

# Skilling for the Future of Work

An Outlook for Youth  
in the Platform Economy



## Foreword

The **'Future of Work'** as a policy concept has received much attention in the last few years. Rapid developments in emergent technologies like artificial intelligence, internet of things, automation, and robotics, have fuelled debate and action from policymakers, educators, and businesses to fully leverage the opportunities these new technologies present. The growth of the platform economy in India in the last few years in the midst of this ongoing debate has received a lot of attention from businesses, policymakers, and workers alike. It has created equal amounts of anxiety and excitement as we adjust to a changing world of work.

In order to address these changes and prepare workers for new working arrangements and job roles, Quest Alliance and Tandem Research released the report Skills for Future Jobs in 2018. The current report builds on the earlier report to focus on the platform economy and the skills that workers will need to thrive on it.

This report focuses on graduate trainees from Industrial Training Institutes and their chances on the platform economy. Quest Alliance has worked closely with ITIs for a number of years and insights from years of experience was formative to the framing of this research. Quest Alliance has previously published a number of reports on the state of ITI trainings. [[www.questalliance.net/our-publications](http://www.questalliance.net/our-publications)]

Many of the recommendations made in this report have been implemented by Quest Alliance in their program or are already included in ITI curricula. However, research conducted during this study indicated that their importance is only going to grow as the new economy and shifts in labour market conditions create new ways of working.

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# 01

## Introduction

### 1.1 Background

The Indian labour market is characterised by widespread informality with over 81 percent of workers in non-standard forms of employment.<sup>1</sup> Labour market conditions have seen severe strain in recent years as unemployment [at 5.8 percent] reached a 45 year high in 2018-2019<sup>2</sup> and female labour force participation shrunk to just 16.2 percent in 2018.<sup>3</sup> Youth labour force participation rate was at 38.10 percent in 2018-2019.<sup>4</sup> India has one of the largest youth populations in the world with 4.75 million youth<sup>5</sup> expected to enter the workforce every year - and yet job creation growth was abysmally low at 2.8 percent in 2018-2019.<sup>6</sup>

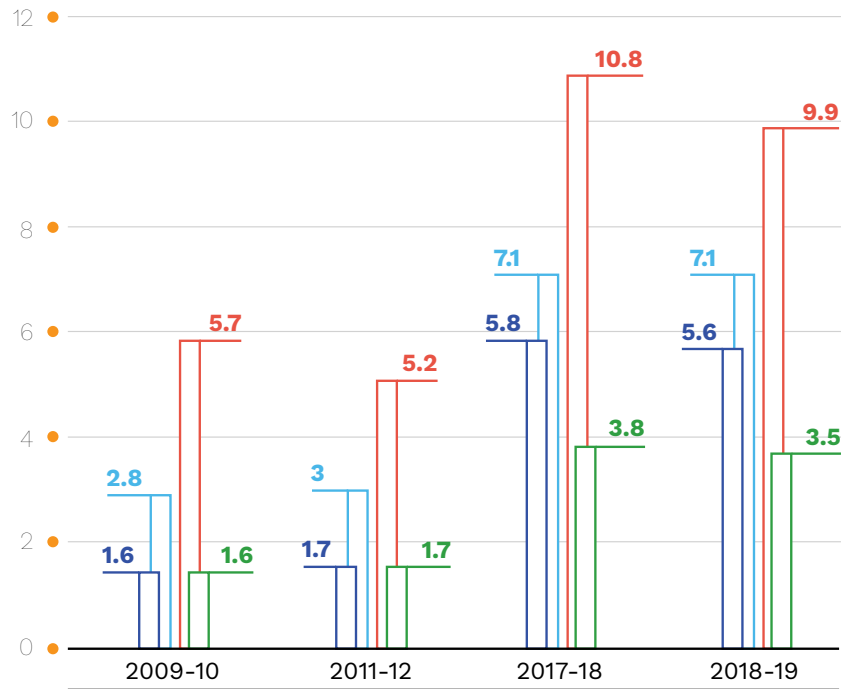
Indian workers currently face a number of barriers - the unavailability of jobs combined with a talent and skill mismatch has resulted in widespread underemployment. Many workers with advanced educational degrees are forced to work in low skill jobs as they are unable to find suitable employment in accordance with their level of education and skill.<sup>7</sup> On the other hand, rapid development in new technologies have created new job roles but industry insiders report that the current workforce is ill-equipped to be onboarded onto these available roles.<sup>8</sup>



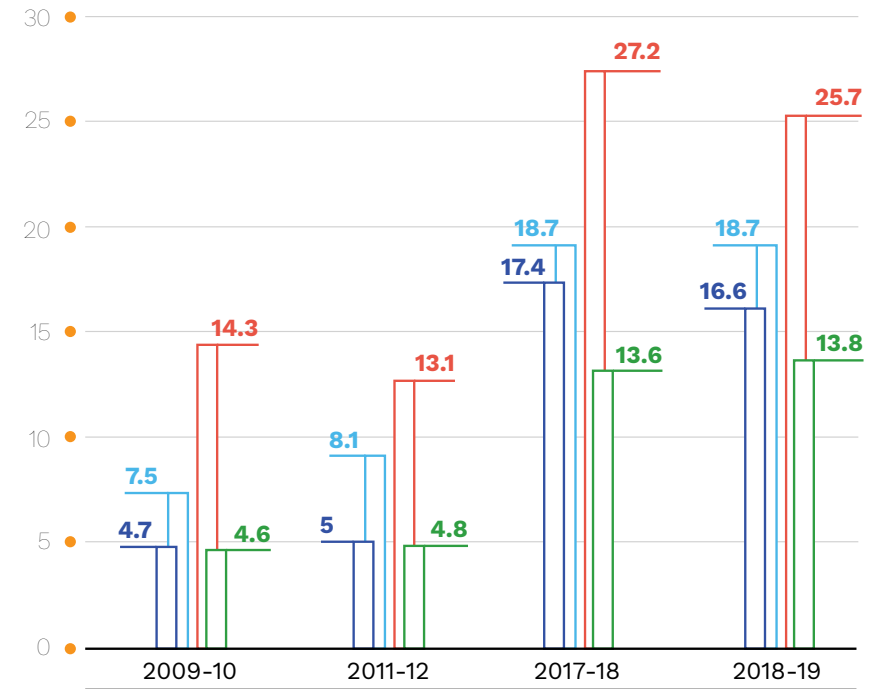
Current educational institutions and training programs have become outdated and inadequate to meet changing industry requirements.

The Indian government sees digital work platforms as opportunities for employment generation and is partnering with platforms in various capacities. The National Skill Development Corporation [NSDC] has collaborated with Urban Company to create skilling initiatives to onboard workers to the platform.<sup>9</sup> AirBnB has signed a memorandum of understanding with the state of Orissa, Maharashtra and Meghalaya to develop tourism infrastructure in underserved parts of the country.<sup>10</sup> Uber and Olacab both have partnered with various states to conduct skilling initiatives and extend lines of credit to onboard drivers to the platforms and create employment opportunities.<sup>11</sup>

## Rise in Unemployment Rate



## Youth Unemployment Rate



In 2017 - 2018, the unemployment rate reached a **45-year high of 5.8 per cent**, with the job-creation growth rate touching an abysmal low of 2.8 per cent. It is against the backdrop of these already troubling indicators, that Covid-19 induced lockdowns pushed India into a phase of economic downturn marked by an estimated growth rate of minus 4.5 this year.

\* Source: Periodic Labour Force Survey 2018-19

The platformization of work comes on the heels of increasing non standard employment globally. India is in a peculiar place - having missed previous industrial revolutions, it is shifting from a largely agrarian economy to a service-led economy, skipping over industrial production and manufacturing.<sup>12</sup> In contrast, east-Asian countries like Korea and Japan were able to leapfrog into becoming highly productive economies by focusing on manufacturing led growth, enabling large scale investment in human capital and raising the quality of life. This period of growth allowed workers to shift to the formal economy and the gap between low skilled workers and high skilled workers to be narrowed. India on the other hand, has had a highly elastic labour market - accommodating low wage, low skill workers and highly skilled, technical workers as well.<sup>13</sup>

The Industrial Training Institutes face immense difficulty placing graduates into industry jobs in the face of shrinking jobs in the present economy. Platforms could present opportunities for graduates who have received core trade skills. However, the platform economy and current economic and labour market conditions have changed the way people work and have created new working arrangements which require a different set of skills.

**While digital skills are prime among the skill requirements for platform economy workers, emerging literature on the platform economy indicates that communication skills, decision-making, risk-taking, financial management, and a tacit sense of entrepreneurship are just as important to succeed on the platform economy.<sup>14</sup> If workers are to find employment or earning opportunities as the number of available jobs shrinks, the platform economy could be a stopgap for workers in the short term. Fluency to navigate the platform economy to leverage these opportunities will be crucial for workers.**



## 1.2 Research enquiry

This white paper seeks to uncover the opportunities presented by the platform economy to graduates of ITIs and VTIs and the skills these institutions will need to impart to trainees. It takes three lines of enquiry to identify the type of job roles that will be available and the skills and competencies that will be required to leverage opportunities on the platform economy.

# 1

What sectors are likely to be most impacted by the growing platformization of work?

# 2

What impact is this likely to have in terms of changing employment opportunities and employment conditions?

# 3

What are the skills and competencies ITIs will need to impart to trainees to prepare them to be able to leverage opportunities on the platform economy?

**Chapter 2** defines the platform economy with a typology of digital labour platforms and the sectors of work that are likely to see platformization. This is followed by **Chapter 3** which details changing employment conditions on the platform. **Chapter 4** outlines the current curricula of ITIs and the skills and competencies trainees will require to succeed on the platform economy.

## 1.3 Method

This paper relies on desk research and qualitative interviews, including a focus group discussion. The team also conducted extensive desk research and 18 in-depth, qualitative interviews with a range of stakeholders crucial to the platform economy in India. During the desk research, we mapped current opportunities on the platform economy and those that are likely to grow in the coming years based on investment patterns and growth in different sectors. We interviewed top level management at 2 top recruitment agencies that focus on blue and grey collar workers in India to elicit insights on hiring practices and current trainings available for workers entering the platform economy. Interviews with a labour economist and the head of the National Skill Development Corporation set the context for labour market conditions in India, the uptake of platforms, changing job roles and employment conditions. We also conducted a focus group discussion with 7 ITI trainers from different institutes in Karnataka to gain a deeper understanding of the challenges with the delivery of current training programs. A focus group discussion with 4 Vocational Training Institute trainers in Bengaluru gave us further insights into different models of vocational training. Interviews with 1 former human resource manager at a food delivery platform and 1 current trainer at a home services platform revealed the skills gaps of workers entering the platform. We also spoke to 3 ITI trainees to hear in their own words their experience of the training.

| Stakeholder Group                      | Organisation  |
|--|---|
| ITI Trainers                           | 7, various Quest Alliance partners                      |
| VTI Trainers                           | 4, various Quest Alliance partners                      |
| ITI Trainees                           | 3, various Quest Alliance partners                      |
| Government agency                      | Sabena Mathayas, National Skill Development Corporation |
| Labour Economist                       | Radhicka Kapoor, ICRIER                                 |
| Recruitment Agency                     | Teamlease, Betterplace                                  |
| Platform Trainer                       | Urban Company   |
| HR and Recruitment manager at platform | Ex - Swiggy   |



# 02

## Working on the platform economy

### 2.1 What are digital work platforms

At its most general level, a platform is a digital infrastructure that enables interaction between two or more parties.<sup>15</sup> In the context of work, the platform is the intermediary through which buyers and sellers can hire or provide goods and services. It can be understood as a two-sided marketplace where hiring agents operate as employers submitting work requests that demand attention from a supply of workers aggregated and made available as a labor market through a platform company. In some cases, the hiring agents are individual consumers using platform company services. In other cases, businesses of all sizes turn to platform services as a labor supply.<sup>16</sup> The platform serves as an intermediary to connect the two parties without getting involved in the transaction while in other cases, the platform may play a pivotal role in setting terms and opportunities for employment.



## Typology of platforms

Digital work platforms can be loosely sub categorised into 2 types - online work and location based work.

### 1

#### Location-based or on-demand platforms

Location-based platforms or on-demand platforms match clients with workers who can provide the service they require within a specific location. Cab aggregators, food delivery services, and home services are some examples of location based services. The customer and service interact through an intermediary i.e. a platform that provides services to customers. As the same suggests, workers are limited to work in a specific geographic location while customers may be able to use the service across various locations. For the most part, platforms of this type play a central role in setting the price of the service, wages for workers, terms of working, and working arrangements.

### 2

#### Online work

Online work may be defined as work done in online labour markets bringing together buyers and sellers of intangible knowledge and service work.<sup>17</sup> Online work is when services are rendered by workers online and can be performed remotely based on the worker's location. The platform serves as an intermediary connecting workers or service providers to clients who require those services. Workers and employers are not bound by geographic location and enables what Mark Graham calls a 'planetary workforce'.<sup>18</sup> Amazon Mechanical Turk and Freelancer are examples of this. Employers can post jobs on the platforms and pay workers for tasks completed. Online work encompasses workers with a wide range of skills

and skill levels. High skill workers like programmers, designers, animators, writers, and editors are increasingly finding work on online work platforms. In the same vein, low skill work like data entry, labelling, content moderation are outsourced to workers in low income countries, powering much of the invisible labour required to develop emerging technologies like artificial intelligence or the day to day functioning of social media platforms.<sup>19</sup>

Whether location based or online platforms, platforms are designed and structured differently depending on the service they offer. For example, on a ride hailing platform, platforms may not exert much control or expect high standardisation for the task at hand ie driving. The onboarding process would typically involve an app-based training or face-to-face training for a few hours regarding the app, company policies and some tips on handling customers. Whereas on platforms that offer services involving close interaction with customers or slightly more specialised skills, the platform may lay emphasis on training workers more rigorously since tasks are standardised and as customer facing roles, workers are expected to carry forward the reputation of the platform. Therefore the terms of engagement, working conditions, and employment relationship will differ across different types of platforms and workers with different levels of skills are likely to reap the benefits differently.<sup>20</sup> A reputation system where workers and employers are ranked is key to these types of platforms and serves a critical purpose.<sup>21</sup> It helps employers identify experienced and reliable workers and at the same time, workers can use this to ensure they work with fair employers.

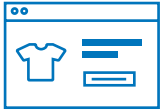
## 2.2 Key sectors likely to see platformization

The platform economy has emerged as a job creator in the country at a time when job growth is low and underemployment is severe. The last few years have seen the proliferation of digital work platforms in various sectors - food delivery, logistics, home services, and care work.

Platforms like Uber and AirBnB are promoted as enabling opportunities for 'micro-entrepreneurship' that allow 'driver-partners' or 'hosts' to have the autonomy and flexibility to work on their own terms. The injection of capital investment into these endeavours allowed platforms to cut costs to end-users thereby prompting rapid uptake. Additionally, the business models adopted by platforms encourages lean asset ownership, thereby allowing the business to scale rapidly and be adapted to various locations with little capital investment.

India, along with China and the US, is set to dominate the global platform economy by 2020.<sup>22</sup> The shift toward platforms across sectors is transforming how the sectors operate, and consequently, disrupting the traditional nature of work

A noticeable trend is that there has been a rapid expansion of platforms across Tier 2 and Tier 3 cities. The affordable smartphone revolution has taken these cities by storm - increased internet penetration and the ubiquity of affordable smartphones has fuelled the growth of the platform economy. Reports estimate that online service transactors have grown at 2.1X and users of hyperlocal services and e-commerce services are growing at 3X.<sup>23</sup>



# 1

## E-Commerce

One of the key drivers of growth in the platform economy is the e-commerce sector. Since e-commerce focuses on goods rather than services, it is usually not included in the conversations around digital work platforms. It is included for the opportunities it presents for entrepreneurship and the jobs created in allied sectors and services like supply chain management, logistics and delivery, warehousing, and customer relations. A report published by Snapdeal and KPMG in 2016 estimated that for every job created in the e-commerce industry, 3-4 jobs would be created in allied industries.<sup>24</sup>

Projections made before the economic downturn in India estimated that the Indian e-commerce sector would surpass the US to become the second-largest e-commerce market in the world by 2034. The E-commerce market in India is expected to reach US\$ 200 billion by 2026 from US\$ 38.5 billion in 2017. This growth is primarily attributed to rising income, the surge in internet penetration, and a rise in smartphone sales. Reports estimate that the E-commerce sector, can create 1 million jobs by 2023.<sup>25</sup>

E-commerce is an important sector to observe in one crucial respect - from 2015-18, reforms like GST & demonetization ushered in the highest informal to formal shift of 14% in E-commerce sector when compared to others like Manufacturing (11%), Government(10%) and Education (7%) respectively.<sup>26</sup> It is significant that the e-commerce sector has prompted this shift to the formal sector, at a time when contractualisation and non standard employment grows globally, and anxieties around the hollowing out of entry level jobs grow.

Crucially the e-commerce sector also provides access to marketplaces with significantly lowered barriers to entry and required capital investment. Platforms like Etsy are specifically targeted at individual entrepreneurs and small businesses selling goods at a smaller numbers. Even social networking platforms like Facebook, Instagram, and Whatsapp are being leveraged to sell products. The ease of using universal payment interfaces [UPI] and online banking have contributed to this growing trend. Not all e-commerce platforms are created equally nor do they reach the same audience. Identifying the right platform to sell on is pertinent as entrepreneurs will have to consider the cost of accessing the platform, commission rates, conditions and terms of engagement set by the platform, and the audience of that platform.



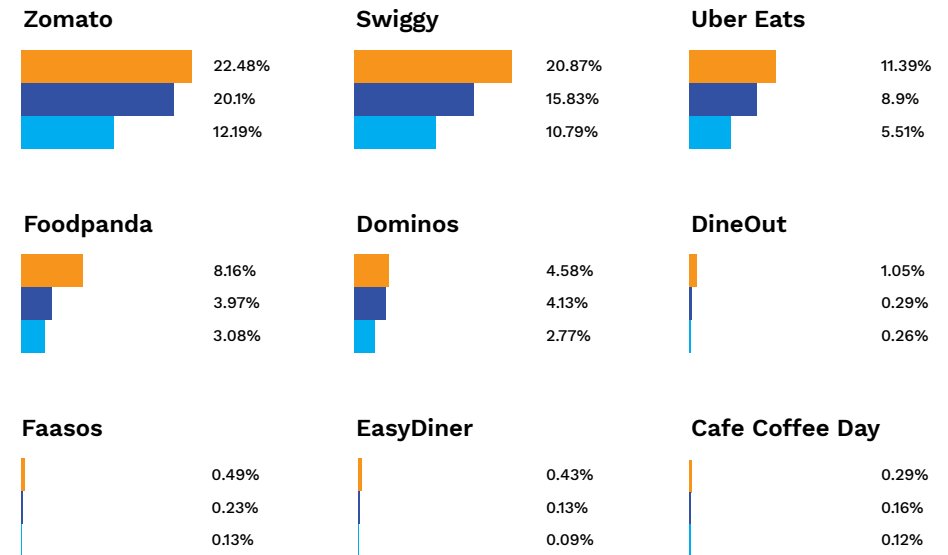
## 2

### Hyperlocal delivery of food and other products

While the hyperlocal delivery sector is already dominated by platforms, the injection of capital to the sector will ensure its further expansion. The Indian food-tech industry is expected to reach \$15 billion by 2023, up from its current estimate of \$4 billion.<sup>27</sup>

Projections from Morgan Stanley indicate that the online food and grocery delivery segment is set to become one of the fastest growing sectors in India, expanding at a compound annual growth rate of 141% by 2020.<sup>28</sup> Food delivery platforms are capturing the market and gaining ground across cities beyond Tier 1 cities and into Tier 2 and Tier 3 cities as well.

### Share of Indian smartphones food-delivery apps installed on



Source: Nearly half of all food-delivery transactions in India in 2018 happened on Swiggy, Quartz

■ Tier 1
 ■ Tier 2
 ■ Tier 3

The 3 main players in the market - Swiggy, Zomato, and Uber Eats have a presence in over 500 cities and raised a combined amount just short of 2 billion dollars in the last year. Zomato alone has 230,000 delivery partners and intends to add 10,000. Tech giant Amazon, too, is looking to join the race, hoping to start operations before the year ends. Earlier this year, reports indicated that the company was in talks with restaurants, trying to get them to come onboard by undercutting the competition.<sup>29</sup> The multiplicity of players involved and steady investments to stay innovative and competitive is indicative of how the hyperlocal delivery segment is likely to sustain its growth.

The grocery delivery segment doesn't lag far behind. Reports indicate that online grocery is set to become a \$10.5 billion dollar industry by 2023, driven not only by consumers in metros, but also non-metropolitan cities.<sup>30</sup> BigBasket, having achieved unicorn status earlier in 2019, is now close to breaking even in ten tier 1 cities, and will chart a course to becoming profitable in 2020-21. Grofers achieved unicorn status in 2019 as well, and is looking to bring in a revenue of over \$1 billion by the end of 2019. With Amazon and Flipkart also entering the fray, the stage is set for the sector to continue growing.



### 3

## Ride-hailing

The ride-hailing sector, along with e-commerce, led the charge and paved the way for platforms to enter multiple sectors in India. Frost & Sullivan's projections indicate that India's mobility market is set to touch \$90 billion by 2030. Most of this growth is expected to come from taxi services, the value of which stood at \$1.5 billion in 2018 and is expected to increase to \$61 billion by 2030.<sup>34</sup> Capital injections into ride-hailing companies are routine. An infusion into one firm is often met by an infusion into another, with all the players vying to be the last player standing. Uber, in November 2019 infused its Indian arm with ₹1,767 crores,<sup>35</sup> around the same time Ola was in talks with Microsoft to receive between ₹1,050 and 1,400 crores.<sup>36</sup>

In India, these interventions have been introduced to a market where the majority of workers are in the informal sector. The uptake of these platforms has been quite rapid in metro cities like Delhi, Bengaluru and Mumbai, while their inroads into smaller cities and tier 2 cities has been slower. For example, Uber operates in 36 Indian cities, whereas OlaCab operates in 125 cities.<sup>37</sup> Adapting to the Indian market, both platforms offer autorickshaw rides and two wheeler rides in addition to solo and pool car rides. Uber and OlaCab also extend lines of credit enabling drivers to purchase their own vehicle. The barriers to entry to driving are low and the initial high pay offered by ride-hailing platforms prompted many to start driving for the platform. However, a number of protests and strikes have taken place as drivers protest against falling wages amounting to intense financial pressure, algorithmic control, and deteriorating employer-employee relationships.



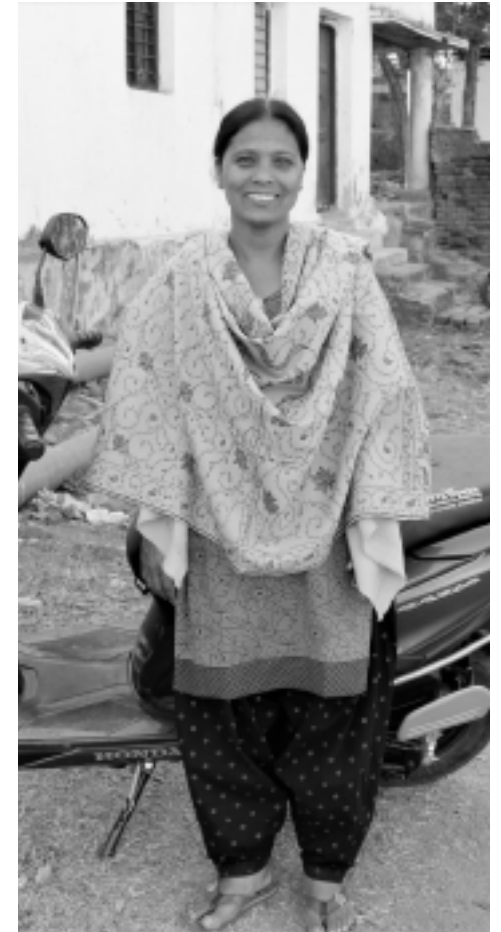


## 4

### Domestic service

The domestic service sector, too, has received a lot of traction, with startups such as BookMyBai operating as platforms for over 10,000 maids, babysitters, nannies, cooks, and patient care staff.<sup>38</sup> Helpersnearme, which like others, bridges the gap between workers and individuals looking to hire, has over 39,300 unorganised workers on their platform.<sup>39</sup> Even Helper4U, which initially started as a telephone directory of job-seekers was transformed into an online platform, offering the services of over 4500 helpers.<sup>40</sup>

The domestic service sector is comprised primarily of women from lower socio-economic sections. The sector has been historically known to be exploitative and workers in the sector have very little legislative protection. Digital interventions in domestic services and care work have been framed by platform founders as avenues for independence and flexibility, however early studies on these platforms demonstrate the way they replicate and reinforce existing exploitative practices through digital methods.<sup>41</sup> For example, domestic workers' work and actions are monitored closely by the platform through the app interface, and are penalised for not following certain behavioural codes set by the platform. Clients rate workers based on their experience, and these ratings determine a worker's ability to book more jobs. By and large, these platforms are designed to improve efficiency for clients and may not be ideal for labour wellbeing although they have the potential to address longstanding, entrenched exploitative practices in the sector.





## 5

### Logistics

Logistics platforms received significant cash inflow in 2019. Driven by an increase in consumption and the growth of the e-tailing industry, the logistics sector is set to grow to \$215 billion by 2020.<sup>42</sup> Ecom Express raised around \$11.4 billion in 2019 and has expanded to over 2,400 cities. The platform reported a 78% increase in revenue for the financial year 2019. Earlier in 2019,<sup>43</sup> Delhivery entered the unicorn club, and is now in talks with established players like Gati and Blue Dart to acquire their B2B operations.<sup>44</sup>

Rivigo, like Delhivery, is another logistics platform that entered the unicorn club. Focusing on the country's trucking system, it has a total fleet size of over 3,000 trucks, and is continuing to expand as its revenues rose 42%.<sup>45</sup> LetsTransport works as an aggregator for mini trucks and other large vehicles, focusing on inter-city service. Thus far, it has onboarded over 44,000 vehicles, and is looking to expand its offerings to include intra-city services as well.<sup>46</sup> The increase in investment and platforms' intention to expand to more locations indicate the creation of new job opportunities on the platform economy and the growth that is expected to follow.







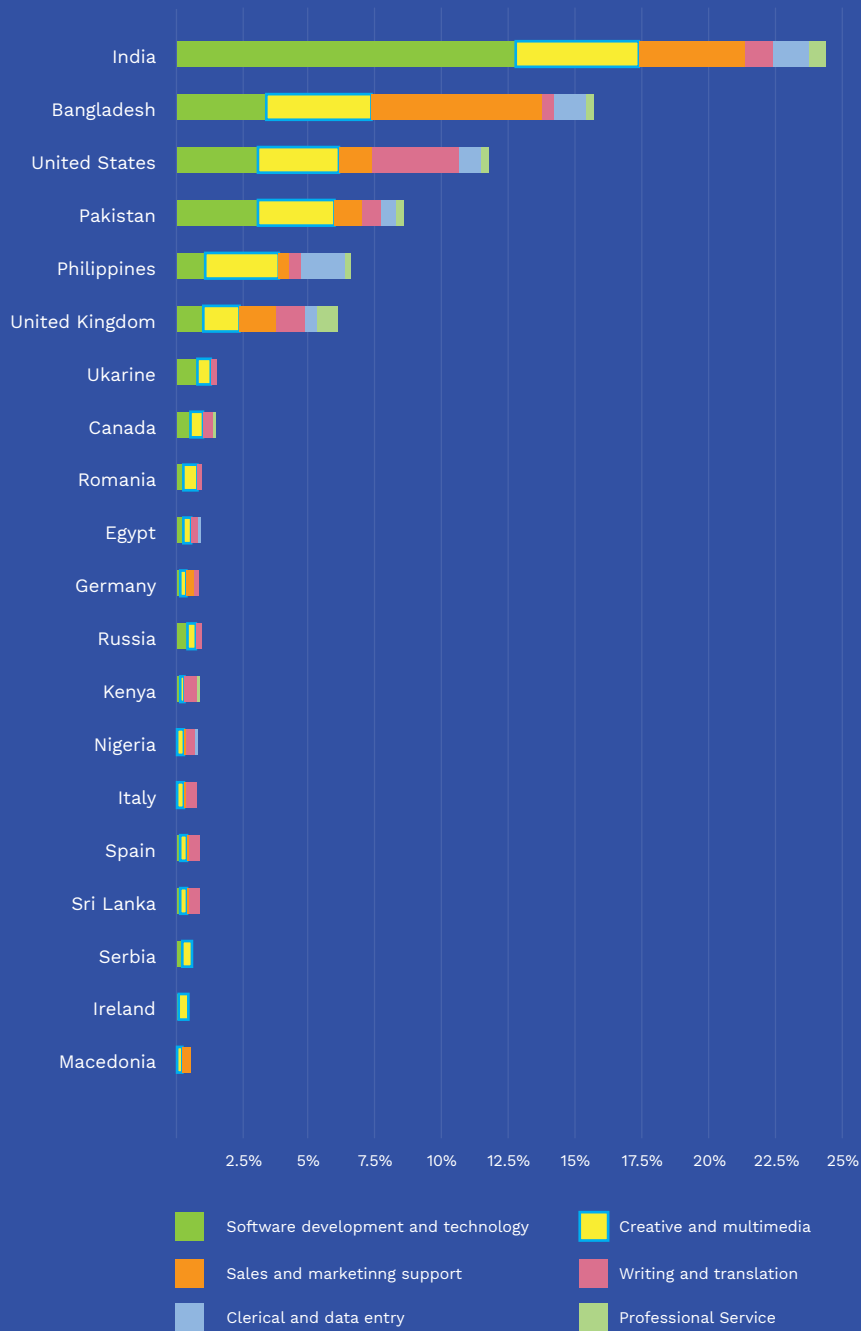
## 6

### Online work and freelancing

A report from payments company PayPal released in 2018 found that one in all four freelancers were from India<sup>47</sup> and 41% of Indian freelancers witnessed growth in 2017.<sup>48</sup> A study conducted by the iLabour project at the Oxford Internet Institute, University of Oxford, found the same – India is home to 24% of online workers. It further stated that the global software development and technology segment is dominated by India, with Indian workers commanding 55% of the market share.<sup>49</sup> A report by Truelancer found that India's freelance workforce stood at 1.5 crore individuals across sectors and projected that by 2020, 50% of the Indian workforce is expected to go freelance.<sup>50</sup>

Platforms like Upwork, Freelancer, Truelancer and Fiverr are growing rapidly while newer platforms like 99designs are steadily gaining momentum. A whole support ecosystem has been created where we see companies like WeWork and 91springboard investing heavily in co-working spaces, and companies like Bon Credit providing FinTech based solutions specifically for platform economy workers.<sup>51</sup>





Ernst & Young's Global Contingent Workforce Study found that half of all organisations surveyed indicated that they have significantly increased their use of freelance (gig) workers over the past five years, with more than a third of them engaging the freelance workers for more than a year. The responses also indicated that by 2020, 25% of the organisations expected to be using 30% or more gig workers,<sup>52</sup> indicating that the demand for freelancers is steadily rising.

# 03

## Changing employment conditions and relationship

The shift of workers to the platform economy comes amid long brewing changes in working arrangements, employment relations and conditions, increasing contractualisation, and shrinking jobs in traditional sectors. Steven P. Vallas argues that the on-demand economy or asset sharing as digital work platforms were first known, came into being in the aftermath of the 2008 recession because of a number of factors.<sup>53</sup> Developments in digital technologies aside, poor conditions in the labour market in the years following recession prompted people to monetise idle assets like their cars or spare rooms.

### Replicating informality and precarity

Workers on the platform economy are paid a piece rate for every 'gig' or job completed. The gig economy is not a new phenomenon, especially in India. In much of the informal sector, workers are paid a piece rate for their work. Most workers in the informal sector lack access to social protection like minimum wage, social security funds, health benefits or sick leave. This is true for platform workers as well. Workers on digital work platforms are classified as freelancers or contractors thereby absolving the platform of providing any kind of social security, health insurance,



sick leave or even minimum wage to workers leaving them in a very precarious position. The platform economy recasts informality and does little to shift workers from non-standard employment to formal employment.<sup>54</sup> It replicates the precarity that characterises non-standard employment and impacts employment conditions in other ways through the introduction of digital methods of monitoring and control.<sup>55</sup> In India, platform work does little to address class, caste, and gender divisions but rather a worker's experience is shaped by such social categories.<sup>56</sup>

## Paradox of flexibility

Platforms use the language of micro-entrepreneurs and independent control over one's destiny to advertise their platforms to potential workers. They promise flexibility, independence, and the ability to be 'one's own boss'. They classify themselves as intermediaries that enable this entrepreneurship and make solo business owners out of all workers. A small section of workers are able to leverage this feature of platform work to their advantage. The ecosystem within which platforms operate allow highly skilled workers like designers, programmers, copywriters, and editors to

take their skills to a global marketplace where they are able to negotiate better wages than their local labour markets may be offering them.<sup>57</sup> In most cases, highly skilled workers are able to leverage the flexibility and advantages that remote working offers and are empowered to take on as much or as little work as they see fit for themselves especially since they are likely to have better social safety nets they can rely on. The platform offers workers an opportunity to exert agency over their work and the time and space to develop certain skills.<sup>58</sup>

**The platform economy presents alternatives for women and other marginalised groups like differently abled people who cannot participate in traditional workplaces.<sup>59</sup> For women with care responsibilities, the flexibility of platform work provides avenues for gainful employment and financial independence. However, women still have to fight barriers like the stigma surrounding platform work which is poorly understood by family members.**

On the other hand, workers with access to fewer safety nets may find themselves facing rather unfair conditions of work, forced to take on work that they find, even if they are poorly compensated or if they are under poor conditions and terms of work. A particular workers' success on the platform economy is determined in large part by their existing social capital and social support systems available to them. Therefore the benefits or challenges posed by work on the platform economy will be felt differently by different social groups and even within social groups will be felt differently by different individuals.<sup>60</sup>



## Weakening bargaining capacity

This focus on individual work and independence has had the effect of weakening the bargaining capacity of workers. Workers on the platform economy hardly ever interact with each other since most gigs are undertaken solo and workers must put in long hours, making it difficult for workers to meet physically, share experiences, and build solidarity. Interaction between platforms management and workers is also kept to a minimum.<sup>61</sup> For the most part, workers on location-based platforms meet with platform managers in the beginning during the sign up process but interactions after that are delivered through the app interface or through helplines. Most grievance redressal mechanisms or helplines are automated, eliminating a human element to work processes. This makes it extremely difficult for workers to negotiate with the platform for better working conditions. Platform workers in India have found a way to form solidarities - through social media groups where they share experiences and tips with each other. However, the existence of these groups and participation is limited.

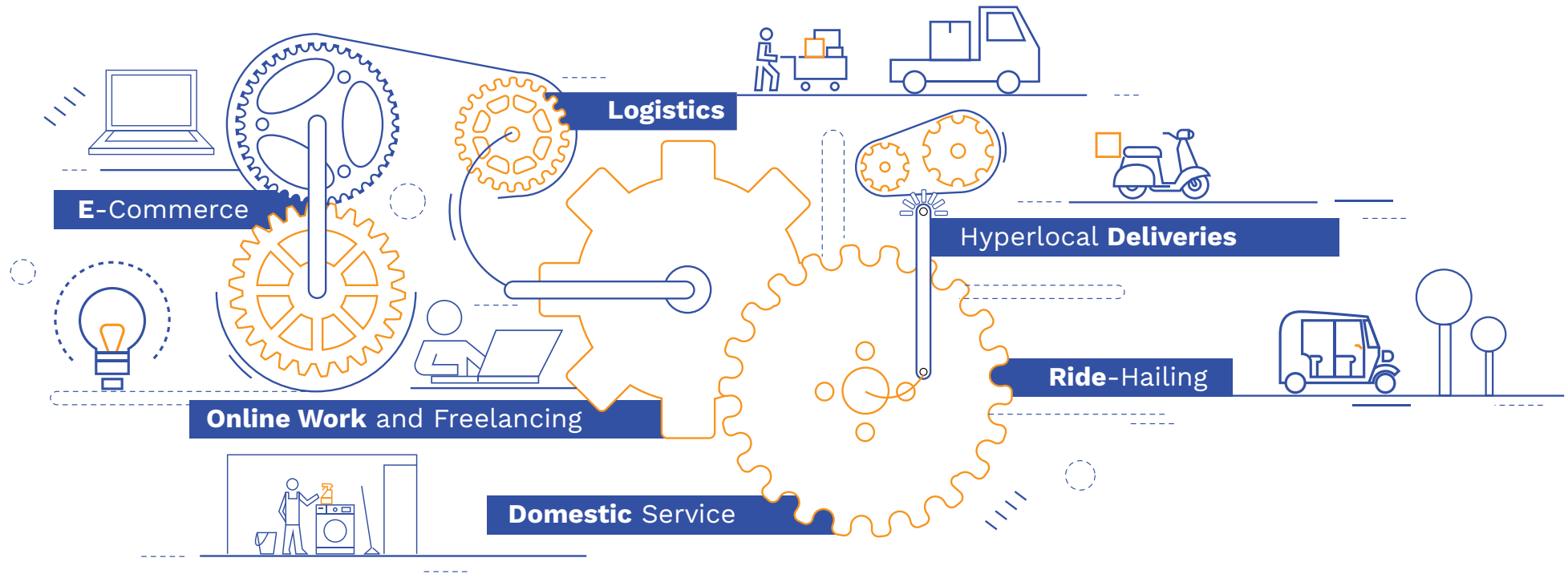
## Algorithmic control and new forms of engagement

One of the features that has become characteristic of work on the platform economy is the sporadic changes to the terms of engagement. Workers have long complained of platforms changing the terms of engagement - whether it be hourly wages, incentive models, or even hours of working - with little to no prior information. This has led to workers' earning capacity being reduced or their working hours extended in order to make the same amount of money. The architecture of most platforms depend on high degrees of automation and act as barriers to engagement between workers and platform managers.<sup>62</sup> By maintaining opaque systems of organisation that don't allow for meaningful engagement between worker and platform, platforms are able to enforce terms of engagement that can be unfair and exploitative.

The digital capabilities on which platforms are based have enabled new forms of monitoring and controlling workers. Worker behaviour is monitored through the app interface through a number of ways. The first is through the rating system. Workers are rated by clients on the service provided. This rating determines the leads and earning opportunities workers can expect and even their ability to work on the platform. Workers are usually instructed to maintain a certain rating after which they are penalised by not being given enough leads or being deactivated from the platform altogether.<sup>63</sup> Workers are prompted to take on more leads during busy hours and enticed with bonuses to take on more work. They are penalised when they cancel leads and can have their account deactivated after a certain number of cancellations. Most times, workers have no recourse to negotiate since the algorithmic systems used to monitor them are opaque and don't take into consideration human judgement or empathy.<sup>64</sup> The app interface also monitors workers' working hours, the time they spend on the app or on the job, and their patterns of working. This information is then used to 'nudge'

workers' behaviour. Platforms are also known to use gamification tactics like rewarding workers who accept tasks quickly, or those who reach a job location quickly, or scoring workers based on their performance to keep a competitive edge among workers in the hopes of creating better efficiency. Most jobs on location-based work platforms are customer facing and require interaction with clients or customers. While online work heavily relies on cognitive ability. Both categories of jobs rely on affect and emotional labour from those performing it. Location-based platforms and even some online work depends heavily on emotional labour and affect. While this has always been the case for care workers, service workers, and work that is categorised largely as women's work, digital platforms and working arrangements on them have made it pertinent for all workers. Workers are largely in customer facing roles and must interact with customers and manage interpersonal interactions throughout the course of their work. Their interactions with customers are intrinsically related to their ratings and therefore their earning opportunities.

## ● The Platform Economy as a Job Creator



## ● Key Skills for Youth to Access and Navigate Opportunities

**Entrepreneurial Skills**

**Communication Skills**

**Digital Fluency**

**Financial Literacy**

While the platform economy may offer opportunities for employment under current constraints in the labour market, the conditions that workers must contend with, and the sustainability of platforms' business models and its reliance on venture capital are not sustainable or ideal in the long run. The digital gender divide and disparity in women's ownership and use of the digital devices can be exclusionary towards women, creating new barriers to access. The platform economy in its current iteration should not be considered a long term solution to India's labour market woes but rather a stop gap where workers can weather current difficulties.

# 04

## How can ITIs prepare trainees for the platform economy

### 4.1 Overview of current ITI programs

Low wage, low skill, manual jobs that comprise of mostly repetitive, non-cognitive tasks are steadily getting automated, leading to a hollowing-out effect.<sup>65</sup> New roles are being created, however they require workers to have new skills and competencies which the training ecosystem in India, consisting of various educational and training institutions, is not currently equipped to impart. Alongside a change in what work entails, there has also been a shift in how it is carried out. The number of full-time positions available has reduced, and companies prefer to hire workers on a contractual or part time basis. The workers who initially would have been full-time employees, have now been forced to become micro-entrepreneurs.<sup>66</sup>

These changes have profoundly reshaped the face of work by transforming what work entails and how it is carried out. To better understand the changes taking place and the skills and competencies workers will require to deal with those changes, we spoke to individuals from the National Skill Development Corporation, agencies working with blue-collar workers and recruiting for platforms, labour market experts, and platform recruiters and trainers. Keeping in mind that there are more than 13,000 Industrial Training Institutes teaching around 1.9 million students across courses at any given time, we also spoke to students from ITIs, trainers from ITIs and VTIs (vocational training institutes), and conducted a focus group discussion with ITI trainers.

Industrial Training Institutes (ITIs) provide students who have cleared their grade ten exams with an alternative to the standard route of higher studies. Focused mostly on imparting technical know-how, the courses aim to prepare the students for entry-level roles across industries. A tracer study of ITI graduates conducted in 2012 found that 39.2% of the total graduates were employed at the time of the survey and an additional 5.4% were self-employed. The study also found that poor labour market outcomes were primarily attributable to a poor quality of human resources at ITIs.<sup>67</sup>



Until 2012, courses at ITIs looked slightly different from today - soft skills were not a part of the curriculum, with trainees only being taught social studies in addition to trade skills.<sup>69</sup> After a reworking of the curriculum in 2012 based on recommendations made by the National Council for Vocational Training, all courses at ITIs now have two components:

# 1

Trade skills that form the bulk of the curricula, with trainees being taught hard skills critical to the trade of their choice through a mix of classroom instruction and practical training.

# 2

Employability skills (ES), a term which is collectively used to refer to the other bucket of skills ITIs aim to imbibe - soft skills. These are taught mostly in the classroom with no practical learning components in most cases. In 2019, the ES syllabus was reworked and the number of hours dedicated to teaching ES was increased.<sup>70</sup>

The government, in response to the dwindling number of jobs and low employability, started promoting entrepreneurship through schemes and initiatives such as ASPIRE and the Pradhan Mantri MUDRA Yojana. Even at ITIs, entrepreneurship is a separate subject under employment skills and there are initiatives like the entrepreneurship development program,<sup>71</sup> which specifically look to mould students into entrepreneurs.

Individuals recruiting for entry level blue-collar positions opine that employability is a bigger problem than unemployment, with graduates from ITIs and universities alike, all lacking essential soft skills. Employers are increasingly looking for graduates with soft skills such as making decisions, taking risks, thinking analytically and being agile, all of which can also be seen as entrepreneurial skills.<sup>72</sup> Institutions across the board are failing to adequately equip students with these skills.

## 4.2 Skills needed for the platform economy

### 1

#### Entrepreneurial skills

Entrepreneurship has emerged as a key buzzword in recent years in conversations around employability and economic development. Entrepreneurial skills refer to an array of technical, personal, and management skills.<sup>73</sup> These skills can help promote innovation, competition, and economic growth.<sup>74</sup>

Entrepreneurial skills could help low-skilled workers with improving their service and consequently customer ratings; understanding promotions and advantageously working around them; and navigating opportunities available on different platforms. For medium and high-skilled workers, in addition to the aforementioned, entrepreneurial skills could help with conducting, managing, and expanding their business on platforms and incorporating feedback to improve the products or services they offer.<sup>75</sup>

#### A trainer at an ITI had the following to say about entrepreneurship skills in the ITI curriculum:

“The course was initially structured around the different loans, benefits and schemes available like Mudra and the Pradhan Mantri Yuva Yojana (PMYY). Now, there is a difference in the approach - examples are used, they are briefed on the challenges entrepreneurship entails, and are taught how to identify and solve problems. The bulk of the focus, however, remains on personality development.”



Mere classroom instruction will fail to effectively imbibe entrepreneurial skills - entrepreneurship cannot be taught through textbooks. There needs to be a practical approach which uses participatory methods and experiential learning to prepare individuals for success on platforms. In addition to an entrepreneurial mindset, succeeding as an entrepreneur on the platform economy will require the following skills:

## 2

### Communication skills

Communication can be defined as the process of transmitting information and common understanding from one person to another (Keyton, 2011). Skills that enable individuals to communicate effectively through written, verbal, non-verbal, and visual means are referred to as communication skills.

Communication skills have been and will continue to be imperative for success – now more than ever, with the rise of the platform economy. While job roles are changing, something that holds true for most jobs, both extant and new, across the platform economy irrespective of the sector, is the importance of knowing how to interact and communicate. Ride-hailing, delivery, on-demand home services, and care-work, all require workers to interface with customers. In addition to knowing how to interact, workers on platforms will be better equipped to deal with challenges if they know how to resolve conflicts, make decisions, brand and market themselves, and negotiate – all critical aspects of communication skills.

### A trainer with a platform remarked-

“We consider work experience necessary. Most individuals fresh out of education lack the soft skills required to interact with clients and since there is no supervisor, they will run into problems no matter how good they are. New hires usually lack patience and are unable to communicate well with clients. They haven’t been exposed to criticism before, so they don’t know how to deal with it – they don’t know what to say and how to say it.”

Most jobs on the platform economy will require workers to act independently, interacting directly with customers. Some managers in the platform ecosystem feel workers are not sufficiently equipped to resolve conflicts. This results in platforms taking measures such as prohibiting workers from responding to concerns raised, instead, requiring them to get their supervisors involved.<sup>76</sup>

As employment relations change on the platform economy, traditional notions of the employer-employee relationship are changing as well. Most platforms contend that they are mere intermediaries, connecting customers and workers on the platform, and the workers are self-employed individuals.<sup>77</sup> This necessitates the need for workers to know and understand their terms of employment, know their rights, and be able to negotiate.

### A labour market expert pointed out-

“The skills and abilities of workers to negotiate is not high enough, especially when it comes to contract terms. A change in terms may eventually come around as a market outcome, or an eventual political intervention.”



Though communication skills are now an integral part of the curricula at ITIs, a host of factors, ranging from administrative inefficiency to the lack of investment in both trainers and students, chip away at the effectiveness of the training received at these institutions. When one student was asked about what communication skills they were taught, they brought up interviews. Probed to find out if they practice for interviews with trainers or other students, they responded in the negative, stating they practice alone in front of the mirror at home when they get the time.

# 3

## Financial literacy/management

Financial literacy is the ability to use knowledge and skills to manage financial resources effectively for a lifetime of financial well-being (PACFL, 2008). With the platform economy, we see more individuals shifting towards non-standard employment, which is different in many aspects.<sup>78</sup> One of these is the financial aspect - incomes fluctuate, payments are irregular, traditional modes of employer-assisted savings have not been carried forward, and how money was traditionally paid to some workers has changed.

The financial sector is changing as well, driven by the rapid integration of technology into most financial services, dubbed fintech. Among other things, fintech has changed how payments are made, how finances are accessed, and how finances are managed. While some banks are keeping up, a lot of innovation is driven by newer fintech companies, also changing traditional notions of banking. Knowledge of basic financial literacy and management principles could greatly help workers navigate complex challenges created by these multitudinous changes.

One of the foremost challenges is the absence of a steady stream of monthly income. This creates problems for workers, many of whom are sole breadwinners and are repaying some form of debt. An important skill to have to better deal with the challenges is managing money. This can help workers understand basic matters ranging from limiting expenditure, investing money to creating emergency funds for times of need. Inculcating a habit of saving can also prove to be highly beneficial for workers in the long run, since platforms do not help them with provident funds or offer them any pension plans.

Payments on platforms are made through different modes. For some workers, money is transferred straight to their bank accounts, while for others, payments could be made in one of many ways - through cash, online transfers to bank accounts, or through financial services applications. In addition to

knowing how to manage finances with a fluctuating income and invest prudently, workers on platforms now need to know how to accept and make online payments and access their finances through applications and websites - they need to be digitally financially literate.

While fintech has made accessing accounts, receiving payments and transferring money significantly more convenient, the convenience does come with some danger - the potential for fraud. One example of this is a scam popular on many Indian marketplaces. Scammers express interest in buying something and send the seller a rupee or a similar small amount on an online payments application. The scammers then proceed to not transfer the remaining amount but create a payment request for the remaining amount. Unsuspecting sellers end up transferring money instead of receiving it.<sup>79</sup> Being both digitally fluent and financially literate can help workers identify and avoid such scams.

# 4

## Digital fluency

Being digitally fluent extends beyond being digitally literate. In addition to knowing how to engage with technology, digital fluency entails the ability to produce things of significance with technology (Papert and Resnick, 1995). Technology and the platform economy are deeply intertwined, with each acting as a catalyst of growth for the other. Workers on platforms need to understand privacy, security, how online spaces operate, and how technology can help them connect, share, and organise. A labour market expert noted that while familiarity with technology and some basic training usually suffice, workers that are finding employment with platforms need to know about privacy and security risks.<sup>80</sup>

At the very least, workers require a basic level of digital skills to operate on platforms. Through conversations with trainers, we were able to ascertain that students at ITIs, like most other potential low/medium-skilled platform workers, have only a basic level of digital skills. One trainer remarked that if they were to log a student out of the apps they use, they would not be able to log back in.<sup>81</sup> One of the causes of this could be that individuals seldom focus on becoming digitally fluent, or even digitally literate – they are content as long as they know how to carry out basic operations and do not want to get into how and why things operate.

Workers sign up on platforms, agreeing to their terms and conditions, which are often skewed in the favour of platforms, allowing them to collect personal data from workers.<sup>82</sup> This information could be sold and/or shared by platforms.

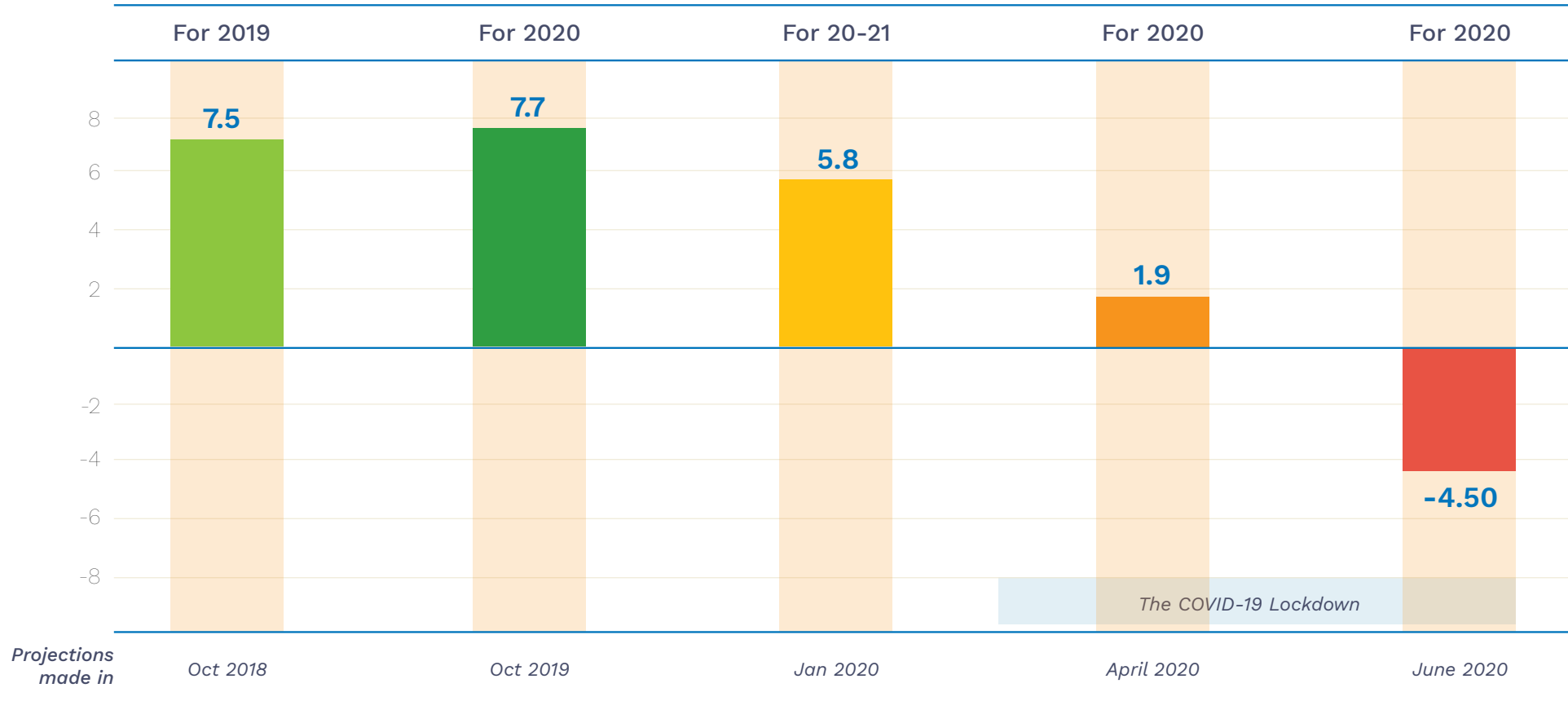
Data from payrolls of certain blue

collar workers is currently being used to evaluate the extension of lines of credit to them.<sup>83</sup> While at the face of it, the move seems positive, if juxtaposed with what BBC has dubbed India's micro-finance suicide epidemic,<sup>84</sup> it paints a gloomy picture of the potential ramifications. This is something that can be prevented if workers are digitally fluent and know their rights.

With platform workers spread across geographically, the ability to interface, discuss, and come together, has been taken away. Platforms dissuade unionisation and the natural disconnect by design helps their cause. Digitally fluent workers can connect with each other through social media and messaging apps, have dialogues about grievances, share best practices, have discussions about their rights, and informally organise.

## GDP Growth Rate

### Projections by the International Monetary Fund



Finally, digital platforms provide learning opportunities to workers on platforms. In lieu of formal higher education, workers can rely on online learning.<sup>85</sup> There are many websites and applications that provide workers with opportunities to upskill, allowing them to acquire different levels of training across fields. Taking advantage of these learning opportunities could help workers focus on personal development, learn continuously and take charge of their career trajectories.



### 4.3 What holds ITIs back

The first tracer study of ITI graduates conducted in 2012 attributed poor outcomes in-part to poor human resources. A second tracer study of ITI graduates conducted in 2017 by Mott MacDonald on behalf of the Directorate General of Training found that the quality of training delivery at ITIs was a major concern, evidenced by students' responses and the labour market performance. When students interviewed for the tracer study were asked about the quality of the training they receive, 70.7% of them thought that an increase in the hours of practical instruction would help and 62% of the respondents thought that upgraded equipment could make the process of learning better. 47% of the students interviewed believed that trainers should be regular and 50% of the students believe there needs to be an improvement in the quality of instruction by trainers.<sup>86</sup>

For ITIs to equip students with skills required to succeed in the current state of work, focus must go beyond the contents of the curriculum. The trainers at ITIs are often burdened with other administrative tasks, rendering them unable to dedicate all their time to classrooms. Further, they are expected to teach new subjects and use new methodologies without adequate training. This results in substandard training imparted through inefficient methods.

One of the most common complaints received from employers other than the lack of soft skills is the lack of hard skills or core skills that the ITIs are designed to imbue.<sup>87</sup> The reasons for this, along with the quality of instruction, can also be traced back to outdated equipment and lack of practical instruction.<sup>88</sup>

The fault here doesn't lie with the trainers, who are often mere pen-pushers for institutes, which have little to no autonomy; it lies with the bodies that govern ITIs and bureaucrats at the helm, who are often out of touch with harsh realities at the grassroots. While we acknowledge that many of the problems

highlighted are systemic, we believe there is a need to take cognizance of the current state of affairs and push for solutions that factor in all aspects of the problem while attempting to untie the Gordian knot.

Systemic and structural issues that plague ITIs have to be addressed if graduates are to have a better chance of meaningful, gainful employment upon graduating. However, the ITIs alone are not to blame for the poor availability of opportunities for gainful employment and should be seen in the larger context of work and global labour markets. Technologically driven productivity and transformations in global labour markets have reduced labour's share of growth. Further developments in technologies like automation and artificial intelligence are projected to usher more unwelcome disruptions to labour markets. While platforms and skilling initiatives can help workers overcome these shocks for a short while, they cannot and should not be looked upon as the welcome future of work. Rather, steps must be taken at higher levels to ensure that systems are put in place to ensure labour wellbeing in the face of these changes.

# 05

## Epilogue

### 1

#### Skills for the Platform Economy - Covid-19

This study was conducted in late 2019 and completed in early 2020 before the Covid-19 crisis struck. It would be remiss to not consider the impact of the crisis on the subject of this study since Covid-19 will have a profound impact on the overall economy, the workforce, and the platform economy. Some of these changes are already unfolding - the International Monetary Fund projections estimate that India's GDP will fall to -4.5 percent in 2020 amid a looming global recession<sup>89</sup>; the unorganised workforce has had to grapple with the closure of factories and businesses; Zomato, Uber India, Ola, Swiggy, Oyo Rooms, and WeWork have announced mass layoffs and salary cuts affecting thousands of workers at these companies.<sup>90</sup> Labour standards may deteriorate as companies seek new ways to increase efficiencies. This epilogue will focus on the impact of the Covid-19 crisis on on-demand service platforms. It will then analyse the impact these changes will have on workers and consequently their skills and training needs.

### 2

#### Covid-19 and the changing platform model

The Covid-19 crisis has had an uneven impact on platforms - cab aggregators like Uber and Ola have seen a steep fall in demand as customers comply with lockdown rules, offices remain shut and travel remains at a standstill. Demand on food delivery platforms like Swiggy and Zomato have also fallen amid growing customer concern around food safety and hygiene standards. Demand on home services platforms has fallen dramatically as customers and companies comply with social distancing guidelines. On the other hand, e-commerce and grocery delivery platforms like Amazon, Flipkart, Big Basket, and Grofers have seen their value rise during the pandemic<sup>91</sup> as customers are forced to rely on online shopping as shops and markets remain closed.

Platforms have been quick to adapt to the challenges caused by the crisis - food delivery platforms have pivoted to delivering essential goods and groceries and even relief supplies. Transportation companies are partnering with the government to provide transportation to healthcare workers and Covid-19 patients. Amazon and Flipkart have entered the food delivery market and

existing platforms have been quick to add concierge services to their operations to address customers' changing needs. Transportation companies and food delivery platforms have introduced health and safety ratings to assure customers of the safety of using their services.

On-demand service platforms were able to make these quick changes because it required little investment in terms of retraining workers for their new roles. The structure of platform businesses allows them the flexibility and agility to make these quick changes. Platforms, for example, do not own most of the assets pivotal to their business - transportation companies do not own the cars that operate under their brand name, and food delivery aggregators do not run or operate the bulk of restaurants that sign up to their platform. Being asset-light, platforms are able to adapt and make changes quickly. And because they depend on a contingent workforce, they do not have to invest time or capital in training their workforce. The changes that platforms make to their businesses will likely cause some churn - new workers will be hired to fill in roles created by expanding services; roles left vacant by workers who have returned to their hometowns because of the lockdown will need to be filled as these companies start to resume services.

# 3

## Covid-19 and the plight of platform workers

The ongoing pandemic has revealed the vulnerability of platform workers. They are classified as “contractors” and not “employees”, absolving platforms of providing them with social security benefits and leaving them outside the purview of labour laws. They are excluded from relief measures announced by the government and since they do not fall under the below poverty line (BPL) category of households, they are ineligible for existing government schemes meant for low income workers. They have few safety nets to rely on and during this crisis have fallen through the institutional cracks. Many workers have lost their source of income during this crisis as services were suspended but are still saddled with the burden of loan repayments. While the government did announce a loan moratorium, non-banking financial companies (NBFC), informal lenders and even some private banks have been slow to honour the directive.

Workers have also reported facing difficulties in accessing the relief funds and measures announced by platform companies. When the lockdown was first announced, on-demand service companies were quick to set up funds for workers, soliciting donations from customers and announcing donations from top level managers to the funds. There has been little transparency with regard to the funds and workers for whom the funds were ostensibly collected have been excluded. One food

delivery worker stated, “that fund is for low wage workers and migrant workers, it’s not meant for us. The company has made donations for food supplies for them.” Platform companies have also initiated several measures including a Covid health insurance to cover the costs of hospitalisation, access to telemedicine facilities, income grants or interest free loans for workers. However, workers have faced difficulty accessing some of these measures because of poor communication from platform companies and long tedious processes to access these relief measures.

Workers who continued to work during the pandemic did so at great risk to their health and personal safety. Platforms did not provide workers with personal protective equipment (PPE), and even now, some workers have stated that they continue to purchase their own PPE in the absence of assistance from the platforms. Additionally, the lockdown created unsafe conditions of work.

Blockades and cordoned off neighbourhoods meant that workers had to travel extra distances and oftentimes on dark and deserted roads.

The road to recovery for platform workers will be a long one. Demand is unlikely to resume to pre-Covid times in the near future. The financial burden on workers will likely be exacerbated by pending loan repayments they must honour on existing loans or on amounts they had to borrow to make ends meet during the crisis. On top of this, there have been reports of platforms changing the wage incentive structure to the detriment of workers.<sup>92</sup>

# 4

## Preparing workers for a post Covid-19 world of work

Even as we elucidate the shortcomings of the platform economy as an avenue for decent and dignified jobs, workers may turn to the platform economy as opportunities in other sectors shrink due to the recession. The pandemic might also usher in the platformisation of other services and sectors of work. Businesses may choose to shift to a platform business model to save costs and in doing so, expose more workers to shortcomings that characterise this type of work. Increasing contractual work and non-standard employment even pre-Covid-19 was an indication that the labour force would need to be prepared for a changing world of work and Covid-19 has hastened that further. The case for preparing workers for the platform economy with the requisite skills has become more urgent. Even the delivery of these skills training workshops will have to be adapted to address the challenges posed by the pandemic.

The importance of the skills we've highlighted in the report will be magnified in a post Covid-19 world of work. The importance of financial literacy, knowledge of financial management, communication and interpersonal skills, and the ability to assess information critically is now more important than ever for workers in the platform economy. Global on-demand service platforms and technology companies are taking hold of the market currently which is sure to have an impact on workers and the nature of platforms themselves. The oversupply of labour might make workers more susceptible to exploitative practices. In addition to exploitation by platforms themselves, workers might find themselves the target of predatory loans or insurance companies offering payday loans or misinformation online.

Health and safety standards in the workplace after the Covid-19 will change dramatically. Workers will be targeted with technological monitoring in order to alleviate customers' concerns. Already, workers are subjected to body temperature screenings, compulsory masks and gloves, contact tracing and increased reporting. Workers will require training and maybe even certifications to deal with health and safety issues at the workplace as economic activity resumes. These will have to be tailored for workers in different lines of work.

The Covid-19 crisis will have a disproportionate impact on women and amplify existing gender inequalities. Women still shoulder the majority of care work and household responsibility and this has been no different during the ongoing crisis. Preliminary studies into the differential impacts of Covid-19 on men and women corroborate this. The platform economy in India is already over-represented by men but the economic fallout of Covid-19 will likely reduce job prospects for women.

The crisis has also exacerbated the digital gender divide and limited women's access to digital technologies. In many low income households in India, digital devices are owned predominantly by male members and shared with other family members. With added responsibilities falling on women and higher usage by other members of the household, women have had less access to digital devices.

A recent ILO report states that women have restricted access to online skills training workshops and webinars because of the double burden of care work and limited access to digital technologies. These inequities will be magnified among low-middle income women workers.

There is an urgent need to prepare workers for these new challenges in a more structured manner. Platforms, by the very nature of their business models, have avoided the responsibility of providing social security benefits to their workers. If the platform economy, with all its flaws, is to be seen as an alternative source of livelihood and promoted as such, workers must be given the support they need to face the challenges and shortcomings that come with working for on-demand service companies. This support needs to include an ecosystem of different actors.

For example, recruitment agencies and last mile human resources firms can contribute to promoting fair and safe standards of work in the platform economy. Currently, their operations involve recruiting, training, and onboarding workers for the platform economy. Their training should include solutions to the difficulties workers may face working on platform companies in a post Covid-19 economy. Government departments that partner with platform companies should include such skills training initiatives too. The platform economy is fast changing and will require an iterative approach to addressing these changes and training workers to deal with them.

Skilling and education initiatives to prepare workers for a post Covid-19 world of work will have to consider all of the above issues in order to help mitigate the risks involved with working on the platform economy. The needs of low-income workers will grow and in the absence of regulation and legislation that directs platforms to improve conditions of work, institutions with a multi-faceted approach will have to step in, in the interim.



# 06

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