# WORKING WITHOUT BORDERS

The Promise and Peril of Online Gig Work











### What is a gig work platform?

### **Gig Work Platform**

- Matches the demand and supply of gig work, usually based on an algorithm
- Provides a participative infrastructure for interactions: governance structures, rules for carrying out work

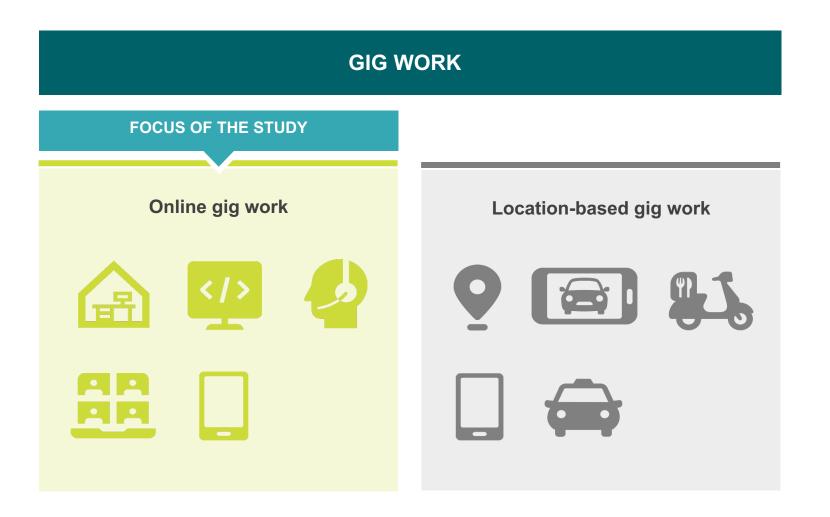


- A business or a person who wants a specific gig job done
- The paid tasks (or gigs) could be food delivery, ride hailing, data entry, translation, software development, etc.

### Supply

- The gig worker seeking to complete gig tasks for payment.
- ❖ The gig worker is not an employee of the enterprise that operates the platform.

### There are mainly two types of gig work platforms: online & location-based. This study focuses on online gig work.



### Online gig work is of two types, based on the nature of the tasks.

### Online freelancing



#### Design, multimedia and creative work

Examples: Logo design, website design, visualizations



#### **Business and professional management**

Examples: Legal- or management consulting, architecture



#### **Business and professional support**

Examples: Research support, proofreading, bookkeeping



#### Sales and marketing support

Examples: Search engine optimization, social media marketing



#### Data entry, administrative and clerical tasks

Examples: Data entry tasks, virtual assistants



#### IT, software development and tech

Examples: Data analyst, backend- or frontend developers



#### Writing and translation

Examples: Content writing, ghost writing, translation

#### Online microwork



#### Online microtasks

Examples:



Image tagging



**Text transcription** 



Video annotation



**Survey completion** 



**Data verification** 

Source: Elaboration by the team









### Why should we pay attention to this new form of work?



Gig work is growing rapidly but reliable and comprehensive data is lacking



Gig work reduces friction and transaction costs for firms and workers



Gig work impacts the geography of jobs, modes of delivery, and skills



Policy and regulatory action are increasingly needed as the gig economy expands



Gig work involves several risks that are not fully understood yet, requiring further research

### Six questions that this report addresses

#### **SUPPLY**

#### **PLATFORMS**

#### **DEMAND**

- 1. How many online gig workers are there?
- 2. How inclusive is the online gig economy?

3. In a market dominated by a few large global platforms, what is the role of local platforms?

4. What types of firms are demanding gig workers, for what tasks, and why?

### **BALANCING RISKS AND OPPORTUNITIES**

5. How should developing countries address the lack of social protection for gig workers?

6. How can operational programs be designed to tap the opportunities of gig work but also safeguard workers?

### The report presents a comprehensive empirical analysis based on an innovative mix of data sources and methodologies.



Data science-based methods, including web scraping and natural language processing, combined with web traffic data and multiple proprietary firm databases



Global survey deployed in 17 countries and 12 languages using the experimental Random Domain Intercept Technology (RDIT)



Platform surveys of online gig workers conducted on 10 platforms



Interviews with key stakeholders including 28 platforms, practitioners, private sector, policymakers



Survey of firms to understand dynamics in the demand for online gig work



Focus group discussions with online gig workers



Five country deep dives Indonesia, Pakistan, Malaysia, Kosovo, Bangladesh

### How this study contributes to the literature

Develops comprehensive global estimates of the size of the online gig workforce

Develops an innovative methodological approach in view of lack of reliable data on the online gig economy

Provides, for the first time, a detailed understanding of local and regional online platforms

Details data on non-English speaking gig workers, often overlooked by studies

Outlines a global assessment of the profile of online gig workers on six aspects of inclusion and comparison with workers in similar sectors and occupations

Develops a blueprint for operational teams on designing gig work programs

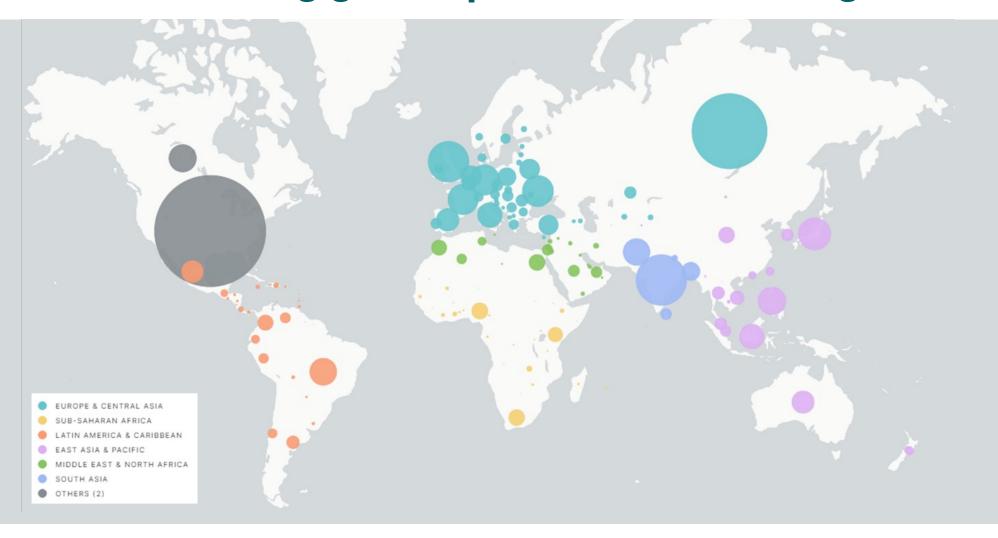
# MAIN FINDINGS 川

### Building on proprietary firm databases and using data science methods, we find 545 online gig work platforms across the globe.

Global distribution of online gig work platforms by traffic and type of platform

Note: Bubble size is proportional to the traffic flow from each country.

Source: Team database



## Almost 3 out of 4 platforms are regional/local. These platforms are often overlooked in most studies, which tend to focus on global platforms.

#### **Definition**

Regional/local platforms connect employers and workers from one or a few countries within a region.

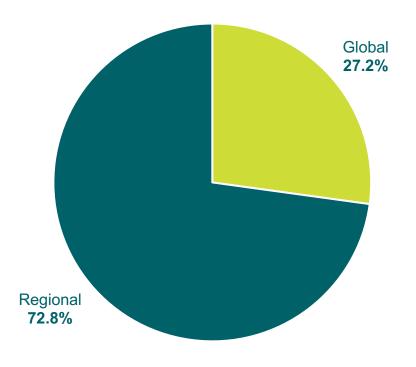
Global platforms span several regions.

#### **Threshold**

A gig work platform was classified regional if more than 60% of the monthly average traffic (weighted by internet users) originated from a single region.

Robustness checks with different thresholds were conducted.

### Share of global and regional/local online gig platforms



Source: Team Database

### Local platforms play a less known but vital role in the local ecosystem on both the supply and demand sides.



### SUPPLY SIDE

- Lowering entry barriers
- Adapting the gig model to local constraints
- Overcoming language barriers in the gig economy.



#### **GOVERNMENT**

- More accessible potential partners on policy goals
- New source of workers for e-governance initiatives.



### **DEMAND SIDE**

- Catering to resource constrained local MSMEs and startups
- Providing a pool of local talent with local knowledge for larger companies.

### Using two different estimation models, we estimate that online gig work is now non-negligible, forming almost up to 12.5% of the global labor force.

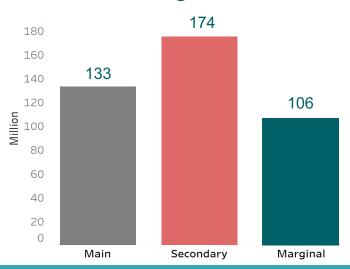
Method 1: Data science approach (lower bound)

- 154 million online gig workers
- 4.4% of the global labor force



Method 2: Global survey in 17 countries (upper bound)

- 435 million online gig worker
- 12.5% of the global labor force



Our estimates are higher than those developed by earlier studies partly because of the additional effort the study team made to identify regional gig work platforms, and to reach non-English speaking gig workers.

#### **Notes**

- Marginal refers to less than ten hours per week and less than 25% of income. A main gig worker earns more than 50% of their income through gig work if working 10-19 hours per week or earns more than 25% of income by working 20 or more hours per week. A secondary gig worker is between these two poles.
- · Method 1 does not include estimations for China.

### Online gig work is more inclusive on average compared to the informal sector and services sector.

To assess how inclusive the online gig economy is, we compared the profile of online gig workers to that of workers in:

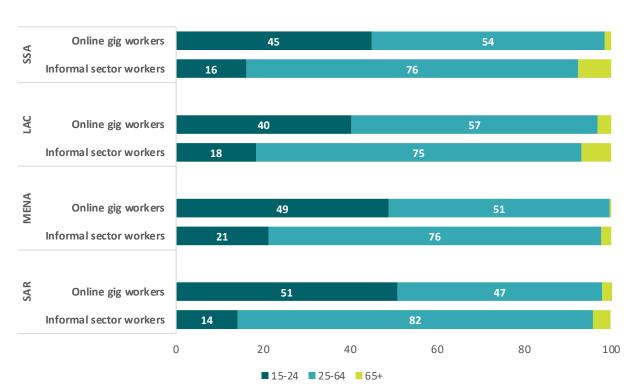
- the general labor market
- the informal sector
- the services sector, and
- Workers in similar occupations

The comparisons draw on available data from labor and household surveys

Online gig workers are predominantly young, mostly under 30, Age and younger compared to workers in similar sectors Women participate in online gig work to a greater extent Gender compared to the general labor market, but gender gaps persist. Skills and Workers with a variety of skill levels are participating in the online education gig economy, especially those with high school level education. Over six in ten gig workers live in smaller cities and towns, **Spatial inclusion** beyond the capital and the top 10 largest cities in the country Language can be a significant barrier to accessing online gig Language work opportunities. **Earnings** For two in three workers, gig work is a secondary occupation or and income only performed sporadically.

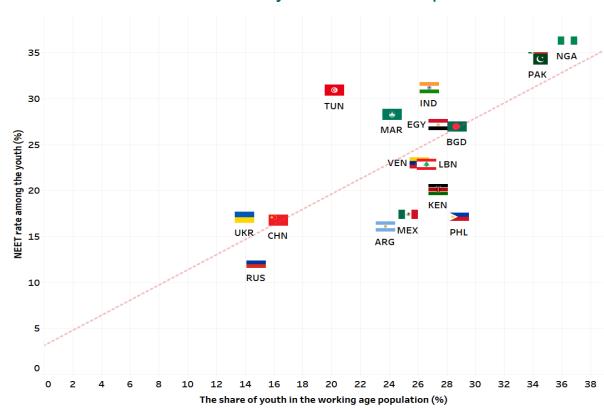
### Online gig work holds potential for countries grappling with high levels of youth unemployment or underemployment.

Age composition of online gig workers and informal sector



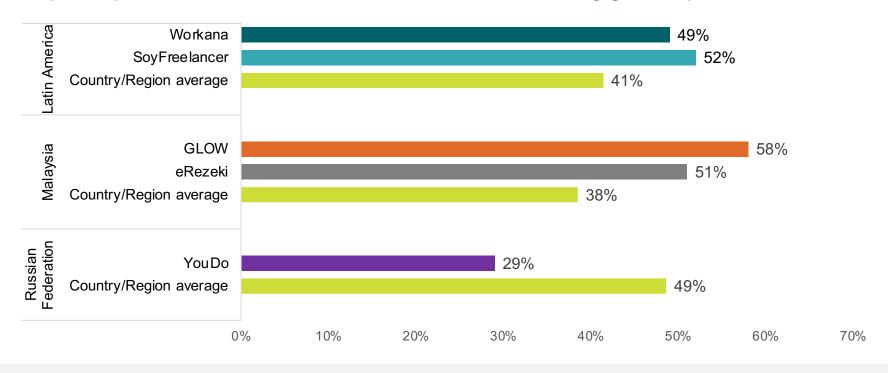
Source: ILOSTAT and global RDIT survey

NEET rate and the share of youth in the sampled countries



### While men dominate online gig work, in some regions women are participating in the online gig economy to a greater extent compared to the general labor market.

Women participation in the labor force and on select online gig work platforms



#### **Notes**

Workana and SoyFreelancer are online gig work platforms active in Latin America and the Caribbean. eRezeki and GLOW are online gig work programs in Malaysia, initiated by the Malaysia Digital Economy Corporation (MDEC). YouDo is an online gig work platform in the Russian Federation.

Source: Analysis based on the platform surveys conducted by the team and platform data collected by the team.

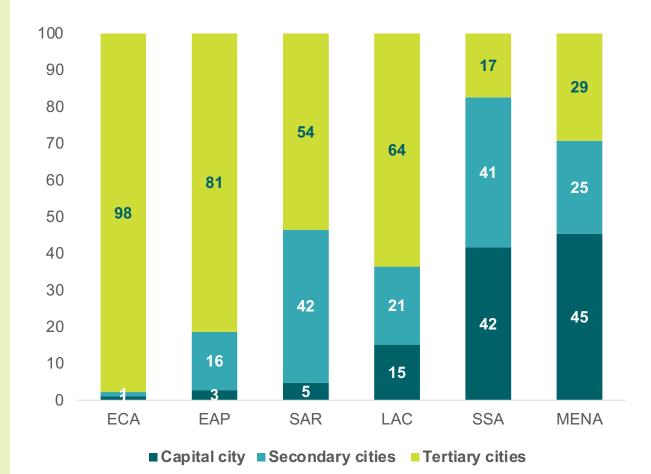
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### Surprisingly, over 6 in 10 gig workers live in smaller cities. This finding has important policy implications for addressing regional inequalities in access to jobs.

We classify gig workers as based in three types of cities:

- A. Capital cities
- B. Secondary cities the top 10 largest cities in a given country, not including the capital city, and
- C. Tertiary cities smaller cities and towns beyond the capital city and the top 10 largest cities in a given country

### Distribution of online gig workers by city size and region

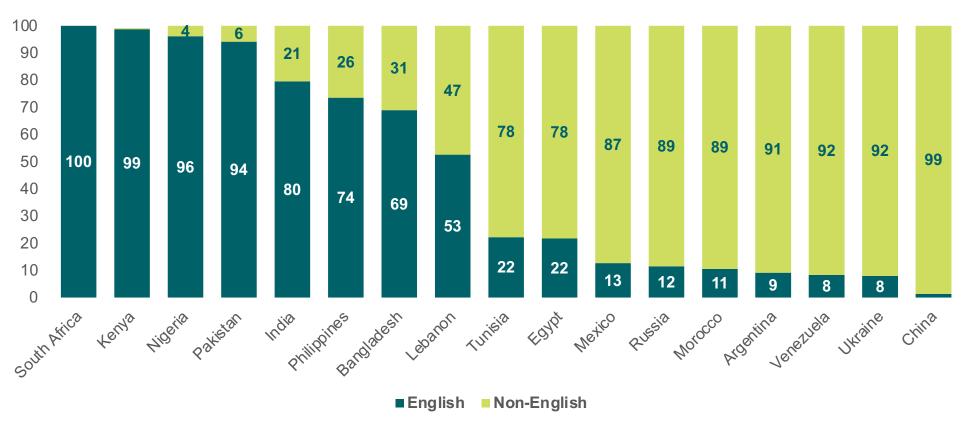


Source: Global RDIT survey.

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### Language: Local platforms could help non-English-speaking populations gain access to work opportunities on gig platforms.





Source: Analysis based on the global RDIT survey conducted by the team.

### The demand for online gig workers is driven by firms' need for access to a cost-effective and wider range of talent.

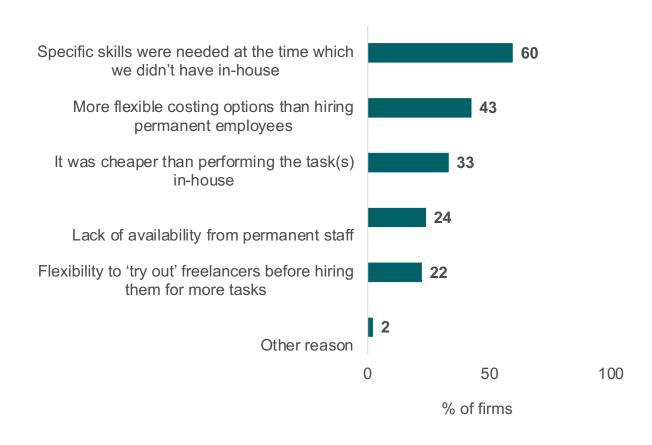
The demand for online gig work comes not only from Fortune 500 multinational companies.

Micro, small, and medium-sized enterprises (MSMEs) and startups are increasingly using online gig workers to access a larger talent pool of labor, skills, and expertise, to reduce transaction costs, and overcome conventional hiring barriers.

Note: Respondents could choose multiple options.

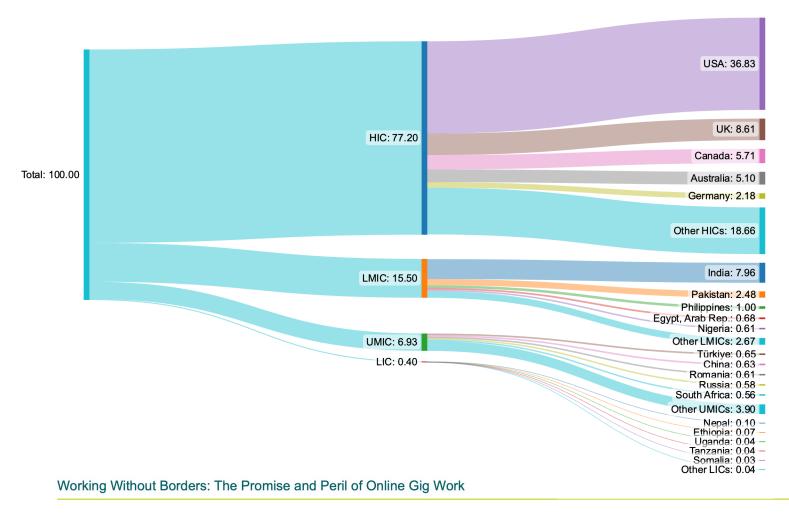
Source: Team survey of firms hiring through digital labor platforms, 2022.

### Reasons for hiring online gig workers

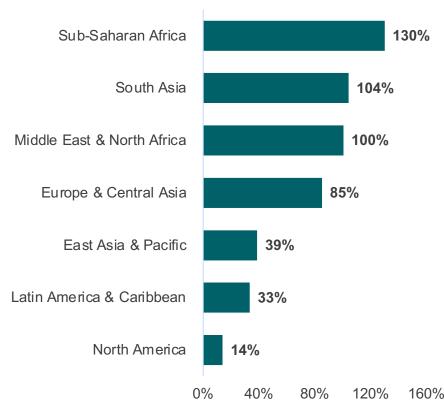


### Developed countries dominate the demand for online labor. However, the demand is growing faster in developing countries.

Demand for online labor, by country and country income groups – 2022



The growth rate of job postings on one of the largest digital labor platforms for 2016-2020



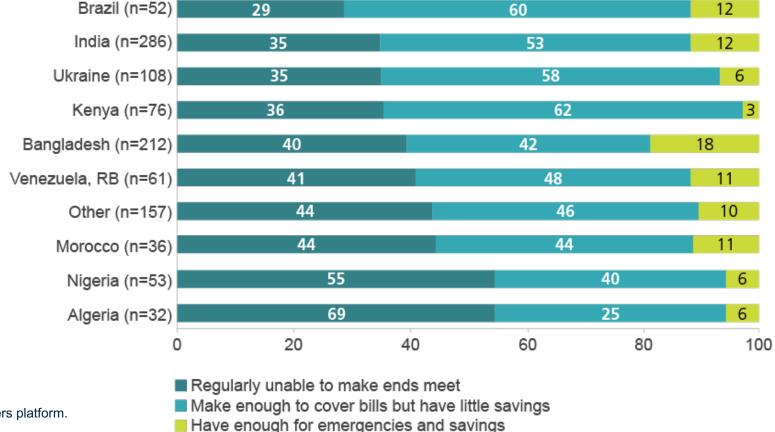
Source: Study team illustration based on data shared by the Online Labour Index team. http://onlinelabourobservatory.org/oli-demand/

### Gig workers, like other self-employed workers, are in the 'missing middle' when it comes to social protection.

#### How online gig workers classify their financial position

### The 'missing middle'

Gig workers are sometimes not poor enough to be eligible for social safety net benefits and not well-off enough to be part of social insurance programs mandated for the formal sector. Still, they are highly vulnerable with volatile and unreliable earnings.

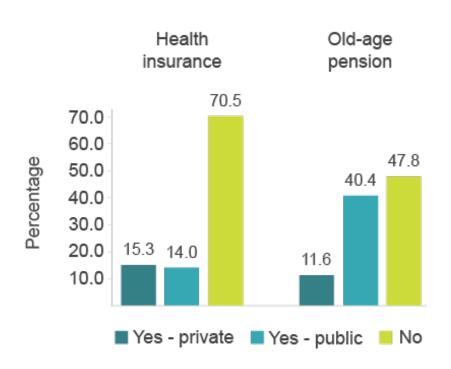


Source: Survey conducted by the study team on the Microworkers platform.

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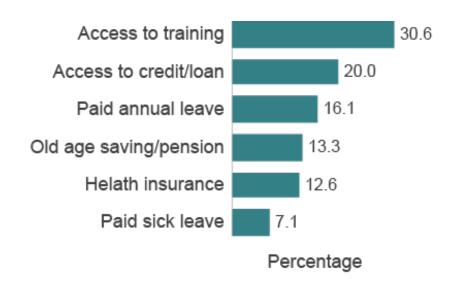
### Gig workers have limited access to health insurance and old age pension; however, they mostly want 'non-conventional' benefits.

#### Access to health insurance and old age pension



Source: Survey conducted by the study team on the Workana platform.

### Top benefits sought by online gig workers



Source: Global RDIT survey conducted by the study team.

### The lack of broad coverage for informal workers is a significant constraint associated with social protection for gig workers.



LACK OF CLEAR CLASSIFICATION OF STATUS IN EMPLOYMENT



LACK OF SYSTEMS TO COVER SELF-EMPLOYED WORKERS OR PEOPLE IN THE INFORMAL SECTOR



LACK OF COLLECTIVE BARGAINING AMONG GIG WORKERS

### Social protection policies for gig workers in developing countries need to consider the high levels of informality in the labor markets. Policy recommendations include:



Cover all, without segmenting to address "missing middle" in social protection



Partner with digital work platforms on broader policy goals, e.g., expanding social registries, economic inclusion



In the short run, innovate and experiment with social insurance designs



Support modern innovative models of collective bargaining



Collect data, track, and monitor scale of gig worker through augmented labor force surveys

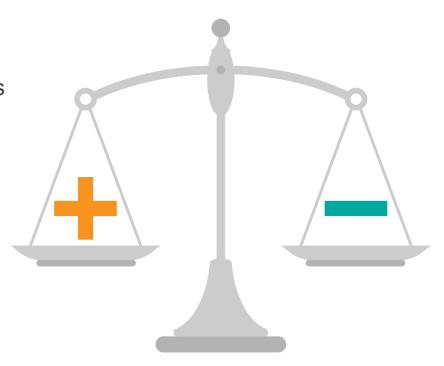


For higher capacity governments, support steps to clarify status in employment

### The promise and peril of online gig work

### **Promise**

- Builds digital skills, including women and people with disabilities
- Helps people in areas that lack good quality local jobs
- Serves as unemployment insurance
- Helps manage income shock
- Enables access to a flexible workforce for firms
- Helps MSMES/startups access a wider pool of talent cost-effectively



### Peril

- Limited access to social protection
- Volatile/unpredictable earnings
- Limited protection against unfair practices or abuse or injuries at work

### Programs to tap the opportunities of online gig work for local economies need to carefully consider five aspects of design and implementation.



DEVELOPING A
STRATEGY FOR
ONLINE GIG JOBS
PROGRAMS



DEVELOPING A
PIPELINE OF
TRAINED ONLINE
GIG WORKERS



DESIGNING AND
DELIVERING
TRAINING
PROGRAMS

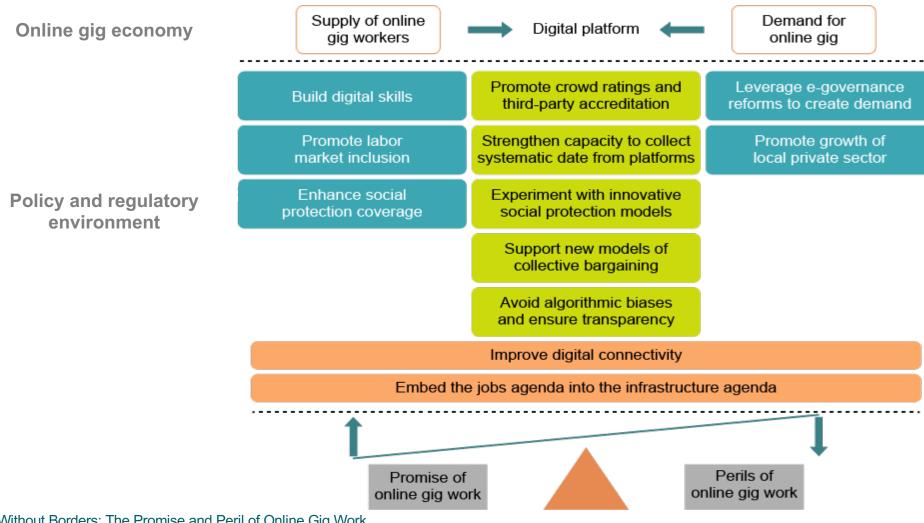


INCREASING
ACCESS TO
INFRASTRUCTURE
& PAYMENT
OPTIONS



BENEFICIARIES
WITH DEMAND /
OPPORTUNITIES

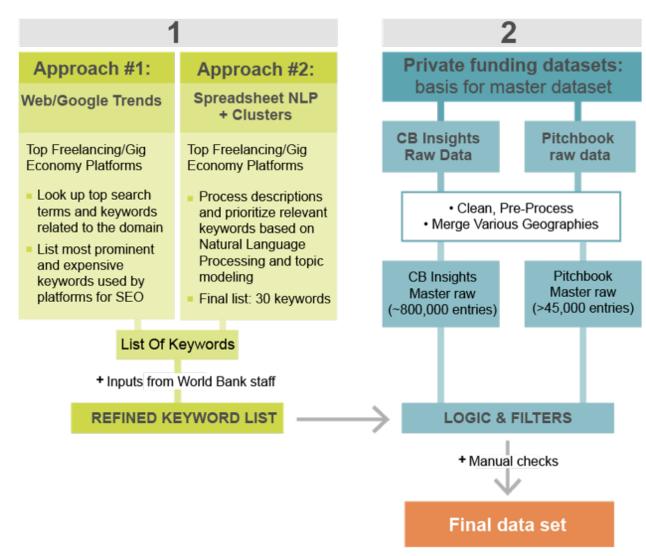
### To maximize the benefits of online gig work and reduce risks it is essential to adopt an incremental and experimental approach.





### We used data science methods to create a global database of online gig work platforms.

- The study team combined several methods and data sources to develop a database of online gig platforms:
  - Data science methods to develop a list of 30 relevant keywords for gig platforms;
  - Two proprietary firm databases (CB Insights and Pitchbook), as well as existing publicly available platform mappings. The firm data were filtered for online gig work platforms by using the list of identified keywords.
- Website traffic data was used as a key proxy to measure platform activity.
- In addition, the study team developed a model to identify regional/local and global platforms.

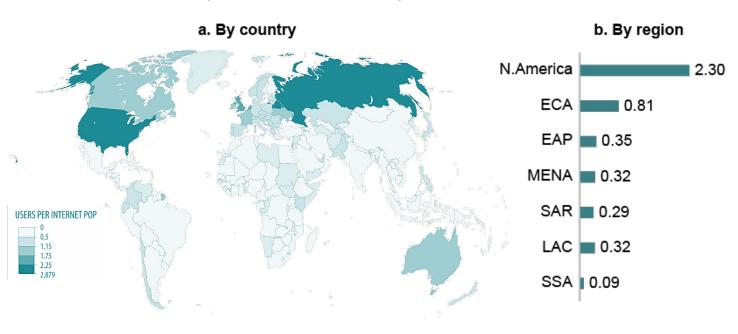


Source: Elaboration by team

### The gig economy is no longer only a developed country phenomenon but is becoming increasingly important in emerging markets.

- There are a total of 545 online gig work
  platforms with headquarters in 63
  countries and platform workers and
  clients located in 186 countries.
- Over a third (30%) of the traffic to platforms in the sample stems from visitors in the United States, followed by Russia (14%) and India (6%).
- Around a fifth of visitors (18%) are from low and lower middle-income countries and 22% from upper-middle income countries.

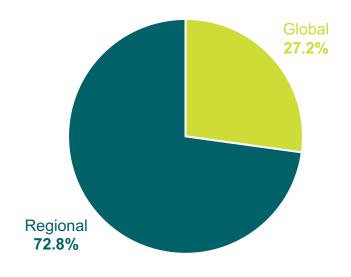
### Average number of unique visitors to gig work platforms in 2022 per internet user



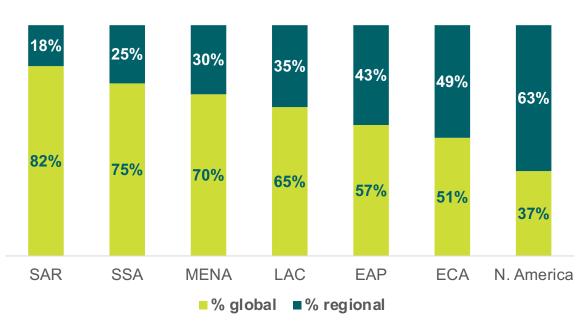
Source: Team database using Semrush data; International Telecommunications Union (2021), World Bank (2021) World Development Indicators.

### Surprisingly, 3 out 4 online gig work platforms are regional/local with some variations across regions.





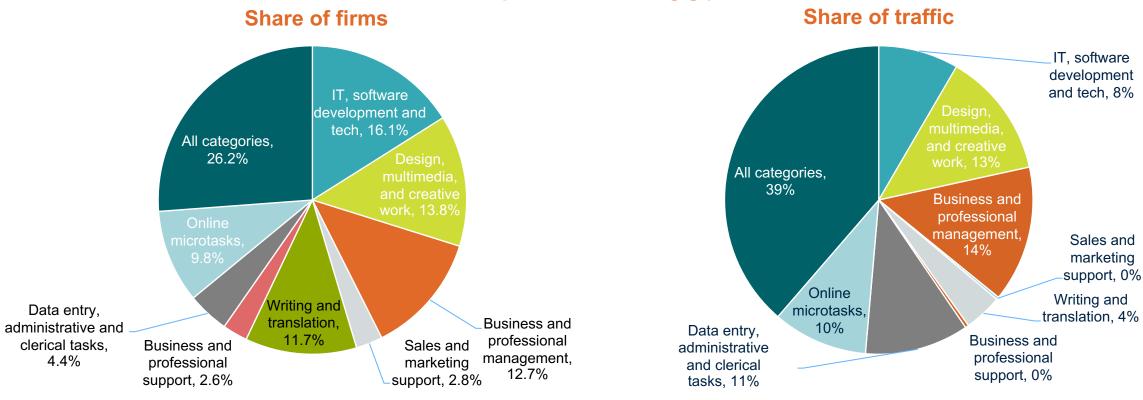
### Traffic share of global and local platforms, by region



Almost three quarters of gig platforms have a local/regional operational focus, meaning they are used in multiple regions globally, but they account for only 40% of traffic

### More and more online gig platforms tend to specialize in one type of gig tasks.





Almost three quarters of gig platforms focus on specific types of tasks, while the rest offer all types of tasks.

But taken individually, the platforms that generate more traffic are more likely to have no specialized offering.

### Regional/local platforms attract more low skilled tasks.

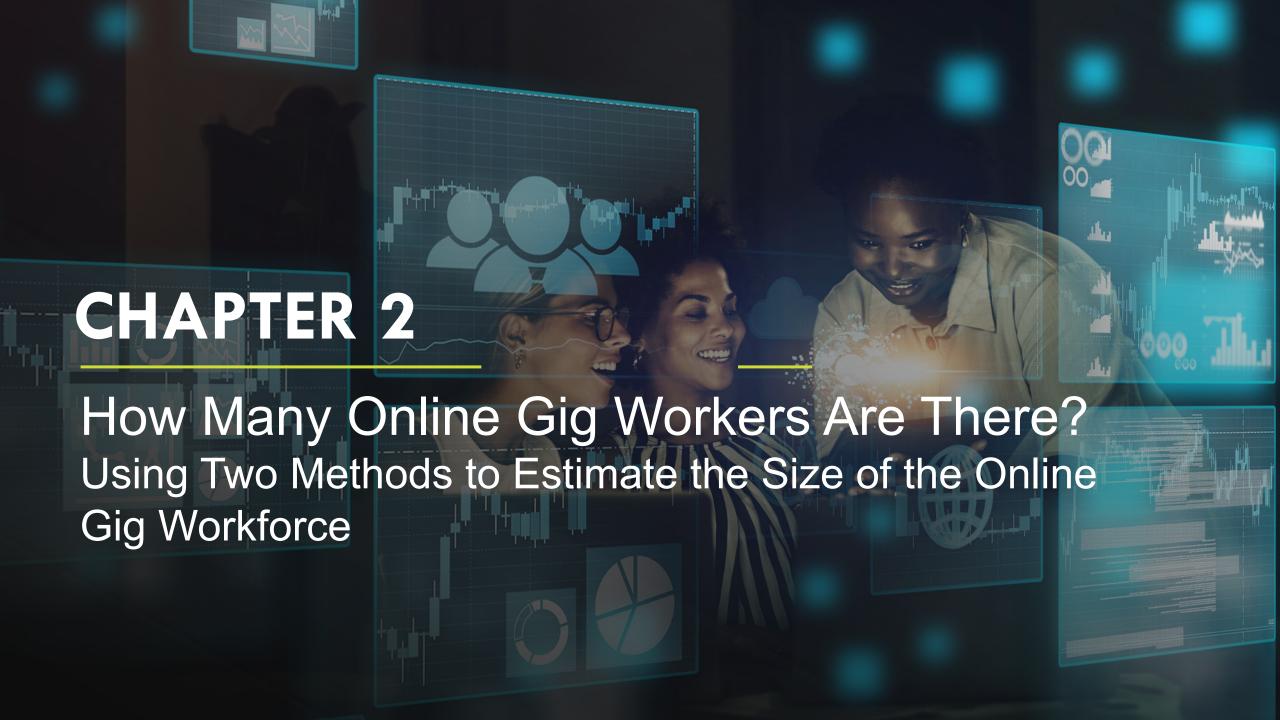
- The traffic to **regional/local platforms** is more likely to be higher on platforms offering lower skill tasks such as data entry and administrative tasks and online-microtasks.
- The traffic to global platforms is driven by platforms without specialization, as well as platforms with higher skill specialization.

Note: The figure on the right shows the percentage of traffic to firms offering all categories or specific categories of tasks. Ordering is based on skill complexity (based on the classification in Chapter 4 of this report).

Source: Team database.

Share of traffic to global and regional/local platforms with respect to tasks offered





### There are no reliable sources of data to estimate how many people work in the online gig economy.

### Gaps in data about the gig economy



Gig work is seldom measured in labor force and household surveys.



National tax records do not capture such information.



Platforms rarely disclose detailed data as this is commercially sensitive.

However, **policy makers need accurate data** on gig work in order to formulate or adapt relevant labor market, social protection policies and other regulations governing data privacy, competition and taxation.

# We used two methods to estimate the size of the gig workforce: a data science-based method and a global survey.

### Method 1: Web scraping and data science

## Data collection

- Collection of data on the number of registered workers on platforms in the mapping database using manual and automated searches
- Information on the number of registered workers was available for around 60% of platforms

Machine learning-based predictions

- Development of a predictive model for remaining 40% of platforms, using a tree-based machine learning model
- Based on parameters such as website traffic (total traffic and unique visitors) and Alexa rank as independent predictive features

Active worker estimation

- Formula to estimate active workers as a % of registered workers on a platform level
- Based on proxy indicator of unique monthly visitors and adjusting for multihoming and multi-working

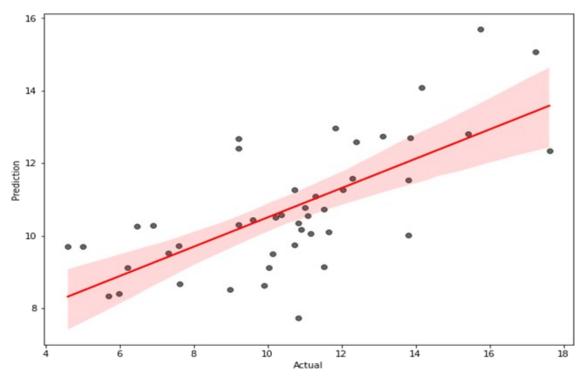
## Method 2: Global survey of online gig workers

- The second method uses a global survey conducted in 12 languages using an experimental methodology based on the Random Domain Intercept Technology (RDIT) patented by RIWI.
- The survey was conducted in 17 low- and middleincome countries from which the share of gig workers among the working population was extrapolated.
- Complete responses were collected from 7015 respondents, including 956 responses from online gig workers and the rest from respondents who had never done any gig work.

# Method 1: The team collected web-scraped data about platforms and developed a predictive model to estimate missing data.

- The team first collected web-scraped data for registered workers with a Python script or retrieved data from the platforms' websites, press releases, or third-party reports. Information about the number of registered workers was available online for around 60 percent of the platforms.
- The second step was to develop a predictive model for the remaining 40 percent of platforms for which information was not available, by using XGBoost, a tree-based machine learning model
- The XGBoost model was found to perform best on the test set, with the lowest best fit between the actual and predicted values.

## Model fit (XGBoost) for the prediction of registered workers on the test set



Note: The figure above presents the plot for the model predicted values for number of registered workers (log scale) vs the actual data (log scale), for the test set. As observed, apart from outliers, the model performed reasonably well.

Source: Elaboration by team.

# Method 1: Using our data science-driven method, we estimate that there are 154 million registered online gig workers.

- Of the estimated 154 million registered online gig workers,
   37% (52 million) are active workers. Active workers are workers that are likely to be actively using a platform (proxied by the time spent by users on websites).
- This estimate is adjusted for multihoming and multiworking:
  - Multihoming refers to gig workers being registered, affiliated, or actively working on more than one online gig platform.
     The surveys conducted by our team show online gig workers are registered on average on 1.83 platforms.
  - Multiworking refers to situations in which multiple workers
    are working under a single freelancing account. 1.19 workers
    are performing work from one account. This study is among
    the few that have estimated this phenomenon at global level.

The number of registered and active online gig workers – Data Science Based Method



Note: The model relies heavily on traffic data for the estimations. To split the demand and supply traffic, the model used data from a sample of 10 platforms. This model cannot estimate the average time spent by workers on the platform.

Source: Team database.

# Method 2: The team developed a second estimation based on a global survey conducted in 17 countries and 12 languages.



Given the challenges in developing reliable estimates of gig workers, the team also used another **experimental approach based on an online global survey** collected randomly from the internet using the population in selected countries.



The survey uses the Random Domain Intercept Technology (RDIT) patented by RIWI rolled out in **17 low- and middle-income countries** to extrapolate the share of gig workers among the working population.



The 17 countries include: Kenya, Nigeria, South Africa China, Philippines, Russia, Ukraine Argentina, Mexico, Egypt, Lebanon, Morocco, Tunisia, Venezuela, Bangladesh, India, Pakistan.



The survey was conducted in **12 languages** in addition to English to reach non-English speaking population. Complete responses were collected from 7015 respondents, including 956 responses from online gig workers and the rest from respondents who had never done any gig work.

# Method 2: The estimation model used several steps to arrive at an estimated number of online gig workers globally.

## **Conduct global survey**

Perform raking based on age, gender, and education to assign weights for each response.

Calculate the share of online gig workers at country level by applying the weights constructed from the raking procedure

Estimate the share of online gig workers at regional level using data on the share of internet traffic to online gig platforms

Calculate the global number of online gig workers

# The global survey included questions to identify type of platform used(global/regional) and the time spent on gig work.

The primary question used to identify online gig workers asks respondents reads as follows:

"Does this describe ANY work you did in the last 12 Months? Yes/No"

"Some people find short, ONLINE tasks or jobs through a website or an app. These tasks (also called gigs) are done entirely online and digital platforms coordinate payment for the work done"

## Defining "active" gig workers

To assess activity levels, we divided gig workers into three groups — main, secondary, and marginal gig workers — adapted from Urzì Brancati et. al.'s (2020) study in the EU.

## Classification of gig workers based on earnings and working hours

% of personal income	Less than 10 hours a week	Between 10 and 20 hours a week	More than 20 hours a week
Less than 25	Marginal	Secondary	Secondary
25 to 50	Secondary	Secondary	Main
More than 50	Secondary	Main	Main

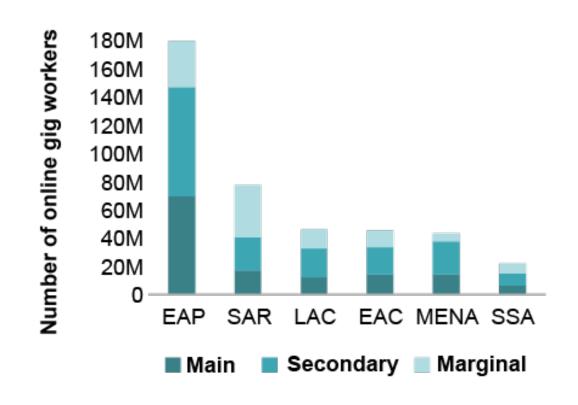
# Method 2: Using data from global survey, we estimate that there are a total of 435 million online gig workers globally.

We estimate that there are 132.5 million "main" gig workers, 173.7 "secondary" and 106.2 "marginal" gig workers. The total number of main, secondary, and marginal online gig workers, excluding North America, is 412.5 million.

Adding estimates on the online gig worker population from North America/Europe-focused studies suggests the number of online gig workers globally is about 435 million.

In other words, based on the two methods, we estimate that the share of online gig workers in the global labor force ranges from 4.4% to 12.5 %.

Estimated number of online gig workers based on the global online gig work survey





## Our estimates are higher than those in earlier studies.

There are **three reasons** why our study estimates on number of online gig workers are higher than other estimates.

- The team's global survey was conducted in multiple languages in addition to English, and therefore reached people from non-English-speaking populations that are usually overlooked by most study surveys.
- Our global survey made a special effort to reach online gig workers on local/regional platforms, who often get overlooked in studies that use platform data or survey data of only the large global platforms.
- Our surveys likely captured the current trend of increasing gig work because of COVID-19.

Note: For further details, please see Appendix D of the full report where assumptions and limitations of the model are discussed.

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# Addressing a major knowledge gap in the literature: The team developed a framework for analyzing platforms with a local and regional footprint.

#### **Definition**

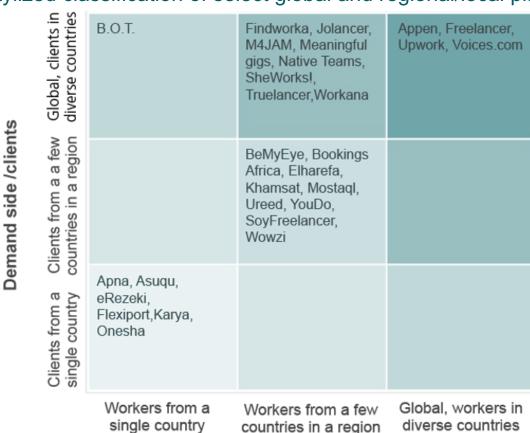
 Regional/local platforms connect employers and workers from one or a few countries within a region, whereas global platforms span several regions.

### Methodology

- In addition to data from the data science driven database (chapter 1), we interviewed 24 regional/local platforms and 4 global platforms.
- The regional/local platforms have varied business models and are among the top platforms in a given region based on website traffic data.

Source: Team elaboration

Stylized classification of select global and regional/local platforms



## How do local platforms compare with global platforms?

	GLOBAL PLATFORMS	REGIONAL / LOCAL PLATFORMS
Size and network effects	Significant number of workers and employers in countries around the world	Varying in size; base of workers and employers located in a region or country
Employers	A variety of employers, spanning from MSMEs and startups to big corporations	Predominantly MSMEs and startups (especially on the smaller platforms)
Language	Predominantly English	English or local languages, depending on the region/country
Task type	Broad ranges of tasks	Tending towards more limited, specialized ranges of tasks
Currency	Predominantly USD	USD and/or local currency
Transaction value	Likelihood of higher pay due to a broader range of employers and work opportunities	Often lower pay as the market is limited regionally / locally
Payment mechanism	Different payment mechanisms; exclusion risk for gig workers from countries where certain payment methods are inaccessible	Payment mechanisms adapted to the solutions available locally
(A)synchronous communication	Potentially significant differences in the time zones of workers and employers	Closer time zones between clients and workers

# Local platforms play a less known but vital role in the local ecosystem on both the supply and demand sides.



## SUPPLY SIDE

- Lowering entry barriers
- Adapting the gig model to local constraints
- Overcoming language barriers in the gig economy.



#### **GOVERNMENT**

- More accessible potential partners on policy goals
- New source of workers for e-governance initiatives.



## **DEMAND SIDE**

- Catering to resource constrained local MSMEs and startups
- Providing a pool of local talent with local knowledge for larger companies.

# In spite of their role in the local ecosystem, local/regional platforms face considerable constraints to becoming viable businesses.



Challenges to establishing a viable, sustainable business



Lack of network effects constraining platform growth



Limited ability to capitalize on the geographical imbalance between demand and supply of gig work



Founders with background in tech but limited financial/business experience

# Local/regional platforms tend to develop new or alternative business models in their search for viability.



### **Enterprise business model**

- In an enterprise business model, the platform provides select clients (usually large multinational clients) access to a team of freelancers who provide flexible labor.
- "Enterprise models" are also offered by global platforms such as Upwork.



## Third-party contract staffing

- Third-party contract staffing involves support offered to clients on compliance, payrolls, statutory requirements (benefits, medical insurance).
- Third-party contract staffing is used as an alternative next to the platform model.



#### Elite freelancer model

- "Elite freelancer" programs to put the spotlight on their top freelancers.
- Elite freelancers are given several benefits such as being having more visibility on the platform and being considered for specific work opportunities.



# We assessed "inclusion" on six dimensions and compared online gig workers to other workers.

### Key research questions

- How inclusive is the online gig economy based on six dimensions of inclusion?
- How do gig workers differ from other workers in the labor market?
- What role do regional/local platforms play?

#### Comparing online gig workers with workers in:

- the overall labor market
- o the informal sector
- o the services sector, and
- Workers in similar occupational codes

The comparisons draw on available data from labor and household surveys.

## Six dimension of inclusion of online gig workers



# To analyze how inclusive the online gig economy is, we used data from multiple sources.

Methodology based on multiple surveys and interviews as well as secondary sources

Global survey

A global survey covering 17 countries

Country deep dives

Country-level insights from country surveys and additional data for five countries: Bangladesh, Indonesia, Kosovo, Malaysia, Pakistan

Platform surveys

Surveys on 10 online gig work platforms

Interviews and focus group discussions

Interviews with representatives of 28 platforms

Focus group discussions with online gig workers in Kenya and Pakistan

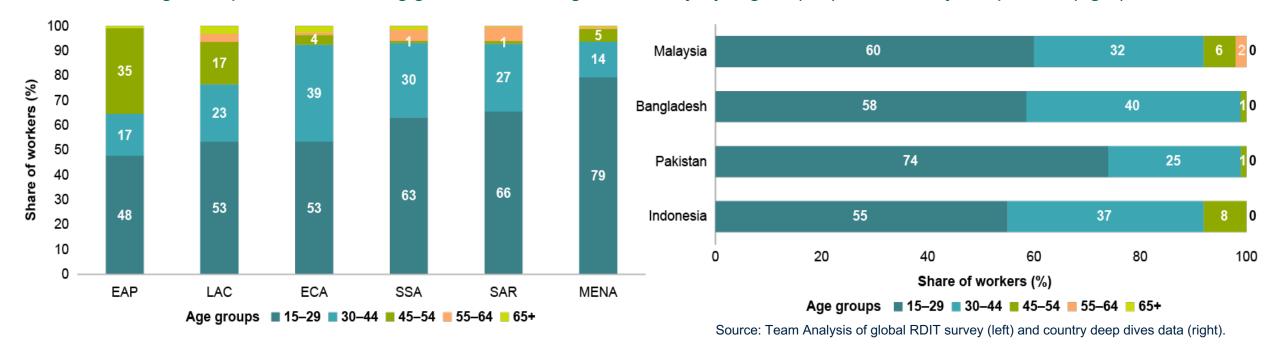
**Secondary data** 

Multiple secondary sources including country labor force and household surveys, as well as data on internet usage from ITU database.

## Online gig workers are predominantly young.

- Most online gig workers tend to be youth, under the age of 30, mostly students or young professionals at the beginning
  of their careers.
- Online gig workers are younger as compared to workers in the services sector, workers with similar occupations in the labor market, and workers in the informal sector.

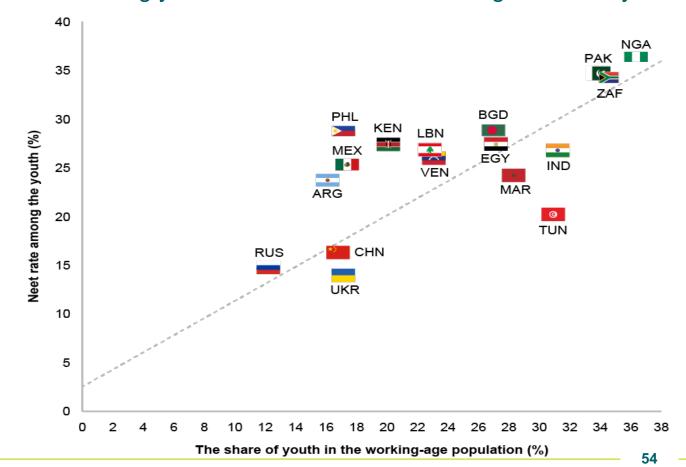
Age composition of online gig workers in the global survey by region (left) and country deep dives (right)



# Opportunities in the online gig economy can help countries struggling with high levels of youth un-/underemployment.

- For countries with growing cohorts of youth, online gig work can provide young people with work opportunities beyond what is available in the traditional labor market.
- Countries struggling with high youth unemployment rates or high rates of youth not in employment, education, or training (NEET) like Nigeria (36%), and Pakistan (34%) could provide targeted support to youth to access online gig jobs.

Share of youth in the working age population and NEET rate among youth in the 17 countries in the global survey



Source: ILOSTAT and global RDIT survey

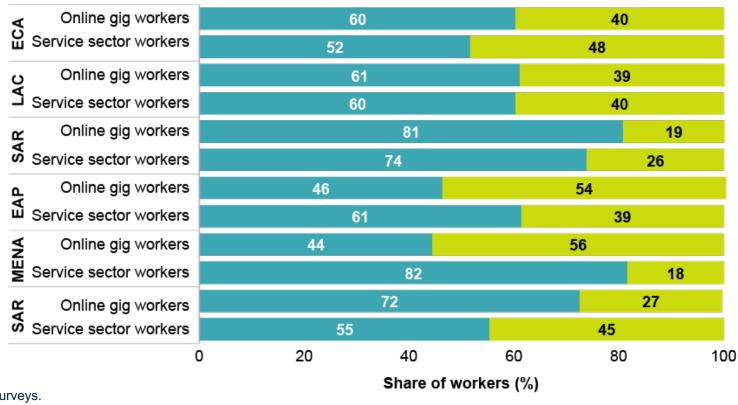
Working Without Borders: The Promise and Peril of Online Gig Work

# Globally, women participate in online gig work to a greater extent compared to the general labor market, but gender gaps still persist.

- 42 percent of online gig workers are women, a higher share compared to the participation of women in the global labor force (39.7 percent as of 2021).
- By region, the share of women in online gig work compared to men varies between 19 percent in SAR and 56 percent in MENA.
- In some cases, the share of women in online gig work is significantly higher than the share of women in the services sector (in EAP and MENA) and the informal sector (in MENA and AFR).

The share of female online gig workers compared to female workers in the services sector, by region

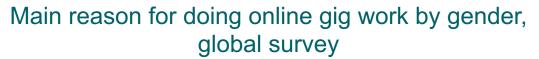
Female



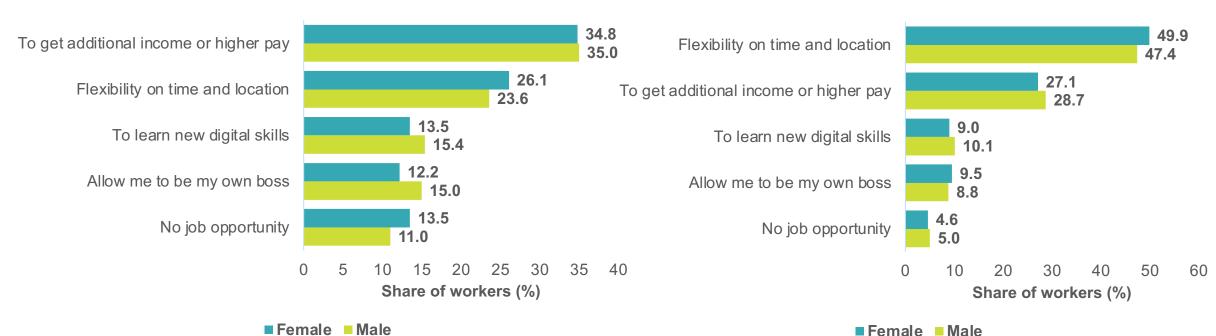
Source: Team Analysis of global RDIT survey and labor force and household surveys.

Working Without Borders: The Promise and Peril of Online Gig Work

# The key drivers of women's participation in online gig work are the ability to earn additional income and the flexibility online work offers.



## Main reason for doing online gig work by gender, platform survey (Workana)



Source: Team Analysis of global RDIT survey

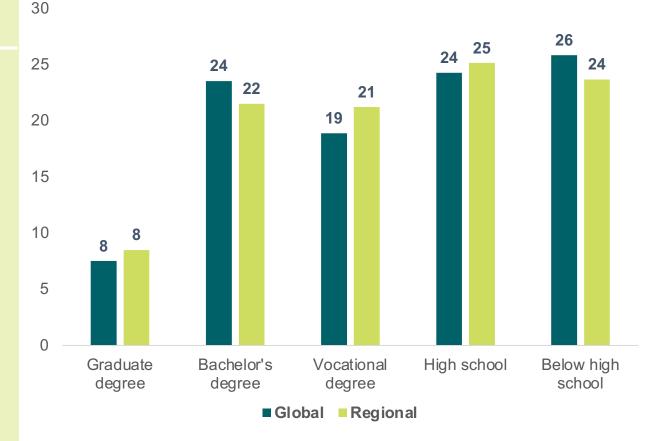
Source: Team Analysis of Workana survey

# Workers with a variety of skill levels are participating in the online gig economy.

Over 70 percent of online gig workers do not have a tertiary education degree, but they are more educated on average than workers in the services and informal sectors.

The participation of workers with basic and intermediate education shows that there are opportunities and there is growing awareness of online gig work across workers with varied educational backgrounds.

## Educational background of online gig workers using global platforms and local/regional platforms (%)



Source: Team Analysis of global RDIT survey.

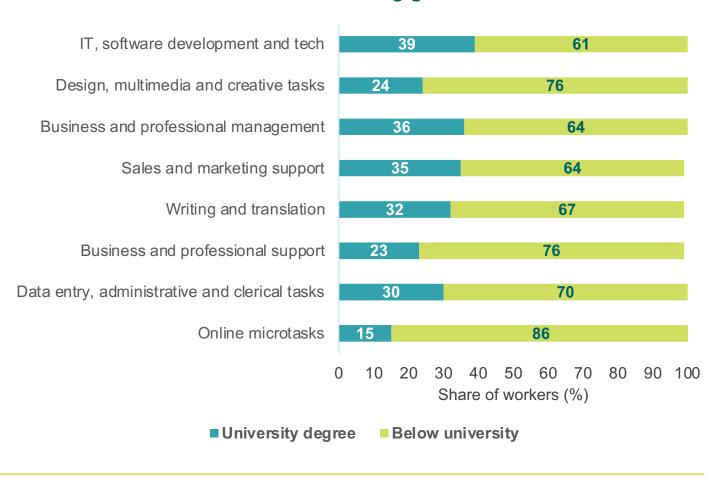
# Microtasks, compared to more complex online freelancing tasks, provide opportunities for low-skilled workers.

Microwork generally includes repetitive, routine tasks, such as data classification, that can be performed relatively easy following a set of instructions.

Workers doing online micro-tasks tend to have a lower level of education compared to online gig workers who conduct complex tasks such as IT and software development and business and professional management.

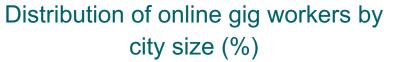
Source: Team Analysis of global RDIT survey.

## Highest level of education attained by online gig workers and their main online gig tasks



# Surprisingly, 6 in 10 online gig workers are in small cities, and not in the capital or major cities as is often assumed.

## ... but there are strong differences between regions.





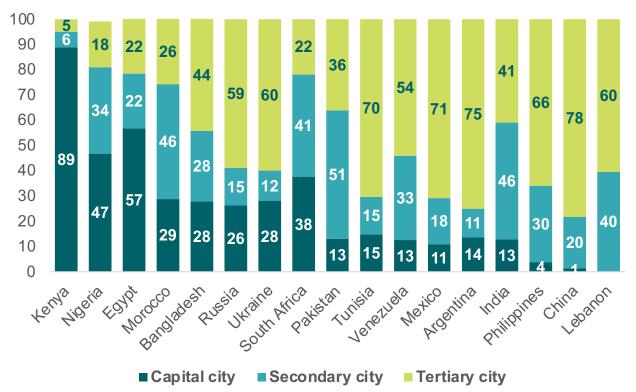
Distribution of online gig workers by city size and region (%)



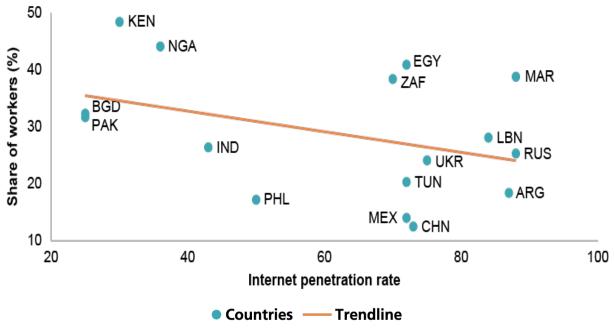
Note: Secondary cities in this context refer to the top 10 largest cities in a given country, except the capital. Tertiary refers to the rest of the smaller cities and towns. Source: Global RDIT survey conducted by the team.

## The availability of digital infrastructure impacts the extent to which workers in small towns and rural areas can access online work.

Spatial distribution of gig workers within countries (%)



Share of gig workers in the top five cities and internet penetration rate in each of the 17 countries in the global RDIT survey



Source: Analysis based on the global RDIT survey conducted by the team and WDI data.

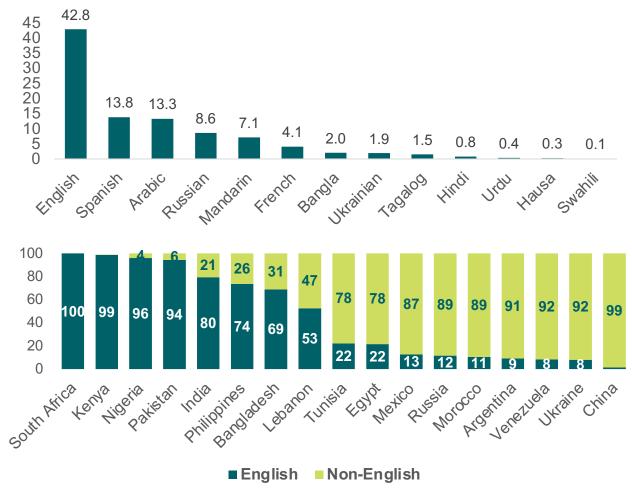
## Local platforms help bring in non-English speaking people on digital platforms.

Surveys conducted in English tend to not only exclude perceptions of non-English speaking populations but might also underestimate the overall size of online gig workforce.

The team's global survey was translated in 12 languages to ensure a wider reach: A substantial number of responses – 57 percent – were in languages other than English, many coming from gig workers who work on local/regional platforms.

Source: Team Analysis of global RDIT survey.

# Language of responses in percentages (top; %) and distribution of the language of responses to the global survey by country (bottom; %)

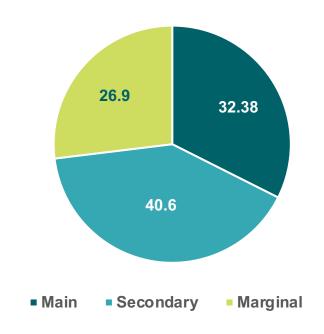


# Online gig work is an important means of earning supplemental income.

- Only 3 in 10 online gig workers do online gig work as their main activity.
- The vast majority spend part of their time working online and earn part of their income by doing gig jobs.

## Share of online gig workers intensity of work based

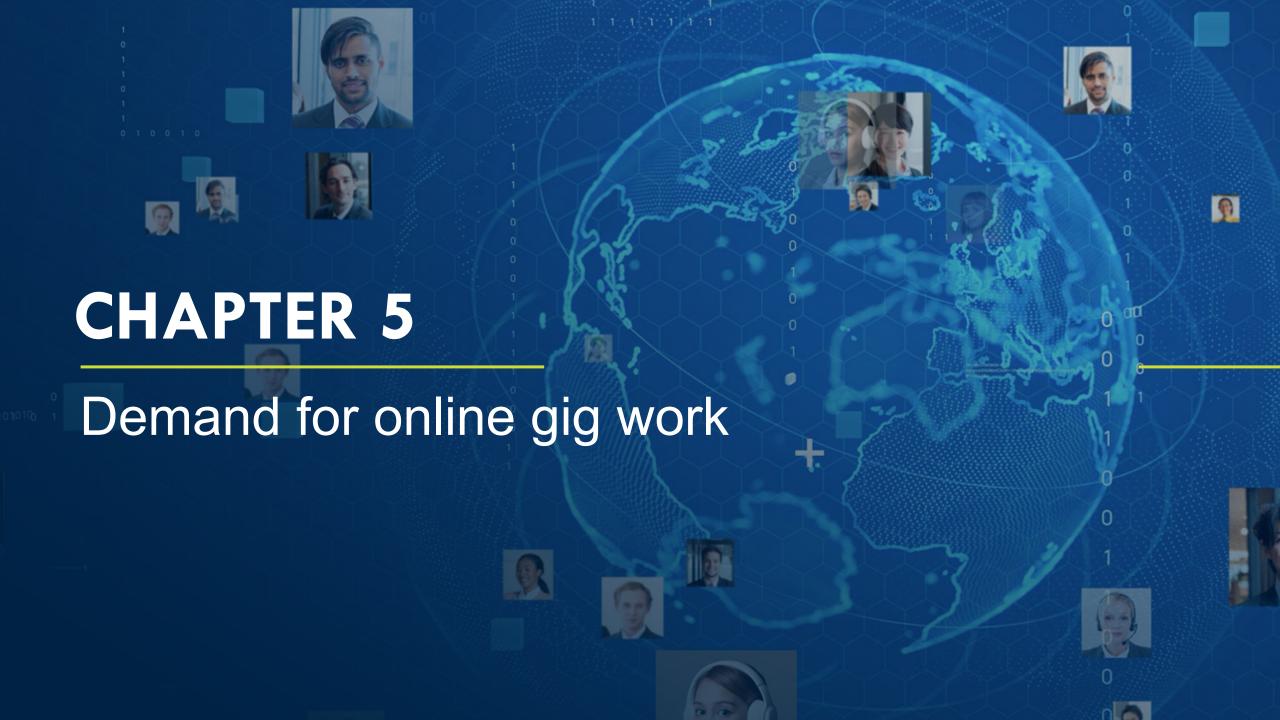
## Intensity of work



Source: Analysis based on the global RDIT survey.

% of personal income	Less than 10 hours a week	Between 10 and 20 hours a week	More than 20 hours a week
Less than 25	Marginal	Secondary	Secondary
25 to 50	Secondary	Secondary	Main
More than 50	Secondary	Main	Main

Source: Adapted from Urzì Brancati et al. (2020).



# We used multiple sources of data to understand where the demand for online gig work is coming from.

Survey of firms

A total of 1,171 respondents participated in the survey, including 364 firms which hire gig workers, representing firms of various sizes.

Interviews with stakeholders

Interviews conducted with a variety of stakeholders: firms and organizations that hire through online platforms, online gig work platforms, and other stakeholders.

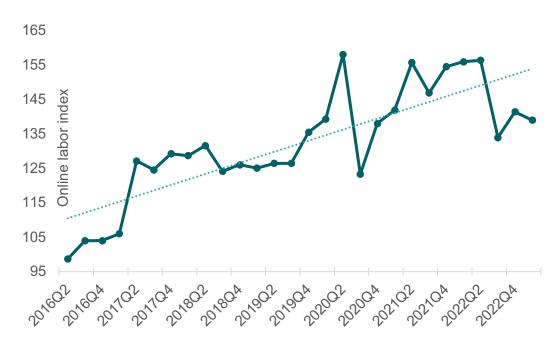
Complementary data

The survey findings are complemented with data from the Online Labour Index (OLI) as well as a literature review.

# The demand for gig work has been increasing over the past few years.

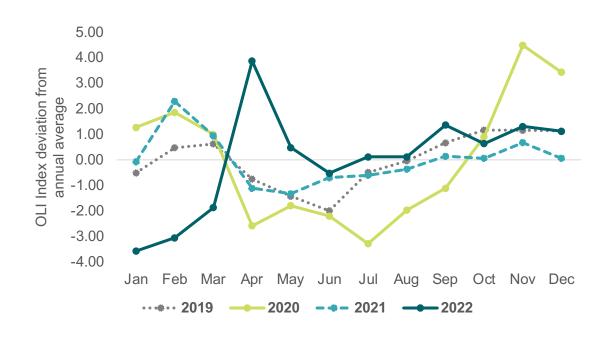
Adding to the overall trend, the COVID-19 pandemic expanded the use of digital platforms. Despite increasing overall, the demand for gig workers has seasonal fluctuation across occupations and regions.

### OLI Labor Demand Index, Index==100, June 2016

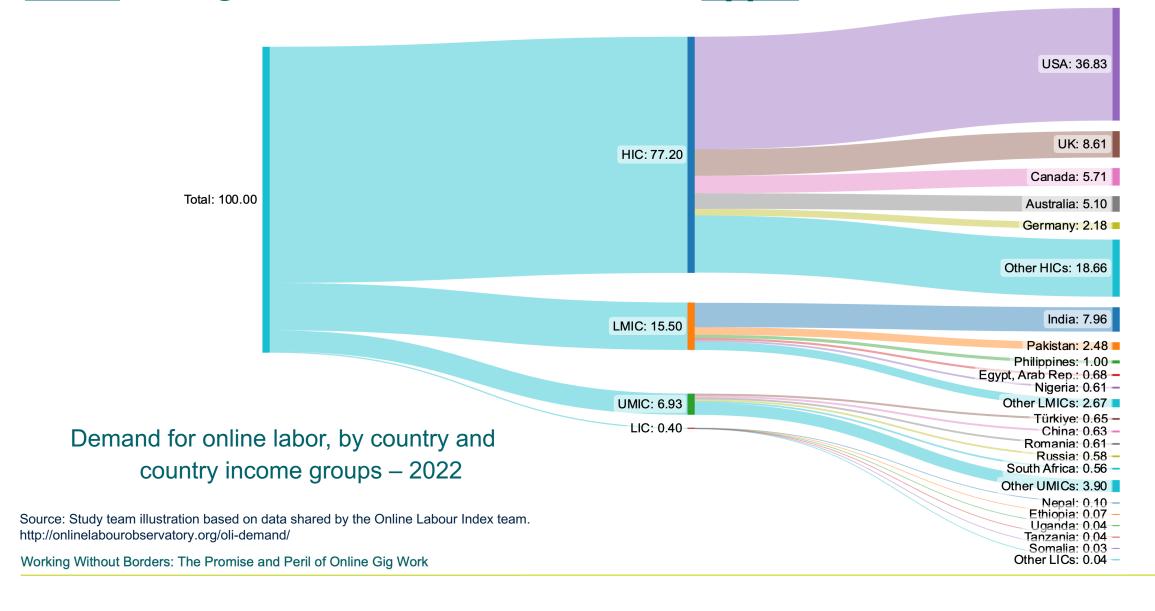


Source: Authors' illustration based on OLI data.

#### Seasonal fluctuations of demand for online labor

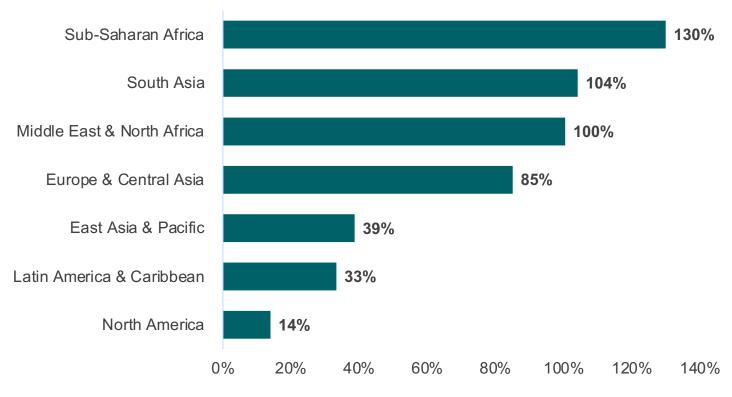


# Developed countries dominate the demand for online labor. However, lower MICs generate more demand than upper MICs.



# However, the demand for gig workers is growing at a *faster rate* in developing countries than in developed.

The growth rate of job postings on one of the largest digital labor platforms for 2016-2020



Source: Study team illustration based on data shared by the Online Labour Index team. http://onlinelabourobservatory.org/oli-demand/

# Micro, small and medium-sized enterprises drive the demand for gig workers.

## Smaller businesses are more likely to:

- Hire gig workers
- Outsource a larger share of work through platforms compared to large firms.

## Not only firms, but governments, too, generate local demand.

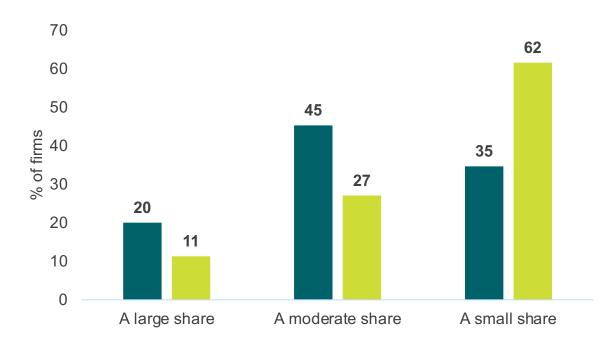
## For example:

 The judiciary in Kenya, the Ministry of ICT, and the Kenya Private Sector Alliance (KEPSA) are working together under the Ajira Digital Project, which allows the judiciary to find local gig workers that transcribe court proceedings.

Note: The figure is based on respondents' self-perception as to what constitutes a large, moderate, and small share of work.

Source: Team's survey of firms hiring through digital labor platforms, 2022.

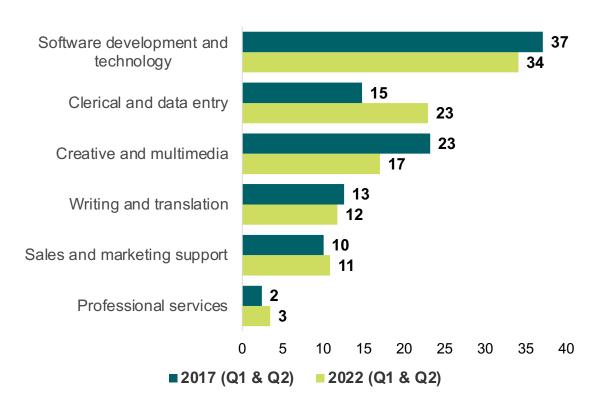
## Share of work outsourced through online gig platforms, by firm size



- Micro firms (fewer than 5 employees)
- Firms larger than micro (5 employees or more)

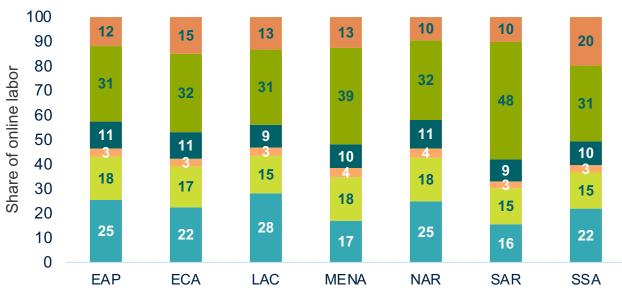
## Tasks related to software development and technology are most demanded.

### Demand for online labor, by occupation



Source: Team survey of firms hiring through digital labor platforms, 2022.

### Demand for online labor, by task type and region



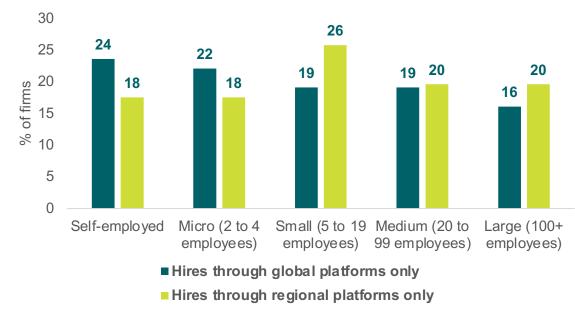
- Writing and translation
- Sales and marketing support
- Creative and multimedia

- Software development and technology
- Professional services
- Clerical and data entry

# The demand for regional or global platforms and for specific tasks varies by firm size.

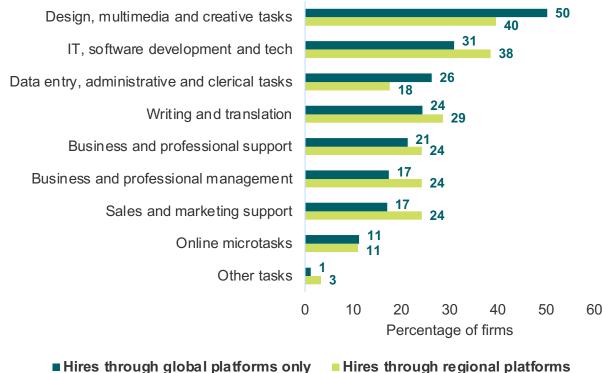
• Firms hiring through regional platforms appear more likely to outsource IT, writing, business, and sales tasks compared to those hiring through global platforms.

## Firms hiring online platforms by size and type of online platforms used



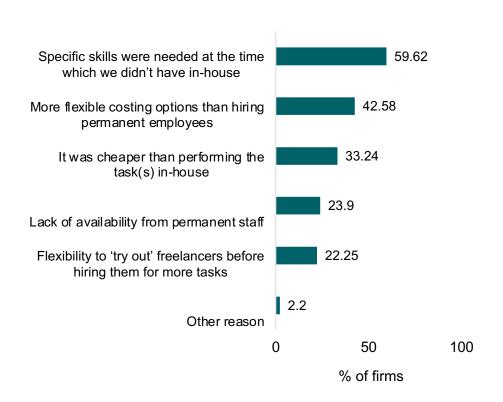
Source: Authors' illustration based on OLI data.

### Types of tasks demanded by firms, by type of platform



# Flexibility to access a wider range of skills cost effectively is the key reason why firms turn to platforms.

### Reasons to hire gig workers



Source: Team survey of firms hiring through digital labor platforms, 2022.

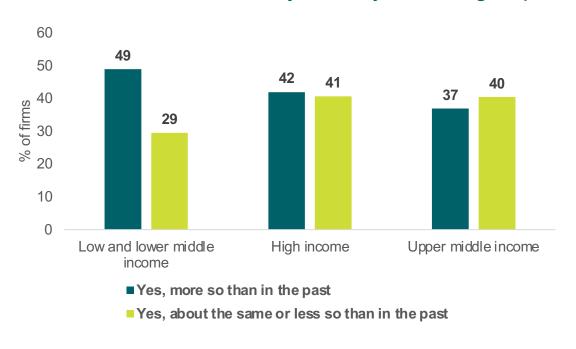
## Tasks outsourced through regional and global platforms



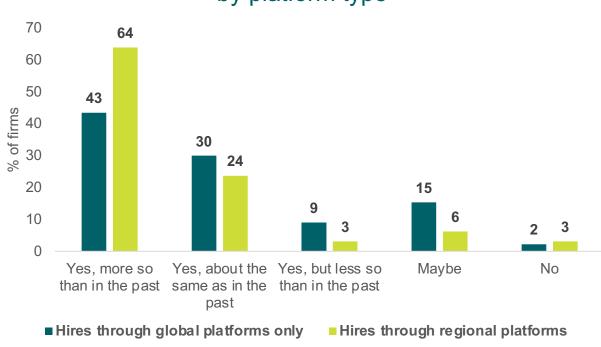
#### Demand for online gig work is likely to continue growing.

- The demand for online gig workers is expected to continue rising, especially in low and lower middle-income countries.
- The demand for local/regional platforms appears to grow faster than for global platforms.

#### Firms' responses on whether they plan to hire gig workers in the future, by country income group



## Intentions to hire gig workers in the future, by platform type



# CHAPTER 6 Social protection for online gig workers

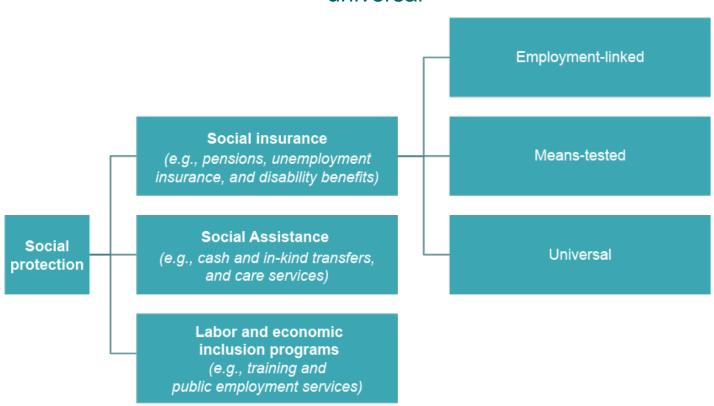
#### Social insurance is one instrument in the social protection toolbox.

Social insurance systems seek to smooth consumption and prevent poverty through two instruments:

- a risk-pooling mechanism;
- savings arrangements.

In low-income countries, the challenge of extending social insurance to gig workers coincides with the broader challenge of extending social security to informal, self-employed workers.

Social insurance can be linked to employment, means-tested, or universal



# We used data from multiple surveys and sources to understand social protection issues in the gig economy.

Global survey

Global survey covering 17 countries

Platform surveys

Surveys of online gig workers on 9 online freelancing platforms and one microwork platform; the analysis draws primarily on three surveys with the highest response rate

Stakeholder interviews

Interviews conducted with key stakeholders including: management of gig platforms, policy makers, financial institutions, and relevant private sector players

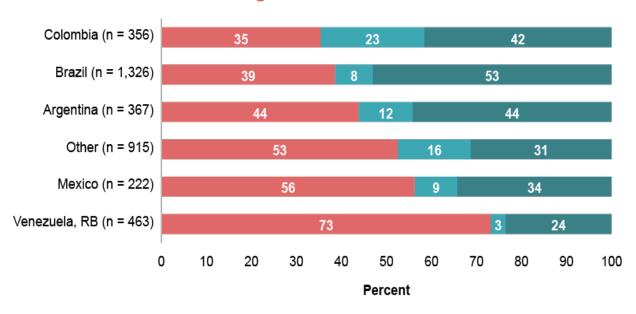
Focus group discussions

Focus group discussions with participants of operations supported by the World Bank

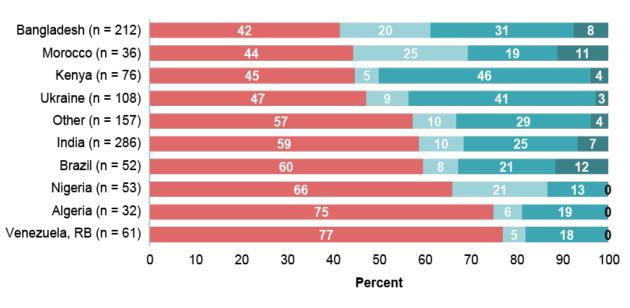
# A major proportion of workers do not have access to social security although the numbers vary across platforms.

#### Do you contribute to a pension or retirement savings scheme?

#### Gig workers on Workana



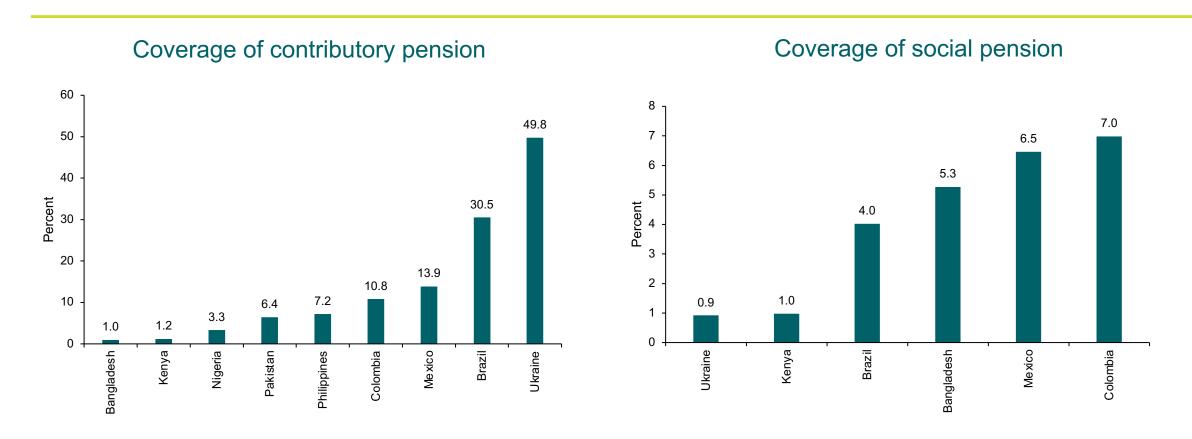
#### **Gig workers on Microworkers**



- No, I do not contribute to a pension or retirement savings scheme
- Yes, I have access to a private pension or retirement savings scheme
- Yes, I have access to a public/government-provided pension or retirement savings scheme

- No, I do not contribute to a pension or retirement savings scheme
- Yes, I have access to a private pension or retirement savings scheme
- Yes, I have access to a public/government-provided pension or retirement savings scheme
- Yes, I have access to both public and private pension or retirement savings scheme

# Pension coverage of the general population in select countries confirms trends observed in the platform surveys.



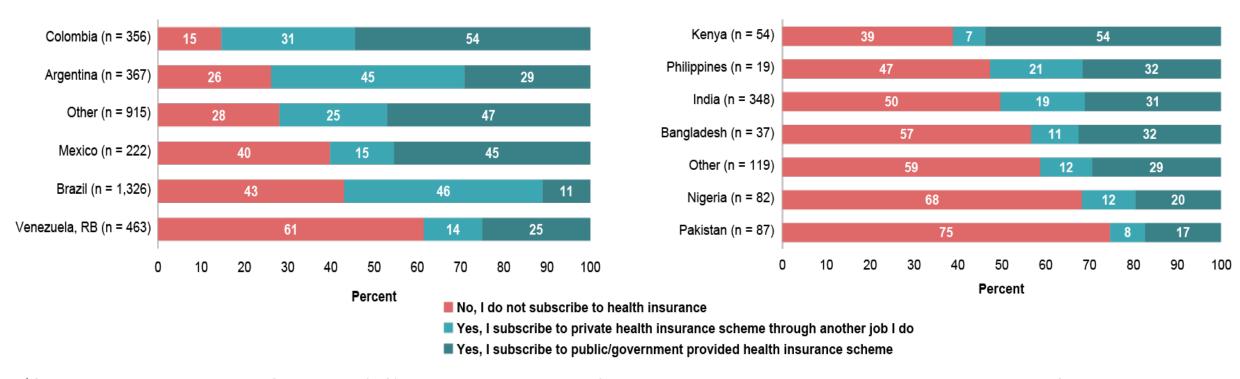
Notes for (a and b): Latest year available varies by country, but the series were restricted to data from 2015 onwards. Notes for figure on the left: The figure shows participation rates in contributory pension schemes from the 1990s to the 2010s. The dashed horizontal line represents no change in rates of contribution over time.

Source: Data from The Atlas of Social Protection: Indicators of Resilience and Equity (ASPIRE) and Rutkowski (2018).

# Compared to pension coverage, an even larger share of surveyed gig workers do not subscribe to health insurance schemes.

While gig workers in the countries and platforms studied are overwhelmingly likely to report not having a pension or a health insurance subscription, their *coverage* rates are still better than the global average.<sup>1</sup>

#### Do you contribute to a health insurance scheme? (Left: Workana: Right: Truelancer)



<sup>&</sup>lt;sup>1</sup>Globally, the International Labour Organization (ILO) estimates that 70 percent of the world's population lacks comprehensive social insurance. ILO 2017.

## The lack of social protection coverage of gig workers is compounded by several factors in developing country labor markets.

CHALLENGE IMPLICATIONS FOR SOCIAL INSURANCE COVERAGE	
1. Lack of clear classification of status in employment	There is considerable debate on how gig workers should be classified. Most gig workers are currently treated as 'independent contractors' or self-employed, which excludes them from the system of employer-linked benefits.
2. Lack of systems to cover self-employed workers or people in the informal sector	While some gig workers are correctly classified as self-employed, most social security schemes exclude self-employed workers. Informal sector schemes are being deployed in a growing number of countries provide an entry point to cover gig workers too.
3. Lack of collective bargaining among gig workers	The independent contractor status limits organizing as efforts may be seen as a form of collusion, which in turn violates anti-trust laws.  Gig workers are often engaged by a multitude of dispersed clients and platforms, making it difficult for workers to identify targets for collective action.

## Steps are being taken to clarify how gig workers can be classified, but these efforts have less relevance in developing countries where the labor market context is characterized by high informality.

#### **Europe**

- Outcomes of court cases point to the role of direction, authority, and control as key markers of whether one is genuinely selfemployed (gig worker) or a dependent employee.
- In the EU, the European Commission proposed a Directive in 2021, consisting of 5 criteria to be used to determine whether a platform was effectively an employer of a gig worker.

#### US

• Jurisdictions in the United States are taking steps to create tests to determine gig worker status in employment.

#### **Latina America**

- Most countries in Latin America are still in the early stages of developing regulations around gig work (e.g., Argentina, Mexico).
- Chile has a new law (N°21.431), which distinguishes between independent and dependent digital platform employees depending on whether gig work includes elements of subordination and dependence.

#### **Sub-Saharan Africa**

• The classification of online gig workers in terms of their employment status is not an issue yet in the region.

# There is no clear pattern in how gig workers define their relationship to platforms and clients. While some gig workers label themselves as 'self-employed'...

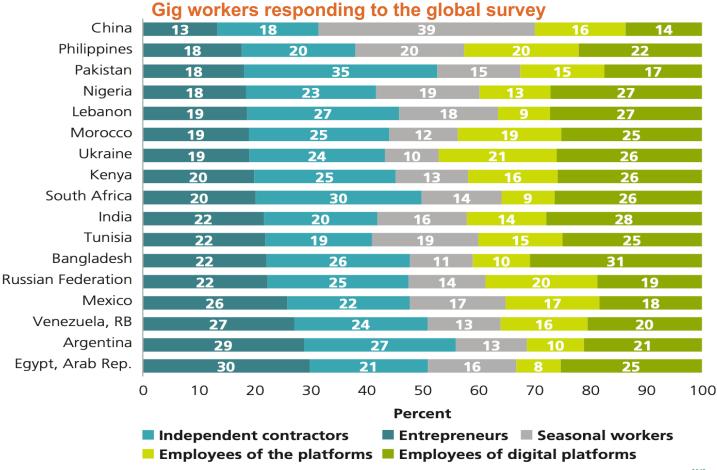
Online gig workers on Workana, Truelancer and the global survey are more likely to see themselves as:

self-employed ('independent contractors' or 'entrepreneurs')

as opposed to

**employees** ('employees of task posters', or 'employees of platforms').

How do gig workers classify their own status in employment?



Source: Team analysis using the global survey.

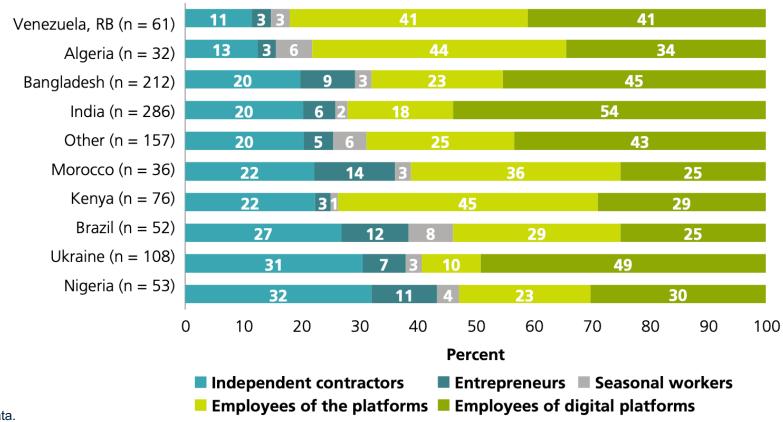
Working Without Borders: The Promise and Peril of Online Gig Work

# ... others see themselves as 'employees' of the platform or the task posters.

#### How do gig workers classify their own status in employment?

#### Gig workers on Microworkers

Responses from gig
 workers on Microworkers
 show that not all gig work is
 the same. The gig workers
 on Microworkers prefer to
 be labelled as 'employees'
 of the platform or of task
 posters.



Source: Team analysis using the global and platform survey data.

# Gig workers, like other self-employed workers, are in the 'missing middle' when it comes to social protection.

The 'missing middle': Gig workers are sometimes not poor enough to be eligible for social safety net benefits and not well-off enough to be part of social insurance programs mandated for the formal sector. Still, they are highly vulnerable with volatile and unreliable earnings.

#### Typology of households by social protection coverage

"Missing Middle" in Social Protection

**Houshold Type** 

#### Informal/Poor:

Focus is on short term consumption-soothing, in need of government cash transfers

## Informal/Non-Poor/Vulnerable:

Precautionary savings to last for a few weeks

#### Informal/Non-Poor/Non-Vulnerable:

Precautionary savings + Long term savings

#### Formal:

Part of mandated social insurance schemes

Source: Guven et al 2020.

# Expanding coverage to <u>all</u> workers is the best way to also include gig workers. Many countries are working towards a more universal coverage of informal and self-employed workers ...

COUNTRY	INITIATIVE	DESCRIPTION
Kenya	Haba Haba (2019)	<ul> <li>Launched by the National Social Security Fund</li> <li>Aims to expand social security coverage (pension, medical cover, loan facilities and welfare) to include members in the informal sector.</li> </ul>
India	Code on Social Insurance (2020)	<ul> <li>Aims to amend and consolidate existing labor laws relating to social security and extend social security benefits to all employees and workers irrespective of belonging to the organized or unorganized sector</li> </ul>
Malaysia	Skim Persaraan 1Malaysia (SP1M) program – rebranded i- Saraan in 2018	<ul> <li>Retirement savings program for self-employed persons introduced by the Employees Provident Fund (EPF)</li> <li>Voluntary matching contribution scheme through which EPF members who are self-employed and do not earn a regular income can make voluntary contributions toward retirement of up to RM60,000 per year.</li> </ul>
Colombia	Complementary Economic Benefits social security system (BEPS	<ul> <li>Voluntary pension scheme for low-income workers who are not paying into the traditional system.</li> </ul>

# Collective bargaining is critical, but we need more modern and updated institutional methods that use technology as an enabler.



#### RATE THE PLATFORMS

Third party
monitoring and
ratings can be used
to align platform
incentives with those
of workers and policy
makers.



#### RATE THE CLIENT

Workers submit information on clients, rate clients, and check client's record before accepting a task



## USE SOCIAL MEDIA

Self-initiated groups on Facebook, Reddit, WeChat, or WhatsApp are bringing gig workers together from across the world



## PARTNER WITH EXISTING UNIONS

Cooperate with existing unions to better their working conditions



"CO-OP"
MODELS

As owners of a platform co-op, gig workers can create the conditions for better pay and job security because they decide on commission rates and surplus value.

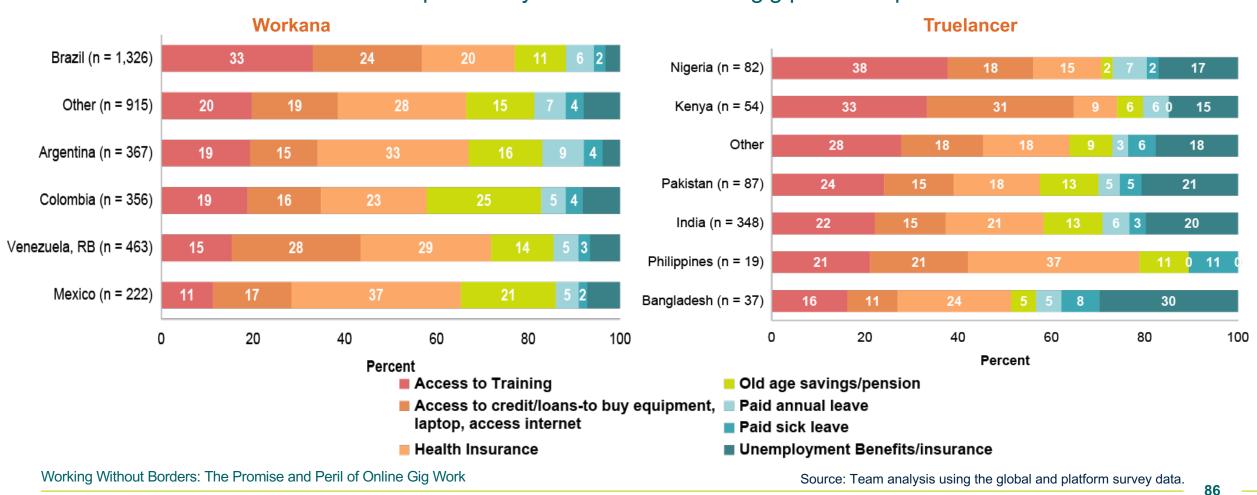


**LEGISLATION** 

Legislators recognizing that competition law should not stand in the way of collective agreements for gig workers.

# We need to design gig worker benefits to include the types of support they most seek - training and access to finance.

What is the top benefit you would like to see gig platforms provide?



# Social protection policies for gig workers in the developing countries need a contextual tailored approach. Policy recommendations include:



Cover all, without segmenting to address "missing middle" in social protection



Partner with digital work platforms on broader policy goals, e.g., expanding social registries, economic inclusion



In the short run, innovate and experiment with social insurance designs



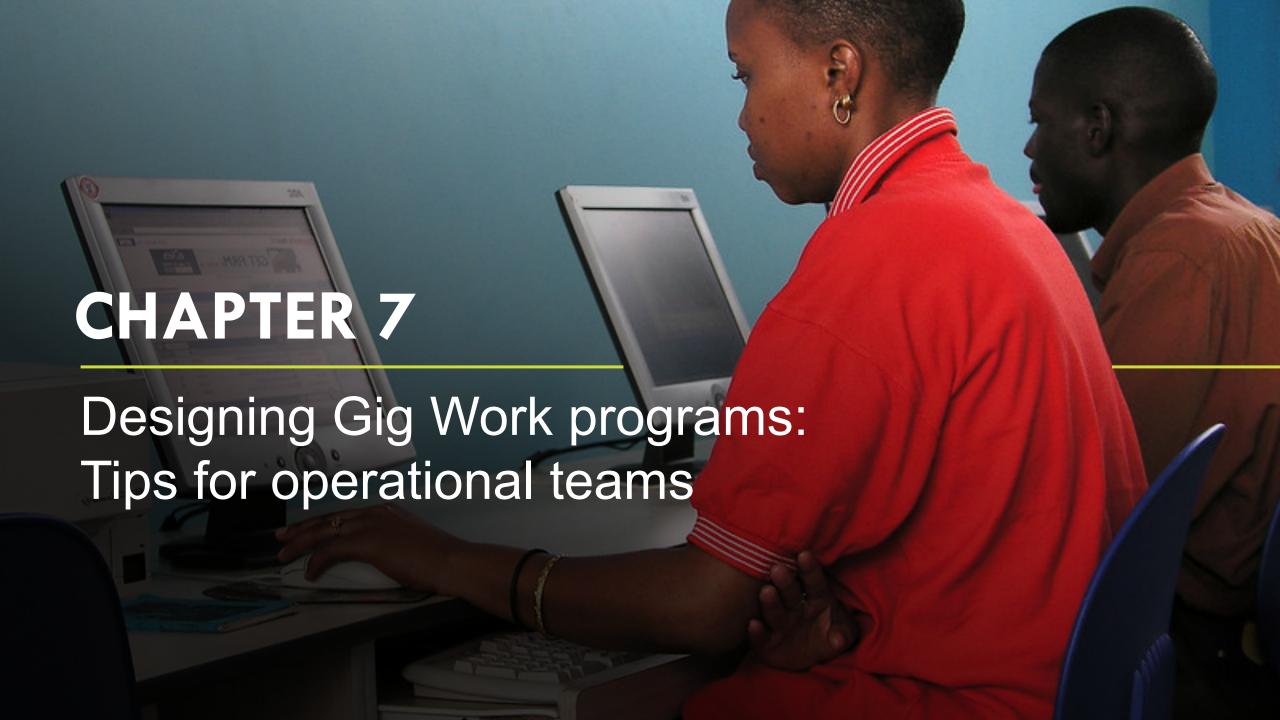
Support modern innovative models of collective bargaining



Collect data, track, and monitor scale of gig worker through augmented labor force surveys



For higher capacity governments, support steps to clarify status in employment



# The five phases of designing and implementing a typical online gig work project



DEVELOPING A
STRATEGY FOR
ONLINE GIG JOBS
PROGRAMS



DEVELOPING A
PIPELINE OF
TRAINED ONLINE
GIG WORKERS



DESIGNING AND
DELIVERING
TRAINING
PROGRAMS



INCREASING
ACCESS TO
INFRASTRUCTURE
& PAYMENT
OPTIONS



BENEFICIARIES
WITH DEMAND /
OPPORTUNITIES

# First, assess the context and develop a clear strategy accounting for multiple perspectives and building strong relationships.

## Clarify motivation

- •Accelerate digital adoption (e.g., World Bank pilot in Kenya: Digital Public Works for Urban Resilience)
- •Address lack of domestic jobs (e.g., the World Bank supported Women in Online Work (WoW) Pilot)

## **Assess** readiness

- •Identify and analyze local supply and demand challenges and competitive advantages of the region / country
- •Rely on use existing labor market studies and conduct stakeholder consultations

## Consult stakeholders

- •Identify relevant ecosystem stakeholders
- •Involve them during the implementation (e.g., trainers, job providers, etc.)

## Identify a champion

- •Identify a government agency to act as champion and help initiate, sustain and scale the program
- •Consider whether a national or local government entity is the best choice for the project

## Partner with platforms

- •Identify, in cooperation with gig platforms and niche segments of demand
- •Government-led programs like eRezeki (Malaysia) and Ajira Digital Program (Kenya) partnered with platforms

## Develop a phased strategy

•Start with a pilot to draw key learnings and set the foundation for the program (e.g., World Bank's <u>Digital Jobs for Khyber Pakhtunkhwa</u> started with small pilots and scaled up to develop an *integrated* model)

# Second, design the process for developing a pipeline of trained online gig workers and clarify the target group.

Define a target group of beneficiaries

- Identify demographic target
- Identify relevant types of online tasks based on the demographic target
- Consider constraints related to access to devices and internet

Design a well-defined pre-assessment and scoring strategy

- Develop clear program participation criteria
- Communicate clearly about the participation requirements to build trust between the program and the participants

Design a clear and transparent communication strategy

- Increase awareness about the program through an outreach strategy considering all stages of the program
- Use appropriate methods, including traditional media, social media, workshops / events, partnerships with local organizations

# Third, place careful attention to the content and delivery of training.

## Consider different types of skills

- Programs should incorporate a a mix of skills:
  - Technical skills
  - Socioemotional skills
  - Freelancing skills

#### **Determine dosage**

 A short-term or longer-term training may be more suitable based on target skills and type of online work (microwork or freelancing)

#### **Hands-on training**

 A hands-on component that shows beneficiaries how to create a profile, bid for their first tasks, and get their first payment is essential

# Fourth, digital infrastructure and payment mechanisms are fundamental, and the team may need to explore innovative options.



#### Infrastructure

- Leverage existing public infrastructure to lower costs: The eRezeki (Malaysia) leveraged over 2,000 telecenters to provide free access to computers and the internet
- **Provide access to internet using data stipends:** The Ajira Digital Program (Kenya) provided data bundles for women participants from remote areas



#### **Payment options**

**Explore appropriate payment options**, e.g. peer-to-peer (P2P) payment channels, mobile money accounts, bank accounts, cash transfers, cryptocurrency

- Projects like Women in Online Work (Kosovo) helped beneficiaries register with Payoneer
- Gaza Emergency Cash for Work and Self-Employment developed a partnership with Paypal to register beneficiaries on the platform

# Fifth, place equal importance on the demand side. Focusing on the supply side alone is not enough to create a successful program.

## Work closely with platforms

- Provide project beneficiaries with 'preferential' profiles to increase their visibility.
- Encourage international or local platforms to begin operations in a country
- Increase the accessibility of platforms and target disabled freelancers in their campaigns

# Stimulate local demand for online gig work

 Work together with local businesses to create awareness of the benefits of digital adoption, including the use of online gig work platforms

## **Explore digital public** works

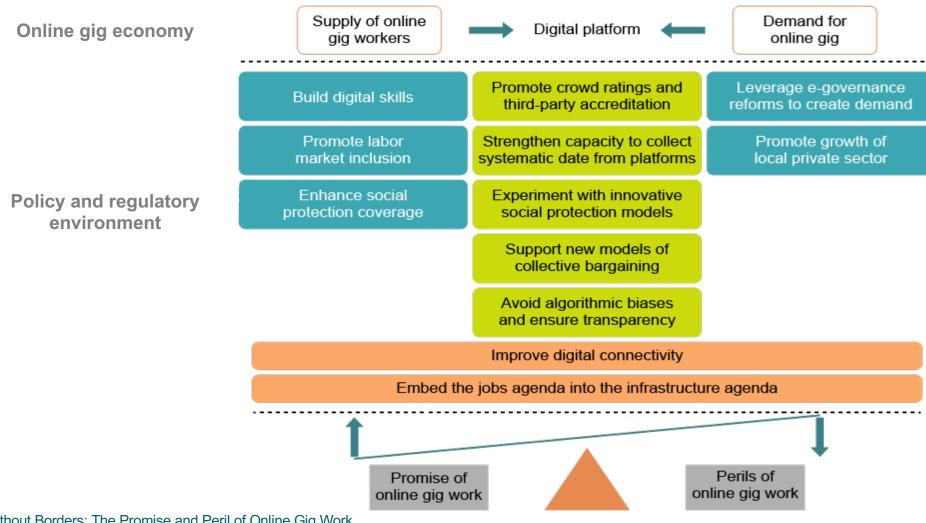
- Create income generation opportunities for lowincome households
- Develop digital skills among the vulnerable
- Build critical national digital assets

# Digital public works (DPW) can be an opportunity for low-income beneficiaries, an example is the pilot program in Kenya.





#### Balancing the promise and peril of online gig work requires an incremental and experimental approach.



# Online gig work can be leveraged for skills development and labor market inclusion. Governments can partner with platforms to extend coverage of informal workers.

#### **Build digital skills**

- Source of supplemental income, acting as a form unemployment insurance
- Can be used to build digital skills while earning an income

## Promote labor market inclusion

- Promote female labor force participation, especially in areas where mobility is a constraint
- Support youth employment
- Access to jobs in smaller cities, towns, and villages

## **Enhance social protection coverage**

- Platforms can help increase visibility of informal workers, that often remain invisible and hard to reach for policy makers
- Governments can partner with platforms to extend social protection coverage or build updated social registries

Online gig platforms can help firms access a wider range of skilled workers cost effectively, helping increase firm productivity and job creation. The public sector can also be a source of demand for gig work opportunities.

Use e-governance reforms to create new digital work opportunities

- Governments can drive the demand for online gig work as they implement e-governance and digital reforms in various sectors.
- Examples: digitizing archives, public records, court files, transcribing public health information and government services by relying on digitally trained workers

Promoting growth of local private sector ecosystem

- Online gig workers are a crucial source of talent for MSMEs and startups.
- Local gig work platforms could be potential allies in developing an ecosystem for the local private sector.

# Innovative partnerships with platforms and new models of collective bargaining are needed.

Engage with platforms to enhance social protection coverage

- Wider coverage of all types of informal workers is the best way to protect gig workers without segmenting the labor market.
- Platforms with their capacity to conduct massive outreach activities and make informal workers more visible to policy makers could be valuable allies.

**Experiment with** innovative social protection models

- Countries should experiment with different pilots and use insights from behavioral nudges to design insurance models.
- Partnership with private insurance providers can provide part of the solution

Support new models of collective bargaining

- New forms of collective bargaining would be needed to support this new distributed model of work and address worker protection.
- A unique feature of some recent structures of collectivization is the leveraging of technology to scale access and impact

# The risks of online gig work can be further minimized by setting the right incentives for platforms, leveraging data, and limiting bias.

Promote crowd ratings and third-party accreditation

Applying the very mechanism of ratings used by platforms (to rate workers) to platforms themselves could be an effective way to incentivize platforms to protect workers.

Strengthen capacity to collect system data

The transactional data recorded by online gig work platforms could be leveraged to monitor labor market conditions associated with contracts that were previously unrecorded and typically absent in the informal economy.

Avoid algorithmic biases and ensure transparency

To limit risks and biases, governments need to establish data safeguard standards and ensure transparency in how platforms use data to match tasks.

# Digital infrastructure is vital to access online work. Expanding connectivity should go hand in hand with creating more and better jobs.



## Invest in digital infrastructure and access to devices

- Affordable access to digital devices for all citizens, and to disadvantaged groups
- Availability of high-speed, reliable and affordable internet across rural and urban areas



## Embed the jobs agenda in the infrastructure agenda

 Maximize the economic impact of programs on local livelihoods by integrating a jobs lens in digital infrastructure projects



# Overview of the number of responses received to the global RDIT survey, by country

Country	Total number of completed surveys	Total number of gig workers who completed the survey	Total number of non-gig workers who completed the survey
Kenya	398	80	318
Nigeria	387	77	310
South Africa	400	32	368
Argentina	385	44	341
Bangladesh	391	61	330
China	525	69	456
Egypt	388	60	328
India	393	39	354
Lebanon	389	38	351
Mexico	395	55	340
Morocco	392	66	326
Pakistan	384	69	315
Philippines	567	53	514
Russia	425	61	364
Tunisia	393	54	339
Ukraine	411	50	361
Venezuela	392	48	344
TOTAL	7015	956	6059

## List of platforms interviewed for this study

Platform	Headquarters
Apna	India
Appen	Australia
Asuqu	Nigeria
BeMyEye	United Kingdom
Bookings Africa	Nigeria
B.O.T.	Lebanon
Elharefa	Egypt
Findworka	Nigeria
Flexiport	India
Freelancer	Australia
Khamsat and Mostaql (Hsoub)	United Kingdom
Jolancer	Nigeria
Karya	India
M4JAM	South Africa

Platform	Headquarters
MDEC (eRezeki platform)	Malaysia
Meaningful gigs	USA
Native Teams	United Kingdom
Onesha	Kenya
SheWorks!	USA
SoyFreelancer	El Salvador
Truelancer	India
Upwork	USA
Ureed	UAE
Voices.com	Canada
Workana	Argentina
Wowzi	Kenya
YouDo	Russia

#### List of interviews with governmental representatives

Institutions	Contact
IFC/ UREED	Elvira Van Daele
GIZ – Flagship Gig Economy Project	Shakhlo Kakharova, Kristen Schuettler
IDB	Oliver Azuara Herrera, Catalina Rodriguez Tapia, Mauricio Mondragon, Luis Carmona Silva
NASA – Centre of Excellence for Collaborative Innovation	Steve Rader
i-Saaran Initiative (Malaysia)	Balqais, Ferizan
Kenya Ajira Digital Program (Emobilis)	Edna Karijo, Ken Mwenda,
KEPSA (kenya private sector association	Ehud Gachugu
Malaysia Digital Economy Corporation (MDEC)	Mohd Redzuan Affandi Abdul Rahim, Muhammad Farhan Hizami Said, Sivarao Aparahu
Digital Jobs for Khyber Pakhtunkhwa, Pakistan	Shoaib Yousafzai
Leveraging ICT for Growth, Employment and the Governance (LICT) Project, Bangladesh	Sami Ahmed
EFE-Jordan	Lizzie Clark, Israa Awajan
Generation	Jennifer Decker Mehta, Teresiois Bundi
Humans in the Loop	Iva Gumnishka
eRezeki- Malaysia Digital Economy Corporation (MDEC)	Mohd Redzuan Affandi Abdul Rahim, Muhammad Farhan Hizami Said, Sivarao Aparahu
Selangor Freelance Initiative	Alejandro Kikuchi
HSOUB Academy	Abdelmohimen Agha
Microsoft Research India ( Project Karya)	Vivek Sheshadri
Mastercard Ghana	Esinam Maura Adorkor
Mercy Corps	Christopher Maclay
Digital Data Divide	Sopheap IM
Working Without Borders: The Promise and Peril of Online Gig Work	

## List of interviews with private sector

Working Without Borders: The Promise and Peril of Online Gig Work

Organization / Company	Contact
60decibels	Tom Adams, Roshi Chengappa
AXA Mansard (Nigeria)	Adebimpe Adejoro, Olalekan Tijani
Catch	Kristen Anderson, Christina MacDonald
Federal Tax Service of Russia	Anatoly Gaverdovsky
Generation – Kenya	Jennifer Decker Mehta, Teresios Bundi
Insured Nomads	Chris Nam
Kenya Private Sector Alliance (KEPSA)	Dr. Ehud Gachugu
Koa (Kenya)	Patrick Russell
Modalis (Canada)	Curtis Grad, Frode Skulbru
Motionwares (Nigeria)	Chris Eliezer

## Overview of platform surveys

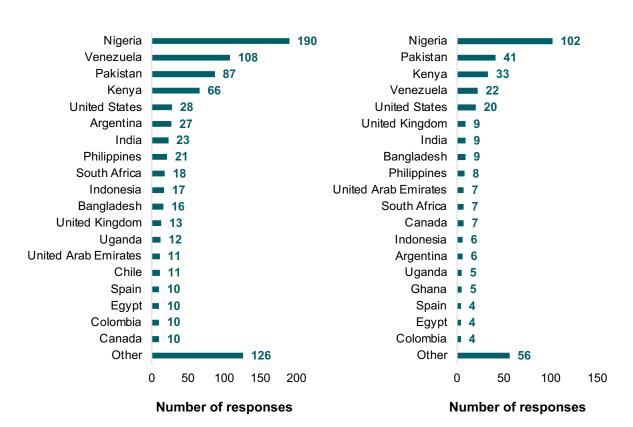
Platform	Sample size (online gig workers)	Timeframe
Elharefa	41	June - September 2022
Flexiport	11	June - September 2022
Jolancer	19	April – July 2022
Microworkers	1073	August - September 2022
Onesha	82	July - December 2022
SheWorks!	36	June - September 2022
SoyFreelancer	324	April 2022
Truelancer	746	June - August 2022
Workana	3697	June - August 2022; Survey conducted by the team in partnership with the IDB
Wowzi	960	September - October 2022
Working Without Borders: The Promis	se and Peril of Online Gig Work	400

## Overview of country deep dives

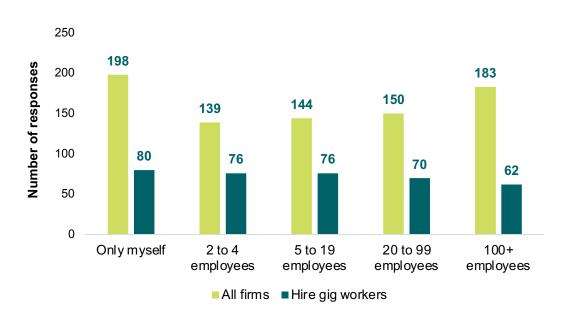
Country	Type of data	Description
Bangladesh	Online survey: 249 online gig workers	The survey was conducted by the study team in collaboration with counterpart client at Bangladesh Computer Council and Startup Bangladesh Limited in November 2021. The respondents were recruited by promoting the survey on social media.
Indonesia	Online survey: 4524 informal workers, of which 148 respondents identified as online gig workers	A survey regarding the participation of informal sector workers in the old-age saving scheme was carried by a local survey firm out under the supervision of the World Bank Social Protection and Jobs (SPJ) team during the period of March – April 2022. The study team collaborated with the SPJ team in Indonesia to include several questions on online gig work in the questionnaire.
Kosovo – Women in Online Work (WoW) pilot	Online survey: 13 online gig workers	The survey was conducted by the study team in collaboration with counterpart client (Ministry of Economic Development) with 13 participants in the 2016 Kosovo Women in Online Work (WoW) pilot, as a follow-up to the pilot. The pilot was a collaboration between the Kosovo's Ministry of Economic Development and the World Bank's ICT and Jobs team, with funding provided by the Korea Green Growth Trust Fund.
Malaysia – eRezeki and GLOW PENJANA programs	Program data	The Malaysia country deep dive is based on data provided by the Malaysia Digital Economy Corporation (MDEC) about the eRezeki program covering the period 2016 – 2020 and the global online workforce (GLOW) PENJANA Program from October 2020 to June 2021, as well as interviews with key stakeholders.
Pakistan	Online survey: 1373 online gig workers; Focus group discussions with women and men gig workers	The survey was conducted by the study team in collaboration with Social Sustainability and Inclusion (SSI) team in Pakistan during the period June-July 2022. The survey build on the implementation of the World project <a href="Digital Jobs for Khyber Pakhtunkhwa">Digital Jobs for Khyber Pakhtunkhwa</a> . Respondents in the survey were recruited by distributing the survey on social media. Online gig workers from the

# Overview of the number of responses received to the demand survey

All surveyed firms (left) and surveyed firms that hire gig workers (right), by country



## Surveyed firms, by size and whether they hire gig workers



# How many online registered gig workers are there? Insights into the data science method to estimate the size of the gig economy

We estimate that there are a total of 154 million unique registered gig workers worldwide. The total number of registered workers that were found through data collection and predictions using the XGBoost model was divided by 1.83 to account for multihoming.

The results may still be underestimating the number of gig workers. This is because traffic data was not available for all platforms. Also, some large platforms were excluded as it wasn't possible to trace traffic on relevant subfolders, further suggesting that these estimates may be on the lower side.

Determining how many of the registered workers are active is challenging because Platform websites do not list how many of their registered workers are active. Moreover, they use different criteria to define active workers. In the absence of reliable data on activity levels, we use a proxy indicator on monthly unique website visitors.

#### The model is as follows:

Estimated share of active workers for each platform (Percentageactive) =

$$\frac{V_{\mathcal{U}} \cdot (1-br) \cdot r}{1.19 \cdot \frac{(W_{\mathcal{T}})}{1.834}}$$

#### Where:

Vu = average number of unique visitors per month

Br = average monthly platform bounce rate

Wr = number of registered workers (either observed or predicted) for each individual platform.

- 1.19 = adjustment factor for multi-working, based on internal surveys conducted by the World Bank.
- 1.834 = adjustment factor for multihoming, based on internal surveys conducted by the World Bank

r = ratio of workers to client (=0.755)