's essay examines the policies that platforms enact to make the space more inclusive for women. Advocating for a recognition of the diversity among platforms, the essay describes how different platforms allow women different affordances and create varying types of precarity. The author uses data gathered from interviews with the management teams of firms to show that platforms vary in their efforts at creating a gender-affirmative ecosystem depending on some key factors: their size, whether they are managed, lightly managed or unmanaged, and their stage of growth and model.

Two essays employ case studies to cast light on women's experiences with the platform economy in India. Chinar Mehta, Usha Raman and Payal Arora use a gender lens to study a recent phenomenon in sanitation work – that of private intervention in the waste management process. Using the case study of a start-up in waste sorting and recycling, the essay examines how technologies used in such spaces affect women's work. Crucially, while these avenues can help introduce greater formality into the sector, sometimes leading to better social security and potentially better working conditions, the essay finds that gendered division of labour in sanitation work persists, particularly in roles that demand technical, often digital, literacy and competence.

This gender lens is also applied by Shahana Chattaraj, Jacob Kohn and Rushil Palavajjhala, whose essay sheds light on how new opportunities and mechanisms for economic participation for women adapt to, and reproduce, existing gender norms. Using the case study of *Bandhu*, a digital platform that provides migrant workers with location-specific information on jobs and housing, the essay demonstrates how gender-based labour market segmentation as well as gender relations within households and communities shape women's participation. The incentives that drive women to engage in economic activity can range from income to social returns within the gendered contexts of their communities. Women's experiences with *Bandhu* also illustrates the importance of a human interphase to technological interventions.

Given the opportunities and challenges of the gig economy highlighted in the other essays, it is clear that effective regulation is key. Maintaining a fine balance between viability of the platform business model, the economic and social needs of workers, and enabling the flexibility and autonomy that makes gig work attractive, is a mammoth task. Most countries are struggling to regulate the sector by including the gig workers within existing definitions of employees or creating new categories, or trying to extend coverage to self-employed digital entrepreneurs and gig workers. The last essay by Kaushiki Sanyal and Perna Seth explores the challenges of regulating the sector through a gender lens, maps some of the current legal frameworks in select countries, and recommends possible pathways to a more gender-inclusive regulatory framework.

This volume spotlights Mark Graham and Anjali Krishan's essay that summarises and reinforces many of the findings across the essays found here. They underscore the fact that while there is heterogeneity in the experience of platform work, platform jobs are not inherently empowering.

The writing is on the wall: Digital platform-mediated work is here to stay, with platforms proliferating, scaling up with extraordinary speed, and reshaping labour markets. It is vital to acknowledge, however, that their growth is also contingent on the workers that power them. On the face of it, different stakeholders – workers, governments, and firms – seem to have conflicting interests. In reality, all these actors have a stake in ensuring that social and economic benefits accrue to workers and their families in order to maintain the growth of the platform economy.

<sup>1</sup> Augustineraj, R., & Bajaj, S. (2021). *Unlocking the Potential of the Gig Economy in India*. Boston Consulting Group.

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# Deconstructing the Platform Economy

A Typology

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From how we buy groceries and hail a cab to how we access household services, technology is transforming the way we live and work. Much of this new world is mediated by platforms -- digital interfaces that connect consumers to providers of goods, services, and information. A subset of platforms facilitate transactions that rely on the service provider's labour value. These are referred to as *labour platforms*. Some *e-commerce platforms* that allow individual producers of goods to generate an income by selling their wares through the digital marketplace also capitalise on direct human labour. Increasingly, individuals are turning to *social commerce*, i.e. the use of social media platforms to sell goods and services.

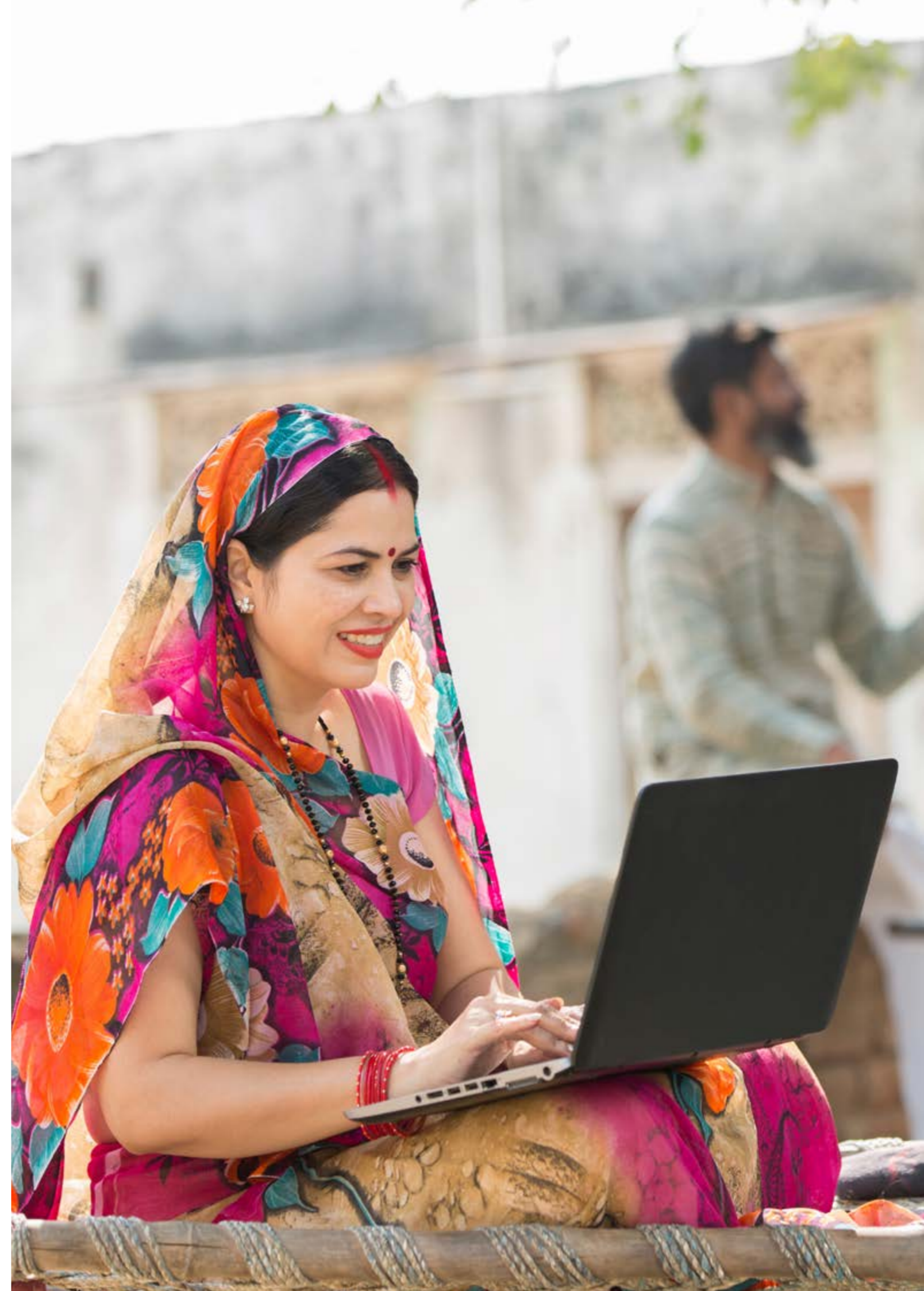
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The platform economy is an economic system built on the basis of digital platforms. These platforms use a digital interface to connect individuals, businesses, and resources to enable the exchange of goods, services, and information. Digital platforms are disrupting existing business models to form a new architecture for the global economy. In the process, they are restructuring labour markets and upending traditional employment relationships.<sup>1</sup>

The platform economy is often treated as a monolith when in reality there are many different kinds of platforms. Only a subset of platforms facilitate transactions that rely on the service provider's labour value. These are referred to as *labour platforms*. These can broadly be classified into cloud-based platforms where the service is provided remotely, or geographically tethered location-based ones. Some *e-commerce platforms* that allow individual producers of goods to generate an income by selling their wares through the digital marketplace also capitalise on direct human labour. Increasingly, individuals are turning to social media platforms to sell their goods and services; these are called *social commerce platforms*.

This typology attempts to provide a broad categorisation for different kinds of digital platforms specifically highlighting the ones where business models are based on the direct application of human labour. Growing cohorts of workers are using these labour, e-commerce, and social commerce platforms as means of income generation (see **Figure 1**).

## A comparison of typologies

In developing this typology, other typologies proposed by the Fairwork Foundation, that of Florian A. Schmidt for FES<sup>2</sup>, and the approach adopted by the Organisation for Economic Cooperation and Development<sup>3</sup> were looked at.

The Fairwork Foundation hones in on working conditions of workers in the digital labour economy. Given the limited, albeit important, scope of their work, they adopt a two-way bifurcation of online digital labour platforms –

## Location-based platforms

### Cloudwork platforms

They define digital labour platforms as those that “use digital resources to mediate value-creating interactions between consumers and individual service-providing workers, i.e. that digitally mediate transactions of labour.”<sup>4</sup>

Schmidt<sup>5</sup> looks at a broader categorisation of the platform economy. While his focus is on digital labour platforms, he studies them as a part of the larger commercial platform ecosystem. Within this ecosystem, he divides the digital labour platforms into location-based and cloudwork platforms. These are further divided in the categories given below:

### Cloud work (web-based digital labour)

1. freelance marketplaces
2. microtasking crowd work contest-based
3. creative crowd work

### Gig work (location-based digital labour)

1. accommodation
2. transportation and delivery services (gig work)
3. household services and personal services (gig work)

In contrast, the **OECD approach** does not give one method of categorising the digital platform economy. They suggest different types of broad and narrow typologies along which the platform economy can be categorised. While functional typologies like those followed by Fairwork and Schmidt give an overview of what a platform does and how, for a more detailed analysis, the OECD methodology recommends applying multiple typologies to get a finer compartmentalisation of platforms. These typologies should be decided based on the focus area and policy questions of that particular context. Some of the narrow typologies suggested by the OECD include the types of users on the platform, revenue sources of the platform, medium of work delivery, whether the work is capital or labour intensive, etc.<sup>6</sup>

## Women and digital labour

Five dimensions of platform work are key to assessing the opportunities and challenges of this form of work for women.<sup>7,8</sup>

**Flexibility:** When it comes to work, women value flexibility in *when* and *where* they work.<sup>9,10</sup> Location-based gig work enables women to choose when they work, though not where they work. E-commerce, social-commerce, and cloud-based gig work also let women have flexibility over where they work.

First, many women value flexibility because it enables them to balance income generation with the often disproportionate burden of household responsibilities that falls to them. Research suggests that women's work intensity in platforms is lower than that of men<sup>11</sup> perhaps pointing to the time poverty they are already confronted with. Second, safety, exploitation, poor conditions of work on the one hand, and patriarchal norms that would rather see women at home than in public spaces on the other, are among the factors that drive women's preference for home-based work. Third, there are spatial and mental implications of merging home and work spaces. If the promotion of gig work or e/social commerce comes at the expense of addressing these underlying concerns, then platform-mediated work will continue to fuel, or perhaps even exacerbate, the same biases that women experience offline.

**Autonomy:** Flexibility and autonomy are often conflated in public imaginations when assessing platformised work. In the hierarchy of autonomy, e-commerce and social commerce offer the highest degree of autonomy. This is followed by web-based gig work; and finally location-based gig work. In all these cases, workers are self-employed, but they are subject to the standards and norms; rating systems, and in many instances, prices set by platforms. Women tend to participate in more ‘feminised’ tasks on platforms<sup>12</sup> suggesting the prevalence of norms that still define the roles that women can pursue, or that they see themselves in.

**Income:** Gig work breaks jobs up into tasks. Some workers avail this form of work as a supplement to their full-time jobs or other economic activity, that adds to their bottom-line income. But when this

form of work is a primary activity, workers have to undertake multiple gigs to piece together the income that they might otherwise have in a regular job. In this case, the benefits of flexibility that women prize, are diminished. A lack of regulation means that in many parts of the world, gig work is not aligned to minimum wages.<sup>13</sup> Given that women tend to participate in ‘feminised’ tasks, particularly in location-based work, evidence suggests that these tasks pay less. Women therefore have lower earnings than men.<sup>14</sup>

Costs of inputs and transport in the case of location-based work, also eat into incomes. Moreover, the barriers to entering gig work, and small-scale e/social commerce are low, which leads to an oversupply of labour that can drive down incomes. Finally, this form of work is risky, as self-employment is, but it doesn't always afford the same degree of autonomy. In cases where women are the secondary earners in households, they may be more amenable to undertaking this risk.

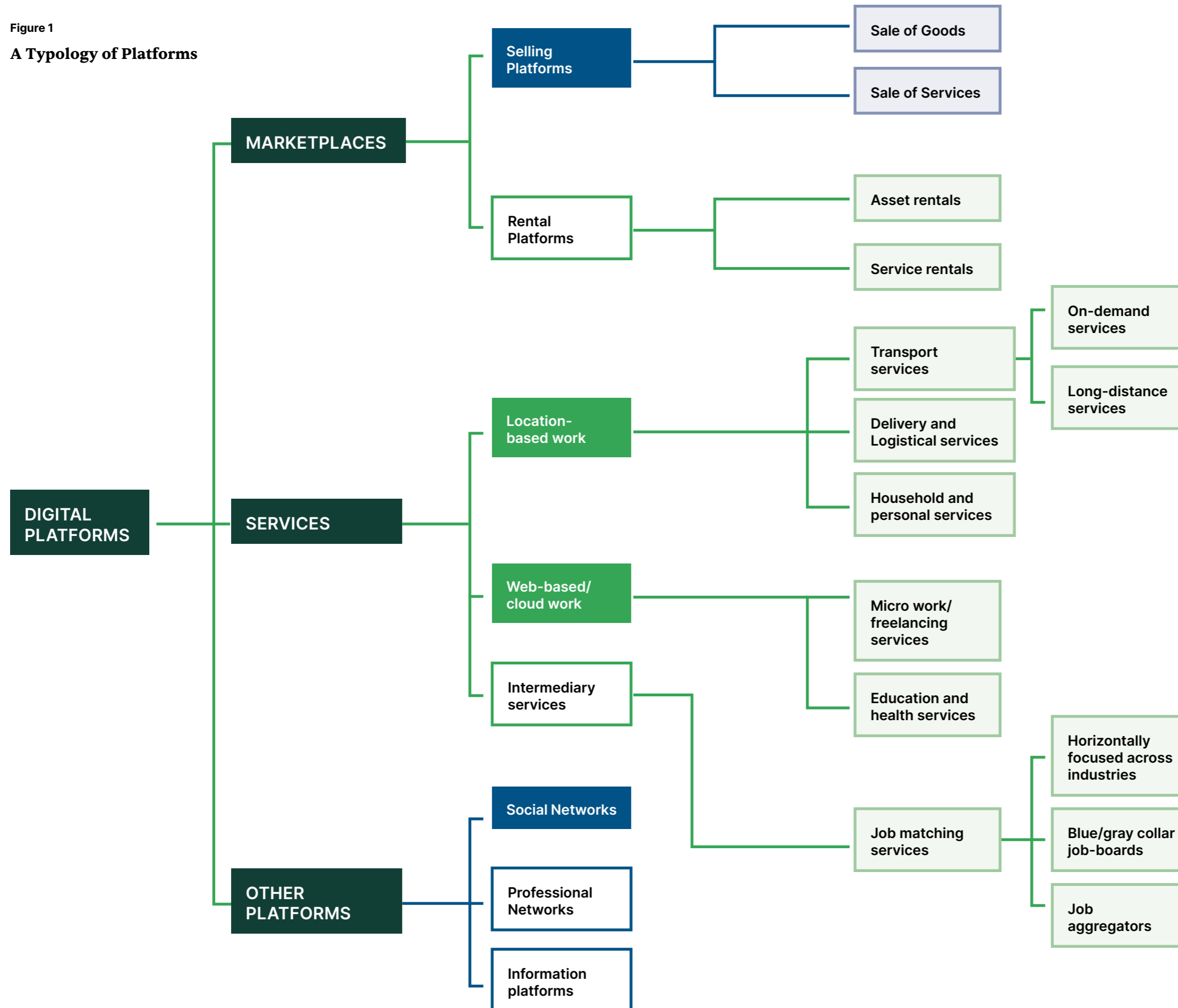
**Entitlements and labour protections:** Workers affiliated with platforms are considered to be self-employed. This means that they are beyond the purview of labour protections and entitlements. As such, these workers are considered to be in informal employment. Since platforms are not employers, they are not obligated to provide welfare benefits. Self-employed workers are responsible for their own benefits; in reality few spend for it.<sup>15</sup>

If higher numbers of women leave regular work arrangements to opt for platform work, largely because it is more flexible, then it is worth acknowledging that not only will the incidence of women in informal work increase, but women will also be left without social security coverage including maternity and health benefits. Women who are already more susceptible to different kinds of exploitation will have access to even fewer protections in these emerging forms of work.<sup>16</sup> Women providing location-based services would be particularly vulnerable. Even when women are working from home, childcare, or opportunities to upgrade their education and skills, still play an important role in their ability to work effectively. Homebased work disincentivises the state to help provide such services, at the same time that there is no employer to provide them.





Figure 1  
A Typology of Platforms



**Selling Platforms**

E-commerce platforms serve as digital intermediaries to link producers, big and small, to markets and consumers. For many women, e-commerce enables market access. For some women, particularly those that may otherwise have a hard time tapping into geographically dispersed demand, e-commerce can provide an important opportunity for income generation. The locationally untethered nature of e-commerce can enable women entrepreneurs to balance income generation with domestic responsibilities in a way that location-specific work does not allow.

**Location-based work**

Location-based gig work requires less specialised skill, technology ownership and internet access than cloud-based gig work. The relatively lower barriers to entry can lead to an over-supply of labour in the sub-sector, driving down wages and working conditions. Women in location-based gig work are concentrated in gender normative occupations.

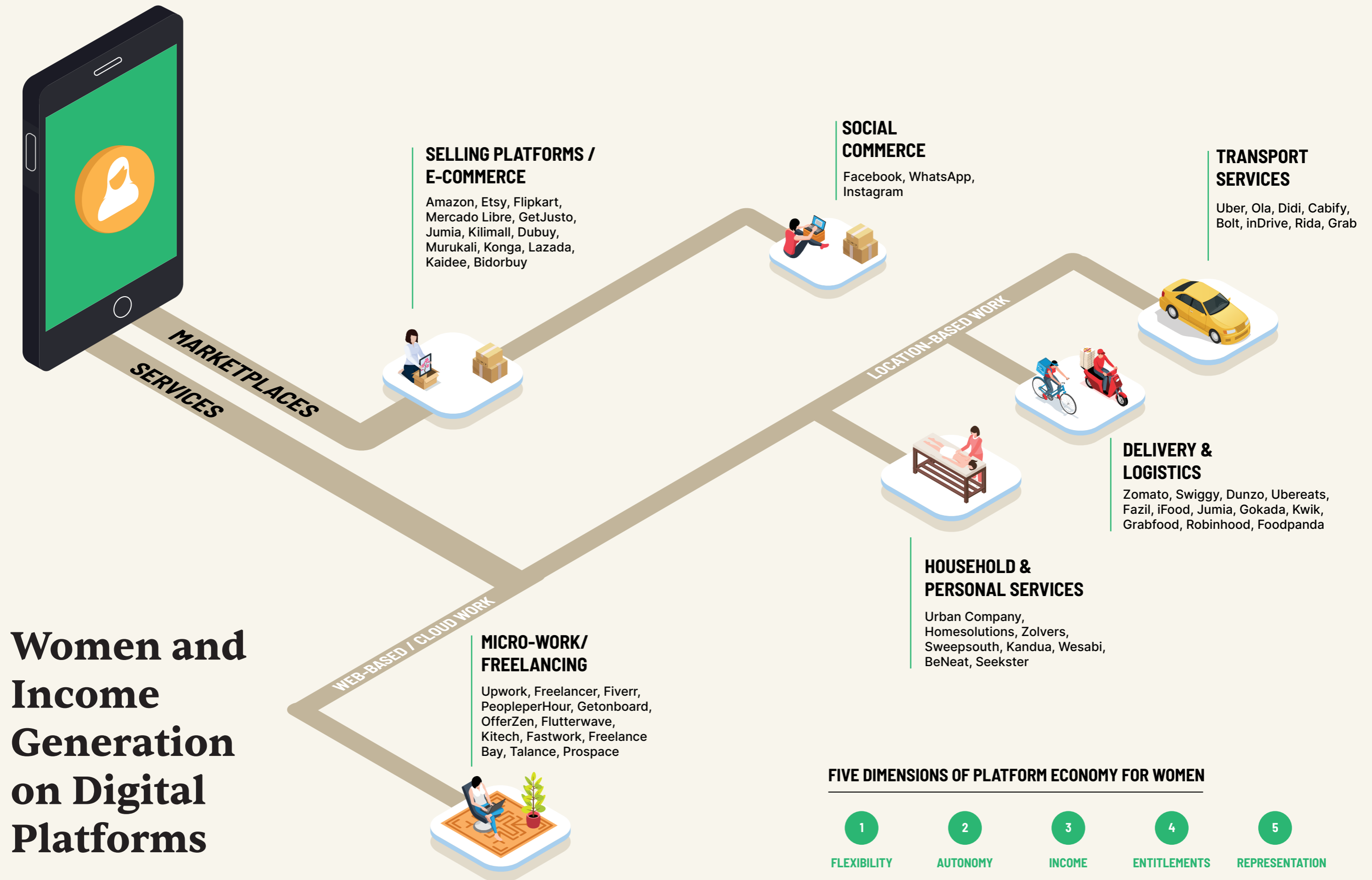
**Cloud-based gig work**

Cloud-based gig work provides labour services remotely via the internet. Services can range from less skilled micro-work such as tagging images to more skilled freelance work such as digital design. Research substantiates the fact that women like this kind of work because the opportunity to work from home and time-flexibility enables them to balance domestic responsibilities with income generation.

**Social Commerce**

Social commerce refers to the use of social media applications such as Facebook or WhatsApp to tap into networks and reach consumers interested in purchasing products or services. Social commerce is highly popular among groups of women that leverage these platforms to run micro-businesses.

# Women and Income Generation on Digital Platforms

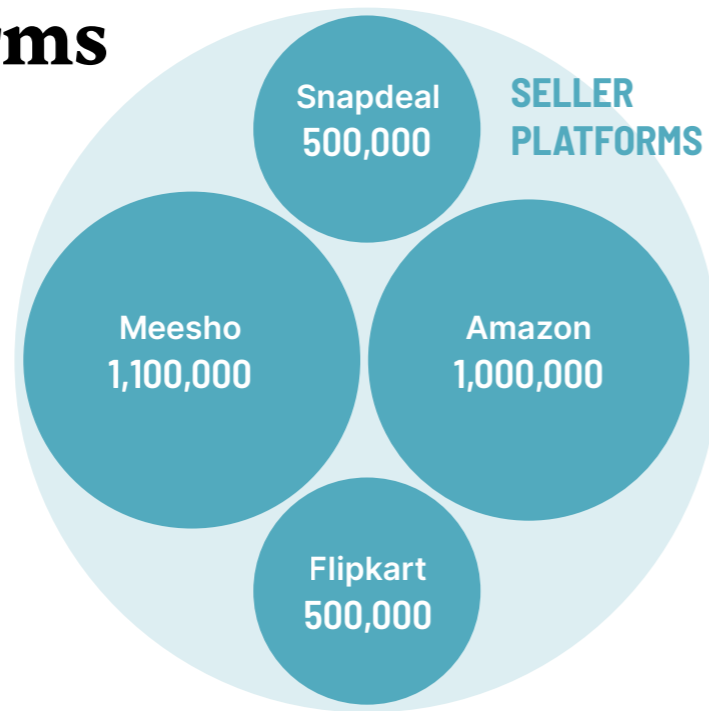


## FIVE DIMENSIONS OF PLATFORM ECONOMY FOR WOMEN

- 1 FLEXIBILITY
- 2 AUTONOMY
- 3 INCOME
- 4 ENTITLEMENTS
- 5 REPRESENTATION

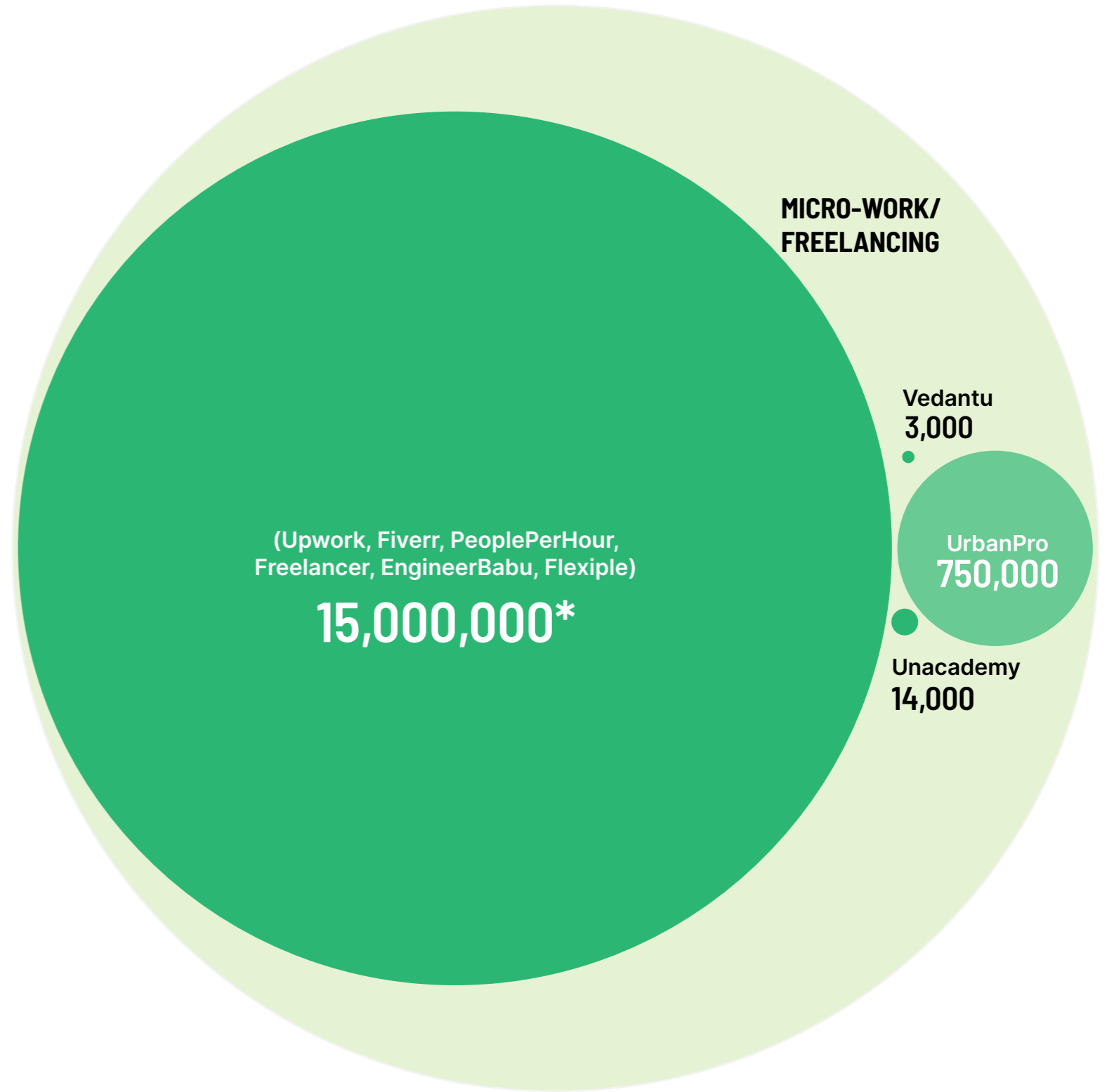
# Scale of some of the largest labour platforms operating in India

## MARKETPLACES



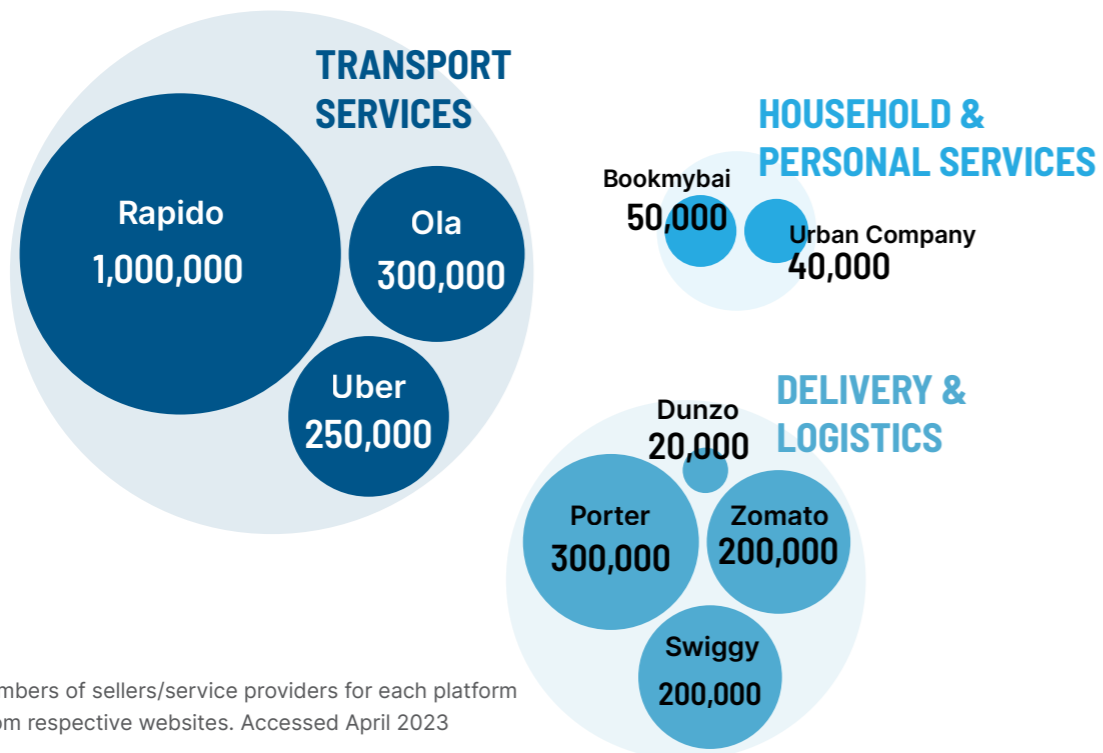
## SELLER PLATFORMS

## WEB-BASED/ CLOUD WORK



## MICRO-WORK/ FREELANCING

## LOCATION-BASED WORK



Source: Numbers of sellers/service providers for each platform adapted from respective websites. Accessed April 2023

\*The Payoneer 2022 Global Freelancer Income Report



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# The Fox and the Hedgehog

Digital Platforms and Livelihood  
Diversification in Thailand

Thailand has witnessed a rise in the platform economy and it has produced workers who are multifunctional and shift between jobs, occupations and sectors with relative ease. However, it has had negative consequences on workers too, especially women. Analysing the findings of a survey data, the essay highlighted that the precarious nature of platform work, lack of social security and labour rights for online gig workers forced people to take up multiple jobs simultaneously. This multifunctionality impacted women more since they were also burdened with domestic responsibilities. They faced difficulty in maintaining work-life balance, potentially affecting their health.

AUTHOR



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SUTASSANAMARLEE**  
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Photo: Donhathai Sutassanamarlee



## Introduction

Development scholar Robert Chambers famously adopted the ancient saying, “the fox knows many things, but the hedgehog knows one big thing” as an analogy to describe the ways in which people secure their livelihoods, comparing those with a single job and specialisation to hedgehogs, and those who maintained a diverse portfolio of activities to foxes.<sup>1</sup> Chambers argues that while full-time employees are ordinarily hedgehogs, most poor people cannot afford to be full-time employees. Poor families tend instead to be foxes, with different household members seeking different sources of livelihood, often in different ways and places, and at different times of the year in order to survive and improve their quality of life.<sup>2</sup> In a developing country like Thailand, such a concept of livelihood diversification has long been used to describe the way rural low-income families often combine farm and non-farm work as a survival strategy.<sup>3</sup>

In recent years, however, a new form of livelihood diversification has emerged, fuelled by the COVID-accelerated rise of the platform economy. The new world of digital work through platforms enables easy access to a wide range of flexible work opportunities, giving rise to a new kind of fox — namely, those individuals who utilise online platforms to engage in a diverse range of economic activities, sometimes in addition to their salaried employment. The days of the hedgehog, the full-time employee with only one job, are in the past, as are the days in which fox-like strategies were largely confined to the rural poor. With an ecosystem of work enabled through digital platforms, it is now common to see a white-collar employee in Bangkok diversify her or his livelihood by offering gig services and/or selling goods on the internet as side hustles.

**While this new world of work allows workers to engage in multiple livelihoods and switch between jobs, occupations, and sectors more frequently and with greater speed, the current trends also point to more precarity in working conditions.**

This study seeks to describe the opportunities and challenges associated with livelihood diversification for the modern-day Thai worker in an increasingly technologically-driven world of work. While this new world of work allows workers to engage in multiple livelihoods and switch between jobs, occupations, and sectors more frequently and with greater speed, the current trends also point to more precarity in working conditions. Importantly, while women may be more likely to adopt this diversification, this research shows that they are also disproportionately burdened by it.

This study is based on primary data collected between July 2021 and June 2022 through 100 surveys and 79 in-depth interviews with workers and entrepreneurs in Thailand. These interviews were part of a larger three-country study titled “Opportunities, Costs and Outcomes of Platformised Home-based Work for Women,” funded by the International Development Research Centre, Canada, and conducted in collaboration by the JustJobs Network, Kenan Foundation Asia (Thailand), Centre for Economic and Social Development (Myanmar), and Nuppun Research and Consulting (Cambodia).

## A new form of livelihood diversification

A livelihood is about more than just earning an income. A livelihood is both dependent on, and is an enabler of, access to a range of social and economic goods such as social networks, public services, and property rights.<sup>4</sup> The fox-like strategy of diversifying livelihoods, therefore, goes beyond mere income diversification, not only augmenting earning, but working as an effective risk management strategy and source of resilience. Hence, factors other than income, such as access to social security benefits, may influence diversification decisions and patterns.

Notably, scholars have long recognised that livelihood diversification is not restricted to the poor. More affluent workers may also choose to practise multiple occupations.<sup>5</sup> The difference, however, is that the poor are usually coerced by their circumstances into diversifying their livelihoods, and are often constrained to low-productivity work, whereas the more affluent enjoy greater agency and choice.<sup>6</sup>

### BOX 1 - MANOW'S STORY

## Gig work as a supplementary source of income

***Her main motivation for doing gig work is to earn extra income and so she can have a backup in case anything happens to her regular day job.***

Manow is a 31-year-old woman who is employed full-time as a writer in a private company, but also does freelance translation, editing, writing, and tutoring work on the weekends. She uses social media platforms to find work and to engage with clients. She had been working as a freelancer for some time but has relied significantly more on digital platforms to find work since the COVID-19 pandemic. Her main motivation for doing gig work is to earn extra income and so she can have a backup in case anything happens to her regular day job. There was a half-year period

when she was relying entirely on gig work after salary cuts brought on by the COVID crisis caused her to quit her full-time job. At one point, Manow considered being a full-time gig worker, but the increasingly intense competition among freelance writers and translators on online platforms meant she was not assured economic security. Despite the skills she had acquired, she was unable to raise the rates of her services because of the competition. Nonetheless, she still recommends that others engage in online work through digital platforms, as she believes that everyone should have a supplementary source of livelihood. However, she notes that she has very little leisure time: she is preoccupied with her full-time job on weekdays and dedicates her weekends to gig work.

Livelihood diversification has characterised Thailand's rural lifestyle for decades. Most farms in the country are smallholdings – parcels of land below two hectares (approximately five acres or 12.5 rai) – whose yields are insufficient for farmers to sustain themselves with. This, combined with the volatility and seasonality of agricultural work, makes livelihood diversification an attractive option. Agricultural workers engage in non-farm work while holding on to their small landholdings and farm livelihoods. However, the precarity of the former means that landholdings serve as a kind of insurance.<sup>7</sup>

To be clear, there is no single uniform pattern of livelihood diversification in Thailand. Nonetheless, a typical pattern depicted in the literature is that of a rural smallholder household in which some family members remain in their hometown to tend the farm, while other members migrate to urban/ industrial areas to do non-farm work. Members may also switch between farm and non-farm occupations at different times of the year and throughout the course of their lives.<sup>8</sup>

Unlike the rural foxes widely described in the literature, the platformised, largely urban foxes of

today can switch between multiple occupations frequently, and sometimes within a single day, possibly within the comfort of their own home. Many types of digital platforms, such as social media, e-commerce, freelance, and crowdwork, enable individuals to take up different ventures at any time, from anywhere, and with relatively little start-up costs. Given its ease and flexibility, the practice of multiple jobholding to diversify livelihoods has become increasingly common, including among middle-class, white-collar workers.

Box 1 describes three case studies of women workers<sup>9</sup> who adopted a range of livelihood diversification strategies.

## Key characteristics of the modern fox

These case studies not only demonstrate the different ways in which people nowadays diversify their livelihoods, but also offer a glimpse into the lived experiences of those who do so. In particular, the cases point to three common characteristics of modern foxes engaged in platformised work. First, they are multifunctional workers who hold concurrent engagements in several, sometimes



## Gig work as a primary source of livelihood

**Online work allows her the flexibility to work anywhere, including by her mother's hospital bed.**

Lookpad is a 44-year-old woman who produces educational content on social media platforms, works independently as an online marketing consultant for small businesses, sells agricultural products online, and is employed part-time at a TV broadcasting company. She started working online about six years ago. Before that, she was employed full-time at the broadcasting company, but decided to quit when her mother became sick and needed

constant care. Although she has a brother, Lookpad is her mother's primary caretaker. Online work allows her the flexibility to work anywhere, including by her mother's hospital bed. When she first started using social media platforms as her main source of livelihood, she struggled with maintaining a work-life balance. She described work as being "24/7", as she would work based on demand. Often, this meant communicating with clients very late at night, leaving her with little time to rest. She has since learned to set herself a relatively fixed work schedule, but notes that time management remains challenging given the multiple gigs and roles she juggles.

very different, occupations. Second, they can switch between jobs, occupations and sectors frequently and quickly. And third, they are often confronted with economic uncertainty, or precarity.

Based on this sample, multifunctionality appears to represent the norm rather than exception when it comes to the profile of a typical worker in the post-COVID era. Manow embodies the most common pattern in the study's sample – she has one full-time salaried job and engages in online gig work/business to supplement her income. Another common route is the one taken by Lookpad, whose livelihood is sustained through a combination of various gig roles. More extreme and less common are cases like Yam's, who engages in gig work despite having two salaried jobs. Remarkably, these multifunctional individuals often do not fit neatly within a singular occupation or industry, and many of their employment statuses could be described as simultaneously formal and informal. Their multifunctionality is not currently captured in national statistics, which categorise workers into single occupations and industries, and by rigid divisions of formal and informal employment.<sup>10</sup>

Related to multifunctionality, the second key characteristic of modern-day foxes engaging in digitally-enabled platform work is that they can shift between jobs, occupations, and sectors

frequently and with speed. With the rise of the platform economy, workers today can switch between different roles and alter their portfolio of activities at a pace never seen before. This is perhaps most clearly evident in the example of Yam, who went from working solely as a flight attendant to working online as a promoter, clothing retailer, and food seller, and now works mainly as a flight attendant, radio host, and promoter – all within the span of less than two years. In the wake of COVID, workers have come to realise that they need to possess the ability to quickly transition between different sources of livelihood in case their main source is suddenly disrupted, as was the case for the examples above and more than half the participants in the study.

But while many workers make use of digital platforms to compensate for labour market precarity, platform work is itself inherently precarious. First, platform workers are not legally recognised as "employees" in Thailand; this prevents them from being protected under labour protection laws, and from accessing the type of social security benefits where employers make contributions – since they supposedly do not have employers.<sup>11</sup> Second, because platform work is easy to enter into, the competition is intense, causing workers' incomes to stagnate or decline over time; this was the case for Manow and many other participants in the study. Third, platform

workers have no control over how the platforms operate. A common complaint among the research participants was that changes in platform algorithms made it harder for customers to see them compared to when they first started working, which in turn led to a decline in their income.

These conditions contribute to poor well-being among those who engage in platform work, while also exacerbating the precarisation of work. Not only do workers need to maintain their full-time employment in order to access labour protections and social security entitlements, but those who do keep both a full-time job and a gig job will not be fully protected by labour laws, since a gig portion of their work is not covered by the law. For instance, the maximum number of working hours under Thai law is eight hours per day and 48 hours per week,<sup>12</sup> but those who perform gig work in addition to a regular day job are bound to exceed this stipulated maximum. Uncertainties that come with intense competition and a lack of control over platforms also contribute to the tendency to overwork. As with all three case studies in Box 1, most modern foxes have difficulties maintaining a healthy work-life balance. Furthermore, the popularity of platform work is driving the

informalisation of labour, as once-formal activities are increasingly outsourced to gig workers. In addition, the widespread recognition that platforms could be used to diversify livelihoods may be undercutting attempts to improve labour welfare. This is reflected in the attitudes and behaviour of most workers in our study, who chose to seek new livelihood sources instead of demanding better conditions from their primary source.

### What about women?

While modern foxes of all genders tend to face similar challenges, women deserve particular attention as they are more likely to engage in platform work and to struggle with achieving a healthy work-life balance. Like many countries, Thailand continues to see gender disparities in labour force participation owing mainly to the fact that women shoulder a disproportionate burden of unpaid domestic and care work. As of 2022, the female workforce participation rate stood at 60 percent (18 million out of 31 million women), while the male rate was 77 percent (21 million out of 28 million men).<sup>13</sup> Preoccupation with household work was the primary reason behind women's

## Bricolage of salaried and gig work

**Apart from doing promoter work on a freelance platform and selling clothes on an e-marketplace, she also sold desserts and snacks on a social media platform.**

Yam is a 31-year-old woman who has two salaried jobs—as a flight attendant and a radio host. These aside, she is an online promoter who finds and performs work through freelance and social media platforms, and occasionally sells clothes through an e-commerce platform. Before the pandemic, she worked solely as a flight attendant. However, she was pushed into seeking other sources of livelihood when COVID-19 severely curtailed air travel. Apart from doing promoter work on a freelance platform and selling clothes on

an e-marketplace, she also sold desserts and snacks on a social media platform. However, Yam indicated that these digital platforms alone would not be sufficient to sustain her livelihoods in the long term, especially given the irregular incomes. Interestingly, her employers are aware of her multiple occupations, both salaried and gigs. Yam believes that COVID has contributed to a cultural shift in the world of work, in which most employers no longer forbid their employees from engaging in other work. At the time of interview, she was content with her work situation, but noted challenges with balancing her many streams of work, especially since her flight attendant workload was gradually growing with the apparent waning of the pandemic.



non-participation in the labour force – cited by 40 percent, or 4.9 million, of the 12.2 million women who were not part of the workforce.<sup>14</sup> In contrast, only four percent, or about 282,000, of the 6.5 million men who were outside of the workforce cited household work as the reason for non-participation.<sup>15</sup> Our study sample also showed that women were likely to spend more time doing care work than men. The case of Lookpad, who assumed the primary caretaking role for her mother despite having a brother, is an example of this trend.

Furthermore, the gender pay gap remains a pressing issue. According to UN Women (2020), the pay gap between men and women in Thailand

**The flexible nature of platform work – especially the absence of fixed schedules and the fact that certain types of online work can be performed entirely at home – blurs the boundary between personal life and work life.**

was 10.94 percent as of 2020, with women earning 89.1 cents to every dollar that men earned. The gap could be partially explained by gender-based discrimination in the workplace;<sup>16</sup> the larger wage penalty for motherhood than for fatherhood;<sup>17</sup> the larger proportion of women in sectors with low wage premiums (e.g. education, social work, agriculture, etc.) and the larger proportion of men who find employment in sectors with high wage premiums (e.g. utilities, transportation, construction, etc.).<sup>18</sup>

Care work obligations drive women to seek greater flexibility in work, as a result of which they may be drawn to platform work opportunities. At the same time, the flexible nature of platform work – especially the absence of fixed schedules and the fact that certain types of online work can be performed entirely at home – blurs the boundary between personal life and work life. Women feel this burden disproportionately, finding it particularly difficult to maintain a work-life balance. Some participants in our study who worked at home recounted the pressures of having to engage in care work while already being at work. Engaging in multiple roles simultaneously in multifunctional ways is especially challenging for women, who must also perform the additional role of caretaker.

## Towards better livelihoods

In summary, the platform economy has given rise to a new kind of workers: those who are multifunctional and shift between jobs, occupations and even sectors with relative ease, speed and frequency, but also face increasing precarity. It is no longer just the rural poor who are forced to adopt a livelihood diversification strategy; increasing labour market uncertainty and the growing precarisation of work are also forcing members of the urban middle-class to diversify their sources of income. Meanwhile, the disproportionate burdens imposed upon women by existing gender disparities are exacerbated by the conditions of platform work and livelihood diversification trends. These findings, in turn, point to the following policy implications, which could benefit all modern workers, especially women.

First, the Thai government should rethink the methodologies it adopts to collect and analyse statistical data. The current practice of singular occupational categorisation cannot accurately capture the realities of today's labour and may lead to poor planning and policies. For instance, the latest Informal Employment Survey<sup>19</sup> claims that workers in informal employment work an average of 41 hours/week, while those in formal employment work an average of 45 hours/week, both considered to be within the acceptable range of number of working hours. However, as this essay has illustrated, such a figure is likely to be inaccurate as the survey does not account for multifunctionality. The same survey also shows that there are more men than women in informal employment – both as a share of all workers in informal employment and as a share of total employment for each gender;<sup>20</sup> but it is unclear whether this accounts for informal employment via online platforms. More generally, since individuals are rigidly categorised by national surveys as

being either formally or informally employed, national statistics on gig workers (and platform workers more specifically) remain wanting, thus constraining the design and implementation of appropriate labour laws and policies.

Relatedly, Thailand's labour laws and social security system are in need of reform. The employee versus non-employee and formal versus informal dichotomies need to be done away with, and all workers should receive equal labour protection and social security benefits regardless of their employment status. Importantly, if workers are able to access protection and benefits through a gig job, they may not be pushed into juggling multiple occupational roles and an excessive workload. This would promote worker welfare, particularly for women.

Third, since work is precarious and the modern worker needs to have the ability to transition from one role to the other, the government should pay increasing attention to the kinds of skills that need to be promoted in the workforce. While specialised technical skills no doubt remain important, transferrable skills may now be more crucial than ever. And as with work opportunities, it is vital that skill development opportunities be accessed in a flexible manner to cater to the needs of women.

It is vital that these more immediate actions be accompanied by sustained efforts to promote gender equity in Thai society. It is highly likely that current work trends will change and evolve, and there is a possibility that the platform economy is replaced by something else altogether. Whatever the future of work, a large number of women will continue to be disproportionately burdened without a broad shift in gender norms and expectations.



## Endnotes

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- <sup>9</sup> Pseudonyms are used for the purposes of confidentiality and anonymity.

- <sup>10</sup> See, e.g., National Statistical Office [NSO], 2023b.
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- <sup>12</sup> Labour Protection Act B.E. 2541, Section 23.
- <sup>13</sup> NSO, 2023a.
- <sup>14</sup> NSO, 2023a.
- <sup>15</sup> NSO, 2023a.
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- <sup>20</sup> *ibid.*, 42.

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# Digitally-enabled Flexible Work for Women

Is it all it's Cracked up to be?

This essay interrogates the commonly held narrative that work flexibility enables women's increased and sustained participation in the labour market. Taking Sri Lanka as a case study, the essay bases its findings on qualitative interviews with 50 women engaged in a variety of digitally-enabled work opportunities, as well as interviews with 11 platform companies offering earning opportunities. It finds that while flexibility is a key motivator for women to join the workforce, it also creates problems such as economic uncertainty, long work hours as women are also responsible for household work, and reinforces mobility constraints.

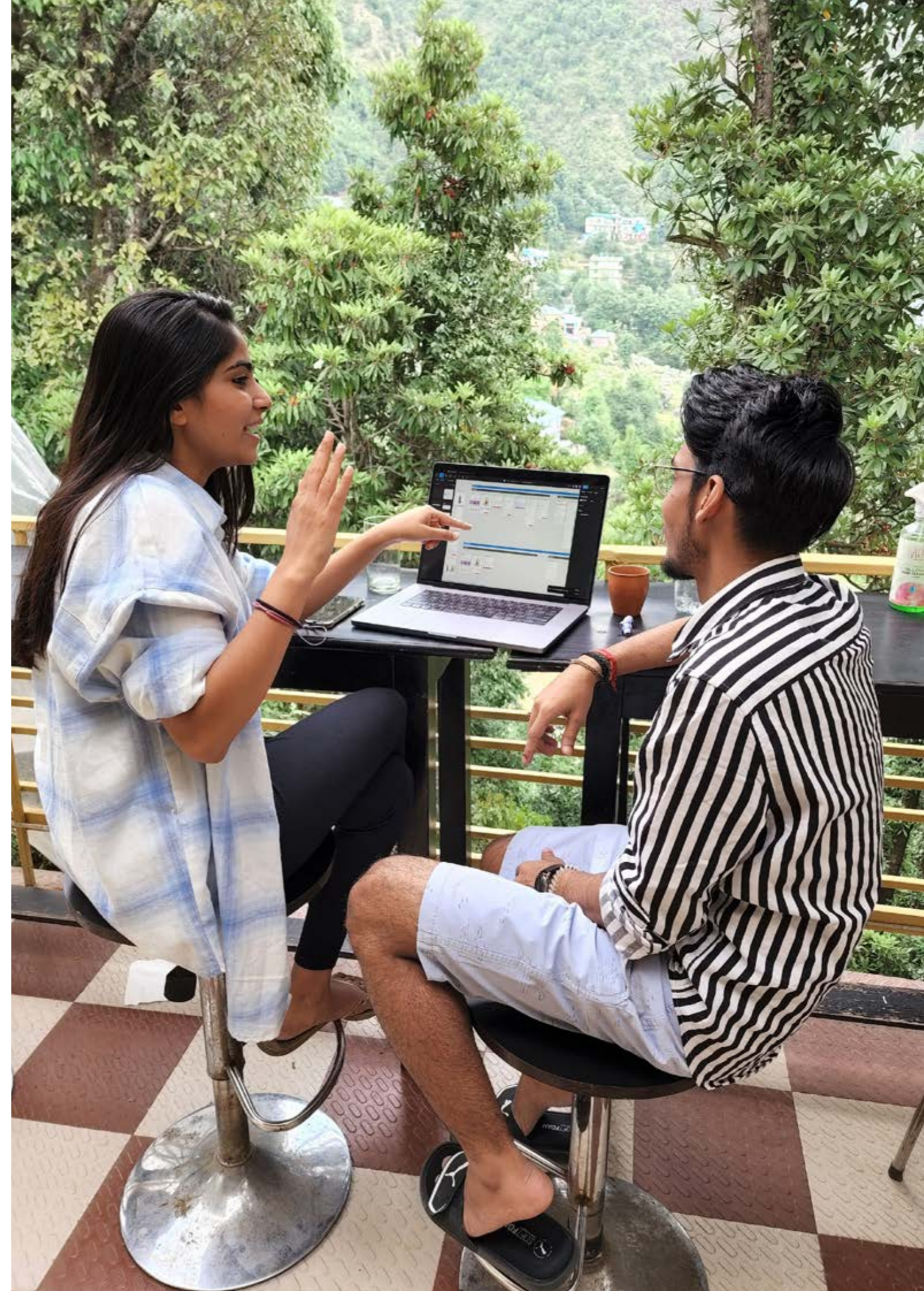
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The technological advancements of the recent decades, including the expansion of the gig economy, have given rise to increasing opportunities for flexible work for both men and women across the globe. Opportunities range from ridesharing to online freelancing to running home-based businesses with the help of social media and logistics platforms. Flexible work arrangements have long been argued to be enablers of women's increased and sustained participation in the labour market. This is particularly pertinent for countries like Sri Lanka, which have tussled with low female labour force participation (LFP) rates over the years. Many have argued that these opportunities are especially advantageous for women, enabling flexibility in terms of time, location, and the conditions of work, allowing for greater LFP and therefore socio-economic empowerment.<sup>2</sup>

The COVID-19 pandemic forced many employers to switch to a remote work setup. Digital businesses (many home-based) supplying essentials to homes flourished. In this manner, the pandemic gave rise to previously unheard-of levels of flexible work opportunities across the globe. It also changed perceptions toward flexible and remote work, almost normalising it, and providing many options for women to (re-)join the labour force.

Against the backdrop of the COVID-19 pandemic, this essay looks at what flexibility means to women who are engaged in flexible, digitally-enabled work in Sri Lanka. It also examines the constraints that women face in engaging in this kind of work, to gain an understanding of what women are giving

up in order to engage in the labour force in this manner.

This study is based on qualitative interviews with over 41 women engaged in various forms of digitally-enabled work ranging from driving on ride-hailing platforms, to providing remote transcription services, to providing online tutoring, and selling home-produced items (baked goods, jewellery, etc.). The sample was largely made up of digitally-enabled micro-entrepreneurs and non-location-based service providers (Table 1), from different age, socio-economic and ethnic groups. Only a small number of women providing location-based services could be included owing to the difficulty locating them; this is perhaps reflective of their prevalence in the population. Other than those providing driving services on ridesharing platforms, most respondents accessed their clients through social media and offline networks, as opposed to sector-specific platforms. A small number of men (six) were also sampled to help understand specifically which aspects of the findings are gendered in nature.

Interviews with 11 platform companies were also conducted, including ride-hailing platforms, online freelancing platforms, and marketplace platforms.

### Sri Lanka's context of women, work and the digital economy

Despite achieving gender parity in education at primary, secondary and tertiary level, Sri Lanka's gender outcomes in economic participation are sub-par. In 2022, it ranked 122<sup>nd</sup> (out of 146) on the Economic Participation and Opportunity sub-index of the World Economic Forum's Gender Gap Index.<sup>3</sup>

Women are increasingly absent from the labour market. They are under-utilised and disincentivised to participate. Sri Lanka has grappled with a low and declining female LFP rate for many years now. Women's LFP has lingered between 30 and 35 percent over the past two decades, compared to men's, exceeding 70 percent.<sup>4</sup> Women who do participate in the labour market have consistently been more likely to be unemployed over time, with unemployment rates of 79 percent in 2021 compared to 3.8 percent for men;<sup>5</sup> young and educated women are among those more likely to be unemployed.<sup>6</sup> Those who are employed are more likely to be in low productivity, low quality jobs, often non-waged, or earning less than men in similar jobs.

Women's lack of participation has been attributed to several factors, including the domestic care burden falling onto women, skill mismatches, and gender discrimination within and outside of the labour market.<sup>7</sup> Furthermore, women are discouraged and restricted from participation by labour laws which limit the number of hours women can work at night, and which restrict overtime work for women; the absence of laws which adequately address sexual harassment is another deterrent.

The absence of labour laws which recognise part-time and flexible work also acts as a barrier, limiting the availability of such work opportunities, which are more often sought out by women for greater work-life balance. Recent data indicates that women in Sri Lanka are twice as likely to engage in part-time work compared to men.<sup>8</sup> As such, those engaged in non-standard employment (including gig workers) are not covered by the legal protections afforded to those in full time employment, and are at greater risk of exploitation.<sup>9</sup> While calls have been made to update the legal framework to enable such arrangements (*Sri Lanka to change laws, 2017; Incorporate flexi-work, n.d.*), little substantive progress is evident to date.

Women's participation in the digital economy has improved significantly since pre-pandemic times. For example, by 2021 Sri Lankan women were only seven percent less likely to be online than men, compared to 34 percent in 2019.<sup>10</sup> However, the digital skills needed to guarantee a meaningful internet experience are still lacking. For instance, 42 percent of women online (compared to 32

## Women are increasingly absent from the labour market. Women are under-utilised and disincentivised to participate.

percent of men) were unable to install an app independently (or at all); 47 percent of women (and 41 percent of men) were unable to set up an account and passwords for a service online; and 80 percent of women online (and 78 percent of men), did not know how to complete a payment or transaction online.<sup>11</sup>

### Flexible work in the digital economy as a way to enable women's participation

Flexible work arrangements provide the worker with the opportunity to choose when, where, how, how much, or with whom to work and what type of work to take on, usually in such a way that it can be accommodated around other daily commitments and personal preferences. For women, this has been viewed as a way to increase and sustain labour force participation across contexts. This is because flexibility allows women to better align working hours with care and other personal responsibilities, enabling them to (re-) enter and remain in the job market, and achieve greater work-life balance. Indeed, the burden of unpaid care work often falls on the shoulders of women in the context of South Asian countries such as Sri Lanka. The platform economy has therefore been viewed as having great potential to enable women's labour force participation in this regard.<sup>12</sup>

Many respondents in this study indicated that flexibility was a key motivator for them to take up digitally-enabled work, whether it be driving on ride-hailing platforms, teaching online, providing remote transcription services, or selling home-made creations through social media. Flexibility is experienced differently depending on various factors including whether the type of work is location- or non-location-based, as well as the nature of the work (baking or reselling); each kind of work affords its own amount of flexibility. Additionally, those of different age groups and degrees of care responsibilities may also experience flexibility differently.

Table 1

#### Primary category of work of female respondents

Digital entrepreneurs	Micro-entrepreneurs	11
	Creative entrepreneurs	7
	Home chefs/food entrepreneurs	7
Non-location-based service providers	Micro-workers / online freelancers	8
	Online tutors	2
Location-based service providers	Transport/delivery/logistic workers	4
	Beauty worker	2
Total women sampled		41

For many women with care responsibilities, such as small children or ageing parents, flexible work allows for paid work to be fit in between care work, thereby optimising their time. It allows them to remain engaged in paid work, and monetarily contribute to the household even after having children.

For those without care responsibilities across age groups, a strong pull factor is the ability to choose where, when and how much to work. This may be to enable them to engage in other forms of work or study simultaneously, or to provide them with a way to monetise a creative passion that they might have whilst holding down a “regular” job. Flexible work options also allow workers to alternate between periods of intense work where they work towards an income target, and periods where they take a break, travel, relax, etc. One online freelancer on a hybrid platform elaborated:

*Then there are certain [freelancers] who are doing it half a month and they have got the money they need to survive for the rest of the month and so they will only do it again next month or they will come looking when the project is over after a few months.*

Being able to work remotely (location flexibility), is advantageous for both women with care responsibilities as well as those without care responsibilities. For the former, the ability to be physically present at home with dependents such as young children is an important pull factor. As one online freelancing mother indicated: “...the fact that I am there and around... I still like that much more than not being there physically... leaving them from nine to five, for hours long on end.” For the latter group, being able to work without having to leave home is seen as advantageous for young women from a social perspective, owing to social norms around women’s mobility: “[My family is] really supportive primarily because it prevents me from going to a 9-5 job ... and even if I get married I can still do it at home,” said a 25-year-old online freelancer in Sri Lanka. From an economic standpoint, savings on transportation costs due to working from home are also valued by Sri Lankan women and men.<sup>13</sup>

For some types of digitally-enabled flexible work the high earnings potential (vis-à-vis regular employment) can be an additional pull factor. Some online freelancers that were interviewed reported

earning up to two-three times the average monthly urban *household* income. Some transportation workers also indicated higher monthly earnings compared to what they previously earned. In this case the earnings potential effectively offset the social stigma, safety and other concerns which generally keep women out of transportation work.

### The bounds and limits of flexibility

The interviews revealed several instances where flexibility was bounded by various factors.

Up to the point of committing to a job or project or an order, the worker has a certain amount of flexibility and choice in terms of whether or not to accept or decline work. But once the work is taken on, and commitments are made, the worker has little flexibility. If the worker fails to deliver on time or fails to meet the customer’s expectations on quality for example, he or she risks losing future work owing to damaged trust and/or poor reviews. This is particularly problematic for women engaged in flexible work, as unexpected disruptions in the household routine (e.g., due to sickness of a dependent) are often expected to be absorbed by women. This is in part due to social norms around the distribution of unpaid care work, but perhaps also because their earnings are seen as supplemental to the household, and they are not committed to working standard hours and jobs. As such, women may have to absorb disruptions by working extended hours, or by compromising on quality of work, undergoing a great amount of stress to ensure the task is completed.

The nature of the relationship with the customer therefore plays a role here. Repeated and direct relationships with the customer are more likely to be bound by trust and commitment. In contrast, for more commoditised products and services such as taxi rides, or those mediated by a platform, the worker might have greater flexibility to reject orders/jobs and decide on when to remain “online” and available for work. The platform plays an important role in mediating, vouching for, and building trust between parties, managing workflows, and responding to unexpected disruptions. Large, automated platforms such as Upwork, Fiverr and others are likely not able to do this. Smaller, local, and less automated hybrid platforms such as PodiJobs, Ik and ReMatics (both offering online freelancing work) as well as PinkDrives (offering lady-driven taxi services for



women and children—usually on a repeat basis) are more (willing and) able to accommodate issues that arise due to the worker’s care responsibilities. This is usually done through direct communication with workers and being able to make a quick substitution from a known pool of workers to get the job done, sometimes even including renegotiation with clients. This is perhaps easier for platforms which are not very large, but which have a specific mandate for enabling women’s participation.

### The challenges of flexibility

However, while flexible work arrangements provide significant opportunities for women to participate in the labour force, especially in the post-COVID context, there are many trade-offs that women must make and challenges they face as a result.

The certainty of regular work and a stable income are trade-offs made for increased flexibility. While platform-enabled taxi driving, or online freelancing, or other home-based businesses, were seen to offer the potential for earnings higher than those from regular jobs, income is not guaranteed. This leaves workers vulnerable at times of crisis, such as the pandemic and the economic crisis that Sri Lanka found itself in thereafter.

The inability of a worker to produce a monthly pay slip as proof of income (i.e., ability to repay), is another trade-off that is made; this acts as a barrier to accessing other services including instance financial services. As respondents indicate, this could be to set up an online business, or build a website, or simply to open a business bank account. The lack of awareness or readiness of financial institutions to serve digital workers and entrepreneurs (especially where there is no tangible asset, like a motor vehicle, equipment, or even a landline contact number), is a challenge to growth, as one respondent indicated:

*But if someone goes to a bank and says, ‘I want to open an online business and make an e-commerce platform like this,’ no bank will give that person a loan. Even if we give a proposal, they will always ask for some kind of collateral. I mean we don’t ask for big loans for someone to build an e-commerce platform, right?*

Given that the law does not recognise flexible work arrangements, women who take up digitally-enabled work and earning opportunities are precluded from receiving the formal benefits and protections afforded by “regular” employment. This can mean having to work odd hours and facing unpaid sick leave days: “It is not like a full-time job where I go and work somewhere even though I



put a sick day I would get paid for that day so, it is bit of a difficult – not a nice ride I would say.” This can put workers in a delicate situation when they cannot afford to miss a day’s earnings.

Trade-offs are also visible when it comes to skilling and career progression. Women in digitally-enabled flexible work were seen to be working below their skill level. An MBA-holding online freelancing mother of two pre-schoolers chose to take on low-cognitive burden work which could be completed in discreet timeslots, like transcription services, rather than work on par with her skill level. Those that are time-poor might be more likely to select low-cognitive burden work in this manner, where earnings are relatively low, and prospects of career progression are limited. In the medium-to-long-term, and on a personal level, this can impact women’s earning potential as well as career progression. This in turn can reinforce gender disparities in earnings. At a societal level, we perhaps need to worry about what this means for the development of expertise and experience among women, and their presence in highly specialised professions, vis-à-vis men.

A related challenge is that women who lack the time to upskill or to develop and execute savvy digital marketing strategies to boost their online business also run the risk of falling behind both men and other women who have more time at their disposal, like those with comparatively lower care responsibilities. Popular freelancing work such as graphic design, website design, etc., sometimes requires workers to be up to date on the rapidly evolving tools and trends. Similarly, as one major e-commerce marketplace platform indicated, the most successful sellers are those who are up-to-date on the new tools within the platform.

The absence of structure and schedule that comes with conventional employment shifts this burden onto the flexible worker. Some may be more capable of structuring their work, setting boundaries and having some kind of self-regulation, while others may not; among the latter, this can have negative consequences as one online freelancing-mom indicates: “I would be with the kids all day and I would work late in the night and again because of that flexibility I kind of forgot that am I doing more than I should be or taking on more than I should be and working... when you take a *nine-to-five* job, at five [o’clock] the job is done... but when you are doing something like

## **The stress and strain of multiple responsibilities of paid work and care-work take a toll on the physical and mental health of the worker. The long-term risk is that women could gradually or eventually pull out of the workforce altogether.**

this [online freelancing] that bell doesn’t go off... I used to do work like even at 12 in the night, one in the morning, two in the morning and that actually led to a bit of a health crisis and as a result I had to take a lot of things off my plate.” Similar sentiments were heard from younger women sans care responsibilities: “You know you are your own boss but at the same time you tend to slave yourself a bit because you want to finish the project as fast as you can, and you want to meet the deadlines.” The stress and strain of multiple responsibilities of paid work and care-work take a toll on the physical and mental health of the worker. The long-term risk is that women could gradually or eventually pull out of the workforce altogether.

The lack of face-to-face interactions was also perceived by respondents as a drawback of remote flexible work. For instance, online teachers mentioned that it could make their jobs difficult and less satisfying simultaneously. It was clear from the experiences of many women that we spoke to that community and relationships are important pillars of support; some had however managed to find this through digital means (groups, collaborations, etc.). Those who lack access to these forms of support naturally find it harder to succeed than others.

## **Concluding thoughts and recommendations**

On the one hand digitally-enabled flexible work opportunities have great potential to engage women in the labour force. On the other hand, this kind of work presents a series of trade-offs and challenges that can constrain women’s participation, not necessarily leading to better economic and empowerment outcomes.

The biases and gender norms seen in the offline setting are often mirrored, sometimes reinforced, in the online setting. Norms and inequities around mobility, the distribution of care work, earning gaps, and deskilling are such examples. The

longer-term effects of women working below their skill levels, uneven distributions of unpaid care work inter alia need to be considered going forward.

In the long term, *sustained* women’s participation in the labour force (especially though digitally-mediated opportunities) will be contingent upon a series of changes including greater investments in digital skills for women, greater institutional recognition of digital workers and entrepreneurs, legal recognition of flexible workers and their rights and protections and, ultimately, tackling the social and cultural norms which place the burden of unpaid care firmly on the shoulders of women.

## Endnotes

- <sup>1</sup> The research reported in the paper was conducted as a part of a larger project entitled *Digital Platforms and Women's Work in India and Sri Lanka*, which examined emerging patterns of digital work and women's engagement with it. The project was funded by the International Development Research Centre (IDRC) of Canada.
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# Breaking Barriers or Building Bias?

Gender Gaps in Latin America's Platform Economy

The essay raises questions about four widely believed benefits of digital platforms for women's workforce participation in Latin America. These include (a) better access to labour markets; (b) breaks gender segregation; (c) improves working conditions in informal sector and (d) flexibility levels playing field for women. Its findings are based on extensive primary and secondary research and show that there are persistent gender gaps in access to skills and resources, which leads to women remaining in certain occupations. Socio-cultural norms which require women to carry the burden of domestic work also impacts women's participation.

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## New technologies, new promises

The proliferation of labour intermediation platforms has significantly changed global labour markets in recent years. By creating digital equivalents of analogue labour markets, the emergence of digital work presents both opportunities and challenges for workers worldwide. As this digital revolution reshapes labour markets, there is an opportunity to manage the transition in a way that promotes greater gender equity. This means ensuring that policies and regulations govern platform design, provide social protections, and address socio-cultural norms, so that the transition to a digital world closes the gender gaps seen in traditional labour markets.

Digital labour is not as prevalent as in Latin America and the Caribbean, as it is in North America, Europe, and Asia; nonetheless, many platforms such as Uber, Cornershop, and Glovo, operate in the region.<sup>1</sup> Approximately nine percent of the region's workforce in country capitals classifies as actively working on digital platforms. Among them, 60 percent consider themselves self-employed, 27 percent salaried workers, 10 percent employers, and the remaining three percent self-classify as family and domestic service workers.<sup>2</sup>

It is important to highlight that Latin America is a region where gender gaps prevail. Women's presence in labour markets is significantly lower than that of men. Following the pattern in the developing world, only five out of 10 working-age women are either employed or seeking employment, as compared to more than seven out of 10 men.<sup>3</sup> In high-income countries, which tend to have greater gender equity, the participation gap between men and women is half of that observed in Latin America. Evidence has linked such low participation rates with the historically higher share of women's responsibilities in unpaid domestic and care work.<sup>4</sup> Analysing labour markets' statistics in the region thus excludes half the working-age female population.

Women who are part of the labour force face particularly challenging working conditions. Female unemployment rates were as high as 12 percent compared to eight percent for men.<sup>5</sup> Moreover, the overall gender pay gap in the region is almost 30 percent (WEF, 2022). On the other hand, informal employment as a share of total

employment<sup>6</sup> is significant for both women and men, representing 52 percent and 54 percent of workers respectively.<sup>7</sup>

Given these deeply rooted inequalities, the promise of new opportunities for women arising from digital labour is compelling. These are related to the potential of platforms to lower barriers to entry into work, offer flexibility and unbiased treatment, as well as enable access to high-skilled jobs and new markets for services. Optimists have connected these features with the possibility of overcoming structural barriers that limit women's participation and the recognition of their contributions to labour markets.

This essay follows from the extensive primary and secondary data collected during a series of research projects studying the future of work from a Global South perspective and a gender-minded approach.<sup>8</sup> It raises four questions about the widely touted benefits of platforms for women's labour force participation and economic empowerment to examine if platforms live up to their promise. It illustrates that working conditions on labour platforms must improve to effectively impact women's empowerment and livelihoods in Latin America. Additionally, the essay sheds light on pre-existing biases that remain unaddressed and continue to perpetuate gender inequity and threaten the prospects of closing gender gaps. Finally, it outlines a set of policy considerations for promoting gender equality in the digital economy and concludes by highlighting the importance of taking a multidimensional approach to gender and platform-based work.

**As this digital revolution reshapes labour markets, there is an opportunity to manage the transition in a way that promotes greater gender equity.**



## Do platforms democratise access to labour markets?

The emergence and growth of digital labour platforms offers promising avenues for reducing transaction costs and information asymmetries, thereby increasing the number of work opportunities. According to Douglas North,<sup>9</sup> transaction costs refer to the costs of operating in a market, including those associated with seeking information, bargaining, and enforcing contracts. High transaction costs for particular goods or services prevent some buyers and sellers from conducting transactions that would otherwise be mutually beneficial and hence hinder the development of markets. Labour intermediation platforms can help reduce transaction costs in the labour market by providing centralised platforms where employers and job seekers can easily find each other, offering detailed information about job opportunities and securing the delivery of work and payment.

Provided they have the necessary equipment and skill set, the entry cost to platforms for workers is generally low. One important form of capital required to thrive in the platform economy is reputational, as built-in incentives encourage workers to grow their online score based on the projects they undertake, the number of hours allocated, and the feedback they receive. The better the reputation, the higher the chances of accessing more and better gigs. This model

can arguably prove beneficial for those facing difficulties finding work in traditional labour markets, such as women, disabled individuals, young people, refugees, and other minorities, who often value the accessibility that these platforms can deliver.<sup>10</sup>

Despite the potential benefits, however, gender gaps remain evident within the Latin American platform economy. While women represent 40 percent of overall labour markets in the region,<sup>11</sup> evidence suggests their participation share drops to 30 percent in the online platform segment.<sup>12</sup> There are several factors that can help explain this gap. First, there are unequal skill sets between genders. According to UNESCO,<sup>13</sup> in Latin America, men are more likely than women to acquire basic knowledge across the whole range of Information Communication Technology skills and competencies that are necessary to participate in an increasingly technologically driven world of work.<sup>14</sup> For instance, while 21 percent of men can use arithmetic formulas in spreadsheets, only 15 percent of women can. When it comes to computer programming skills, only 5.6 percent of men can achieve related tasks, but for women, the rate falls to 3.4 percent.<sup>15</sup>

Second, women often lack access to the resources and facilities required to participate in digital platforms. While developing countries have made significant progress in internet and smartphone use, women continue to be disadvantaged. Across the world, there is a 33 percent gender gap in internet access, which becomes more pronounced among women living in low-income urban areas.<sup>16</sup> When turning to Latin America's use of mobile internet by gender, there is significant heterogeneity across the region. Although some countries like Brazil, Panama, and Costa Rica show between two and three percentage point difference in favour of women, men have greater access in most countries. In cases like Peru, El Salvador, or Guatemala, the gender gap reaches 15 percentage points.<sup>17</sup>

Third, sociocultural norms, particularly those that assign women a disproportionate share of unpaid care responsibilities, discourage women from working as much as men or prevent them from accessing the labour market altogether.<sup>18</sup> We return to the point in question: "does the flexibility associated with platforms level the playing field for women?"





### Do platforms help break glass walls that box women in?

Gender segregation in labour markets takes different shapes, like those illustrated by the analogies of sticky floors, glass ceilings, and glass walls that are used to describe the barriers women have faced in traditional, offline labour markets. Glass walls refer to a horizontal concentration of women in sectors and occupations that have low pay and are less dynamic. This phenomenon pertains to barriers of different kinds that women experience to access attractive sectors, like those related to science, technology, engineering, and math (STEM). The evidence in Latin American countries suggests the same patterns are replicated in digital labour markets, in which glass walls box women into certain gendered occupations.

According to data from the Online Labour Observatory by the Oxford Internet Institute, Brazil exemplifies this issue. While 40 percent of the labour force in gig jobs on digital platforms is female, this percentage drops to 33 percent when considering only gig jobs related to software and technology. Similar gaps are observed throughout the continent. Women's share among software and technology platform workers ranges from 12

percent to 33 percent, with the only exceptions of Costa Rica and Panama, where female workers are a majority. On the other hand, women tend to represent more substantial shares of clerical, data entry, writing and translating jobs.<sup>19</sup>

One significant factor contributing to glass walls in labour markets is women's under-representation in technology-related fields of study. However, this also stems from women themselves self-selecting particular occupations, often largely driven by socio-cultural norms. This makes them less likely to pursue careers in science and technology-intensive industries, leading to a lack of diversity in these sectors. These circumstances not only limit the potential pool of talent but also perpetuate gender inequalities in the workplace, as these jobs are some of the fastest-growing and highest-paying in the global economy, both in the analogue and digital labour spheres. In Argentina, to illustrate, eight percent of males who access a tertiary or bachelor's degree choose a technological degree intensive in coding and other technical abilities—such as software engineering or informatics—as opposed to only one percent of female students.<sup>20</sup> Women are also underrepresented in technical and vocational education and training programmes oriented

toward the digital economy in Chile, Colombia, and Argentina.<sup>21</sup>

Discrimination also plays a significant role in shaping women's participation in digital labour markets. Discriminatory practices have been reported to take a variety of forms. They can be carried out by customers or embedded in platform design, and may reflect in limited access to work, being assigned low-paying tasks, and harassment. According to a survey conducted by ILO, workers reported that platforms allocated specific high-quality tasks to contributors in developed countries exclusively. Platforms also tend to provide clients with workers' names and photos, therefore enabling the same biases seen in the traditional labour market. In online labour platforms, 21 percent of women and 17 percent of men have suffered some form of discrimination. These rates rise to 25 percent and 20 percent in developing countries respectively.<sup>22</sup>

### Do platforms improve working conditions for those in informal employment?

The discourse on platforms suggests that digital labour platforms have the potential to improve access to rights and enhance working conditions for people in informal employment. By aggregating and registering workers that may otherwise be disaggregated and unregistered, this work modality can make it easier to connect workers to public services and entitlements.<sup>23</sup> Informal workers face a variety of challenges, including low wages, which can be below the legal minimum rates, lack of social protection and job security, unsafe working environments, and the absence of institutional mechanisms to safeguard their needs and interests.<sup>24</sup> Taken together, these challenges can have a significant impact on the productivity, well-being, and livelihoods of workers.

Informal and temporary, on-call, and disguised work, among a variety of modalities described by the International Labour Organization, are widespread in Latin American economies. Digital labour platforms can move workers toward formalisation through technological solutions that make these workers visible.<sup>25</sup> By reducing costs and improving monitoring through digital transactions, platforms could aid in the transition from informality to formality.

This would be particularly relevant in countries such as Bolivia or Peru, where informal employment characterises up to 80 percent of the labour force.<sup>26</sup> But the possibilities are also pertinent for Latin America and the Caribbean as a whole; currently the region enjoys a demographic advantage, where the share of the dependent population is less than that of the working-age population. This demographic phase offers better growth prospects than in aged societies. However, it is difficult to seize the demographic advantages in contexts where informality leads to low pay and low saving rates. In these countries, platforms that push more workers toward formality can help realise the benefits of growth and increased contributions to pension funds. For Latin American women, the chances of working in the informal economy are almost as high as for men; one out of two female workers are in informal employment. However, female informality rates are higher than that of men in specific sectors like manufacturing, utilities, trade, and other services.<sup>27</sup>

Regardless of the potential of labour platforms to formalise work, the emerging empirical evidence signals various challenges at a global level. First, most online platform workers receive very low pay, with two-thirds earning less than the average local wages. Social protection coverage for online platform workers is deficient, with less than 40 percent holding health insurance, 15 percent protected against accidents or unemployment, and only 20 percent contributing to pension funds. Furthermore, these indicators deteriorate even more for workers in developing countries compared with high-income ones—as platforms tend to achieve higher social protection coverage in the latter. Thus, although platforms are digital and potentially global in nature, the geography in which they operate seems to play a vital role in determining working conditions. Finally, when breaking down indicators by gender, we see that only 14 percent of women contribute toward pension funds, while 21 percent of men do.<sup>28</sup> This illustrates the complex interactions between variables such as the geographic location and gender of workers, which exacerbate the challenges of working in a digital platform.

The prevalence of informality in low- and middle-income countries tends to expose workers to worse conditions. Research from the Fairwork Initiative indicates that platforms operating in vulnerable institutional environments may take

advantage of loose labour regulations, offloading risks and costs onto workers.<sup>29</sup> Thus, so far, the working conditions that digital platforms offer are far from the ideal of decent work, causing these platforms to be referred to as the 21st-century version of informal jobs.

### Does the flexibility afforded by platforms level the playing field for women?

The platform economy has been celebrated for its potential to encourage more women to join labour markets. The rationale is that digital work offers more flexibility than traditional jobs, allowing women to balance their household and care responsibilities with work. These opportunities can be particularly relevant for women who have been excluded from the labour market due to social and cultural norms surrounding gender roles and expectations. As such, many have seen platform work as a way to break down barriers and promote greater gender participation in the workforce.

However, gender inequality is a deeply rooted social phenomenon, which makes matters more complex than this interpretation suggests. One of the reasons is that the available data challenges the assumption that platform work does indeed offer significant flexibility. Crowdworkers who decline tasks or take longer to complete them face penalties and may lose future opportunities.<sup>30</sup> Evidence shows that women, who must also shoulder domestic and caregiving responsibilities, are unable to complete tasks as quickly as their counterparts, resulting in lower earnings.<sup>31</sup> Digital workers are also encouraged to adapt their schedules to meet the demands of high-income countries, which, for women, can easily blur the boundaries between work and home life, leading to adverse effects on their health and well-being, including stress and burnout. This can also result in reduced dedication to work and, ultimately, attrition.<sup>32</sup> Flexibility, therefore, comes at a cost that affects women disproportionately.

Furthermore, pre-existing normative views on gender roles and responsibilities mean that flexibility does not have the same implications for women as for men. For men, it is acceptable to use work flexibility to enhance their performance, increase their working hours, and augment their income. However, women are expected to take advantage of flexible hours to undertake their

household responsibilities.<sup>33</sup> In practice, women in digital labour platforms tend to work fewer hours than men and earn less,<sup>34</sup> with many of them classifying their income as “pocket money” and insufficient to grant significant levels of economic freedom.<sup>35</sup>

Thus, it is difficult for women to take full advantage of the flexibility and low-entry barriers offered by the platform economy as long as traditional gender roles prevail. Viewing platform work as a solution for women to achieve a healthy balance between remunerated and unremunerated work can hide the latent risk of perpetuating gender roles and inequalities that are present both in traditional labour markets and in society in general. Families need support to find more egalitarian ways to distribute household and care work so that it is equally possible for women to have fulfilling and empowering professional paths. While the platform economy has the potential to provide new opportunities for women, achieving gender balance requires a more profound cultural transformation, one in which a fairer distribution of responsibilities and opportunities is achieved.

### Policies for a fairer platform economy

In developing regions like Latin America and the Caribbean, women who participate in the platform economy face a triple challenge. First, platforms still fail to deliver fair working conditions. The platform economy and labour platforms are expanding quickly, but the institutions and regulations that govern them are lagging behind, leaving digital workers unprotected. Second, some of these issues are particularly prevalent in low- and middle-income countries, where earnings can, and do, fall below legal minimum wages, contributions to workers' social security are low, and local institutions struggle to govern both the analogue and digital labour markets equally. Third, women are at a larger disadvantage than men in the digital environment, as they are more likely to lack the skills, equipment, or time to fully capitalise on available opportunities. Addressing these challenges calls for a comprehensive and coordinated set of policy interventions targeting regulatory frameworks, platform design, and social norms surrounding gender.

Governments must develop and implement adequate policies to ensure that workers in the online platform economy are granted social

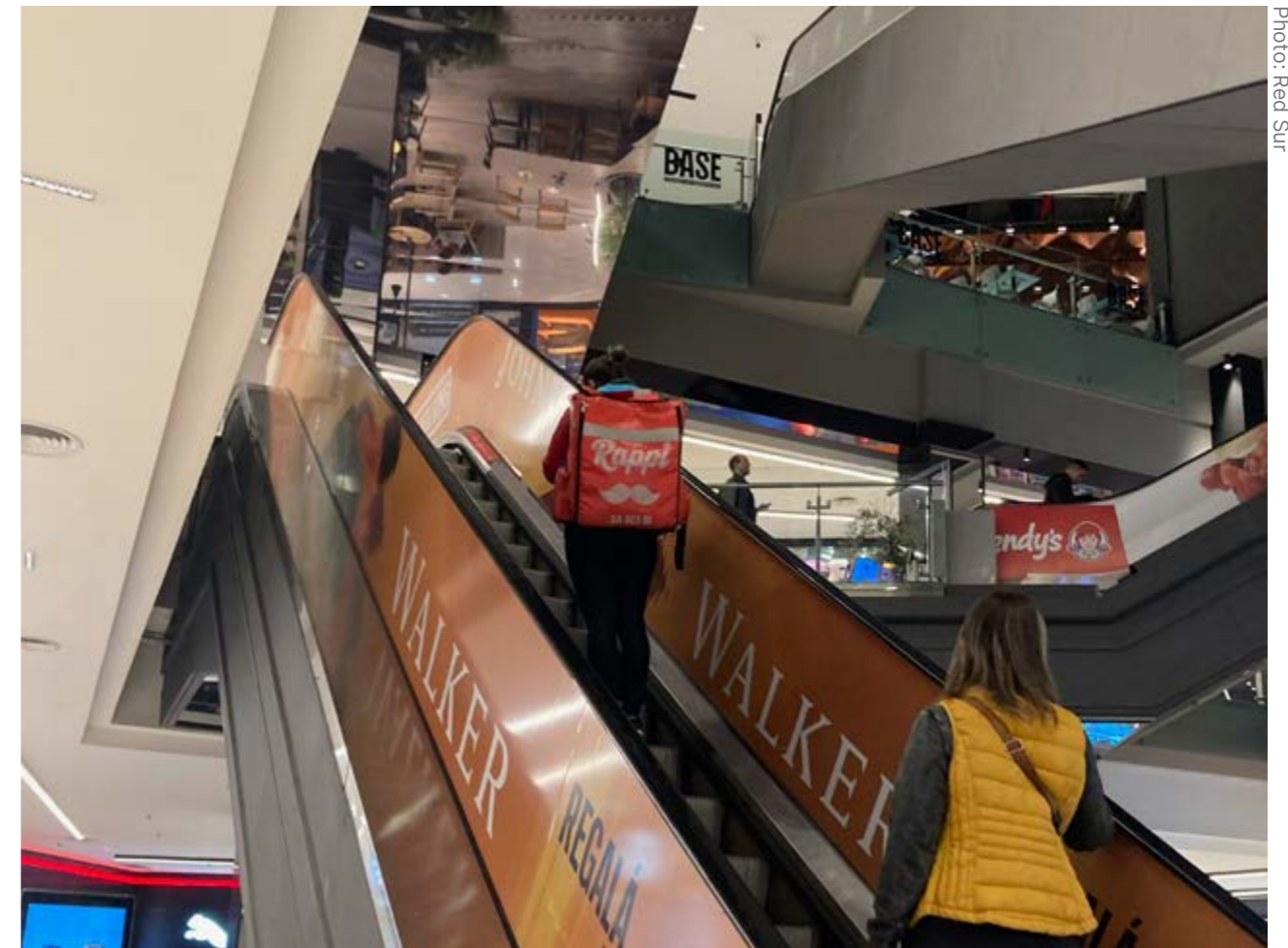


Photo: Red Sur

protection and labour rights comparable to those in traditional formal employment. This includes providing platform workers with basic social protection schemes such as health insurance, retirement benefits, and fair pay. Platforms must also be held accountable for providing safe, healthy, and decent working conditions. The gig economy is geographically dispersed, making it particularly challenging to regulate. However, the International Labour Organization and other multilateral institutions are making progress in setting down new standards and adapting old ones to new trends. ILO's independent Global Commission on the Future of Work has drawn inspiration from their Maritime Labour Convention of 2006, which includes recommendations for the case of seafarers who work across different countries under different legal systems. For the case of digital platform workers, they propose the creation of an international governance framework that sets basic rights and safeguards for platform work to meet, independently of workers' contractual arrangements.<sup>36</sup> However, aside from these broader frameworks, there are no one-size-fits-all regulatory approaches. Some jurisdictions have moved forward in determining that platform

workers are considered employees, while some have stated that they are independent workers, and others have found in-between categories that allow workers to be partially covered by social protection.<sup>37</sup> Developing countries will benefit from participating in global debates and adopting early emerging best practices.

Vitaly, the digital nature of the platform economy can be leveraged to address some of the larger problems traditionally related to informality and discrimination in labour markets. Digital footprints enabled by platform work make visible economic activities and transactions. If adequate data privacy principles and protocols are followed, this data can be crucial in the process of regulating and creating accountability for digital labour platforms.

Digitalisation can also help prevent some discriminatory practices. Platforms must be designed to be gender-inclusive, which implies correcting and improving algorithmic management to explicitly avoid gender bias and to ensure women are not discriminated against in areas of pay, promotions, or access to training and



development opportunities. Clients or users purchasing platform services can also be nudged against discriminatory practices by reassessing the information on workers they need to receive—such as gender, age, photograph—and the incentives they are given to provide fair rating and assessments. Moreover, being digital, platforms are in a unique position to actively pursue gender-minded strategies. They can monitor diversity and inclusion within their workforce, generate data, and give visibility to information on the gender pay gap and other relevant statistics. Such initiatives aimed at creating awareness and filling data gaps are still in their nascent stages and should be encouraged.

Finally, it is important to stress the need for policies that follow a holistic and systemic

approach accounting for the multidimensionality of the challenge at hand. Ultimately, we cannot achieve true gender balance in digital labour markets without addressing the underlying sociocultural norms that limit women's personal and economic freedoms. In the absence of more egalitarian social and family ecosystems, platform economies bring about renewed risks of consolidating pre-existing gender roles and relegating women to household and caregiving activities. By improving current efforts to implement multi-layered policies that tackle gender-normative rules and roles, we can create a more equitable future of work that empowers women to fully participate in, and benefit from, the opportunities presented by the digital economy.

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# Women's Work, Technology Access, and Skills in the Digital Era

An African Perspective

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This essay analyses the macroeconomic trends in women's participation in the African labour market over the past two decades, providing the context to examine how technology is affecting the female labour force. It also examines the measures in place to help women successfully participate in the evolving digital economy. It finds that although e-commerce is thriving in many countries in Africa, women are often relegated to specific gendered occupations on platforms. Gendered patterns of enrolment are observed in Technical and Vocational Education in Training (TVET) where women opt for vocational courses while men join technical courses.

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*This chapter was enriched by the work of Gladys Kerubo Ombati and Kevin Otieno. I would also like to acknowledge the support from my colleagues at the Center of Intellectual Property and Information Technology Law.*



Digitisation is credited with making significant contributions to economic growth in many countries across Africa.<sup>1</sup> This is why several African countries—Kenya, Nigeria, Egypt, Ethiopia, Rwanda, Tanzania, Democratic Republic of Congo, and South Africa, which represent some of the most populous countries in Africa—are proponents of the African Union's Digital Transformation Strategy for Africa (2020-2030).<sup>2</sup> Estimates suggest that by 2025, the digital economy will represent almost five percent of Africa's Gross Domestic Product (GDP) and it will account for nine percent of the continent's GDP by 2050.<sup>3</sup>

As technology becomes increasingly important in driving economies and development strategies, it is imperative that women participate equally. Africa fares better with respect to the gender gap in technology ownership and use relative to other regions in the world. While a gender gap is not entirely absent, the gap in technology ownership and use in Africa is narrower than other regions, variations across countries notwithstanding. Yet African women lack access to appropriate skills training, which continues to constrain their participation in increasingly digitally driven economies across Africa. Moreover, a lack of demand for women workers and socio-cultural factors also hold women back from effectively participating in the labour market. When women do participate, these dynamics also feed into gender normative selection of roles and occupations, including in the platform-mediated gig economy.

This essay examines trends in women's participation in the African labour market over the past two decades. This provides the context to examine how technology is affecting the female labour force. Finally, it looks at the measures in place to help women successfully participate in the evolving digital economy in ways that doesn't just relegate them to low-end entrepreneurship or gig work in the service economy.

## As technology becomes increasingly important in driving economies and development strategies, it is imperative that women participate equally.

This essay relies on harmonised global data sets of the World Bank, International Labour Organization, World Economic Forum, and the International Telecommunication Union. To fill in gaps in the data, the authors relied on region-specific data sets, such as national household surveys, and labour force surveys. The essay relies on an analysis of data from 1990 – 2019<sup>4</sup> for 12 African countries,<sup>5</sup> including:

1. In East Africa: Kenya, Uganda, and Rwanda;
2. In West Africa: Ivory Coast (also referred to as Côte d'Ivoire), Ghana, and Nigeria;
3. In South Africa: Botswana, Zimbabwe, and South Africa;
4. In North Africa: Egypt, Tunisia, and Morocco

### Women's participation in labour market and structural transformation

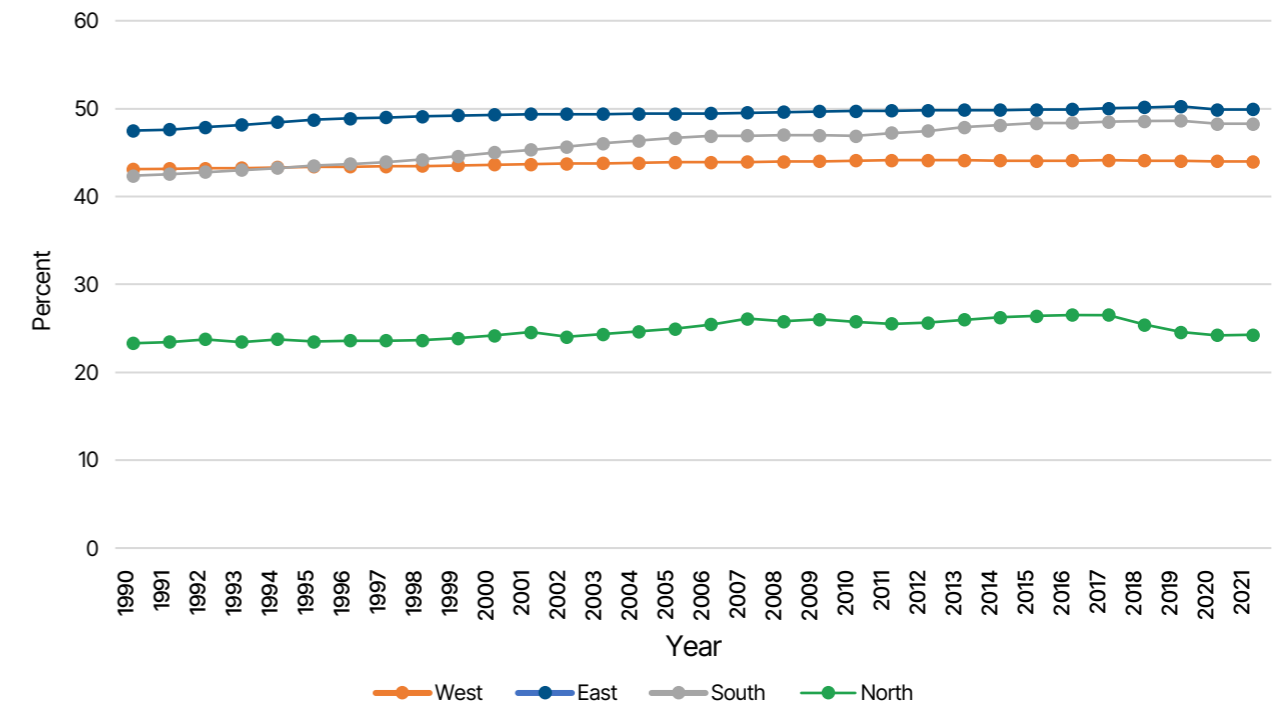
Female labour force participation in the continent is significantly lower than among men, with a gap of just under 18 percent.<sup>6</sup> This is, however, lower than the global gap; women's global labour force participation rate is 27 percentage points below that of men.<sup>7</sup> Regionally, Northern Africa has the highest gender gap in labour force participation rate, with 47 percent in 2019.<sup>8</sup>

In the decade between 1990 and 2019, the percentage of women participating in Africa's labour market did not increase significantly. South Africa saw the largest increase, 5.9 percentage points, over this period, while increases in other regions of Africa were negligible. However, this aggregate data conceals noteworthy differences between countries. Egypt, for instance, saw a significant decline in female labour participation rates from 24 percent to just under 19 percent within these two decades.<sup>9</sup> Similarly, in West Africa, Ghana had a decline in the same rates from 49.39 percent to 46.71 percent, and Nigeria saw a decline from 46.62 percent to 43.97 percent between 1990 and 2019.<sup>10</sup> Meanwhile, over the same period, Rwanda saw an increase in the female labour force participation rate from 48.99 percent to 51.58 percent, the highest increase in the East African region.<sup>11</sup>

Agriculture is the biggest employer of women in Africa. This is significant because agriculture is usually marked by high levels of informality and sharing of low-productivity work. The large

Figure 1

### Average female participation rate from 1990 to 2021 in West, East, South, and North Africa regions.



Source: Computed from ILOSTAT, ILO modelled estimates, November 2021.

proportion of women in the sector indicates that women tend to be relegated to low-value added work in the economy as a whole. In the four sub-regions under study, Rwanda has the highest proportion of women employed in agriculture at 88 percent, i.e., 88 percent of employed women in Rwanda are engaged in the agricultural sector, relative to just under 12 percent men. South Africa had the lowest percentage of women employed in agriculture, that of 6.16 percent.

In the period between 1990 and 2019, there has been a decrease in the number of women employed in the agricultural sector in all four regions of study, indicating a structural transformation of the economy. A key question remains: are women who leave agriculture making their way into better jobs in non-farm sectors?

In 2019, of all employed African women, 40 percent worked in the service sector.<sup>12</sup> Women are more likely to work in the service sector – in leisure, hospitality, and retail sales. In urban areas, the share of female employment in the services sector was 74 percent, whereas that of male employment was 59 percent in 2019.<sup>13</sup>

The service sector in recent years has been driven by technology intensity. On the one hand, the sector offers high-skilled technology jobs, and on the other, it includes technology-mediated gig work that could range from providing personal services to high-skilled legal services, and other business management operations.<sup>14</sup>

### Technology enabled opportunities for women

Studies have shown that the use of Information and Communication Technologies (ICTs) can exert a positive influence on female labour force participation in developing countries.<sup>15</sup> The female participation rate is in general positively correlated with the use of ICTs, measured as the percentage of individuals using the internet and mobile cellular telephone subscriptions per 100 inhabitants.<sup>16</sup> ICT can empower women, aid in increasing their financial inclusion, increase the transparency of labour market information, and increase female participation in the labour market by making it easier for women to balance work and household duties.<sup>17</sup>





This is also one of the reasons why policymakers and experts deem platform mediated e-commerce and gig work as harbouring the potential to increase women's labour force participation.<sup>18</sup> A study by the International Finance Corporation found that women could add over \$300 billion to e-commerce markets alone in Africa and South-East Asia between 2025 and 2030.<sup>19</sup> E-commerce in Africa presents an opportunity to close gender gaps by opening more markets to women-owned enterprises. E-commerce offers women several advantages: (i) lower barriers to entry than traditional brick-and-mortar businesses, (ii) a potentially global consumer base to women entrepreneurs, and (iii) flexibility in when, how, and how much to work.

The rise of digital platforms has facilitated the growth of gig work in Africa. Platforms like Jumia, SafeBoda, Uber, Bolt, and Upwork have gained popularity in different African countries, providing opportunities for gig workers. A lack of data makes it difficult to assess exactly how many workers generate an income from the gig economy, but evidence suggests that countries with higher levels of internet penetration, such as South Africa, Nigeria, Kenya, and Egypt, have witnessed more significant growth in the gig economy. Additionally, urban areas tend to have more gig work opportunities compared to rural regions. Like e-commerce, gig work also has low barriers to

entry and offers flexibility, but women are often relegated to specific gendered occupations on platforms.

Emerging work in e-commerce or the gig economy could create opportunities to absorb some of the women moving out of agriculture. But in reality, many women that leave agriculture do not have the access to technology or possess the education and skills necessary to make the shift in a way that significantly improves their economic outcomes. Moreover, when women do acquire the technology, education and skills, they are limited by demand side constraints as well as socio-cultural factors.

### Constraints on Access to Technology and Skills

According to a report by Global System for Mobile communications Association,<sup>20</sup> the digital divide as captured in terms of gender gap in mobile internet (37 percent) in sub-Saharan Africa countries is persistently higher than other Low- or Middle-Income Countries (16 percent). In countries like Nigeria, Kenya and Egypt, where the gender gap in mobile ownership has considerably reduced, access to mobile internet for men and women is low at about half and one-third respectively. Women in sub-Saharan countries are now 30 percent less likely to own smartphones. This adversely affects participation of women in the

digital platform economy. Even as awareness of mobile internet among women has gone up to 73 percent in Kenya and 83 percent in Nigeria, factors such as unaffordability of smartphones and absence of digital skills are cited as the main barriers to using mobile internet. This disparity between men and women in terms of access to and use of mobile internet manifests in the form of 192 million women in sub-Saharan Africa not using mobile internet.

Adoption of technology and digitalisation in the labour market has increased the global demand for individuals with high digital skills, resulting in their taking up new or changing jobs in various sectors of the economy. Developing countries tend to have "overeducated" individuals in technologically unskilled jobs.<sup>21</sup> This indicates a gap between skills demand and job availability in the market, particularly against the backdrop of a large and growing youth population in many of these countries. This is certainly true in Africa where there is a significant demographic bulge.

This coupled with the informality of most labour markets in developing economies means that a large working population is overeducated. Women in particular have gained parity in education, but they tend to be left out of jobs or relegated to particular gender normative occupations or roles.

The African Union has identified Technical and Vocational Education and Training (TVET) as a priority area and has launched a number of initiatives to promote its development in the continent. Historically, TVET institutions were seen as an alternative to post-secondary education for youth who could not afford higher education. The TVET landscape in Africa faces a number of challenges: insufficient funding, small pool of qualified instructors, and outdated equipment and facilities. There is also a significant gender gap in participation in TVET programs, with a disproportionately low number of women enrolled in these programs.

Take, for instance, agriculture. Although women play a critical role in the agricultural sector in Africa, they are underrepresented in agricultural education and training.<sup>22</sup> In many countries in Africa, only the male heads of household are entitled to further education, training or TVET.<sup>23</sup> When women are able to make decisions at a higher level within the household, they are also

able to implement better farming practices that result in higher yield from agricultural activities, and increase the livelihood of the entire household. This is only possible, however, if women are allowed the same access to agricultural training and TVET education as their male counterparts.

The gender disparity observed in the agricultural TVET sector is a mirror of the general African TVET system as a whole, which affects women's engagement across all technology jobs and tech-enabled jobs on platforms as well. A lack of skills relegates women to specific sectors, occupations, or roles. Even when they have the requisite skills, women find it difficult to find quality employment, especially in fields deemed to be high-skilled.<sup>24</sup> A survey of construction companies in Zambia, operating between 2000 and 2003, found that large-sized companies did not employ qualified female crafts people, and only 22 percent of women who participated in a 2002 survey in Tanzania were engaged in an occupation that matched their skills.<sup>25</sup> This means that a lack of options for employment also pushes women into self-employment, be it through entrepreneurship or gig work.

### Looking ahead

In the past 20 years, Africa has seen significant economic shifts and changes in its labour market. The agricultural sector in all 12 countries of study, for example, contracted in the years between 1990 and 2019. However, labour force participation remained roughly the same, suggesting that women did not drop out of the labour market, but continued to participate in different sectors, including e-commerce and gig work. Despite this, women continue to have low levels of participation in TVET and face demand-side constraints and socio-cultural barriers in the labour market, factors that drive their self-selection into these jobs.

**Women in particular have gained parity in education, but they tend to be left out of jobs or relegated to particular gender normative occupations or roles.**

Countries across the African continent are embracing technology. Mobile and internet use are on the rise, as are economic activities related to them. African countries are also making attempts to include ICT courses in their TVET curriculum, and also use ICT in the delivery of this curriculum. This, however, is challenging due to inadequate infrastructure and resources, including a lack of computers, limited access to internet, and an unqualified pool of trainers. Given that most TVET institutions are public, lack of funding has hindered the acquisition of these resources or the development of this infrastructure. Despite this challenge, some private public partnerships are helping to bridging this gap in technological skills. The private sector is keen on setting up initiatives that provide the infrastructure and training required. Further, it is worthwhile to note that most African countries are in the process of formulating strategies and policies that will advance the use of technology and gain from the Fourth Industrial Revolution.

Meanwhile, the gap in women's access to skills training and participation in the labour market relative to men in Africa continues to persist. This divide results in a loss of productive potential. All stakeholders in the Fourth Industrial Revolution should bear this in mind, and make sure the participation of women does not lag behind that of men. Currently, the number of female students enrolling into TVETs is lower than their male counterparts, despite policies and frameworks in

many African countries developed to mitigate this gender disparity. In 2019, in 24 countries across regions of the African continent, females lagged behind males in terms of enrolment in TVET. In Ghana, for example, female enrolment in TVET was just 26 percent for the 2015-16 school year, less than the proportion of girls enrolled in 2012-13 at 31 percent, and in Rwanda, where gender equality in education has been a policy priority for many years, boys (57 percent) outnumber girls (43 percent) in TVET enrolment.<sup>26</sup> A pattern of gendered participation in TVET courses can also be seen, with women dominating vocational courses and men the technical education courses. This gender disparity is a result of poor programming of curricula, done without addressing gender needs.

A lack of access to the appropriate skills on the one hand, and a lack of demand for women, especially in high-skilled occupations, means that women risk being left behind as technology develops. These two factors together means that women are also pushed into self-employment in the form of entrepreneurs or contractual gig workers, neither of which provides labour or social protections. As Africa seeks to chart its development trajectory in the years to come by leveraging digitalisation, it must ensure that women are afforded as many opportunities as men and are equipped to participate equally.

## Endnotes

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- <sup>4</sup> The study focuses on the effect of technology on Africa's labour market prior to the COVID-19 pandemic.
- <sup>5</sup> All data, from the multiple sources, was normalised to a standard unit of measurement. This allowed identification of any inconsistencies in the data due to breaks in data series, changes in sources, or data entry errors. Percentage of missing data was computed using the multiple imputation technique. This method first proposed by Rubin (1987) is consistent, asymptotically normal, and efficient as shown in different reviews. Y.C. Yuan, "Multiple Imputation for Missing Data: Concepts and New Development," In *Proceedings of the Twenty-Fifth Annual SAS Users Group International Conference*, 2000; Patrick Royston, John B. Carlin, and Ian R. White, "Multiple Imputation of Missing Values: New Features for Mim," *The Stata Journal* 9, no. 2 (August 2009): 252–64; Donald B. Rubin, "The Calculation of Posterior Distributions by Data Augmentation: Comment: A Noniterative Sampling/Importance Resampling Alternative to the Data Augmentation Algorithm for Creating a Few Imputations When Fractions of Missing Information Are Modest: The SIR Algorithm," *Journal of the American Statistical Association* 82, no. 398 (June 1987); Donald B. Rubin, *Multiple Imputation for Nonresponse in Surveys*, Hoboken, New Jersey: John Wiley & Sons, 2004.
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# Fixing Platform Power

A Framework for Substantive Inclusion in the Platform Economy

Although digital technologies have enabled women's participation in the economy, they continue to face technological, financial and social barriers. This essay explores these structural challenges women face by analysing select enterprises. The authors found that (a) women-led MSMEs tend to demonstrate "thin" forms of digital integration which has implications for their scalability and growth; and (b) enterprises which are modeled on co-operatives or social enterprise led platforms are more responsive to the issues faced by women so they are better able to foster "substantive inclusion" i.e, inclusion that enables women's participation in the digital economy on terms that favour them.

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Photo: Community kitchens led by SHG women who are supported by Farm Didi, a food-tech enterprise.



## Introduction: gendering the platform state-of-play

For many women workers across India, digital technologies are increasingly shaping participation in social and economic activities. Be it using social media or messaging apps, or participating in digitally mediated gig work, familiarity with technology has become a precondition for sustaining livelihoods, accessing information and welfare services, and forging community ties. The question remains, however: does access to and engagement with digital technologies and platforms consistently translate into expansion of economic choices and livelihood options for women? For whom and under what conditions can these outcomes be enabled? How can platform design and institutional frameworks enable women to reap the benefits of the digital economy?

In this essay, we use insights from our primary research across a spectrum of women workers and digital marketplace platform models to answer these questions. Digital marketplace platforms are a kind of transaction platform whose main purpose is to facilitate exchanges between buyers and sellers. While there are many kinds of digital marketplace platforms, in this essay we focus specifically on e-commerce and social commerce platforms that enable small producers, traders, and micro-entrepreneurs to connect with a marketplace in order to sell goods. Importantly, we view platforms as “architectures” – a set of digital frameworks for social and marketplace interactions,<sup>1</sup> and seek to answer the question: how, and under what conditions can digital marketplace platforms respond to the needs of women small producers and micro-entrepreneurs?

**The rationale behind “substantive inclusion” is to reduce power asymmetries between the owners of the platform and its users. It comprises three core principles: (1) socially embedded design (2) ethical intermediation and (3) equitable data value creation and distribution strategies.**

The methodology used was primarily qualitative – including focus group discussions with 70-80 women farmers and small producers, and 10-15 semi-structured interviews with women micro-entrepreneurs, as well as enterprise leads/owners who are building e-commerce solutions for women/micro-entrepreneurs.

Based on the findings, we developed the concept of “substantive inclusion” as a core principle in the design of such platform architectures. The rationale behind “substantive inclusion” is to reduce power asymmetries between the owners of the platform and its users. It comprises three core principles: (1) socially embedded design – i.e., design that recognises the interconnectedness of its users to larger social networks and is intentional about empowering groups belonging to historically marginalised social locations, (2) ethical intermediation, i.e., mediation strategies that privilege fairness and equity, and (3) equitable data value creation and distribution strategies. Before elaborating on these principles in the subsequent section, we offer a brief overview of the key gendered challenges in the e-commerce landscape.

### **A multifaceted digital divide that builds off and amplifies existing gender inequalities.**

Adoption, use, and familiarity with digital tools and technologies, and in particular, the internet, is a prerequisite for e-commerce transactions to take place. A gender digital divide affects e-commerce adoption.<sup>2</sup> As per the latest statistics released by the National Family Health Survey (NFHS), only 24 percent of rural women and 52 percent of urban women have ever used the internet, as compared to 43 percent of rural men and 65 percent of urban men.<sup>3</sup> Additionally, women’s mobile phone and internet use tends to be supervised or monitored by men, older family members and intimate partners, as a result of which many of them tend to limit public engagement on the internet.<sup>4</sup> This creates barriers for their ability to master more advanced technology and digital skills and leverage digital tools as workers and entrepreneurs, with men more likely than women to have used mobile internet for complex tasks such as accessing government services, reading the news, or making payments.<sup>5</sup> In a recent pan-India survey of financial transactions of women consumers, it was found that 48 percent cite cash payment as their first preference.<sup>6</sup> Anecdotal evidence from Women Self-Help Group (SHG)

members across four states suggests that even though women in their community were using phones for personal use, they were unable to make financial transactions online, and did not use phones for their businesses.<sup>7</sup>

Women are also doubly disadvantaged because of their “care giver” roles in society – a study examining links between women’s online exposure and their labour force participation found that while online exposure increased the amount of time women were spending on employment and learning related activities, it did not decrease the time they allocated to unpaid household work. In fact, those who perform domestic duties as their principal activity, were found to be spending the least amount of time online.<sup>8</sup> Thus, various socio-structural differences and influences necessitate taking a gender responsive approach to the design of e-commerce architectures, one that recognises the historical imbalances of gendered power structures and is intentional about correcting them.

### **Exclusion-by-design in mainstream digital marketplace models**

The rise of e-commerce marketplaces has been viewed as a pathway to reduce gender gaps in women’s entrepreneurship activities by improving women’s access to digital skills, finance/credit, training, and work opportunities, and by reducing information asymmetries.<sup>9</sup> However, significant gender gaps persist in the Global South in the adoption of digital technologies for entrepreneurship and commerce. A recent study of over 1500 micro enterprises in India found that while e-commerce has certainly improved overall employment levels in MSMEs in India, female employment has remained low in e-commerce based MSMEs as compared to others.<sup>10</sup> Evidence suggests that the algorithmic evaluation criteria used by mainstream e-commerce platforms do not account for the reality of women led enterprises, most of which are small businesses with low output levels, limited growth potential, and very little capacity to bear inventory and customer service overheads, which leads to their unfair exclusion from such platforms.<sup>11</sup>

Women-led micro enterprises also tend to have lower profit margins than men-owned firms.<sup>12</sup> Piya Bahadur, Co-Founder and CEO of a start-up that is currently building MeraBills, a phone-based accounting software designed to build financial management capacities of micro entrepreneurs,

notes the need for platform infrastructure that can catalyse local e-commerce at scale, while accounting for the differential attributes and needs of women-run enterprises:

*Women entrepreneurs are a highly segmented population. The question we keep asking is – how do you deploy a technology solution that works for someone who just wants to run it at a subsistence level by tracking her receivables, and for someone else who wants to make a product catalogue for her bags and take it to multiple cities? This is about thinking through what may be the optimal consumption basket from the standpoint of women’s differential needs and locations, and not what is most profitable.*

### **Lack of investment in the infrastructural and institutional building blocks**

Digital-only, or digital-first, solutions tend to obfuscate the real problems of lack of public policy and infrastructure support for micro entrepreneurship. For example, even within small businesses, evidence points to differential access to circuits of knowledge, capital and infrastructure between male and female owned businesses, with the latter being less likely to have access to facilities like a fixed office premise, toilets, waste management, proximity to bank/post office accounts, etc.<sup>13</sup> Women entrepreneurs also fail to develop highly productive and revenue generating businesses due to insufficient market information about prices, inputs and competitors, connections, etc., which then impacts their ability to access capital/finance.<sup>14</sup> A tech-first approach that is centred on the provision of a tool, a platform or a website overlooks these important connectors in the ecosystem (both physical and informational) that can enable women entrepreneurs to build the capability to navigate the big picture, and grow their businesses.

When they first launched, Farm-Didi, a food-tech enterprise that is working to provide e-commerce solutions for self-help groups (SHGs)<sup>15</sup> in rural Maharashtra, provided women with an app that allowed them to market their products by uploading product pictures through their mobile phones on to a personal website. However, giving women a platform to create websites did not automatically translate into a sustainable revenue stream. Asmita Ghodeswar, Co-Founder and Chief Technology Officer (CTO) of Farm Didi,



reflects on how discussions with the SHGs pointed to non-technological needs:

*The women we met did not think about their cooking as a business enterprise. For example, it's not just about how tasty my pickles are or even how much pickle I can produce; it's also about which locations will have the highest demand for them, and how I should price them. We realised that this was the entrepreneurship deficit that we had to bridge in parallel with the technology solution. This required extensive investments in physical outreach infrastructure and support.*

Additionally, the rural e-commerce landscape, as Piya notes, has a very distinct, hyper local character that is side stepped by mainstream digital marketplace platforms. "There are products that are made in rural areas and sold in rural areas, and they will never be found on Amazon or Flipkart," she says. "Enterprises here don't need 10-minute delivery models, they have very specific requirements across cataloguing, village to village reach, bookkeeping assistance and so on."

Thus, the potential of technology notwithstanding, the ability to translate that potential into meaningful participation rests on investing in the institutional and infrastructural building blocks that can allow women—individually and collectively—to find their niche and sustain their enterprises in the digital economy. Support for digital skilling is often seen as the apt textbook response to capacity building, when the missing piece is actually the institutional building blocks that can enable equitable access to capabilities, knowledge and capital circuits at the level of the local ecosystem.

### What needs to change? A framework for Substantive Inclusion

Are alternative models of e-commerce that lead to more empowering outcomes for women possible? The research findings show that there are ways of incorporating the principle of "substantive inclusion" in e-commerce. Substantive inclusion occurs when women can participate in platform mediated work that promotes entrepreneurial flourishing and deepens their control over the terms of their participation. In the section below, we unpack the three-way dimensions of substantive inclusion, and their intersections with gendered stratifications.

### Socially embedded design

Design is neither purely technical, nor are platform interactions neutral transactions.<sup>16</sup> Socially embedded design refers to design that is intentional about empowering groups belonging to historically marginalised social locations. It recognises that users are stratified on axes such as gender, caste, class, race, and geographical location. Piya explains how it intersects with elements of platform design,

*Women learn and adopt technologies in ways that are very different from their male counterparts. For example, women micro-entrepreneurs in the rural areas face significant challenges in receivables management, because their largest client base comprises their friends and neighbours, and social barriers make it difficult for them to collect monies from this segment. Setting a payment reminder option on the app allowed them to do this without being too obvious. They could initiate a reminder and then say – 'oh the app sent it'. That's something they value.*

Additionally, noting the need for sellers to have more control over their market, Mera Bills did away with the requirement of having potential clients to download apps, as is the norm in mainstream e-commerce platforms. They gave users the option to share PDF versions of their catalogue through WhatsApp. Women micro-entrepreneurs did not have to coerce their friends and family to download an app to purchase their products.

### Ethical intermediation

Intermediation practices (either digital or otherwise) are critical enablers particularly for delivering digitally-enabled solutions to vulnerable or marginalised groups. Ethical intermediation refers to platform strategies that privilege fairness and equity in marketplaces. It counters the algorithmically powered intermediation strategies of mainstream platforms, which, structurally disadvantage women led enterprises. Ethical intermediation strategies explicitly promote participation and control of less powerful platform actors in production and supply chain decisions.

For example, Vrutti, a social enterprise that works with Farmer Producer Organisations (FPOs) ensures that its Business Acceleration Units (BAUs) set up at the block or district level provide



the critical institutional support women need to actively participate in the agriculture value chain. While the entire value chain is set up to be delivered digitally, there is a physical intermediary layer that provides support for supply chain linkages, capacity building, training, and technical troubleshooting. Rajesh Kanna, Manager – Meals, BAU (Pudukottai, Tamilnadu), describes this "phygital" arrangement:

*Our physical intermediaries are known as ABAs (Agri-Business Accelerators), and every FPO has about five-six ABAs. The intermediation provided by the ABAs touches every part of the supply chain and is particularly responsive to gendered challenges. For example, because women farmers are more likely to face mobility challenges than male farmers, ABAs ensure that all women farmers receive transportation support to pick up the produce from their homes and deliver to the warehouse. Without this support, many women farmers find it difficult to market their produce.*

Another example is that of SEWA Federation's platform co-operative model developed by their women. Here, the co-operative becomes the "trusted" intermediary between the digital platform and its members. It aggregates data and makes

decisions on resources and input information to be channelled to the farmers. It also ensures that they are not being exploited or forced to choose something that may be destructive of the land.<sup>17</sup>

### Equitable creation and distribution of data value

One of the key ways in which e-commerce platforms create value is through the generation and use of huge volumes of data based on transactions and interactions on the platforms.<sup>18</sup> The benefits of such data accrue primarily to the platform owners. Here, substantive inclusion therefore necessitates privileging local value generation and structural transformation of smaller enterprises through equitable creation and distribution of platform data value. This means that digital platforms must accord producer and user communities primary claims over their data. Data, as a common pool resource, should primarily be managed through participatory, locally scrutinisable systems.<sup>19</sup>

Vrutti ensures that the data value generated through the platform transactions is distributed to the farmers who use the platform and not the investor or the developer of the application. This approach, as Rajesh observes, moves the needle, nudging FPOs to use and deploy the insights from



their data. This is in direct contrast to mainstream agri-tech platforms that harvest data to optimise their own profits.<sup>20</sup> He says:

*Building data capacities of the FPOs is a key area of focus for us. Our platform generates a lot of data that can strengthen farmer capacities. The FPOs are taught to harness this data. What are their fast-moving commodities? Which are their high margin products? What kind of forecasts can you make for groundnut sales for the next three months? Importantly, these are not just technical capacities. We need to make them think like entrepreneurs running a business. We start by making them understand that digital tools are not just for record keeping, but intelligence systems that can aid business development strategies.*

Another example of equitable data value creation and distribution can be seen in the platform ecosystem being developed by Kerala government – the Kerala Food Platform. It aims to connect producers, consumers, and business enterprises in the agricultural value chain. The experiment seeks to leverage the value of data to support the state’s extensive network of agricultural

and labour cooperative institutions by providing them a suite of publicly created basic digital services for membership records management, business process tracking, and leveraging data-based analytics for activity planning, monitoring, revenue forecasting, and risk management.<sup>21</sup> Data aggregated from co-operative institutions will be covered as a knowledge-commons (i.e., it will be collectively owned and governed by a community of users) with conditional accesses provided to private players (for creating useful digital products and services for the co-operatives) as well as state agencies (for public policy decision making).<sup>22</sup>

Both these examples point to the centrality of a new economic logic for data value creation and distribution – where data is not the private property of platforms; rather, it is recognised as a social knowledge commons where a baseline of non-appropriability is maintained, and whose uses have to maximise public value creation without risks of individual or collective harms.<sup>23</sup>

#### **The state as orchestrator of the techno-institutional paradigm**

Our fieldwork suggests that while platform architectures can produce substantial inclusion and galvanise agency of smaller market actors, this

needs to be complemented by the state through public policies and institutional mechanisms. Platforms wield an all-encompassing intelligence about social relationalities — endogenous (to the platform ecosystem) and exogenous (as pertaining to wider social systems and structures).<sup>24</sup> In the dominant digital economy landscape, a totalising control over social knowledge enables the platform to know more, know better, and know how best to extract labouring time for profit. The governance of the resources of data and digital intelligence and their value therefore become non-negotiable for a fair and just economy. State interventions are essential not only to curb these monopolistic and winner-take-all characteristics of the mainstream platform sector, but also to promote inclusive development policies.<sup>25</sup> Gender equal outcomes, therefore, are not merely about policies that increase women’s access to technology. We need policies that enable necessary investments in public digital innovation ecosystems – high-speed connectivity, public data pools and machine-readable data sets, public cloud infrastructure and public platform marketplaces.<sup>26</sup> It is also necessary to provide support for SSE (Social and Solidarity Economy) enterprises where women dominate,<sup>27</sup> and create appropriate institutional mechanisms to encourage and operationalise

women’s participation in local innovation systems and enterprise development.

### **Conclusion**

In conclusion, alternative technological models provisioned by social intermediaries and co-operatives can facilitate a fair distribution of the gains from e-commerce for women workers and entrepreneurs. Their gender responsive platform models—with socially embedded design, ethical intermediation and equitable value creation and distribution—put the power and agency of women workers at the centre. However, given current trends of platformisation, it is impossible to think of a scenario in which such organisations can enjoy a level playing field in funding and scale. A platform paradigm that works for women can sustain itself only if the accumulative impulse of dominant venture capital-backed platform marketplaces is regulated. Ultimately, as platformisation becomes the new ordering principle, it remains contingent on the state to orchestrate the structural conditions for a just society and economy, ensuring freedom from precarity for all, and guaranteeing the right to market participation and economic citizenship of women.



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# Marketplace Models and Business Strategies

Prioritising Women's Work in the Platform Economy

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Do start-ups in India include enabling measures to allow women equal access to the platform economy? This essay explores the question by analysing data from a survey of 14 platforms. It explores the factors that make tech start-ups more or less likely to see gender differences, and to acknowledge that men and women behave differently for their time, aspiration, and resources. It finds that the platforms' efforts at creating a gender affirmative scenario to augment women's economic participation is dependent on their size, on whether they are managed, lightly managed or unmanaged, and their stage of growth and model.

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## Introduction

Digital labour platforms, which offer workers opportunities for income generation, are characterised by a diverse set of business models and a range of marketplaces that cater to various economic sectors from transport, medical care to e-commerce. Through a series of primary interviews with digital labour platform companies, this essay examines how their platform business models map to differences in working conditions of platform workers, especially for women workers. This diversity in business models of digital labour platforms and marketplaces further complicates the creation of policy and regulation aimed at supporting platform workers.

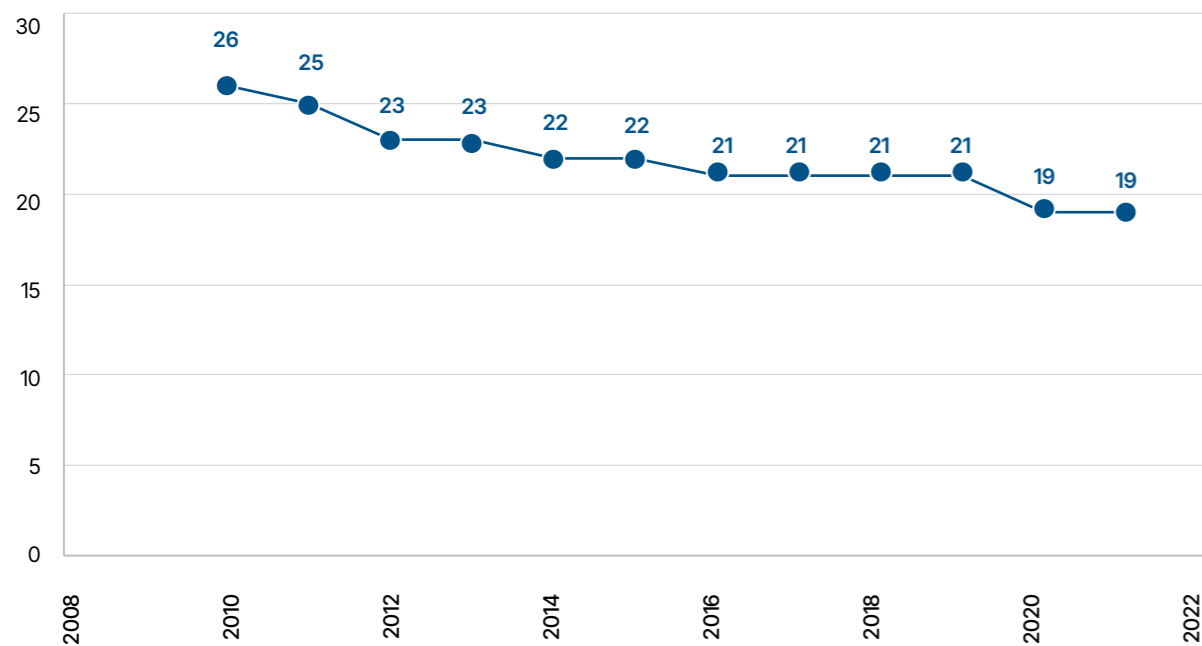
With over 77 million Indian workers engaged in platformised work,<sup>1</sup> an understanding of how different platforms operate, and how workers experience these differences is crucial, especially to guide future policies and regulation. Moreover, policymakers are increasingly looking to digital labour platforms to increase female labour force participation.<sup>2</sup> This is because India has always struggled to bring women into its workforce, in which women tend to work in low-paying, poor quality jobs in the informal service or small manufacturing sector, with only a small percentage

working in higher paying, skilled jobs. The women's work challenge in India is two-fold: first, better work is to be created for those in poor quality informal jobs, and second, the gap of "missing" women workers in the labour market—those who have graduate training but do not work—is to be filled. The chart below shows why India's female labour force participation has become an issue of policy concern from the 2010s when the already-low rate fell even more. The COVID-19 pandemic further aggravated the situation, forcing working women to drop out of the labour market. While there has been some short-term recovery in the rate of women's participation in 2022, India's growth potential remains stymied by the fact that a significant part of its working population sits outside the labour market.

Platforms, in policy imagination, can help bring about change in both these challenge areas. For lower incomes, informal work platforms are seen as formalisers, enabling women workers to have a stronger connection to retail and service markets. At the middle and upper end of skills and jobs, platforms can bring women into the workforce by enabling remote work, part-time, or flexible work. These expectations from policymakers and industry deserve attention and scrutiny. But how can the platform economy, so notorious for its

Figure 1

### Female Labour Force Participation (2010-2022) Annual Percentage



Source ILO modelled estimates, 2021



precarity, support the increase in female labour force participation through the platform economy? Are platforms amenable to women's requirements in the labour market? Are all platforms built the same or are some more advanced in their ability to support female workers?

The answers are not straightforward. While a number of studies shed light on the worker experience, few examine the company operating the platform and its business models. In fact, worker experience is determined by how platforms are designed and the strategy employed to enter and manage multi-sided markets.<sup>3</sup> Companies<sup>4</sup> create platforms, singlehandedly controlling both working conditions, including penalties and incentives, as well as how workers experience the app. Different companies adopt different strategies, implying that they differ in how they treat workers and in their ability to foster women's economic empowerment. This essay aims to demonstrate the importance of these strategies on worker experience.

This research study presents findings from semi-structured interviews with 14 platform companies that operate in India. These interviews reveal how the "management" in platforms – C-suite, heads of operation, heads of service verticals – think about women's work on their platforms.

Platforms' firms adopt various business models such as SaaS (software as a service), managed and unmanaged marketplaces in on-demand, and web-based platform work. This study highlights the implications of these models as they become operationalised in different sectors (e.g., education, home services, mobility) and how policy recommendations can be drawn based on variations in companies.

Beginning with a description of the study's methodological choices and primary data collection, the essay then engages with platform strategy, demonstrating how different models see value creation. It then describes how risk and responsibility form the basis of platform classification, key to understanding the effects of internal and external policy on company strategy. Advocating for a move away from stereotypical conceptions of platforms (in the vein of Uber), the essay describes how different platforms allow workers, especially women, different affordances and create varying types of precarity. Also creating opportunities for the exploitation of women is the grey market, in which middlemen and contractors aid women in accessing and working on platforms. However, this research shows that the ability of a company to support its women workers ultimately relies on the company's scale and stage of growth. In conclusion, the essay offers recommendations



Designation	Absolute Number
AVP Business	B2C educational services in exam prep
VP Supply Development	B2C educational services in exam prep
Product Manager	B2C educational services in exam prep
Senior Manager	Foundation of Ondemand Mobility Services
Business Head - Salon at Home	B2C home services
Head of Operations	B2C home services
Head of Human Resources	grocery marketplace
Senior Product Manager	social commerce marketplace
Product Manager	social commerce marketplace
Founder's office	SaaS educational services
Chief Operating Officer	B2B blue collar worker services
Manager - New Initiatives and Partnerships	Managed Marketplace staffing agency
Chief Executive Officer	
Founder and Managing Director	NGO-run ecommerce website

to guide policies toward leveraging the platform economy and a diverse set of business models to better serve the needs of platform workers.

### Methodology: Studying the People who run the Platform

14 platform companies were approached to respond to an in-depth semi-structured interview. The interview guide was set up to answer the study's main question: "Are platforms sensitive to the gendered aspects of work? How does this awareness reflect in their internal HR policies, work conditions, contracts, branding?" Interview questions sought to ask perception-based questions that brought out how platform operators build platform strategy. Platform strategy is dependent on founders' visions, perception of gender, and organisational culture. Perceptions help develop how company culture develops, how different teams understand and interpret the core goal of a platform, the value that a platform firm places on women on any side of the market – as service seller, product seller, or consumer. In addition, those who set up and run a platform can become important stakeholders in creating a

more empowering ecosystem for women. Firms were also asked about the size of their platform workforce, and the professional workforce in the organisation that complemented these platforms.<sup>5</sup> These interviews, then, sought to capture the firms' engagement with women's resources, agency and achievements<sup>6</sup> in their platform vision, strategies, and operations.

The study is based on primary data collected through 14 semi-structured interviews with upper management professionals such as C-suite executives, director's office, heads of Supply, or product managers. Individuals in these three roles may have varying degrees of control over platform strategy, but exert considerable strategic influence on bringing workers onboard and evaluating their performance. The table shows the sectors in which these 14 platforms operate, and the designations of interviewees. Names of companies in the education technology sector have been withheld upon the request of interviewees. Interviews were recorded and transcribed, and then analysed using thematic and analytical coding. Public relations and marketing teams were not approached in this study.

### Platform Strategy: Different Models of Value Creation

Platforms are asset-light, functioning as intermediaries that coordinate or orchestrate transactions. Labour platforms, for instance, mediate the provision of services by workers to consumers of work, provide the infrastructure and the governance conditions for the exchange of work, and facilitate corresponding compensation.<sup>7</sup> Platforms thus create value by brokering interactions between different actors, namely users and service providers, allowing them to claim distinct status from "traditional businesses", which create value from producing or distributing goods or services. Since interaction is key to the existence and success of a platform, the job of its parent company is to understand who the main economic actors are, facilitate conditions of access and success for them, and explore how best to compete with other businesses that employ these actors. Indeed, platform strategy is central to operation and success, encompassing a set of decisions that companies take in defining their main value proposition, actors, rules of conduct, pricing, incentives, and penalties in a way that manages consumers and service providers alike.<sup>8</sup> How companies approach each of these decisions varies by stage of platform – emergence, growth, expansion, and maturity.

So far only the preserve of management schools and business dailies, studies on platform strategy offer critical insights into the platform economy. Platforms warrant examination; they work hard to differentiate themselves from each other in how they enter markets, which markets they enter, how they choose and incentivise participants, and how they gauge performance. In addition, a study of platform strategy is particularly useful

**Platforms thus create value by brokering interactions between different actors, namely users and service providers, allowing them to claim distinct status from "traditional businesses", which create value from producing or distributing goods or services.**

to gain an understanding of how platforms can hinder or enable women's work, and foster a better experience of work for all workers.

Platforms' strategy decisions have been evident in some sectors. For instance, the competition between Uber and Ola from 2015-17 drove both companies to offer their drivers heavy monetary incentives to attract them to—and retain them on—one platform.<sup>9</sup> In the ridesharing industry's competitive landscape, both companies invested in maintaining their network effect – a phenomenon in which an increase in the volume of producers (like drivers) using a platform increases its attractiveness to consumers, who in turn attract more producers.<sup>10</sup> Reliant on network effects, a single labour platform may expand until it dominates its region or sector and eliminates rival platforms.<sup>11</sup> As the coming sections explain, these strategy decisions influence how workers experience platform working conditions.

Often difficult to approach, the company itself has been outside the purview of worker-focused research. Digital labour platforms have been charged with engaging in purposeful employment misclassification by treating workers as independent contractors while forcing them to work under defined terms of work which do not offer real flexibility. Companies that operate them may therefore be reluctant to engage with labour scholars. If they do comment on worker-related issues, they tend to do so through public relations or marketing departments who speak on behalf of the administration. Also, labour scholars may choose not to expend resources amplifying the voices of already powerful companies and focus, instead, on bringing much-warranted attention to the experiences and voices of workers. In the case of innovative technologies like digital labour platforms, in which systems and strategies are updated continuously, it is imperative that the company that creates and operates the platform is examined. Knowledge of organisational structure, business strategy and corporate culture is increasingly going to form the basis of interventions seeking to assure platform workers of stable, decent work.

### Managed and Unmanaged Platforms: Categorising Risk and Responsibility

In industry and management studies, platforms may be classified as managed or unmanaged

marketplaces. This classification helps investors understand the role a company plays in the creation of a marketplace. OLX, for instance, is an unmanaged marketplace; it is a classifieds platform where anyone can list an item for sale with little intervention from OLX relating to the seller, buyer, or quality of the item. Uber, on the other hand, may be seen as a lightly managed marketplace by investors. In managed marketplaces, the intermediary's presence is a "value add" in itself, providing a "superior experience versus more traditional peer-to-peer marketplaces, brick and mortar or even a legacy service provider".<sup>12</sup>

The labour market in the Global South has a large share of under skilled workers. These workers' skills may not be a match for the jobs on offer, or they may not have received adequate formal or informal education.<sup>13</sup> This results in an ecosystem in which workers who should have occupational licenses (like those in carpentry or care work) do not, and in which wages do not meet the standards created by regulatory bodies. Many platforms have chosen to enter the market to fill these "institutional voids," taking on a role that allows them to be "value adds" in the economy.<sup>14</sup> Sectors like education, domestic services, beauty or care work, medical services, and education, which have historically employed women see a predominance of managed marketplaces that fill these institutional voids in training, skilling, or

price standardisation, allowing for platforms to create stronger network effects that aid worker and customer retention. For instance, consumers flock to Urban Company as they trust the quality of service. They do so as the platform bears the onus of recruiting workers who are trained and experienced, or trainable.

The classification of managed and unmanaged allows for an understanding of how a company assumes its mediatory role and how far it can extend it. Underlying this classification is the question of how much risk an otherwise asset-light company can assume.<sup>15</sup> For instance, Ola's introduction of Ola Fleet—a car leasing business—entailed expenditure on new inventory. Considering the low rates of car ownership among those who drive taxis in India, Ola's risk was expected to translate into improved service and experience, thereby adding to its network effects. An introduction of additional risk into a business model in this manner has the potential to increase consumer trust, ensure more control over quality, improve the company's knowledge of suppliers or buyers, and allow for strategic control over network effects.

For labour researchers, however, platforms are classified on the basis of location—they may be location-dependent or web-based<sup>16</sup>—and analysis focuses on how social media platforms, payment

platforms and crowdfunding inform the world of work.<sup>17</sup> While these classifications demonstrate the various ways in which internet businesses impact work and employment, the industry classification foregrounds the role of the company, and could help shine a light on the choices it makes to meet its goals, including the mainstreaming of women's work.

### Diversity in Affordances and Precarities

Uber has become an archetype for all platform work. It has fed the assumption that all platform work takes place on demand, and is characterised by quick, fleeting transactions and one-time interaction between customers and workers. This model has been overemphasised in worker-research,<sup>18</sup> which has neglected to examine how distinctions between platform work depend on model-choice business strategy despite the emergence of sophisticated classifications of platform work.<sup>19</sup>

Companies choose models based on factors such as labour oversupply or the skill level required of workers who offer services.<sup>20</sup> In education and retail, for instance, some platforms choose to operate SaaS models that do not control workers and instead offer software to existing entrepreneurs or business owners, even providing the technological infrastructure to let people set up online businesses. Edtech company ClassPlus allows home tutors to conduct their classes online, providing the tutor with a way to manage fees, teaching resources, video-calling facilities, etc. Their work and earnings are also mediated by platforms, but they differ from drivers and delivery people whose earnings and work are structured by platforms. Additionally, edtech platforms offer full-time employment to a significant share of their educator workforce. Algorithmic surveillance and management affect these platform workers differently than they do the Uber driver, a level of nuance currently wanting in worker-focused studies.

Working conditions and experiences of work are shaped by type of marketplace, whether unmanaged, lightly managed, or managed.<sup>21</sup> The same beauty salon worker registered with two different platforms, JustDial and Urban Company, works under different conditions and has different experiences. On Urban Company, she is expected

## ...distinctions between platform work depend on model-choice business strategy despite the emergence of sophisticated classifications of platform work.

to wear a uniform, receives a work schedule in advance, and is expected to fulfil the scheduling requirements. She must adhere by the company's rate card and meet the quality requirements of the service. In the event of poor performance, the customer can raise a complaint with Urban Company and receive compensation, and the beauty worker may be penalised. On Justdial, none of these options is available to the customer or beauty worker. She receives "leads" – a customers' needs and phone number, and has full control over the fee she charges. This diversity of work conditions, precarity, and experience exists in all sectors of work that have been platformised. Furthermore, different platforms variously guarantee and hinder women's safety – for example, edtech teachers, though often fully employed, report that they face sexually offensive comments from students on videos or comment sections of learning resources. Customer-centric services do not penalise students for this kind of behaviour.

### The Contractor Economy and its Effects on Women Workers

While platforms like Amazon Mechanical Turk (AMT) offer many skilled Indian women workers employment,<sup>22</sup> workers encounter a number of difficulties using their platform. Learning how to navigate and perform on unmanaged or lightly managed platforms requires digital fluency or knowledge of platform systems that takes time and labour to learn and is not compensated for. This has serious implications for women workers, for whom the digital divide has been found to afford less frequent access to devices or the internet.<sup>23</sup>

In India and several countries in the Global South, a spectrum of intermediaries has arisen to fill this gap, with informal contractors and organised small firms contributing to a "contractor economy" as a host of actors mediate the work and wages of workers and digital platforms.





Women workers are especially dependent on them – these intermediaries offer information on platform requirements like onboarding documentation (government IDs, bank accounts, skill, or educational certifications), or how best to represent skill levels so a platform's algorithmic assessments accepts the applicant's work history.

Management models impact women's work, especially when we factor in scale. As platforms grow in size and scale up, their ability to take on the responsibility of more workers in the ecosystem diminishes. Larger and less-managed platforms like AMT or listing platforms like Naukri.com and OLX are likely to have this kind of grey economy. In India, the grey market middlemen showed up on Telegram channels as recruiters (for workers or for researchers looking to speak to workers), on Google searches for platform companies in the microtasking sector, and on media platforms (like YouTube, Twitter) where workers learn how to use labour platforms. Multiple YouTube channel owners who teach their audience how to earn through remote platform work said that it is regular practice in India, Sri Lanka, and Pakistan for individuals or small firms to gather and subcontract HIITs to people who use classifieds platforms like OLX. These middlemen have become significant gatekeepers with deep, localised knowledge of platform terms and conditions and worker information. Some grey market middlemen also operate as single operators via Reddit or Telegram, selling platform IDs to workers but providing no other support or guarantee. Additionally, some contractors allow workers to rent platform worker IDs and pay a commission to the contractor for each task done. Other studies suggest, as I do too, that this is because AMT significantly changed its onboarding criteria to bar non-US workers from joining their platform in 2011.<sup>24</sup>

Some organised firms also gather micro tasks and workers into Knowledge Processing Outsourcing (KPO) companies. These small businesses are present in India and Sri Lanka, and form a part of the ecosystem around larger platforms. They are often registered companies that offer part-time or full-time work to workers. These KPOs offer a physical workspace, flat or incentivised wages, and support with navigating the AMT interface. Some of these small firms also aggregate work from scaled platforms like AMT, manage worker schedules, and liaise between platform and worker.

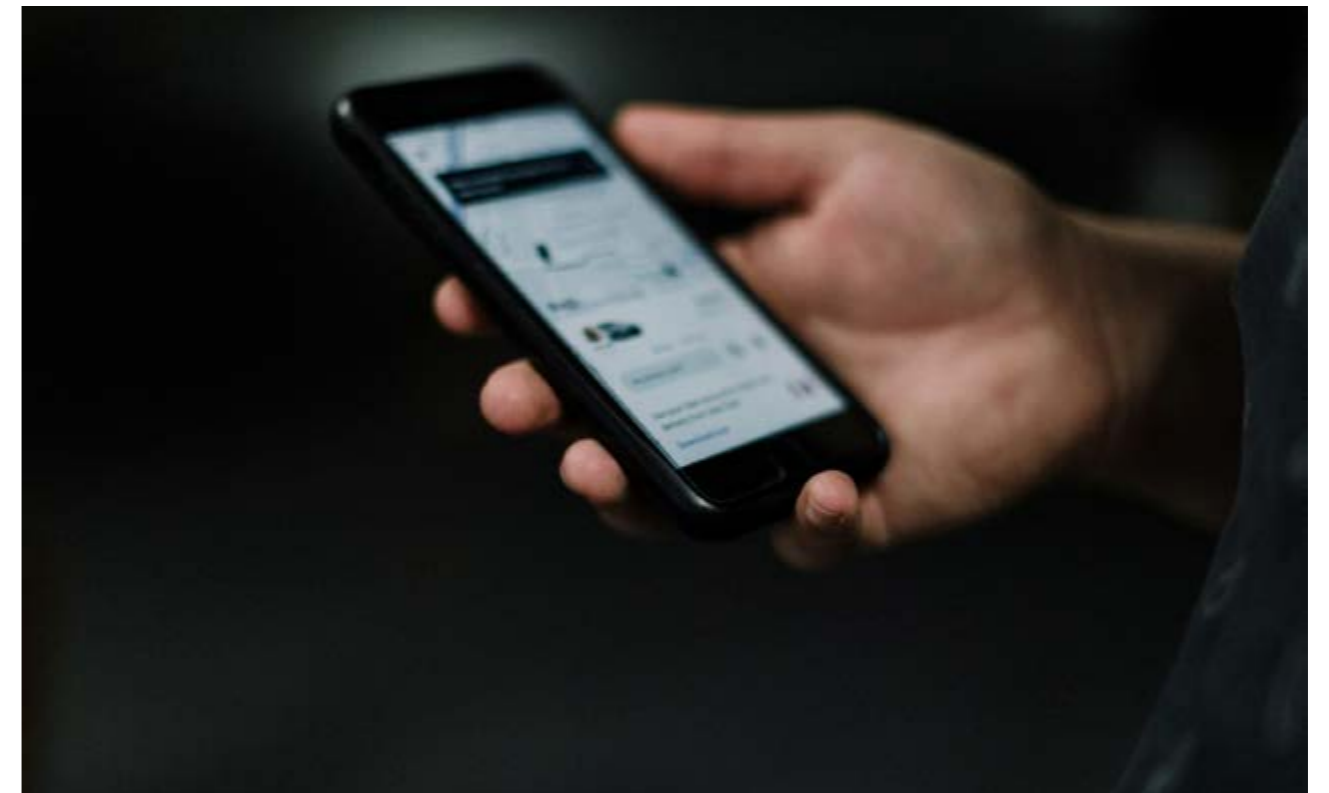
These examples show that while intermediaries can act to positively facilitate women's work, they can also contribute to the exploitation of women. These players in the platform ecosystem need to be considered in the framing of both internal platform policy and external government policy to best protect women's interests.

### **Business Model and Growth Stage: Factors Underlying the Prioritisation of Women**

Companies differ in their interest and ability to capture gender-based data, and in the allocation of resources towards supporting women's work. Choice of model, size, and stage of the platform evolution are all factors influencing how companies work towards tackling issues of gender imbalances, women's safety, and the promotion of women's empowerment. Managed marketplaces, for instance, offer civil societies and governments greater avenues to push for the prioritisation of women. But not all platforms are in the same stage as companies that can do this.

Platforms typically go through four stages of evolution, in which founding teams make decisions on technological and business considerations. Platforms strategically plan to emerge, grow, expand and mature in the markets they choose to operate in.<sup>25</sup> Initially, platform operators spend time and resources to create minimum viable products that are sent out in the market to determine whether they fit, create demand and how they should be changed. To grow, the key participants for the platform (sellers, workers etc.) are bought into the platform. Companies decide who to bring in first, and how to attract them. Expansion is a stage in which we typically see companies incentivise participants to use the platform continuously. Maturity is a time in which a platform can hone in on its ecosystem to improve

### **Choice of model, size, and stage of the platform evolution are all factors influencing how companies work towards tackling issues of gender imbalances, women's safety, and the promotion of women's empowerment.**



its network effects, efficiencies, partnerships, and innovate on the platform. Companies have different priorities at each stage, which influences where they focus their time and resources.

The small managed marketplaces in staffing sectors interviewed in the study reported having in their workforce many college-going women or women returning to work after a maternity break of two-four years. These companies interact with workers at the recruitment stage, during onboarding, and through their work week to week on the platform. One platform said they started creating "work certificates," documents serving as proof of work, so that women could show their families, who did not consider the time they spent at home on a laptop to be "true" work. This interaction between platform and worker allowed the company to offer these certificates in a bid to show work experience, and as an indication that a person was engaged in paid work. The platform felt it was worth doing this to retain workers who they had already trained for the service they offered and trained on the platform system the company had put in place. This indicates how differently platform companies can operate given what research has shown about large, scaled platforms like Uber and Ola cabs, who resist making such claims given the regulatory pressure they face to offer formal employment to drivers.

However, the small staffing company in the study claimed not to gather gender-based data on the platform despite having deep qualitative or conversational interactions with women workers. This seemingly discordant situation arose, they explained, because they were too small and new to have an established system of data collection. The company was founded in 2019 and interviewed in 2021. Many small companies or start-ups that create digital labour platforms have a poor track record of keeping a systematic track of how women fare on their platform; this is a big deficit in small and medium firms where gendered data collection was considered unnecessary for business processes.<sup>26</sup> Company dashboards evolve over different stages of evolution, especially when companies take in external funding from banks or investors. One small platform explained that when they borrowed from SIDBI (Small Industrial Development Bank of India), they were required to maintain gender-disaggregated data for their corporate workforce, though not the gig workforce. Another platform said they did not ask for gender at the sign-up stage, but gauged gender using people's names. They explained that once they were able to prove their market fit, they would develop their data gathering practices.

At best, operators provide very rough estimates; at worst, they offer anecdotes of women who

work on their platform and how they have fared historically. This missing information extends to all the parts of the lifecycle of the engagement of the workers with the firm: how they get recruited, how they fare during the training processes, how they fare on the platform on a day-to-day basis, and when and how they drop off from platforms. Without a clear data pipeline that can be broken down by gender, understanding where women are most challenged in the worker lifecycle is difficult. As a consequence, there is limited knowledge of which areas require the greatest number of interventions to address gender imbalances.

Very small start-ups said that they recognised the issue of gender imbalance but that it was not a priority for them at the moment. Larger start-ups had a better sense of *why* previous efforts at improving gender diversity on their platform did not work. However, they still relied on anecdotes and referred to minor efforts, ultimately conveying that the business interests of the firm outweighed such concerns. Being gender “neutral” was a key concern for small start-ups. They indicated that gender-focused policies were not in their interest to scale and grow, and that prioritising gender would mean adopting a wholly different strategy compared to what was currently planned. There is a strong element of founder or C-Suite interest in supporting women’s work that shapes these policies.

Scaled platforms, like those in the mobility sector, do not have a female-friendly operating environment. If they do incorporate women into their mainstream platform workforce, they do so through foundations as charity or corporate social responsibility and to foster social change rather than through the platform’s regular governance structure. Thus far, Indian platforms have not seen rider-side incentives like good behaviour monetised into credit or rider scoring that has value on the platform system. Connections with foundations and civil society can help in incorporating newer kinds of workers and encourage workers to join platforms.

## Discussion and Recommendations

- Companies differ in their willingness to take on responsibility for the service they offer to workers. In the early years of platform expansion investors took this as an indication

of risk. In India and other parts of the Global South, there has been more growth in managed marketplaces than in unmanaged marketplaces. Investors now see the larger role of the platform as a value add, thus encouraging companies building platforms to balance risk and reward of their role in intermediation. The ecosystem is primed for dialogue, intervention, and persuasion. Understanding how far companies can be tasked to alter their business decisions can open a new area for intervention outside legal, or judicial pathways.

- The model used by the company to create platform work is an indication of how much responsibility they are willing to take on. The preponderance of Uber- and Swiggy-type work in policy imagination eclipses the diversity of precarities or affordances of platform work. This results in little attention paid to how women workers on platforms like AMT may be exploited by actors that do not own or run AMT. The regulation or reduction of individual or small firm gatekeepers are an area that internal platform policy and government policy can work together.
- Managed marketplaces are more suited to filling institutional voids, i.e., stepping in to do things that the state or formal market have not. These marketplaces can have a structural impact on women’s work. Documenting a platform’s role in its ecosystem is therefore key to framing regulation.
- The scale of a platform – how big or small it is – drives how many resources (financial and human) are allocated towards supporting women’s work. Scale and model are indicators of how internal policy could augment women’s work. Larger firms, for instance, often choose to see women’s work as a social cause relegated to their Corporate Social Responsibility (CSR) or foundation wings.

Large, scaled platforms in mobility, food and grocery delivery tend to dominate public imagination and inform what policymakers think platforms are. There is, however, a diversity of platforms. Large platforms like Uber are important to understand and tame, but smaller ones present different adaptations and experimentations of the model. There is a possibility that platform work will not simply mimic the manner in which mobility platforms render drivers precarious. The presence of this possibility is worth noting.

## Endnotes

- <sup>1</sup> Niti Ayog, “India’s Booming Gig and Platform Economy”2022
- <sup>2</sup> Ibid.
- <sup>3</sup> Platforms operate on the basis of multi-sided market economics. For more on this see J Rochet, and J Tirole, “Two-Sided Markets: An Overview,” *IDEI-CEPR Conference on Two-Sided Markets*, (2004):1–44 and David Yoffie et al., *The Business of Platforms*. Harper Collins, 2018.
- <sup>4</sup> Globally, some platforms are also set up by cooperatives. India’s experiments with platform co-operatives are in their nascent stages and outside the scope of this study.
- <sup>5</sup> The findings presented in this article are part of a larger project called “Ecosystems of Engagement” with researchers from the Centre for Policy Research, India, LIRNEasia, Sri Lanka, Indian Institute for Human Settlements and World Resources Institute. The project engaged with the potential of women’s economic empowerment through an ecosystems-approach that will create a common understanding of the ecosystem across business, policy, and civil society towards a more inclusive ecosystem for women. To create a comprehensive ecosystem this project examines business practices on the one hand, and the needs of workers, particular women workers, on the other, connecting these nodes to each other
- <sup>6</sup> Naila Kabeer’s framework allows us to assess whether paid work on platforms contributes to Women’s Economic empowerment if they report (or we can document other indicators to show) improvements in:
 

**Resources:** gaining access to material, human, and social resources that enhance people’s ability to exercise choice, including knowledge, attitudes, and preferences

**Agency:** increasing participation, voice, negotiation, and influence in decision-making about strategic life choices

**Achievements:** the meaningful improvements in well-being and life outcomes that result from increasing agency, including health, education, earning opportunities, rights, and political participation, among others.

Women’s Empowerment – as it indicates a change in power relations – should be situated within their specific social context rather than through absolute measures or universal indicators.

There are context-specific and institutionalised “structures of constraint” that shape the process and extent of empowerment afforded to women through platform work. These are norms (unwritten but socially-enforced rules, gender roles, expectations and standards of behaviour) and institutions (norms + formal structures, rules, procedures).

Platforms ecosystems interact with and are influenced by existing norms and institutions, but are themselves composed of infrastructure networks, rules, policies and protocols which might constrain/ support or enable/ facilitate women’s empowerment.
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- <sup>20</sup> Li Jin, "Things to Consider When Building Managed Marketplace Companies," 2019, <https://a16z.com/2019/08/28/where-the-opportunities-are-in-regulated-marketplaces-managed-marketplaces/>.
- <sup>21</sup> Working conditions refers to hours of work, task allocation, and how earnings are structured whereas experience of work refers to workers perception of working on apps, under algorithmic management.
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# Digitalisation and Transformations of Women's Labour in Sanitation Work

An Indian Perspective

The waste management sector has attracted the private sector in India. Taking the case study of a start-up in waste sorting and recycling, the essay examines how technologies used in such spaces affect women's work. It finds that there is a shift in the perceptions of who engages in this work and how the work itself is experienced and seen. But it also cautions against the perpetuation of the gendered division of labour in sanitation work, particularly in roles that demand technical (often digital) literacy/competence.

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## Introduction

In the corner of a large warehouse, a woman sits with a barcode reader connected to a computer, picking up and scanning plastic items from the conveyer belt in front of her. Other women around her are hard at work; some segregate the plastics and papers, while others load the items at the start of the belt. They look at the clock at intervals, waiting for their lunch break, or break into a conversation until another bright blue bag is emptied onto the belt.

The warehouse is different from the other manufacturing units that find a place in the sprawling industrial region of southeast Hyderabad. Many women here have worked at the warehouse for four years, a longer period than they are used to in an otherwise precarious semi-skilled and unskilled labour market.<sup>1</sup> The hundreds of other factory units here primarily involve manufacturing rather than sorting waste, and most employees are men. As one walks the wide roads vibrating with the movement of heavy machinery, a sweet smell lingers in the air, a result of the many biscuit manufacturing units in the area. This particular warehouse is tucked away in between a biscuit factory and a glass processing unit. A sorting facility of a waste management start-up and one of the many entrants into the domain of waste management, it embodies the changing dynamics in India's waste management and sanitation sector.

From cleaning streets and collecting garbage from public residential and non-residential areas of the city to transporting the waste to dumping yards and managing the pipeline to relevant recycling industries, municipalities and local government bodies are responsible for waste management and sanitation work. This is codified into the various state regulations and the city's Municipal Corporations Act established in the early 20th century by British rule at the time. Sanitation work, as a category of tasks related to cleaning areas and collection of waste, is highly diffused work. It includes cleaning public areas, institutional premises, community and public toilets, drains, and sewers; handling municipal waste, including medical waste and that from dry latrines and septic tanks; cleaning leather; and managing dead bodies.<sup>2</sup> Around five million workers are employed in sanitation in urban locations.<sup>3</sup> Among these jobs, sweeping, latrine cleaning, and school toilet

cleaning are undertaken by a workforce of which 90 percent are women.<sup>4</sup> Additionally, most workers belong to regional Dalit sub-castes tied to manual scavenging and sanitation work.

This essay focuses on two kinds of sanitation work:

- The work of cleaning and sweeping in private residential areas
- The work of segregating waste for recycling

These tasks are picked for two reasons. First, both reflect changes in how waste is collected and processed, especially in metro cities where there is greater access to digital technologies. Second, both these types of sanitation work have traditionally employed women, a trend that persists.

This essay explores the role of digital technology in women workers' lives in the above-mentioned sanitation work categories, illuminating how technology intersects with women's work in complicated ways, which transcend simplistic categorisations of beneficial or harmful. This essay documents how women engaged in cleaning and sweeping residential areas, and in recyclable waste segregation, interact with technology in their field.

This essay results from broader research that seeks to understand how digital technologies can be leveraged for the collectivisation of women workers in India. These discussions are based on secondary research conducted since the start of 2020 and primary research conducted in Hyderabad between July 2021 and December 2021. This included studying the daily activities of women workers in two sites, as described in

**This essay explores the role of digital technology in women workers' lives... illuminating how technology intersects with women's work in complicated ways, which transcend simplistic categorisations of beneficial or harmful.**

the forthcoming sections. During this time, semi-structured, in-depth interviews were conducted with 10 women workers, three supervisors, and three managers.

## Reassessing Sanitation Work

One common activity in privately led sanitation work is the sweeping of public areas. For this, municipal corporations hire workers directly on contract directly or through middlemen, to clean streets and institutional spaces. A majority of these sanitation workers are women and belong to what are described as Hindu "lower and scheduled castes," relegated to doing work that is caste-based.<sup>5</sup> Workers in this sector face a variety of issues, ranging from extreme surveillance to a lack of dignity<sup>6</sup> and safety, and a low and precarious wage structure.

Various technologies have recently been used to monitor, supervise, and control worker movement. In May 2022, sanitation workers staged a massive protest outside the Greater Hyderabad Municipal Corporation (GHMC), demanding permanent jobs and minimum wages.<sup>7</sup> Biometrics and location tools, often faulty, were allegedly used to cut wages based on erroneous data collected on attendance, sometimes due to poorly designed interfaces. Smartwatches have been used in Chandigarh to track workers' whereabouts constantly, infringing on their privacy even during hours off.<sup>8</sup> Additionally, most workers are not permanent and do not receive wages on time. Corruption is also rampant in this system; workers are harassed by Sanitary Field Assistants for a cut from their salary.<sup>9</sup>

The second set of jobs relate to domestic work in private or semi-private areas such as homes and offices. This includes the "three Cs" of work, namely caring, cleaning, and cooking. Domestic work in India is one of the least regulated sectors, with only very few states having laws on minimum wages and maternity for this sector. Wages remain low, jobs are highly precarious, and there is little to no social security.

## Formalising "Housekeeping"

This section uses a case study to illustrate how women workers may benefit in complex ways from new digital technologies in urban areas. In particular, it points to how these technologies help

women seek out better employment opportunities. Also illustrated is how women workers negotiate with possible surveillance in the workplace.

Metro cities in India have seen the growth of larger residential areas that manage garbage collection and sanitation work by hiring staff or private services. Usually referred to as gated communities, these residential areas are characterised by gated and guarded entrances.<sup>10</sup> This essay relies on interviews of workers at a private service that manages "housekeeping" tasks in the common areas of residential buildings – paths, lobbies, hallways, and seating areas.

Almost all these workers are women who are given responsibilities ranging from sweeping and mopping to dusting. They begin work at 8 am and finish by 5 pm. Many workers who do this job worked as domestic workers in the same area; some even worked in homes in the same residential locality before switching to work for the agency. Rajni, a 31-year-old woman from a nearby village who worked as a domestic worker, describes her experience of finding the job:

*I was registered at the security gate and let them know that I was looking for a job outside people's homes, within the buildings itself. It was very easy to lose that job (referring to her job in private homes). I was contacted by the manager here through that. Since I already knew the locality well, I was hired.*

Krishna, the manager, verified the claim. He explained how the gate application—a community management application that registers all the workers coming inside a gated society to work in the residents' homes—had helped them hire people in the past. During this registration process, workers' identities are verified using a document of proof of identity.

Rajni was a domestic worker who was registered through this process. Since workers undergo this registration process, it is easier to bring them on board to work for the gated society management corporation because their identities have already been verified. The manager could be sure that the worker had already cleared the necessary security screening and had valid documentation. In this way, technology helped workers make the transition from private domestic work to working for the community management corporation.

And workers saw this shift as a step up. Rajni articulates this well:

*Before this, my children would be waiting for me to get home. Some days I could not go back home until 9 at night. We are finished by 5 or 6 pm here, and I can immediately go home. I would lose homes also before, and then I had to look for another home to work at. This job is permanent, and I get money in my account on time every month. I don't have to go asking again and again. Everything is more proper here.*

Even though these sanitation jobs managed by private management corporations pay less than what a government municipal corporation would pay for the same work, the respondents expressed appreciation for the improved conditions of work relative to their previous occupations in private domestic work.

Rajni also refers to the social security benefits she receives as a permanent employee, namely the Employees' Provident Fund (EPF) and the Employees' State Insurance (ESI). The Provident Fund (PF) is a compulsory retirement scheme for employees who earn less than ₹15,000, and is managed by the government. Private organisations with 20 or more employees are obligated to participate in the PF.<sup>11</sup> ESI covers health-related eventualities including sickness, maternity, temporary or permanent disability, occupational injuries, or death. The ESI Act applies to all non-seasonal factories employing 10 or more persons and to all employees earning wages of ₹21,000 or less per month (₹25,000 for those with a disability).<sup>12</sup> Since these private firms that hire workers like Rajni tend to be larger in size and are registered, they are also subject to labour regulations and therefore tend to offer better conditions of work.

Workers are also supervised closely here, but a smaller group and a transparent chain of command help resolve issues related to attendance. For instance, Krishnaveni, a supervisor, explains how phones facilitate specific tasks, which could require invasive and unreliable surveillance methods in other circumstances:

*Not all the workers have phones, and sometimes it used to be an issue if we wanted to reach one of them while they were working somewhere in the society. What we do now*

*is that we make sure that the workers are paired up to work together in the same area where one can be reached easily. We make this schedule ahead of time, so there is no confusion.*

This example illustrates how technology such as cellular phones can reduce the need for other invasive surveillance technologies. Perhaps more importantly, it demonstrates how supervisors, using their own judgement and trust in the worker, can mediate performance, reducing the need for possibly invasive measures using technology.

Rigid underlying hierarchies, or a lack of trust, can undermine the ability of supervisors to mediate the potentially intrusive use of technology. Technology can also be a tool that supervisors use to exercise greater power and control. For instance, most supervisors, especially in Municipal Corporation jobs but also in private management companies, tend to be men. This creates an additional power dynamic between male supervisors and women workers. For instance, in the service examined for this study, 40 workers worked under five supervisors. Only one supervisor was a woman; the rest were men. These power dynamics and hierarchies can exacerbate the intrusive potential of technology.

### New Kinds of Work in Waste Management

Entrepreneurs in waste management have the potential to provide opportunities for upskilling and create partnerships that improve working conditions. The growing use of technology in waste management provides opportunities to skill more workers in the use of these technologies. Additionally, by registering workers, aggregators in this space grant greater visibility to workers who may otherwise be invisible.

Waste collected from residential and non-residential areas passes through many hands before being recycled to be used again or ending up in a landfill. In Hyderabad, inorganic waste moves from private or communal dustbins to traders or rag-pickers – informal workers who collect waste. From here, retail or wholesale traders sell it directly to recycling units, while some of it may be reused directly.<sup>13</sup> The role of the Greater Hyderabad Municipal Corporation (GHMC) in this is to simply collect waste from dustbins



and transport it to one of the many landfills on the city's outskirts. Rag-pickers do the job of separating recyclable waste from these trash cans and the dumping sites. More than 20,000 rag-pickers do this job in Hyderabad alone, and they belong to the most underprivileged, vulnerable section of society, some of them with no assets except the clothes on their back.<sup>14</sup>

These informal recyclers provide a valuable service to the community by selling recyclable waste to various recycling units in the city. Most of the rag-pickers are women, and many employed are children. Most of them work eight or more hours daily, walk long distances, and take home about Rs. 1500-2000 in a month. They receive no social recognition for their work by the city's larger public, nor does this work offer social or economic mobility.

In recent years, India has seen the emergence of a business model in the waste management sector in companies like Skrap, Saahas Zero Waste, Crapbin, and Bintix. Start-ups in this space are also seen in other parts of Asia, such as Waste4Change in Indonesia. These organisations are platforms that seek to strengthen partnerships with the informal waste sector by consolidating informal workers to collect waste for them.<sup>15</sup> These companies collect waste directly from consumers in residential or non-residential areas, thereby

placing the responsibility of basic segregation on the consumer. Once they receive the waste, they segregate the different kinds of dry materials at a sorting warehouse in accordance with the needs of their recycling partners.

As part of this study, women workers were interviewed in one such sorting facility. The facility employed 42 women who did most of the work, mainly concerned with sorting the waste. Other tasks, such as driving trucks to collect waste around the city and loading and offloading, were done by five men. A woman floor manager oversaw the work of sorting, while another male manager oversaw the collection work. The sorting facility is situated in an industrial area of Hyderabad, and most workers were consequently drawn from other manufacturing units nearby. Because the computer work at the sorting facility is highly specific, the company trained 28-year-old Seema from Hyderabad to use the computer for her work. She describes her experience:

*I had to leave my tailoring job because my son was sick. I was out of work for almost a year, so this job was a blessing. I learned to use the sewing machine for my previous job, [but] I am learning to use the computer here. I am happy about how quickly I picked this up.*



Tapasya, who is 39 years old, had a similar story. She lost her previous job because the factory she worked in shut down. She expressed frustration with how little time she was given to find a new job.

Underscoring how these new tech-enabled jobs are affording women better opportunities, Ishwar, the city manager of Hyderabad, thinks that most women will continue to work at this warehouse for a long time. He says:

*[The workers] around here are mostly non-local. Most have migrated from other states. Their relatives work in other factories or even in farming back home, but they are enthusiastic about working in the warehouse instead of working in the field. If the job does not involve travelling, they prefer that. And if they see other women working here, they also feel comfortable working there. We prefer hiring women for this work because they are more regular and responsible. It is only where travel is required that we hire men.*

As in the previous example, this kind of factory employment, when it is above 20 workers for PF and 10 workers for ESI, is under legislation that ensures workers get social security benefits from their employers and the government. There are other advantages to a job like the one at the sorting facility. Here, the workers may be tasked with scanning the barcodes of the materials they are sifting through during segregation. A rudimentary software that lists the products is used for this. Although the software is simple, only a few workers are trained for this task. Seema informs me with a proud smile that she could pick up the system in just two days, enabling her to earn more. This is an example of the kind of upskilling that technology can promote in this sort of a factory job. This work is still significantly removed from rag-picking, and rag-pickers do not usually have access to these jobs. However,

new entrants such as the start-ups mentioned earlier can partner with informal workers like rag-pickers to formalise their contribution to waste segregation through the more lucrative business of selling recyclable waste.

## Conclusion

Changing urban geographies, work aspirations, and the rise of new digital technologies and new actors in sanitation are creating possibilities for more formal and dignified work. However, this area of work is also faced with challenges that government agents, policymakers, and corporations can help mitigate.

First, new work can be leveraged to improve existing kinds of work. For instance, emulating the chain of command and management system of private cleaning services can mitigate the need for surveillance technologies. Second, the question of how technology can help find employment opportunities can provide an avenue for future research. For instance, women prefer working in a private cleaning service over being engaged in domestic work, which is a highly precarious labour market with few rights. Similarly, women working factory jobs or as rag-pickers can become part of a very lucrative trash segregation business that can, over time, improve workers' economic and social conditions. Being employed in jobs in which upskilling is a part of the daily work benefits women's perception of their work. Third, while new kinds of work may hold promise, it is clear that a majority of women continue to work within the poorly legislated informal economy that provides low-productivity work and low wages, and offers no social security coverage or labour protections. Technological advances notwithstanding, any improvement in labour conditions for women in the waste management and sanitation sector will occur at snail's pace in the absence of better legislative measures.

## Endnotes

- <sup>1</sup> According to the National Classification of Occupations, 2015, jobs requiring the lowest skill level are described as “elementary occupations”, followed by plant and machine operators and assemblers. These jobs require only primary education and are described as those that “[t]ypically involve the performance of simple and routine physical or manual tasks”. All types of cleaners, sweepers, and garbage collectors are included in this category.
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## Introduction

This essay tells the story of Bandhu,<sup>1</sup> a platform that, through a free mobile phone-based application, connects low and medium-skilled migrant workers to information on work opportunities and wages, housing costs and conditions, and government entitlements and programs. In offering these services, Bandhu provides income generation opportunities for low-income urban women, bringing them into paid work, and increasing their income, mobility, networks, and skills.

The story begins in the city of Ahmedabad in Gujarat, India, where Bandhu launched its housing pilot in the aftermath of COVID-19. Women within migrant and working-class communities, we found, came to play an important role in finding and listing housing on the platform, earning a commission for these tasks, and increasing housing supply and choices for incoming migrants.

This study contextualises and explains empirical data from Bandhu, drawing on published literature and the authors' prior research. Employing Naila Kabeer's<sup>2</sup> framework for women's economic empowerment, we describe how engagement

### Training women “housing champions.”



Photo: Bandhu

with the platform helped empower low-income women not previously engaged in paid work or work outside the home. This engagement provided income-earning opportunities, improved digital skills, and expanded mobility within the city. We also demonstrate how gender and social norms and relations shape the ways in which women engage with the platform—namely as housing intermediaries rather than migrant job seekers, employers or homeowners and providers.

In line with other studies in Indian contexts,<sup>3</sup> Bandhu's example in the city of Ahmedabad shows how mobile platforms benefit low-income urban women with their range of income-earning options, low barriers to entry into the labour market, and flexible work arrangements. The platform enables opportunities for paid work, the acquisition of new skills, increased income, greater mobility, and the creation of networks for the women that serve in-person intermediaries between the platform and its migrant worker clients. By providing the means for the economic and social empowerment of women, platform-based work could, arguably, contribute to changing gender roles and relations within households and communities. At the same time, there is little evidence that the proliferation

of platform-based work has had a transformative effect on deep-rooted gender inequalities, as some proponents had expected.<sup>4</sup> Additionally, rental housing and migrant labour markets vary considerably across cities, variously impacting the roles women play in housing and migration processes.<sup>5</sup>

## Rural-Urban Migration and Flexible Labour in India

Migrants, intrastate and interstate, constitute a large share of the workforce in India's cities and urban regions. The 2011 Census recorded 450 million internal migrants, constituting about 37 percent of the population.<sup>6</sup> This number is likely to have grown significantly over the past decade, driven by population growth, urbanisation and economic progress.<sup>7</sup> Reflecting regional and spatial disparities in how this growth is distributed, migrants move between rural areas, as well as from rural to urban areas. Migration in India has traditionally been seasonal and circular.

Large numbers of migrants move from the poorer agrarian states of Uttar Pradesh, Bihar, Bengal and Odisha to the national capital of Delhi and industrialised western and southern states, such as Gujarat. This form of rural-to-urban migration is often short-term, recurrent, and circular, with migrants moving between cities and rural home states, and tends to be male-dominated.<sup>8</sup> Women in India migrate primarily for reasons of marriage and, to some extent, education, and constitute only about 16 percent of the population that migrates for work.<sup>9</sup>

In Gujarat, migrants from within and outside the state make up over half the population of its major cities, Ahmedabad and Surat, and the bulk of the industrial workforce.<sup>10</sup> Self-employed, casual, and daily wage workers, and workers in “unorganised” small and microenterprises in the state also tend to be migrants. Official numbers are likely to be undercounts, as short-term and circular migration is difficult to capture in national statistics, and city administrations do not keep count. Although urban economies are dependent on migrant workers, India's internal migrants, as the COVID-19 crisis made clear, remain socially and politically marginalised within destination cities, and lack access to state entitlements and social protections.<sup>11</sup>

While migrant workers are likely to be unorganised, vulnerable to exploitation, and excluded from welfare entitlements and labour protections,<sup>12</sup> migration to the city offers higher wages and more income earning opportunities<sup>13</sup> and, in some cases, opportunities for social and economic mobility within destination cities. Migrant remittances are an important source of income for rural households.<sup>14</sup>

The labour market in India, empirical research shows, is stratified into legally protected “formal” employment, and insecure and unprotected “informal” modes of work, and by gender, caste, ethnicity, religion and place of origin.<sup>15</sup> Circular and seasonal migrants, concentrated at the low rungs, live and work under conditions of precarity and vulnerability.<sup>16</sup> Such migrants are predominantly male, and typically migrate alone, or with other men from their home districts, although they may go on to bring their families. A majority of female migrant workers in Indian cities belong to marginalised social groups, and work in low-wage, “unorganised” and unprotected work such as casual and low-skill construction, domestic work and home-based piecework.<sup>17</sup>

Based on long-term empirical research in the “model industrial state” of Gujarat, labour scholar Berman<sup>18</sup> links the informalisation of industrial employment with the availability of a pool of “footloose” migrant workers from poorer states. Even when employed in “formal” or “organised sector” industrial enterprises, such migrant workers are likely to be contract or off-the-books workers who do not have collective bargaining power, benefits or labour protections.<sup>19</sup> Circular migrant workers move between cities and rural homes in India, and between jobs, industries, and worksites, constituting a flexible, mobile, “on-demand” workforce that presages the global gig economy.<sup>20</sup> Digital labour platforms and marketplaces have proliferated in this context of informalisation. Digital technologies allow for the aggregation and scaling of millions of small-scale sellers of labour and goods, and the algorithm-assisted matching of buyers and sellers eases transaction costs.<sup>21</sup> In the next section, we discuss how Bandhu's platform model applies digital technologies to match migrants with work opportunities in destination cities.



## Bandhu's Migration-Matching Platform

Bandhu was born in 2020, just before the COVID-19 lockdown resulted in an exodus of migrants from cities to rural homes and made visible the precarity that characterises the lives of India's migrant workers and their families. It is one of several phone-based platforms targeted at migrant and informal workers that were active during the COVID-19 crisis, as lockdowns and other pandemic containment measures disrupted labour markets and migration dynamics, and created new demands and jobs in delivery services, healthcare and offsite gig work. What sets Bandhu apart from other platforms is that it works more as a migration-matching platform than an employment-matching or recruitment platform. Its focus on migrants and the migration ecosystem, and the bundling of jobs, housing and welfare distinguishes Bandhu's model from similar platforms like LabourNet,<sup>22</sup> which matches informal workers with jobs and enterprises.

The migration ecosystem in India is a complex one. Migration corridors or circular flows of people from rural districts to cities and industrial regions are organised by networks of labour contractors and brokers, often from migrant communities. Chain migration is also common, where migrants follow earlier migrants from their communities to destination areas, and more established migrants facilitate the process. While digital platforms might be expected to circumvent intermediaries and enable direct relations between workers and employers, researchers have found that intermediaries continue to play an important role in labour platforms, particularly among more low-skilled and low-wage workers in the Global South.<sup>23</sup>

Bandhu's platform model incorporated contractors and intermediaries, an adaptive approach that helped the platform scale quickly in the post-lockdown period, as cities reopened and firms sought workers. Its algorithm, designed to operate in and systematise India's complex rural-urban migration ecosystem, aims to optimise a manifold match between migrant workers, employers, contractors and labour brokers, landlords and housing providers.

As part of its initial efforts, Bandhu attempted to reach out directly to target workers, working with migrant-support organisations like Aajeevika

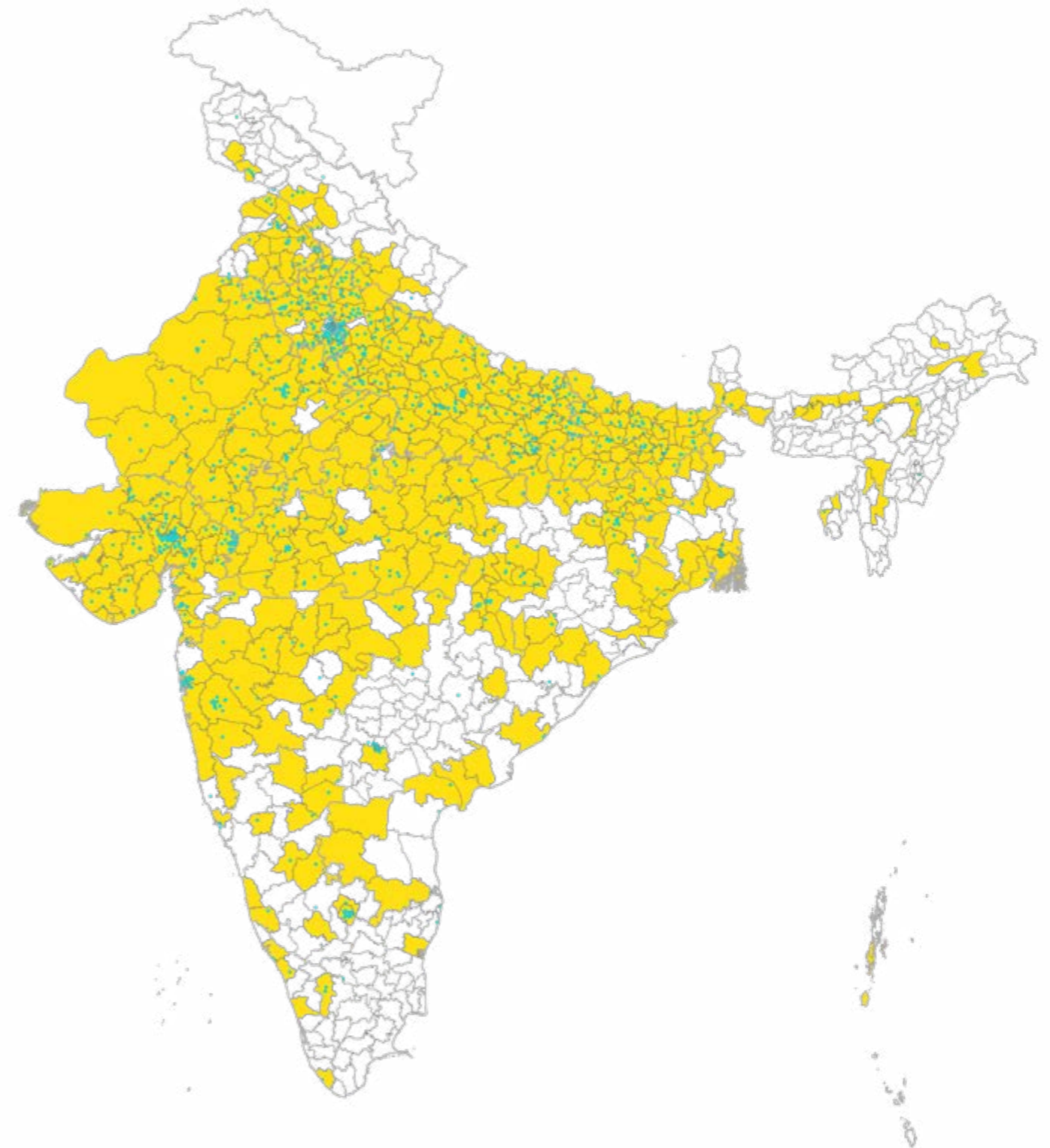
Bureau<sup>24</sup> and using physical plus digital modes of engagement. This approach, however, had high operational costs. Young seasonal migrants, while willing to try out new platform applications to seek job opportunities, had high exit rates, and lacked the education, digital skills, and technology needed to use the platform effectively. It became increasingly evident that contractors, brokers and well-established long-term migrants were essential for the mobile application to gain ground among migrant communities and networks. Such individuals were incentivised to be platform "champions", helping to inform and on-board migrant workers. They acted as digital intermediaries and labour suppliers for employers, especially in migrant-dependent industries such as construction and transport.

Current users of the Bandhu platform are predominantly male, a reflection of the migrant workforce in India. While engaged mainly in "blue-collar" work, they span the socio-economic spectrum and come from wide range of migrant sending states and districts. Bandhu's attempts to bring women users on board and connect them to job opportunities were relatively unsuccessful; most female labour migrants in India are, as previously discussed, from marginalised and socio-economically disadvantaged communities, and have low levels of digital literacy and limited access to smartphones.<sup>25</sup> In general, women in India have limited access to digital technologies,<sup>26</sup> face gender-based employment and wage discrimination,<sup>27</sup> and have less power to make migration-related decisions and choices than men. Women migrants are more likely to migrate with male partners or families, and less likely to engage in paid work in destination cities. Migration choices of more educated low-income women who move for work—for example, as care workers, beauticians, low-level office or retail workers—are often circumscribed by family and social networks. How, then, did women come to be vital intermediaries in the migrant housing ecosystem?

**Its focus on migrants and the migration ecosystem, and the bundling of jobs, housing and welfare distinguishes Bandhu's model from similar platforms...**

Figure 1

**Origin districts (yellow) and destination cities (blue) for migrants on the Bandhu platform.**



Source: Bandhu



## Women as Housing Intermediaries on the Platform

Housing was central to Bandhu's migration-matching model, as large numbers of seasonal and circular migrants migrate without specific jobs and work as self-employed workers, platform-based gig workers, and daily-wage and casual workers. The location, cost and conditions of housing influence livelihood opportunities and earnings, and may affect important decisions, including whether migrants migrate alone or with their families. Short-term and seasonal migrants engaged in casual or daily-wage labour stay at construction sites, in accommodation arranged by labour contractors, or makeshift shelters on the streets.<sup>28</sup> Other migrants have access to an informal rental market that is unregulated, flexible, and demand-driven.<sup>29</sup> Typically located in slums and informal settlements, urban villages, informal sub-divisions and villages in industrial urban outskirts,<sup>30</sup> migrant housing units usually contain beds or sleeping spaces rather than rooms or flats, and are provided by local landlords, homeowners, micro-entrepreneurs, labour contractors and employers themselves, often within work premises. This sort of housing is invisible in official plans and statistics, and rental housing provision for migrants rarely receives attention in urban planning and policy.<sup>31</sup>

Bandhu introduced its housing component in Ahmedabad in 2022, as the pandemic waned and rural-urban migration, including family migration,

began to pick up pace—driving demand for low-cost rental housing. Listing an extra room or bed/space for incoming migrants offered homeowners, existing landlords and small entrepreneurs a way to earn additional income with little investment. Bandhu's model relied on earnings from tenants and housing providers, who would pay a small fee digitally for video tours of rental spaces and a success fee once a rental agreement was transacted within the application. Locating these spaces and listing them was primary, and central to the platform's operations. However, even though the Bandhu app has written policies, digital contracts, and a legal and regulatory framework for tenancy, the semi-legal nature of the market and the fact that rental accommodation is often within private homes led to a reluctance among housing providers to list rooms and properties. Information on rental housing options for migrants was consequently hard to collect and required painstaking groundwork.

To overcome this problem, Bandhu enlisted on-ground housing facilitators and intermediaries to locate and list housing options. While they initially engaged male migrant workers already on the platform, they soon discovered that these workers—already employed full-time elsewhere and not well-embedded in the community—were either uninterested or unable to find information on available and potential housing. The male workers also faced gender-related barriers in obtaining information from women who stayed at home while male householders were away at work.

**Although these women have low levels of education and literacy and limited digital access compared to male migrants, the trust they enjoyed within migrant communities and their extended social networks enabled them to effectively perform the role of housing intermediaries and facilitators.**



Photo: Bandhu



Photo: Bandhu

Through experimentation, Bandhu found that women within migrant communities were likely to have information about housing options in their neighborhoods and were able to encourage local landlords and households to list spaces. Although these women have low levels of education and literacy and limited digital access compared to male migrants, the trust they enjoyed within migrant communities and their extended social networks enabled them to effectively perform the role of housing intermediaries and facilitators.

Working with community-based organisations, Bandhu brought women onto the platform as “housing champions” to identify, digitise and help increase housing supply for incoming migrants. Most were non-working wives of longer-term migrants or factory workers between the ages of 30 and 45, and largely from the states of Uttar Pradesh and Bihar. The platform trained women and paid them to seek out, inspect, and list housing options, as well as persuade landlords and potential housing providers to list and rent rooms. Each housing champion was paid for tasks completed, such as finding and listing properties

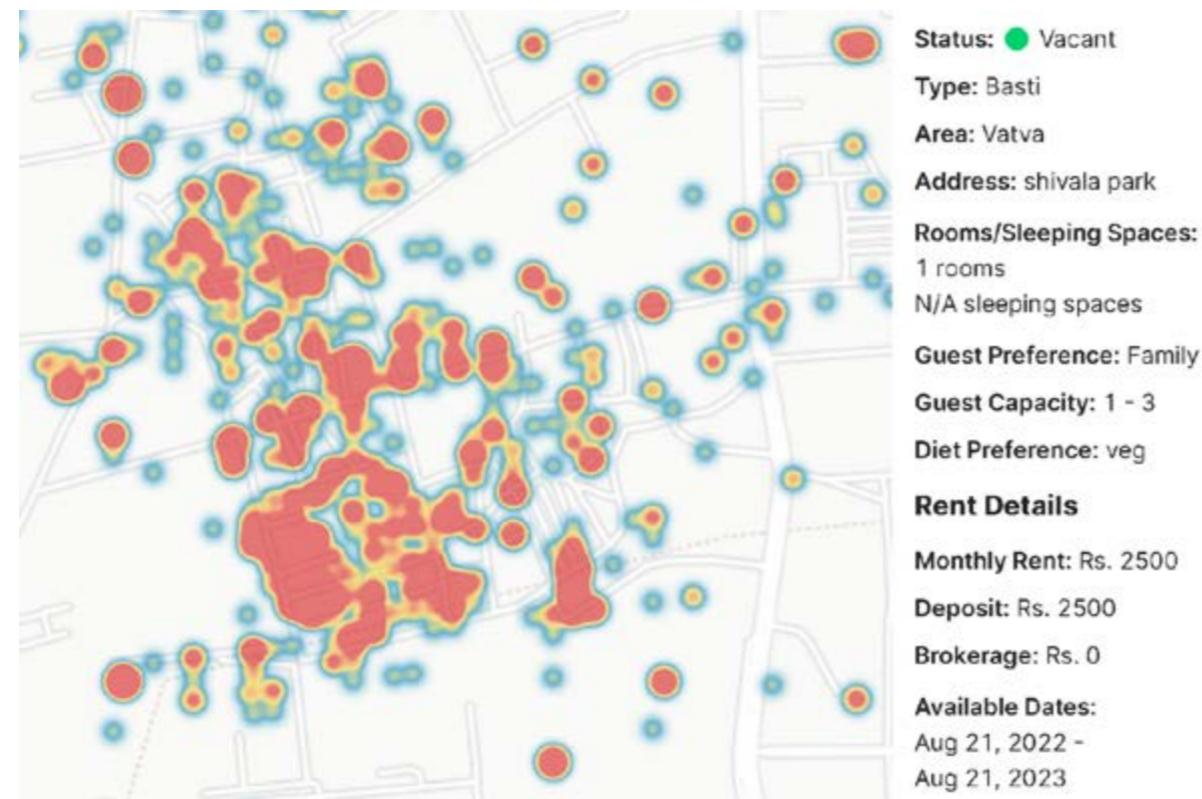
or securing tenants. For safety as well as practical reasons, both training and scoping took place in small groups. Initially, women's groups shared a single phone owned by one of the members. As some group members were only recently digitally literate, group members helped each other with listing and on-boarding. This sort of group activity also helped reduce incentives to make fraudulent listings.

Bandhu's algorithms match housing on several criteria such as cost, quality of housing, distance to work site, and availability of transport, as well as more personal and social preferences. Housing providers and tenants in Indian cities may seek or provide housing for members of their own social groups based on caste or religion, for instance. This information is not included in rental listings, but coded into dietary preferences, places of origin, and names, which are disclosed at later stages of the platform's housing transactions. Women intermediaries were better equipped to understand these underlying preferences without the need for overt listings.



Figure 2

**Properties on-boarded on the Bandhu platform in an Ahmedabad locality.**



Source: Bandhu

Bandhu's housing supply model was adaptive, rather than disruptive, of gender and social norms and relations in migrant communities. In the housing pilot areas in Ahmedabad, patriarchal norms held sway, and women were rarely allowed to spend time outside their homes or venture beyond their immediate neighbourhoods. However, facilitating housing for incoming migrants was seen as a community-centred activity appropriate for women. Furthermore, this work was flexible and could be combined with household duties and care work.

Women enjoyed another advantage. Usually working in small groups and often with children in tow, they were not perceived as threatening when they surveyed neighbourhoods for housing options. Their interactions on these missions were usually with other women, and they were able to champion Bandhu's housing product to potential housing providers. While women may not be the homeowners, landlords or primary decision-makers in their households, they had influence over decisions related to hosting migrants and their families to supplement household incomes.

The housing champions helped providers list individual beds and properties, establish criteria and preferences, and select suitable tenants.

Bandhu also worked with local non-governmental organisations, contractors, brokers, and employers to make their housing champions points of contact for new migrant workers and their families, interacting with them offline while helping them digitally browse listed properties and make housing decisions. Here again, women-to-women contact was the norm, as housing is an important concern for family migrants, and women within the family typically vet housing options. In this way, the platform helped facilitate social connections for incoming migrants beyond their immediate and existing networks.

Housing champions were also able to earn significant amounts through their activities. This led to decreased resistance from family members and encouraged women to become more entrepreneurial. Some acquired their own mobile phones, and now enjoy increased digital literacy and skills. Some groups venture

outside their localities into new areas of the city, chartering rickshaws for the day and often taking their children along. In one case, Bandhu observed housing intermediation becoming a family enterprise – the husband of one housing champion, a driver for a food delivery application, would survey potential migrant housing areas during delivery rounds for his wife to later canvas with her group.

In nine months of activity in Ahmedabad, Bandhu's housing platform has aggregated around 35,000 beds. As demand grew, Bandhu adopted a "training the trainers" approach, in which early cohorts of housing champions trained additional women. Bandhu has trained about 80 women from local communities as housing champions. A dozen or so, distinguished mostly by ambition and skills rather than educational or social advantage, work on housing intermediation and brokerage more or less full-time, some more than doubling their household incomes in the process. In addition to rental income, housing brokers and providers will soon be able to receive incentives in the form of access to collateral-free low-cost home improvement loans, while tenants will be able to receive loans for housing deposits through the platform.

**Conclusions**

Bandhu's migration platform illustrates the potential of digital platforms to expand women's economic participation and contribute to greater gender equality, and sheds light on some of their limitations. It has empowered low-income women who had not previously worked outside their homes, increasing their economic resources and contributing to a sense of achievement and agency. This process strengthened social connections and mobility among women in the community and helped establish networks between older and newer migrants in the city. At the same time, the case illustrates how context-specific "structures of constraint"<sup>32</sup>—gender-based labour market segmentation as well as gender norms and relations within households and communities—shape how women participate in platform economies.

Bandhu's experience with platformising migrant housing is also of interest because it highlights the context-specific relationship between jobs, housing and labour mobility in Indian cities on the

**The case illustrates how context-specific "structures of constraint"—gender-based labour market segmentation as well as gender norms and relations within households and communities—shape how women participate in platform economies.**

one hand, and technology on the other. Given that housing and neighbourhood-level social networks help migrants move and establish a foothold in the city, the platform's housing initiative may have spillover effects that contribute to more inclusionary migration experiences. Moreover, the use of women intermediaries to achieve the ends of the platform also signals the importance of a human interface alongside technological solutions.

Digital platforms are thought of as disembodied spaces for the exchange of information, goods, and services. Bandhu's case, however, illustrates how platform economies are embedded within existing networks and social structures. In Ahmedabad, community and social networks play an important role in organising rental housing for migrant workers and families, and gender norms that associate women with the "home and hearth" both enable and constrain women in their role as housing champions. It is too early to say—and will be difficult to assess—the extent to which women's economic and social empowerment through the Bandhu platform could reconfigure household and community-level gender relations and inequalities, or the sustainability of these early developments.

Widely assumed to be gender-agnostic, digital platforms and their algorithms are expected to provide women with a more equal playing field. The Bandhu case challenges this theory. Consistent with a growing body of research,<sup>33</sup> this case shows that platform models may be more likely to adapt to and work with—and therefore reproduce—existing gender and social norms and relations than to disrupt them, even as they offer new opportunities and mechanisms for economic participation for women and diverse groups of workers, including those from disadvantaged communities.

## Endnotes

- <sup>1</sup> For more information about Bandhu, see <https://www.bandhu.work/> and [https://designx.mit.edu/venture\\_team/bandhu/](https://designx.mit.edu/venture_team/bandhu/)
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- <sup>3</sup> IWWAGE, *India's Emerging Gig Economy: The Future of Work for Women Workers*, The Asia Foundation, 2020; NITI Ayog, *India's Booming Gig and Platform Economy: Perspectives and Recommendations on the Future of Work*, 2022.
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- <sup>12</sup> Nivedita Jayaram and Divya Varma, "Examining the 'Labour'in Labour Migration: Migrant Workers' Informal Work Arrangements and Access to Labour Rights in Urban Sectors," *The Indian Journal of Labour Economics* 63, no. 4 (2020): 999-1019; Datta, "Circular Migration and Precarity," 2020; Varun Aggarwal et al, "The Integration of Interstate Migrants in India: A 7 State Policy Evaluation," *International Migration (Geneva, Switzerland)* 58, no. 5 (October 2020): 144-63.
- <sup>13</sup> Parvathi Benu, "Data Focus: Migration to city pays; Over two third of urban migrants see spike in income," *Hindu Business Line*, April 14, 2023.
- <sup>14</sup> Datta, "Circular Migration and Precarity," 2020.
- <sup>15</sup> Jan Breman, *Footloose labour: Working in India's informal economy*, Cambridge: Cambridge University Press, 1996; Ravi Srivastava, "Emerging Dynamics of Labour Market Inequality in India: Migration, Informality, Segmentation and Social Discrimination," *Indian Journal of Labour Economics* 62, no. 2 (1 June 2019): 147-71.
- <sup>16</sup> Srivastava, "Emerging Dynamics of Labour Market Inequality in India," 2019; Datta, "Circular Migration and Precarity," 2020.
- <sup>17</sup> WIEGO, "Informal Workers in India: A Statistical Profile," WIEGO Statistical Brief No. 24, August 2020.
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- <sup>20</sup> Jan Breman and Marcel van der Linden, "Informalising the Economy: The Return of the Social Question at a Global Level," *Development and Change* 45, no. 5 (September 2014): 920-40; there is a rich corpus of literature on the transformation in Gujarat's industrial model and labour force, and the social and political implications of this change. These include Breman, *Footloose labour*, 1996; Howard Spodek, *Ahmedabad: Shock city of twentieth-century India*. Indiana University Press, 2011; Indira Hirway et al, *Growth or development: Which way is Gujarat going*, New Delhi: Oxford University Press India, 2014.
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In December 2021, about 50 women, “partners” of Urban Company – one of India’s largest home-based services platforms, gathered to protest what they called “unfair labour practices.”<sup>1</sup> Many other countries from Indonesia to South Africa have seen similar agitations; workers have mobilised to publicly voice their grievances over their designated employment status, incomes, working conditions, algorithmic (mis)management, and the lack of formal redressal mechanisms.<sup>2</sup>

These protests are an outcome of the regulatory vacuum that exists in most countries with relation to the platform economy’s labour practices. The digitally mediated platform economy upended the traditional employer-employee relationship. The digital labour platforms such as Uber, Urban Company, Gojeck, or Door Dash call themselves “aggregators” who connect service providers with service consumers through a digital platform. So instead of paying the service providers a fixed salary, these platforms take a commission from them in return of providing them some training and connecting them with customers. This employment relationship, or lack thereof, allows platforms to bypass existing regulations mandating employer provision of social security entitlements and other labour protections that are available to permanent employees in most countries.<sup>3</sup> Largely, existing regulations are built upon the precedent of a traditional employee-employer relationship. As the platform economy unfolds, regulators are faced with a new challenge: of how to govern this emerging world of platforms.

Since the success of these labour platforms depends on a large pool of service providers and consumers, they provide their partners with incentives such as joining and performance bonuses. This tends to hold more in a platform’s initial years, but as the platform reaches scale and market saturation, the incentives are scaled down.<sup>4</sup> However, information on which incentives are given when, and for how long, is held only with the platform, leaving workers to make decisions based on partial information.

Increasing protests by gig workers have now forced most countries to scrutinise these platforms and their labour practices. However, the novel nature of the employment relationship means that countries lack past precedent for regulating platforms. Some countries, especially in Europe, have taken steps to protect workers. Others,

such as India, Sri Lanka, Philippines, and Kenya, where gig work is an important means of income generation<sup>5</sup> for many, including women,<sup>6</sup> are struggling to create regulatory frameworks that protect workers without stifling private innovation and viability of platform businesses.<sup>7</sup>

Given the relatively large presence of women in digital labour platforms, this chapter uses a gender lens to explore the major challenges faced by gig workers that regulations need to address. The focus is on the challenges related to the employment status of workers, which does not afford them entitlements, labour protections, or opportunities for redressal with the platform. This is partly because work on these platforms is managed through algorithms. Moreover, the fact that a growing number of individual gig workers are geographically dispersed implies they have limited access to social dialogue and collective bargaining in comparison with traditional employment models. This essay provides an overview of these challenges while also discussing examples of regulatory approaches taken by different countries. The essay concludes with a set of recommendations that could make the platform economy more inclusive and equitable, especially for women.

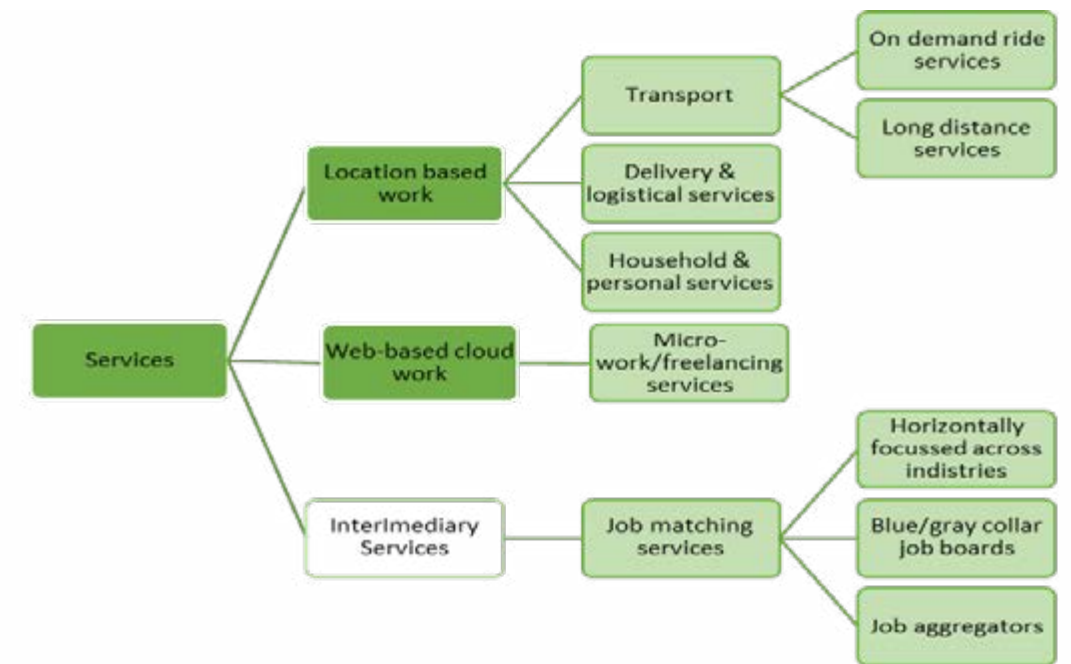
### A brief profile of the platform economy

Those in the informal sector in most developing economies do not receive regulatory protections such as minimum wages, social security entitlements, or access to formal redressal mechanisms because these entitlements are often linked to formal employment.<sup>8,9</sup> A sizeable share of the workforce in developing countries are either own-account workers and are self-employed, or work with small enterprises that are often themselves unregistered and/or are small enough to not be mandated to provide entitlements and labour protections by law. This leaves workers vulnerable in the face of unfair dismissals, lack of payment of minimum wages, and employer-linked social security entitlements.<sup>10</sup>

It is pertinent to note that women make up a disproportionate percentage of workers in the informal sector.<sup>11</sup> The gig workforce, which works on digital labour platforms, remains in the informal sector largely due to the fact that platforms hire them as independent contractors.

Fig 1

### Typology of digital platforms



Source: “Women, Work and Digital Platforms: Enabling Better Outcomes for Women in the Digital Age,” Sabina Dewan, 2022

Gig work encompasses a vast range of employment types, including agency and temporary work, short-term contracts and app-based roles. They can be broadly classified into location-based work and web-based cloud work (see Fig. 1). Though the size of the gig workforce is difficult to estimate due to its fluid nature, it is clear that sector is growing. In the UK, the number of gig workers doubled between 2016 and 2021. In the US it is the main source of income for over 10 percent of workers.<sup>12</sup> In India, 1.5 percent of its total workforce, or 7.7 million people, were estimated to be engaged in the gig economy in 2020-21.<sup>13</sup>

Although platforms have low entry barriers, in many cases, they seem to compound gender stereotypes in the types of work women do. For instance, women are largely concentrated in administrative roles, domestic and care work, and beauty services, while men drive cabs, become delivery agents or work as electricians, plumbers or carpenters.<sup>14</sup> Although large scale data is not available, some studies indicate that women’s participation in the gig economy is inhibited by factors such as societal restrictions on women’s movement, lack of safety and privacy, lack of access to child care facilities, inadequate redressal

mechanism on platforms and unequal access to technology.<sup>15</sup>

### Key Challenges of the Gig Economy that Need Regulatory Intervention

**Business models of platforms:** Digital labour platforms work on a two-sided marketplace model, connecting a service provider with a service user. Their success depends on their ability to scale up by adding a large number of service providers and consumers on the platform. However, rapid scaling up is possible if they do not have to employ the service providers on a permanent basis. This also allows platforms the flexibility to quickly adjust to market demand volatility. Therefore, although the service providers may be working full time for on a platform, they do not have job security in the form of an assured income, reasonable notice period, or protection against discriminatory dismissals. They also lack social security protections, and do not have access to redressal mechanisms.<sup>16</sup>

Many of the occupations that gig workers find themselves in, including delivery agents, drivers, beauticians or domestic workers, rely on manual skills that do not command a high fee. Often workers entering these occupations, especially women, do not have a financial safety net, leaving them particularly vulnerable. They also have little

control over their work –be it choosing work hours, clients or pay rates<sup>17</sup> – and a limited ability to upskill.<sup>18</sup>

Women are especially affected by this. For instance, in India, where very few women are in the labour force, studies show that women do not want to join the gig economy due to a lack of job security, unstable income and uncertain employment status.<sup>19</sup> The lack of social security benefits, paid maternity leave and redressal mechanisms to address issues that workers face in the course of work either act as deterrents or adds to their economic precarity, forcing them to take up multiple jobs alongside unpaid domestic work.

### Examples of regulatory responses

Although most developing countries such as Sri Lanka, Thailand, Indonesia, Nigeria, Argentina and Brazil are yet to frame regulations to protect gig workers,<sup>20</sup> other such as the US, UK, Spain, and India have made some attempts at regulation. This has taken one of two approaches: (a) presume all platform workers to be employees unless proven otherwise; (b) classify gig workers as a new category of workers.

In the US, the state of California presumes all workers to be employees and eligible for benefits and other labour protections unless they are (a) free from control and direction of the business, (b) perform work outside the hiring entity's business, and (c) decide to do so independently. Certain professionals would be exempted from being considered as employees if they set or negotiate their own rates, communicate directly with customers, and make twice the minimum wage.<sup>21</sup>

In December 2021, the European Commission proposed a directive to improve working conditions in platform work. The proposed directive provides a list of criteria to determine whether the platform is an employer. These include whether: (i) the platform determines the pay, (ii) requires workers to follow rules regarding appearance, conduct toward clients or performance of the work, (iii) uses electronic means to supervise, assess job performance, (iv) restricts work times or the freedom to turn the app off and (v) requires exclusivity or non-competition. If the platform meets the necessary criteria, it is legally presumed to be an employer.<sup>22</sup> Platform workers would be entitled to a plethora of benefits including paid holidays, minimum wage, safety and

health protection, unemployment benefits, parental leave, pension rights, and benefits related to accidents at work and occupational diseases.

Spain also amended its Workers Statute in 2021 so that digital platform workers in the delivery sector are presumed to have a dependent employment status. Colloquially known as the Rider's Law, it effectively means that platform workers in the delivery sector are employees and eligible for employer-provided benefits, unless the platform is able to prove that it is legally excluded.<sup>23</sup>

The UK has three tiers of workers: employees, workers, and those that are self-employed. This is based, among other things, on the level of freedom one has over where, when and how much to work. Gig workers qualify as "workers", which entitles them to core employment protections.<sup>24</sup>

In 2019, India consolidated 29 of its labour laws into four labour codes (Wages, Industrial Relations, Social Security and Occupational Safety, Health and Working Conditions) and enacted some of them in 2020. In the Code on Social Security, it added new categories of workers to include gig, platform, home-based and unorganised workers.<sup>25</sup> Contrary to the above mentioned countries, India defined gig workers as "outside the traditional employer-employee" relationship. It also called for a Social Security Fund in which the aggregator would be required to contribute one to two percent of its revenue; the fund would then be used to provide gig workers with benefits.<sup>26</sup> Besides the Social Security Code, none of the other three codes related to minimum wages, industrial disputes, and occupational safety and health say anything about gig workers.

By comparison, in Thailand, current laws such as the Labour Protection Act are not applicable to Thai gig workers, but a Draft Independent Workers Act is under consideration in the Office of the Council of State. The Act aims to provide work safety and social security to gig workers.<sup>27</sup>

**Often workers entering these occupations, especially women, do not have a financial safety net, leaving them particularly vulnerable.**



It remains to be seen how these regulations play out with respect to workers and platforms in this ecosystem of digital work.

**Algorithmic control:** Digital platforms use automated systems to match supply and demand for work. These systems are used to assign tasks, to monitor, evaluate and take decisions for the people working through them. Such practices are often referred to as "algorithmic management".<sup>28</sup>

Algorithms can exacerbate precarious working conditions. First, algorithmic management allows firms to structure their business in a more transactional manner with limited personal interactions with the gig workers. This can lead to what is called "platform discipline" in the form of systems of ratings, rewards, and penalties. The absence of 'guardrails' can serve to entrench existing inequities. Seemingly neutral algorithms can create an additional barrier, for example, against women. Studies have found that platform workers providing domestic services or beauty treatments avoid reporting harassment because they fear negative ratings from clients.<sup>29</sup>

Second, the freedom and flexibility for workers touted by gig economy platforms is often misleading and at odds with the control wielded by algorithmic management. It can force workers to work long and/or irregular hours by mandating

a minimum number of required hours or jobs to stay active on the platform, while controlling jobs allocation through an algorithm.<sup>30</sup>

Third, not only are algorithms susceptible to replicating any pre-existing biases in the data on which they are based, but they also distance the worker from platform managers and decision makers. The opacity of algorithms spotlights the power asymmetry or imbalances between platforms and platform workers. Studies have pointed to the weakening of platform worker agency due to such algorithmic management and power imbalances.<sup>31</sup>

A 2020 study by [coworker.org](https://coworker.org) and MIT Media Labs showed that nearly half the workers on a grocery delivery platform in the US saw an 11 percent drop in pay outs when the platform shifted from a transparent pay out model to a "black-box algorithm" that monitored the number of hours worked and pay per job.<sup>32</sup> Workers found that over time, their earnings dropped over 50 percent for the same job.<sup>33</sup> The lack of transparency and agency led workers to crowdsource data online to better understand how the new algorithm worked.

While antitrust and competition laws can be applied to algorithms if they are used in a way that harms competition or restricts consumer choice, protections for workers are still lacking.





Some jurisdictions are considering—or already implementing—measures to increase transparency and accountability of platform algorithms. These measures may include mandating platforms to disclose information about their algorithms, their impact on users, and any biases or discriminatory effects.

The European Union’s proposed directive has made it mandatory to be transparent about the use of automated monitoring and decision-making systems. However, the proposed directive has been critiqued on the ground that it does not address pre-existing shortcomings which include profiling workers, predicting their behaviour and performance. For workers, these decisions are difficult to understand and almost impossible to contest.<sup>34</sup>

**Due to the technical and opaque nature of artificial intelligence-powered algorithmic management systems, it is extremely difficult to detect discrimination and biases.**

Policymakers in the US have raised concerns over invasive monitoring and surveillance practices by employers that are used to discipline or terminate workers. Low wage and hourly workers are especially vulnerable to these practices. Legislative proposals such as Schedules that Work Act and Stop Spying Bosses Act ties into the larger issues of data privacy and indicate interest among policymakers to mitigate the risks of allowing algorithms to decide many key decisions of the platform.<sup>35</sup>

Due to the technical and opaque nature of artificial intelligence-powered algorithmic management systems, it is extremely difficult to detect discrimination and biases. Countries in the Global South such as India, Indonesia, Thailand and Kenya are grappling with the vexed issue of protecting work conditions in the face of algorithm powered decisions.

Although India’s Supreme Court in 2017 recognised the right to privacy as a fundamental right and NITI Aayog flagged the problems associated with algorithmic management of workers in its report on gig work, no concrete steps have yet been taken to increase transparency, accountability of platforms, mitigate biases and decrease the power asymmetries between platforms and workers.<sup>36</sup> The other countries also do not yet have policies

in place but in some cases workers have shown initiative in resisting algorithmic management.<sup>37</sup>

Sri Lanka’s recently enacted Personal Data Protection Act No. 9 (2022) is a step in the right direction as it binds entities that are “controllers or processors that are domiciled in, incorporated in or offer goods or services to persons in Sri Lanka” to protect user data, with penalties for non-compliance.<sup>38</sup>

**Collectivisation of workers:** The platform economy significantly diminishes bargaining power of workers in a variety of ways. First, the geographically dispersed nature of gig work makes it harder for workers to collectivise. This is exacerbated by the fact that workers are classified as freelancers or independent contractors, implying they have little leverage to demand transparency from gig companies, even in the face of unclear information about availability of work and evaluation criterion. Women gig workers find it especially challenging to collectivise and bargain: first, they are fewer in number; second, patriarchal norms restrict their mobility; and finally, collectivisation requires time. Women may find it particularly difficult to devote time outside of “regular working hours” considering they also shoulder the burden of care work.

Interestingly, food delivery workers across the world have succeeded in organising a vast array of collective actions to improve their working conditions, especially focusing on pay and employment status. Many European countries including UK, Spain, Germany, France, Italy, and Belgium saw the collective mobilisation of gig workers. They were supported by unions, social movement organisations and Far Left parties. The tactics employed combined logging out of the app with mass pickets and an online campaign on social media.<sup>39</sup> In Norway, delivery workers at Foodora, a Swedish food delivery platform, secured a landmark collective bargaining agreement with the company.<sup>40</sup> This included a wage increase, reimbursement for equipment, extra pay in the wintertime, and early retirement pensions for workers with employee status.<sup>41</sup>

The Global South also witnessed attempts at collective action by workers, including women, be it in India, Indonesia, Thailand, or Sri Lanka, to protest low wages, poor working conditions, and lack of benefits, especially accidental insurance.

From strikes at Urban Company and Amazon in India to Indonesia’s Gojek riders using informal networks to band together and bargain for better work conditions, resistance across the region has helped improve workers’ bargaining power. However, workers have also been subject to unfair dismissals or permanent blocks on platforms for spearheading these collectivisation efforts.<sup>42</sup>

Countries in which gig workers are entitled to the status of employee are conducive to the formation of worker collectives or unions to bargain with platform companies. However, in countries in which a new category of worker is being created for gig work, it is unlikely that their right to form unions would be extended. Given the non-traditional employment relationship of gig work, it is also important to acknowledge that traditional models of collectivisation and unionisation may require modifications to meet the needs of gig workers.<sup>43</sup>

### **New, Gender-Sensitive Policy Options to Regulate the Platform Economy**

The platform economy is becoming an increasingly important source of income for many workers, especially those in developing economies. Women are a growing part of this gig workforce. Though this kind of work offers some benefits, it also leads to greater precarity. Regulations are necessary to ensure that workers receive labour and social protections and have redressal mechanisms; that platforms are held to account for their algorithms; and that workers’ right to freedom of association and collectivisation is protected.<sup>44</sup>

However, most countries do not yet provide gig workers with many of the entitlements that regular employees have. But the good news is this is slowly changing. Countries are taking note of the challenges faced by the most vulnerable of those who work in the sector. While this is a positive development, the regulatory frameworks being used are based on existing templates that govern the formal sector. In many instances, they do not consider the role that algorithms play in determining tasks assigned or hours worked. This framework also replicates and reinforces many of the societal biases against women.<sup>45</sup>

A big roadblock to better policies is the lack of comprehensive data on gig workers – the size, working hours, earnings, occupational safety

mechanisms and redressal mechanisms. Without data, policymakers lack the capacity to design appropriate policies that maximise the platform economy's social benefit.<sup>46</sup>

What can be done to ensure better outcomes for all stakeholders? Broadly speaking, policy objectives of governments should be tailored to the economy's level of digital development and the significance of the platforms in the country.<sup>47</sup> The differential experiences of men and women seem to arise mostly due to entrenched social hierarchies and unequal power relations. Government regulations may be too blunt an instrument to address some of these seemingly intractable problems but there remain areas in which they can make a difference.

Below are outlined a few recommendations for policymakers to take note.

## General policy recommendations

- 1. Facilitate systematic data collection on the platform economy:** This could be done through the government's survey mechanisms or by forging data sharing agreements with platform firms. Clear procedures for the categorisation and measurement of this workforce, in a gender disaggregated manner, should be laid out.
- 2. Give legal recognition to platform workers:** It is essential for governments to establish formal legal categories for platform economy workers. There will likely be no one-size-fits-all solution to clarifying the legal relationship between platforms and workers. However, determining these categories would lay the groundwork for governing the rights of platform workers.
- 3. Create an integrated system for taxation and social protection:** The governments should then design integrated taxation and social protection systems appropriate for this new form of work. There are several reasons for linking policy conversations around taxation and social protection in the platform economy. Primary among them is the fact that leveraging the aggregation opportunity for revenue collection enables an expansion

of social benefits. Moreover, governments can enhance buy-in among workers and platform economy firms for taxation measures by tying them to expanded benefits for the platform workforce – aiding workers directly and firms indirectly through enhancements in productivity.

- 4. Follow principles of co-regulation:** Co-regulation is an approach that resembles managed compliance between various stakeholders. In this case, they would be government, industry and workers. This is also beneficial for companies as it allows for regulatory predictability and avoids reactive court decisions that force them to comply with pre-existing regulations.<sup>48</sup>
- 5. Review data privacy laws** to ensure the identity protection, safety and security of platform workers and customers.

## Gender inclusive policy recommendations<sup>49</sup>

- Ease the burden of domestic and care responsibilities by providing childcare and other such entitlements. These should be enshrined in policy, and implemented in practice.
- Adopt measures to ensure safe commuting and working conditions for women. These include measures ranging from adequate lighting on streets, to ensuring improved last mile connectivity in public transport.
- Promote equitable access to technology, education and training, and subsequent access to a wider range of occupations than just those that are gender-normative through public campaigns. Consider different incentives such as subsidies that draw and support women and girls in non-normative fields such as Science, Technology, Engineering and Mathematics where they are underrepresented.
- Frame regulations that require platforms to institute safety-related education and protocols for women as well as redressal mechanisms in instances where women experience any form of exploitation or violence.

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SPOTLIGHT



# Does Digital Platform Work Empower Women and Gender Minorities?

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Platform work markets itself as offering workers the opportunity to be their own bosses, decide their own schedules, and have the independence to choose the type of work they would like to engage in. This freedom is particularly appealing for workers who must shoulder care and other household responsibilities, and need flexible schedules that allow them to earn a living without neglecting their duties.

However, we, at Fairwork, find that the actual experience of working these platform jobs is not inherently empowering. On the contrary, for some women and gender minorities, it can be tedious, isolating, and disempowering.

It is important to note that not all women and gender minorities experience platform work in the same way. Women's experiences are shaped by the type of work they do, where they work, and

who they work for. For instance, there are vast differences between the everyday experiences of a female courier in São Paulo and those of a female cleaner in Belgrade. The complexity of such varying experiences underlines the need for more data on platform work. Fairwork, an action-research project working in 38 countries, provides unique insights into this very complexity. Coordinated by the Oxford Internet Institute and the WZB Berlin Social Science Centre, Fairwork, employs a global network of researchers to evaluate working conditions on digital platforms and rank them based on [five principles of fair work](#).

Based on the Fairwork methodology, we find that women and gender minorities often struggle to access certain types of platform work. When they do manage access, they end up self-limiting their work timings to avoid threatening situations. This dimension of access causes platform work to be highly gendered. The most public types of platform work – ride-hailing and delivery – is usually done by men while women perform more private platform work in the areas of care, beauty, and domestic work.

Most women who enter more public forms of platform work find it isolating, reporting feelings of exclusion and being at risk. To ensure their safety, women drivers working on ride-hailing platforms equip themselves with pepper-spray, and even, in the case of the United States, guns. Like their colleagues on delivery platforms, these women often refuse to work late nights or go to certain neighbourhoods, and ask their partners to track their movements. Such workers find it difficult to access worker associations set up by their male colleagues. Women in countries ranging from

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Nigeria to Mexico have, therefore, set up their own groups, offering each other advice on how to make the most money, and even providing practical, roadside help like tracking each other's movements to make sure they are safe. Platforms rarely acknowledge such efforts, let alone promote them, even though they regularly feature women drivers and couriers in their advertising campaigns.

Sectors such as care, beauty, and domestic work have historically worked through informal arrangements with marginalised women and gender minorities. Knowledge of working conditions in these private spaces is opaque, and employees feel highly isolated and vulnerable to risk. Unsurprisingly, women report experiencing frequent verbal, physical and sexual harassment in these spaces. Although platforms promise safety through a high degree of surveillance, workers report that such surveillance is, in practice, a way to control and discipline them. Additionally, women are often expected to do unpaid work; beauty workers in India, for instance, tell of being asked to help prepare meals alongside the beauty treatments they are booked to provide. Women often give in to these demands to pacify clients and keep them happy, especially in cases in which clients can rate workers' performance. In the UK, Fairwork came across instances in which women deliberately offered discounts or underestimated their work timings simply so they could get good reviews.

Gender minorities, especially those that are visibly non-conforming, also suffer discrimination in platform work. Fairwork found that most of the platforms studied lacked basic anti-discrimination policies. Nevertheless, owing to the comparatively lower barriers of entry for platform workers, LGBTQIA+ individuals often turn to platform work in societies with homophobic legal structures that make finding employment in traditional workspaces difficult. It is evident that much needs to be done to make work mediated through platforms both safe and dignified for both women and gender minorities.



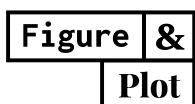




JustJobs Network is an applied research institute finding evidence-based solutions to pressing labour market challenges. We produce research on good job creation and workforce development, focusing our work on the critical knowledge gaps in the employment landscape.

JJN convenes a network of diverse stakeholders — including policy shapers, private sector players, academics, and grassroots leaders — to deepen the practical implications of our research and amplify its impact. Through the combination of cutting-edge research and global knowledge sharing, we aim to forge a fresh, dynamic channel for policy dialogue and instigate practical change to improve employment opportunities and outcomes for more people. Our team members are based in New Delhi and Washington, D.C.

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