

India's Booming Gig and Platform Economy

Perspectives and Recommendations on the Future of Work





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MESSAGE FROM VICE CHAIRMAN

The pace of digitalisation has grown rapidly around the world, transforming societies and ushering in a new economic revolution with significant implications for the future of work and employment. India's twin advantages of having a favourable demographic structure and the rapid proliferation of digital technologies position it to be at the forefront of this economic revolution.

The gig-platform economy is at the core of this unfolding paradigm shift. ILO's 2021 World Employment and Social Outlook Report states that the number of digital labour platforms have grown fivefold over the last decade. Digital platforms offer innovative solutions in different sectors such as transport, retail, personal and home care. They provide promising income opportunities to workers with different skill sets and wider market access to businesses. The gig economy has demonstrated resilience even during the pandemic, with platform workers playing an indispensable role in urban India.

In this backdrop, this report offers a scientific methodological approach to estimate the job creation potential of the gig-platform economy as well as provides wide-ranging perspectives and recommendations on the gig-platform economy in India.

I commend Dr. K. Rajeswara Rao, Special Secretary, NITI Aayog, for conceiving and taking forward this initiative and successfully bringing it to completion. My congratulations to Sh. Kundan Kumar, Adviser, NITI Aayog and Sh. Rajesh Gupta, Director, NITI Aayog, for ensuring necessary coordination and time-bound action for the study report. Special appreciation to the research team comprising Dr. Sakshi Khurana, from NITI Aayog, Dr. S.K. Sasikumar, former Senior Fellow at V.V. Giri National Labour Institute, Dr. Vinoj Abraham, Centre for Development Studies, Dr. Balakrushna Padhi, BITS-Pilani, and contributors Ms Aishwarya Raman, Ms Chhavi Banswal and Ms Sreelakshmi Ramachandran.

I hope that the report will become a valuable resource in overcoming the knowledge and data barriers in our understanding of the gig-platform economy and drive further research and analysis on this sector.

I extend my best wishes and support to all the Ministries, State governments, training providers, platforms and others who can work in coordination and forge collaborations for the implementation of report's commendations to bring about growth and job creation in the gig and platform sector.

Suman Bery Vice Chairperson, NITI Aayog



MESSAGE FROM CHIEF EXECUTIVE OFFICER

The accelerated adoption of novel digital technologies has brought about a paradigm shift in business processes and service provisions. New technologies associated with Industry 4.0 and the gig economy are already reshaping the world of work and are expected to open up a whole range of new opportunities in the future. Digital platforms in India have thrived as a result of the increasing use of smartphones, the low cost of internet and other initiatives under the Digital India campaign. Different platforms that comprise the gig economy offer innovative solutions in different sectors such as transport, retail, personal and home care.

This changing scenario calls for the need to assess the employment generation potential of the gig and platform sector and design policy measures that can invigorate efforts from different stakeholders to promote growth along with decent work opportunities in this sector.

This report, a remarkable initiative of NITI Aayog, has come at a critical time. This report prepared by a research group of experts in the sector, steered by NITI Aayog, presents estimates on the size of the gig-platform workforce and its employment potential and delineates strategies for job creation, skill development and social security in the sector to come-up with a set of forwardlooking recommendations for different stakeholders.

I congratulate Dr. K. Rajeswara Rao, Special Secretary, NITI Aayog, for steering this initiative and Mr. Kundan Kumar, Adviser, NITI Aayog and Mr. Rajesh Gupta, Director, NITI Aayog for the necessary coordination. I appreciate the excellent work and contribution of the research team comprising Dr. Sakshi Khurana from NITI Aayog, Dr. S.K. Sasikumar, former Senior Fellow at V.V. Giri National Labour Institute, Dr. Vinoj Abraham, Centre for Development Studies, Dr. Balakrushna Padhi, BITS-Pilani, and contributors Ms Aishwarya Raman, Ms Chhavi Banswal and Ms Sreelakshmi Ramachandran.

I request the concerned Ministries, State Governments, skill training providers and platforms to review this report and build upon its recommendations to promote employment opportunities, skill training and social security initiatives for workers in this sector. Only with coherent, consistent and coordinated efforts can we all truly leverage the potential that the gig and platform sector offers for growth and employment opportunities.

Amitabh Kant CEO, NITI Aayog



MESSAGE FROM SPECIAL SECRETARY

The gig and platform economy is a relatively new and emerging sector with immense potential for growth and employment generation. The Economic Survey 2020-21 has noted that India has already emerged as one of the world's largest countries for flexi-staffing (i.e., gig and platform work), and that this form of work will likely continue to grow with the increase in e-commerce platforms.

This study 'India's Booming Gig and Platform Economy: Perspectives and Recommendations on Future of Work' has been undertaken with the objective to understand the significance of this sector to the economy, to employment generation and suggest measures to encourage employment in the sector, along with initiatives for social security.

Several rounds of discussion were held and this report is the culmination of efforts of the research team comprising Dr. Sakshi Khurana from NITI Aayog, Dr. S.K. Sasikumar, former Senior Fellow at V.V. Giri National Labour Institute, Dr. Vinoj Abraham, Centre for Development Studies, Dr. Balakrushna Padhi, BITS-Pilani, and contributors Ms Aishwarya Raman, Ms Chhavi Banswal and Ms Sreelakshmi Ramachandran.

The study highlights the significance of this sector through estimating the size of the workforce and future requirements based on demand for different skill levels of workers. The study highlights the employment generation potential of the gig and platform economy as jobs in this sector have low-entry barriers and cater to the needs and aspirations of workers with varying degrees of skill sets, including women, youth and Persons with Disabilities (PwDs).

The study documents and analyses best practices and initiatives for social security undertaken by different platforms and different countries. On the basis of the estimates undertaken and a review of literature and best practices, recommendations are made for future estimates of workforce in the sector, policies for promoting business and employment generation in the sector, enhancing the inclusiveness of jobs in the sector, particularly for women and PwDs, preparing the workforce for employment in the sector through platform-led skill development and recommendations for social security initiatives that can be introduced by platforms for workers.

I hope that this report will serve as a crucial resource for Ministries, State Governments, Training Providers, Platforms and other stakeholders to work in collaboration for promoting growth and employment opportunities in this sector.

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Dr K. Rajeswara Rao Special Secretary, NITI Aayog



MESSAGE FROM ADVISER

The advent of technology has transformed the world of work with new and flexible types of jobs, business models and working arrangements. The gig and platform economy is at the heart of this transformation, having disrupted a range of sectors from ride-hailing transport services to professional beauty and home services. Given the rapid growth and growing significance of the platform economy, it becomes imperative to undertake a systematic quantitative assessment of the current size and job generation potential and suggest policy measures for boosting employment opportunities in this sector.

The key objectives of this study are estimating the size of the workforce engaged in the gig and platform economy, highlighting both the opportunities and the challenges of this emerging sector, presenting global best practices on initiatives for social security and outlining strategies for skill development and job creation for different categories of workers in the sector through a set of comprehensive recommendations.

Several rounds of discussion were held with the research team comprising Dr. Sakshi Khurana from NITI Aayog, Dr. S.K. Sasikumar, former Senior Fellow at V.V. Giri National Labour Institute, Dr. Vinoj Abraham, Centre for Development Studies, Dr. Balakrushna Padhi, BITS-Pilani, and contributors Ms. Aishwarya Raman, Ms. Chhavi Banswal and Ms. Sreelakshmi Ramachandran. The research study has been an outcome of these very enriching discussions and efforts undertaken by the research group towards estimations in the sector, systematic review of literature for presenting best practices and global insights and recommendations for enhancing employment and social security in the sector.

I am confident that this report will serve as a crucial resource for Ministries, State Governments, Skill Training Providers, Platform companies and other stakeholders towards concerted efforts for promoting growth and employment opportunities in this sector.

Kundan Kumar Adviser, NITI Aayog



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Executive Summary

The rapidly burgeoning gig workforce is ushering in a new economic revolution globally. India – with its demographic dividend of half-a-billion labour force and the world's youngest population, rapid urbanisation, widespread adoption of smartphones and associated technology – is the new frontier of this revolution. The gig economy has proven its resilience and potential even in the wake of the Covid-19 pandemic, by continuing to unlock jobs in the millions and keeping communities connected. Gig economy – transforming the way we move, work, and live – not just impacts how we do business but also affects our GDP. In this backdrop, this first-of-its-kind report presents comprehensive perspectives and recommendations on the gig-platform economy in India, engaging gig-platform workers in the millions. Gig workers – those engaged in livelihoods outside the traditional employer-employee arrangement – can be broadly classified into platform and nonplatform-based workers. Platform workers are those whose work is based on online software apps or digital platforms. While, non-platform gig workers are generally casual wage workers and own-account workers in the conventional sectors, working part-time or full time. Delving deeper into the variance



between gig and conventional workers, this study uses the characteristics such as location (in urban areas), age group (18-45 years), education levels (ranging between secondary school and graduation), income level (workers whose household consumption expenditure is below the 75th percentile of monthly per capita consumption expenditure), ownership of mobile phones and access to a bank account for estimating gig and platform workers.

The purpose of this study is to view gig work, with a focus on its subset - platform work, through economic as well as worker perspectives. In economic terms, the job creating potential of the gig economy, estimating its size and identifying its demand across various industries are some of the aspects that have been studied. The worker perspective focuses on both the opportunities and challenges for workers in the sector, skilling the workers to enhance employment opportunities for them in the sector, the potential of platform work in accelerating job creation for women and Persons with Disabilities (PwDs) and initiatives for providing social protection to all workers in this sector.

ECONOMIC PERSPECTIVE: ESTIMATES AND PROJECTIONS

A special emphasis has been placed on estimating the gig workforce in India, which has otherwise been confounded by methodological issues in identifying gig workers. Often taking up multiple tasks with contracts on-a-task-basis makes counting workers complex. Moreover, there are severe data gaps when it comes to estimating the size of the gig economy. Therefore, with the limited data that is available on employment and other related aspects, this study sets out to estimate the size of the gig workforce in India by building on assumptions derived from micro and macro studies in the country. It must, however, be noted that the estimation is only indicative and may not represent the true size of the gig workforce. Notwithstanding these limitations, the key estimations and projections of this study are summarised below.

1. The gig economy engages millions of gig workers.

- a. It is estimated that there were 68 lakh (6.8 million) gig workers in 2019-20, using both principal and subsidiary status, forming 2.4% of the non-farm workforce or 1.3% of the total workers in India.
- b. It is estimated that in 2020-21, 77 lakh (7.7 million) workers were engaged in the gig economy. They constituted 2.6% of the nonagricultural workforce or 1.5% of the total workforce in India.
- c. The gig workforce is expected to expand to 2.35 crore (23.5 million) workers by 2029-30. The gig workers are expected to form 6.7% of the non-agricultural workforce or 4.1% of the total livelihood in India by 2029-30.

2. There is a growing demand for gig work.

- The employment elasticity to GDP growth for gig workers was above one throughout the period 2011-12 to 2019-20, and was always above the overall employment elasticity.
- b. The higher employment elasticity for gig workers indicates the nature of economic growth, which created greater demand for gig workers while not generating commensurate demand for non-gig workers.



c. This also points towards greater conversion of non-gig work to that of gig work.

3. Gig work is expanding in all sectors.

- a. In terms of industrial classification, about 26.6 lakh (2.7 million) gig workers were involved in retail trade and sales, and about 13 lakh (1.3 million) were in the transportation sector.
- About 6.2 lakhs (0.6 million) were in manufacturing and another 6.3 lakhs (0.6 million) in the finance and insurance activities.
- c. The retail sector saw an increase of 15 lakh (1.5 million) workers during 2011-12 to 2019-20, transport sector 7.8 lakhs (0.8 million), manufacturing — 3.9 lakhs (0.4 million).
- d. In the education sector, the expansion was from 66,000 to more than one lakh (100,000) by 2019-20.

4. Gig work may accentuate skill polarisation

- At present about 47% of the gig work is in medium skilled jobs, about 22% in high skilled, and about 31% in low skilled jobs.
- b. Trend shows the concentration of workers in medium skills is gradually declining and that of the low skilled and high skilled is increasing.
- c. It may be expected that while the domination of medium skills would continue till 2030, gig work with other skills will emerge.

Gig work is bound to expand due to the technological possibilities in numerous production spaces. At the same time, it also provides the opportunity for workers to

transcend the limitations of work-time and work-space. Given this potential of gig work, the future would see a growing prominence of such work. However, there exists no official data that can authoritatively estimate the extent of gig work in India, thereby rendering the gig workforce invisible. This calls for the following **recommendations for future estimations**

Recommendations for Future Estimations

- Undertake a separate enumeration exercise to estimate the size of the gig economy, and identify the characteristic features of gig workers.
- 2. During official enumerations (PLFS, NSS or otherwise), collect information to identify gig workers. This could include questions on the nature of contract between worker and job creator, use of technology in work, etc.

WORKER PERSPECTIVE: FINDINGS AND RECOMMENDATIONS

Gig and specifically platform workers exhibit characteristics beyond the formal-informal dichotomy. While gig work is a larger concept with many undefined aspects, platform work within it is more substantial. Therefore, the worker perspective of this study aims to shed light on who is a platform worker and how a platform worker can be protected, while encouraging employment opportunities in the platform sector.

In a platform economy, any individual armed with an internet-enabled smartphone and tangible or intangible assets can monetise these assets at will, to become a platform worker. Thus, beyond its potential to provide a wide spectrum of services to consumers, the platform economy can also offer livelihood opportunities to different sections of workers, including women, migrants, Persons with Disabilities (PwDs), and the youth. The worker perspective heavily draws from case studies and secondary literature review for a comparative analysis of platform workers and their counterparts, paving the way for recommendations. The study presents a systematic analysis of both the opportunities as well as challenges for workers in the platform sector. Some of the key findings and recommendations have been detailed below.

1. Technology Diffusion and Evolving Future of Work

a. Delineation of Jobs

The huge difference between platform-mediated jobs and those in the wider unorganised economy entails the definition of the job itself.

b. Democratisation of Jobs

- The gig and platform sector has low-entry barriers and hence holds enormous potential for job creation in India.
- ii. The gig and platform sector offers better income opportunities to those previously engaged in similar nonplatform jobs. It can thus work as a catalyst for occupational mobility.

c. Geographical Availability

Around 300 cities of varying sizes in India are serviced by various platforms operating across sectors like ride-hailing, home-based services, food/ grocery/ medicine delivery, logistics fulfilment and e-commerce, covering the broad ambit of urban services, and making mobility of workers and clients across markets hassle-free.

d. Reliability of Work

- The technological intervention in this space has contributed to the uptick in demand, and hence the earnings opportunities associated with it.
- ii. This is predicated on the unprecedented level of skill matching and tech-based job allocation fulfilled in realtime by platforms, thereby eliminating the inefficiencies in these sectors.

e. Challenges for Workers in the Sector

- Access to internet services and digital technology can be a restrictive factor for workers willing to take up jobs in the gig and platform sector.
- ii. Lack of job security, irregularity of wages, and uncertain employment status for workers are significant challenges noted by studies in the gig and platform sector. The uncertainty associated with regularity in the available work and income may lead to increased stress and pressure for workers.
- iii. The contractual relationship between the platform owner and worker is characterised as other than one of employment. Platform workers are termed as "independent contractors". As a result, platform workers cannot access many of the workplace protections and entitlements.
- iv. Studies have also reported that workers engaged in



remunerative activities with digital platforms may face stress due to pressures resulting from algorithmic management practices and performance evaluation on the basis of ratings.

Thus, growth of business in labour platforms needs to be balanced with decent working conditions and well-being of workers.

With technological diffusion changing the future of work, greater efforts are needed to facilitate innovation while creating jobs and protecting workers. Therefore, the following recommendations have been made.

a. Catalyse Platformization

- A Platform India **initiative**, built i. on the pillars of Accelerating Platformization by Simplification and Handholding, Funding Support and Incentives, Skill Development, and Social Financial Inclusion, like the immensely successful Startup India initiative, may be introduced.
- ii. Ferrying of passengers for hire may be permitted in all categories ranging from twowheelers (in the form of bike taxis or bike-pool) and threewheelers (rickshaws, autorickshaws), to four-wheelers (taxi-cabs and carpool), and 10-12-seater vehicles (minibuses).
- iii. Self-employed individuals engaged in the business of selling regional and rural cuisine, street food, etc. may be linked to platforms so that they could sell their produce to wider markets in towns and cities.

iv. The government may remove entry barriers and create a levelplaying field while retaining key aspects of mobility platforms - the ability of drivers to have flexible working conditions and be an entrepreneur in their own right. For instance, the Central Government (Ministry of Road Transport and Highways -MoRTH) has done away with the requirement of commercial licences to drive commercial vehicles. The state governments may consider implementing the no-commercial license rule uniformly across the country.

b. Accelerate Financial Inclusion

- Access to institutional credit i may be enhanced to bolster the Government's existing efforts to promote financial through inclusion financial products specifically designed for platform workers and those interested to set-up their own Venture capital platforms. funding, grants and loans from banks and other funding agencies should be provided to platform businesses of all sizes at the pre-revenue and earlyrevenue stages.
- FinTech and platform businesses may be leveraged to provide cash flow-based loans to workers as against collateral-based loans, thereby catering to the needs of those new to credit.
- iii. Unsecured loans to first-time borrowers participating in the platform economy may be classified as Priority Sector Lending.



- iv. Special emphasis may be placed on access to formal credit for women and Persons with Disabilities (PwDs).
- v. Likewise, special emphasis should be offered to platform businesses started in small cities, towns, and villages in India.

2. Skill Development for Platform Jobs

- Skill development of youth and the workforce remains an important priority for India to make them employable.
- b. Often, the platform companies which provide earning opportunities for those associated with them take considerable steps in skilling these workers as well. This is to assure uniform standards in quality of service, while also achieving upskilling of workers in an otherwise highly unorganised labour economy.

Therefore, pursuing ends- or outcomebased, platform-led models of skilling and job creation have gathered attention from industry associations and have proven to be successful. This study makes the following **recommendations** to bolster skill development initiatives to enhance employment opportunities for workers in the gig and platform sector.

a. Outcome-based Skilling

 It is important to strengthen industry-linkages and enable candidates undergoing skill training to receive on-the-job training.

> Examples of such outcomebased skilling are seen in the National Apprenticeship

Training Scheme of the Ministry of Education, and the National Apprenticeship Promotion Scheme and Dual System of Training initiative of the Ministry of Skill Development and Entrepreneurship. These initiatives combine theoretical training with practical training industry partners, from thereby strengthening industry linkages and providing handson experience to students on industries' latest technologies and techniques.

b. Platform-led Transformational Skilling

- Platforms can enable the i. upskilling and diversification of platform workforce in a newly structured and industrytested manner. Platforms can collaborate with the Ministry of Skill Development and Entrepreneurship, and the National Skill Development Corporation (NSDC) to nurture skilled workers and microentrepreneurship.
- Transformational upskilling creates avenues of horizontal and vertical mobility for workers empowering them to augment their earnings.

c. Transferability of Skills

- Platforms can enable the creation of potential "Skill Certificates" or "Skill Passports" for workers that platform businesses can provide.
- ii. This can be envisaged as a "Skill Badge" in the platform worker's online profile.



d. Platform-skilling Models with Government Schemes

- The potential and impact of platform-led skilling may be included in India's National Skill Development Policy, and incorporated in the formulation of all roadmaps and strategies for skill development.
- ii. This would set the right stage for nationwide ends-based skill development while also catering to a growing young population which is mobile-first.
- e. Integration/Linkage of Employment and Skill Development portals: By integrating the Skill Development and Employment/ Social Security portals such as E-Shram and National Career Services portals of the Ministry of Labour and Employment, Udyam portal of the Ministry of Micro, Small & Medium Enterprises and the ASEEM portal of Ministry of Skill Development & Entrepreneurship, a one-stop solution could be afforded for a large number of workers India.

3. Enhancing Social Inclusion in the New-age Digital Economy

- The female labour force participation in India has remained low, oscillating between 16% to 23% in the last few years.
- Meanwhile, Persons with Disability (PwDs), who make up for 2.11 to 10% of India's population, have a labour force participation rate of 36%.
- c. The structural barriers for both demographic groups range from access to education, lack of skilling and a direct correlation between

gender or disability and incidence of poverty.

- d. There is an emerging positive trend that suggests women are more likely to take up platform jobs after their education and marriage.
- e. Platforms businesses are actively working towards value creation in terms of skilling, digital literacy, financial literacy and inculcating entrepreneurial spirit.

Platforms offer flexibility and choice of labour to all workers in general and women and PwDs in particular, empowering them to monetise their idle assets when and where they want. This benefit is missing in traditional employment sectors. Platforms are thus attractive avenues of livelihood opportunities for women and PwDs.

The platform economy relies on innovation to provide access to skill development, social security, access to finance and job creation, which are the key pillars of inclusive growth. In order **to strengthen the inclusiveness platform jobs have to offer**, this study makes the following **recommendations**:

a. **Recommendations for the Industry**

- Gender Sensitisation & Accessibility Awareness Programmes for workers and their families
 - Platform businesses can 1 undertake partnerships with civil society organisations (CSOs) and nongovernmental organisations (NGOs) to promote legal/ economic/ social rights of women and especially from marginal and vulnerable backgrounds, thereby increasing their potential to take up non-traditional livelihoods.



- ii. Inclusive Communication, Systems, and Processes
 - Platform businesses can 1 implement communication plans which are gender- and accessibilityinclusive. For instance, they can ensure there is a higher share of women and PwD managers and supervisors in the organisation. They can ensure communication workers does to not perpetuate gender and disability stereotypes. They can have 24 X 7 helplines, etc.
- iii. Skill development and asset ownership
 - Partnerships with Governments, CSOs & Allied Businesses to reskill and upskill women and PwDs while also facilitating their access to assets
- iv. Better Infrastructure and Work Design to create enabling environment for women and PwD workers.
- v. Institutionalise Accessibility, Diversity and Inclusion at the workplace with initiatives such as Gender-based and Disabilitybased onboarding targets and incentives.
- vi. Facilitate access to social security benefits for women and Persons with Disabilities (PwDs).
- b. Recommendations for the Government, Civil society, Allied businesses, and Nonprofits

- Ensure universal coverage of platform workers through the Code on Social Security
- Bridge skill gaps by carrying out periodic assessments and partnering with platform businesses for onboarding skilled women and PwDs
- iii. Reach out to unbanked and underbanked women and PwDs through FinTech services
- iv. Organise gender sensitisation and accessibility awareness programmes for all publicfacing personnel from traffic cops and law-and-order police to toll booth operators, et. al.
- v. Incentivise inclusive businesses

 women led-platforms or platforms that encourage recruitment of women employees and those with disabilities.
- vi. Make aggregate data publicly available to enable robust decision-making by the ecosystem.

4. Global Examples and Suggestions for Social Security for Gig & Platform Workers in India

This study report sheds light on the various social protection approaches taken around the world for gig and platform workers and how they can pave the way for social protection measures for gig and platform workers in India.

 Paid Sick Leave, Health Access and Insurance: On the lines of measures introduced to mitigate the challenges posed by the Covid-19 pandemic by platforms such as Ola, Uber, Urban Company, Swiggy, Zomato, measures for paid sick



leave, health access and insurance may be adopted by platforms as a part of their workplace or workengagement policies for all the workers they engage, round the year. This will have positive implications for offering a social security cover to platform workers engaged by these firms.

- Occupational Disease ii. and Work Accident Insurance: On the lines of Indonesia's initiatives in offering accident and other insurance to workers through digital mechanisms, ride-hailing, delivery and e-commerce platforms may adopt such a model for providing accident insurance to all delivery and driver partners, and other platform workers across India. These may be offered in collaboration with the private sector or government, as envisaged under the Code on Social Security, 2020.
- Retirement/Pension Plans iii. and Other Contingency Benefits: As illustrated in the case of measures introduced in the U.K. in the study, gig and platform firms need to adopt policies that offer old age/retirement plans and benefits and other insurance cover for contingencies such as injury arising from work that may lead to loss of employment and income. Such plans and policies may be uniquely designed by a firm, in partnership with insurance companies, or could be designed and offered in collaboration with the government, as envisaged under the Code on Social Security, 2020.
- iv. Support to Workers in a Situation of Irregularity of Work: As illustrated in the study through the examples

of initiatives undertaken in the U.S. and U.K., gig and platform firms may consider providing income support to workers. This will be a critical step in providing assured minimum earnings and social security from income loss in the wake of uncertainty or irregularity in work.

- Supporting Small Businesses & V. Entrepreneurs associated with Platforms: As a part of initiatives introduced to mitigate the challenges posed by the Covid-19 pandemic, there have been examples of certain platforms extending interest-free business advances and delayed payback periods to protect the gig workers, self-employed and small businesses engaged with them. Following such examples, small businesses and entrepreneurs can be encouraged to have linkages with platforms to expand outreach for their products and services.
- vi. **Contingency Cover out of a Corpus Fund:** As illustrated in the study a mobility platform, in order to support auto-rickshaw, cab, kaali-peeli and taxi drivers to mitigate the effects of the Covid-19 lockdown on their income, created a corpus of INR 20 Cr, called the "Drive the Driver Fund". Measures such as offering a social security cover out of a corpus fund can help support gig and platform workers and other self-employed individuals associated with the sector in case of contingencies.

RAISE Framework for operationalising the Code on Social Security (CoSS), 2020 As Central and State governments draw up rules and regulations under CoSS 2020, they could adopt the five-pronged **RAISE**



approach to ensure realisation of full access to social security for all gig and platform workers:

- i. **R**ecognise the varied nature of platform work to design equitable schemes.
- Allow augmentation of social security through innovative financing mechanisms.
- iii. Incorporate, while designing schemes, the specific interests of platforms, factoring the impact on job creation, platform businesses and workers.
- iv. Support workers to subscribe to government schemes and welfare programmes through widespread awareness campaigns.
- v. Ensure benefits are readily accessible to workers.

5. The Future of Platform Economy: A Research Agenda

Being in its nascent stage, the platform economy in India is yet to be studied comprehensively. Not only are there severe data gaps when it comes to enumerating gig and platform workers, there is much to be explored on the regulatory front as well. The exercise of policy design and implementation must keep its specific subjects and welldefined purpose, in order to be effective. Therefore, this study concludes by formulating a research agenda that lists out some of the key aspects of the platform economy that need to be studied:

i. Survey of Small Platforms

At present, the regulatory debate around platform businesses takes a blanket approach of treating all businesses the same. However, the functioning and issues of small platform businesses are not the same as those of their bigger counterparts. Applying uniform regulations and policy interventions without accounting for how their impact may vary according to the size of a platform, would prove to be detrimental to the growth of smaller businesses.

ii. Women-run Platforms

Greater data is needed to understand the difficulties faced by women-run platforms. Extensive research into this domain would help design incentives to promote their growth and help them scale up.

iii. Are Platforms leading to Formalization of Employment?

Even as various studies have recognised the employment generation potential of platforms, it may be of interest to explore if the use of technology and other new mechanisms in platforms is leading to formalization of employment.

iv. Contribution of the Platform Economy to India's GDP

This report presents an indirect approach to estimate the growth in the size of the gig-platform economy and its contribution to India's economic output. Alternative approaches grounded in actual data of the number of workers wearing the platform labour hat are necessary. Furthermore, using these estimates, platform economy's contribution to India's GDP must be determined. This exercise may also enable India to unpack the pace at which platformization is occurring across industries and what enablers and barriers might be causing the same.









Introduction

The rise of the gig economy in India is changing the face of its workforce. The current estimation for gig economy jobs in India is at 8 to 18 million, which is projected to increase to over 90 million jobs in the non-farm sector in the next eight to ten years (Tiwari, Ram & Roy, 2019; BCG and Michael & Susan Dell Foundation, 2021). Therefore, by next decade the gig economy in India can see USD 250 billion transactions at 1.25% of the country's Gross Domestic Product.

For India, four industry sectors can be identified as the ones with the highest potential to produce "gigable" jobs in the future — Construction, Manufacturing, Retail, and Transportation and Logistics. These sectors are together expected to accommodate over 70 million of the potentially "gigable" jobs in the future (BCG and Michael & Susan Dell Foundation, 2021). However, the gig economy is fast-expanding and its presence can be noticed in other industries such as textile, banking and financial services, electricity, gas and water; real estate, IT and ITES, education, personal services (IBEF, 2021). Currently more than 75% of the companies have less than 10% gig headcount, but this proportion is bound to rise with MNCs turning to flexible hiring options (ibid).



Shifting the focus to platform economy, a subset of the gig economy, in the next three to four years, about 24 million jobs could be converted to technology-based gig labour (i.e. platform work), with about three million jobs in shared services and another eight million jobs servicing household demand (BCG and Michael & Susan Dell Foundation, 2021). Further, the study by Fairwork India (Fairwork India, 2020) estimates that eleven platforms in India report about 30 lakh workers in 2020¹. Therefore, the increasing prominence of gig and platform workers must be acknowledged, if India is to leverage the full potential of this new-age workforce.

A gig worker is a person who engages in income-earning activities outside of a traditional employer-employee relationship, as well as in the informal sector (Ministry of Labour and Employment, 2020a). When gig workers use platforms – i.e., websites or apps like Ola, Uber, Dunzo, Zomato, Swiggy or Urban Company – to connect with customers, they are called platform workers (OECD, 2019).

Platform workers are one of the most visible groups of professionals in urban India today. Through the app, they could receive a work order which might involve ferrying passengers around in taxi-cabs, auto-rickshaws, bike-taxis and their electric vehicle variants, deliver food and groceries, or provide cleaning or wellness services at home. Even as this form of labour, i.e. platform work, gains currency in today's socio-political landscape, it did not start in the 2020s. Nor is it restricted to the aforementioned jobs or a country like India alone.

The gig economy in itself is expansive and undefined and can include a variety of workers outside of a traditional worker definition. However, platform economy is more concretised as it specifically focuses on the use of online platforms, making each worker's role clearly defined. For instance, it is not uncommon in India to have an independent worker, like the chauffeur for a family, take up other roles, such as butler, errand runner or daytime watchman. Such roles are dissociated and demarcated to provide a specific service in the platform economy (Ramachandran & Raman, 2021).

Even though independent work is not a new phenomena, its digital enablement through platformization is. Globally, the number of web-based platforms have tripled, and the number of taxi and delivery platforms has grown nearly tenfold (ILO, 2021). The number of digital platforms increased from 142 in 2010 to 777 in 2020, generating a revenue of at least USD 52 billion in 2019 alone. These digital platforms of labour are primarily concentrated in the US (29%), India (8%), and the UK and Northern Ireland (5%) (ibid). Tasks, such as design, data entry, analytics, and financial services, among others, can now be outsourced by businesses through these webbased platforms. Platforms are thus emerging as the new defining peak of a globalised world, where the needs of a business in the global North can be addressed by a worker in the global South. The diverse nature of platforms enables them to parallely offer hyperlocal jobs centred on driving and delivery. Such locationbased platforms also provide a plethora of day-to-day professional home services, such as electrical work, cleaning, and beauty or wellness-based services, among others.

Thus, the future of work is rapidly changing in the face of three common forces – technological advancement, climate change and demography. Of the three, the most pervasive has been technology. A panel of 20 technology businesses and academic experts from around the globe have estimated that 85% of the jobs that will exist in 2030 have not even been invented yet (Dell & IFTF, 2018).



¹ See page 30, Fairwork India Report 2020, for estimates of each of the eleven platforms.

The diffusion of technology can be witnessed in the BRICS countries (Brazil, Russia, India, China and South Africa) that have experienced momentous growth in internet connections and use of internet-enabled devices (ILO, 2020). In India alone, the number of active internet users is expected to increase by 45%, from 622 million in 2020 to 900 million in 2025 (IAMAI-Kantar, 2020).

The world is only beginning to capture the immense opportunities digitalisation offers, and the Covid-19 pandemic has accelerated this process. In India, the total digital transaction volume had increased to INR 4,371 crore from 3,412 crore in 2019-20. At the same time, the value of digital transactions made through the Unified Payment Interface (UPI) system alone doubled from INR 21,31,730 crore in 2019-2020 to INR 41,03,658 crores in 2020-2021 (RBI, 2021). This increased preference for digital modes of payments was a result of the strict containment measures, including lockdowns and restrictions on non-essential economic and social activities throughout 2020. Moreover, digital technologies, thus, emerged as the essential tool that ensured service continuity. Platform workers emerged as the lifeline keeping communities connected in 2020. They ferried essential personnel to hospitals, delivered food, groceries, and medicines to all in general, and the elderly and vulnerable communities, in particular (The Economic Times, 2020).

This study impresses upon the need to leverage these benefits of digitalisation to boost employment in the gig and platform sector.

Undoubtedly, platform labour is the result of the Fourth Industrial Revolution (4IR). 4IR which started in the late 2000s – early 2010s is growing exponentially, disrupting every industry in every country, and heralding the transformation of entire systems of production, management, and governance. Technologies and emerging technological breakthroughs of the 4IR such as smartphones, Internet of Things (IoT), artificial intelligence, etc. are blurring the lines between the physical, digital, and biological spheres (Schwab, 2016), all the while making our jobs and lives safe and convenient.

As most platform businesses rely on mobilebased apps, accessed on affordable mobile devices and low-cost data plans, they have thrived in India, with a much needed impetus provided by the Government's Digital India² campaign that aims to build a digitally empowered society and knowledge economy. The accretion in the number of active internet users in India will further enable existing platforms to scale, and new ones to emerge. Moreover, India has already emerged as one of the world's largest countries for flexi-staffing (i.e., gig and platform work) (The Economic Survey 2020-21), and that this form of work will likely continue to grow with the incursion of e-commerce platforms amid the Covid-19 pandemic.

Indeed, the ubiquity of smartphones and availability of affordable data are transforming how we work, move, and live. As the digital permeates all aspects of our lives, digitalisation of work is inevitable. Invariably, central to this metamorphosis is talent or labour, representing the most critical factor of production in the 21st century. Even as consumer needs and aspirations evolve, and business models change, how well a nation's labour force adjusts to the transitions, and powers this transformation is important for any economy. This is particularly relevant for India which is home to over half a billion individuals in the working-age. Thus, the manner in which



² Digital India is a flagship programme of the Government of India with a vision to transform India into a digitally powered society and knowledge economy (Ministry of Electronics and Information Technology, 2015).



India leverages the technologies of the 4IR to unlock meaningful jobs for its population while enhancing its global competitiveness is a public policy issue of urgent significance.

1.1. PURPOSE OF THE STUDY

Situated in this backdrop is this comprehensive study of the platform economy in India. Being a new-age phenomena, there are a number of aspects of platform work that remain unexplored, and this study is an attempt to plug these knowledge gaps through a structure of four key pillars:

1. Data on Platform Economy

- a. There is a need for evidence-based analysis around gig and platform work to recommend policy measures to leverage gig and platform economy to unlock jobs, protect livelihoods, and enhance social and financial inclusion.
- b. This study estimates the size of the gig and platform economy, while also highlighting their relevance for India.

2. Job creation for the marginalised

 Platform work due to the flexibility of work hours and work space that it offers, can offer greater employment avenues to different categories of workers such as women and Persons with Disabilities (PwDs) as well.

b. This study presents suggestions for promoting social inclusion in the platform economy, which can be leveraged to improve the labour force participation of marginalised and vulnerable groups, especially through skilling.

3. Global comparisons and lessons

- a. Through a comprehensive comparative analysis, this study examines the characteristics of platform labour and regulations related to it globally.
- The study documents best practices and initiatives for social security of platform workers undertaken by some countries.

4. Recommendations for policy measures to leverage the opportunities offered by the platform economy

- a. Through a concretised set of recommendations, this study calls for a multi-stakeholder approach to leverage the gig and platform economy to unlock jobs, protect livelihoods, and enhance social and financial inclusion in India.
- b. The study presents recommendations for estimating employment



in the gig and platform economy, promoting platforms for employment generation, skill development initiatives to enhance employment and income earning opportunities for workers and recommendations to enhance access to social security coverage for gig and platform workers in India.

1.2. OVERVIEW OF THE STUDY

This report presents findings from the investigation into the following aspects of what is broadly termed the gig and platform economy, arranged thematically in various chapters as follows.

Chapter 2: The Gig Workforce in India: Estimates and Projections

Chapter 2 adopts a novel albeit indirect method to estimate the size of the gig workforce in India. Using proximate gig worker characteristics (supply side) determined from existing literature & micro-studies, we estimate the number of workers with these gig worker-like characteristics within the industries and occupations that demand gig work (demand side). While estimates are made for the time period 2011-20, projections are made for the period 2021-30. Worker characteristics such as location, age group, education, household income, agriculture or non-agricultural employment, and access to mobile phones and bank accounts, are factored in for the estimation. 21 occupations ranging from computer professionals and electronic equipment operators to sales and business services agents, motor vehicle drivers, housekeeping and restaurant service workers, street vendors, domestic helpers and cleaners, and building caretakers, etc. are

included in the analysis. Lastly, 15 industries with the largest concentration of gig work or having the potential to have a growth of gig work are considered in the estimation of the size of gig workforce in India.

The chapter concludes with recommendations on improving the process of enumeration in India with specific inputs on strengthening labour force surveys and data collection in the country.

Chapter 3: Technology Diffusion and Democratisation of Jobs

This chapter unpacks the concepts of platformization and the platform economy in detail. It further looks at a host of frequently asked questions on the platform economy: What is the impact of digitalisation of jobs in India? Who is a platform worker? What are the characteristics of a platform worker and how are they different, if any, from a nonplatform worker? How does the platform economy interact with the traditional formal-informal economy? How large is the platform economy in India; what is the quantum of livelihoods it can unlock in the years to come?

To answer said questions, we use data from a first-of-its-kind survey involving 3,300 platform workers and 1,700 nonplatform workers conducted across 12 cities in India, in late 2019. The insights are then combined with an analysis of macro- and microeconomic trends revealed by large datasets from Periodic Labour Force Surveys, and data from the Centre for Monitoring Indian Economy, among others. Evidence, thus, collected on India is compared with that of emerging and advanced economies³ to understand the similarities and differences

3 We use secondary and tertiary sources here.



of platformization as it unfolds around the world.

The chapter concludes with policy recommendations for India to unlock jobs in the millions, with emphasis on identifying and removing entry barriers, if any, and truly democratising access to jobs in the country.

Chapter 4: Creating a Future-ready Labour Force

Chapter 4 looks at the interplay between skill development and platformization. We situate skills in the larger context of assets that individuals have access to and which can be monetised at their will. Thus, the chapter considers numerous questions: What are the assets needed for jobs in the 21st century? How can they be gained? What is the impact of platformization on worker's skills? What are the skill sets needed for India's half-a-billion labour force? What is the role of the larger ecosystem – digital platforms, training agencies, and the government, among others – in skill development?

Evidence is derived from a driver training provided by a mobility platform through inperson sessions in the second half of 2019. This is combined with survey results from the 5000-worker survey stated earlier, along with secondary data on skilling and asset augmentation in the platform economy.

The chapter highlights the urgent need for India to create a future-ready labour force and presents policy recommendations to enable the same.

Chapter 5: Enhancing Social Inclusion in the New-age Digital Economy

This chapter uses the lens of equity to study the platform economy. Are platforms diverse and inclusive? Here, we specifically study the role of platforms in bringing women, and Persons with Disabilities (PwDs) to the forefront of the economy. In this context, we study the enablers and barriers to performing platform labour, faced by the traditionally marginalised groups in India and conclude with policy recommendations for India to mainstream the active participation of women and Persons with Disabilities (PwDs) in the economy.

Insights from a survey of ~700 women within and outside the platform economy informs the policy learnings and recommendations in this chapter, combined with case studies on the participation of in the platform economy.

Chapter 6: Global Examples and Suggestions for Social Security for Gig & Platform Workers in India

Chapter 6 demystifies the evolution of social protection around the world.

This chapter uses case studies to examine how India and the rest of the world has protected and leveraged the platform economy against Covid-19. Platforms have given rise to innovative models that can provide social security benefits to workers independent of their association to platforms. Best practices from countries such as the US, the UK, Singapore, China, South Africa and Hong Kong have been used as evidence to underscore the need for creating specific policies to promote platform economy and protect the platform workers. India's Code on Social Security expands worker classifications in India, recognises worker classifications of gig and platform workers and extends social protection to all workers. Extending social security to those associated in nontraditional work relations such as platforms is key to universalising social security.



Chapter 7: The Future of the Platform Economy – A Research Agenda

The concluding chapter of this report identifies potential areas of research to

deepen our collective understanding of the platform economy, and to leverage it to unlock jobs in the millions while protecting livelihoods and lives at scale.






The Gig Workforce in India: Estimates and Projections

2.1 SIZING UP THE GIG ECONOMY: CURRENT APPROACHES AND ESTIMATES

Estimating the gig work force in India is confounded with methodological issues in identifying gig workers. Workers not identified as employees, and instead termed as partners, pose the issue of whether to classify them as wage employed or as selfemployed. Often taking up multiple tasks with contracts on-a-task-basis makes counting workers complex. In addition, estimating the size of the gig economy in India is fraught with severe data gaps in this field. Though the Indian statistical system is very robust in the case of the conventional economy, official data presently does not estimate gig and platform workers due to the amorphous nature of work in the sector. Nevertheless, the gig economy is emerging in prominence and its rising presence cannot be ignored. The gig economy is bound to expand on account of both conversion of conventional jobs into gig work and also due to new sectors that depend on platform and gig work.

With the limited data that is available on employment and other related aspects we attempt to estimate the size of the gig workforce in India. The estimation is only



indicative and may not represent the true size of the gig workforce. Before we present our estimates we summarise recent literature on gig work estimations and their structure in India and other countries.

2.1.1. Gig Economy Size

We first begin by outlining recent estimates on the size of the gig economy. A 2020 study conducted by the Michael and Susan Foundation and Boston Consulting Group (BCG) estimates the gig economy jobs at 8 million in India. This could increase to about 90 million jobs in the non-farm sector in about 8 to 10 years, with USD 250 billion transactions at 1.25% of India's GDP (BCG and Michael & Susan Dell Foundation, 2021). Further in three to four years, about 24 million jobs could get converted to technologybased gig labour (i.e. platform work), about three million jobs in shared services and eight million jobs servicing household demand. A study by Fairwork India (Fairwork, 2020) estimates that eleven platforms in India report about 30 lakh workers in 20204. Another study notes that there are 33 lakh platform workers in the passenger mobility and hyperlocal delivery services in urban India (Raman, Ramachandran & Sasikumar, 2021). IBEF, citing an ASSOCHAM study, reports that the gig sector is set to expand to USD 455 billion at a CAGR of 17% by 2024 (IBEF, 2021).

A 2019 study by TeamLease estimates that gig workers in India increased from 8.5 million in 2016 to 11.7 million in 2017, and 15 million in 2018 (Tiwari, Ram & Roy, 2019). The report further notes that 56% of new employment in India is being generated by gig economy companies across both blue- and whitecollar workforce. Most of the workers are in Delhi followed by Bengaluru (Salman & Bansal, 2019). Another 2019 report – the one

by Betterplace – estimates that of the 2.1 million blue-collar jobs in India in 2019, 1.4 million were in the gig economy. Betterplace collated this data based on a sample set of 1.1 million individual profiles, engaged by 1,000 job creators (Ganesh, 2019). Lastly, in this confounding, contradicting array of gig economy estimates is the 2021 compilation of statistics on the gig economy by ASSOCHAM and Primus Partners. Their report pegs the gig economy size at 15 million "freelance workers engaged in projects in different sectors". 64% of them are 24-38 years of age, the report adds further. Lastly, the report notes the distribution of gig workers in top metro cities as follows: Bengaluru (2,34,000), Delhi (2,25,000), Mumbai (1,33,000), Pune (1,25,000), and Chennai (93,222) (ASSOCHAM & Primus Partners, 2021).

2.1.2. Gig Industries and Occupations

Gig work is currently not spread across all sectors of the economy, though it has the potential to become a major form of work in future. The BCG study identified four industry sectors as the ones with the highest potential to produce "gigable" jobs in the future. Construction, Manufacturing, Retail, and Transportation and Logistics would accommodate over 70 million of the potentially "gigable" jobs in the future. The IBEF report cites other industries that are transforming to gig such as textile, banking and financial services, electricity, gas and water; real estate, IT and ITES, education, personal services. IBEF reports that MNCs are now turning to flexible hiring options. Currently more than 75% of the companies have less than 10% gig headcount, but this proportion is bound to rise. The future for such gig hiring may increase from 15% in 2020 to nearly 70% in another 5 years in the FMCG industry, and similarly in other related industries. Currently, the popular occupations include driving, delivery of goods, customer



⁴ See page 30, Fairwork India Report 2020, for estimates of each of the eleven platforms.

support, transactions processing, marketing and sales, software development etc. As is expected, in the future other jobs could also get gigged. Reports project the long term potential for gig to be skilled and semi-skilled jobs (around 35 million) within industry sectors; Shared services roles (around five million) like facility management, transportation, and accounting; household demand for services (around 12 million); unskilled jobs (approximately 37 million) across various sectors of the economy.

2.1.3. Type of Gig Workers

Gig workers can be broadly classified into platform and non-platform-based workers. Non-platform gig workers are generally casual wage workers and own-account workers in the conventional sectors, working part-time or full time. Platform workers are whose work is based on online software apps or digital platforms. Location-based platforms allow in-person work at specific locations, such as delivery or driving while web-based platforms enable workers to perform online tasks for clients around the world⁵.

2.1.4. Gig Worker Characteristics

Gig workers seem to differ from conventional workers in terms of some individual characteristics. Gig workers are comparatively young, working for fewer hours a day on gig work, preferring a flexible work schedule, typically with low to middle level of education. Income through gig work is not their primary source of income and they are often holding another regular job. They value transparent, timely and assured payments while non-wage benefits are not attractive to such workers. Apart from these common characteristics there are specific characteristics. For instance, women prefer high-skill segments with flexible work hours, to fulfil both their work and household commitments⁶. Students look at the gig economy as an additional source of income. Similarly, students looking for partial incomes with flexible schedules form a part of the gig workforce.

2.2 ESTIMATING THE GIG WORK-FORCE: METHODOLOGY

As stated earlier, estimating gig workers in India is a challenge as there is no official or widely accepted database that enumerates gig workers. The primary difficulty arises from the amorphous nature of gig work. Perhaps this heterogeneous nature of gig work is what is generating the wide gaps in estimates of gig workers, ranging anything from 3 million workers to 14 million. Acknowledging this limitation we embark on an indirect method to estimate the number of gig workers in India. From the literature cited above and results of micro studies we are able to identify proximate features of gig workers. We use these features to estimate the workers. Broadly the approach is to identify worker characteristics (supply side) of gig workers and then to estimate the number of workers with these gig-worker like characteristics within the industries and occupations that demand gig work (demand side).



⁵ See Section 3.3 for a detailed classification of platform labour categorised by reach and complexity of labour.

⁶ While this has been observed for gig jobs with high complexity, women also take up location-specific platform jobs such as providing professional home services, delivering packages, or ferrying passengers, as can be seen in *Chapter 5*. Thus, women value flexibility and choice of labour allowing them to monetise their skills and tangible assets when and where they want. This helps reframe the role of women in public and private life. Thus, labour force participation is no longer a binary decision between household duties and economic aspirations, but women now have the choice to work at will (Raman & Kulkarni, 2021).

2.2.1. Characteristics of Gig Workers

Location: Gig work, especially locationa. based gig work is largely concentrated in the urban areas. An essential feature of gig work is to be able to do small parcels of tasks within a short period of time. In order for such work to be economically viable for workers, the search cost for jobs must be low. Agglomeration economies are crucial for such fragmented jobs to be matched among workers, job creators (such as digital platforms), and final clients. Gig work had remained local and not grown in the past mainly due to the huge coordination and monitoring costs associated with such work. Information Technology in the form of smartphonepowered platforms has reduced this transaction cost substantially in the recent past, thus enabling the possibility of gig work growing beyond the local. The geographical spread of gig work - now, much beyond local however, is constrained by the need for agglomerations to reap economies of scale and scope. Hence, such work remains largely urban, concentrated within large cities of the country. Today, though, there is penetration of such services in the hinterlands as well, i.e. smaller urban formations (Tier 2 and 3 cities). After analysing the locational specificities of various platform-based firms we found that a large share of their operations were located within Therefore, metropolitan cities. we earmarked the districts with the top 100 cities in the country, as identified by the Census of India 2011, assuming most of gig work would be limited to these large cities within the country. In this study, while selecting the 100 metropolitan cities of India (as per the census) from the NSSO-EUS & PLFS survey, we have

used a specific procedure based on the available datasets. For those cities whose information is not available in the NSSO datasets, we have considered the whole district for the computation.We have used both the urban as well as rural samples for identifying the total number of gig-platform workers as per the specifications. While 100 cities are used for the current estimate, it is noteworthy that passenger mobility services using two-wheelers (mopeds, scooters, bikes), hyperlocal deliveries, and e-commerce services, among others, have reached over 300 cities in India as will be seen in Section 3.5.3.

- b. Age Group: This study has included the age group of 18-45 years as the potential age group for estimating workers in the gig and platform sector. The selection of this age group as a characteristic for estimating workers in this sector may lead to an underestimation, but is in line with the findings of a number of studies that have noted that gig workers are young workers compared to non-gig workers. A 2019 study shows that the average age group of app-based taxi drivers was concentrated within the ages of 18-45 years, while the age ranged from 18 to 65 years for conventional taxi drivers (Ramachandran & Raman, 2021).
- c. **Education:** Growing evidence from around the world shows that work of all degrees of complexity is giggable. Thus gig work requires a range of skill sets. For starters, manoeuvring a platform system through complex interfaces of technology and organisations may demand basic levels of education. And for higher complexity jobs such as accounting or coding relevant educational qualifications might be needed and even demanded by clients. In this backdrop, it is noteworthy



that studies have found gig workers in general to have educational levels ranging between secondary school and graduation, mirroring the larger trends in the Indian economy where educational levels are constantly rising. Thus, we use this range in the level of education (i.e. secondary school to graduation) as the proximate educational qualification of typical gig workers.

- **Income Level:** We assume that gig work d. is largely undertaken for augmentation of existing income, based on microstudies in India. Most of the jobs that are getting gigged or platformized are the ones with lower degrees of complexity. From the above it can be deduced that most individuals belonging to the high income category households may not be part of the gig workforce, at least for the time being. Treating this as our basic assumptions, we consider those workers whose household consumption expenditure was below the 75th percentile of monthly per capita consumption expenditure (MPCE) as potential gig workers.
- e. **Type of Employment:** Gig work is urbanised and operates mostly within the non-agricultural sector of the economy. We consider this feature as another characteristic of the gig worker.
- f. **Ownership of Mobile Phones:** All platform-based gig workers require ownership or access to mobile phones or similar electronic devices to operate the software interface. We consider that only those workers who have mobile phones are potential gig workers.
- g. **Bank Account:** Most app-based or platform-based services pay on piece rate or task rate. The payment is done only through authorised banks, as other

forms of payment are unviable. The online banking system is an important innovation that enables and powers the operation of the platform economy. Hence, we assume that all workers who are part of the gig economy require to have a bank account⁷.

2.2.2. Occupation and Industry

- a. Occupation: Not all occupations are gig work. Reading through the literature (BCG and Michael & Susan Dell Foundation (2021), IBEF(2021), Fairwork India (2020), Pesole A (2018) ILO (2020), Kässi, O., & Lehdonvirta, V. (2018), Berg, J., Furrer, M., Harmon, E., Rani, U., & Silberman, M. S. (2018,)it can be seen that there are select occupations where gig work is concentrated. Based on the literature, we identify the following occupations from the National Classification of Occupation 2004 as occupations that have gig workers.
 - i. Computing Professionals
 - ii. Architects, Engineers and Related Professionals
 - iii. Business Professionals
 - iv. Computer Associate Professionals
 - v. Optical and Electronic Equipment Operators
 - vi. Finance and Sales Associate Professionals
 - vii. Business Services Agents and Trade Brokers
 - viii. Secretaries and Keyboard-Operating Clerks
 - ix. Numerical Clerks



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⁷ Notably, platforms help workers set up their bank accounts and also facilitate their access to institutional credit, as can be seen in the forthcoming chapters of this report.

- x. Material Recording and Transport Clerks
- xi. Cashiers, Tellers and Related Clerks
- xii. Client Information Clerks
- xiii. Travel Attendants, Guides and Related Workers
- xiv. Housekeeping and Restaurant Services Workers
- xv. Personal Care and Related Workers
- xvi. Shop Salespersons and Demonstrators
- xvii. Stall and Market Salespersons
- xviii. Motor Vehicle Drivers⁸
- xix. Street Vendors and Related Workers
- xx. Domestic and Related Helpers, Cleaners and Launderers
- xxi. Building Caretakers, Window and Related Cleaners
- b. **Industry:** We identify from literature the industries that have the largest concentration of gig work or have the potential to have a growth of gig work. The identified industries from the National Industrial Classification are as follows.
 - i. Section E Manufacturing
 - ii. Section D Electricity, gas, steam and air conditioning supplies
 - iii. Section E Water supply; sewerage, waste management and remediation activities
 - iv. Section F Construction

- v. Division 47 Retail trade, except of motor vehicles and motorcycles
- vi. Section H Transportation and storage
- vii. Section I Accommodation and Food service activities
- viii. Section J Information and communication
- ix. Section K Financial and insurance activities
- x. Section L Real estate activities
- xi. Section N Administrative and support service activities
- xii. Group 854 Other education Group
- xiii. Group 855 Educational support services
- xiv. Division 87 Residential care activities
- xv. Division 95 Repair of computers and personal and household goods

2.2.3 The Procedure for Estimation and Projection

a. Estimating Employment

In India, the most acceptable and authentic source for collecting estimates employment is the National Sample Survey Organization (NSSO) cross-sectional Employment-Unemployment Survey (EUS), and Periodic Labour Force Survey (PLFS) datasets. Here, our aggregate employment analysis is based on the Usual Principal Status (UPS), and Usual Principal Status and Subsidiary Status (UPSS) employment criteria as used in the EUS and PLFS data. The employment estimates are provided in the NIC-2008 classification basis, whereas the occupational characteristics use the NCO-2004 classification. Further, census adjusted weights have been applied



⁸ Today, any individual with access to a two-wheeler, with or without a commercial permit, can deliver packages, food, groceries, medicines etc., in the digital hyperlocal economy. Such individuals are different from the traditional motor vehicle drivers who drive vehicles with commercial permits alone. Thus, many of these traditional occupational categories need to be expanded and/ or redefined.

for estimating employment using the NSSO-EUS and PLFS survey⁹.

b. Employment Projections

For estimating the employment projections from 2020-21 to 2029-30 at the aggregate level as well as for the gig workers, we have followed the weighted average growth rate criteria. Here, we have first estimated the aggregate employment growth (CAGR) (also for gig workers) from 2011-12 to 2017-18 and from 2017-18 to 2019-20. Afterwards, we have estimated the weighted average employment growth rate (WEGR) for these two growth rates. This can be depicted as,

 $WEGR = \frac{(EGR (2011 - 12 to 2017 - 18) \times 6) + EGR (2017 - 18 to 2019 - 20) \times 2)}{8}$ $EGR_{i}^{(2024-25)} = WEGR_{i}^{(2019-20)} + 6 \times WEGR$ $EGR_{i}^{(2029-30)} = WEGR_{i}^{(2024-25)} + 5 \times WEGR$

c. Estimation of Gig Workers

We use the aforementioned supply side and demand side proximate features of gig work to estimate the volume of gig workers in the country. We use progressive filters to arrive at the number of gig workers from the total population. The base data source is the EUS of the NSS and PLFS for the period 2011-12 to 2019-20. In the first step we estimate the total workforce from the population, after using the workforce proportions estimated from the NSS and PLFS. The population is the projected population for the respective years, based on the Census of India 2011.

In the next step we filter in that set of workers from the NSS and PLFS which has the following characteristics:

- belongs to any of the top 100 cities;
- within the age group 18 to 45 years;
- with an education level ranging between secondary school to graduation;
- belongs to the bottom 75th percentile of MPCE¹⁰; and
- works in the non-agriculture sector.

Two additional desirable filters, ownership of mobile phones and bank account are not available in the NSS and PLFS data.

From the available sources, we have considered the percentage of the population having mobile phone penetration. Reduce for estimating this, we have taken the information from the World Bank estimates on mobile phone penetration (World Bank, 2021). As reported in the estimates we have considered this share as 71.5% for the year 2011-12 and accordingly taken the estimates as 87.3% for the year 2017-18. As for the latest years i.e., 2018-19 and 2019-20, the estimates have not been provided, we have considered the estimates by 1% increment for the year 2018-19 (88.3%) and 2019-20 (89.3%) respectively. We apply the same proportions for the filtered workforce (working population) as estimated from the NSS and PLFS data.

10 monthly per capita consumption expenditure



⁹ The census adjustment has been done on the basis of Census and NSSO population data sets. First the Weighted NSSO population figure was estimated from the concerned NSSO employment and unemployment rounds both for rural-urban and male and female differently. After that, the given figures are divided by the concerned census population figure. We have taken the census figures from the Report of the Technical Group on Population Projection, RGI, Census 2011. After getting the respective ratios, they are multiplied with the multiplier figure to get the census adjusted weights.

After estimating the labour force using worker characteristics we now apply industry and occupation filters. From the NSS and PLFS data set, we have the proportion of workers to total workers engaged in the various selected occupations across the selected industries. We apply these proportions to the filtered workforce. After applying this, the sum total of all workers in the selected industries and occupations is the estimated gig workers.

The procedure for estimation, in short, is (a) to identify the potential workforce that can be part of the gig workforce, through supplyside characteristics; (b) thereafter identify the demand for such workers through gigintensive industries and occupations; (c) the intersection of the two, that of the gig workforce and gig industry-occupation provides the number of workers currently estimated to be the gig workers.

As can be seen in the method above, the estimation method followed is indirect and only identifies characteristics close to gig work. The method has numerous limitations. The first and most obvious is that we do not have any direct indicator for gig work. Had it been so. estimation would have been straightforward. The second limitation is that, even proxy variables are not very close proxies. For instance, job characteristics such as taskbased or piece rate, interface with technology and travelling or working at flexible time are reasonably fitting characteristics of gig workers. We do not have such information in the data set, and are hence, constrained to work with the available information. Nevertheless, the available information does throw some light on the prevalence of gig workers in the economy. We feel that though this method is imperfect, this is a reasonably robust direction of enquiry when limited by data constraints.

Employment Datasets in India

Different employment datasets have been used in India to understand the changing contours of employment in the Indian labour market. Broadly, the labour statistics are collected, compiled, and disseminated by several agencies in India. The most prominent of them are that of NSSO Employment and Unemployment (EUS) datasets and recently the Periodic Labour Force Survey datasets.

The main objective of the employment and unemployment surveys conducted by NSSO at periodic interval is to get estimates of various labour force characteristics at the national and State/UT level. Various employment datasets include,

1-NSSO Employment and Unemployment Datasets (EUS) (1972-73 to 2011-12) –

These datasets are available in quinquennial round basis from 1972-73 to 2011-12. The employment information is available as per Usual Principal Status, Usual Principal and Subsidiary Status, Current Weekly Status and Current Daily Status criteria. These surveys also provide employment estimates across different industry groups and socioeconomic characteristics.

2-Periodic Labour Force Survey (PLFS)-2017-18 to 2019-20 – One, unlike the quinquennial EUS, the PLFS is conducted annually in rural areas and quarterly in urban areas.

Both the surveys are based on the stratified random sampling procedure, but the criterion for the second-stage stratum in the EUS is based on the consumption expenditure and/or livelihoods, whereas for PLFS, it is based on levels of education (Padhi and Motkuri, 2021).



In the PLFS, households in each of the selected villages (the primary sampling unit or PSU) were stratified into three segments based on the presence of educated household members.

There is also a revisit sample in the PLFS survey for the urban area. Further, the wage information related to self employed workers has been provided in the PLFS survey which is not available in the earlier EUS surveys.

3-Labour Bureau Employment Survey-2009-10 to 2015-16 – Responding to discontentment of NSSO EUS, the Labour Bureau started conducting the yearly Employment and Unemployment survey. This study has been discontinued.

4-Annual Survey of Industries – Yearly Information only related to registered manufacturing and industries, however services are not included. But it provides a detailed information related to registered manufacturing in India.

5-CMIE Datasets (2016 to 2021) - The Centre for Monitoring Indian Economy (CMIE) is a private business information organisation conducts survev on employment and unemployment since 2016. The consumer pyramid survey covers about 160000 households and 522000 individuals (Abraham and Shrivastava, 2019). It provides up-to-date information on employment and unemployment in India but uses different methodologies for estimation of employment. Due to this, it may not be strictly comparable to other official estimates related to employment.

2.3. EMPLOYMENT, GDP, AND EMPLOYMENT GROWTH IN INDIA

2.3.1. Estimates for 2011-12 to 2019-20

The estimated employment during 2011-12 was 46.99 crores which increased to 51.1 crores in 2019-20. Correspondingly the output also increased from 87 lakh crores to 145 lakh crores during the same period.

Table 1: Estimated Output andEmployment levels and growth 2011-12 to2019-20

	Employment (in crores)	Output (in crores)	Per worker output
2011-12	46.99	8736328.71	185904.09
2017-18	45.50	13144582.14	288863.92
2018-19	46.75	14003316.25	299551.35
2019-20	51.10	14569267.87	285101.41

The employment growth during the period was -0.54% per annum during 2011-12 to 2017-18. During the same period output grew at 7.05% per annum exhibiting the jobless growth trends. The period after 2017-18 shows robust increase in employment, but the output growth slowed down below 7% during the period. The employment elasticity during the period 2017-18 to 2019-20 was 1.13, showing robust employment growth with output growth, compared to the jobless growth period of 2011-12 to 2017-18.

Table 2: Employment Growth and Elasticity

Growth rates (annual)	Employ- ment	Output	Employment Elasticity
2011-12 to 2017-18	-0.54	7.05	-0.076
2017-18 to 2018-19	2.73	6.53	0.418
2018-19 to 2019-20	9.31	4.04	2.305
2017-18 to 2019-20	5.97	5.28	1.131



2.3.2. Projections for 2021-2030

Based on the employment growth pattern during the period 2011-12 to 2019-20, the employment growth and output growth rates are projected for the period 2021 to 2030 as weighted average growth rate for the period 2011-12 to 2019-20. Of course, this is an approximation to assume that the economy would grow in future at the same rate as in the past.

Table 3: Projected GDP Growth,Employment Growth for 2021 to 2030

	Employment Growth	GDP growth
2011-12 to 2017-18	-0.535	7.046
2017-18 to 2019-20	5.972	5.280
2019-20 to 2024-25	1.092	3.692
2024-25 to 2029-30	1.092	7.000

Based on the projections the employment growth may increase from 46.9 crores to 56.9 crores by 2030 while the GDP may increase from INR 87 lakh crores in 2011-12 to INR 244 lakh crore by 2029-30.

Table 4: Projected GDP and EmploymentLevels for 2021 to 2030

	Employment (Crores)	GDP (Crores)
2011-12	46.99	8736329
2012-13	46.74	9213017
2013-14	46.49	9801370
2014-15	46.24	10527674
2015-16	46.00	11369493
2016-17	45.75	12308193
2017-18	45.50	13144582
2018-19	46.75	14003316
2019-20	51.10	14569268
2020-21	51.66	13512740
2021-22	52.22	14323504
2022-23	52.79	15254532
2023-24	53.37	16322349

	Employment (Crores)	GDP (Crores)
2024-25	53.95	17464914
2025-26	54.54	18687458
2026-27	55.14	19995580
2027-28	55.74	21395271
2028-29	56.35	22892939
2029-30	56.96	24495445

2.4. ESTIMATE OF GIG WORKERS

Using the methods described above, the estimated size of gig workers in India was about 68 lakh, using both principal and subsidiary status. The total number of workers increased from about 25 lakh in 2011-12 to 68 lakh in 2019-20. The number of gig workers who spend the majority part of the reference year as gig workers (Usual Principal Status) were 24.5 lakh in 2011-12 which increased to 67 lakh in 2019-20. Those that did such work for a shorter period of the year (Usual Subsidiary Status) increased from about 0.7 lakhs to 1.1 lakhs during 2011-12 to 2019-20. As mentioned above, these are workers that have gig worker like characteristics, with a possible over-estimation as some of these workers may not be engaged in gig work.

Table 5: Estimated Number of Gig Workersin Lakhs

	No.of Gig workers (UPS)	No.of Gig workers (USS)	No.of Gig workers (UPSS)
2011-12	24.5	0.7	25.2
2017-18	52.1	0.5	52.6
2018-19	53.4	0.5	53.9
2019-20	67.0	1.1	68.0

As per our estimates only a small fraction of the total workforce is part of the gig workforce as of now. Currently, about 1.33% of the total



workers (UPSS) are gig workers. In terms of UPS workers it was 1.37% and subsidiary status was only 0.49% of the subsidiary workers. However, it can be seen that there is a steady increase in the share of gig workers in total workers, from 0.54% in 2011-12 to 1.33% in 2019-20.

Table 6: Gig Workers as a Share of TotalWorkforce 2011-12 to 2019-20

	Share of Gig workers (UPS)	Share of Gig workers (USS)	Share of Gig workers (UPSS)
2011-12	0.57	0.18	0.54
2017-18	1.18	0.40	1.16
2018-19	1.18	0.28	1.15
2019-20	1.37	0.49	1.33

The increase in the share of gig workers over the period is corroborated by the difference in employment elasticity as well. The employment elasticity to GDP growth for gig workers was above one throughout the period 2011-12 to 2019-20, and was always above the overall employment elasticity. During this period the employment growth was nearly twice that of the GDP growth. The higher employment elasticity for gig workers also indicates the nature of economic growth, which created greater demand for gig workers while not generating commensurate demand for non-gig workers. This nature of economic growth points towards greater conversion of non-gig work to that of gig-work.

Table 7: Gig Work Employment Elasticity

	Gig work Employ- ment growth	GDP	Gig work Elasticity	
2011-12 to 2017-18	13.020	7.046	1.848	-0.076
2017-18 to 2019-20	13.750	5.280	2.604	1.131

Our estimates show that about 37.6% of these workers are in the organised sector,

while the remaining are in the unorganised sector. Organised sector is taken to be those workers who work in firms with more than ten employees as is currently the common definition used. It can be seen that the share of gig workers is largely concentrated in the unorganised sector, about 62.4% of the total gig workers in 2019-20. Yet the share of gig workers in the organised sector is increasing, implying that more of such workers are now being part of larger firms. The share increased from 26% in 2011-12 to 37.6% in 2019-20, correspondingly the share of the unorganised sector declined. The future course of development of gig work indicates growth within the organised sector.

Table 8: Share of Gig Workers in theOrganised and Unorganised Sectors

	% in organised sector	% in unorganised sector	Total
2011-12	25.9	74.1	100
2017-18	30.6	69.4	100
2018-19	35.7	64.3	100
2019-20	37.6	62.4	100

However, when the share of workers in the organised sector increased substantially during the period, the share of informal workers remained more or less the same, or even marginally increased. Based on previous studies (Srivastava and Naik (2016) and Srivastava et al. (2020)), informal workers are defined as those workers who do not have a written contract for at least a year and are working in the non-agricultural sector. More than 80% of such workers were in informal labour relations. This share was at 83.7% in 2011-12 which declined to 81.8% in 2017-18, but increased to 82.5% in 2019-20. Thus there is persistence of informal work relations in the sector. When we read this along with the trends in the organised sector, it can be



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seen informal work is now penetrating the organised sector workforce through the gig and platform modes of work. Informalisation of the organised sector is recorded in previous studies (Abraham and Sasikumar, 2017), but these were mainly on account of contractual employment rising within the organised sector. But the trends above shows that apart from contractual employment within the organised sector, gig or task based forms of employment is also adding to the informality in the organised sector.

It is important to situate the above in the larger context of India having more than 90% of its workforce in the unorganised, informal economy traditionally, as well (NCEUS, 2007; Ramana Murthy, 2019; The Economic Survey 2018-19). As will be seen in the forthcoming chapters of this report, the trends of formalisation and organisation differ by countries, and are highly contextualised.

Table 9: Gig Workers: Formal and InformalWorkers Share

	Formal	Informal	Total
2011-12	16.3	83.7	100
2017-18	18.2	81.8	100
2018-19	18.6	81.4	100
2019-20	17.5	82.5	100

In terms of industrial classification, about 26.6 lakh gig workers were involved in retail trade and sales, and about 1.3 million were in the transportation sector. About 6.2 lakhs were in the manufacturing and another 6.3 lakhs in the finance and insurance activities. It can also be seen that gig work is expanding fast in almost all sectors. For instance the retail sector saw an increase of 15 lakh workers during 2011-12 to 2019-20, transport sector 7.8 lakhs, manufacturing – 3.9 lakhs. Similarly, in the education sector, the expansion was from 66,000 to more than one lakh by 2019-20.

National Industrial Classification 2008 Change 2011-12 2017-18 2018-19 2019-20 2011-12 to 19-20 (NIC-2008) 2.3 5.5 5.4 6.2 3.9 Manufacturing Electricity, gas, steam and air conditioning 0.2 0.2 0.1 0.4 0.4 supplies Water supply; sewerage, waste management 0.0 0.3 0.3 0.3 0.3 and remediation activities Construction 1.4 1.8 0.3 1.2 2.1 Retail trade, except of motor vehicles and 10.6 19.2 21.7 26.5 15.9 motorcycles 5.2 11.0 13.0 7.8 Transportation and storage 9.4 Accommodation and Food service activities 1.4 3.2 2.8 4.0 2.7 Information and communication 3.4 1.6 4.2 4.2 5.0 Financial and insurance activities 2.4 4.1 4.8 6.3 3.9 Real estate activities 0.4 2.0 1.5 2.4 2.0 Administrative and support service activities 0.2 0.4 0.4 0.2 0.2 Other education Group 0.2 0.5 0.4 0.0 0.3 Educational support services 1.2 0.7 1.3 1.1 0.4 25.2 52.6 53.9 68.0 42.8 Total

Table 10: Industrial Classification of Gig Workers in Lakhs (2011-12 to 2019-20)



It can be noted that even as gig workers are increasing in all the sectors highlighted below, the sectoral concentration in highly concentrated sectors is gradually declining as well. For instance, the retail trade sector accounted for nearly 42% of all gig workers which declined to 39% by 2019-20. For the transportation sector, the share declined from 20.7 % to 19.1% in 2019-20. The real estate sector increased from 1.7% to 3.5% and construction increased from 1.2% to 3.06% during the same period. The estimates thus show that gig workers are growing in all sectors, and the share of gig workers is also increasing in sectors that were not initially having gig workers. In terms of future projections, growth and diversification of gig workers across industries is a clear indication that gig work would expand further and may be a key form of employment in future, though it is relatively small today.

National Industrial Classification 2008 (NIC-2008)	2011-12	2017-18	2018-19	2019-20
Manufacturing	9.09	10.50	10.03	9.17
Electricity, gas, steam and air conditioning supplies	0.69	0.67	0.73	0.33
Water supply; sewerage, waste management and remediation activities	0.00	0.59	0.49	0.47
Construction	1.24	2.31	2.58	3.06
Retail trade, except of motor vehicles and motorcycles	41.97	36.48	40.30	38.95
Transportation and storage	20.69	20.86	17.40	19.18
Accommodation and Food service activities	5.49	6.05	5.20	5.94
Information and communication	6.43	7.91	7.74	7.39
Financial and insurance activities	9.32	7.78	8.98	9.21
Real estate activities	1.72	3.77	2.84	3.53
Administrative and support service activities	0.64	0.36	0.68	0.55
Other education Group	0.08	0.38	0.58	0.67
Educational support services	2.64	2.34	2.44	1.56
Total	100.00	100.00	100.00	100.00

Table 11: Industrial Classification of Gig Workers in Percentage Share (2011-12 to 2019-20)

In terms of occupation in 2019-20, about 22 lakh workers were sales and marketing persons, about 12 lakh were motor vehicle drivers, about 6 lakh were secretaries and clerks, about 5 lakh sales and finance associates, and others. Between 2011-12 and 2019-20, the largest addition in the gig economy was shop sales and market sales persons which increased by 12 lakh workers, followed by drivers which increased by 8.5 lakh.



National Classification of Occupation-2004	2011-12	2017-18	2018-19	2019-20	Change 2011-12 to 19-20
Computing Professionals	0.4	1.8	2.2	2.7	2.3
Architects, Engineers and Related Professionals	0.5	1.0	1.6	1.7	1.2
Business Professionals	2.0	2.6	3.0	3.8	1.9
Computer Associate Professionals & Optical and Electronic Equipment Operators	0.4	2.6	1.7	1.6	1.2
Finance and Sales Associate Professionals & Business Services Agents and Trade Brokers	1.3	3.3	3.4	5.2	3.8
Secretaries and Keyboard Operating Clerks & Numerical Clerks & Material Recording & Transport Clerks	2.4	3.4	2.8	6.2	3.8
Cashiers, Tellers and Related Clerks & Client Information Clerks	0.9	1.6	1.7	2.0	1.2
Travel Attendants, Guides and Related Workers	0.3	0.7	0.3	0.9	0.5
Housekeeping and Restaurant Services Workers & Personal Care Workers	1.4	2.6	3.0	3.9	2.5
Shop Salespersons and Demonstrators & Stall and Market Salespersons	9.9	18.9	22.0	22.8	12.9
Motor Vehicle Drivers	4.4	10.9	9.2	13.0	8.5
Street Vendors and Related Workers	0.8	1.5	1.7	2.6	1.8
Domestic and Related Helpers, Cleaners and Launderers	0.6	1.4	1.0	1.7	1.1
Building Caretakers, Window and Related Cleaners	0.0	0.2	0.2	O.1	0.1
Total	25.2	52.6	53.9	68.0	42.8

Table 12: Occupational Classification of Gig Workers in Numbers (2011-12 to 2019-20)

Two occupational segments namely, drivers and sales persons, together accounted for more than 52% of the gig workers in 2019-20. During the earlier period 2011-12 to 2017-18 the share of these two segments remained more or less consistent at about 57%.

Table 13: Occupational Classification of Gig Workers in Shares (2011-12 to 2019-20)

National Classification of Occupation-2004	2011-12	2017-18	2018-19	2019-20
Computing Professionals	1.47	3.44	4.15	3.96
Architects, Engineers and Related Professionals	1.80	1.88	2.91	2.43
Business Professionals	7.84	5.00	5.53	5.63
Computer Associate Professionals & Optical and Electronic Equipment Operators	1.46	4.92	3.16	2.33
Finance and Sales Associate Professionals & Business Services Agents and Trade Brokers	5.34	6.31	6.32	7.60
Secretaries and Keyboard Operating Clerks & Numerical Clerks & Material Recording & Transport Clerks		6.53	5.11	9.05
Cashiers, Tellers and Related Clerks & Client Information Clerks	3.46	2.97	3.18	3.01
Travel Attendants, Guides and Related Workers	1.32	1.27	0.57	1.27



National Classification of Occupation-2004	2011-12	2017-18	2018-19	2019-20
Housekeeping and Restaurant Services Workers & Personal Care Workers	5.39	4.99	5.63	5.68
Shop Salespersons and Demonstrators & Stall and Market Salespersons	39.31	35.98	40.80	33.53
Motor Vehicle Drivers	17.62	20.80	17.12	19.06
Street Vendors and Related Workers		2.78	3.19	3.86
Domestic and Related Helpers, Cleaners and Launderers		2.68	1.92	2.43
Building Caretakers, Window and Related Cleaners	0.00	0.44	0.41	0.17
Total	100.00	100.00	100.00	100.00

2.5. PROJECTIONS FOR GIG WORK IN INDIA

Based on the following projections, the gig workforce is likely to expand from 68 lakhs (6.8 million) in 2019-20 and 77 lakhs (7.7 million) in 2020-21 to about 2.35 crores (23.5 million) by 2029-30. The gig workforce is expected to grow from 2.6% of the non-agricultural workforce or 1.5% of the total workforce in 2020-21 to 6.7% of the non-agricultural workforce or 4.1% of the total livelihood in India by 2029-30.

Table 14: Projection for Gig Work using Employment Growth

	Employment in Crores			Pe	ercentage	
	Employment	Non-Agri- Employment	Gig Workers	% of Non Agri to total Employ	Gig to total Employ	Gig to Non Agri.
2011-12 (actuals)	46.99	24.52	0.25	52.18	0.54	1.03
2017-18 (actuals)	45.50	26.38	0.53	57.98	1.16	1.99
2018-19 (actuals)	46.75	27.62	0.54	59.09	1.15	1.95
2019-20 (actuals)	51.10	28.79	0.68	56.34	1.33	2.36
2020-21 (projected)	51.66	29.37	0.77	56.86	1.49	2.62
2021-22 (projected)	52.22	29.97	0.87	57.39	1.67	2.91
2022-23 (projected)	52.79	30.58	0.99	57.93	1.87	3.23
2023-24 (projected)	53.37	31.20	1.12	58.47	2.09	3.58
2024-25 (projected)	53.95	31.84	1.27	59.01	2.34	3.97
2025-26 (projected)	54.54	32.49	1.43	59.56	2.63	4.41
2026-27 (projected)	55.14	33.15	1.62	60.12	2.94	4.89
2027-28 (projected)	55.74	33.82	1.84	60.68	3.29	5.42
2028-29 (projected)	56.35	34.51	2.08	61.25	3.69	6.02
2029-30 (projected)	56.96	35.21	2.35	61.82	4.13	6.68



At present about 47% of the gig work is in medium skilled jobs, about 22% in high skilled and about 31% in low skilled jobs. But the trend shows the concentration of workers in medium skills is gradually declining and that of the low skilled and high skilled is increasing. It may be expected that while the domination of medium skills would continue till 2030, gig work with other skills will emerge. Possibly the share of high skilled gig workers would increase from the present level of 21.9% to about 27.5% by 2030 while for the low skilled workers it may increase to about 33.8% by 2030. In effect this trend would imply that gig work will grow in size and would become part of the livelihood across sectors and occupations.

	High skilled	Medium skilled	Low skilled	Total
2011-12 (Actuals)	17.9	53.4	28.7	100
2019-20 (Actuals)	21.9	46.9	31.2	100
2020-21 (proj)	22.5	46.0	31.5	100
2024-25 (proj)	24.7	42.8	32.6	100
2029-30 (proj)	27.5	38.7	33.8	100

Table 15: Projections of % share of gigwork employment by skill category 2021-2030

2.6. SUMMARY ON GIG WORKER SIZE ESTIMATION

In the backdrop of a complete lack of data on gig workers in India, we have attempted to estimate the number of gig workers using an indirect and novel method. The approach is to identify proximate indicators that would jointly have a high likelihood of identifying gig workers. Using this approach we have traced a few supply side and demand side factors to estimate the number of gig workers. It may be appropriate to name this estimate as the estimate of "workers with gig worker-like characteristics" rather than terming it as an estimate of gig workers themselves.

Based on this method, we estimate that there were around 68 lakh (6.8 million) gig workers in India in 2019-20, constituting 2.4% of the non-farm workforce or 1.3% of the total livelihood in India. Of these workers, about half are concentrated in two sectors, retail trade and transportation. Also about half of the workers are engaged in the occupations of sales and driving. Both industrial and occupational characteristics show that gig work is expanding and diversifying into more industries and more occupations. Though an increasing share of gig workers are a part of the organised sector – about 36% in 2019-20 – the overwhelming majority of gig workers are informal workers (more than 82.5%). This is unsurprising since over 90% of India's workforce is informal.

Based on our projections, we estimate that India had around 77 lakh (7.7 million) gig workers in 2020-21, forming 2.6% of the nonagricultural workforce and 1.5% of the total livelihood in India. Our projections further show that gig work in India is likely to expand in the future to touch about 2.35 crore (23.5 million) workers, accounting for about 6.7% of the non-agricultural workforce and 4.1 % of the total workforce by 2030. Additionally, the estimates show that gig work, which is concentrated in middle level skills currently, is likely to diversify into both high skilled and low skilled types of gig work in the future.



2.7. RECOMMENDATIONS FOR ESTIMATION

As discussed earlier, this estimation is an indirect method to arrive at the number of gig workers. Gig work is bound to expand due to the technological possibilities in numerous production spaces. At the same time, it also provides the opportunity for workers to transcend the limitations of work-time and work-space. Given this potential of gig work, the future would see a growing prominence of such work. However, there exists no official data that can authoritatively estimate the extent of gig work in India, thereby rendering the gig workforce invisible. This calls for the following recommendations for future estimations.

2.7.1. Undertake a Separate Enumeration Exercise

Ideally the national statistical system could embark on estimating gig workers, and other such workers who enter the workforce in non-conventional labour relations. A separate survey may be undertaken for estimation and identifying the characteristic features of gig workers.

2.7.2. Collect Information to Identify Gig Workers

Additionally, there could be a few probing questions that explore further to identify gig

workers The Periodic Labour Force Survey, for instance, could collect information on the following aspects that could identify gig workers.

- a. One of the primary characteristics of gig workers is the freelance nature of work. The work is task based. To identify workers of this nature a set of questions regarding the nature of work contract can give us insights on this. For instance, the nature of contract can be enumerated as the following.
 - i. Task based contract
 - ii. Contract as partner
 - iii. Job Contract
 - iv. No contract
- b. Another characteristic of gig workers is the use of technology. Questions of the following type may help in exploring this dimension.
 - i. Use of Information Technology in work
 - Use of ICT as an aid to identify tasks (app-based, software-based work allotment)
 - iii. Conducting ICT-enabled services
 - iv. Production of ICT goods and services







Technology Diffusion and Democratisation of Jobs

The digital has permeated all aspects of life, entailing the platformization of the everyday (Ramachandran, 2020). This could take many shapes and forms such as digital platforms that connect buyers and sellers of groceries, medicines, technology products and services, as well as those that allow consumers to access a ride in a cab or bike, home cleaning services, professional beauty and wellness services, and much more. Individuals can now easily use their skill sets and earn a livelihood online. The consequent digitalisation/platformization of work has given rise to a new classification of labour – platform labour – different from the traditional dichotomy of formal and informal labour. Platform labour has emerged and grown over the last decade thanks to the ubiquity of smartphones and mobile data. Since the entry barriers to such work are low, platforms hold enormous potential to unlock millions of jobs in India (BCG and Michael & Susan Dell Foundation, 2021; Ramachandran & Raman, 2021; IBEF, 2021; ASSOCHAM & Primus Partners, 2021).



3.1. CONTOURS OF THE PLATFORM ECONOMY

The contemporary labour market has witnessed the emergence of two new categories of work, gig and platform work, respectively. To understand what each form of work entails, how they might be different from each other and from other forms of work, and what the new categories mean for the Indian economy, we turn to India's labour reforms of the 2020s.

The Government of India enacted the Code on Social Security (CoSS) 2020, granting legitimacy to the new form of work and paving the way for comprehensive reforms. CoSS 2020 defines a gig worker as "a person who performs work or participates in a work arrangement and earns from such activities outside of traditional employer-employee relationship". Further, a platform worker is recognised as a type of gig worker, in that they are "a person engaged in or undertaking platform work, while platform work is 'a work arrangement outside of a traditional employer employee relationship in which organisations or individuals use an online platform to access other organisations or individuals to solve specific problems or to provide specific services or any such other activities which may be notified by the Central Government, in exchange for payment" (Ministry of Labour and Employment, 2020a).

Marking a distinction between platform workers and unorganised, informal workers, the CoSS 2020 further recognises platform workers as a step up from the latter. Platform workers enjoy flexibility and choice of labour, ability to hold multiple jobs, guaranteed payments, augmentation of assets, heightened earnings etc. In a platform economy, individuals merely armed with an internet-enabled smartphone and an asset – such as the tangible vehicle (motorised or even non-motorised) or the intangible skill of cooking or plumbing – can monetise their assets at will, to become platform workers (Sundararajan, 2016; Raman & Kulkarni, 2021).

The platform economy comprises digital intermediaries or aggregators that offer innovative solutions through solving inefficiencies in a system, thereby improving productivity. A mobility aggregator platform, for instance, efficiently bridges the gap between supply and demand, creating economies of scale. Hence, it increases the earnings of its driver-partners, while providing affordable mobility solutions to consumers. In the larger picture, digital platforms increase economic output and have a tremendous positive impact on the labour market. This ever-expanding platform economy has demonstrated resilience, reinforcing the role of such workers, especially in the times of the Covid-19 pandemic, when several other sectors of the economy were adversely impacted (ILO, 2021; IWWAGE 2020; Raman, Ramachandran & Sasikumar, 2021).

3.2. LIVELIHOOD CREATION THROUGH PLATFORM WORK

Offering innovative solutions in different sectors, such as passenger mobility and hyperlocal delivery, retail, and personal and home care, platforms can create livelihood opportunities for any willing individual, be it students, home makers, store owners or even those already engaged in the informal sector. With access to internet-enabled smartphones and a monetisable tangible or intangible asset, any individual can turn into a platform worker. Such low entry barriers, along with the flexibility to hold multiple jobs, grant the platform economy an immense potential to leverage India's demographic dividend more than 400 million millennials (Morgan Stanley, 2017).



Platforms generate self-employment and space to improve or augment one's income. This flexibility and choice, being the core characteristic of platform work, makes it attractive for the masses. Consider the case of two-wheelers in India. India is the world's largest two-wheeler market, with the small form factor emerging as the engine of growth for the booming hyperlocal economy in recent years. Sharing of assets such as scooters or motorbikes (in the form of bike taxis or bike pool) unlocks remunerative opportunities in the millions while also providing first- and last-mile connectivity to public transit, and an affordable form of daily commute for the public at large. A 2020 study estimates that biketaxi in India has the potential to create over 2 million livelihood opportunities and a revenue of USD 4-5 billion (Raman, 2020). Likewise, over the long term, the number of gig jobs in India could reach 90 million, with total transactions valued at more than \$250 billion (BCG and Michael & Susan Dell Foundation, 2021).

No wonder, India is a fertile ground for platform jobs. Between 2010 and 2018, mobility aggregators - Ola and Uber - alone are reported to have unlocked 2.2 million livelihood opportunities in the country (Pradhan, 2019). These included driving jobs using taxi-cabs, auto-rickshaws, and the ubiquitous two-wheelers (scooters and motorbikes) as taxis. By early 2020, Ola biketaxi service was operational in 200 cities in India and engaging over 300,000 bike partners. Another bike-taxi company, Rapido, was present in over 90 cities as of March 2020, with 500,000 driver-partners catering to 10 million customers (Raman, 2020). Dunzo, the fast-growing on-demand guick commerce platform, used to engage 18,000 active delivery partners including cyclists in late 2019 (Apurva, 2019), and has reported a 40-times growth in the period 2019-'21, fuelled by the pandemicinduced surge in demand for convenience and availability of platform labour (Akolawala,

2021; BusinessWire, 2021). Such accelerated growth appears to be the cornerstone of platform businesses across sectors, including the restaurant aggregation, and food delivery domains as well. Zomato, for instance, reported earning INR 2,604 crores in the financial year 2019-'20, signifying a 5.5-times growth from 2017-'18. The platform witnessed 10.7 million active customers ordering food every month from 131,233 active restaurants, and served by 161,637 active delivery partners (Alawadhi & Abrar, 2021). Similarly, the platform Swiggy, which has diversified its business to include grocery delivery and package transfers in addition to food delivery, reported engaging 150,000 delivery partners as of June 2021 (PTI, 2021). Notwithstanding the small- and medium-sized platforms offering passenger mobility and delivery services across India, the aforementioned major platform businesses in the said domain alone engage 3,329,637 workers, i.e. over 3.3 million workers (Raman, Ramachandran, Sasikumar, 2021).

Notably, this workforce of 3.3 million platform workers in the digitalised passenger mobility and hyperlocal delivery services, with the potential to grow in the years to come, is higher than the 1.254 million employees engaged by the Indian Railways, India's largest and the world's eighth-largest employer (Ministry of Railways, 2020), and the 500,000 headcount of the Tata Consultancy Services, India's largest private-sector employer (ET Bureau, 2021).

As has been estimated in Chapter 2, in 2019-20, India had around 68 lakh (6.8 million) gig workers – of whom platform workers are a subset – in 2019-20, forming 2.4% of the nonfarm workforce or 1.3% of the total livelihood in the country. It is projected that in 2020-21, 77 lakh (7.7 million) workers were engaged in the gig economy. They constituted 2.6% of the non-agricultural workforce or 1.5% of the total workforce in India. Our projections further show that gig work is likely to expand in the future to touch about 2.35 crore (23.5 million) workers,



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6.7% of the non-agricultural workforce or 4.1% of the total livelihood in India by 2029-30. In effect, this trend would imply that gig work will grow in size and would become part of the livelihood across sectors and occupations.

3.3. EVOLUTION OF PLATFORM JOBS

Widespread access to the internet through affordable data and devices has contributed to the proliferation of platform-based services across the world. Platforms also display a great deal of interoperability, integrating multiple services for an end-to-end user experience, but also in the process, creating as many more employment opportunities from their single app. For instance, Grab, the popular platform present in Southeast Asia, offers multiple mobility options (car, bike, scooter), food, groceries, last mile logistics, hotels, entertainment, and a mobile wallet and insurance service, all in one app (Grab, 2020). Through this they serve drivers, merchants and enterprises in their local area of operations. Other forms of cross-platform collaborations and interoperability are seen in instances such as a Swiggy delivery person in India using a shared Bounce bike to complete orders, eliminating the need for asset ownership thanks to the deep entrenchment of the digital economy.

By their very nature, platforms have a wide reach and nearly no entry barriers for their workers (referred to as partners¹¹). Jobs in the digital age vary by country. In some countries, particularly the more industrialised ones, digital platform solutions emerged in the wake of an economic downturn leading to the eventual informalisation of jobs (Morozov, 2018). In developing countries like India, the phenomenon has been carefully crafted to solve inefficiencies in the system. This is done so by plugging in a tech tool to streamline the process with an algorithmic coherence, benefiting service providers and end-users alike.

While many differences exist between countries and regions when it comes to the genesis of platform labour, there is a shared story of tech-induced efficiency and its rapid adoption. While in the North American cities, it was the desire to summon a cab at the press of a button rather than waiting in long queues at public transit hubs, in emerging economies like Indian cities, it was the dual need to enhance the efficiency of Intermediate Public Transit (IPT) options (forthcoming by Ola Mobility Institute & CUTS International, 2022) to increase accessibility to mass transit as well as to create millions of job opportunities in urban mobility (Randolph, Galperin & Khan, 2019).

Matrix 1: Types of Digital Livelihood, and Where Platform Work Falls

Type & Experience of work	Global Reach	Local Reach
Sales	Websites that advertise and sell handmade/ artisanal goods etc.	e-commerce platforms that host home- grown labels and brands
Lower complexity; on-demand services	Online microw- ork platforms like data entry, survey adminis- tration etc.	Location-based platform services like passenger mobility, food delivery
Higher complexity; scheduled services	Online freelancing consultations like design, copy-editing, creative, legal and compliance advisory	Location-based staffing platforms that require on-site presence like home improvement, wellness, logistics

Source: Adapted from World Economic Forum, 2020; Caribou Digital 2020, ILO 2021, Ramachandran & Raman, 2021



¹¹ Partners are independent contractors associated with a technology platform where they offer/ advertise their services so that end users (citizens) can find them.

Matrix 1 shows a broad classification of platform work based on locationality and the skill spectrum that the workers inhabit. This is a lucid classification of platform-based work around the world and illustrates the level of complexity of tasks and the mode of work being done. In much of the developing world, the type of work described under "online microtasking" found rapid uptake as well as mass adoption. India is one of the early adopters of information labour¹², due to massive outsourcing from capital-intensive countries. Indian workers, as well as those from the Philippines or parts of Africa, are no strangers to piecemeal IT-based tasks, undertaken in a freelance fashion or on a contract with an incorporated KPO (Graham, Hjorth & Lehdonvirta, 2017; Graham et al, 2017).

While online freelancing has gained popularity in recent years, platform companies that have the highest visibility and the most direct impact on city life are those that fall under location-based staffing & services. These services involve many e-commerce companies that provide livelihoods to millions of individuals, who in turn, serve several millions more by delivering goods, assisting in household tasks or by providing mobility services (Ramachandran & Raman, 2021).

BRICS & the Gig-Platform Economy

Issue Paper on "Gig and Platform Workers: Role in Labour Markets" Prepared for the BRICS Employment Working Group under the Indian Presidency April 2021

The issue paper provides an overview of platform work in the BRICS countries.

It presents estimates of the number of platforms in the BRICs countries, the funding or investments in these platforms and revenue generated by them over the past decade. The issue paper also examines opportunities and challenges related to platform workers and regulatory steps initiated by the BRICS countries to protect the platform workers.

- In BRICS countries, the number of platforms has grown from 19 to 127 in the past decade, and represents 16% of the platforms operating around the world in 2021.
- Within the BRICS countries, the concentration of the number of platforms is the highest in India (49%), followed by Brazil (20%), China (16%), Russia (12%) and South Africa (4%).
- Across sectors, the number of platforms in the delivery sector is the highest (80), followed by online webbased platforms (30), taxi sector (15) and there are 2 hybrid platforms in BRICS countries, which provide varied types of services.
- The global distribution of investments in digital labour platforms is skewed, with 96% of the investments concentrated in Asia (US\$57 billion), North America (US\$46 billion) and Europe (US\$12 billion) compared to 4% going to Latin America, Africa and the Arab States (Figure 2a).
- In comparison, the investments to the BRICS countries comprises about 32% of the global investments (US\$39 billion), from which 73% (US\$29 billion) are concentrated in China, followed by 21% (US\$8 billion) in India, while the share in other BRICS countries is less than 5%.



¹² Labour provided by 'knowledge workers', i.e. employees of Business Process and Knowledge Process Outsourcing of the early 2000s

- Digital technologies have also led to new outsourcing models through digital labour platforms with a large proportion of work originating from countries in the Global North like Australia, Canada, Germany, New Zealand, the United Kingdom and the United States is performed by workers in developing countries, particularly from India, which accounts for almost 20% of the total market, followed by the Philippines and Ukraine.
- The BRICS countries constitute about 45% of the world's workforce and there has been a huge surge in demand for platform activities in these countries.
- The principal advantages to working on digital labour platforms, especially online web-based platforms, are the flexibility it provides to workers to choose the place and time to work, which is quite beneficial for workers with disabilities or care responsibilities.
- Platforms also have the potential to allow women to enter male dominated sectors. For instance, in India, platforms such as Ola and Uber specifically assist the on-boarding of women as driver-partners in their service.
- Working conditions on digital platforms are largely regulated by the terms of service agreements. They tend to characterise the contractual relationship between the platform owner and worker as other than one of employment. As a result, platform workers cannot access many of the workplace protections and entitlements.

• Growth of business and in labour platforms has to be balanced with ensuring workers' well-being along with decent working conditions and earnings through coherent, consistent and coordinated international effort.

BRICS LABOUR AND EMPLOYMENT MINISTERS' DECLARATION

July, 2021 New Delhi

The BRICS Labour and Employment Ministers' Declaration under Indian Presidency focuses on four key pillars of labour and employment policies: Promoting Social Security Agreements amongst BRICS Nations; Formalisation of Labour Markers ; Participation of Women in the Labour Force; and Gig and Platform Workers: Role in the Labour Market.

In order to achieve progress in concluding social security agreements, the declaration takes into account the International Labour Organization's (ILO) labour standards which provide guidance on decent labour migration conditions.

"Building on previous Declarations of BRICS Summits and Labour and Employment Meetings (LEMM), Ministers' the Conclusions of the Recurrent Discussion on Social Protection (Social Security) adopted by the International Labour Conference in 2021 and with the support of ILO and ISSA, we are committed to deepening social security cooperation among our countries. We resolve to carry out exchange of information among BRICS countries on employment and social security for crossborder labour flows and initiate social security agreements between BRICS nations with a reasonable timeframe."



Recommendations of the Labour & Employment Ministers Declaration in the context of Gig and Platform Workers

- Digital labour platforms are a distinctive part of the digital economy. These platforms have created unprecedented opportunities for businesses, society and workers, but at the same time, presented challenges relating to working conditions, social protection, the regularity of work and incomes.
- We reaffirm our commitment to support the development of the digital economy, including digital delivery of services, while acknowledging the role of digital platforms in providing resilience to national economies in the face of crisis such as Covid-19.
- We acknowledge the positive impact of digital platforms in facilitation of job creation, entrepreneurship and development of micro and small businesses, and in providing livelihood opportunities for disadvantaged groups, including women, and Persons with Disabilities (PwDs).
- We will strive to leverage the opportunities and overcome the challenges emerging from the rise of digital labour platforms, to ensure sustainable enterprise development and decent work for all, and to work towards achievement of the United Nations Sustainable Development Goals.

Ministry of Labour & Employment, Government of India

3.4. CHALLENGES FOR WORKERS IN THE GIG & PLATFORM SECTOR

Before large-scale evidence on the challenges faced by workers in the gig and platform sector in India is presented, it is important to note the different criticisms the platform economy is facing globally.

One issue often highlighted by studies primarily on platformization of mobility around the world is the algorithmic control of platform labour by digital platforms. Notwithstanding the improvements to efficiencies algorithms engender, platform algorithms have come under critical review for compromising quality of work, and dignity of labour. Platforms are criticised for having opague algorithms, imposing excessive control over their workers through "ratings-based reputation systems", assigning "disproportionate power" to customers over workers, and causing significant risk to workers who are unfairly penalised based on customer feedback. On the one hand, algorithmic management raises the larger debate on privacy, data protection, and cybersecurity. On the other, the opacity of algorithms spotlights the power asymmetry or imbalances between platforms and platform workers. Studies have pointed to the weakening of the platform worker agency due to such algorithmic management and power imbalances, giving rise to emotional labour of platform workers and biases. Emotional labour pertains to the worker socialising with the customer, stemming from the need to appease a customer with the objective of securing a high rating. The current approach by platforms is criticised for bringing bias in ratings, and distorting worker rights. Platforms are also censured for classifying or rather misclassifying workers as independent contractors, thereby denying them of their due access to social security benefits or their entitlement of collective



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bargaining. Informalisation of the economy, and precariousness of work are growing concerns in the world of platforms. Long hours on the platforms, decreasing incentives and low earnings, and the reproduction of exploitative work practices and structural inequities of the unorganised-informal economy within the platform economy are other red flags raised globally (Sehrawat et al., 2021; Davidov, 2016; Slee (2016); Ahmed et al, 2016; Stefano, 2016, Fan, et al, 2020; Glöss, McGregor & Brown, 2016; Hanrahan et al, 2015; Hodges, 2020; Fairwork India, 2021; Isaac, 2014; Kasera & Bidwell, 2016; Kittur et al, 2013; Kumar, Jafarinaimi & Morshed, 2018; Lee et al, 2015; Lustig et al, 2020; Ma et al, 2018; Martin et al, 2014; Means & Seiner, 2015; Purdy, 2017; Raval & Dourish, 2016; Rogers, 2015; Rosenblat & Stark, 2016; Shapiro, 2018; Srija & Shirke, 2014; Wilson, 2015; Rest of World, 2021; ISST, n.d.).

3.4.1. Challenges faced by Gig & Platform Workers: India

Issues of Accessibility

Even though the gig economy, with the wide variety of employment options it offers, is accessible to all those who are willing to engage in such employment, access to internet services and digital technology can be a restrictive factor. This is particularly true for those residing in rural and remote areas. This has made the gig economy, largely an urban phenomenon (IWWAGE 2020). This also implies that platforms that require inperson services may be accessible more to urban men and women or to those rural men and women who are either willing to migrate or to commute from their rural residence to a town or a city on a regular basis.

Job and Income Insecurity

As in other parts of the world, platform workers in India are predominantly paid a piece rate (i.e.per task), are typically classified by the platforms as "independent contractors," or as "driver/delivery partners." As a result, workers do not benefit from labour regulations pertaining to wages, hours, working conditions, and the right to collective bargaining (Fairwork 2020). Fairwork Report 2021 points out that a prominent issue with work on digital platforms is employment status, as most workers are not classified as employees with income security and social protection. As a result of such classification, many lack labour and income security, and work based identity.

Occupational Safety and Health Risks

Studies have reported that workers engaged in employment with the digital platforms, particularly, women workers in the appbased taxi and delivery sectors, face various occupational safety and health risks. ILO global surveys on freelance platforms reveal that workers in the app-based taxi and delivery sectors, particularly women, also face several occupational safety and health risks. About 83 per cent of workers engaged in the appbased taxi sector and 89 per cent in the appbased delivery sector reported having safety concerns about their work, often relating to road safety, theft and physical assault. In the app-based delivery sector, a particularly high proportion of respondents from India, Mexico and Morocco (predominantly male, as few women are present in the sector in these countries) reported facing discrimination or harassment (ILO 2021).

Skills Mismatch

Varying degrees of vertical and horizontal skills mismatch can be observed on online web-based platforms. According to ILO surveys, workers with higher educational achievements are not necessarily finding work commensurate with their skills. Many respondents on online web-based



platforms reported that they have more skills than demanded for the tasks, with small differences by sex. The skills mismatch is quite pronounced for those engaged on microtask platforms, where many (57 per cent) have a university degree, of whom a majority have a specialization in STEM (science, technology, engineering and medicine), but undertake tasks such as responding to surveys and experiments, content access, data collection and so on, which tend to require few or no specific skills. On freelance platforms, a sizeable proportion of respondents (29 per cent) reported that they had more skills than were demanded for the task. A higher proportion of women (68 per cent) than men (59 per cent) reported that their skills were a good match. On competitive programming platforms, an overwhelming majority of respondents (77 per cent) reported that their skills were adequate for doing well on the platform. The need for more technical training was prominent among respondents on web-based platforms in China (54 per cent) and Ukraine (33 per cent). Horizontal skills mismatch was particularly prevalent in developing countries (ILO 2021).

ILO surveys also found that a sizeable proportion of workers engaged in the appbased taxi and delivery sectors have high educational levels, including women and young people. Even though these sectors are often considered to be low-skilled, 24 and 21 per cent of app-based taxi drivers and delivery workers respectively are highly educated. These proportions are lower in the traditional sectors. In countries such as Chile and India, a considerably higher proportion of app-based taxi drivers and delivery workers were found to be highly educated compared to those in the traditional sectors. Even though fewer women engage in the app-based taxi and delivery sectors, a higher proportion of them were found to be highly educated (42 and 29 per cent respectively) compared to men (24 and 20 per cent respectively). Younger appbased taxi drivers and delivery workers (18 – 24 years) were highly educated (24 and 17 per cent respectively) compared to workers in the traditional sectors (12 and 4 per cent respectively). This reflects the challenges in the context of youth employment, where young people often find themselves engaged in poor employment opportunities while looking for possibilities to earn an income (ILO WESO 2021). Skills mismatch then, also appears to be an issue that may need to be addressed, also from the gender perspective, in the gig and platforms sector.

Challenges faced due to Terms of Contract, Weak Collectivization

Working conditions on digital platforms are largely regulated by the terms of service agreements. They tend to characterize the contractual relationship between the platform owner and worker as other than one of employment. Platform workers are termed as "independent contractors". As a result, platform workers cannot access many of the workplace protections and entitlements (ILO 2018b).

The organisation of work through digital platforms where workers seldom meet or get together makes it difficult for them to form associations for collective bargaining (De Stefano 2015, Graham & Woodcock, 2018). Fairwork India Report notes that despite the rise in gig worker collectivisation in India, none of the platforms studied expressed a willingness to recognise a collective body of workers (Fairwork 2021). Weak collectivization constrains the ability of workers to negotiate with the platforms to settle disputes and redress grievances.

A 2021 qualitative investigation of the impact of a ride hailing platform on its drivers in India is revealing. This study frames itself in the Indian context, and rightfully so – noting that



India's transport and infrastructural conditions vary significantly from the global North. The study finds that drivers from the largely traditional taxi and informal labour sectors have been transitioning to platform-based driving, motivated by flexibility of labour and opportunity to augment incomes, hitherto unavailable in their former employment (Sehrawat et al, 2021). The study also posits that platformization ushers employment and wage stability despite the lack of employee status (ibid). Lastly, the study - employing a human-computer interface (HCI) approach, finds that ride-hailing platforms can be conceptualised as shaping and being shaped by driver's agency in their everyday work (ibid).

3.5. EXPANDING PLATFORM EFFICIENCY ACROSS THE ECONOMY

The platform economy has tremendous potential to unlock jobs in the millions while leveraging technology and innovation to drive social and financial inclusion.

This is true around the world. In the US for instance, the gig economy is found to serve as an income supplement and as insurance against entrepreneurial-related income volatility (Barrios, Hochberg & Yi, 2020). The introduction of gig opportunities is associated with an approximate 5% increase in the number of new business registrations in the local area, and a correspondinglysized increase in small business lending to newly registered businesses (ibid). Studies have further found that the increase in entrepreneurial entry is larger in regions with lower average income and higher credit constraints, as well as in locations with higher ex ante economic uncertainty regarding future wage levels and wage growth (ibid).

Undoubtedly, there is a crucial need to acknowledge the need for and platforms' role

in promoting creative micro entrepreneurship: asset ownership and financialisation are two key components of this shift (Ramachandran, Singh & Narain, 2021). Micro entrepreneurship has long been the cornerstone of the Indian economy, but productivity in this form of work has often been the subject of much debate and scrutiny, mainly because of the fact that formal financial institutions and systems of accounting have not made their way to these small scale enterprises. Through the platform economy, formal credit can be accessed through a variety of means including small ticket non-banking lenders, as well as raising asset ownership (such as a vehicle or real estate) for operation through the platform (through a ride hailing or renting service). This has the potential for transforming the asset monetisation scope of Indian households which remains highly illiquid and pitifully inadequate to meet the needs of a burgeoning youth population (RBI, 2017).

Thus, closer home in India, digitalisation of work is also a moment of "formalisation" in the largely informal Indian economy. Formalising refers to (a) financial aspect of a business such as paying tax or filing paperwork with regularity, or (b) conditions of work and the status of workers affiliated with said type of business (Sehrawat et al, 2021). Using the approach of measuring the proportion of businesses of all sizes paying taxes and filing returns, the October economic outlook from the State Bank of India (2021) draws a direct line between digitalisation and "formalisation" through the emergence of the platform economy and specifically, with the prevalence of gig jobs. The estimate goes on to state that the informal economy is possibly at 15-20% of formal GDP, down from 52% in FY2018 (ibid). While the connection between formalisation and digitalisation is palpable, the line may not be straight between formalisation and gig work. Formalisation of jobs (not the economy)



entails the expansion of social security cover for jobs, hence requiring a greater effort at addressing the needs of workers at the level of job security and work rewards.

The e-SHRAM portal set up to enumerate workers of the unorganised sector, with specific reference to the needs of the migrant workers in sectors like construction and other urban sectors, is a landmark effort. This will be the largest such undertaking in the history of India and has the potential to render a strong data backend as the process is digitised from the first step, relying on a network of Common Service Centres (CSC) to assist those workers that are not digitally adept to enroll themselves. Regardless, this portal can serve as the gateway to a number of targeted interventions to deliver social security to the masses. This, along with the developments under the Code on Social Security (CoSS), whereby different forms of work have been recognised outside the traditional employeremployee relationship (viz. gig work and its sub-type, platform work), makes for the comprehensive reform desired in this space for many years now. See Chapters 6 and 7 for a deeper understanding of labour welfare and governance in the 21st century.

Some of the practices in the platform economy that can be emulated elsewhere for the benefit of the wider economy cut across themes of work access, payment transparency and ease, as well as tech reliability in fulfilling the services end to end. These are all pointers that can be adapted as a playbook of sorts to induce platform efficiency in operations and jobs across the economy, and therefore merit some detailed analysis, as given below.

3.5.1. Delineation of Job Role and Professionalisation of Bluecollar Work

The huge difference between platformmediated jobs and those in the wider

unorganised economy entails the definition of the job itself; the driver-partner of a ridehailing service is strictly expected to run a business of providing rides and is not expected to perform any other allied services like running errands on behalf of the client. Similarly, an aesthetician providing services at home has a pre-agreed list of jobs for which she is prepared and her time is budgeted; anything extra is reportable and payable as extra work. This is a marked departure from practices in the prevailing non-digitalised economy (Sehrawat et al, 2021). The payment shown upfront to the client is conditional on the delivery of the requested services, and service quality is hence standardised and assured. To the worker, the payment is assured and commensurate with the expected time inputted, thereby increasing the efficiency of time utilisation vis-à-vis the conventional economy. This is a huge shift in work practices and helps the wider professionalisation of many roles in the services economy. Given the ballooning of India's services sector across the skill spectrum, this is a desirable trend.

3.5.2. Low Entry Barriers, Non-discrimination, and Democratisation of Jobs

Social factors of caste, religion and gender may have implications for workers' access to employment opportunities, particularly in the unorganised sector in India. Social networks play an important role in finding jobs, making up the social capital that workers from rural areas can leverage upon their migration to cities. These networks help in settling into a new place, assist in finding work, and even propel one's advancement in the city; Tarini Bedi (2016) explores the relationship between community, livelihoods and identity in more detail, and establishes the inextricable link between the migrant and the rural roots, jobs and socio-economic groups and how



these livelihoods and incomes are often at odds with the project of modernising Indian cities. However, the experienced of jobs not only makes jobs more accessible, it also helps break the cyclical nexus of poor earnings forcing more members of the same family (and the same community/ regional origin) taking up the same line of work to find some source of income.

Due to their low-entry barriers and flexibility and choice of labour, platforms catalyse the heightened participation of women and Persons with Disabilities (PwDs) in the economy, as can be seen from evidence presented in Chapter 5. Platform companies have in place efficient mechanisms for skill matching. To this end, platform companies have also undertaken many skilling initiatives in partnership with governments and otherwise, contributing to democratisation of jobs and increasing business opportunities by using digital outreach modes (Pant, n.d. & Mathur, 2019). The Code on Social Security 2020 has recognised this important shift in the changing nature of work through platformization.

3.5.3. Platform Services, Geographical Availability, and Hinterlands Rejuvenation

Some 300 cities of varying sizes in India are serviced by various platforms operating across sectors like ride-hailing, home-based services, food/ grocery/ medicine delivery, logistics fulfilment and e-commerce, covering the broad ambit of urban services, and making mobility of workers and clients across markets hassle-free. A plumber finding work in Mumbai and Jaipur with the same ease is no simple feat and is a different experience from before the platforms took over such services; similarly the same mobile app providing a medicine delivery service across different cities is a convenience that customers could not have experienced in the past, which would have required prior knowledge of the cities and local connections that would point in the right direction for their needs. This discoverability of services, and hence work, is a unique contribution of the platform economy to the hinterlands rejuvenation project, as it created livelihoods and better customer experiences, regardless of city sizes, thereby fulfilling broader development goals.

3.5.4. Technological Diffusion, Reliability and Network Effect of Services

While urban services have always been in demand, the unreliability and unassured quality of services has always been a stickler point for this sector. The technological intervention in this space has contributed to the uptick in demand, and hence the earnings opportunities associated with it; this is predicated on the unprecedented level of skill matching and tech-based job allocation fulfilled in real time by platforms, thereby eliminating the inefficiencies in these sectors. The sharp uptick in smartphone usage and widespread availability of mobile internet have certainly pushed the uptake of these services. Therefore through a combination of tech diffusion and ability to scale, these services have also improved over time as the algorithms get better at geographical, skill and preferences matching. This has rendered favourable outcomes for all. This network effect, unlike the traditional nexus networks, can expedite the growth of the urban services sector and expand their scope. This translates to higher earnings and income opportunities, and better consumption indices at the macroeconomic level.



3.6. POLICY RECOMMENDATIONS

The platform economy has changed the nature of jobs, has disrupted traditional notions of "employer" and "employee", and has introduced innovative, scalable ways to achieve social and financial inclusion while creating meaningful jobs that pay. Platform work incorporates the regularity of formal work, while assuring the flexibility of hours and the certainty of good income to millions of working families in India, thus meriting a category of its own, and which has been duly fulfilled by The Code on Social Security, 2020. The fact that platform work in its current format already offers the lowest entry barriers and the highest hourly earning potential compared to alternatives present in the private sector - both formal and informal - is noteworthy here.

Platform work has proven to be indispensable to the functioning of cities, especially evident during the lockdowns undertaken to fight the transmission of Covid-19 (Raman & Ramachandran, 2020b). The unique aspect about online platforms is that they are assetlight and operate off the dividends of a network effect, implying that the services get better with an increasing number of people signing up to provide and receive them. This means that there is ample room for workers to join in the network, making platforms an engine of job creation in the wider economy. Policy should therefore encourage labour market arrangements that facilitate innovation and provide protection for workers, are efficient, and promote sustainable, decent lives for citizens. To this end, there are measures that can be taken by the government.

A **Platform India initiative** built on the pillars of Accelerating Platformization by Simplification and Handholding, Funding Support and Incentives, Skill Development, and Social Financial Inclusion may be started, like the immensely successful *Startup India* initiative.

3.6.1. Catalyse Platformization in India

a. Platformization of all occupations and industries must be catalysed.

- As seen in *Chapter 2*, gig and platform work is concentrated in as many as 21 occupations¹³ as listed in the National Occupation for 2004 – ranging from professionals in computers, architecture, accounts and finance, etc. to motor vehicle drivers¹⁴, travel attendants, housekeeping workers, domestic and related helpers, personal care workers, street vendors, launderes, cleaners, etc.
- Likewise, 15 industries as enumerated in the National Industrial Classification – have the largest concentration of platform work or have the potential unlock growth in gig and platform work.



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¹³ See section 2.2.2

¹⁴ Today, any individual with access to a two-wheeler, with or without a commercial permit, can deliver packages, food, groceries, medicines etc., in the digital hyperlocal economy. Such individuals are different from the traditional motor vehicle drivers who drive vehicles with commercial permits alone. Thus, many of these traditional occupational categories need to be expanded and/ or redefined.

These industries range from manufacturing, electricity, water supply, construction, and retail trade to transport and storage, accommodation and food services, information and communication, financial and insurance services, real estate, administration, other education, educational support, residential care, and repair of computers and personal and household goods.

- iii. In the aforementioned occupations and industries, it must be easy for both business owners and individual workers to enter the platform economy, and grow and thrive in it.
 - For instance, the Prime Minister ٦. Street Vendor AtmaNirbhar Nidhi Yojana (PM SVANidhi provides Scheme) credit support and business revamp for street vendors and small food salespeople. Street vendors are also being digitally upskilled and onboarded to platforms¹⁵. On the lines of this initiative, selfemployed individuals engaged in the business of selling regional and rural cuisine, street food etc. may be linked to platforms so that they can sell their produce to wider markets in towns and cities.

b. Promote entrepreneurship, and ensure ease of starting and doing business in the platform economy.

 There is an urgent need to take a light-touch regulatory approach to governing and promoting platform businesses in India. The multiplicity of policies and rules and regulations as seen today not only needs to be simplified and streamlined, but any licensing requirements for aggregators too should be reconsidered.

Regulatory Framework for Platforms

Currently, e-commerce platforms and online aggregators of goods and services are registered first under the Companies Act, 2013, and are regulated as technology companies under the Information Technology Act, 2000, under the Ministry of Electronics and Information Technology. Empowered by the Consumer Protection Act, 2019, the Ministry of Consumer Affairs, Food and Public Distribution notified the Consumer Protection (E-Commerce) Rules in 2020, thereby making online retailers more accountable and their businesses more transparent. The 2020 Rules were amended in 2021. It is further expected that the Department for Promotion of Industry and Internal Trade (DPIIT) under the Ministry of Commerce will release a comprehensive draft e-commerce policy in 2022, with the Ministry of Consumer Affairs, Food and Public Distribution simultaneously releasing its revised e-commerce rules to protect consumer interest. These revised versions of the e-commerce policy and rules are expected to spell out comprehensive guidelines for all online transactions, covering all digital commerce and service providers, including marketplaces, ride-hailing companies, ticketing and payment companies, etc.

Due to the cross-cutting nature of digital businesses, e-commerce platforms and online aggregators have to register under a slew of laws in India. These range from the ones listed above as well as the Income Tax Act, 1961, Central and State Goods and



¹⁵ See more in Section 4.3.1. In Chapter 4

Services Tax (GST) Acts, and policies and rules governing industries like hotel and homestay, road transport – passenger and goods transport, food, pharmaceutical etc. The latter include the Motor Vehicles Act and Rules issued by the Ministry of Road Transport and Highways as well as Aggregator policies and rules by each of the State and UT governments, Digital Information Security in Healthcare Act, 2018 (the DISHA Bill), etc., among others.

These policies and rules therefore regulate not just the underlying businesses like homestay and hotels, passenger mobility, food delivery, etc. but also the platform businesses that are aggregating them. Thus, online aggregators of goods and services are required to get suitable licences in their respective industries. More often than not, the licence fee is determined by the size of the platform, and this is a problem. Since, platform workers have a transient identity switching from one platform to another and moving in and out of the platform economy to pursue agriculture, education or employment elsewhere. The licence also comes with a validity of a mere one year. The current policies and rules also regulate the nature of engagement among platforms, workers, and customers by determining pricing of goods and services for instance, applicability of dynamic pricing as well as discounts and incentives, service charge to be levied on every transaction, number of hours a worker puts into the platform etc.

Many of these reduce the competitiveness of said industries, with sub-par services getting offered to consumers ultimately. Some of these regulations are also hard to comply with. For instance, platform workers work simultaneously and sequentially on multiple platforms, rendering it impossible for platform businesses to track the total hours of work put in by the worker, and accordingly limit the business or remunerative opportunities provided to them. Safety and health of the worker, therefore, needs to be governed differently. Likewise, platform workers own their own assets from smartphones to vehicles and in some cases, equipment. Expecting these to be energy efficient or zeroemission etc. can only be encouraged by the platforms. Platforms cannot directly comply with such rules because they do not own the assets (goods or services) they aggregate. This raises the larger question around what the aggregator is actually liable for, and how the law of the land perceives aggregator liability. Noncompliance usually results in the licence of the platform business getting revoked. This leads to direct loss of livelihood of affiliated workers.

- ii. All these well-intentioned regulations to protect the interests of consumers, workers, and businesses, adversely affect the (digital) sharing economy in India promoted by online aggregators. Such imposed regulatory costs drive up the cost of goods and services, and not to forget the cost of job creation. It also renders the business of aggregating expensive, thereby preventing many micro, small, and medium enterprises from starting up or continuing their platform business.
- iii. It is essential to promote microentrepreneurial opportunities as well, in line with India's vision for an *Atmanirbhar Bharat*. All stakeholders from central and state governments, to urban local bodies, and financiers, etc. should leverage digital platforms to promote microentrepreneurship and lay the road to inclusive economic growth.



iv. The core advantage of the platform economy is that platform businesses are asset-light, and thus, platforms of all sizes and shapes emerge. As a result, India already witnesses the booming of platform businesses not just in the cities but in the hinterlands as well. Minimum compliance with maximum access to finance, technology, know-how, etc. would help create hundreds of thousands of platform businesses all across India.

c. Accelerate the platformization of the mobility economy.

- i. In the specific case of mobility platforms, the government may remove entry barriers and create a level-playing field for all. Retain what is core to the increasing popularity of mobility platforms – the ability of drivers to have flexible working conditions and be an entrepreneur in their own right.
- ii. The central government (Ministry of Road Transport and Highways - MoRTH) has done away with the requirement of commercial licences to drive commercial vehicles (The Hindu, 2018). In so doing, the government effectively removed the arbitrary one-year waiting period in getting a commercial driving licence, recognising that the waiting period served little of the intended purpose. Doing away with the need for commercial licence would hugely contribute to the initiation of women and Persons with Disabilities (PwDs) as drivers in the platform economy; Women and PwDs can minimise the waiting time between learning and earning. The state governments should, therefore, implement the no-

commercial licence rule uniformly across the country.

Ferrying of passengers for hire iii. may be permitted in all categories ranging from two-wheelers (in the form of bike taxis or bike-pool) and three-wheelers (rickshaws, autorickshaws), to four-wheelers (taxicabs and carpool), and 10-12-seater vehicles (mini-buses). While MoRTH should issue guidelines on promoting shared mobility, state governments should notify the necessary rules and regulations to legalise and operationalise shared mobility, with minimal barriers. The regulations should focus on achieving the desired and much-needed outcomes such as (a) decongesting cities, (b) increasing the usage of public transport by using new-age shared mobility for first- and last-mile connectivity, (c) moving people away from private vehicle ownership and usage, (d) reducing pollution, and (e) improving safety, accessibility, reliability and affordability, all the while unlocking millions of jobs for the masses.

Consider the case of bike taxis in India. Bike taxis have the potential to become a highly popular mode of commute and livelihood choice, given how India is quintessentially a two-wheeler country having 128 twowheelers per 1000 population, one in two households owning a two-wheeler, and over 80% of the automobiles sold and 70% of the automobile registered in India being two-wheelers (Raman, 2020; Ministry of Road Transport and Highways, 2019). Bike taxis disincentivise ownership and usage of private vehicles, and incentivise the usage of public transit by offering first and last-mile connectivity.



Accordingly, the Central Motor Vehicles Act legalised bike taxis in 2004. The Motor Vehicles (Amendment) Act, 2019 allows for the aggregation of all vehicles including bikes. In this backdrop, even though over 15 States¹⁶ and Union Territories such as Gujarat, Haryana, Punjab, West Bengal, Mizoram, Telangana, Madhya Pradesh etc. have allowed operation of bike taxis, several key states including Maharashtra, Delhi, Tamil Nadu, etc. are yet to notify rules on this front (Raman, 2020). Since 2021, Karnataka, on its part, is permitting the operation of electric bike taxis, but is silent on conventional bike taxi operations.

- iv. Removing operational restrictions such as high permit fee, past experience, requirement of CCTVs in vehicles, conservative floor on the age of the vehicle, etc. might help in ensuring that the mobility-based livelihoods are not prohibitively expensive for India's youth to access.
- Encourage the widespread adoption V. deliveries of hyperlocal usina two-wheelers. Central and state governments should issue necessary guidelines for the same while also promoting both passenger mobility and hyperlocal deliveries using the same vehicle, in an integrated fashion. Referred to as Mobility-asa-Service, integrated mobility of this kind is gaining momentum the world over, and is a sustainable avenue for platform workers to augment their earnings.

- vi. Despite the All India Institute of Medical Sciences certifying that there exists little relationship between hearing abilities and driving a vehicle, the issuance of licences to those hard of hearing remains minimal (Ministry of Road Transport and Highways, 2016). Awareness creation and expansion of licensing for Persons with Disabilities (PwDs) is needed to increase their employability.
- vii. The government(s) may also create supportive tax mechanisms to allow platform drivers to report earnings and be taxed fairly.

At present platform drivers have only limited options to file Income Tax Returns (ITR). For instance, under Section 44AD presumptive income option (India.com Business Desk, 2018), meant for those running their own business. Recognising platform workers as a separate worker classification would thereby necessitate their recognition under various ITR forms. This would streamline the process of filing taxes. Moreover, the central government has recently revoked GST exemption on app-based auto rides (TNIE, 2021). This tax will lead to a rise in platform fares and a corresponding drop in demand, directly affecting the income of drivers. Therefore, there is a need for supportive tax mechanisms, designed to help the platform economy grow.

d. Skilling, upskilling, and reskilling programmes must all be aligned to jobs of the 21st century, i.e. platform jobs of today and tomorrow. See detailed recommendations on Skilling in Chapter 4.



¹⁶ States and Union Territories that have legalised bike taxis (in alphabetical order): Andhra Pradesh, Bihar, Chandigarh, Goa, Gujarat, Haryana, Jharkhand, Madhya Pradesh, Meghalaya, Mizoram, Punjab, Rajasthan, Telangana, Uttar Pradesh, and West Bengal.
3.6.2. Unlock Financial Support for Platform Businesses

- Venture capital funding, grants and a. loans from banks and other funding agencies should be provided to platform businesses of all sizes at the pre-revenue and early-revenue stages. The central and state governments along with the Small Industries Development Bank of India (SIDBI) as well as other banks in the country should play an active role. The existing and upcoming network of State and Central government-run Entrepreneurship Development Cells, Entrepreneurship Development Cells in academic institutions, etc. should all actively provide financial support to platform businesses. Emphasis must be placed on providing collateral-free working capital funding, grants, and loans to entrepreneurs starting platform businesses. The financial support offered by such institutions would allow earlystage platforms to prove their business model, gradually become sustainable, and also attract private investments.
 - Today, the Prime Minister Street Vendor AtmaNirbhar Nidhi Yojana (PM SVANidhi Scheme) provides credit support and business revamp for street vendors and small food salespeople. Under the scheme, street vendors are being digitally upskilled and onboarded to platform businesses¹⁷. Such programmes should be designed for all occupations that have and are expected to have high concentration of platform businesses and workforce.
- b. Special impetus should be offered to platforms managed by women and Persons with Disabilities (PwDs).

c. Likewise, special emphasis should be offered to platform businesses started in small cities, towns, and villages in India.

3.6.3. Accelerate Financial Inclusion of Platform Workers

Steps should be taken to enhance platform workers' access to institutional credit.

- For India to be able to fully benefit from a. the shifting paradigms of mobility and the resulting mobility economy, it must eliminate cost barriers to the means of livelihood. A major need in this regard is to expand access to credit and achieve financial inclusion, by having formal lenders, i.e. banks, transition from assetbased lending to cash flow-based lending. Thus, unsecured loans to first-time borrowers participating in the platform economy may be classified as Priority Sector Lending (PSL). Such a measure would strengthen India's complementary financial inclusion programmes such as MUDRA, and mainstream formal lending to individuals leveraging platforms to earn a living.
- b. Today, lenders may utilise data available with platforms to profile workers and estimate their creditworthiness. New-age companies, banks and micro-finance institutions (MFIs) may, thus, develop innovative products including loans for individuals with intermittent but predictable income, or tools for running freelancer businesses.
 - i. The government and platforms can leverage FinTech and InsurTech businesses to provide benefits tailored to platform workers and improve financial inclusion. A host of such businesses have sprung up in the last five years in India with the mandate of financial inclusion by



¹⁷ See Section 4.3.1 in Chapter 4.

providing micro-credit and microinsurance, such as Avail Finance, Kosh or PerkFinance which operate for the blue-collar market especially (Singh, 2020a; Soni, 2019a). Such newage financial organisations enable cash flow-based lending as against asset-based lending to platform workers. This new class of start-ups has a market opportunity because the existing traditional benefits infrastructure is not currently set up to meet the needs of individual platform workers (Cannon, 2019). As seen with businesses like Avail Finance, such startups would find it attractive to offer on an aggregate basis, lower cost options for healthcare, institutional credit, insurance, and retirement savings that individual platform workers would not be able to access themselves. Many platforms have partnered with such players in order to fulfill their workers' credit needs. The strategic partnership forged between Ola and Avail Finance is one such instance. Overall. businesses that have optimised value distribution in favour of marginalised or underrepresented communities may be further developed and scaled through effective strategies. The government can ease regulations allowing the accelerated growth of such financial businesses in India.

- ii. NSDC can also facilitate entrepreneurial loans to gig and platform workers registered on the Skill India Portal.¹⁸
- c. The platformization of everyday must go hand-in-hand with the financialization

of everything. Formal credit access may be provided to access a vehicular asset, smartphone, and/ or to run the business in the platform economy through design of targeted programmes.

- d. Additionally, a special emphasis must be placed on access to formal credit for women and Persons with Disabilities (PwDs). Their access to microfinance has increased over the years with initiatives such as Micro Units Development & Refinance Agency Limited (MUDRA). Existing schemes like National Backward Classes Finance & Development Corporation's Mahila Samriddhi Yojana specifically target women. However, these schemes are not enough. Civil Society organisations, state, district authorities, gram panchayats and local financing institutions must work together to mobilise and support women and PwDs to gain access to credit, build their own assets, which can subsequently be monetised for livelihood creation through platform work.
- Therefore, in order to let the platform e. economy - i.e. the economy of jobs - really flourish, it is essential to also enact policy reforms on the monetary and fiscal fronts, such as access to credit and finance for those associated with platforms. This significant entry barrier could be lifted once the norms for lending are tweaked to fit microentrepreneurs' needs, as mentioned in the latest stimulus package announced by the Finance Minister, Government of India (Government of India, 2020). The state of Gujarat has already taken this a step further and announced Atmanirbhar Gujarat Sahay Yojna, through which loans will be made available at 2% interest rate to skilled workers and those falling under the lower middle income category



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¹⁸ Inputs shared with NITI Aayog by MSDE (O.M. no. MCRN-11/3/2022-O/0 JD (SNP) dated 26th May 2022

(Financial Express, 2020). Industryspecific needs for each platform in terms of market unlocks would also go a long way in ensuring more work and better services mediated through the platform.





Creating a Future-Ready Labour Force

India is the youngest country in the world, with an average age of 29 years, and home to a fifth of the world's youth population (Financial Express 2017, MEA 2021). Youth, typically characterised as those between ages of 15 and 24 years, make up a third of our population (MoSPI, 2017) and therefore have a strong role to play in the rebuilding of the Indian economy. India has entered a 37 year-long demographic dividend, signalling that its working age population has peaked (Thakur, 2019). This bulge will last till 2055 and is an indicator of how there are far fewer dependents than providers in the population. This dividend, or the growth potential that results from shifts in the nation's age structure, was the plank on which the Asian economies and China based their phenomenal growth.

India's digital future holds the promise to leapfrog its economy to a 10 trillion dollar one by 2030 (Bloomberg, 2019). The analyst group Morgan Stanley predicted in their 2017 research that demographics, reforms and globalisation contributed to the first phase of growth, but digitalisation of financial services and comprehensive fiscal and monetary reforms can together propel this position (Morgan Stanley, 2017). Combined with the promise of the digital and the force of a young population, India stands to gain much in the developmental path of the next decade.



4.1. THE PRESENT TRAINING ECOSYSTEM AND RECENT POLICY INITIATIVES

India has made significant strides in secondary education outcomes and more Indians are attending college at unprecedented levels. The Indian Higher Education system is the third largest in the world next only to the US and China¹⁹. The sector has seen phenomenal growth. In the last decade alone, the overall Gross Enrolment Ratio (GER) increased from 15% in 2009-10 to 26.3% in 2018-19. The number of students enrolled has increased from 20 million to 37 million (an increase of 85%) in the same period. The number of universities and colleges has increased by 127% and 54% respectively to 993 Universities and 39,931 colleges in the last decade (AISHE 2019).

In order to productively employ the large proportion of youth, skill training initiatives have also been a priority for the Government. The first National Policy on Skill Development was notified in 2009. The shifts in the skilling ecosystem and the experience gained through implementation of various skill development programmes in the country, led to an imminent need to revisit the 2009 policy (PIB 2020). The new National Policy on Skill Development and Entrepreneurship was, thus, notified on July 15, 2015 to replace the 2009 policy. While addressing the numerous shifts in the ecosystem, the 2015 policy made a pertinent observation on the poor regard for skilling in India back in 2015 among various quarters and how that needed to be urgently overhauled.

"One of the major challenges in the country today is public perception on skilling, which is viewed as the last option meant for those who have not been able to progress/opted out of the formal academic system. A number of factors are responsible for this state of affairs:

- Social and traditional view that sees status as being inversely proportional to the degree to which one works with one's hands. This can also be attributed to primeval and archaic ethos which compartmentalized the skilling landscape for several hundred years. This unfortunate legacy has no moral, ethical and constitutional sanction in free India. Nonetheless, this gets at times manifested in norms, attitudes and societal behavior.
- The proclivity of large sections of industry especially in the micro, small and medium sectors to treat skilled and unskilled persons at par, thereby depriving skilling of any meaningful economic incentive.
- Most of the vocational training programmes are not aligned to the requirements of the industry. As a result of the above, a piquant situation exists in the country wherein unemployment continues to coexist with lack of requisite number of skilled people at functional level to build roads and bridges, lay pipelines, work in factories, engage in offshore drilling, build ships etc." (Ministry of Skill Development and Entrepreneurship, 2015)

The National Policy on Skill Development and Entrepreneurship 2015, therefore, aims to provide an umbrella framework for all skilling activities being carried out within the country, to align them to common standards and link skilling with demand centres. A key objective of this policy is to address the challenge of skilling at scale with speed, standard (quality) and sustainability. The policy also seeks to coordinate and strengthen factors essential for growth of entrepreneurship across the country (*ibid*).



¹⁹ India's Country Summary of Higher Education, World Bank

In order to provide a strong institutional framework to implement and scale skill development efforts across the country, the Ministry of Skill Development & Entrepreneurship (MSDE) was formed in 2014 and the National Skill Development Mission (NSDM) – also referred to as the Skill India Mission – was launched on July 15, 2015.

Under the Skill India Mission, about 20 Central Ministries and Departments including the Ministry of Skill Development and Entrepreneurship (MSDE) are involved in the implementation of more than 40 schemes for various skill development programmes for youth across the country. Long-term skill training is provided through the Industrial Training Institutes that number around 15,000 (Government & Private ITIs). Flagship skill training programmes of the Government of India, Pradhan Mantri Kaushal Vikas Yojana (PMKVY), and Deen Dayal Upadhyay Gramin Kaushalya Yojana provide short-term training to youth in various trades and job-roles.

As a part of the "Transformation of Aspirational Districts" programme, spearheaded by NITI Aayog and launched in 2018, there has been a special focus on skill training of youth in 112 Aspirational Districts, including those from vulnerable and marginalised sections of society, with various stakeholders and agencies coming forward to empower youth in aspirational districts.

4.2. THE NEED AND OPPORTUNITY FOR SKILL DEVELOPMENT IN THE PLATFORM ECONOMY

In India, the gap in skilling initiatives is emblematic of a soon-to-be-missed opportunity (Shukla, Shree & Rani, 2017). This means that the youth in the country need to be trained in some skill or the other today, so as to remain productive. In this direction, the government's efforts in skilling and enabling entrepreneurialism is of immense importance (Sharma, 2019).

It is crucial to acknowledge here the fact that a third of India's workforce is composed of the millennials, who are aged 25-40 years now (Bijapurkar, 2019). Millennials are also the first generation who encountered the digitalised reality and the potential of a workplace mediated online, given the slew of changes that took place around their entry to the workforce. Therefore, skilling efforts have to be designed with the dual needs of millennials and the post-millennials in mind, catering to the latter's needs urgently.

Importantly, both of these groups are also similarly adept at navigating technology in an unprecedented way, and overwhelmingly access the internet through their mobile devices (Mitter, 2020). Tech-driven disruption has occurred in almost every sector of the world economy, primarily through a supplyaggregation model; nested under the larger ambit of the "sharing economy", and supported by emergent technologies like blockchain or Internet of Things (IoT). This means that the younger workforce at large requires advanced knowledge and skills for a digital age, which includes proficiency in leveraging online means (Osborn, 2020).

Given the quick diffusion of technology in platform-work, especially in the mobility economy, this should be turned into an opportunity and suitable avenues of skilling need to be identified. This is an industryagnostic concern and any initiatives in this direction must recognise the importance of impacting the entire value chain of a business model.

Most new technologies, especially the digital kind, require the acquisition of specialised skills, while platform technologies, on the other hand, tap into skill sets developed for performing simple smartphone-based tasks.



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This has opened up the platform economy to over 44.7% of the workforce, who have acquired smartphone skills in recent years (MoSPI, 2017). This presents an unprecedented opportunity, especially for the younger section of the workforce.

4.3. PLATFORM-LED SKILLING AS A GROWTH MODEL

In many instances, the platform companies which provide earning opportunities for those associated with them take considerable steps in skilling these workers as well. This is to assure uniform standards in quality of service and to gain repeat business through the app itself, while also achieving upskilling of workers in an otherwise highly unorganised labour economy.

Some of the initiatives in this direction are helmed by platform companies that have tied up with the National Skill Development Corporation (NSDC) to upskill blue-collar workers at scale. This is crucial given the smart city aspirations of many urban centres in India, and such Recognition of Prior Learning (RPL) and certification of upskilling signals the potential for workers to build the smart cities of tomorrow (Osborn, 2020). This tie-up is set to benefit various sectors such as beauty & wellness, plumbing, carpentry and other home improvement works, as well as servicing and repair, by creating a technology and skill mediated career progression. Strategic partnerships between ride-hailing platform companies and NSDC are aimed to achieve upskilling in the mobility industry by creating good quality self-employment (Chopra, 2016). The constellation of partners assembled here encompasses all the actors in the mobility ecosystem, including financiers, car manufacturers and insurers. Added to the in-house technology capabilities, this wholesome ecosystem also facilitates the formalisation of an unstructured market and

affords many opportunities to upskill workers. This is especially important when it comes to addressing the skills mismatch that is prevalent in the Indian economy.

Pursuing employer-led models of job creation have gathered attention from industry associations and have proven to be successful (FICCI, 2017). By creating jobs for people along with avenues for skilling, these strategies allow for output generation even while the workers are being trained. Additionally, due to the technology interface, it is possible to skill real time and do it iteratively. Most importantly, this platform-led model also mainstreams revenue generation and fills a data lacuna in our understanding of value addition in these economic activities undertaken by microentrepreneurs.

Lastly, India's huge informal labour market also stands to benefit from a restructuring due to the *platformization* of skilling and jobs. Several initiatives by e-commerce and platform companies aim at gender, disability and other marginalisation- inclusivity of such a diverse workforce while simultaneously bringing more informal workers under the fold of an economy of jobs which offers better incomes and experience of work. By combining income generation, gainful self-employment and new forms of social protection, technology platforms have the potential to create a better working environment for all.

4.3.1. Case Study: Partnerships between Street Vendors & Platforms through PM SVANidhi

In June 2020, the Government of India initiated the scheme, "PM Street Vendor AtmaNirbhar Nidhi Yojana" (PM SVANidhi Scheme) by which street vendors and small food salespeople would be recognised for credit support and business revamp,



given the effect of the pandemic on people's eating out and hygiene habits. Through this scheme, street vendors could also partner with digital platforms to facilitate delivery of their food wares. Under this, platforms like Zomato and Swiggy have signed an MoU (PIB, 2021a) with the Ministry of Housing and Urban Affairs (MoHUA) to facilitate the upskilling and platform-onboarding of street food vendors on their food-tech platforms. This move was intended as a boost to the traditional street food vending sector which had been affected due to the lockdowns announced to combat the spread of Covid-19. Such contact-intensive jobs, performed usually by marginalised groups, need an urgent revival and the platform economy is able to fill the gap without disrupting traditional skill markets.

This is a necessary match; most new technologies, especially the digital kind, require the acquisition of specialised skills, while platform technologies, on the other hand, tap into skill sets developed for performing simple smartphone-based tasks. This presents an unprecedented opportunity, especially for the younger section of the workforce, even as we translate extant skills such as food vending into the digital realm.

4.4. POLICY RECOMMENDATIONS

Since 2015, with the launch of the Skill India campaign (or National Skills Development Mission of India), there is an increasing emphasis on training the labour force in futureready and industry-ready skills while factoring in the needs and aspirations of India's youth, and challenges and opportunities existing in the ecosystem.

4.4.1. Catalyse Platform-led Transformational Skilling Leading to Horizontal and Vertical Mobility

Platforms can play an important role in not only recognising prior skills but also in imparting skills through in-person and virtual training programmes to their platform partners to hone soft-skills, communication, and financial literacy and proficiency. Needless to say, these are transferable skills to other professions that the partner may choose to switch to, thereby providing the opportunity for horizontal mobility in the ecosystem. For instance, a platform worker driving a taxi may double up as a delivery executive for the same or different platform, thus creating avenues for horizontal mobility and improving workers' remunerative opportunities.

These transferable skills also allow for vertical mobility in jobs which is necessary to expand earning opportunities and cater to the aspirations in the market. Vertical mobility marks the gradual upskilling of the worker through association with the platform and makes them more skilled at their job, setting off positive effects through the ecosystem. Fashion sellers at Myntra receive training through their in-house entrepreneurship programme to turn their passion to a successful business, and are able to move up because of their enhanced skills (Balakrishnan, 2019).

4.4.2. Promote Outcome-based or Ends-based Skilling

How can we achieve an ends-oriented approach to skilling? The answer lies in imparting skilling through doing, i.e., in a professional setting.



An example of this model is seen in the National Apprenticeship Training Scheme of the Ministry of Education, and the National Apprenticeship Promotion Scheme and Dual System of Training initiative of the Ministry of Skill Development & Entrepreneurship. These initiatives combine theoretical training with practical training from Industry Partners, thereby strengthening industry linkages and providing hands-on experience to students on industries' latest technologies and techniques (PIB, 2019).

Ends-based skilling is best achieved through online platform-attachment of workers. Such a model allows partially skilled workersbe they drivers or plumbers or data-entry operators- to find work and simultaneously upskill themselves, in the process also gaining an income. Iterative upskilling is also possible, through continuous interaction with platforms. This yields a learning model which is also consistent with the demands of the job as well as affording income.

The National Skill Development Corporation (NSDC) should create skilling, reskilling, and upskilling opportunities in collaboration with platform businesses, to enable outcomebased or ends-based skilling en masse, across the length and breadth of India. Reskilling and upskilling opportunities for workers presently engaged in the informal sector can lead them to take up jobs in the gig and platform sector, enabling them to have jobs with relatively better earnings and conditions of work. Ministry of Skill Development & Entrepreneurship is coming up with Skill India Portal 2.0 which is currently under development. Skill development for gig and platform sector would be met through the proposed features of Skill India 2.0 (erstwhile DESH Stack Portal), currently under development. Platform companies and workers associated with the platforms can be onboarded on the Skill India Portal. The registering of gig workers will automatically record their current skill and education qualifications and verified credentials will be readily available through proposed "Skill Card". New or upgraded qualifications through skill upgradation initiatives can also be updated against their credentials on the 'skill card'. The proposed features would enable SIP 2.0 to serve as a platform to link skilled candidates trained through Pradhan Mantri Kaushal Vikas Yojana (PMKVY) or linked to E-Shram, National Career Services (NCS) portal etc. with platform companies for prospective employment opportunities. ²⁰

4.4.3. Promote Digital and Financial Proficiency across India

Concerted effort from NSDC and the various Sector Skill Councils (SSCs) is required to train India's youth to be digitally and financially proficient, and empower them to become micro-entrepreneurs in the platform economy or start their own platform businesses. Modules for English, Entrepreneurship and Employability (EEE) are available under PMKVY. NSDC and Directorate General of Training (DGT) are collaborating on Employability and Entrepreneurial mindset development. DGT would be submitting to release National Occupational Standards (NOSs) to suit the varied needs of candidates. These modules can be part of training modules for gig workers or can be offered as upskilling.²¹

4.4.4. Integrate Platform-led Skilling Models with India's National Mission and Policy on Skill Development and Entrepreneurship

The National Skills Development Corporation (NSDC) has taken several proactive steps

²¹ Inputs shared with NITI Aayog by MSDE (O.M. no. MCRN-11/3/2022-O/0 JD (SNP) dated 26th May 2022



²⁰ Inputs shared with NITI Aayog by MSDE (O.M. no. MCRN-11/3/2022-O/0 JD (SNP) dated 26th May 2022

in this regard, to recognise the potential of platform-first jobs and their projected growth in the coming years. Accordingly, new Qualification Frameworks (NSDC, 2017) have been added in step with the emerging job roles of the platform economy. They demonstrate the need for an intersectional understanding of skills across the spectrum, regardless of job role: each requires digital dexterity, an understanding of digital financial management and demands the candidates' ability to manage time effectively. Therefore, the skill dividends reaped through platform jobs, which afford "earning while learning", transcend sector-specific ones.

Likewise, it is recommended that the potential and impact of platform-led skilling be included in India's National Policy for Skill Development and Entrepreneurship (MSDE, 2015). This would set the right stage for nationwide ends-based skill development while also catering to the aspirations of a growing young population which is mobile-first and values flexibility and entrepreneurship.

4.4.5. Accelerate Skills Training for Women and Persons with Disabilities (PwDs)

Promoting skills training and providing placement support to women and PwDs, particularly in rural areas, smaller towns, and cities can encourage them to take up platform jobs. A greater thrust to training for skills relevant for platform work can be given through Government schemes such as Pradhan Mantri Kaushal Vikas Yojana, Jan Shikshan Sansthan, and Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY). Long-term skill training programmes through Industrial Training Institutes (ITIs) can also supplement these efforts. MoUs between the government and platform businesses could also incentivise training for marginalised groups, securing

them livelihood opportunities in the platform economy.

The platform economy, in principle, is free of any biases. However, due to socio-cultural reasons more women than men and more PwDs than non-disabled are deprived of access to the internet, smartphones and digital literacy. This may prevent them from obtaining access to livelihood opportunities in the platform economy. Thus, policy initiatives that promote access to digital education and internet for women and PwDs are critical in providing equal opportunities for all. Schemes like Pradhan Mantri Gramin Digital Saksharta Abhiyaan, aimed at imparting digital literacy to rural citizens, can be instrumental in enabling rural women and PwDs to learn digital skills. Central and State Governments, Civil Society Organisations (CSOs), and businesses can work on implementing programmes with well-defined outcomes for women and PwD's digital access, mentoring them to take up livelihood opportunities with platforms.

4.4.6. Enable Transferability and Transplantation of Longterm Skills by Leveraging Platforms

Platform-enabled skilling generates a digital footprint, leading to the much-needed accountability mechanism that the skilling domain has sorely lacked till date. Platforms enable the creation of potential "Skill Certificates" or "Skill Passports" for workers that platform businesses can provide. This can be envisaged as a "Skill Badge" in the platform worker's online profile. This ensures both transferability and transplantation of crucial long-term skills (Ramachandran, 2020b).

By integrating the Skill Development and Employment/Social Security portals such as E-Shram and National Career Services portals of the Ministry of Labour and Employment, Udyam portal of the Ministry of Micro, Small



& Medium Enterprises, the ASEEM portal and the upcoming Skill India Portal 2.0 of Ministry of Skill Development & Entrepreneurship – a one-stop solution could be afforded for a large number of workers India.





Enhancing Social Inclusion in the New-age Digital Economy

As discussed in the previous chapters, the livelihood generation and increased earning potential of platform jobs, along with the flexibility they offer, are what make them apt for the new-age digital economy. However, their capacity goes beyond improving just financial figures. Platform work is fundamentally gender, race, caste ansd age agnostic. Any willing individual armed with an internet-enabled smartphone and a vehicle (motorised or even non-motorised), can monetise their assets, and earn a livelihood (Sundararajan, 2016; Ramachandran, Singh & Narain, 2021). Therefore, this democratising of access to jobs, with low entry barriers creates equal opportunities for all, which overtime can lead to improvement in the socio-economic status of marginalised groups. This Chapter underscores how platformization can lead to a more inclusive economy, empowering women and PwD (Persons with Disability), thereby tempering the structural barriers that have historically hindered their labour force participation.



5.1. STRUCTURAL BARRIERS TO SOCIAL INCLUSION : CHALLENGES FACED BY WOMEN

Despite the tremendous economic growth that India has experienced, only a third of the country's women partake in economic activities. The female labour force participation (FLPR) has remained low, oscillating between 16% to 23% in the last few years (Kumar, 2021; Kapoor & Negi, 2021). NSSO data (1970-2018) indicates that an increase in household incomes have led to an apparent decline in the "need" for women to work (Nikore, 2019). Research studies indicate that social and household dynamics continue to govern the intra-household division of labour and in turn. women's choices of paid work, particularly when they do not have access to child care support (Khurana, 2015, 2020).

On their part, women typically face constraints related to time, their dual responsibilities defined by social norms and disadvantages related to poverty and intersecting inequalities. Women, more than men, are concentrated in jobs that are low paid and devoid of social security. This is primarily a result of two factors - discrimination and occupational choices. Aside from receiving lower wages, women also tend to choose lower paying jobs like clerical over production jobs (Bhalla & Kaur, 2011). Moreover, there is a confluence of other varied factors such as less access to education and less work experience than men that further reduce the earning potential of women (ibid).

The gig economy offers women a wide choice of work and flexible arrangements enabling them to have an income along with managing their normative responsibilities of care work in their households. Studies indicate that women appreciate the income generating potential of the gig economy and are its "major beneficiaries" (IWWAGE 2020: 7). However, there could be certain factors restricting women's access, their ability to continue in their chosen profession and their upward mobility. The WESO Report (ILO 2021) points out that while women do find work on digital labour platforms, they represent only four in ten workers on online web-based platforms and one in ten workers on location-based platforms. This according to the report (ILO 2021), indicates that the online labour market poses challenges for women in accessing work, just as in the case of the offline labour market. Challenges that women face in accessing work gig and platform sector, in upward mobility and their ability to continue with employment in the sector are analysed based on a systematic analysis of literature.

Gender Inequalities in Access to Digital Technology

Even though the gig economy, with the wide variety of employment options it offers, is accessible to all those who are willing to engage in such employment, access to internet services and digital technology can be a restrictive factor.

Significantly, data suggests that women's access to internet and to smart phones is much lower than men in both urban and rural areas. According to the GSMA Mobile Gender Gap Report 2021, only 25 per cent women owned smartphones compared to 41 per cent men in India in the year 2020. While these figures represent a considerable increase from the previous year when only 14 per cent women compared to 37 per cent men owned a smartphone, the difference of ownership between men and women still remains stark (GSMA 2021). Usage of smartphones indicates access to mobile internet and when a woman owns a smartphone "she is almost as likely as a man to use mobile internet and access a range of services" (Carboni 2021). According to the report, in addition to other



factors such as changing market dynamics, Covid-19 restrictions and lockdowns have driven an increased need, and in some cases, the required justification for women to go online. Qualitative research undertaken by GSMA with female mobile internet users in Bihar and Madhya Pradesh, as well as expert interviews, highlighted four important life needs that had driven smartphone uptake and mobile internet use among women over the year 2020: online education for children, video calls, access to income opportunities and increased demand on devices in the home for entertainment and other purposes. Further research is however, needed to understand the implications of this relative increase in women's smartphone usage for their engagement in the gig and platform economy.

Figures on unequal access to smartphone, however, do indicate that women still lag behind in access vis-à-vis men. Women are less likely to own mobile phones and digital devices due to both economic and socio-cultural restrictions. When disposable income in a household is scarce, it is often the male members of the household who get to spend on purchase of digital devices like mobile phones and laptops or computers. This disparity is observed more in the case of rural women. Platforms that require women's in-person services may be accessible for employment only to urban women. Those that allow workers to offer remote services may not also be accessible to several rural women willing to take up such employment opportunities, who do not have access to internet services.

Women's Normative Responsibilities and the "Double Burden of Work"

While employment in the gig economy allows for combining paid work and unpaid

care work, women may feel the extra work burden since they still take care of the majority of household work (Samman & Hunt, 2016). Research studies among women workers in the informal sector indicate that social and household dynamics continue to govern the intra-household division of labour and in turn, women's choices of paid work, particularly when they do not have access to child care support (Khurana, 2015, 2020). Gig and platform work, in principle, allows workers to better manage their paid and unpaid care work responsibilities as they get to decide their work hours and are not required to be in a structured physical work setting (Kasliwal 2020, IWWAGE 2020, ILO 2021). However, women's choices of employment in the gig and platform economy may still be largely shaped by their normative responsibilities of household and care work with women prioritizing the latter. Studies conducted in the UK show that women are more likely to exit from the gig economy. This could be attributed to their income being of the "distressed" category. Consequently, as soon as conditions improve, women leave the workforce. This phenomenon is widely visible in India's informal economy as well. Women's normative responsibilities of household and care work is often responsible for their inability to continue in any form of employment and more so in employment that lacks job security and future career prospects (Kasliwal 2020, Khurana 2020).

Lack of Job Security

A study conducted by Observer Research Foundation and World Economic Forum in 2018 found that 35 percent of women surveyed were disinterested in joining the gig economy due to the lack of job security and uncertain employment status (Kasliwal 2020). Women's ability to improve their conditions of work is also restricted by a lack of voice, a



lack of effective bargaining power, especially in a context like the gig economy and the informal economy. The study undertaken by IWWAGE also points out that gig workers experience significant challenges in terms of regularity of wages and working conditions. This is an aspect of the gig work structure where the features of informal work become evident. Several challenges faced by shortterm contract workers are the same as those faced by informal workers (IWWAGE 2020). This uncertainty associated with regularity in the available work and income may lead workers, particularly women workers, who already manage normative responsibilities of housework and child care, to discontinue or give up employment in the gig sector.

The WESO Report (ILO 2021) found that work on online web-based platforms is the primary source of income for many, particularly in developing countries, and especially for many women. About one third of respondents reported that online work was their main source of income, and this proportion was higher in developing countries and for women. The report indicates that platform work is the primary source of income for many workers in developing countries (44 per cent), and especially among women in these countries (52 per cent). However, low and unstable incomes was a concern for some of these workers. Gig work as a primary source of income allows for less flexibility, compared to when such work is a source of additional earning (ILO 2021). It is pointed out that when the numbers of available workers is large, incentivising workers based on the numbers of tasks completed or on customer feedback may lead to the loss of work-life balance and place the worker under duress. Competition between workers due to increased labour supply can push earnings down so that workers may be forced to work longer hours and hence compromise on flexibility (Graham and Woodcock, 2018 in IWWAGE 2020).

Gender-Based Occupational Segregation of Tasks & Pay Gap

ILO's WESO report found that women are more likely than men to perform professional services (such as legal services, translation, writing and editing), and tasks related to business services or sales and marketing. Few women mentioned that they performed tasks related to technology and data analytics (ILO 2021). Across the world, the app-based taxi and delivery sectors are found to be largely maledominated. Women comprise fewer than 10 per cent of workers in these sectors. The share of women is considerably higher only in some countries, for instance in Indonesia in the app based taxi sector (13 per cent), where femaleonly taxis are preferred by some female clients to mitigate risks of violence and harassment (Straits Times 2015 in ILO 2021:137-38). It was also found that a considerable proportion of workers on online web-based platforms have experienced discrimination, particularly women and workers in developing countries. About 19 per cent of respondents on freelance platforms reported that they had experienced discrimination. This proportion was lower in developed countries (12 per cent) than in developing countries (22 per cent), where it was also particularly high among female respondents (25 per cent). The qualitative responses from respondents in developing countries further reflect the fact that discrimination often takes the form of exclusion from work opportunities or low pay. This was observed on several platforms where certain higher-paying tasks were allocated to workers from developed countries through the platform design. Discrimination based on other factors, such as gender, ethnicity, age or language spoken, was also reported (ILO 2021).

Findings of studies on online web-based platforms on the gender pay gap are mixed. The ILO surveys reveal that when looking



at averages, a gender pay gap can often be observed, but this may not always be significant when a statistical analysis is undertaken. The average hourly earnings for female online workers were slightly lower than for male, and they are also lower for women in developed countries than for men. In developing countries, however, the average hourly earnings (paid and unpaid) for women are higher than for men. These higher earnings among women in developing countries could be due to their higher education levels compared to those of men, allowing them to perform better-paid tasks. Gender pay gaps are also observed in some developed countries. A study in the app-based taxi sector in the United States based on data collected from over a million Uber drivers found that men earn around 7 per cent more than women. This gender gap is attributed to differences in experience, preferences for location of work and driving speed (Cook et al. 2018 in ILO 2021). Women's ability to access more work might also be restricted as they are cautious and less likely to work during night hours for fear of experiencing discrimination, harassment or violence (ILO 2021). A report by Teamlease indicates that while a large number of women are joining the gig economy, they are paid less than men for the same jobs. The study observed an 8-10 percent difference in the monthly salary between male and female delivery executives (Kasliwal 2020).

ILO surveys show that a substantial proportion of respondents are required by platforms or clients to install specific software, or meet certain hardware and software requirements; their working hours are monitored by clients; they are requested to be available during specific times by clients; and they are required to use a monitoring system for submitting screenshots of the work done. Such mechanisms for monitoring and control tend to be more frequent for platform workers from developing countries and women (ILO 2021).

Concerns regarding Safety

ILO global surveys reveal that about 83 per cent of workers engaged in the app-based taxi sector and 89 per cent in the app-based delivery sector reported having safety concerns about their work, often relating to road safety, theft and physical assault. In countries with women in the sample, higher proportion of women than men reported being subject to discrimination or harassment, or were aware of such instances faced by their peers (ILO 2021).

An analysis of the gender aspects of employment in the gig and platform sector thus indicates that women may experience various challenges with regards to access and engagement with digital platforms including access to digital technologies, double burden of paid work and care responsibilities, lack of job security, issues of occupational safety, upward mobility and lack of effective bargaining power. An understanding of the barriers and challenges that women might face - those emanating from their social and economic positions in the labour market and within the household – provides an indication of the pathways that can enable more women to engage in and sustain in their employment with the platforms.

5.2. STRUCTURAL BARRIERS TO SOCIAL INCLUSION: CHALLENGES FACED BY PwDs

Labour market challenges are also evident for Persons with Disabilities (PwDs), who make up for 2.1% to 10% of India's population (Kulkarni, 2021), but have a labour force participation rate of 36% (MoSPI, 2021). Even though The Rights of Persons with Disabilities Act, 2016



increased the mandated 3% reservation for PwD in Government vacancies from 3% to 4%, along with incentivising 5% reservation in private sector, their needs for meaningful employment remain unmet (Gol 1995, Gol 2016).

For PwDs, the structural barriers range from access to education, lack of skilling and a direct correlation between disability and incidence of poverty. PwDs are more likely to have lost work or changed their nature of work because of disability. This often ties disability with lower economic location (Thomas et al, 2012). Initiatives such as the National Rural Employment Guarantee Act, 2005²², are a step in the right direction, but there is little data to assess how the scheme may have been utilised by the PwDs.

Thus, dedicated and focussed efforts are needed to address such structural barriers that prevent marginalised groups from taking part in economic activities. The efforts made by the government must be bolstered through multi-stakeholder partnerships, an approach that is foundational to the platform economy.

5.3. OPPORTUNITIES FOR GREATER SOCIAL INCLUSION IN PLATFORM WORK

The socio-cultural and economic biases of conventional economic models have led to stark disparities within the labour force, leaving behind the marginalised. Apart from the existing government schemes and policies to uplift these sections, a new approach is needed, factoring the changing future of work on account of digitalisation. Unlike traditional jobs, the platform economy affords flexibility and choice of labour, is free of selective biases – such as gender, caste, class or disability bias, etc. – that often impinges on the ability of the "formal" economy to expand its scope and reach (Ramachandran & Raman, 2021).

The platform economy relies on innovation to provide access to skill development, social security, access to finance and job creation, which are the key pillars of inclusive growth. A case in point is how beauticians now have the option to no longer be tied to parlours that would pay them poorly, despite them bringing in four times the business than their salary (Raval, 2019). Platform workers can be their own boss, while earning higher income, all the while learning skills that support their families (Pema, 2020). Indeed, platforms are reframing the role of women in private and public life. Platforms offer women the dual benefit of flexibility and choice to work when and where they want, and augment assets – benefits which are absent or limited in the traditional sectors of the economy. Thus, labour force participation is no longer a binary decision between household duties and economic aspirations, but women now have the choice to work at will (Raman & Kulkarni, 2021).

The inclusive character of platform economy goes beyond the accessibility it provides through app interface to create economic opportunities. For instance, Zomato has taken steps to incorporate more PwDs through active onboarding and facilitation, while making the customer aware when a disabled delivery person is assigned to them via the app (Zomato, 2019). Among other platforms, Amazon and Flipkart facilities in Mumbai and Bengaluru, too, are actively hiring teams who have speech and/or hearing disabilities (Flipkart, 2017). Platforms are forging partnerships with NGOs to not only create



²² Mahatma Gandhi National Rural Employment Act 2005 is aimed at providing at least 100 days of guaranteed wage earnings each financial year to each household whose adult members agree to do unskilled manual labour (Gol, 2018).

livelihood opportunities for women and PwDs but also to train them in managing order fulfilment and last-mile delivery. While such efforts are still not upto the required scale to create a measurable impact, they are still an example for others to follow.

5.4. GROWING EVIDENCE OF WOMEN'S PARTICIPATION IN THE PLATFORM ECONOMY

It has already been evidenced that platform work offers flexibility and choice, which are the primary motivation for individuals to join this economy. However, for the marginalized, platform work presents a lucrative opportunity, which can not only enhance their economic participation but enable upward social mobility as well. Discussed in the previous section, marriage and education have a direct impact on a woman's participation in economic activities. In the context of the platform economy, there is an emerging positive trend that suggests women are more likely to take up platform jobs after their education and marriage (Raman & Kulkarni, 2021). Additionally, the platform economy offers women the ability to earn extra money, choose their working hours, place of work and also the nature of work. Studies indicate that women are "major beneficiaries" of the gig economy and appreciate its income generating potential (IWWAGE, 2020).

5.4.1. Case Study: Impact of platforms on women's economic empowerment

Source: Adapted from Raman, Ramachandran & Sindhu, 2021

This case study presents evidence from a mixed methods study conducted in 2020-21. The study focused on delineating the facilitators and barriers for women's participation in the platform economy.

Primary data was collected through both online surveys and in-person interviews for two distinct sets of respondents: Individual Platform Workers and, and Aspirational Women. 84 platform workers affiliated to platforms offering professional home services, hyperlocal deliveries, and passenger mobility were interviewed from October 2020 to February 2021. A survey of 624 women participants termed "Aspirational Women" outside the platform economy was conducted in late 2020 across Bengaluru, Mysuru, Jaipur, Jodhpur, Udaipur, and Delhi. Further, a series of telephonic and virtual interviews were conducted with select individuals representing organisations relevant to the Indian platform economy in both the private and public spheres. Experts from over 40 organisations belonging to governmental, civil society, and private sector organisations across the domains of public policy, skill development, entrepreneurship, finance, etc. were interviewed. Government stakeholders at the Government of India, and Governments of Delhi, Rajasthan, and Karnataka provided invaluable insights. Platform businesses engaging women workers too were systematically studied and engaged with.

Key highlights from the study are presented below.

a. Women are more likely to take up platform jobs after their education and marriage.

80% of the respondents are in the age group 26-45 years, followed by 18-24 years (18%) and 46-65 years (2%). Of the women surveyed, 72% are married. 19% are



unmarried while 5% of them are divorced and 4% widowed. A majority of the respondents reported having completed high school and higher secondary (61%), with a sizeable number holding diploma or undergraduate degree (25%).





Chart 12: Distribution of women platform workers by educational qualifications

The findings suggest a trend where women are more likely to take up platform jobs after their education and marriage. This is a positive finding, contrary to the macroeconomic trend where married Indian women withdraw from the labour force on account of caregiving responsibilities and for enabling family's upward social mobility.





Chart 14: Preference for platform work over other jobs

 Women opt for platform work out of the need to participate in economic activities to support dependents.

In the study, over 90% of the respondents reported supporting two or more dependents. Over 80% had dependents younger than 18 years of age.









Chart 16: Distribution of respondents by number of dependents



Chart 17: Distribution of respondents by number of dependents under 18 years of age

c. Platform labour forms a primary source of income for the majority of the women interviewed.

Preference for platform work can also be seen as it was the primary source of income for 75% of the total respondents.



Chart 18: Platform as primary source of income

Overall, platform work finds a strong preference among women, providing them opportunities that are otherwise absent in conventional jobs.

d. Platforms offer high earning opportunities for women.

About 38% of the respondents work between 5 and 25 hours a week and 29% of them spend more than 40 hours in platform work. The flexibility of work timings results in a unique advantage for workers to choose how many hours to put in a typical workday. Whereas a traditional beautician/ driver is expected to spend at least 40 hours on-job, a majority of these platform workers spend less than half that time, while earning much more.

The monthly income of 39% of the respondents falls in the range of INR 10,000 to 25,000. Of these, 48% of women cite this as their only source of income. About 34% respondents report a monthly income of between INR 25,000 to 40,000 while another 20% of them earn around INR 40,000 to 75,000 per month.









Chart 21: Motivation to continue in the platform economy

Women participants in platform businesses are more likely to continue in this workforce due to the flexibility offered, which allows them to manage their unpaid care work at home and paid work in their occupation.

This is reinforced by analysis of the reason for willingness to join platforms as reported by women outside the platform economy. Upon being informed of platform jobs, 624 women outside the platform economy were asked if they would be willing to participate in the platform economy and the reasons for the same. Flexibility, ability to be an entrepreneur, ability to monetise assets including skills, assured income, etc. were the top reasons cited by women outside the platform economy.



Chart 22: Reasons of non-platform women for willingness to participate in the platform economy

Indeed, platforms are helping reframe the role of women in private and public life. Labour force participation is no longer a binary decision between household duties and economic aspirations, but women now have the choice to work at will.

5.5. BREAKING BARRIERS, CREATING OPPORTUNITIES

The potential of the platform economy runs beyond the livelihood opportunities it offers to the marginalised groups. Platforms businesses can play a significant role towards value creation in terms of skilling, digital literacy, financial literacy and inculcating entrepreneurial spirit. This value addition may not only help the individual associated with the platforms, but can also radiate to their social groups, especially family, in the form of cultural capital.

The dispersed locations, a feature of most platforms, widens the geographic possibilities for PwDs and women to work out of. Complemented with the ability to set their own hours, platform jobs have greater freedom and flexibility compared to any other conventional occupation. Moreover, productive selfemployment is one of the key enablers for a PwD to realise their potential. Platforms



have been earnestly supporting this, by listing and selling products by entrepreneurs with disabilities. With fast onboarding and credit access, they further nurture self-employment among PwDs (Flipkart, 2019).

5.5.1. Case Study: Platforms empowering marginalized

Platforms are empowering PwDs and women by boosting their selfesteem in the workplace and creating opportunities for them to participate as productive members of society. Amazon has introduced a first-of-its-kind "Silent Station" in Mumbai, that employs a large workforce of individuals with hearing and speech disabilities (Nair, 2019).

Meanwhile, the e-commerce giant has also launched "The Saheli Store" on its India website, for products curated by women entrepreneurs. In Thiruvananthapuram (Kerala) and Chennai (Tamil Nadu), Amazon has women-only delivery stations (ibid), aimed at empowering them.

On similar lines, Flipkart too incorporates individuals with hearing and speech disabilities to their fleet of delivery personnel and customer-facing roles. In their most recent initiative, "Ekartians with Disabilities", they are attempting to create a diverse and inclusive workplace and supply chain (ET, 2021).

Such initiatives not only dismantle stereotypes surrounding the employability of women and PwDs, underlining their capabilities as a crucial member of the society, they also lead to skilling of a large workforce which may otherwise not have access to such training.

From expectations to be chaperoned by a male member of the family to occupational

stereotypes, systemic barriers prevent women from choosing certain professions like becoming a service provider in the mobility domain. With the advent of platform jobs, driving can now be associated with liberating and empowering women. According to the case studies by Association for Nontraditional Employment for Women (ANEW), more women are seeking driving courses with the motivation to become an earning member of the family, develop new skills or to gain agency (Raman, Ramachandran & Sindhu, 2021). Even a few women working in the mobility space goes a long way in shattering gender stereotypes for the society at large, especially the misogynistic notions around women being bad drivers. At the same time, these women develop transferable skills, support their families, gain access to digital banking accounts and formal credit. Financial inclusion has been a long standing matter of contention. In India, only 44% women have bank accounts, with less than 2% of those having access to mobile banking facilities (Kohli, 2018). Holding a bank account, especially a digital bank account, is a prerequisite for a woman entering the platform economy, with platform businesses taking steps to help women workers open one (Raman, Ramachandran & Sindhu, 2021).

5.5.2. Case Study: Platformization increases access to banking services

While access to bank accounts is a prerequisite for platform jobs, platform businesses are also enabling their partners to gain access to formal credit. Companies like Ola, Zomato, and Swiggy have partnered with banking platforms like Avail Finance to provide short-term personal loans to their workers (Bhakta, 2019).





Urban Company has an interest-free loan programme for its partners, under which INR 11 crores have been disbursed to those eligible, covering almost 85% of its workforce. Meanwhile, under their Gold Partners plan, partners can avail small loans in times of emergencies with zero to minimal interest rates (Raman, Ramachandran & Sindhu, 2021).

As platform businesses are actively taking steps to include more women and PwDs in their workforce, benefits of such initiatives further bolster the government's efforts to increase access to banking facilities and financial inclusion.

Platformization has the potential to not only grant a sense of autonomy and agency to those working in its ambit, but also catalyse social change by shattering stereotypes, social constraints and economic barriers. The gender, caste, disability and age agnostic character of platform economy can be leveraged by the government to ramp up its effort towards creating an equitable society. Creating an ecosystem that enables platformization as well as benefits the platform workers, would go a long way in India's quest to become a more inclusive society and economy.

5.6. POLICY RECOMMENDA-TIONS

Platforms offer flexibility and choice of work to all through asset monetisation – both physical assets (vehicles, tools and equipment) and assets of transferable skills (Ramachandran, Singh & Narain, 2021). Given the advantages they offer, ranging from low-entry barriers, and ease of access and enrollment, to flexibility of time, digital platforms have immense potential for creating livelihood opportunities, particularly for women and PwDs. However, even with this potential, the platform economy is not without its challenges, primarily due to the existing structural inequalities in the larger economy that could take years to amend. The WESO Report (ILO, 2021) points out that while women do find work on digital labour platforms, they represent only four in ten workers on online web-based platforms



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and one in ten workers on location-based platforms. Thus, if India is to leverage the true potential of the platform economy, an array of enabling strategic interventions with multi-stakeholder collaborations must be introduced at the earliest.

This chapter presents policy recommendations for the consideration of Government, Industry, Civil society, Allied businesses, and Nonprofits.

5.6.1. Recommendations for the Industry

1) Gender Sensitisation & Accessibility Awareness Programmes for Workers and their Families

Platform businesses can undertake partnerships with Civil Society Organisations (CSOs) and Non-Governmental Organisations (NGOs) to promote legal/ economic/ social rights of women and Persons with Disabilities (PwDs), especially from marginal and vulnerable backgrounds, thereby increasing their potential to take up non-traditional livelihoods. These partnerships will also help identify talented/ aspirational women and Persons with Disabilities (PwDs) from marginal/ vulnerable backgrounds.

2) Inclusive Communication, Systems, and Processes

Platform businesses can implement communication plans which are gender- and accessibility-inclusive. A few considerations to make while designing internal and external communication are:

 Do the communication programmes, materials, and messages perpetuate or promote gender inequality by privileging one sex over the other? Do they perpetuate disability stereotypes?

- Do the platform businesses have a higher share of women and PwD managers and supervisors than traditional companies?
- Is the communication used during on-boarding and training workers inclusive? Do the training staff or facilitators use inclusive language, and inspire confidence among women and Persons with Disabilities (PwDs)?
- Is the communication adapted in local languages as well? Is it gendersensitive and accessibility-inclusive while being translated?
- Is there a dedicated helpline for women, and PwDs each?

Partnerships with Governments, CSOs & Allied Businesses to Reskill and Upskill Women and PwDs while also Facilitating their Access to Assets

There is scope for aggregators/platform businesses to collaborate with civil society organisations, social enterprises, and other relevant groups which aid in the economic participation of women and PwDs. The private sector could provide the necessary impetus to efforts being undertaken in the areas including, but not limited to, access to finance, skilling and education. Partnerships may be formed within existing business models or through new or unique models as per each organisation's structure, goals and objectives.

Partnerships with CSOs/NGOs, and government and parastatal agencies to enable creation of peer and support groups for mentorship and any other support including psychological support, legal aid, financial literacy, communication, and soft-skills training too may be explored.



Tie-ups with organisations conducting gender/ safety audits and accessibility audits to aid in data sharing and aggregation is recommended. This is important for safety and accessibility mapping, and gender- and accessibility-budgeting. Independent and periodic internal surveys, feedback, and audits to understand the needs, aspirations and challenges of women and PwDs will also go a long way in modifying operational structure to invite and retain women and PwD workers.

4) Better Infrastructure and Work Design to Create Enabling Environment for Women and PwD Workers

Incubating childcare services as a community business can reduce the time cost of care work which is borne disproportionately by women.

Platforms could explore partnership with local hospitality businesses/ petrol stations, etc. where women workers and PwDs can utilise accessible restrooms and lounges between work hours, especially in the mobility or logistics related platform economy.

Platform businesses should have inclusive and accessible local offices (with partners/ in a co-working space) for walk-ins by women and PwD workers. Though it is a diversion from the existing business model for platforms, a local office, however sparse, may instil confidence in women and PwD workers reaching out for personal support. The platform businesses may consider a local office for clusters of Tier-2/ Tier-3 cities.

Use of technology to create safer workplaces for women could lead the way in demolishing the stigma around their safety and mobility, benefiting women who are engaged or wish to be engaged in this sector. Panic buttons and installation of surveillance technology such as CCTV cameras at workplaces could be a step in this direction.Incentives for women and PwDs choosing to work beyond regular working hours/festive days: This is a short-run recommendation, and can greatly motivate ambitious women and PwD workers, until there is equity at the workplace.

5) Institutionalise Accessibility, Diversity and Inclusion at the Workplace with initiatives such as Gender-based and Disability-based Onboarding Targets and Incentives

Platform businesses should make targeted efforts to mainstream women and PwD workers into the platform economy through gender-based and disability-based onboarding and performance incentives. The leadership of platform businesses can envision an equitable workforce for the coming decade. Further, Key Performance Indicators (KPIs) can be linked to achieve onboarding targets to gauge the organisation's overall success in attaining gender and disabilitybased inclusion.

Referral bonuses for existing platform workers to bring onboard their female and PwD friends/ relatives: Informal networks, and especially peer groups on social media and WhatsApp, have been found to be the most useful in converting an acquaintance into a platform worker.

Facilitate shared ownership of assets such as cars/ two-wheelers for part-time workers with other female and PwD workers. Alternatively, platform businesses may also incentivise male and non-disabled workers to share ownership and plying of their vehicles with their female and PwD family members on a shift-basis.

6) Facilitate access to Social Security Benefits for Women and Persons with Disabilities (PwDs)

Platforms can actively facilitate access to social security for all workers affiliated to



them, in general, and women and PwDs, in particular. *For detailed recommendations, see Chapter 7.*

5.6.2. Recommendations for the Government, Civil society, Allied businesses, and Nonprofits

1) Ensure Universal Coverage of Platform Workers through the Code on Social Security

The Code on Social Security (CoSS) 2020 expands worker classifications in India, recognises two new-age worker categories and extends social protection to all workers regardless of their employment status. Extending social security to those associated in non-traditional work relations such as platforms is key to universalising social security. For detailed recommendations, see Chapter 7.

2) Bridge Skill Gaps by Carrying Out Periodic Assessments and Partnering with Platform Businesses for Onboarding Skilled Women and PwDs

We need to encourage platform-led skilling for women and PwDs for them to become productive members of our economy. The government should also periodically assess the relevance and effectiveness of such ends-based skilling programmes for women and PwDs especially. For detailed recommendations on skilling, see Chapter 4.

Further streamlining the availability of periodic aggregate data on the various courses on offer and the demographic of the participants completing the courses would be an advantage. This would assist the platform businesses in identifying potential services to offer, geographical markets to operate in, and aspirational workers in those areas.

3) Reach Out to Unbanked and Underbanked Women and PwDs to through FinTech Services

An innovative method to bridge the gender and accessibility gap in digital banking is to open "UPI-receive-only" accounts while opening accounts for women and PwD workers. Through this method, while the women and PwD workers are able to carry out expenditure through non-digital methods, the regular inflow of income also creates a financial profile for the women and PwDs, enabling them to access credit in the future.

Public & Private Sector Banks may employ more women and PwD banking correspondents. Such representation would inspire confidence and trust amongst the unbanked and under-banked women and PwDs from rural and semi-urban areas.

FinTech and new-age financial institutions have an important role, which needs to be recognised, in bridging the gender and accessibility gap for financial services. Greater outreach by such companies needs to be encouraged and appropriate changes in regulations relevant to FinTech platforms may be explored. Cash-flow-based-lending at scale may also be encouraged by leveraging FinTech platforms. For detailed recommendations on financial inclusion, see Chapter 3.

4) Organise Gender Sensitisation and Accessibility Awareness Programmes for all Public-facing Personnel from traffic cops and law-and-order police to toll booth operators, et. al.

Gender sensitisation and accessibility awareness programmes may be encouraged for all personnel in public spaces. Local bodies and parastatal agencies, in partnership with private sector organisations or relevant CSOs may conduct training and workshops to improve gender sensitivity and accessibility



awareness. This would help prioritise and improve accessibility of public spaces and safety of women and PwDs. This may especially be introduced in the transport and mobility sector where bus drivers, bus conductors, traffic police and RTO personnel, toll booth operators, et al may be trained to improve their engagement with women and PwDs.

5) Incentivise Inclusive Businesses

Fiscal incentives such as tax-breaks or startup grants may be provided for businesses that provide livelihood opportunities where women constitute a substantial portion (say, 30%) of their workers. Likewise, a platform with high accessibility or high degree of participation of PwDs too may be rewarded with fiscal incentives.

Other financial incentives may be considered for women and PwDs on platforms who provide services through the hospitality sector, such as bread & breakfast facilities, cloud kitchens, etc.

6) Make Aggregate Data Publicly Available to Enable Robust Decision-making by the Ecosystem

For implementation of these provisions, we need adequate data on platform workers. In order to have some reliable estimates, gig and platform work must be included in new categories in the NSSO surveys to accurately ascertain their percentage in the Indian economy. The e-SHRAM portal, a mega platform for registration of all workers that do not form a part of the formal enterprises with linkage to Employee Provident Fund Organisation (EPFO) and Employee State Insurance Corporation (ESIC), can also be a source of providing data on gig and platform workers. The e-SHRAM portal provides portability and access to various social security and welfare schemes of the Central and State governments. This portal can provide data and information about gig and platform workers such as their occupation, skill sets and access to social security. This can help in enabling them to access different social security schemes and also in formulating new schemes.







Global Examples and Suggestions for Social Security for Gig & Platform Workers in India

World over, there is growing support for universalising benefits that have traditionally been tied to employment or one's workplace (Öktem, 2020; Ortiz, 2018; Ghai, 2015; Srivastava, 2008; Lautier, 2006; Duggal, 2005). The enormous public attention being paid to the gig and platform economy, and in particular, the robust discussions being conducted around portable benefits create an important opportunity to examine how best to provide economic security, via social protections, to workers in the 21st century.

The new forms of employment entail work relationships that are distinctively different from the traditional or standard employment contracts (generally considered to be long or for a lifetime) which form the basis for existing social security arrangements. The new forms of employment are often not covered or are only partially covered under prevailing social security systems. It has, thus, become essential that the social security framework is reoriented to include the new forms of employment in order to improve the quality of new jobs generated, and also meet the growing aspirations of a youthful population.

During the advent of the Covid-19 pandemic in 2020, governments and platform businesses, the world over, formulated special measures to grant social protection to platform workers.



This chapter sheds light on the various social protection approaches taken around the world for platform workers and how they can pave the way to a well-structured social protection regime, especially targeting this specific group for a specific purpose.

6.1. UNDERSTANDING SOCIAL SECURITY THROUGH WORKER CLASSIFICATIONS

The world over, worker classification determines a worker's access to legal protection and social security. Thus, in order to understand social security in the 21st century, we need to understand worker the classifications. Traditionally, the labour market world over bisects into formal and informal. When an employer hires an employee under an established working agreement that includes wages or salary, defined work hours, pension, maternity and health benefits, disability and unemployment benefits, among others, such employment is treated as formal. Consequently, the employee is treated as a formal worker. Conversely, informal work is devoid of any established working agreement and the resulting social security benefits. Such a labourer is called an informal worker. Thus, in the realms of the formal-informal distinction, social security is essentially the non-wage compensation afforded to the employees in addition to their salary or wage. Social protection is linked to employment itself, with the worker classification determining a worker's access to social security.

Then there is the dichotomy of organised and unorganised. The organised sector comprises licensed organisations or incorporated companies – such as factories, large businesses, hotels, etc. – which are registered and pay taxes. On the other hand, we have the own-account enterprises forming the unorganised sector of the economy. Thus, the unorganised sector consists of unlicensed, self-employed or unregistered economic activity ranging from farming and rural trade to running general stores or trading handicrafts or handlooms. Platform work is placed at the unique intersection of formalinformal classification. A platform worker exhibits the formal (payments and credit) as well as informal (time management, dynamic work relations) characteristics (Kumar & Ramachandran, 2021).

The chapter first looks at initiatives undertaken for offering social protection for platform workers during Covid-19 in India and across the world and then examines instances of changes brought about in the regulatory framework or measures for extending social security to gig and platform workers in different countries across the world. Drawing on these initiatives from across the world, the chapter provides suggestions for extending social security to gig and platform workers.

6.2. EVIDENCE OF SOCIAL PROTECTION FOR PLATFORM WORKERS DURING COVID-19

The dual health-cum-economic crisis of Covid-19 has affected all facets of life in an unprecedented fashion. No worker – including the new-age gig and platform workers – is immune to the fall-outs of this crisis. A systematic study in 2020 documented the measures taken by governments and platform businesses to leverage and protect platform workers against the pandemic. Platform workers emerged as superheroes who kept neighbourhoods connected, and ensured the supply of essential goods and movement of essential personnel (The Economic Times, 2020)²³. By working closely with city authorities,

²³ This was in the backdrop of nationwide lockdowns across the world and pertinently in India on account of the public health emergency precipitated by the Covid-19 pandemic.



platforms and platform workers laid a strong foundation of social partnerships, thus paving the way for a far more resilient world. Thanks to digitalisation, drivers affiliated to passenger mobility platforms were able to ferry the elderly and other vulnerable groups to hospitals, while doubling up as delivery personnel delivering medicines, food, and groceries to those in need. Furthermore, platforms forged technology-based partnerships offering lastmile logistic support transporting medicines, life-saving equipment, etc., and movement of fresh produce from farms to markets in a safe manner, among others (Raman & Ramachandran, 2020b).

Globally, both the government and the platform businesses implemented a plethora of measures to protect the lives and livelihoods of platform workers. Such initiatives are presented in sections 6.2.1 and 6.2.2.

6.2.1. Case Study: How is India Protecting and Leveraging the Platform Economy Against Covid-19?

Source: Adapted from Raman & Ramachandran, 2020b; Government of India, 2020

I. Protective measures taken by platform businesses

Platforms like Ola, Uber, Urban Company, Swiggy, Zomato, Dunzo, Flipkart, Big Basket, and Delhivery implemented the following measures to protect workers and their families.

- 1. Supporting the livelihood of workers and their families
 - a. Providing health access for all and expanding paid leave
 - i. Providing health access and insurance and covering medical expenses
 - Ola has facilitated free medical help for all driver-partners and their families. The driver-partners and their spouses will be covered by a sum of INR 30,000 under which they will receive a compensation of INR 1,000 per day for a maximum of 21 days for an individual from the date they are tested positive for Covid-19. The cover would include their hospital expenses and home quarantine prescribed by a doctor.
 - 2. Urban Company is contributing INR 1.5 Cr to a Covid-19 relief fund to help the families of 30,000 gig workers.
 - b. Offering paid sick leave
 - i. Delhivery, India's courier pickup and delivery company has provided paid sick leave for 40,000+ central and field employees and partners. This policy will continue through Covid-19 outbreak, with no stipulated end date.
- 2. Securing income and livelihoods of gig workers and small business
 - i. Safeguarding small businesses
 - 1. Ola has created a corpus of INR 20 Cr, called the "Drive the Driver Fund" to support auto-rickshaw, cab, kaali-peeli and taxi drivers to mitigate the effects of the lockdown on their income.



- 2. Ola has partnered with Avail Finance under the Ola Sahyog initiative to enable instant access to cash for 100,000 eligible driver-partner families across the country. This would provide crucial credit of INR 1200 per week for three weeks to foot household expenses, set off against future earnings on the platform.
- ii. Waiving lease and insuring payments
 - 1. Urban Company is extending interest-free business advances and delayed payback periods to protect the gig workers, self-employed and small businesses engaged with them.
- 3. Protecting workers in the work environment
 - a. Strengthening operational safety and health measures
 - i. Securing safety and health through training and education
 - 1. Platforms have launched dedicated hotlines and websites to disseminate information and take preventive action.
 - b. Mandating the use of hand sanitisers and masks
 - i. Platforms, particularly, those handling food and other deliveries have mandated the use of hand sanitizers and masks by their driving

and delivery partners and require them to wash their hands regularly and observe "coughing etiquette" as specified by WHO and health ministries around the world.

- c. Adapting the work environment
 - i. Enabling contactless deliveries: To ensure the safety of workers during this emergency, food and grocery delivery platforms have developed no-contact protocols and temperature checks for its personnel.
 - ii. Physical separation: Ride-hail platforms have provided drivers with masks and sanitizers, created physical separation between driver and passenger cabins, and mandated regular cleaning of taxis.
 - iii. Servicing new markets, from food delivery to grocery and medicine delivery
 - iv. Going digital: encouraging card-less, cashless payments, "no-contact" payments

II. Protective measures taken by the government

To stimulate the economy and labour demand in these challenging times, governments have announced discretionary measures supplementing existing social safety nets and insurance mechanisms.

- 1. Active fiscal policy & accommodative monetary policy
 - a. Active fiscal policies include social protection measures ranging from targeted transfers to automatic stabilisers such as unemployment benefits, and public investment and tax relief for the self-employed, gig workers, and Micro, Small, and



Medium Enterprises (MSMEs). Accommodative monetary policies consist of interest rate reductions, reserve rate relaxation, and targeted liquidity provisions.

- b. While over 20 State Governments in India announced a series of measures, the Central Government too for its part announced additional cash transfers, medical insurance cover, and in-kind transfer of wheat/ rice and pulses to beneficiaries under various existing schemes.
- 2. Lending and financial support to specific sectors
 - a. India is extending collateral-free loans up to INR 20 lakh each to women in Self Help Groups.
 - Under the Atmanirbhar Bharat Abhiyan, India has announced an INR 20 lakh crore package on May 12th, 2020, to cater to various sections including cottage industry, MSMEs, labourers, middle class, industries, among others.

III. Leveraging the Platform Economy for Recovery and Resilience

- a. A few governments are choosing to take an active approach to utilise and expand the services of gig workers and make them an integral part of crisis management. These include measures to tap into companies' resources and logistical networks, and the skills of their gig workers.
- b. In India, the Kerala State Civil Supplies Corporation (Supplyco) in Kochi, partnered with food delivery service Zomato to enlist grains and other essentials on the app. By restricting payment to online mode only and by roping in Zomato's expertise in packaging to train their staff, this action shows the state's commitment to public health and well-being as well as the willingness to cooperate with the private sector.
- c. The ride-hailing platform, Ola, has supported the local administration in Bengaluru (Bruhat Bengaluru Mahanagara Palike, BBMP), India, to provide transportation for health workers to visit people quarantined at home and ensure their well-being. Ola and other platforms facilitated visits of health workers to around 20,000 households in the city. Ola has additionally pledged 500 cabs for the state government of Karnataka to transport healthcare workers and medicines, and for other emergency purposes.
- d. The Government of India's Union Health Ministry allowed the doorstep delivery of essential medicines to curb the need for movement. Many states are following this approach for large-scale immunisation as well.
- e. The Government of India provided an enabling environment for online grocery stores to deliver food and essentials to shut-in families during the ongoing lockdown. This enabled the hiring of a larger number of warehouse workers and delivery partners as online orders increased.
- f. Further, the Government of India notified all States and Union Territories to exempt e-commerce operations from any prohibitory order during the lockdown in view of the necessity to ensure smooth delivery of essential goods and services to all citizens while practicing physical distancing.



g. With the need for housing away from home on the rise due to mandatory self-isolation, hospitality aggregator Oyo offered rooms for quarantines to the Delhi government. Oyo has also offered crucial free or highly subsidised homes to medical professionals and first responders.

6.2.2. Case Study: Global Best Practices on Protecting and Leveraging the Platform Economy against Covid-19

USA

In 2020, New York City offered help to the gig workers, who were licensed with the Taxi & Limousine Commission, by getting them delivery work (Dickey, 2020). The jobs came with minimum wage guarantee, paid as much as USD 15, apart from reimbursement for gas mileage and tolls. On similar lines, delivery company Postmates had created a relief fund to support medical expenses of delivery persons affected by Covid-19 (Shieber, 2020). This provided social security to those suffering from income loss in the wake of business closures.

UK

The FinTech community in the UK came together to build a "Covid Credit", that would allow sole traders to self-certify lost income. Their aim was to extend government relief, which was otherwise meant for salaried workers, to now be expanded to the self-employed, gig workers, and small businesses through this Open Banking technology (O'Hear, 2020).

Singapore

In Singapore, Grab offered driver and delivery-partners a one-off income support of USD 500-1,000, and a reimbursement of the rental fee for drivers. Additionally, driver-partners were given a supplemental income for 90 days, through a Special Relief Fund, which consisted of a combination of daily allowance from the Government and weekly cover by Grab (Grab, 2020).

South Africa

South African startup, Yoco Card Machines accelerated the development of its remote payment product to enable transfers on its client network through weblink. Yoco is a leading payments partner for small businesses and this move benefitted them largely, with the pandemic restricting movement. It also issued a directive to clients to encourage customers to use the contactless payment option on its point of sale machines (Carraro, 2020).

China

DiDi Chuxing launched a Covid-19 insurance programme that offered medical emergency allowances to drivers who were working while other means of public transportation in China were suspended or considered unsafe. DiDi Chuxing engages 20 million drivers and delivery-partners (couriers), who were also given additional cover, through a USD 10 million Relief Fund for Covid-19 infected drivers and couriers in all the countries it operates in (BusinessWire, 2020).



Hong Kong

UberEats in Hong Kong waived off its service fee for independent restaurants and reduced it for all other restaurant partners to keep the delivery service afloat, while supporting businesses, during the first wave of the pandemic. Additionally, it provided them with the option to receive daily payments instead of weekly, in order to maintain cash flow and pay suppliers and staff (Korosec, 2020).

India

In India, a similar initiative was led by the Kerala State Civil Supplies Corporation (Supplyco) in Kochi, where they partnered with food delivery service Zomato to enlist grains and other essentials on the app. Thereafter, the payment mode was restricted to online mode only and Zomato's expertise in packaging to train their staff was leveraged as well.

On the other hand, brands such as Flipkart, BigBasket and Grofers were granted permission to service grocery requests in cities. This enabled the hiring of a larger number of warehouse workers and delivery partners as online orders increased, offsetting job losses in other sectors such as travel & tourism, sales and restaurant service to a certain extent (Shrivastava, 2020).

The Government of India, too, had notified all States and Union Territories to exempt e-commerce operations from any prohibitory order (Ministry of Home Affairs, 2020) during the nation-wide lockdown.

The evidence of social protection for platform workers across different economies of the world during the pandemic, highlights the unique nature and requirements of this new form of work. These initiatives and measures show examples of how social security can be planned at the firm level. Existing designs of social protection were insufficient in covering platform workers, who needed a range of additional interventions such as customised health insurance, daily allowances from the government to cover income loss, and accelerating development of online payments modes. This existing evidence of innovative social security provisions for platform workers not only underscores how their potential can truly be leveraged, but also indicates the need to redesign social security programmes to meet the unique demands of the changing future of work.

6.3. CONTEMPORARY CHAL-LENGES TO REGULATORY FRAMEWORK FOR GIG AND PLATFORM WORKERS: A GLOBAL ABSTRACT

Even as platformization has spread across different economies of the world, the characteristics of platform workers across nations starkly differ. As has been the case for many economic models, including the adoption of the formal-informal dichotomy, the concepts and ideas around platform economy are too being largely viewed from the lens of developed nations.

Platformization began in the US in 2008, and despite the key overlapping aspects of the work, the nature of the workforce has been remarkably different in emerging economies. While emerging and developing countries



represent 82% of world employment, 93% of the world's informal employment is in these countries (ILO, 2018). Maximum employment in the informal sector can be seen in Africa at 85.8%, followed by 68.2% in Asia and the Pacific, 68.6 per cent in the Arab States, 40.0 per cent in the Americas and 25.1 per cent in Europe and Central Asia (ibid). Below is a timeline of how the regulatory framework with respect to platform work has been evolving around the world.

6.3.1. USA

• Current size of informal workforce: 18.6% (ILO, 2018)

• Late 2000s

- + The founding of Airbnb, Uber, Snap, Facebook, Twitter, WhatsApp, Open Table catalysed the platform revolution in the second decade of the 21st century (Acs et al, 2021).
- + Platforms in the sharing economy (AirBnB, Uber) were formed in response to the global financial crisis of 2007-'09 (ILO, 2021; Hall & Ince, 2017).

• 2010 onwards

 Platform workers are treated as independent contractors, but businesses assure them benefits by working with them to create and fund their workers association (Reis & Chand, 2020, Farmer, 2020a; Isaac & Sheiber, 2016).

2019-20

- + 57 million gig workers (McCue, 2018).
- Three states New Jersey, California and Massachusetts challenge worker status.
 Worker unions demand that the workers be treated as employees (Kerr, 2019; GWC Law, 2020).
- California becomes the first state to change its labour law and grant gig workers more labour protections with Assembly Bill 5 (AB-5) (California Legislative Information, 2019), that came into effect in January 2020.
 - The law expanded the definition of an employee, making it harder for employers to classify regular workers as independent contractors, forcing companies to shift classification of these workers to employees.
 - AB-5 proposes an ABC-test to determine the employment status of workers associated with platforms and companies (DIR, 2019).
 - Under this test, a worker is considered an employee and not an independent contractor, unless the hiring entity satisfies the following three conditions (ibid):
 - i. The worker is free from the control and direction of the hiring entity with respect to the performance of the work, under the contract for the performance of the work as well as in fact;
 - ii. The worker performs work that is classified outside the usual work of the hiring entity's business; and



- iii. The worker is customarily engaged in an independently established trade, occupation, or business of the same nature as that involved in the work performed.
- The law mandates by the courts and extends labour protections like paid leave to about one million people who were formerly classified as contractors.
- Opponents say, instead of protecting them, the new law is taking away their livelihood because clients don't want to risk running afoul of the requirements for California-based freelancers (Farmer, 2020b).
- As a result AB-5 will increase labour costs, which would be transferred to the consumers and reduce the flexibility of workers.
- The Bill unintentionally affects truck drivers working as independent contractors. It makes it difficult for drivers to work for themselves. AB-5 presumes all workers are employees. Therefore, Carriers would either have to convert all independent contractors into employees, or terminate their agreements and hire a new fleet of drivers (Brin, 2021).
- By early Sep. 2020, over 100 exemptions and limitations were made to the original law (AB-5). The Sep. exemption was introduced for the benefit of the music industry workers. The practical effect is that a test different from the ABC-test would be used to determine status of workers in the music industry (Oncidi, Gold & Deserio, 2020).

2020

- Californians vote for Proposition 22 (Prop-22), one of the 12 initiatives that appeared on the ballot for votes on 3rd November 2020 along with the US presidential elections. It exempts gig companies in the ridesharing and food delivery industries from AB-5, which requires them to treat workers as employees (O'Donnell, 2020).
- Platform workers would thus remain flexible, gig-based workers while also gaining benefits like assured earnings to the tune of 120% of minimum wages and rebates on healthcare, owed by the platform/ Network Company (ibid).
- Through the Prop-22, "The Protect App-Based Drivers and Services Act" came into being and ensured that rideshare and delivery workers continue to reap benefits of flexible, gig-based work, alongside economic security.

2021

 In August 2021, Alameda Superior Court declares Prop-22 as "unconstitutional", a decision that has since been challenged (National Law Review, 2021; Bloomberg Law, 2021).

6.3.2. UK

• Current size of informal workforce: 13.6% (ILO, 2018)


- The UK is the only country to have the "worker" category between employees and the self-employed. This categorisation gives them entitlements such as national minimum wage and paid holiday, but does not give them full employment rights, such as the right to not be unfairly dismissed (PwC, 2021; Government of UK, 2021).
- Launch timeline of select platforms:
 - + 2007: PeoplePerHour
 - + 2009: AnyVan
 - + 2010: Fiverr
 - + 2011: Hailo (later, myTaxi; now, FREENOW)
 - + 2012: Uber launches in the UK; treats its workers as independent contractors
 - + 2013: TaskRabbit, Deliveroo
 - + 2015: UpWork
 - + 2016: AmazonFlex, UberEats

2016

- + The UK Government commissions Matthew Taylor, former head of ex-PM Tony Blair's policy unit, to review modern workers' rights and practices, including platform work; and to look at a range of issues, including workplace insecurity and anxiety, parental rights, access to pensions, and holiday pay (Mason, 2016).
- + Labour employment tribunal rules that Uber drivers are not self-employed and should be paid the "national living wage" and holiday pay (Osborne, 2016).

2017

- + Good Work: The Taylor Review of Modern Working Practices by Matthew Taylor, publishes its findings and recommendations
 - The report calls for a new "dependent contractor" category of worker. States that gig economy workers and those on flexible contracts should, through this new status, receive benefits such as sick pay and holiday leave (Quinn, 2017).
 - The status would also mean they are obliged to pay National Insurance contributions, which was otherwise avoided through gig workers being classified as "self-employed" (Taylor et al, 2017).
- + Uber challenges the 2016 employment tribunal ruling and loses (Davies, 2017).
 - The Independent Workers' Union of Great Britain, which backed the appeal, says drivers will still be able to enjoy the freedoms of self-employment such as flexibility in choosing shifts even if they have worker status.

2018

 The government publishes its response to the Good Work report, launches four consultations into employment status, increasing transparency in the labour market, agency and atypical workers, and enforcement of employment rights (ClarksLegal, 2019).



- The government also releases a report, *The Characteristics of those in the Gig Economy Final Report*, in February 2018. The report posits that 4.4% of the population in Great Britain had worked in the gig economy in 2017-18 (Department for Business, Energy & Industrial Strategy, 2018).
- + Uber introduces new insurance plan for its drivers and couriers across Europe, including the UK (Topham & Butler, 2018)
 - The plan to be free of cost for the drivers.
 - Drivers who have completed 150 trips in the past two months, or Uber Eats couriers who have completed at least 30 deliveries to be eligible.
 - Plan to cover £1,000 for maternal care, with sick pay for injured drivers after a week capped at £1,125 (ibid).

2019

- + The government holds three more consultations on one-sided flexibility (addressing unfair flexible working practices), establishing a single enforcement body for employment rights and proposals to support families (The Law Society, 2020).
- In the December 2019 Queen's speech, the government made its proposals to introduce an employment bill, which would include changes already anticipated by the Good Work Plan. However, no progress has been made on this front yet (Ozanne, 2021).

2021

- Growth in platform work
- 2016-'19: People performing platform work at least once a week grew from 5.8% of the working population in 2016 to 11.8% in 2019 rising to 14.7% in 2021; equivalent to approximately 4.4 million people (TUC, 2021).
- + In February 2021, the Supreme Court unanimously rules (Russon, 2021) that Uber's drivers are workers as:
 - The company controls everything, from the fare to the number of rides they can reject before being penalised.
 - Uber's drivers are working from the moment they are logged into the app, even if they are waiting for a ride, and not just when they are actively ferrying passengers.
- + In March, Uber reclassifies its 70,000 driver-partners in the UK as "workers" (Pitas, 2021).
- + New benefits under this reclassification (Davies, 2021):
 - **Minimum wage**: Uber worker will earn the minimum wage (£8.72 per hour for people aged 25+) after accepting a trip and after expenses.
 - Paid Holiday Time: With 12.07% of earnings paid out every two weeks.



- **Pension Plan**: Paid into by both Uber and the worker, if the worker is eligible (Government of UK, 2020). Here, Uber's contributions will be 3% of a driver's earnings.
- **Continuation of old benefits:** Free insurance in case of sickness or injury as well as parental payments, which have been in place for all drivers since 2018, and continued support from Uber's Clean Air Plan in London, which has so far raised over £120m for drivers switching to an electric vehicle.
- + In November, Uber challenges a small part of the Supreme Court ruling, where a judge's comments suggest the tech firm should enter into a direct contract with passengers when providing car journeys. Uber's contention is that passengers enter a contract with the drivers affiliated with Uber, while Uber maintains a contractual relationship with drivers (Milligan, 2021).
- In December, the UK High Court rules that Uber's existing business model is unlawful. The judgement has ramifications for the entire ride-hailing industry in the UK, with the potential of an indirect price rise, with Uber and others now liable for VAT, which could add up to 20% more to the cost of a trip (Lomas, 2021; Topham, 2021; Keane, 2021).

6.3.3. European Union

• The **European Union** at present has a draft underway that will reclassify platform workers as employees if their work fits certain criteria, set minimum rights for these workers, but allow countries under the EU to take forward the implementation as per their needs (Haeck, 2021a).

• The Netherlands

- + Current size of informal workforce: 9.4% (ILO, 2018)
- + In 2021, a Dutch Court rules that the legal relationship between Uber and the drivers aligns with all the characteristics of an employment relationship: work, salary and authority (Haeck, 2021b)
- + As a result, the platform will have to "employ" over 4,000 drivers and pay them by the rules of the collective labour agreement of the taxi industry (ibid).

• France

- + Current size of informal workforce: 9.8% (ILO, 2018).
- + In 2020, *Cour de Cassation*, France's top court recognises the right of an Uber driver to be considered an employee, stating that these drivers could not qualify as a selfemployed contractor because he could not build his own clientele or set his own prices, making him a subordinate of the company (Al Jazeera, 2020).

• Spain

- + Current size of informal workforce: 27.3% (ILO, 2018).
- + In 2020, Spain's top court rules that platform businesses must officially hire drivers as "employees" (Pymnts, 2021).



- + A year later, in 2021, Spain's government pledges to clarify the legal status of couriers working for online delivery firms, saying they should be considered employees rather than "gig" workers (France24, 2021).
- + Later in the year, Spain government enacts legislation that recognises riders working for delivery firms such as Deliveroo and UberEats as salaried staff. Spain becomes the first country in the EU to do so (ibid).

6.3.4. Indonesia

- Current size of informal workforce: 85.6% (ILO, 2018).
- 2015
 - + Platform economy gains attention, particularly with the popularisation of platformbased online motorbike taxi services, Ojek (Rachmawati et al, 2021).
 - + Platform businesses adopt a "partnership model" with their drivers, to offer greater freedom and flexibility in terms of hours and work arrangements. These driver partners are classified as temporary contractors (Mulia, 2021).

2018

- Platform services expand beyond ride-hailing to offer last-mile delivery and food delivery (ibid).
- The on-demand economy in Indonesia, thus, provides workers with an alternative to existing low wages and underemployment in the informal economy (Fanggidae, V. et al, 2018).

2021

- + No-work strikes are carried out by drivers/couriers working with platform businesses, to express dissatisfaction with low incentive schemes (Mulia, 2021).
- + Youth organisation, Emancipate, initiates an online petition, which will be sent to the Manpower Minister, on getting 10,000 signatories. The petition demands new regulations to ensure decent income schemes, humane workloads, labour rights, and legal assistance when needed for couriers (ibid).

6.3.5. India

- Current size of informal workforce: 92.5% (Ramana Murthy, 2019; NCEUS, 2007)
- **2017**
 - + The Delhi Commerce Driver Union, representing 1.5 lakh drivers in the city, moves High Court seeking employee status (NDTV, 2017).
 - + The Court directs the central government, as well as the state government to clarify their stand on the issue of worker classification. The case is moved to an employment tribunal where it is pending (Surie, 2018).



2019-2020

- + The government introduces the Code on Social Security 2020. The Code acknowledges gig and platform workers outside the traditional employer-employee arrangement.
- + The Union Road Transport Ministry issues fresh guidelines for motor vehicle aggregators that regulates working conditions for the platform drivers (Singh, 2020c).
 - The driver should receive 80% of the fare from each ride, 20% will go to the aggregator.
 - The aggregator will be allowed to charge only 50% lower than the base fare.
 - Drivers to not be permitted to work for more than 12 hours in a day.
 - Companies to provide them insurance cover (ibid).

2021

- During the Budget 2021-22, the Finance Minister announces that minimum wages will apply to all categories of workers, including the gig and platform workers, and that they will be covered by Employee State Insurance Corporation (ESIC) (Khan, 2021).
- The Ministry of Labour and Employment launches the e-Shram portal, which will register unorganised workers to create a centralised database seeded with Aadhaar. The portal would have the following benefits (Ministry of Labour & Employment, 2021):
 - After registering, the worker will get an Accidental Insurance cover of INR 2 Lakhs under the *Pradhan Mantri Suraksha Bima Yojana* (PMSBY) and premium for the first year will be borne by the Ministry of Labour & Employment²⁴.
 - In future, all the social security benefits of unorganised workers will be delivered through this portal. In emergency and national pandemic like situations, this database may be utilised to provide necessary assistance to the eligible unorganised workers.
- + A petition is filed in the Supreme Court of India, urging the Court to direct the Government to extend social security benefits to "gig and platform workers" engaged with Ola Cabs, Uber, Zomato and Swiggy, and have them treated as employees ("workman" under existing laws) (Singh, 2021; Suryam, 2021).
- The petition is jointly filed by a registered union and a federation of trade unions representing app-based transport and delivery workers, and two individual drivers who have worked with Ola Cabs and Uber.
- + The Supreme Court seeks response from the Centre on the plea. Matter to be heard in 2022 (Roy, 2021).



²⁴ E-SHRAM portal: Frequently Asked Questions, Q8 and Q21.

Apart from the above mentioned countries, other countries such as Italy, Uruguay, Australia and New Zealand, that have a significant presence of the platform economy, are also in midst of debates around the classification of platform workers (Armellini & Sage, 2021; Carli, 2021; Healey, 2021).

The proportion of informal workforce is remarkably high in the global South, as compared to the global North. Whereas countries like the USA (18.6%), UK (13.6%), and Spain (27.3%) have a relatively small informal sector, the global South paints a contrasting picture with India (93%), Indonesia (85.6%), and China (54.4%) (ILO, 2018) showing high levels of informality. Not only is the proportion of informality higher in these nations, but their enormous population further adds to their existing structural insecurities.

In countries of the global North, webbased jobs are performed by a low-skilled workforce, whereas, in the global South, these jobs are carried out by relatively more skilled professionals (Tabares, 2019). In terms of preference for independent work, only 20 to 30% of the working age population in the United States and European Union opted for it. Within them, over half the individuals engaged in order to supplement their income from traditional jobs, and around 30% chose them out of necessities such as inability to find a traditional job (McKinsey, 2017). On the other hand, in emerging economies of the global South that witness a high degree of informalisation, access to traditional jobs is limited and independent or informal work is a more prevalent option.

In the light of the above evidence, it can be seen that the purpose of platform jobs is markedly different in the global North and global South; and hence the structural challenges may also differ. As evidenced in Indonesia, since the advent of platform work in 2015, the number of mobility sector workers increased by 5,00,000 within a year (Rachmawati et al, 2021). Consequently, Indonesia's unemployment rate fell from 6.18% to 5.61% in that duration (ibid).

The on-demand economy provides workers with an alternative to existing low wages and underemployment in the informal economy, as seen in Indonesia (Fanggidae, V. et al, 2018). Additionally, individuals may have greater flexibility and choice of work and gain additional benefits, which otherwise informal sector workers are deprived of. In the UK, for instance, even before being classified as "worker", platform workers enjoyed several benefits, such as free insurance in case of sickness or injury, parental payments which have been in place for all drivers since 2018, and continued support from Uber's Clean Air Plan in London, which has so far raised over £120m for drivers switching to an electric vehicle (Davies, 2021).

It is clear that the need of the hour is to acknowledge the unique features of a platform worker. In such an event, the worker entitlements for platform economy must also be designed specifically to cater to their unique requirements.

6.4. BEST PRACTICES

This section throws light on some of the best practices followed by countries in providing entitlements to platform workers, without compromising on their worker classification status. These practices can serve as a blueprint for the rest of the world in shaping the social security ecosystem with the changing future of work.

6.4.1. Indonesia

Indonesia is one among the few countries globally that has adapted its regulatory frameworks and enforcement mechanisms to ensure social protection coverage for platform



workers. Indonesia has introduced a digital mechanism to securitise digital platforms commonly used for motorcycle taxi rides in the country. When using the application, a small amount of the tariff is automatically deducted for accident insurance of both the driver and the passenger for the length of the trip (ILO, 2018).

Indonesia's Further, social insurance administration organisation called Badan Penyelenggara Jaminan Sosial(BPJS) has introduced a set of reforms that address the exclusionary design of conventional worker entitlement policies tied to status of employment. The two key schemes introduced by BPJS are - BPJS Kesehatan for universal health insurance and BPJS Ketenagakerjaan for worker insurance. The latter offers affordable future protection and guarantees to the workers (Yoel & Hasym, 2021).

On registering as a member of BPJS Ketenagakerjaan, workers get access to three types of insurance: Old-Age Insurance (Jaminan Hari Tua or JHT), Work Accidental Insurance (Jaminan Kecelakaan Kerja or JKK), and Death Insurance (Jaminan Kematian or JKM). The eligibility for such schemes was limited to company workers, under the Jaminan Sosial Tenaga Kerja (Jamsostek or Social Insurance for Workers). However, since the scheme has been rechristened to BPJS Ketenagakerjaan, it has expanded its scope to include even those who have a job outside of a work relationship such as traders, fishermen, bloggers, artists, athletes, motorcycle taxi drivers, gig workers and other independent workers (ibid).

Moreover, independent workers can get greater cover under BPJS' Non-Wage Recipient (*Bukan Penerima Upah* or BPU) program, getting access to guarantees from BPJS *Ketenagakerjaan* and also the same facilities as workers in the formal sector. Some of the benefits under BPU cover are – care and medical facilities if a worker meets with an accident at work, full cover for three months in case a worker is unable to work as a result of an occupational disease or work accident (ibid).

In order to fund social security programmes and mitigate the economic impact of the pandemic, in 2020, Indonesia has imposed a 10% value-added tax on digital services by non-resident companies provided (Yu, 2020). Even though there was no specific assistance programme for the online ojek drivers, the government provided financial assistance to them through its direct cash assistance programme, Bantuan Langsung Tunai (BLT). The programme assisted those whose earnings were impacted by the pandemic, by providing cash (US\$ 43) per month for three consecutive months (Rachmawati et al, 2021).

6.4.2. Uruguay

Uruguay has an application to facilitate mandatory social security coverage for all taxi drivers, including those operating through online platforms, which builds on its efforts of simplified tax and contribution collection mechanisms for the self-employed and micro-enterprises (ILO, 2018).

Self-employed individuals and small businesses that are eligible for Monotax (unified contributions) can either choose to pay that on the revenue generated by their activities (called "Monotributo" in Uruguay), or contribute to ordinary social security and taxes (except import taxes) (ILO, 2014). These Monotax contributions are collected by the Uruguayan Social Security Institute (BPS) that transfers a proportion to the fiscal authority. The remaining amount is used by the BPS to finance social security benefits for those affiliated through the scheme and their families. Monotax members can also include



one-person businesses, for whom the Social Monotax (Monotributo Social MIDES) has been created. This Social Monotax can also be availed by individuals in households earning below the poverty line or in situations of socioeconomic vulnerability (ILO, 2014).

Uruguay has, thus, introduced adapted mechanisms for its platform workers. In its G20 document on social protection, the ILO notes, "Where such mechanisms are part of the general social insurance scheme or foresee portability arrangements, workers transitioning from one form of employment to another, or combining different types of employment, will not see their social security coverage interrupted or reduced. At the same time, the coverage of this type of worker helps to ensure a level playing field and a fair competitive environment among economic actors in the "old" and "new" economy." (ILO, 2018)

6.4.3. India

The Ministry of Labour and Employment, Government of India, in August 2021, launched the e-SHRAM portal. The portal is a first-ever national database of unorganised workers, including construction workers, gig and platform workers, migrant workers, among others (PIB, 2021b). The centralised database, seeded with Aadhaar, will give the registered workers access to an Accidental Insurance cover of INR 2 lakhs under the Pradhan Mantri Suraksha Bima Yojana (PMSBY). The premium for the first year will be borne by the Ministry of Labour & Employment for this scheme. The government envisages e-SHRAM as a unified window, wherein all future social security benefits of unorganised workers will be delivered through this portal. In emergency and national pandemic situations, this database will be utilised to provide necessary assistance to the eligible unorganised workers (Government of India, 2021).

As of March 2022, more than 27 crore informal workers have registered on the portal, of which 52% were from the agricultural sector, domestic and household workers (9.9%) and construction workers (9.1%) (e-SHRAM dashboard, 2022). When coupled with CoSS 2020, e-SHRAM portal can expand the scope of social security by giving a large number of platform workers access to government sponsored schemes. The blueprint and operationalising of CoSS 2020 have been discussed at length in the following section.

6.4.4. CoSS 2020: Expanding the Scope of Social Security

Expanding the scope of social security, the Code on Social Security 2020 defines it as "the measures of protection afforded to employees, unorganised workers, gig workers and platform workers to ensure access to health care and to provide income security, particularly in cases of old age, unemployment, sickness, invalidity, work injury, maternity or loss of a breadwinner by means of rights conferred on them and schemes framed, under this Code." The Code also provides for the setting up of a Social Security Fund for social security benefits to gig and platform workers with contributions from aggregators/ platforms (between 1-2% of annual turnover), workers and the government. (Ministry of Labour and Employment, 2020a).

The Code, therefore, acknowledges gig and platform workers as a distinct category. Extending social security to those associated in non-traditional work relations such as platforms is key to addressing the social security gap in India and elsewhere. The RAISE framework presented in the box below presents a five-pronged approach to operationalising the Code on Social Security (CoSS) 2020, as Central and State governments formulate the rules under CoSS 2020.



RAISE approach to operationalising CoSS 2020

As Central and State governments formulate rules under CoSS 2020, they could adopt the five-pronged **RAISE approach** to ensure realisation of full access to social security for all gig and platform workers²⁵ (Ramachandran, Raman & Singh, 2021).

<u>Recognise the varied nature</u> of platform work to design equitable schemes

Platform businesses within and across industries are inherently different in their nature of work. To elaborate, the business model and revenues of a rideshare platform could vary based on the services being aggregated, the size and scale of operations of the platform, the specific segments of workers and customers the platforms cater to (e.g: all-women rideshare platforms catering to women customers alone), etc.

Further, platform workers can be associated with multiple platforms simultaneously or in different time periods through the year and through their lifetime. Additionally, an individual could be both a platform worker and employed in the organised or unorganised sectors simultaneously.

These factors should be taken into consideration while designing schemes that determine the contribution of funds to the central social protection corpus. In so doing, the government can ensure that schemes are inclusive and afford maximum coverage for workers, and platforms of all sizes and revenues are able to protect workers while also continuing their business. This would also ensure flexibility of the worker to engage with multiple kinds of work and achieve greater income security.

<u>Allow augmentation of social</u> security through innovative financing mechanisms

Social security schemes must be designed in a way that allows platform workers the choice to avail additional social protection cover such as health or life insurance through financial institutions like insurance companies, banks, NBFCs, new-age FinTech businesses, etc.

Today, FinTech companies are making insurance accessible and affordable to platform workers and blue-collared workers across industries (Mishra, 2020). By adding millions of youngsters to the pool of those insured, such micro-insurance, techpowered initiatives are lowering the risk and the insurance premium by extension.

For platform workers who shall be protected under the Code on Social Security, the option of choosing top-ups empowers the worker to secure cover for other beneficiaries apart from the ones covered in the scheme, and also cater to healthcare expenses not covered by the government schemes. Therefore, platform workers should be allowed to top up insurance limits through voluntary additional premiums in the public or the private sectors.

Additionally, the government can leverage the e-SHRAM portal to combine products like the National Pension Scheme, Atal Pension Yojana with insurance and a liquid mutual fund.



²⁵ The following is an excerpt from Issue Brief, "Reimagining Social Protection in the 21st century: Operationalising the Code on Social Security 2020', by the Ola Mobility Institute (Ramachandran, Raman & Singh, 2021) reproduced with permission.

Incorporate, while designing schemes, the specific interests of platforms, factoring the impact on job creation, platform businesses and workers

The very nature of platform work has ensured the creation of millions of livelihood opportunities, giving workers the flexibility to increase their incomes from multiple jobs. Furthermore, platforms may not be limited to only one business and could have multiple businesses that may or may not engage platform workers. Therefore, scientifically rigorous methods for social security coverage are needed that would promote job creation and ensure minimum burden on both workers and platform businesses.

Support workers to subscribe to government schemes and welfare programmes through widespread awareness campaigns

Information, Education and Communication are key to increasing the awareness and utilisation of social security schemes. As the Code on Social Security 2020 is operationalised, gig and platform workers too need to be updated with all relevant social security benefits they can avail. The schemes must detail strong awareness programmes in a manner that government information reaches each and every worker. Effective and widespread communication is essential to raise awareness and ensure every worker in India is truly protected

Ensure benefits are readily accessible to workers

Platform workers are mobile i.e. they can simultaneously work on multiple platforms or in different states at different time periods. They can also work in the. organised or unorganised sectors on the side. Such mobility makes workers vulnerable to local-level policy differences in accessing complete social security benefits. Therefore, to ensure that benefits are easily accessed by workers, universal and portable social security measures are important.

Here, India should leverage technology. India is a global trailblazer in fostering digital financial inclusion through the unique IndiaStack platform for financial transactions and Direct Benefit Transfers.

Likewise, while operationalising CoSS 2020, layering technology through all the stages of accessing a scheme would streamline distribution of funds. Harnessing the power of technology, disbursement of funds and grievance redressal can be achieved for the digitally-proficient platform workers across India. The recently launched e-SHRAM portal achieves the goals of facilitating ready access to social security benefits to workers as well as ensuring social protection is portable.

6.5. POLICY RECOMMENDATIONS

Create Specific Policies to Promote the Gig and Platform Economy and Protect Workers

India requires a framework that balances the flexibility offered by platforms while also ensuring social security of workers.

The consequent platformization of work has given rise to a new classification of labour platform labour — falling outside of the purview of the traditional dichotomy of formal and informal labour. Apart from impetus through digitalisation, operating outside the traditional "employer-employee" relationship enables platforms to scale within and across



geographies as well as sectors. Policies designed by platform firms and governments need to keep in mind specific characteristics of workers in these sectors. Based on good practices identified in the previous sections, the following suggestions are made for framing policies and measures that can be implemented by different stakeholders viz. the platform firms, other private sector actors, civil society organisations, and the government, among others.

- Measures for Paid Sick Leave, Health Access and Insurance: As illustrated in section 6.2.1, as a part of initiatives introduced to mitigate the challenges posed by the Covid-19 pandemic platform firms such as Ola, Uber, Urban Company, Swiggy, Zomato, Dunzo, Flipkart, Big Basket, and Delhivery provided sick leave, health access and insurance covering medical expenses of workers and their families. Such measures for paid sick leave, health access and insurance may be adopted by platforms as a part of their workplace or work-engagement policies for all the workers they engage. This will have positive implications for offering a social security cover to platform workers engaged by these firms.
- \bigcirc **Occupational Disease and Work** Accident Insurance: As illustrated in section 6.3.4, Indonesia is among the few countries globally that has adapted its regulatory frameworks and enforcement mechanisms to ensure social protection coverage for platform workers. Indonesia has introduced a digital mechanism securitise digital platforms to commonly used for motorcycle taxi rides in the country. When using the application, a small amount of

the tariff is automatically deducted for accident insurance of both the driver and the passenger for the length of the trip. Ride-hailing, delivery and e-commerce and other platforms may adopt such a model for providing accident insurance to all delivery and driver partners across India. Indonesia's social insurance administration organisation has introduced an insurance programme for gig and platform workers. Some of the benefits under the programme are care and medical facilities if a worker meets with an accident at work, full cover for three months in case a worker is unable to work as a result of an occupational disease or work accident. It may be explored to introduce such an insurance programme that provides social security support to workers in the case of health emergencies and accidents. These may be offered in collaboration with the private sector or government, as envisaged under the Code on Social Security, 2020.

Retirement/Pension Plans and Contingency Other **Benefits:** As illustrated in the section on international regulations for gig and platform workers, in the U.K., the Supreme Court ruling in February 2021 led to the reclassification of Uber's driver-partners in the UK as "workers". New benefits under this reclassification included a minimum wage, paid holiday time, a pension plan (paid into by both Uber and the worker), continuation of oldage benefits introduced since 2018 such as free insurance in case of sickness or injury as well as parental payments and platform company's support for drivers switching to an



electric vehicle. On similar lines, gig and platform firms need to adopt policies that offer old age/retirement plans and benefits and other insurance cover for contingencies such as injury arising from work that may lead to loss of employment and income. Such plans and policies may be uniquely designed by a firm, in partnership with insurance companies, or could be designed and offered in collaboration with the government, as envisaged under the Code on Social Security, 2020.

- Support to Workers in a Situation \odot of Irregularity of Work: The example of New York City offering help to gig workers in 2020 is illustrated in section 6.2.2, who were licensed with the Taxi & Limousine Commission, by getting them delivery work that came with a minimum wage guarantee. On similar lines, such an initiative may be incorporated by gig and platform firms to provide income support to workers. This will be a critical step in providing assured minimum earnings and social security from income loss in the wake of uncertainty or irregularity in work.
- Supporting Small Businesses & \bigcirc Entrepreneurs associated with Platforms: As illustrated in section 6.2.1, as a part of initiatives introduced to mitigate the challenges posed by the Covid-19 pandemic, Urban Company extended interest-free business advances and delayed payback periods to protect the gig workers, self-employed and small businesses engaged with them. Kerala State Civil Supplies Corporation in Kochi partnered with food delivery service Zomato to enlist grains and other essentials on the app. Following such examples, small businesses and entrepreneurs can be encouraged to have linkages with platforms to expand outreach for their products and services.
- Contingency Cover out of a Corpus Fund: As illustrated in section 6.2.1, in order to support auto-rickshaw, cab, kaali-peeli and taxi drivers to mitigate the effects of the Covid-19 lockdown on their income, Ola created a corpus of INR 20 Cr, called the "Drive the Driver Fund". Measures such as offering a social security cover out of a corpus fund can help support gig and platform workers and other self-employed individuals associated with the gig and platform sector in case of contingencies.







The Future of the Platform Economy – A Research Agenda

As the gig-platform economy grows, there is a burgeoning interest from all quarters to study its impact on the microeconomic and macroeconomic levels. While this report estimates the size of the gig-platform workforce in India, demystifies the impact of platformization on livelihoods in urban India, outlines the characteristics of platform labour and workers, and presents evidence on its innovative practices to drive social and financial inclusion, further research is needed to improve our collective understanding of the platform economy.

This chapter, therefore, outlines important questions for future research.

7.1. THE SURVEY OF SMALL PLATFORMS

The WESO 2021 report by the ILO notes that India – like the rest of the world – witnessed an exponential growth in digital platforms in the last decade. At approximately 8% of the world's platforms, the number of platforms in India is estimated to have increased from 10 or fewer in 2010 to over 60 in 2020 (ILO, 2021). While the report does not provide a comprehensive list of platforms in India even in the common categories of online (a) web-based work, (b) passenger mobility, (c) hyperlocal deliveries, and (d) professional



home services, journalistic accounts mention widespread platformization of domestic work, gardening, elder care, mechanic work, at-home care, among others. For instance, Delhi and Bengaluru had at least over 17 digital platforms for domestic work as of late 2019 (Tandon & Rathi, 2019). In the late 2010s, several home cook aggregator platforms too were launched in metro cities across the country. Thus, numerous platforms of varying sizes across all the professions listed above are present in India. Their varied sizes warrant suitable policy action, with no one-size-fitsall approach.

For instance, while a large platform might have the wherewithal to contribute substantially to social security, a small platform business with limited funding or revenues may find it prohibitively expensive to pay the necessary welfare fees or taxes. Thus, a differentiated approach is warranted to ensure that platforms of all sizes survive and thrive. At present, the regulatory debate around platform businesses takes a blanket approach of treating all businesses the same. However, the functioning and issues of small platform businesses are not the same as those of their bigger counterparts. Applying uniform regulations and policy interventions without accounting for how their impact may vary according to the size of a platform, would prove to be detrimental to the growth of smaller businesses.

In this context, there is a need to conduct a big survey of small platforms in India, enumerating all platform businesses in the country, ranking them by size, delineating their characteristics based on a systematic analysis, and recommending policy measures for their growth in the years to come. As has been India's experience with the Micro, Small, Medium Enterprise (MSME) sector, small firms unlock jobs in the millions and contribute substantially to the economy. They need to be strengthened by leveraging technology, improving their efficiencies, etc., all of which can be addressed through platformization.

7.2. WOMEN-RUN PLATFORMS

Women-run firms in the platform economy have been fairly successful in attracting and retaining women workers over the past few years. They adopt comprehensive measures to catalyse the participation of women in the economy. However, they do not scale as rapidly as their counterparts in India. Studies have documented their challenges from limited network effect to heightened safety and security concerns women face in public spaces (IFC, 2018; IFC, 2020; Raman, Ramachandran & Sindhu, 2021).

Therefore, greater information is needed to understand the difficulties faced by womenrun platforms. Extensive research into this domain would help design incentives to promote their growth and help them scale up.

7.3. ARE PLATFORMS FORMALIZING OR INFORMALIZING THE ECONOMY?

There is also an urgent need to explore the question being asked globally, on whether platforms formalise or informalise the economy? Formalising the economy can be viewed from the lens of the firm and establishment or lens of labour. The former pertains to the financial aspect of a business; whether or not it pays taxes, files paperwork with regularity, etc. This is about standardising and bringing structure at the enterprise level. The labour perspective refers to conditions of work and the status of workers engaged by the firms under investigation. Therefore, the labour view is all about formalising everyday



work practices and including workers in the formal work processes (Castells & Portes, 1989; Unni, 2018; Sehrawat, et al, 2021).

In this backdrop, a pan-India study on the formalising or informalising effects of the platform economy must be undertaken. It should also be determined if the effects vary based on the degree of urbanisation, among other factors. Such a heightened understanding of the platform economy will enable India to protect workers suitably while also creating an enabling environment for the sustainable growth of the platform economy.

7.4. CONTRIBUTION OF THE PLATFORM ECONOMY TO INDIA'S GDP

This report presents an indirect approach to estimate the growth in the size of the gig-platform economy and its contribution to India's economic output. Alternative approaches grounded in actual data of the number of workers wearing the platform labour hat are necessary. Furthermore, estimates, the using these platform economy's contribution to India's GDP must be determined. This exercise may also enable India to unpack the pace at which platformization is occurring across industries and what enablers and barriers might be causing the same.







References

- Abraham, V. & Sasikumar, S.K. (2017). Declining wage share in India's organized manufacturing sector: Trends, patterns and determinants. ILO Asia-Pacific Working Paper Series (2017): 67. https:// www.ilo.org/wcmsp5/groups/public/—asia/—-ro-bangkok/—-sro-new_delhi/ documents/publication/wcms_614777.pdf
- 2. Abraham, R., & Shrivastava, A. (2019). How comparable are india's labour market surveys. Report, Centre for Sustainable Employment, Azim Premji University
- 3. Acs, Z.J., Song, K., Szerb, L. & Audretsch, D.B. (2021). *The Evolution of GLobal*

Digital Platform Economy 1971-2021. Research Gate. January 2021. https://www. researchgate.net/publication/350237835_ The_Evolution_of_the_Global_Digital_ Platform_Economy_1971-2021/link/60766ade4585151ce182fc7c/download

- ADB. (2005). Labour Markets in Asia: Promoting Full, Productive, and Decent Employment – Key Indicators. Asian Development Bank. www.adb.org/documents/books/key_indicators/2005/
- Agewell Research and Advocacy Centre. (2019). Status of Social Security & Social Protection Floors in India.



With special focus on older persons. Agewell Foundation. March 2019. https://social.un.org/ageing-workinggroup/documents/tenth/Social-Securityin-India-2019.pdf

- Ahmed, I.S., Bidwell, N.J., Zade, H., Muralidhar, S.H., Dhareshwar, A., Karachiwala, B., Tandong, C.N. & O'Neill, J. (2016). *Peer-to-peer in the Workplace: A View from the Road*. In Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems. 5063 – 5075.
- AISHE. (2019). All India Survey on Higher Education 2018-19, Government of India. Department of Higher Education, Ministry of Human Resource & Development. https://www.education.gov.in/sites/ upload_files/mhrd/files/statistics-new/ AISHE%20Final%20Report%202018-19.pdf
- Akolawala, T. (2021). How Dunzo Achieved 40x Growth in India in Two Years. Gadgets 360 – NDTV. March 3, 2021. https://gadgets. ndtv.com/apps/features/indian-startups-101-dunzo-ceo-co-founder-kabeerbiswas-all-you-need-to-know-2382255
- 9. Alawadhi, N. & Abrar, P. (2021). Zomato's revenue from operations doubles to Rs 2,604 cr amid pandemic. Business Standard. April 28. 2021. https:// www.business-standard.com/article/ companies/failure-of-govt-stepsvaccinations-may-cause-economicdisruption-zomato-121042800994_1.html
- Al Jazeera. (2020). France recognises Uber driver's rights in blast to 'gig economy'. March 04, 2020. https://www. aljazeera.com/economy/2020/3/4/francerecognises-uber-drivers-rights-in-blastto-gig-economy
- Anant, T.C.A., R. Hasan, P. Mohapatra,
 R. Nagraj, and S.K. Sasikumar (2006).
 Labour Markets in India: Issues and

Perspectives. In Jesus Felipe and Rana Hasan (eds.), Labour Markets in Asia: Issues and Perspectives, Asian Development Bank and Palgrave Macmillan, London. https://link.springer. com/chapter/10.1057/9780230627383_5

- Apurva, P. (2019). Dunzo introduces bicycle for delivery, welcomes new partners aboard. YourStory. August 21, 2019. https://yourstory.com/2019/08/ dunzo-bicycle-delivery-partners/amp
- Armellini, A., Alexandria, S. (2021). Italy fines Uber and food apps, says couriers are employees. Tech Xplore. February 24, 2021. https://techxplore.com/news/2021-02-italy-fines-uber-food-apps.html
- 14. ASSOCHAM & Primus Partners. (2021). *The rising gig economy of India*. https:// www.primuspartners.in/admin/uploads/ documents/The%20Rising%20GIG%20 Economy%20Of%20India-09-21-06.pdf
- 15. Balaji. (2019). How Amazon India is promoting inclusivity by employing People with Disabilities at its silent stations. YourStory. November 29, 2019. https://yourstory.com/socialstory/2019/11/ amazon-india-inclusive-workplacedisabled-delivery
- Balakrishnan, R. (2019). How this housewife became a top seller on Myntra and made Rs 3.4 Cr this year. YourStory. October 4, 2019. https://yourstory.com/ herstory/2019/10/housewife-fashionseller-walmart-flipkart-myntra-jabong
- Balasubramanian, M. (2015). Mapping 17. of social dialogue institutions and labour administration frameworks in Tamil Nadu. ILO-VVGNLI National Tripartite Seminar: Enhancing Labour Administration's Performance and Strengthening Tripartite Social Dialogue: Session - 3 Presentations. November https://www.ilo.org/wcmsp5/ 1. 2015.



groups/public/—-asia/—-ro-bangkok/—sro-new_delhi/documents/presentation/ wcms_420565.pdf

- 18. Ballal, S. (2020). Coronavirus has highlighted India's healthcare crisis: Here's how we can resolve it. The Economic Times. October 12, 2020. https:// economictimes.indiatimes.com/wealth/ insure/health-insurance/coronavirushas-highlighted-indias-healthcarecrisis-heres-how-we-can-resolve-it/ articleshow/78588320.cms
- Barrios, J.M., Hochberg, Y.V. & Yi, H.L. (2020). Launching with a Parachute: The Gig Economy and Entrepreneurial Entry. University of Chicago, Becker Friedman Institute for Economics Working Paper No. 2020-21. March 16, 2020. Available at SSRN: https://ssrn.com/abstract=3557279 or http://dx.doi.org/10.2139/ssrn.3557279
- 20. BCG and Michael & Susan Dell Foundation. (2021). Unlocking the Potential of the Gig Economy in India. March 2021. https:// media-publications.bcg.com/India-Gig-Economy-Report.pdf
- Bedi, T. (2016). Taxi Drivers, Infrastructures, and Urban Change in Globalizing Mumbai. City & Society. Volume 28 Issue
 December 2016. https://doi.org/10.1111/ ciso.12098
- Benner, C. et al. (2020). On-demand and On-the-edge: Ride-hailing and delivery workers in San Francisco. UC Santa Cruz. Institute for Social Transformation. May 5, 2020. https://transform.ucsc.edu/wpcontent/uploads/2020/05/OnDemand-n-OntheEdge_MAY2020.pdf
- Berg, J., Furrer, M., Harmon, E., Rani, U., & Silberman, M. S. (2018). Digital labour platforms and the future of work. Towards Decent Work in the Online World. Rapport de l'OIT.

- 24. Bhakta, P. (2019). Avail Finance gets \$9 million more from Matrix. The Economic Times. June 04, 2019. https:// economictimes.indiatimes.com/smallbiz/startups/newsbuzz/avail-finanacegets-9-million-more-from-matrix/ articleshow/69642454.cms
- 25. Bhalla, S., Kaur, R. (2011). Labour Force Participation of Women in India: Some facts, some queries. London School of Economics Asia Research Centre. http:// eprints.lse.ac.uk/38367/1/ARCWP40-BhallaKaur.pdf
- 26. Bijapurkar, R. (2019). Why India needs its own definition of what it means to be a 'millenial'. December 31, 2019. Live Mint. https://www.livemint.com/ news/india/why-india-needs-its-owndefinition-of-what-it-means-to-be-amillennial-11577809636255.html
- 27. Bloomberg. (2019). India insight: \$10 trillion GDP by 2030? Not quite, but almost. October 2, 2019. https://www. bloomberg.com/professional/blog/indiainsight-10-trillion-gdp-by-2030-not-quitebut-almost/
- 28. Bloomberg Law. (2021). Prop. 22 Backers Appeal Ruling Striking California Gig Work Law (1). September 23, 2021. https:// news.bloomberglaw.com/daily-laborreport/prop-22-backers-appeal-rulingstriking-california-gig-worker-law
- 29. Borooah, V. K. (2005). *Caste, Inequality and Poverty in India*. Review of Development Economics, Vol. 9, No. 3, pp. 399-414.
- 30. Brin, D.W. (2021). Ruling Threatens Independent Trucker Business Model in California. Society for Human Resource Management (SHRM). June 03, 2021. https://www.shrm.org/resourcesandtools/ legal-and-compliance/state-and-localupdates/pages/ruling-threatens-inde-



pendent-trucker-business-model-in-calif. aspx

- 31. BusinessWire. (2020). DiDi Provides Update on Covid-19 Relief and Recovery Initiative. April 24, 2020. https://www.businesswire.com/news/ home/20200424005555/en/DiDi-Provides-Update-on-Covid-19-Relief-and-Recovery-Initiatives
- 32. BusinessWire. (2021). Dunzo Is Building India's Largest Quick Commerce Platform with Dunzo Daily. June 21, 2021. https://www.businesswire.com/ news/home/20210621005439/en/Dunzo-Is-Building-Indias-Largest-Quick-Commerce-Platform-with-Dunzo-Daily
- 33. California Legislative Information. (2019). *AB-5 Worker status: employees and independent contractors.* September 09, 2019. https://leginfo.legislature.ca.gov/faces/bill-TextClient.xhtml?bill_id=201920200AB5
- 34. Cannon, S. (2019). Look for a new class of start-ups to provide gig worker benefits. Financial Times. https://www. ft.com/content/51663ec0-2868-11e9-9222-7024d72222bc
- 35. Caribou Digital. (2020). The Experience of Platform Livelihoods in the Global South: A literature review. PlatformLivelihoods, October 20, 2020. https://www. platformlivelihoods.com/wp-content/uploads/2020/10/QYDEL-v1.01.pdf
- Carli, F.R. (2021). Match Point: Uruguayan Labor Appeal Court Establishes that Uber Drivers Are Dependent Workers. Brill. July 13, 2021. https://brill.com/ view/journals/ilrc/7/2/article-p235_235. xml?language=en
- Carraro, M. (2020). How are inclusive FinTech startups responding to Covid-19?. BFA Global. April 8, 2020. https://bfaglobal.com/catalyst-fund/

insights/inclusive-FinTech-supportingworlds-most-vulnerable-covid-19/

- 38. Castells, M. & Portes, A. (1989). World underneath: The informal economy: Studies in advanced and less developed countries. Chapter: The origins, dynamics, and effects of the informal economy. John Hopkins University Press. (January 1989). https://www.wiego.org/publications/ world-underneath-origins-dynamicsand-effects-informal-economy
- 39. Chakraberty, S. (2020). Helping People Claim Benefits is Good Business. LiveMint, October 11, 2020. https://www. livemint.com/news/business-of-life/ helping-people-claim-benefits-is-goodbusiness-11602426055194.html
- 40. Chen, M.A. (2012). *The Informal Economy: Definitions, Theories and Policies*. WIEGO Working Paper No 1, Cambridge, MA, USA. https://www.wiego.org/sites/default/files/ publications/files/Chen_WIEGO_WP1.pdf
- Chopra, A. (2016). Ola Partners With NSDC To Train 100K Drivers, Commits \$14 Mn In The Next 3 Years. December 19, 2016. INC42. https://inc42.com/buzz/ ola-nsdc-partnership/
- 42. Chowdhry, B. & Tantri, P. (2020). Protect poor by creating jobs in formal sector. The New Indian Express. May 8, 2020. https://www.newindianexpress.com/ opinions/2020/may/08/protect-poor-bycreating-jobs-in-formal-sector-2140563. html
- 43. Churchill, C. & Bhardwaj, G. (2020). *Retirement Plan: Why don't the working poor save for old age?.* The Financial Express. June 4, 2020. https://www. financialexpress.com/opinion/retirementplan-why-dont-the-working-poor-savefor-old-age/1980420/



- 44. Clark, A. (2020). Uber, Gig Companies Seek Labor Deals to Avoid Workers Becoming Employees. The Wall Street Journal. December 30, 2020. https://www.wsj. com/articles/uber-gig-companies-seeklabor-deals-to-avoid-workers-becomingemployees-11609334051
- ClarksLegal. (2018). Government response to Taylor Review. February 9, 2018. https://www.clarkslegal.com/Blog/ Post/Government_response_to_Taylor_ Review_
- 46. Consultative Group to Assist the Poor (CGAP). (2021). Call for Expressions of Interest: Financial Services for Digital Platform Workers in Emerging Markets. September 1, 2021. https://www.cgap.org/ news/call-expressions-interest-financialservices-digital-platform-workersemerging-markets
- 47. Dalmia, N., Goel, G. (2020). India must urgently address gaps in its skilling vision; else Covid pain will be lot worse for job-seekers. August 14, 2020. Financial Express. https://www.financialexpress. com/opinion/india-must-urgentlyaddress-gaps-in-its-skilling-vision-elsecovid-pain-will-be-lot-worse-for-jobseekers/2054505/
- Davidov, G. (2016). The status of Uber drivers: A purposive approach. Spanish Labour Law and Employment Relations Journal (2017), Forthcoming (2016), 17 – 7
- 49. Davies, C. (2021). Uber 'willing to change' as drivers get minimum wage, holiday pay and pensions. BBC. March 17, 2021. https:// www.bbc.com/news/business-56412397
- 50. Davies, R. (2017). Uber loses appeal in UK employment rights case. The Guardian. November 10, 2017. https:// www.theguardian.com/technology/2017/ nov/10/uber-loses-appeal-employmentrights-workers

- 51. Deakin, S., Marshall, S., & Pinto, S. (2020). Labour Laws, Informality and Development: Comparing India and China. Centre for Business Research, University of Cambridge Working Paper No. 518.
- 52. https://www.cbr.cam.ac.uk/wp-content/ uploads/2020/08/wp518.pdf
- 53. Dell & IFTF. (2018). *Realising 2030: A Divided Vision of the Future*.https://www. delltechnologies.com/content/dam/del-Itechnologies/assets/perspectives/2030/ pdf/Realizing-2030-A-Divided-Vision-ofthe-Future-Summary.pdf
- 54. Department for Business, Energy & Industrial Strategy. (2018). The characteristics of those in the gig economy. February 2018. https://assets. publishing.service.gov.uk/government/ uploads/system/uploads/attachment_ data/file/687553/The_characteristics_of_ those_in_the_gig_economy.pdf
- 55. de Soto, H. (1989). *The Other Path*. New York: Harper and Row.
- Dickey, M.R. (2020). NYC is offering gig workers delivery jobs during Covid-19 pandemic. Yahoo! News. March 24, 2020. https://au.news.yahoo.com/nycs-taxi-limo-commission-offering-221526572.html?guccounter=1
- 57. Department of Industrial Relations (DIR), California (2019). *Independent Contractor vs Employee*. https://www.dir.ca.gov/dlse/ faq_independentcontractor.htm
- Dougherty, S.M. (2008). Labour regulation and employment dynamics at the state level in India. OECD.
 Economics Department Working Papers No. 624. ECO/WKP(2008)32. August 4, 2008. https://www.oecd-ilibrary.org/ docserver/241014565862.pdf



- 59. Dougherty, S.M., Herd, R., Chalaux, T. & Erumban, A. (2008). *India's growth pattern and obstacles to higher growth*. OECD Economics Department Working Paper, No. 623. https://www. oecd-ilibrary.org/economics/india-sgrowth-pattern-and-obstacles-to-highergrowth_241033544261
- 60. Dougherty, S.M. & Herd, R. (2008). Improving human capital formation in India. OECD Economics Department Working Paper, No. 625. https:// www.oecd-ilibrary.org/economics/ improving-human-capital-formation-inindia_241005853765
- 61. DownToEarth. (n.d.). *India's Health Crisis.* https://www.downtoearth.org.in/dteinfographics/india_s_health_crisis/index. html
- 62. Duggal, R. (2005). *Need to Universalise Social Security*. Economic and Political Weekly. Vol. 41, No. 32 (Aug. 12-18, 2006), pp. 3495-3497 (3 pages). https://www. jstor.org/stable/4418561
- 63. Employees' Provident Fund Organisation. Scheme guidelines (2020). for implementation of Aatmanirbhar Bharat Rojgar Yojana (ABRY) – to incentivize creation of new employment EPFO registered opportunities in establishments. Ministry of Labour and Employment, Government of India. December 31, 2020. https://www.epfindia. gov.in/site_docs/PDFs/Abry/ABRY_ Scheme_Guidelines_31122020.pdf
- 64. Employees' Provident Fund Organisation. (2021a). *Provisional Monthly Estimate of Payroll; Date: 20th November 2021.* Ministry of Labour and Employment, Government of India. November 20, 2021. https://www.epfindia.gov.in/site_ docs/exmpted_est/Payroll_Data_EPFO_ Nov_2021.pdf

- 65. Employees' Provident Fund Organisation. (2021b). *Provisional Monthly Estimate of Payroll; Date: 20th October 2021*. Ministry of Labour and Employment, Government of India. October 20, 2021. https://labour. gov.in/sites/default/files/Payroll_Data_ EPFO_20_Oct_2021.pdf
- 66. Employees' Provident Fund Organisation. (2021c). *Provisional Monthly Estimate of Payroll*. Ministry of Labour and Employment, Government of India. https://www.epfindia.gov.in/site_en/ Estimate_of_Payroll.php
- 67. Esposito, M., Kapoor, A. & Goyal, S. (2012). Enabling healthcare services for the rural and semi-urban segments in India: when shared value meets the bottom of the pyramid. Corporate Governance, Vol. 12 No. 4, pp. 514-533. https://doi. org/10.1108/14720701211267847
- 68. ET Now Digital. (2020). How to claim money from dormant, unclaimed EPF account. March 19, 2020. https:// www.timesnownews.com/businesseconomy/industry/article/how-to-claimmoney-from-dormant-unclaimed-epfaccount/566389
- 69. ET. (2021). Flipkart launches first 'Ekartians with Disabilities' delivery hub. The Economic Times. July 29, 2021. https://economictimes.indiatimes.com/ industry/services/retail/flipkart-launchesfirst-ekartians-with-disabilities-deliveryhub/articleshow/84861582.cms?utm_ source=contentofinterest&utm_ medium=text&utm_campaign=cppst
- 70. ET Bureau. (2021). TCS crosses 500,000 headcount. The Economic Times. July 8, 2021. https://economictimes. indiatimes.com/tech/informationtech/tcs-crosses-500000-headcount/ articleshow/84237887.cms



- 71. Fairwork India. (2020). Fairwork India Ratings 2020: Labour Standards in the Platform Economy. https://fair.work/ wp-content/uploads/sites/131/2020/12/ Fairwork_India_2020_report.pdf
- 72. Fairwork India. (2021). Fairwork India Ratings 2021: Labour Standards in the Platform Economy.
- Fan, S., Gadiraju, U., Checco, A. & Demartini, G. (2020). CrowdCO-OP: Sharing Risks and Rewards in Crowdsourcing. Proceedings of the ACM on Human-Computer Interaction 4, CSCW2 (2020), 1 – 24.
- 74. Fanggidae, V. et al. (2018). On-demand transport workers in Indonesia: Toward understanding the sharing economy in emerging markets. JustJobs Network. March 2018. Accessed on 15 November 2019, at https://www.justjobsnetwork. org/wp-content/uploads/2018/03/towardunderstanding-sharing-economy.pdf
- 75. Farmer, L. (2020a). *Legislating the Gig Worker Economy.* Rockefeller Institute of Government. June 25, 2020. https:// rockinst.org/blog/legislating-the-gigworker-economy/
- 76. Farmer, L. (2020b). Legislating the Gig Economy: How States are Redefining Labor. June 26, 2020. https://www. farmersfieldonline.com/featuredstories/2020/6/26/legislating-the-gigeconomy-how-states-are-redefininglabor
- 77. FICCI. (2017). Primer on Employer Led Models of Job Creation – Perspectives and Case Studies. FICCI Skill Development Committee Working Group. September 15, 2017. https://ficci. in/spdocument/22952/Employer-Led-Models-of-Job-Creation_Final_.pdf
- 78. Financial Express. (2017). With an average age of 29, India will be the world's youngest country by 2020. March

26, 2017. https://www.financialexpress. com/india-news/with-an-average-ageof-29-india-will-be-the-worlds-youngestcountry-by-2020/603435/

- 79. Financial Express. (2020). Taking cue from Modi's Atma Nirbhar Bharat: Here's how Gujarat now aims to become self-reliant. May 15, 2020. https:// www.financialexpress.com/economy/ taking-cue-from-modis-atma-nirbharbharat-heres-how-gujarat-now-aimsto-become-self-reliant-guarantee-freeloan-atmanirbhar-gujarat-sahay-yojna/1-959782/
- 80. Flipkart. (2017). Differently-abled wishmasters of EKart deliver a special message. August 24, 2017.https:// stories.flipkart.com/differently-abledwishmasters/
- 81. Flipkart. (2019). #Selfmade Disability is no setback for this determined Flipkart seller. December 3, 2019. https://stories. flipkart.com/sellfmade-disability-flipkartseller/
- France24. (2021). Spain declares delivery riders to be staff, in EU first. March 11, 2021. https://www.france24.com/en/livenews/20210311-spain-declares-deliveryriders-to-be-staff-in-eu-first
- 83. Ganesh. (2019). 'Blue' is the new 'white' in thriving 'gig economy'. The Hindu Business Line. March 14, 2019. https:// www.thehindubusinessline.com/infotech/blue-is-the-new-white-in-thrivinggig-economy/article26536560.ece
- 84. Garcia, N. (1991). *Restructuración, Ahorro, y Mercado de Trabajo*. Santiago de Chile: PREALC
- 85. Ghai, M. (2015). A model for universal social security coverage: The experience of the BRICS countries. International Social Security Review, 68(3), 99-118. https:// onlinelibrary.wiley.com/doi/abs/10.1111/ issr.12081



- 86. Ghani, E., Kerr, W. & Segura, A. (2015). Informal tradables and the employment growth of Indian manufacturing. June 9, 2015, VOX CEPR Policy Portal. https:// voxeu.org/article/employment-growthindian-manufacturing
- 87. Ghatak, A.R. (2017). *Misleading dichotomy.* Development and Cooperation. September 14, 2017. https://www.dandc. eu/en/article/indias-informal-sector-backbone-economy
- Glöss, M., McGregor, M. & Brown, B. (2016). Designing for labour: uber and the on-demand mobile workforce. In Proceedings of the 2016 CHI conference on human factors in computing systems. 1632 1643.
- Gerry, C. (1978). Petty Production and Capitalist Production in Dakar: The Crisis of the Self-Employed. World Development 6:1187 – 98
- 90. Goswami, A.K., Ramadass, S., Kalaivani, M., Nongkynrih, B., Kant, S. & Gupta, S.K. (2019). Awareness and utilization of social welfare schemes by elderly persons residing in an urban resettlement colony of Delhi. Journal of Family Medicine and Primary Care. 2019 Mar; 8(3): 960 – 965. doi: 10.4103/jfmpc.jfmpc_28_19 https:// www.ncbi.nlm.nih.gov/pmc/articles/ PMC6482716/
- 91. Government of India (Gol). (1995). The Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995. https://legislative. gov.in/sites/default/files/A1996-1.pdf
- 92. Government of India (Gol). (2016). The Rights of Persons with Disabilities Act, 2016. https://legislative.gov.in/sites/default/ files/A2016-49_1.pdf
- 93. Government of India (Gol). (2018). The Mahatma Gandhi National Rural Employment Guarantee Act,

2005, (42 of 2005), with Schedules as amended in 2017. https://nrega.nic.in/ amendments_2005_2018.pdf

- 94. Government of India (Gol). (2020). AtmaNirbhar Bharat – Part-5: Government Reforms and Enablers. May 17, 2020. https://www.thehindu.com/news/resources/article31606441.ece/binary/AtmaNirbharBharatFullPresentationPart5.pdf
- 95. Government of India (Gol). (2021). *Ministry* of Labour & Employment: E-Shram Portal Frequently Asked Questions. https://eshram.gov.in/faqs
- 96. Government of UK. (2020). Detailed guidance for employers. Resource: The different types of workers. The Pension Regulator UK. April 2020. https://web. archive.org/web/20210330104734/https:/ www.thepensionsregulator.gov.uk/-/ media/thepensionsregulator/files/import/ pdf/resource-diff-types-of-worker.ashx
- 97. Government of UK. (2021). Employment Status. https://www.gov.uk/employmentstatus/worker
- 98. Goyal, M. (2018). *How car ownership is changing rapidly and irreversibly in India.* The Economic Times. October 21, 2018. https://economictimes.indiatimes.com/ industry/auto/auto-news/how-car-ownership-is-changing-rapidly-and-irreversibly-in-india/articleshow/66296079.cms
- 99. Grab. (2020). *Income support for Covid-19.* https://help.grab.com/driver/en-sg/360039182412-Income-support-for-Covid-19
- 100. Graham, M., Hjorth, I. & Lehdonvirta, V. (2017). Digital labour and development: impacts of global digital labour platforms and the gig economy on worker livelihoods. European Trade Union Institute for Research, pp. Vol. 23(2) 135–162. https://doi.org/10.1177/1024258916687250



- Graham, M., Lehdonvirta, V., Wood, A., Barnard, H., Hjorth, I., & Simon, D. P. (2017). The Risks and Rewards of Online Gig Work at the Global Margins. Oxford: Oxford Internet Institute. https://www.oii. ox.ac.uk/publications/gigwork.pdf
- 102. Gupta, R.D. (1994). A Labour History of Social Security and Mutual Assistance in India. Economic and Political Weekly. Vol. 29, No. 11 (Mar. 12, 1994), pp. 612-620 (9 pages). https://www.jstor.org/ stable/4400928
- 103. GWC Law (2020). Rideshare Driver Classification Lawsuit Filed Against Uber, Lyft. July 24, 2020. https://www.gwclaw. com/blog/rideshare-driver-classificationlawsuit-uber-lyft/
- 104. Haeck, P. (2021a). EU to propose reclassifying some gig workers as employees. Politico. December 07, 2021. https://www.politico.eu/article/eu-gigworkers-couriers-employees-criteriarules/
- 105. Haeck, P. (2021b). Uber drivers are employees, Dutch judge rules. Politico. September 13, 2021. https://www.politico. eu/article/uber-drivers-are-employeesdutch-judge-ruled/
- 106. Hall, S.M., Ince, A. (2017). Sharing Economies in Times of Crisis. University of Manchester Research. https://www. research.manchester.ac.uk/portal/ files/53216867/Sharing_Economies_in_ Times_of_Crisis.pdf
- 107. Hanrahan, B.V., Willamowski, J.K., Swaminathan, S., & Martin, D.B. (2015). *TurkBench: Rendering the market for Turkers*. In Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems. 1613 – 1616.
- 108. Haqdarshak.com. (n.d.). https://haqdarshak.com/what-do-we-do

- 109. Hart, K. (1973). Informal Income Opportunities andUrban Employment in Ghana. Journal of Modern African Studies 11:61 – 89
- 110. Hart, K. (1985). *The informal economy*. Cambridge Anthropology (1985), 54 – 58
- Hart, K. (1990). The Idea of the Economy: Six Modern Dissenters. Pp. 137 – 60 in Beyond the Marketplace: Rethinking Economy and Society, ed. Roger Friedland and A. F. Robertson. New York: Aldine de Gruyter.
- 112. Healey, B. (2021). Uber drivers from Sydney and Melbourne have launched legal action to prove they are employees, hoping to emulate a landmark UK win. Business Insider Australia. August 02, 2021. https://www.businessinsider.com.au/ uber-drivers-legal-challenge
- 113. Himanshu. (2017). *Is informal the new normal?*. LiveMint. May 22, 2017. https://www.livemint.com/Opinion/ wbGabfgoBnHwJPWHBZbPLI/Isinformal-the-new-normal.html
- 114. Hodges, G.R.G. (2020). Taxil: a social history of the New York City cabdriver. JHU Press.
- 115. IAMAI-Kantar (2020). *ICUBE Report.* Internet and Mobile Association of India.
- 116. IBEF. (2021). Emergence of India's Gig Economy. May 5, 2021. https://www.ibef. org/blogs/emergence-of-india-s-gigeconomy#
- 117. IFC. (2018). Driving Toward Equality: Women, Ride-Hailing, and the Sharing Economy. International Finance Corporation. March 01, 2018. https:// www.ifc.org/wps/wcm/connect/782bfb99-e9d4-458e-bb79-c3d8b1c656f4/ Driving+Toward+Equality+Report.pdf?-MOD=AJPERES&CVID=myqwLdI



- 118. IFC. (2020). Gender-Segregated Transportation in Ride-Hailing: Navigating the Debate. International Finance Corporation. https://www.ifc. org/wps/wcm/connect/c4ce4844-ff6a-4537-b4c4-3ff956d5f3ee/062020+IFC +Gender+Segregated+Ride+Hailing. pdf?MOD=AJPERES&CVID=naU5q5r
- ILO. (2006). Social security for all: Trade union policies. International Labour Organization. Labour Education 2006/4. No. 145. https://www.ilo.org/wcmsp5/ groups/public/—-ed_dialogue/—-actrav/ documents/publication/wcms_111441.pdf
- 120. ILO. (2014). Monotax: Promoting formalization and protection of independent workers. International Labour Organisation. https://www.socialprotection.org/gimi/RessourcePDF. action?id=48020
- 121. ILO. (2016). *India Labour Market Update*. ILO Country Office for India. International Labour Organization. July 2016. https:// www.ilo.org/wcmsp5/groups/public/—asia/—-ro-bangkok/—-sro-new_delhi/ documents/publication/wcms_496510. pdf
- 122. ILO. (2018a). Women and Men in the Informal Economy: A Statistical Picture. 3rd edition, 2018. International Labour Organization. https://www.ilo.org/wcmsp5/ groups/public/---dgreports/---dcomm/ documents/publication/wcms_626831. pdf
- 123. ILO. (2018b) Digital Labour Platforms and the Future of Work:Towards decent work in the online world, 2018, International Labour Organization.
- 124. https://www.ilo.org/wcmsp5/groups/ public/—-dgreports/—-dcomm/—-publ/ documents/publication/wcms_645337. pdf

- 125. ILO (2020). The Online Labour Index 2020
- 126. ILO. (2020). Digital labour platforms and the future of work: Towards decent work in the online world. https://www.ilo.org/ wcmsp5/groups/public/—-dgreports/—dcomm/—-publ/documents/publication/ wcms_645337.pdf
- 127. ILO. (2021). World Employment and Social Outlook: The role of digital labour platforms in transforming the world of work. (WESO) https://www.ilo.org/ wcmsp5/groups/public/—-dgreports/—dcomm/—-publ/documents/publication/ wcms_771749.pdf
- 128. India.com Business Desk (2018). Income Tax Return Filing Tips for Ola or Uber Drivers; Deductions to Reduce Tax Liability. India.com. July 23, 2018. https://www.india.com/business/ income-tax-return-filing-tips-for-ola-oruber-drivers-deductions-to-reduce-taxliability-3181507/
- 129. Infrastructure Leasing & Financial Services (IL&FS). (2013). Evolving PPP Models in Skill Development: An Indian Private Sector Experience. December 2013. https://events.development.asia/system/ files/materials/2013/12/201312-evolvingpublic-private-partnership-models-skillsdevelopment-indian-private-sector.pdf
- 130. Irani, L.C. & Silberman, M.S. (2013). Turkopticon: Interrupting worker invisibility in amazon mechanical turk. In Proceedings of the SIGCHI conference on human factors in computing systems. 611 – 620
- Isaac, E. (2014). Disruptive innovation: Riskshifting and precarity in the age of Uber.
 Berkeley Roundtable on the International Economy. https://brie.berkeley.edu/sites/ default/files/disruptive-innovation.pdf



- 132. Isaac, M. & Sheiber, N. (2016). Uber settles cases with concessions but drivers stay freelancers. New York Times. April 21, 2016. https://www.nytimes.com/2016/04/22/ technology/uber-settles-cases-withconcessions-but-drivers-stay-freelancers. html
- 133. ISSA (International Social Security Association). (2012). Handbook on the extension of social security coverage to the self-employed (Geneva). https://ww1. issa.int/node/181886
- 134. ISST (Institute of Social Studies Trust). (n.d.). Women workers in the gig economy in India: An exploratory study. https://www. isstindia.org/publications/1619503999_ pub_GIG_Report_Final_-_Low_Res_ compressed.pdf
- 135. IWWAGE. (2020). India's Emerging Gig Economy: The Future of Work for Women Workers. The Asia Foundation. https://iwwage.org/wp-content/ uploads/2020/08/IWWAGEGig-Economy-Report.pdf.
- 136. Jethmalani, H. (2017). More than 30% of India's youth not in employment. Live Mint. March 7, 2017. https://www.livemint.com/Money/ JYalqNRTOtaQCIU4EuXGRO/More-than-30-of-Indias-youth-not-in-employmentshows-OECD.html
- 137. Kantor, P., Rani, U. & Unni, J. (2006). Decent Work Deficits in the Informal Economy: the Case of Surat. Economic and Political Weekly, 27 May, pp. 2089-97.
- 138. Kapoor, A., Negi, S. (2021). Impact of pandemic on female labour force participation. September 9, 2021. Economic Times. https://economictimes. indiatimes.com/news/economy/indicators/view-impact-of-pandemic-on-female-labour-force-participation/articleshow/86060988.cms

- 139. Kapuria, P. & Chakrabarti, A. Role of trade unions in improving social security and productivity: Evidence from India and Philippines. Observer Research Foundation (ORF). September 17, 2020. https://www.orfonline.org/expert-speak/ role-of-trade-unions-in-improving-socialsecurity-and-productivity/
- 140. Kasera, J., O'Neill, J. & Bidwell, N.J. (2016). Sociality, tempo & flow: Learning from Namibian ridesharing. In Proceedings of the First African Conference on Human Computer Interaction. 36 – 47
- 141. Kässi, O., & Lehdonvirta, V. (2018). Online labour index: Measuring the online gig economy for policy and research. Technological forecasting and social change, 137, 241-248.
- 142. Keane, J. (2021). Europe could be seeing the decline of its gig economy. And new rules could mean higher prices. CNBC. April 12, 2021. https://www.cnbc. com/2021/04/12/europe-could-be-seeingthe-end-of-its-gig-economy-deliveroouber.html
- 143. Kerala Development Society. (2020). A Study on Social Security and Health Rights of Migrant Workers in India. Sponsored by National Human Rights Commission. October 2020. https:// nhrc.nic.in/sites/default/files/Approved_ Health%20and%20social%20security%20 ISMW_KDS-NHRC.pdf
- 144. Kerr, D. (2019). Uber fined \$650 million by New Jersey over driver classification. CNET. November 14, 2019. https://www. cnet.com/tech/mobile/uber-fined-650million-by-new-jersey-over-driver-classification/
- 145. Khan, S. (2021). *Budget 2021: FM races to fix flaws in labour model.* The Economic Times. February 05, 2021. https:// economictimes.indiatimes.com/small-



biz/sme-sector/budget-2021-fm-races-to-fix-flaws-in-labour-model/articleshow/80699369.cms?from=mdr

- 146. Khurana, Sakshi (2015), 'Negotiating Responsibilities and Relationships: Power, Conflict, and Decision-making in Households of Informal Women Workers,' *Asian Journal of Women's Studies*, 21:3, 273-294, DOI: 10.1080/12259276.2015.1072942
- 147. Khurana, Sakshi (2020), Redefining norms, exploring new avenues: Negotiations of women informal workers in Delhi. *International Journal of Comparative Sociology*. 61,2-3, 178-199, DOI: 10.1177/0020715220940009
- 148. Kittur, A., Nickerson, J.V., Bernstein, M., Gerber, E., Shaw, A., Zimmerman, J., Lease, M. & Horton, J. (2013). *The future* of crowd work. In Proceedings of the 2013 conference on Computer supported cooperative work. 1301 – 1318
- 149. Klein, E., & Tokman, V.E. (1988). Sector Informal: Una Forma de Utilizar el Trabajo como Consequencia de la Manera de Producir y No Viceversa. Estudios Sociológicos 6(16): 205 – 12
- 150. Kohli, R. (2018). Women & Banking: India's Financial Inclusion Suffers from Gender Gap. Financial Express. May 19, 2018. https://www.financialexpress. com/opinion/women-banking-indiasfinancial-inclusion-suffers-from-agender-gap/1173467/
- 151. Korosec, K. (2020). Uber Eats waives delivery fees for independent restaurants during Covid-19 pandemic. Tech Crunch. March 17, 2020. https:// techcrunch.com/2020/03/16/uber-eatswaives-delivery-fees-for-independentrestaurants-during-covid-19-pandemic/
- 152. Kumar, M. (2021). India's Female Labour Participation Rate Falls to 16.1% As Pandemic Hits Job Sector. August 3,

2021. The Wire. https://thewire.in/labour/ indias-female-labour-participation-ratefalls-to-16-1-as-pandemic-hits-job-sector

- 153. Kumar, N., Jafarinaimi, N. & Morshed, M.B.. (2018). Uber in Bangladesh: The Tangled Web of mobility and justice. Proceedings of the ACM on Human-Computer Interaction 2, CSCW (2018), 1 – 21
- 154. Kumar, P. & Ramachandran, S. (2021). *Gig workers have derailed the formal-informal divide*. The Hindu BusinessLine. November 11, 2021. https://www.thehindubusinessline.com/opinion/a-false-dichotomy/article37424713.ece
- 155. Lautier, B. (2006). Towards universal social security and protection of the "most vulnerable". International Labour Office (ILO) and Strategies and Tools against social Exclusion and Poverty programme (STEP) Social Protection and Inclusion: Experiences and Policy Issues, 77-103. https://www.academia. edu/download/46218572/2006Social_ Protection_ILO.pdf#page=87
- 156. Lee, M.K., Kusbit, D., Metsky, E. & Dabbish, L. (2015). Working with machines: The impact of algorithmic and data-driven management on human workers. In Proceedings of the 33rd annual ACM conference on human factors in computing systems. 1603 – 1612.
- 157. Lomas, N. (2021). UK High Court deals huge blow to Uber-style ride-hailing contract. Tech Crunch. December 06, 2021. https://techcrunch.com/2021/12/06/ uk-high-court-uber-contracts-loss/
- 158. Lustig, C., Rintel, S., Scult, L. & Suri, S. (2020). Stuck in the middle with you: The transaction costs of corporate employees hiring freelancers. Proceedings of the ACM on Human-Computer Interaction 4, CSCW1 (2020), 1 – 28



- 159. Ma, N.F., Yuan, C.W., Ghafurian, M. & Hanrahan, B.V. (2018). Using Stakeholder Theory to Examine Drivers' Stake in Uber. In Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems. 1 – 12
- 160. Martin, D., Hanrahan, B.V., O'Neill, J. & Gupta, N. (2014). *Being a turker*. In Proceedings of the 17th ACM conference on Computer supported cooperative work & social computing. 224 – 235
- 161. Mason, R. (2016). Theresa May hires former Tony Blair policy boss to review workers' rights. The Guardian. October 1, 2016. https://www.theguardian.com/money/2016/oct/01/theresa-may-hires-formertony-blair-policy-boss-to-review-workersrights
- 162. Mathur, N. (2019). Flipkart partners with NSDC to train its 20,000 delivery executives. Live Mint. August 12, 2019. https:// www.livemint.com/companies/news/flipkart-partners-with-nsdc-to-train-its-20-000-delivery-executives-1565590528410. html
- 163. McCue, T.J. (2018). 57 Million U.S. Workers Are Part Of The Gig Economy. Forbes. August 31, 2018. https://www. forbes.com/sites/tjmccue/2018/08/31/57million-u-s-workers-are-part-of-the-gigeconomy/?sh=4688bb7d7118
- 164. McKinsey Global Institute. (2017). *Technology, Jobs and the Future of Work.* May 2017. http://dln.jaipuria.ac.in:8080/ jspui/bitstream/123456789/1891/1/MGI-Future-of-Work-Briefing-note-May-2017. pdf
- 165. Means, B. & Seiner, J.A. (2015). Navigating the Uber economy. UCDL Rev. 49 (2015), 1511
- 166. Mehrotra S., Sinha, S. (2017). Explaining Falling Female Employment during a

High Growth Period. September 30, 2017. Economic & Political Weekly Vol. LII No. 39. https://smartnet.niua.org/sites/default/ files/resources/s_mehrotra_sinha-female_ employment_.pdf

- Milligan, E. (2021). Uber UK Accused of Undermining Court Ruling on Worker Rights. Insurance Journal. November 23, 2021. https://www.insurancejournal.com/ news/international/2021/11/23/643315.htm
- 168. Ministry of Electronics and Information Technology (MeitY). (2015). "Digital India". Government of India. https://www. digitalindia.gov.in/
- 169. Ministry of External Affairs (MEA). 2021. One of The Youngest Populations in the World – India's Most Valuable Asset. Economic Diplomacy Division, Ministry of External Affairs, Government of India. June 13, 2021. https://indbiz.gov.in/one-ofthe-youngest-populations-in-the-worldindias-most-valuable-asset/
- 170. Ministry of Health and Family Welfare.
 (2018). National Health Accounts Estimates for India: Financial Year 2015-16. National Health Systems Resource Centre. Government of India. November 2018. https://main.mohfw.gov.in/sites/default/ files/NHA_Estimates_Report_2015-16_0. pdf
- 171. Ministry of Home Affairs (MHA). (2020). Order. Government of India. April 15, 2020. https://www.mha.gov.in/sites/default/files/MHA%20order%20dt%20 15.04.2020%2C%20with%20Revised%20 Consolidated%20Guidelines_compressed%20%283%29.pdf
- 172. Ministry of Labour and Employment (2020a). *The Code on Social Security, 2020*, Government of India. https://labour. gov.in/sites/default/files/SS_Code_Gazette. pdf



- 173. Ministry of Labour and Employment. (2020b). Aatmanirbhar Bharat Rojgar Yojana (ABRY): A brief note on ABRY. Government of India. https://labour.gov. in/brief-note-abry
- 174. Ministry Labour and Employment (2021). *E-Shram Portal launched for registration of unorganized workers*. Government of India. September 30, 2021. https:// labour.gov.in/whatsnew/e-shram-portallaunched-registration-unorganizedworkers
- 175. Ministry of Railways. (2020). Indian Railways Year Book 2019-20. Government of India. http://indianrailways.gov.in/ railwayboard/uploads/directorate/stat_ econ/Annual-Reports-2019-2020/Year-Book-2019-20-English_Final_Web.pdf
- 176. Ministry of Road Transport and Highways. (2016). MoRTH Notification No. RT-11021/40/2014-MVL. October 28, 2016. https://morth.gov.in/sites/default/files/ Driving_Licence_for_hearing_impaired_ persons.pdf
- 177. Ministry of Road Transport and Highways.
 (2019). Road Transport Year Book (2016-17).https://morth.nic.in/sites/default/files/ Road%20Transport%20Year%20Book%20 2016-17.pdf
- 178. Ministry of Skill Development and Entrepreneurship (MSDE). (2015). *National Policy for Skill Development and Entrepreneurship 2015.* https://msde.gov.in/sites/ default/files/2019-09/National%20Policy%20on%20Skill%20Development%20 and%20Entreprenurship%20Final.pdf
- 179. Mishra, A.R. (2021). India will become the third largest importer by 2050: UK Report. LiveMint. September 20, 2021. https://www.livemint.com/economy/ india-will-become-3rd-largest-importerby-2050-uk-report-11632083073032.html

- 180. Mishra, L. (2020). Avail Finance eyes 15 million customers. The Hindu. January 4, 2020. https://www.thehindu.com/ business/avail-finance-eyes-15-millioncustomers/article30480543.ece
- 181. Mitter, S. (2020). With half a billion active users, Indian internet is more rural, local, mobile-first than ever. May 13, 2020. YourStory. https://yourstory.com/2020/05/ half-billion-active-users-indian-internetrural-local-mobile-first
- 182. Morgan Stanley. (2017). India's Millennials to Drive Growth in Four Key Sectors. Morgan Stanley. April 2017. https:// www.morganstanley.com/ideas/Indiamillennials-growth-sectors
- 183. Morozov, E. (2018). From Airbnb to city bikes, the 'sharing economy' has been seized by big money. The Guardian. November 27, 2018. https://www. theguardian.com/commentisfree/2018/ nov/27/airbnb-city-bikes-sharingeconomy-big-money
- 184. MoSPI. (2017). Youth in India 2017. Ministry of Statistics and Programme Implementation. http://mospi.nic.in/sites/ default/files/publication_reports/Youth_ in_India-2017.pdf
- 185. MoSPI. (2021). Persons with Disabilities (Divyangjan) in India – A Statistical Profile: 2021. March 31, 2021. Ministry of Statistics and Programme Implementation. http:// www.nhfdc.nic.in/upload/nhfdc/Persons_ Disabilities_31mar21.pdf
- 186. Mukherji, J. (2006). *Economic Growth and India's Future*. University of Pennsylvania Center for the Advanced Study of India, Occasional Paper No. 26, March.
- 187. Mulia, K. (2021). Couriers and activists demand reforms in Indonesia's gig economy. KR-Asia. September 07, 2021. https://kr-asia.com/couriers-and-activists-



demand-reforms-in-indonesias-gigeconomy

- 188. Nair, A. (2019). A 'Silent Delivery Station', Amazon employs disabled people in logistics. YourStory. January 19, 2018. https://yourstory.com/2018/01/silentdelivery-station-amazon-employsdisabled-people-logistics/amp
- 189. Narain, A. (2006). *Wage Trends and Determinants.* Paper written for the India Labour Conference and World Bank Report, India's Employment Challenge: Creating Jobs, Helping Workers, World Bank, Washington.
- 190. Narasimhan, C., Papatla, P, Jiang, B, Kopalle, P.K., Messinger, P.R., Moorthy, S., Proserpio, D., Subramanian, U., Wu, C. & Zhu, T. (2018). Sharing economy: Review of current research and future directions. Customer Needs and Solutions 5, 1-2 (2018), 93 – 106.
- 191. National Commission for Enterprises in the Unorganised Sector (NCEUS). *Report* on conditions of work and promotion of livelihoods in the unorganised sector. August 2007. http://dcmsme.gov.in/Condition_of_workers_sep_2007.pdf
- 192. National Law Review. (2021). Alameda Superior Court Judge Rules Proposition 22 Unconstitutional. September 8, 2021.
- 193. https://www.natlawreview.com/article/ alameda-superior-court-judge-rulesproposition-22-unconstitutional
- 194. National Sample Survey Office, Employment unemployment Surveys various years
- 195. National Sample Survey Office, Periodic labour force surveys various years
- 196. National Skill Development Council (NSDC). (2017). *Model Curriculum Home Delivery Boy*. May 12, 2017. https:// nsdcindia.org/sites/default/files/MC-THC-Q2902Home-Delivery-Boy-12-05-2017.pdf

- 197. NDTV. (2017). Are Ola, Uber Drivers Their Employees, Asks Delhi High Court. May 09, 2017. https://gadgets.ndtv.com/ apps/news/are-ola-uber-drivers-theiremployees-asks-delhi-high-court-1691203
- 198. Nikore, M. (2019). Where are India's working women? The fall and fall of India's female labour participation rate. London School of Economics Blogs. October 22, 2019. https://blogs.lse.ac.uk/ southasia/2019/10/22/where-are-indiasworking-women-the-fall-and-fall-ofindias-female-labour-participation-rate/
- 199. Nishanth, K. (2020). Registration does not always guarantee access to welfare – exclusions in Tamil Nadu's welfare system. Dvara Research. November 4, 2020. https://www.dvara.com/research/ blog/2020/11/04/registration-does-notalways-guarantee-access-to-welfareexclusions-in-tamil-nadus-labourwelfare-system/
- 200. Nivedita, B.M., Hemavarneshwari, S., Mangala, S. & Subrahmanyam, G. (2015). *Utilization of Social Security Schemes among Elderly in in Kannamangala, Bengaluru*. International Journal of Scientific Study. October 2015. Vol 3 Issue 7. https://www.ijss-sn.com/ uploads/2/0/1/5/20153321/ijss_oct_oa14.pdf
- 201. O'donnell, R. (2020). What Does California's Prop 22 Mean for the AB5 Law?. Workest by Zenefits. November 09, 2020. https://www.zenefits.com/workest/ what-does-californias-prop-22-mean-forthe-ab5-law/
- 202. OECD (2003), Economic Survey of Mexico, Economic Surveys No. 2003/1, OECD, Paris.
- 203. OECD (2007), Economic Policy Reforms: Going for Growth, OECD, Paris.
- 204.OECD (2019). Measuring Digital Transformation: A Roadmap for the



Future. OECD, Paris. https://www.oecdilibrary.org/science-and-technology/ measuring-the-digital-transformation_ f2873445-en

- 205. O'hear, S. (2020). UK FinTech community comes together to build Covid credit and let sole traders self-certify lost income. Tech Crunch. March 24, 2020. https:// techcrunch.com/2020/03/24/covid-credit/
- 206. Öktem, K.G. (2020). The Welfare State as Universal Social Security: A Global Analysis. Social Inclusion. Vol 8, No1 (2020): "Universalism" or "Universalisms" in Social Policies?. https://www.cogitatiopress.com/ socialinclusion/article/view/2509
- 207. Ola Mobility Institute & CUTS International. 2022. Unlocking the potential of intermediate public transport. Forthcoming.
- 208. Oncidi, A.J., Gold, K. & Deserio, P.A. (2020), 'California Amends Independent Contractor Law (Again) – New Exemptions for Music Industry Workers, Freelance Writers and Photographers', September 9, 2020. The National Law Review, Volume X, Number 253. https:// www.natlawreview.com/article/californiaamends-independent-contractor-lawagain-new-exemptions-music-industry
- 209. Ortiz, I. (2018). *The case for universal social protection*. Finance & Development, 55(004). https://www.elibrary.imf.org/view/journals/022/0055/004/article-A009-en.xml
- 210. Osborn, J. (2020). 'Platform-Led Upskilling' in Africa: Can Digital Platforms Help Close the Continent's Skills Gap?. NextBillion. March 10, 2020. https://nextbillion.net/ digital-platforms-closing-africa-skillsgap/
- 211. Osborne, H. (2016). Uber loses right to classify UK drivers as self-employed. The Guardian. October 28, 2016. https://

www.theguardian.com/technology/2016/ oct/28/uber-uk-tribunal-self-employedstatus

- 212. Ozanne, S. (2021). What progress has been made on the employment bill?. People Management. June 01, 2021. https://www.peoplemanagement.co.uk/ experts/legal/what-progress-has-beenmade-on-the-employment-bill#gref
- 213. Padhi, B. and Motkuri, V. (2021). Labour Force and Employment growth in Recent times in India: Evidence from EUS (2011-12) & PLFS (I-II) Survey, *Economic and Political Weekly*, Vol. 56, Issue No. 47
- 214. Pandey, K. (2018). Can Ayushman Bharat reduce out-of-pocket expenditure?. DownToEarth. September 19, 2018. https:// www.downtoearth.org.in/news/health/ can-ayushman-bharat-reduce-out-ofpocket-expenditure—61673
- 215. Pant, D. (n.d.). *NSDC & WhatsApp partner to fuel skill development for youth.* People Matters. https://www.peoplematters.in/ news/skilling/nsdc-whatsapp-partner-tofuel-skill-development-for-youth-29796
- 216. Peattie, L. (1987). An Idea in good currency and how it grew: The informal sector. World Development Vol 15, No 7, pp 851-860, Pergamon Journals, Great Britain. https://doi.org/10.1016/0305-750X(87)90038-6
- 217. Pema, T. (2020). Women's Day: Meet Mahalakshmi, the only female Ola outstation driver in Bengaluru. YourStory. March 8, 2020. https://yourstory.com/ herstory/2020/03/womens-day-meetmahalakshmi-femaleola-outstationdriver/amp
- 218. Perez-Sainz, J.P. (1992). Informalidad Urbana en América Latina: Enfoques, Problemáticas e Interrogantes. Caracas: Editorial Nueva Sociedad



- 219. Pesole, A., Urzi Brancati, M.C., Fernandez Macias, E., Biagi, F. and Gonzalez Vazquez, I., Platform Workers in Europe Evidence from the COLLEEM Survey, EUR 29275 EN, Publications Office of the European Union, Luxembourg, 2018, ISBN 978-92-79-87996-8, doi:10.2760/742789, JRC112157.
- 220. PIB. (2019). Dual System Training. Ministry of Skill Development & Entrepreneurship, December 02, 2019. https://pib.gov.in/ newsite/PrintRelease.aspx?relid=195263
- 221. PIB. (2020). National Policy on Skill Development, Ministry of Skill Development and Entrepreneurship. 20 March 2020. https://pib.gov.in/newsite/ PrintRelease.aspx?relid=200504
- 222. PIB. (2021a). Ministry of Housing Affairs (MoHUA): MOHUA Joins Hands with Zomato to Take Street Food Vendors Online Under PM. Mobile Application for PM Svanidhi Se Samriddhi Launched. February 4, 2021. https://pib.gov.in/ PressReleseDetail.aspx?PRID=1695263
- 223. PIB. (2021b). Ministry of Labour & Employment: Over 1.7 crore registrations in a month at E-Shram portal-the National Database of Unorganized Workers. September 26, 2021. https://pib.gov.in/PressReleasePage. aspx?PRID=1758218
- 224. Pitas, C. (2021). Uber to give UK drivers workers' rights after court defeat. Reuters. March 17, 2021. https://www.reuters.com/ article/uk-uber-britain-idUSKBN2B82Y9
- 225. Portes A. & W. Haller. (2005). The Informal Economy. In book: Handbook of Economic Sociology (pp.403-425) Edition:
 2 Chapter: 18 Publisher: Russell Sage FoundationEditors: Smelser, Swedberg.
- 226. Portes, A & Schauffler, R. (1993). Competing Perspectives on the Latin American Informal Sector. Population and Development Review 19: 33 – 60.

- 227. Pradhan, D. (2019). Jobs Are Being Created, Ola And Uber Added 2.2 Mn Jobs: NITI Aayog CEO Kant. Inc42. February 2, 2019. https://inc42.com/buzz/ jobs-are-being-created-ola-uber-added-2-2-mn-jobs-niti-aayogceo-kant/
- 228. Prinja, S., Kaur, M., & Kumar, R. (2012). Universal health insurance in India: ensuring equity, efficiency, and quality. Indian journal of community medicine: official publication of Indian Association of Preventive & Social Medicine, 37(3), 142 – 149. https://doi.org/10.4103/0970-0218.99907
- 229. Programa Regional de Empleo para América Latina (PREALC). 1985. *Más Allá de la Crisis.* Santiago de Chile: PREALC.
- 230. PTI. (2019). Education, employment to 300 million youth! Smriti Irani's new initiative. Business Standard. November 1, 2019. https://www.business-standard. com/article/pti-stories/irani-launchesinitiative-to-provide-education-skillingand-employment-to-300-millionyouth-119110101247_1.html
- 231. PTI. (2021). Swiggy launches covid care package for delivery partners across India. The Economic Times. June 7, 2021. https://economictimes.indiatimes.com/ tech/startups/swiggy-launches-covidcare-package-for-delivery-partnersacross-india/articleshow/83318445.cms
- 232. Purdy, J. (2014). *There's a Reason Your Waiter Hates You*. The Daily Beast. April 14, 2017. https://www.thedailybeast.com/ theres-a-reason-your-waiter-hates-you
- 233. PwC. (2021). The Gig Economy in the EU and the UK: PwC Report 2021. https:// www.pwc.co.uk/services/legal/insights/ gig-economy-eu-uk-2021.html
- 234. PYMNTS (2021). New Spanish Law Requires Delivery Companies To Treat Drivers As Employees. May 11, 2021. https://



www.pymnts.com/gig-economy/2021/ new-spanish-law-requires-delivery-companies-to-treat-drivers-as-employees/

- 235. Quinn, J. (2017). *Gig economy latest: City Sprint and beyond*. HR Magazine. January 12, 2017. http://www.hrmagazine. co.uk/article-details/gig-economy-latestcity-sprint-and-beyond
- 236. Rachmawati et al. (2021). Urban gig workers in Indonesia during Covid-19: The experience of online 'ojek' drivers. Work Organisation, Labour & Globalisation, 2021, Vo. 15, No. 1. Pp 31-35. Pluto Journals. https://www.jstor.org/stable/pdf/10.13169/ workorgalaboglob.15.1.0031.pdf?refreqid=excelsior%3A400ab52963f901d217657795 95d8d604
- 237. Ramachandran, S. 2020. *Platformification* v/s platformization: What do these terms mean?. Ola Mobility Institute. August 13, 2020. https://medium.com/@ mobilityinstitute/til-platformification-vs-platformization-what-do-these-termsmean-c3439a8152a
- 238. Ramachandran, S. (2021). "The support has to come from home": Evidencebased assessment of platform work in India. FemLab. July 20, 2021. https:// femlab.co/2021/07/20/the-support-has-tocome-from-home/
- 239. Ramachandran, S. & Raman, A. (2021). Unlocking Jobs in the Platform Economy: Propelling India's post-Covid Recovery. Ola Mobility Institute. May 2021. https:// olawebcdn.com/ola-institute/OMI_ Platform_Economy_Report.pdf
- 240. Ramachandran, S., Raman, A. & Singh, S. (2021). *Reimagining Social Protection in the 21st century: Operationalising the Code on Social Security 2020.* Ola Mobility Institute. February 2021. https://olawebcdn.com/ola-institute/ reimagining_social_protection.pdf

- 241. Ramachandran, S., Singh, S. & Narain, Y. (2021). Asset Ownership in the Indian Economy: Contesting Traditional Conceptions. Ola Mobility Institute. July 2021. https://olawebcdn.com/ola-institute/ asset-ownership.pdf
- 242. Raman, A. (2020). The Power of Two Wheels – Bike-Taxis: India's New Shared Mobility Frontier. Ola Mobility Institute. March 2020. https://olawebcdn.com/olainstitute/bike-taxi-report.pdf
- 243. Raman, A & Kulkarni, A. (2021). Women in the Driving Seat: Studying the interplay between gender and asset ownership in the platform economy. March 2021. https://olawebcdn.com/ola-institute/ women_asset_ownership_platform_ economy.pdf
- 244. Raman, A. & Ramachandran, S. (2020a). Safety net: Social security for Indian workers. Fortune India. November 13, 2020. https://www.fortuneindia.com/opinion/safety-net-social-security-for-indianworkers/104836
- 245. Raman, A. & Ramachandran, S. (2020b). Leveraging and protecting the gig economy against Covid-19. Ola Mobility Institute. April 2020. https://olawebcdn. com/ola-institute/covid19-report.pdf
- 246. Raman, A. & Ramachandran, S. (2020c). Social security for workers: Lessons from India in the Great California Experiment. Financial Express. December 14, 2020. https://www.financialexpress.com/ opinion/social-security-for-workers-lessons-from-india-in-the-great-california-experiment/2149260/
- 247. Raman, A., Ramachandran, S. & Sasikumar, S.K. (2021). *India's Social* Security Code, 2020: A Catalyst for Promoting and Protecting Platform Labour. Labour & Development June 2021. Journal Volume 28. No. 1. June



2021. ISSN 0973-0419. Pages 1-23. V.V. Giri National Labour Institute. https:// wgnli.gov.in/sites/default/files/Labour%20 %26%20Development%20June%20 2021%20PDF_0.pdf

- 248. Raman, A., Ramachandran, S. & Sindhu, R. (2021). Women in the Platform Economy: Breaking Barriers and Driving Inclusive Growth. Ola Mobility Institute & Children's Investment Fund Foundation. September 2021. https://olawebcdn.com/ola-institute/ women-in-platform-economy.pdf
- 249. Ramana Murthy, S.V. (2019). *Measuring Informal Economy in India*. 7th IMF Statistical Forum: Measuring the Informal Economy, Session-II. London. https://www.imf.org/~/media/Files/ Conferences/2019/7th-statistics-forum/ session-ii-murthy.ashx
- 250. Randolph, G., Galperin, H. & Khan, L. (2019). New Opportunities in the Platform Economy: On-ramps to Formalization in the Global South. JustJobs Network, May 2019. https://www.justjobsnetwork. org/wp-content/uploads/2019/09/T-20-Report-v3.pdf
- 251. Raval, N. & Dourish, P. (2016). Standing out from the crowd: Emotional labor, body labor, and temporal labor in ridesharing. In Proceedings of the 19th ACM Conference on Computer-Supported Cooperative Work & Social Computing. 97 – 107.
- 252. Raval, N. (2019). *Infusing Care in the Gig Economy*. The Hard Copy. November 5, 2019. https://thehardcopy.co/%20infusingcare-in-the-gig-economy/
- 253. Ray, SS. 2020. Livelihood support: ESIC reserves to help low-income workers. Financial Express. April 14, 2020. https:// www.financialexpress.com/economy/ livelihood-support-esic-reserves-to-helplow-income-workers/1927191/

- 254. RBI. (2017). Indian Household Finance: Report of the Household Finance Committee. Reserve Bank of India. July 2017. https://rbidocs.rbi.org.in/ rdocs/PublicationReport/Pdfs/HFCRA-28D0415E2144A009112DD314ECF5C07. PDF
- 255. RBI. (2021). Annual Report 2021. Reserve Bank of India https://www.rbi.org.in/ Scripts/AnnualReportPublications. aspx?ld=1314
- 256. Reis, A. & Chand, V. (2020). Uber Drivers: Employees or Independent Contractors?. Kluwer Tax Blog. April 03, 2020. http:// kluwertaxblog.com/2020/04/03/uberdrivers-employees-or-independentcontractors/
- 257. Rest of World. (2021). 'We're all fighting the giant': Gig workers around the world are finally organizing. September 21, 2021. https://restofworld.org/2021/gig-workersaround-the-world-are-finally-organizing/
- 258. Rogers, B. (2015). *The social costs of Uber.* U. Chi. L. Rev. Dialogue 82 (2015), 85.
- 259. Rosenblat, A. & Stark, L. (2016). *Algorithmic labor and information asymmetries: A case study of Uber's drivers*. International Journal of Communication 10 (2016), 27.
- 260. Roy, D. (2021). Supreme Court seeks response from Centre on plea seeking social security benefits for 'gig workers' of Zomato, Swiggy, Ola, Uber. Bar & Bench. December 13, 2021. https://www. barandbench.com/news/supreme-courtseeks-response-centre-plea-seekingsocial-security-benefits-gig-workerszomato-swiggy-ola-uber
- 261. Russon, M. (2021). Uber drivers are workers not self-employed, Supreme Court rules.
 BBC. February 19, 2021. https://www.bbc. com/news/business-56123668



- 262. Rutkowski, M. (2018). *Reimagining Social Protection*. International Monetary Fund. Finance & Development. December 2018. Volume 55. No. 4. https://www.imf. org/external/pubs/ft/fandd/2018/12/worldbank-reimagining-social-protectionrutkowski.htm
- 263. Sabharwal, M., Chakraborty, R. (2019). In search of an effective way to blunt self-exploitation. Live Mint. March 26, 2019. https://www.livemint.com/ opinion/online-views/opinion-in-searchof-an-effective-way-to-blunt-selfexploitation-1553543107853.html
- 264. Safe in India Foundation. (2020). ESIC Covid-19 April Schemes Survey and Recommendations May https://60d15e1f-27ff-4be1-2020. 8827-f7f0b5f74084.filesusr.com/ 5d022b_0aaa05b81bef4693a1acuqd/ 11421c96334f.pdf
- 265. Salman, S.H. & Bansal, V. (2019). Delhi, and not Bengaluru, is the place to be for gig workers. April 12, 2019. https://www.livemint.com/companies/ start-ups/delhi-and-not-bengaluruis-the-place-to-be-for-gig-economyworkers-1555013405684.html
- 266. Schwab, K. (2016). The Fourth Industrial Revolution: what it means, how to respond. World Economic Forum. January 14, 2016. https://www.weforum. org/agenda/2016/01/the-fourth-industrialrevolution-what-it-means-and-how-torespond/
- 267. Sehrawat, U., Sawhney, N., Yeleswarapu, T. & Rangaswamy, N. (2021). *The Everyday HCI of Uber Drivers in India: A Developing Country perspective*. Proc. ACM Hum.-Comput. Interact. 5, CSCW2, Article 424 (October 2021), 22 pages. https://doi. org/10.1145/3479568

- 268. Sethuraman, S. V. (1981). The Urban Informal Sector in Developing Countries. Geneva: International Labour Office.
- 269. Shanmughasundaram, J. (2020). Special drive to enrol 60 lakh unorganised workers in Tamil Nadu. Times of India. March 26, 2020. https://timesofindia.indiatimes. com/city/chennai/special-drive-to-enrol-60-lakh-unorganised-workers-in-tamilnadu/articleshow/74821291.cms
- 270. Shapiro, A. (2018). Between autonomy and control: Strategies of arbitrage in the "on-demand" economy. New Media & Society 20, 8 (2018), 2954 – 2971.
- 271. Sharma, A. (2006). Flexibility, Employment and Labour Market Reforms in India. Economic and Political Weekly, 27 May, pp. 2274-85.
- 272. Sharma, Y. (2019). Government plans skill vouchers to make youth more skilful. The Economic Times. March 4, 2019. https://economictimes.indiatimes. com/news/economy/policy/skillvouchers-in-the-works-to-attract-youthto-undertake-skilling-programmes/ articleshow/68246617.cms
- 273. Sheth, N.R. (1968). *Trade Unions in India—A Sociological Approach*. Sociological Bulletin. Vol. 17, No. 1 (March 1968), pp. 5-18 (14 pages). https://www.jstor.org/stable/23618623
- 274. Shieber, J. (2020). Postmates reveals plans to cover medical cost for couriers as part of Covid-19 response. Tech Crunch. March 10, 2020. https:// techcrunch.com/2020/03/10/postmatesreveals-plans-to-cover-medical-costs-forcouriers-as-part-of-covid-19-response/
- 275. Shrivastava, A. (2020). *BigBasket, MedLife, Grofers up hiring as demand spikes due to Covid-19 lockdown*. The Economic Times. April 01, 2020. https://economictimes.



indiatimes.com/small-biz/startups/ newsbuzz/bigbasket-medlife-grofersup-hiring-as-demand-spikes-due-tocovid-19-lockdown/articleshow/74922698. cms?from=mdr

- 276. Shukla, R., Shree, M. & Rani, P.G. (2019). *Explained: Gap between Skill India goal and current status. Financial Express.* March 19, 2019. https://www. financialexpress.com/opinion/skill-indiawhy-there-is-a-gap-between-currentstatus-and-goals-explained/1520633/
- 277. Singh, M. (2020a). Y Combinator-backed Kosh is a neobank for blue-collar workers in India. TechCrunch. March 19, 2020. https://techcrunch.com/2020/03/19/ycombinator-backed-kosh-is-a-neobankfor-blue-collar-workers-in-india/
- 278. Singh, S. (2020b). *#In-Depth: Vehicle Scrappage- Key to India's Clean Mobility Ambitions*. Ola Mobility Institute. October 22,2020. https://mobilityinstitute.medium. com/in-depth-vehicle-scrappage-keyto-indias-clean-mobility-ambitions-8c9977604dfc
- 279. Singh, M. (2020c). India sets rules for commissions, surge pricing for Uber and Ola. Tech Crunch. November 27, 2020. https://techcrunch.com/2020/11/27/ india-sets-rules-for-commissions-surgepricing-for-uber-and-ola/
- 280. Singh, R. (2021). 'Gig workers' move Supreme Court for social security benefits from Zomato, Swiggy, Ola, Uber. Law Beat. September 22, 2021. https:// lawbeat.in/top-stories/gig-workers-movesupreme-court-social-security-benefitszomato-swiggy-ola-uber
- 281. Slee, T. (2016). *The Sharing Economy's Dirty Laundry*. Jacobin. March 2016. https://www.jacobinmag.com/2016/03/ uber-airbnb-sharing-economy-housingtech/

- 282. Soni, Y. (2019a). PerkFinance Is Building A Complete Financial Solution For Blue Collar Workforce. Inc42. April 22, 2019. https://inc42.com/startups/perkfinancelending-blue-collar-workers/
- 283. Srija, A. & Shirke, S.V. (2014). An Analysis of the Informal Labour Market in India. Economy Matters. September-October 2014. Confederation of Indian Industry (CII). October 2014. Pp. 40-46. https://www. ies.gov.in/pdfs/CII%20EM-october-2014. pdf
- 284. Sriram, S. & Khan, M.M. (2020). Effect of health insurance program for the poor on out-of-pocket inpatient care cost in India: evidence from a nationally representative cross-sectional survey. BMC Health Services Research volume 20, Article number: 839 (2020). https:// bmchealthservres.biomedcentral.com/ articles/10.1186/s12913-020-05692-7
- 285. Srivastava, R. (2008). Towards universal social protection in India in a rightsbased paradigm. Indian Journal of Human Development, 2(1), 111-132. https://journals.sagepub.com/doi/ pdf/10.1177/0973703020080106
- 286. Srivastava, R, Padhi, B. and Ranjan, R. (2020) "Structural Change and Increasing Precarity of Employment in India" in Mishra, N.K. (Eds.), Development Challenges of India After Twenty-Five Years of Economic Reforms: Inequality Labour Employment and Migration, Springer, (pp 133-156).
- 287. Srivastava, Ravi S. and Ajaya Kumar Naik (2016), Growth and Informality in the Indian Economy, in K. P. Kannan, R. P. Mamgain and Preet Rustagi (eds.) Development from the Perspective of Labour: Essays in Honour of Prof. T. S. Papola. New Delhi: Academic Foundation



- 288. State Bank of India. (20201). Share of informal economy may have shrunk to no more than 20% from 52% in FY18. SBI Research EcoWrap. Issue No. 43, FY22. October 29, 2021. https://sbi.co.in/ documents/13958/10990811/281021-Ecowrap_20211029.pdf/b0625dda-46bf-1f1e-2998-3c58c94dd156?t=1635409920832
- 289. Stefano, V.D. (2016). The rise of the" justin time workforce": on demand work, crowdwork, and labor protection in the" gig economy". Comparative labor law and policy journal 37, 3 (2016), 461 – 471
- 290. Sundararajan, A. (2016). The Sharing Economy: The End of Employment and the Rise of Crowd-Based Capitalism. The MIT Press.
- 291. Surie, A. (2018). Are Ola and Uber Drivers Entrepreneurs or Exploited Workers?. Economic & Political Weekly, Vol. 53, Issue No. 24. June 16, 2018. https://www.epw.in/ engage/article/are-ola-and-uber-driversentrepreneurs-exploited-workers
- 292. Suryam, S. (2021). "Gig workers" move Supreme Court against Zomato, Swiggy, Uber, Ola seeking social security. Bar & Bench. September 21, 2021. https://www. barandbench.com/news/litigation/gigworkers-move-supreme-court-againstzomato-swiggy-uber-ola-seeking-socialsecurity
- 293. Tabares, S. (2019). Digitalization and the Future of Work. December 2019. https://www.researchgate.net/ publication/337984642_Digitalization_ and_the_Future_of_Work
- 294. Tandon, A., Rathi, A. (2019). *Domestic Work in the 'Gig Economy'*. The Centre for Internet Society. November 16, 2019. https://cis-india.org/raw/domestic-workin-the-gig-economy-20191116
- 295. Taylor et al. (2017). Good Work: The Taylor Review of Modern Working Practices.

Government of UK. https://assets. publishing.service.gov.uk/government/ uploads/system/uploads/attachment_ data/file/627671/good-work-taylor-reviewmodern-working-practices-rg.pdf

- 296. TeamLease. (2006). India Labour Report: A Ranking of Indian States. TeamLease Services. New Delhi. www.teamlease. com/TeamLease-LabourReport2006.pdf
- 297. Thakur, A. (2019). India enters 37-year period of demographic dividend. The Economic Times. July 22, 2019. https:// economictimes.indiatimes.com/news/ economy/indicators/india-enters-37year-period-of-demographic-dividend/ articleshow/70324782.cms
- 298. The Economic Survey 2018-19 https:// www.indiabudget.gov.in/budget2019-20/ economicsurvey/
- 299. The Economic Survey 2020-21 https://www.indiabudget.gov.in/ economicsurvey/
- 300. The Economic Times. (2020). *Gig workers are superheroes who keep neighbourhoods connected*. April 8, 2020. https://economictimes.indiatimes. com/small-biz/startups/newsbuzz/ gig-workers-are-super-heroes-whokeep-neighbourhoods-connected/ articleshow/75038808.cms
- 301. The Hindu. (2018). Commercial license not needed for driving taxis, autos. April 19, 2018. https://www.thehindu. com/news/national/commercial-licensenot-needed-for-driving-taxis-autos/ article23599988.ece
- 302. The Hindu. (2020). Enumerate and enlist all unorganised sector workers in 34 welfare boards, HC directs government. August 28, 2020. https://www.thehindu. com/news/national/tamil-nadu/enumerate-and-enlist-all-unorganised-workers-



in-34-welfare-boards-hc-directs-govt/article32460511.ece

- 303. The Law Society. (2020). *Good Work Plan and the Taylor Review*. July 1, 2020. https://www.lawsociety.org.uk/en/topics/ employment/good-work-plan-and-thetaylor-review
- 304. The New India Express (TNIE). (2021). *Centre revokes GST exemption; review it, says Uber*. December 11, 2021. https:// www.newindianexpress.com/states/ karnataka/2021/dec/11/centre-revokesgstexemptionreview-it-says-uber-2394285. html
- 305. The News Minute. (2019). Lending startup Avail Finance enters into a strategic partnership with Ola. June 29, 2019. https://www.thenewsminute.com/article/ lending-startup-avail-finance-entersstrategic-partnership-ola-104516
- 306. Thomas et al. (2012). Social, economic, and demographic factors affecting risk of severe disability and employability in India. Novermber 28, 2012. De Grutyer. https://www.degruyter.com/document/ doi/10.1515/ijdhd-2012-0129/html
- 307. Tiwari, Ram & Roy. (2019). Three Gigs. Three Men. Three Stories. What it is like to work in a gig economy job. Times of India. May 29. 2019. https://timesofindia.indiatimes. com/india/what-it-is-like-to-work-in-agig-economy-job/articleshow/69371217. cms#
- 308. Tokman, V. (1982). Unequal Development and the Absorption of Labour: Latin America, 1950 – 1980. CEPAL Review 17:121 – 33
- 309. Topham, G. (2021). Uber must overhaul London business model after high court ruling. The Guardian. December 06, 2021. https://www.theguardian.com/ technology/2021/dec/06/uber-must-

overhaul-london-business-model-afterhigh-court-ruling

- 310. Topham, G. & Butler, S. (2018). Uber to give drivers and couriers sickness and maternity cover. The Guardian. May 23, 2018. https://www.theguardian.com/ technology/2018/may/23/uber-driverscouriers-sickness-maternity-coverinsurance-policy
- 311. Trades Union Congress (TUC). (2021). Seven ways platform workers are fighting back. November 05, 2021. https://www.tuc.org. uk/sites/default/files/2021-11/Platform%20 essays%20with%20polling%20data.pdf
- 312. Uhlig, A. et al. (2020). Technological innovation and the future of work: A view from the South. December 10, 2020. G-20 Insights. https://www.g20-insights.org/ policy_briefs/technological-innovationand-the-future-of-work-a-view-from-thesouth/
- 313. UNCTAD. (2017). Information Economy Report 2017: Digitalisation, Trade and Development. United Nations Conference on Trade And Development. https://unctad.org/en/PublicationsLibrary/ ier2017_en.pdf
- 314. Unni, J. (2018). Formalization of the Informal Economy: Perspectives of Capital and Labour. The Indian Journal of Labour Economics 61, 87 – 103. 18 September 2018. https://www. researchgate.net/publication/327731542_ Formalization_of_the_Informal_ Economy_Perspectives_of_Capital_and_ Labour
- 315. Vasudevan, U., Akkilagunta, S. & Kar, S.S. (2019). Household out-of-pocket expenditure on health care – A crosssectional study among urban and rural households, Puducherry. Journal of Family Medicine and Primary Care. 2019 Jul; 8(7): 2278 – 2282. doi: 10.4103/jfmpc.



jfmpc_302_19 https://www.ncbi.nlm.nih. gov/pmc/articles/PMC6691471/

- 316. Wilson, J. (2015). Being edgy and cool doesn't make tech companies any less exploitative. The Guardian. August 18, 2015. https://www.theguardian.com/ technology/2015/aug/18/silicon-valleytech-companies-blue-collar-workerswage-gap-diversity
- 317. World Bank. (2006). *India's Employment Challenge: Creating Jobs, Helping Workers.* Poverty Reduction and Economic Management Unit. Report No. 35772-IN
- 318. World Bank. (2019). World Development Report 2019: The Changing Nature of Work. http://documents1.worldbank.org/ curated/en/816281518818814423/pdf/2019-WDR-Report.pdf
- 319. World Bank. (2021). India Mobile Penetration. https://databank.worldbank. org/id/dc528a52?Report_Name=India-Mobile-Penetration#

- 320. World Economic Forum. (2020). The Promise of Platform Work: Understanding the Ecosystem. January 2020. http:// www3.weforum.org/docs/WEF_The_ Promise_of_Platform_Work.pdf
- 321. World Health Organization. (n.d.). *Global Health Expenditure database*. https:// data.worldbank.org/indicator/SH.XPD. OOPC.CH.ZS?locations=IN
- 322. Yoel, S.M. & Hasym, M.W. (2021). *Healthcare Protection for Gig Workers: A Brief Case During Pandemic.* Advances in Social Science, Education and Humanities Research, Vol. 549. Atlantis Press. January 01, 2021. https://www.atlantis-press.com/ article/125956239.pdf
- 323. Yu, D. (2020). Indonesia to impose 10% digital services tax. Tech In Asia. May
 18, 2020. https://www.techinasia.com/
 indonesia-impose-10-digital-services-tax
- 324. Zomato. (2019). A story of hustle, respect and determination. May 22, 2019. https://www.zomato.com/blog/astory-ofdetermination





Endnotes

- States and Union Territories that have legalised bike taxis (in alphabetical order): Andhra Pradesh, Bihar, Chandigarh, Goa, Gujarat, Haryana, Jharkhand, Madhya Pradesh, Meghalaya, Mizoram, Punjab, Rajasthan, Telangana, Uttar Pradesh, and West Bengal.
- [2] See page 30, *Fairwork India Report* 2020, for estimates of each of the eleven platforms.
- [3] Digital India is a flagship programme of the Government of India with a vision to transform India into a digitally powered

society and knowledge economy (Ministry of Electronics and Information Technology, 2015)

- [4] We use secondary and tertiary sources here.
- [5] See page 30, *Fairwork India Report* 2020, for estimates of each of the eleven platforms.
- [6] See Section 3.3 for a detailed classification of platform labour categorised by reach and complexity of labour.
- [7] While this has been observed for gig jobs with high complexity, women also



take up location-specific platform jobs such as providing professional home services, delivering packages, or ferrying passengers, as can be seen in *Chapter 5*. Thus, women value flexibility and choice of labour allowing them to monetise their skills and tangible assets when and where they want. This helps reframe the role of women in public and private life. Thus, labour force participation is no longer a binary decision between household duties and economic aspirations, but women now have the choice to work at will (Raman & Kulkarni, 2021).

- [8] Notably, platforms help workers set up their bank accounts and also facilitate their access to institutional credit, as can be seen in the forthcoming chapters of this report.
- [9] Today, any individual with access to a twowheeler, with or without a commercial permit, can deliver packages, food, groceries, medicines etc., in the digital hyperlocal economy. Such individuals are different from the traditional motor vehicle drivers who drive vehicles with commercial permits alone. Thus, many of these traditional occupational categories need to be expanded and/ or redefined.
- [10] The census adjustment has been done on the basis of Census and NSSO population data sets. First the Weighted NSSO population figure was estimated from the concerned NSSO employment and unemployment rounds both for ruralurban and male and female differently. After that, the given figures are divided by the concerned census population figure. We have taken the census figures from the Report of the Technical Group on Population Projection, RGI, Census 2011. After getting the respective ratios, they are multiplied with the multiplier figure

to get the census adjusted weights.

- [11] monthly per capita consumption expenditure
- [12] Partners are independent contractors associated with a technology platform where they offer/ advertise their services so that end users (citizens) can find them.
- [13] Labour provided by 'knowledge workers', i.e. employees of Business Process and Knowledge Process Outsourcing of the early 2000s
- [14] This evidence was first published in the report, Unlocking Jobs in the Platform Economy: Propelling India's post-Covid Recovery, Ola Mobility Institute, February 2021 (Ramachandran & Raman, 2021).
- [15] The control group of the survey includes personal chauffeurs, auto drivers, kaalipeeli taxi drivers, radio- taxi drivers for companies such as Meru or Fastrack etc., drivers of tours and travels companies, chauffeurs of hotels, drivers for dedicated trips to schools, colleges, and offices, etc., and other such categories. The driverpartners of platforms constituting the experiment group of the survey include drivers of cabs, auto-rickshaws, biketaxis and city-taxis or kaali-peelis. It is important to note that a driver-partner can be attached to more than one platform.
- [16] 23 cars per 1000 population, and 128 twowheelers (scooters, motorbikes) per 1,000 population (Ministry of Road Transport and Highways)
- [17] A self-employed driver is one who owns or rents the asset- car/ auto/ bike- and drives it either on the platform or outside of it.
- [18] A wage-worker driver does not own the vehicle he drives; instead he is employed by the owner of the asset or by a fleet



company, and "typically" has a fixed salary for a particular number of hours of work. These drivers are also found within and outside of the platform economy.

- [19] States and Union Territories that have legalised bike taxis (in alphabetical order): Andhra Pradesh, Bihar, Chandigarh, Goa, Gujarat, Haryana, Jharkhand, Madhya Pradesh, Meghalaya, Mizoram, Punjab, Rajasthan, Telangana, Uttar Pradesh, and West Bengal.
- [20] India's Country Summary of Higher Education, World Bank
- [21] The ILO defines microtask platforms as a type of web-based labour platform that provide businesses and other clients with access to a large, flexible workforce (a "crowd") for the completion of small, mostly clerical tasks, that can be completed remotely using a computer and Internet connection.
- [22] Mahatma Gandhi National Rural Employment Act 2005 is aimed at providing at least 100 days of guaranteed wage earnings each financial year to each household whose adult members agree to do unskilled manual labour (Gol, 2018).
- [23] The organised sector in manufacturing consists of factories (or plants) that have ten workers or more and use power, or 20 workers or more and do not use power.

For the remainder of the economy, the organised sector essentially refers to all companies and government administrations. (Dougherty, 2008)

- [25] This was in the backdrop of nationwide lockdowns across the world and pertinently in India on account of the public health emergency precipitated by the Covid-19 pandemic.
- [26] E-SHRAM portal Frequently Asked Questions, Q8 and Q21.
- [27] Excerpt from Issue Brief, "Reimagining Social Protection in the 21st century: Operationalising the Code on Social Security 2020', by the Ola Mobility Institute (Ramachandran, Raman & Singh, 2021) reproduced with permission.
- [28] Ayushman Bharat is a flagship scheme of the Government of India launched to achieve the vision of Universal Health Coverage. Ayushman Bharat has two interrelated components: health and wellness centres and Pradhan Mantri Jan Arogya Yojana (PM-JAY). While the centres are work in progress, PM-JAY aims to provide free healthcare access to 40% of India's population, those at the bottom of the pyramid. As of December 20, 2020, a total of 128+ million e-cards were issued under PM-JAY and state government-sponsored health insurance programmes, with PM-JAY constituting 70% of the enrollment. https://pmjay.gov. in/





