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Appendix 1

Digital labour platforms: Estimates of workers, investments and revenues

Table A1.1 List of country codes

Country	ISO Alpha 3	Country	ISO Alpha 3	Country	ISO Alpha 3
Albania	ALB	France	FRA	Peru	PER
Algeria	DZA	Georgia	GEO	Philippines	PHL
Argentina	ARG	Germany	DEU	Poland	POL
Armenia	ARM	Ghana	GHA	Portugal	PRT
Australia	AUS	Greece	GRC	Republic of Moldova	MDA
Bangladesh	BGD	India	IND	Romania	ROU
Belarus	BLR	Indonesia	IDN	Russian Federation	RUS
Benin	BEN	Ireland	IRL	Saint Lucia	LCA
Bolivia, Plurinational	BOL	Israel	ISR	Senegal	SEN
State of		Italy	ITA	Serbia	SRB
Bosnia and Herzegovina	BIH	Jamaica	JAM	Singapore	SGP
Brazil	BRA	Japan	JPN	Slovakia	SVK
Bulgaria	BGR	Kazakhstan	KAZ	South Africa	ZAF
Cameroon	CMR	Kenya	KEN	Spain	ESP
Canada	CAN	Madagascar	MDG	Sri Lanka	LKA
Chile	CHL	Malaysia	MYS	Sweden	SWE
China	CHN	Mauritius	MUS	Thailand	THA
Colombia	COL	Mexico	MEX	Tunisia	TUN
Costa Rica	CRI	Morocco	MAR	Turkey	TUR
Croatia	HRV	Nepal	NPL	Uganda	UGA
Cyprus	CYP	Netherlands	NLD	Ukraine	UKR
Denmark	DNK	New Zealand	NZL	United Arab Emirates	ARE
Dominican Republic	DOM	Nicaragua	NIC	United Kingdom	GBR
Ecuador	ECU	Nigeria	NGA	United States	USA
Egypt	EGY	North Macedonia	MKD	Uruguay	URY
El Salvador	SLV	Norway	NOR	Venezuela, Bolivarian	VEN
Ethiopia	ETH	Pakistan	PAK	Republic of	VEIN
Finland	FIN			Viet Nam	VNM

Table A1.2 Estimates of workers performing tasks on digital platforms

Reference	Estimate	Countries and years	Time period/proportion of income	Definition
	9.5–11% of adult population (aged between 16 and 74 years)		Ever gained income from providing services via online platforms.	
	1.9–2.4% of adult population		Provided labour services via platforms but less than once a month over the last year.	
Urzì Brancati, Pesole and Fernández Macías	3.1% of adult population	16 EU Member States,* 2018	At least monthly, but for less than 10 hours a week and earned less than 25% of their income via platforms.	Providing labour services via online platforms; payment is conducted digitally via the platform, and tasks are performed either online web-based or on-location.
(2020)	4.1% of adult population	510105, 2010	At least monthly, for between 10 and 19 hours or earned between 25% and 50% of their income via platforms.	
	1.4% of adult population		At least monthly, and worked on platforms at least 20 hours a week or earned at least 50% of their income via platforms.	
Pagalage at al. (2019)	9.7% on average 6–12% of adult population	14 EU Member States,	Provided labour services at any time in the past.	Providing services via online platforms (location-based
Pesole et al. (2018)	8% on average 4–10% of adult population	2017	Provided services regularly at least once a month in the past year.	and web-based).
Alsos et al. (2017)	1% of working-age population	Norway, 2016–17	Earned money through labour platforms in the past year.	
CIPD (2017)	4% of working adults (18–70 years)	United Kingdom, 2016	Engaged in paid platform work at least once in the previous 12 months.	Platform work includes performing tasks online, providing transport or physically delivering food or other goods.
	9–12% in Germany, Netherlands, Sweden, United Kingdom 18–22% in Austria, Italy, Switzerland	Austria, Germany,	Performed crowdwork at any time in the past.	
Huws et al. (2017)	6–8% in Germany, Netherlands, Sweden, United Kingdom 13–15% in Austria, Italy, Switzerland	Italy, Netherlands, Sweden, Switzerland, United Kingdom,	Performed crowdwork at least monthly.	Crowdwork is paid work via an online platform, such as freelance platforms or outside one's home on location-based platforms.
	5–6% in Germany, Netherlands, Sweden, United Kingdom 9–12% in Austria, Italy, Switzerland	2016–17	Performed crowdwork at least weekly.	
Farrell, Greig and Hamoudi (2018)	1.6% on all platforms 1.1% on labour platforms, 0.2% on capital platforms, 0.4% selling (28 million US bank accounts)	United States, 2016	Earned income from platform work over the past month.	Labour platforms are those on which participants perform discrete tasks, and capital platforms are those whose participants sell goods or rent assets.
	4.5% on all platforms		Earned income from all platform work over the past year.	

Table A1.2 (cont'd)

Reference	Estimate	Countries and years	Time period/proportion of income	Definition	
	42% of adult population		Have purchased or used one of the services.		
Burson-Marsteller, Aspen Institute	22% of adult population	United States, 2015	Have offered at least one of the services in the past.	Services in the on-demand economy include: ride-sharing, accommodation sharing, task services, short-term car	
and <i>Time</i> (2016)	7% of adult population		Earn in a typical month at least 40% through on-demand economy.	rental, or food or goods delivery.	
Katz and Krueger (2016)	0.5% of labour force	United States, 2015	Reference period – one week.	Working through an online intermediary.	
		Survey	s conducted by national statistical offices		
Switzerland, FSO (2020)	0.4% of the population 1.6% of the population	Switzerland, 2019	In the past 12 months.	Carried out work via internet-mediated platforms. Provided internet-mediated platform services.	
United States, BLS (2018)	1% of total employment	United States, 2017	In the last week.	Electronically mediated workers, doing short jobs or tasks through websites or mobile apps that both connect them with customers and arrange payment for the tasks.	
	2.4% of working-age population		In the past year.	Earned money via digital platforms, both labour and capital platforms.	
Ilsøe and Madsen (2017)	1% of working-age population	Denmark, 2017	In the past year.	Earned money via a labour platform such as Upwork, Happy Helper.	
	1.5% of working-age population		In the past year.	Earned money via a capital platform such as Airbnb, GoMore.	
Sweden, SOU	4.5% of working-age population	Sweden, 2016	In the past year.	Tried to get an assignment via a digital platform.	
(2017)	2.5% of working-age population	3Weden, 2010	In the past year.	Performed work via a digital platform.	
Canada, Statcan		In the past 12 months.	Used either peer-to-peer ride services or private accommodation services.		
(2017)	0.3% of adult population (≥18 years)	Canada, 2015-10	In the past 12 months.	Offered peer-to-peer ride services.	
	0.2% of adult population (≥18 years)		In the past 12 months.	Offered private accommodation services.	
Statistics Finland (2018)	7% of adult population	Finland, 2017	In the past 12 months.	Worked or earned income from the following platforms: Airbnb, Uber, Tori.fi/Huuto.net, Solved, and others.	

^{*} These 16 EU Member States are Czechia, Croatia, Finland, France, Germany, Hungary, Ireland, Italy, Lithuania, the Netherlands, Portugal, Romania, Slovakia, Spain, Sweden and the United Kingdom.

Source: ILO compilation.

Table A1.3 Total funding from venture capital and other investors, selected categories of digital labour platforms, by region and type of platform, 1999-2020

	Funding (US\$ million)	Number of platforms	Number of countries
Delivery	37495	164	47
Africa	13	5	4
Arab States	48	6	5
Central and Western Asia	51	6	4
East Asia	8915	16	3
Eastern Europe	110	10	3
Latin America and the Caribbean	3019	15	9
North America	11 116	44	2
South Asia	4199	21	2
South-East Asia and the Pacific	222	8	3
Western Europe	9803	33	12
Taxi	62784	61	30
Africa	45	8	6
Arab States	772	1	1
Central and Western Asia	929	2	2
East Asia	21581	4	2
Eastern Europe	1001	2	2
Latin America and the Caribbean	337	6	3
North America	33032	19	1
South Asia	3850	5	4
South-East Asia and the Pacific	26	4	2
Western Europe	1211	10	7
Online web-based	2690	142	31
Arab States	0.3	1	1
Central and Western Asia	113	4	2
East Asia	579	11	3
Eastern Europe	12	5	3
Latin America and the Caribbean	2	4	3
North America	1 601	66	2
South Asia	7	6	2
South-East Asia and the Pacific	77	9	5
Western Europe	299	36	10
Hybrid	16999	5	4
Africa	908	1	1
South-East Asia and the Pacific	15100	2	2
East Asia	991	2	1

Source: Crunchbase database.

Table A1.4 Estimated annual revenue of digital labour platforms, by region and type of platform, 2019–20

	Revenue (US\$ million)	Number of platforms	Number of countries
Delivery	25063	191	36
Africa	10	3	4
Arab States	113	7	3
Central and Western Asia	231	1	1
East Asia	9107	101	4
Eastern Europe	63	7	5
Latin America and the Caribbean	934	6	4
North America	9104	34	1
South Asia	690	10	1
South-East Asia and the Pacific	90	6	5
Western Europe	4772	16	8
Transportation	17343	31	18
Africa	7	2	2
Arab States	119	1	1
Central and Western Asia	1000	1	1
East Asia	401	1	1
Eastern Europe	501	1	1
Latin America and the Caribbean	17	2	1
North America	14521	9	1
South Asia	460	4	3
South-East Asia and the Pacific	17	3	2
Western Europe	300	7	5
Online web-based	2509	107	22
Africa	2	1	1
Central and Western Asia	107	1	1
East Asia	127	6	3
Eastern Europe	24	3	2
Latin America and the Caribbean	1	1	1
North America	1572	61	2
South Asia	26	7	1
South-East Asia and the Pacific	494	7	4
Western Europe	155	20	7
Hybrid	6273	5	4
Africa	180	1	1
South-East Asia and the Pacific	3600	2	2
East Asia	2493	2	1

Source: Owler database, annual reports and filings by platform companies to the Securities and Exchange Commission of the United States.

Table A1.5 Mergers and acquisitions in delivery platforms

Name of platform	Merger/ acquisition	Name of platform/company (merged with/acquired by)	Date of merger/ acquisition
Appetito24	Acquisition	PedidosYa (acquired by Delivery Hero)	14.08.2017
Baedaltong	Acquisition	Delivery Hero	09.12.2014
BGMENU.com	Acquisition	Takeaway.com (now Just Eat Takeaway.com)	23.02.2018
Canary Flash	Acquisition	Just Eat (now Just Eat Takeaway.com)	01.09.2019
Carriage	Acquisition	Delivery Hero	29.05.2017
Caviar	Acquisition	DoorDash	01.08.2019
Chef Shuttle	Acquisition	Bitesquad	23.06.2017
CitySprint	Acquisition	LDC	19.02.2016
Dáme Jídlo	Acquisition	Delivery Hero	09.01.2015
Daojia	Acquisition	Yum! China	17.05.2017
Delicious Deliveries	Acquisition	Bitesquad	10.10.2017
Deliveras	Acquisition	Delivery Hero	12.02.2018
Delivery.com	Acquisition	Uber	11.10.2019
Delyver	Acquisition	Big Basket	12.06.2015
Domicilios.com	Acquisition	iFood	08.04.2020
Doorstep Delivery	Acquisition	Bitesquad	28.08.2017
Eat24	Acquisition	Grubhub	03.08.2017
Eats Media	Acquisition	delivery.com	26.08.2009
Eda.ua	Acquisition	Menu Group (UK) Limited	05.08.2019
Favor	Acquisition	HE Butt Grocery	15.02.2018
Feedr	Acquisition	Compass Group PLC	26.05.2020
Foodarena.ch	Acquisition	Takeaway.com (now Just Eat Takeaway.com)	22.06.2018
	Acquisition		
Foodfly	·	Delivery Hero	20.09.2017
Foodfox	Acquisition	Yandex	28.11.2017
Foodie Call	Acquisition	Bitesquad	10.10.2017
FoodNinjas	Acquisition	Velonto	04.2020
Foodonclick.com	Acquisition	Delivery Hero	05.2015
Foodora	Acquisition	Delivery Hero	09.2015
Foodpanda	Acquisition	Delivery Hero	10.12.2016
Foodpanda India	Acquisition	Ola	19.12.2017
FoodTime	Acquisition	Fave	24.05.2019

Table A1.5 (cont'd)

Name of platform	Merger/ acquisition	Name of platform/company (merged with/acquired by)	Date of merger/ acquisition
Freshgora	Minority stake investment	Meal Temple Group	2019
Gainesville2Go	Acquisition	Bitesquad	01.10.2017
HipMenu	Acquisition	Delivery Hero	08.2018
Honest Food	Acquisition	Delivery Hero	20.12.2019
Hungerstation.com	Acquisition	Foodpanda	09.08.2016
Lieferando	Acquisition	Takeaway.com (now Just Eat Takeaway.com)	10.04.2014
Menulog	Acquisition	Just Eat (now Just Eat Takeaway.com)	08.05.2015
Mjam	Acquisition	Delivery Hero	2012
MyDelivery	Acquisition	Meal Temple Group	26.02.2019
NetPincér hu	Acquisition	Foodpanda, then by Delivery Hero	12.2014 and 12.2016 respectively
PedidosYa	Acquisition	Delivery Hero	26.06.2014
Pyszne.pl	Acquisition	Lieferando, then by Just Eat Takeaway.com	23.03.2012 and 10.04.2014 respectively
Rickshaw	Acquisition	DoorDash	14.09.2017
SberMarket	Acquisition	Sberbank	30.11.2020
Seamless	Acquisition	Grubhub	01.05.2013
SkipTheDishes	Acquisition	Just Eat (now Just Eat Takeaway.com)	15.12.2016
Stuart	Acquisition	Geopost	07.05.2017
Takeaway.com and Just Eat	Merger	Just Eat Takeaway.com	23.04.2020
Talabat	Acquisition	Internet Rocked, then by Delivery Hero	02.2015 and 12.2010 respectively
Tapingo	Acquisition	Grubhub	25.09.2018
Uber Eats (India)	Acquisition	Zomato	21.01.2020
Waitr	Acquisition	Landcadia Holdings	16.05.2018
Woowa Bros	Acquisition	Delivery Hero	12.2020
Yemeksepeti	Acquisition	Delivery Hero	05.05.2015
YoGiYo	Acquisition	Delivery Hero	2014
Zakazaka	Acquisition	Mail.Ru Group	02.05.2017

 $\textbf{Source:} \ \textbf{Crunchbase database, annual reports and platform websites.}$

Table A1.6 Mergers and acquisitions in taxi platforms

Name of platform	Merger/ acquisition	Name of platform/company (merged with/acquired by)	Date of merger/ acquisition
99	Acquisition	DiDi	03.01.2018
Beat	Acquisition	Intelligent Apps	16.02.2017
Careem	Acquisition	Uber	26.03.2019
Citybird	Acquisition	Felix	12.06.2018
Curb	Acquisition	Verifone	13.10.2015
Easy Taxi	Acquisition	Cabify	01.01.2017
Fasten	Acquisition	Vezet Group, then by MLU BV	02.03.2018 and 15.07.2019 respectively
Flinc	Acquisition	Diamler	28.09.2017
FREE NOW	Acquisition	Intelligent Apps	26.07.2016
Savaree	Acquisition	Careem, then by Uber	30.03.2016 and 26.03.2019 respectively
Vezet Group	Acquisition	MLU BV	15.07.2019
Yandex.Taxi and Uber (Russia, CIS)	Merger	MLU BV	02.2018

Source: Crunchbase database, annual reports and platform websites.

Table A1.7 Mergers and acquisitions in online web-based platforms

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Name of platform	Merger/ acquisition	Name of platform/company (merged with/acquired by)	Date of merger/ acquisition
99designs	Acquisition	VistaPrint	05.10.2020
Applause	Acquisition	Vista Equity Partners	23.08.2017
AudioKite	Acquisition	ReverbNation	04.11.2016
Brandstack	Acquisition	DesignCrowd	20.12.2011
ClearVoice	Acquisition	Fiverr	13.02.2019
Codechef	Acquisition	Unacademy	18.06.2020
DesignCrowd	Acquisition and merger	DesignBay (since renamed DesignCrowd)	23.11.2009
Freelancer Technology	Acquisition	Music Freelancer.net	02.01.2019
Gengo	Acquisition	Lionbridge	16.01.2019
Guru	Acquisition	Emoonlighter	01.07.2003
Indiez	Acquisition	GoScale	26.02.2020
Iwriter	Acquisition	Templafy	07.05.2019
Kaggle	Acquisition	Alphabet (includes Google)	07-03.2017
Liveops	Acquisition	Marlin Equity Partners	01.12.2015
Mila	Acquisition	Swisscom	02.01.2013
MOFILM	Acquisition	You & Mr Jones	11.06.2015
Streetbee	Acquisition	BeeMyEye	16.01.2019
Test IO	Acquisition	EPAN Systems	21.05.2019
Topcoder	Acquisition	Appirio, then by Wipro Technologies	17.09.2013 and 20.10.2016 respectively
Twago	Acquisition	Randstad	14.06.2016
VerbalizeIt	Acquisition	Smartling	19.05.2016
WeGoLook	Acquisition	Crawford & Company	06.12.2016
Xtra Global	Acquisition	Rozetta Corp	09.08.2016
Zooppa	Acquisition	TLNT Holdings SA	07.2019

Source: Crunchbase database, annual reports and platform websites.





Appendix 2

ILO interviews with digital platform companies and analysis of terms of service agreements

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2A. ILO interviews with digital platform companies

To understand the functioning of digital platform companies, interviews with representatives of both location-based platforms and online web-based platforms were conducted. With regard to location-based platforms, interviews with representatives of taxi and delivery platforms were conducted, in collaboration with consultants, using a semi-structured questionnaire prepared by the ILO. The consultants approached taxi and delivery platforms in their cities of operations, requesting them to participate on the basis of a letter provided by the ILO. The interviews collected information on the platforms' business profiles, operations and marketing strategies, business model, recruitment practices and future strategies. However, only a few taxi platforms (in Chile, Ghana, India and Kenya) and one delivery platform (in Ghana) agreed to the interviews, which were conducted in person by the consultants or using video call by the ILO.

With regard to online web-based platforms, the ILO contacted about 30 platform companies with significant or growing presence at the country or regional levels, requesting them to participate in the study. The ILO conducted interviews with eight such platform companies and with one open-source platform (Apache Software Foundation). The interviews used semi-structured questionnaire, which were quite similar to those for the taxi and delivery platforms but platform specific. In addition, the interviews sought information related to tasks, matching process, algorithmic management, work evaluation and the platforms' global operations. All these interviews were conducted using video call, and follow-up meetings were held with some platforms.

Table A2.1 lists the platform companies whose representatives were interviewed. The interviews were conducted between March 2019 and March 2020, and took between approximately 30 minutes and two hours.

▶ Table A2.1 Interviews conducted with digital platform companies

	Platform company	Person interviewed	Coverage			
Α.	Online web-based platforms					
1.	Clickworker	CEO	Berlin, Germany			
2.	Upwork	Human Resources Manager	Santa Clara, California, United States			
3.	Hsoub	CEO	London, United Kingdom			
4.	Worknasi	CEO	United Republic of Tanzania			
5.	Nabeesh	CEO	United Arab Emirates			
6.	Playment	CEO	Bengaluru, India			
7.	Crowd Analytix	CEO	Bengaluru, India			
8.	GoWorkABit	CEO (and member of the Sharing Economy Association)	Estonia			
9.	Apache Foundation	Board member (and Treasurer)	Berlin, Germany			
В.	Location-based platforms					
	Taxi platforms					
1.	Uber	Employee, operations department	Accra, Ghana			
2.	Maramoja	Employee, operations department	Nairobi, Kenya			
3.	Uber	Employee, responsible for public policy in East Africa	Nairobi, Kenya			
4.	Bolt	Employee	Nairobi, Kenya			
5.	Ola	Employee, operations department	New Delhi, India			
6.	Beat	CEO	Santiago, Chile			
7.	DiDi	Director, corporate affairs	Santiago, Chile			
	Delivery platforms					
	Okada	Employee, operations department	Accra, Ghana			



2B. Analysis of terms of service agreements

The terms of service agreements and other related documents of 31 platforms have been analysed for this report. Chapters 2 and 5 draw on this analysis to understand the functioning of the platform business model. Of these, 16 are online web-based platforms (4 freelance, 3 contest-based, 5 competitive programming and 4 microtask) and 15 are location-based platforms, of which 7 are in the taxi sector and 8 are in the delivery sector, operating in a number of countries.

The online web-based platforms were chosen because of their coverage in the global microtask, freelance and competitive programming surveys for this report, and some additional platforms were analysed because of their prominence. All the location-based platforms analysed for the business model were identified in the country-specific worker surveys that were conducted in Africa (Ghana, Kenya and Morocco), Asia (China, India and Indonesia), Central and Eastern Europe (Ukraine), Latin America (Argentina, Chile and Mexico), and the Middle East (Lebanon). The exception is Deliveroo, which was considered for analysis because of its distinct characteristics compared to other delivery platforms, in order to enable a comparison to be made with these other platforms. In addition, with respect to Grab and Gojek, the terms of service agreements for Singapore were also analysed, as both these platforms are based there; some key aspects of the agreements in Singapore may differ from those in other countries where these platforms operate. The platform websites provide information related to the agreements and other related documents (see table A2.2). Where it was not possible to obtain the information required, the information from the country surveys and interviews conducted for the purposes of this report were used.¹ The analysis focuses on the following aspects:

- ➤ **Contractual relationship:** The terms of service agreements of both online web-based and location-based platforms provide information on the contractual relationship. They all use terminology which seeks to deny any relationship of employment between themselves and the platform users (see tables A2.2 and A2.3 for more details).
- ▶ **Types of services:** The websites of both online web-based and location-based platforms provide information on the types of services available. Though the terms of service agreements also provide such information, this is usually very brief compared to the details posted on the main websites. For online web-based platforms in particular, information included in the main text of this report is also based on the interviews conducted with representatives of the platforms.
- ▶ **Revenue model:** The websites of online web-based platforms provide information on the different types of fees charged to the various users (clients, workers and so on). These include fees for onboarding, commission fees or service charges for performing the tasks, transaction/withdrawal fees, maintenance fees and cancellation charges. Some of the platforms also have optional fees, which include fees for clients to mark projects as urgent or to highlight them so as to attract higher-quality submissions, and fees for workers to obtain access to more job proposals and better listings. Some also have a subscription model, and the amounts payable for the various subscriptions along with the different services and benefits they provide are available on the respective platform websites.

In the case of location-based platforms, the terms of service agreements of both transportation and delivery platforms provide information on the types of fees charged, which almost invariably include commission fees, cancellation fees and waiting-time fees, as well as various other surcharges, such as for airport trips and tolls or for cleaning and maintenance services. The terms and conditions of location-based platforms also provide information on surge pricing, specifying that the prices of services vary according to demand and supply. Nevertheless, the agreements do not include information on the exact amount of these fees. For some platforms, such as Bolt and Cornershop in Mexico, and Grab or GrabFood and Gojek in Singapore, more precise information on commission fees can be found on their websites (usually in the FAQ or support sections), but where such information was not available, it was collected from the surveys of taxi drivers and delivery workers in the various countries, and from the interviews conducted with restaurant and grocery shop owners.

- ▶ **Recruitment and matching:** Information on onboarding requirements and procedures was collected from a number of sources. In some cases, privacy policies stipulate that users can access platforms via third parties, such as social networking services, while for other platforms this information can be deduced from the registration sections on their websites, which clearly give users the option to sign up via third parties such as Google, Facebook or LinkedIn.
 - For instance, the privacy policies of both online web-based and location-based platforms provide information on the documents needed to create an account. In the case of location-based platforms, in particular, information on both the personal and technical requirements needed for joining as either a driver or a courier (depending on whether the platform provides transportation or delivery services) was collected from the registration sections on the platforms' websites. Moreover, the support or frequently asked question (FAQ) sections of online web-based platforms' websites contain information on verification and vetting procedures, which can include anything from ID verification via camera to registration of user profiles based on standards set by the platform. Information was also collected from the country-specific surveys and the interviews conducted with companies for this report. Finally, much of the information on the indicators used in assignment of work is based on an analysis of the websites of 117 online labour platforms listed on Crunchbase.
- ▶ Work processes and performance management: The websites of online web-based platforms contain various sections relevant to work processes and performance management. There are sections analysing platforms' rating systems and the various levels assigned to workers based on such ratings, and others referring to tools that the platforms make available to facilitate communication between the parties and that enable them to track projects in real time (for example, in-app messaging systems, live chat features and remote desktop apps). There are specific sections outlining the testing methods that determine workers' continued access to tasks and to the platforms. Information on the ratings systems used by location-based platforms was more difficult to obtain. Their terms of service agreements are usually silent on the matter and only a few platforms outline their rating systems on their websites.

Though most of the information concerning both online web-based and location-based platforms was collected from their websites, the terms of service agreements were also relevant; they often include clauses prohibiting activities such as communication between parties and payment being made outside the platform, the use of automated methods (such as Google Translate in the case of Appen) or the use of subcontractors. In the case of location-based platforms in particular, terms and conditions include provisions on codes of conduct, customer service etiquette, and cancellation and communication time frames.

Rules of platform governance

▶ Account access/deactivation: Information on who can access the platforms and under what conditions was mostly collected from terms of service agreements. In general, both online web-based and location-based platforms deactivate user accounts when the users are considered to have breached the terms of service agreements. That said, the power of platforms to deactivate accounts is often broadly formulated. Many agreements contain clauses on platforms' discretionary power to refuse registration and deactivate accounts, often without the need to provide a reason or prior notice. In the case of online web-based platforms, in particular, their websites often include sections with additional information on deactivation and the reasons that might lead to it, which can include low ratings, plagiarism or simply unoriginality of work, breach of codes of conduct (for instance, abuse of other users), non-performance or submission of work which does not meet the platform's or the client's specifications or quality standards.

- ▶ Dispute resolution: Most information on the dispute resolution processes of both online web-based and location-based platforms was collected from the terms of service agreements, which usually contain entire sections dedicated to dispute resolution in which the governing law and jurisdiction are clearly specified. In the case of online web-based platforms, such sections tend to be lengthier, given that dispute resolution procedures usually take the form of arbitration proceedings, the conditions of which are defined in detail by the platforms. In addition, online web-based platforms often include different dispute resolution policies depending on the issue in question, and information on these different policies is usually located on their websites. For instance, Upwork has different dispute resolution procedures for hourly and fixed-price contracts. Online web-based platforms also tend to have separate dispute resolution processes for disputes concerning intellectual property. For location-based platforms, the governing law and jurisdiction is usually that of the country where the services are being provided, though in some cases it is that of another country, as is the case with certain countries where Uber, Bolt and Glovo operate.
- ▶ Data collection and usage: Obtaining information on the data that platforms collect and how they process it was fairly straightforward, since such information is provided through privacy policies which are uniformly structured. These policies, for both online web-based and location-based platforms, clearly specify the kind of data collected, how it is collected, when and from where, as well as how they use it and when and with whom they share it. Data can be collected directly (i.e. when users provide it) or indirectly (i.e. by technological means such as cookies). Data collected directly from users varies across platforms and can include a user's contact and financial details, specific identity documents, criminal records, vehicle registration and insurance documents, or even more sensitive information such as race, religion and marital status (the latter observed only for Grab).

Data collected indirectly also varies, and can include anything from usage data (such as browsing and searching history, areas within the platform visited, duration of visits and number of clicks) and device information (such as IP address, device identifier and browser type), to data on communication between users and other data stored in the user's device (information from address books and calendars, or even the names of other applications installed in the device). Such automatically collected information also includes data relating to worker performance, such as their ratings and participation statistics, while location-based platforms may even collect driving-related data such as real-time geolocation and acceleration or braking data (as the privacy policies for Uber and Grab specify).

Apart from describing the kinds of data they collect, platforms' privacy policies also outline the various ways in which they use such data. For instance, they process user data to provide, enhance and personalize their services, to understand how users use their services, to comply with the law, and for automated decision-making (for instance the privacy policy of Uber specifies that it uses data to match workers with clients, determine prices based on demand and suspend or deactivate accounts). Although platforms may describe in detail the kinds of data they collect and the ways in which they process it, they do not, however, clearly link data collection to data processing; in other words, it is not always clear how a particular kind of data, such as location data, is used. Moreover, platforms share user data with their business partners, with other users of the platform, and with an array of third-party service providers including payment processors, insurance and financial partners, advertising companies, social networking services, cloud storage providers, research and marketing providers, and law enforcement agencies. Privacy policies provide information on data protection, usually by asserting that they abide by certain data protection laws, such as the European Union's General Data Protection Regulation, or that they ensure that any party with access to the platform's data abides by its privacy policy.

- ▶ Intellectual property rights (IPR): The terms of service agreements of both online web-based and location-based platforms clearly state that any IPR rest with the platform. In the case of online web-based platforms, however, it is not always clear in the terms and conditions which party has IPR over the creative work produced via the platform. In most cases, IPR are transferred from the worker to the client upon payment, though in some cases (such as Toptal) workers contractually assign any rights in their work to the platform, which then transfers such rights to the clients upon payment. Certain online web-based platforms also require that users sign non-disclosure agreements as is the case with private contests in 99designs and Designhill while other platforms give clients the option to sign such an agreement in return for a fee (such as Freelancer, PeoplePerHour). This information, wherever possible, was collected from the platform websites, though often such information was not available.
- ▶ **Taxation**: All the online web-based and location-based platforms under analysis specify that any prices quoted on the platform are inclusive of taxes, and emphasize that the responsibility to determine and pay taxes falls on the users (workers and clients). Nevertheless, there are some platforms that mention in their terms of service that they deduct taxes from workers' earnings. For instance, both Ola and Zomato in India make deductions from proceeds as per the Income Tax Act, 1961. Freelancer recently updated its "Fees and Charges" policy by adding a section on taxation, specifying that taxes will be applied based on a user's country of residence/registration. Similarly, Uber's updated terms for Chile state that Uber will transfer and collect the applicable taxes.

► Table A2.2 Online sources of platforms' terms of service agreements

A) Online web-based platforms

Freelance platforms

Freelancer

User agreement: https://www.freelancer.com/about/terms

For data collection and usage see the privacy policy: https://www.freelancer.com/about/privacy

Revenue model

Fees and charges: https://www.freelancer.com/feesandcharges/ Membership: https://www.freelancer.com/membership/

Enterprise: https://www.freelancer.com/enterprise

Project management: https://www.freelancer.com/project-management/

Also see link under user agreement.

Ranking/ratings

Freelancer ratings: https://www.freelancer.com/support/General/freelancer-ratings

Freelancer rewards: https://www.freelancer.com/faq/topic.php?id=42

The preferred freelancer program: https://www.freelancer.com/support/freelancer/general/

the-preferred-freelancer-program?keyword=preferred

What is the preferred freelancer program?: https://www.freelancer.com/community/articles/

what-is-the-preferred-freelancer-program

Recruitment and matching

Sign up: https://www.freelancer.com/signup

Restrictions in some countries: https://www.freelancer.com/support/freelancer/General/

restrictions-in-some-countries

Know your customer and identity verification policy: https://www.freelancer.com/page.php?p=info%2Fkyc_policy Also see links under user agreement and revenue model.

Work processes and performance management

Code of conduct: https://www.freelancer.com/info/codeofconduct

Communicating or paying outside Freelancer.com: https://www.freelancer.com/support/freelancer/General/

communicating-or-paying-outside-freelancer-com

Messaging my employers: https://www.freelancer.com/support/project/messaging-on-projects

Using the desktop app: https://www.freelancer.com/support/freelancer/project/

using-the-desktop-app?keyword=desktop%20a

Also see link under user agreement.

Rules of platform governance

 $\textit{Violations that lead to account closure:} \ \underline{\text{https://www.freelancer.com/support/freelancer/General/support/freelancer/Support/Support/freelancer/Support/freelancer/Support/freelancer/Support/Support/freelancer/Support/freelancer/Support/freelancer/Support/freelancer/Support/freelancer/Support/freelancer/Support/free$

violations-that-lead-to-account-closure

Reopening closed account: https://www.freelancer.com/support/Profile/can-i-reopen-my-closed-account Milestone dispute resolution policy: https://www.freelancer.com/page.php?p=info%2Fdispute_policy

Also see links under user agreement and code of conduct.

A) Online web-based platforms (cont'd)

Freelance platforms (cont'd)

PeoplePerHour

Terms and conditions: https://www.peopleperhour.com/static/terms

For data collection and usage see the privacy and cookies statement: https://www.peopleperhour.com/static/ privacy-policy

Revenue model

Loyalty programs for premium buyers: https://www.peopleperhour.com/premium-programme What's the difference between PeoplePerHour and TalentDesk.io?: https://www.peopleperhour.com/blog/product-platform/difference-between-peopleperhour-and-talentdesk-io/Also see link under terms and conditions.

Ranking/ratings

Understanding CERT: https://support.peopleperhour.com/hc/en-us/articles/205218587-Understanding-CERT

Recruitment and matching

Sign up: https://www.peopleperhour.com/site/register

Your freelancer application: https://support.peopleperhour.com/hc/en-us/

articles/205217827-Your-Freelancer-Application

Freelancer application got declined: https://support.peopleperhour.com/hc/en-us/

articles/360039120094-Freelancer-Application-got-declined?mobile_site=false

Verify your account: https://support.peopleperhour.com/hc/en-us/articles/360001764608-Verify-your-Account?mobile_site=false

Profile policies: https://support.peopleperhour.com/hc/en-us/articles/205218177-Profile-policies

PeoplePerHour academy: https://www.peopleperhour.com/academy Also see links under terms and conditions, and revenue model.

Work processes and performance management

WorkStream policies: https://support.peopleperhour.com/hc/en-us/articles/205218197-WorkStream-Policies Also see links under terms and conditions, and profile policies.

Rules of platform governance

See links under terms and conditions, profile policies, and WorkStream policies.

Toptal

Terms and conditions: https://www.toptal.com/tos

For data collection and usage see the privacy policy: https://www.toptal.com/privacy

Revenue model

Enterprise: https://www.toptal.com/enterprise

The Toptal referral partners program: https://www.toptal.com/referral_partners

Frequently asked questions: https://www.toptal.com/faq

Recruitment and matching

See links under terms and conditions, privacy policy, and frequently asked questions.

Rules of platform governance

See links under terms and conditions, and frequently asked questions.

A) Online web-based platforms (cont'd)

Freelance platforms (cont'd)

Upwork

User agreement: https://www.upwork.com/legal#useragreement

For data collection and usage see the privacy policy: https://www.upwork.com/legal#privacy

Revenue model

Pricing: https://www.upwork.com/i/pricing/

Freelancer plus: https://support.upwork.com/hc/en-us/articles/211062888-Freelancer-Plus

Enterprise: https://www.upwork.com/enterprise/

Featured jobs: https://support.upwork.com/hc/en-us/articles/115010712348-Featured-Jobs

Use connects: https://support.upwork.com/hc/en-us/articles/211062898-Use-Connects; https://support.upwork.

com/hc/en-us/articles/360057604814-11-24-FREE-Connects-to-Do-More-on-Upwork-

How to bring your own talent to Upwork: https://support.upwork.com/hc/en-us/

articles/360051696934-How-to-Bring-Your-Own-Talent-to-Upwork

Fee and ACH authorization agreement: https://www.upwork.com/legal#fees

Hourly, bonus, and expense payment agreement with escrow instructions: https://www.upwork.com/

legal#escrow-hourly

 ${\it Fixed-price escrow instructions:} \ \underline{{\it https://www.upwork.com/legal\#fp}}$

Milestones for fixed-price jobs: https://support.upwork.com/hc/en-us/

articles/211068218-Milestones-for-Fixed-Price-Jobs

PayPal fees and timing: https://support.upwork.com/hc/en-us/articles/211063978-PayPal-Fees-and-Timing

Payoneer fees and timing: https://support.upwork.com/hc/en-us/articles/211064008-Payoneer-Fees-and-Timing

M-Pesa fees and timing: https://support.upwork.com/hc/en-us/articles/115001615787-M-Pesa-Fees-and-Timing-

Wire transfer fees and timing: https://support.upwork.com/hc/en-us/

articles/211063898-Wire-Transfer-Fees-and-Timing

Direct to local bank fees and timing: https://support.upwork.com/hc/en-us/

articles/211060578-Direct-to-Local-Bank-Fees-and-Timing-

Direct to US bank (ACH) fees and timing: https://support.upwork.com/hc/en-us/

articles/227022468-Direct-to-US-Bank-ACH-Fees-and-Timing

Also see link under user agreement.

Ranking/ratings

Job success score: https://support.upwork.com/hc/en-us/articles/211068358-Job-Success-Score

Upwork's talent badges: https://support.upwork.com/hc/en-us/articles/360049702614

Expert-vetted talent: https://support.upwork.com/hc/en-us/articles/360049625454-Expert-Vetted-Talent

Recruitment and matching

Sign up: https://www.upwork.com/signup/?dest=home

Eligibility to join and use Upwork: https://support.upwork.com/hc/en-us/

articles/211067778-Eligibility-to-Join-Upwork

Create a 100% complete freelancer profile: https://support.upwork.com/hc/en-us/

articles/211063188-Create-a-100-Complete-Freelancer-Profile

Application to join Upwork declined: https://support.upwork.com/hc/en-us/

articles/214180797-Application-to-Join-Upwork-Declined

 $\textit{Multiple account types}: \underline{\text{https://support.upwork.com/hc/en-us/articles/360001171768-Multiple-Account-Types}}$

 ${\it ID\ verification\ badge:} {\it https://support.upwork.com/hc/en-us/articles/360010609234-ID-Verification-Badge}$

Types of ID verification: https://support.upwork.com/hc/en-us/articles/360001176427-Types-of-ID-Verification

Selfie ID review process: https://support.upwork.com/hc/en-us/articles/360001706047-Selfie-ID-Review-Process Also see links under user agreement, privacy policy, pricing, Freelancer plus, enterprise, featured jobs, and use connects.

Work processes and performance management

Upwork's work diary: what it is and why use it: https://www.upwork.com/hiring/community/upworks-work-diary/

About the desktop app: https://support.upwork.com/hc/en-us/articles/211064038-About-the-Desktop-App

Upwork for clients app: https://support.upwork.com/hc/en-us/articles/211064028-Upwork-for-Clients-App

Upwork for freelancers app: https://support.upwork.com/hc/en-us/

articles/360015504093-Upwork-for-Freelancers-App

Use messages: https://support.upwork.com/hc/en-us/articles/211067768-Use-Messages

Video and voice calls: https://support.upwork.com/hc/en-us/articles/217698348-Video-and-Voice-Messaging

Freelancer education hub: https://www.upwork.com/hiring/education/getting-started-for-freelancers/
Readiness test: https://support.upwork.com/hc/en-us/articles/360047551134-Upwork-Readiness-Test

Also see link under user agreement.

Rules of platform governance

Freelancer violations and account holds: https://support.upwork.com/hc/en-us/

articles/211067618-Freelancer-Violations-and-Account-Holds

Non-disclosure agreements: https://support.upwork.com/hc/en-us/articles/211063608-Non-Disclosure-Agreements

Also see links under user agreement; hourly, bonus, and expense payment agreement with escrow instructions;

fixed-price escrow instructions; and multiple account types.

A) Online web-based platforms (cont'd)

Contest-based platforms

99designs

Terms of use: https://99designs.com/legal/terms-of-use

For data collection and usage see the privacy policy: https://99designs.com/legal/privacy

Revenue model

Pricing: https://99designs.com/pricing

What is a platform fee?: https://support.99designs.com/hc/en-us/articles/360022206031

What is a client introduction fee?: https://support.99designs.com/hc/en-us/articles/360022018152

Can I choose how much I pay for a contest?: https://support.99designs.com/hc/en-us/

articles/204760735-Can-I-choose-how-much-I-pay-for-a-contest-

What is a payout and how do I request one?: https://support.99designs.com/hc/en-us/

articles/204108819-What-is-a-payout-and-how-do-I-request-one-

100% money-back guarantee? for real?!: https://support.99designs.com/hc/en-us/

articles/204108729-100-Money-back-guarantee-For-real-

Also see link under terms of use.

Ranking/ratings

What are designer levels?: https://support.99designs.com/hc/en-us/articles/115002951643-What-are-designer-levels-What are the benefits for each designer level?: https://support.99designs.com/hc/en-us/articles/360022097311
What is top level status?: https://support.99designs.com/hc/en-us/articles/360001153443

Availability status and responsiveness score: https://support.99designs.com/hc/en-us/

articles/360000537386-Availability-Status-and-Responsiveness-Score

Recruitment and matching

How does 99designs' application process work?: https://support.99designs.com/hc/en-us/

articles/360036552311-How-does-99designs-application-process-work-

What are 99designs' quality standards?: https://support.99designs.com/hc/en-us/

articles/204862935-What-are-99designs-quality-standards-

What is identity verification?: https://support.99designs.com/hc/en-us/

articles/205460145-What-is-identity-verification-

Can I have more than one account?: https://support.99designs.com/hc/en-us/

articles/204761325-Can-I-have-more-than-one-account-?mobile_site=false

Best design awards: https://99designs.com/best-design-awards/

Also see links under terms of use, privacy policy, pricing, and ranking/ratings.

Work processes and performance management

Designer code of conduct: https://support.99designs.com/hc/en-us/articles/204109559-Designer-Code-of-Conduct

Designer resource center: https://99designs.com/designer-resource-center

Also see links under terms of use, pricing, and what are 99designs' quality standards?

Rules of platform governance

Non-circumvention policy: https://support.99designs.com/hc/en-us/

articles/360022405192-Non-Circumvention-Policy

What's a non-disclosure agreement (NDA)?: https://support.99designs.com/hc/en-us/

articles/204760785-What-s-a-non-disclosure-agreement-NDA-

Who owns what and when?: https://support.99designs.com/hc/en-us/articles/204761115-Who-owns-what-and-when-Also see links under terms of use; what are 99designs' quality standards?; can I have more than one account?; and designer code of conduct.

A) Online web-based platforms (cont'd)

Contest-based platforms (cont'd)

Designhill

Terms and conditions: https://www.designhill.com/terms-conditions

For data collection and usage see the privacy policy: https://www.designhill.com/privacy

Revenue model

 $\textit{Pricing guide:} \ \underline{\text{https://www.designhill.com/pricing/logo-design?services=contest}}$

What is included in the enterprise package?: https://support.designhill.com/hc/en-us/

 $\underline{articles/360013633753\text{-}What\text{-}is\text{-}included\text{-}in\text{-}the\text{-}Enterprise\text{-}package\text{-}}$

Here is what you get when you go for subscription upgradation: https://www.designhill.com/design-blog/

here-is-what-you-get-when-you-go-for-subscription-upgradation/

Why should you upgrade your designer membership subscription?: https://www.designhill.com/design-blog/

why-should-you-upgrade-your-designer-membership-subscription/

What is a payout and how do I request one?: https://support.designhill.com/hc/en-us/

articles/115001380229-What-is-a-payout-and-how-do-I-request-one-

 ${\it Can I choose how much I pay for a contest?} : \underline{ https://support.designhill.com/hc/en-us/}$

articles/115001213765-Can-I-choose-how-much-I-pay-for-a-contest-

How much do 1-to-1 projects cost to customers?: https://support.designhill.com/hc/en-us/

articles/115001517009-How-much-do-1-to-1-Projects-cost-to-customers-

Also see link under terms and conditions.

Recruitment and matching

Sign up: https://www.designhill.com/signup

How can I create an account?: https://support.designhill.com/hc/en-us/

articles/115001187805-How-can-I-create-an-account-

Can I have multiple accounts?: https://support.designhill.com/hc/en-us/

articles/115001186685-Can-I-have-multiple-accounts-

Also see links under terms and conditions; pricing guide; what is included in the enterprise package?; here is what you get when you go for subscription upgradation; and why should you upgrade your designer membership subscription?

Work processes and performance management

Designer code of conduct: https://support.designhill.com/hc/en-us/articles/115004513989

Free small business tools online: https://www.designhill.com/tools/

Also see links under pricing guide.

Rules of platform governance

Suspension policy: https://support.designhill.com/hc/en-us/articles/115004544629-Suspension-Policy

Concept originality policy: https://support.designhill.com/hc/en-us/articles/115004544729-

What if someone breaches my NDA?: https://support.designhill.com/hc/en-us/

articles/360013262574-What-if-someone-breaches-my-NDA-

Also see links under terms and conditions; can I have multiple accounts?; and designer code of conduct.

Hatchwise

Terms and conditions: https://www.hatchwise.com/terms-and-conditions

For data collection and usage see the privacy policy: https://www.hatchwise.com/privacy-policy

Revenue model

Contest pricing: https://www.hatchwise.com/contest-pricing

Our money back guarantee: https://www.hatchwise.com/guarantee

Also see link under terms and conditions.

Recruitment and matching

See link under contest pricing.

Work processes and performance management

The Hatchwise learning center: https://www.hatchwise.com/resources

Frequently asked questions: https://www.hatchwise.com/frequently-asked-questions

Rules of platform governance

See links under terms and conditions, and frequently asked questions.

A) Online web-based platforms (cont'd)

Competitive programming platforms

CodeChef

Terms of service: https://www.codechef.com/terms

For data collection and usage see the privacy policy: https://www.codechef.com/privacy-policy

Revenue model

Refund policy: https://www.codechef.com/refund-policy Guidelines: https://www.codechef.com/problemsetting Setting: https://www.codechef.com/problemsetting/setting Testing: https://www.codechef.com/problemsetting/testing CodeChef business: https://business.codechef.com

Ranking/ratings

Rating mechanism: https://www.codechef.com/ratings

Recruitment and matching

Create your CodeChef account: https://www.codechef.com/signup Code of conduct: https://www.codechef.com/codeofconduct Also see links under guidelines, setting, testing, and ranking/ratings.

Work processes and performance management

How does CodeChef test whether my solution is correct or not?: https://discuss.codechef.com/t/ how-does-codechef-test-whether-my-solution-is-correct-or-not/332 Also see links under guidelines, setting, testing, and code of conduct.

Rules of platform governance

See links under terms of service, setting, testing, and code of conduct.

HackerEarth

Terms of service: https://www.hackerearth.com/terms-of-service/

For data collection and usage see the privacy policy: https://www.hackerearth.com/privacy/

Revenue model

Pricing: https://www.hackerearth.com/recruit/pricing/

Recruitment and matching

Sign up: https://www.hackerearth.com Also see link under pricing.

Rules of platform governance

What is HackerEarth's plagiarism policy?: https://help.hackerearth.com/hc/en-us/articles/360002921714-What-is-HackerEarth-s-plagiarism-policy-Also see link under terms of service.

HackerRank

Terms of service: https://www.hackerrank.com/terms-of-service

For data collection and usage see the privacy policy: https://www.hackerrank.com/privacy

Revenue model

Pricing: https://www.hackerrank.com/products/pricing/?h_r=pricing&h_l=header

Ranking/ratings

Scoring documentation: https://www.hackerrank.com/scoring

Recruitment and matching

Sign up: https://www.hackerrank.com/auth/signup?h_l=body_middle_left_button&h_r=sign_up Also see links under terms of service and revenue model.

A) Online web-based platforms (cont'd)

Competitive programming platforms (cont'd)

Kaggle

Terms of use: https://www.kaggle.com/terms

For data collection and usage see the privacy policy: https://www.kaggle.com/privacy

Revenue model

Meet Kaggle: https://www.kaggle.com/static/slides/meetkaggle.pdf?Host_Business

Also see link under terms of use.

Ranking/ratings

Kaggle progression system: https://www.kaggle.com/progression

Recruitment and matching

Sign in: https://www.kaggle.com/account/login?phase=startRegisterTab&returnUrl=%2Fterms

Also see link under terms of use.

Work processes and performance management

 ${\it Community guidelines:} \ \underline{{\it https://www.kaggle.com/community-guidelines}}$

Courses: https://www.kaggle.com/learn/overview

Rules of platform governance

Why has my account been blocked: https://www.kaggle.com/contact

Also see links under terms of use, meet Kaggle, and community guidelines.

Topcoder

Terms and conditions: https://www.topcoder.com/community/how-it-works/terms/

For data collection and usage see the privacy policy: https://www.topcoder.com/policy/privacy-policy

Revenue model

Enterprise: https://www.topcoder.com/enterprise-offerings/

Talent as a service: https://www.topcoder.com/enterprise-offerings/talent-as-a-service/

Ranking/ratings

Algorithm competition rating system: https://www.topcoder.com/community/competitive-programming/

how-to-compete/ratings

Development reliability ratings and bonuses: https://help.topcoder.com/hc/en-us/

 $\underline{articles/219240797\text{-}Development\text{-}Reliability\text{-}Ratings\text{-}and\text{-}Bonuses}$

Recruitment and matching

Log in to Topcoder: https://accounts.topcoder.com/member

Also see links under terms and conditions, revenue model, and algorithm competition rating system.

Work processes and performance management

Community code of conduct: https://www.topcoder.com/community/topcoder-forums-code-of-conduct/ Account policies: https://www.topcoder.com/thrive/articles/Topcoder%20Account%20Policies

Rules of platform governance

Cheating infractions and process: https://www.topcoder.com/thrive/articles/Cheating%20Infractions%20&%20

Process

Non-Disclosure Agreement (NDA): https://www.topcoder.com/thrive/articles/Non%20Disclosure%20Agreement%20

(NDA)

Also see links under terms and conditions, account policies, and community code of conduct.

A) Online web-based platforms (cont'd)

Microtask platforms

Amazon Mechanical Turk Participation agreement: https://www.mturk.com/participation-agreement

 $For \ data \ collection \ and \ usage \ see \ the \ privacy \ notice: \\ \underline{https://www.amazon.com/gp/help/customer/display.html/displa$

ref=footer_privacy?ie=UTF8&nodeId=468496

Revenue model

Pricing: https://www.mturk.com/pricing

Amazon Mechanical Turk pricing: https://requester.mturk.com/pricing

Amazon pay fees: https://pay.amazon.com/help/201212280

FAQs: https://www.mturk.com/worker/help Also see link under participation agreement.

Ranking/ratings

Qualifications and worker task quality: https://blog.mturk.com/ qualifications-and-worker-task-quality-best-practices-886f1f4e03fc New feature for the MTurk marketplace: https://blog.mturk.com/ new-feature-for-the-mturk-marketplace-aaa0bd520e5b

Also see link under FAQs.

Recruitment and matching

See links under participation agreement, privacy notice, revenue model, FAQs, pricing, and qualifications and

worker task quality.

Work processes and performance management, and rules of platform governance

See links under participation agreement and FAQs.

Clickworker

For the terms and conditions and privacy policy see: https://www.clickworker.com/terms-privacy-policy/

Revenue model

Pricing: https://www.clickworker.com/pricing/
Clickworker FAQ: https://www.clickworker.com/faq/
Customer FAQ: https://www.clickworker.com/customer-faq/
Survey participants for online surveys: https://www.clickworker.com/
survey-participants-for-online-surveys/#fee-recommendations

Recruitment and matching

Qualifications at Clickworker: https://www.clickworker.com/crowdsourcing-glossary/qualifications-at-clickworker/ What does a Clickworker do?: https://www.clickworker.job/#distribution Clickworker starts new SMS account verification system: https://www.clickworker.com/2014/05/08/sms_verification/ Also see links under terms and conditions and privacy policy, Clickworker FAQ, and customer FAQ.

Work processes and performance management, and rules of platform governance

See links under terms and conditions and privacy policy, Clickworker FAQ, and customer FAQ.

Appen

Legal terms: http://f8-federal.com/legal/

Revenue model

Frequently asked questions: https://success.appen.com/hc/en-us/articles/115000832063-Frequently-Asked-Questions

Also see link under legal terms.

Recruitment and matching

Glossary of terms: https://success.appen.com/hc/en-us/

articles/202703305-Getting-Started-Glossary-of-Terms#tainted_judgment

Guide to: test question settings (quality control): https://success.appen.com/hc/en-us/

articles/202702975-Test-Questions-Settings

Also see link under frequently asked questions.

Work processes and performance management

Guide to quality control page: https://success.appen.com/hc/en-us/articles/201855709

Also see links under legal terms and recruitment and matching.

Rules of platform governance

See links under legal terms, frequently asked questions, glossary of terms, guide to: test question settings (quality control), and guide to: quality control page.

A) Online web-based platforms (cont'd)

Microtask platforms (cont'd)

Microworkers

Terms of use: https://www.microworkers.com/terms.php

For data collection and usage see the privacy policy: https://www.microworkers.com/privacy.php

Revenue model

FAQ: https://www.microworkers.com/faq.php

Guidelines FAQ: https://www.microworkers.com/faq-guidelines.php

Also see link under terms of use.

Recruitment and matching, and work processes and performance management

See links under FAQ and guidelines FAQ.

Rules of platform governance

See links under terms of use, FAQ, and guidelines FAQ.

B) Location-based platforms

Taxi platforms

Bolt (Taxify)

Ghana Kenya

General terms for drivers: https://bolt.eu/en/legal/terms-for-drivers/

Terms and conditions for passengers: https://bolt.eu/en/legal/terms-for-riders/

For data collection and usage see:

Privacy policy for drivers: https://bolt.eu/en/legal/privacy-for-drivers/ Privacy policy for passengers: https://bolt.eu/en/legal/privacy-for-riders/

Revenue model

Commission fee: https://support.taxify.eu/hc/en-us/articles/115002946374-Commission-Fee

Driver paid wait time fees: https://support.taxify.eu/hc/en-us/

articles/360009458774-Driver-Paid-Wait-Time-Fees

Issue with a cancellation fee: https://support.taxify.eu/hc/en-us/

articles/360009457274?flash_digest=7dcc15def68f2cf475d9152c23ca169b44e11f2f

Damage or cleaning fee: https://support.taxify.eu/hc/en-us/

articles/360003640779-Damage-or-Cleaning-Fee

Also links under general terms for drivers and terms and conditions for passengers.

For Ghana: Driver payouts and commission: https://support.taxify.eu/hc/en-us/ articles/360001892993-Driver-Payouts-and-Commission

For Kenya: Driver balance and commission: https://support.taxify.eu/hc/en-us/ articles/360010650180-Driver-Balance-and-Commission

Ranking/ratings

Activity score calculation: https://support.taxify.eu/hc/en-us/

articles/115002946174-Activity-Score-Calculation

Acceptance rate calculation: https://support.taxify.eu/hc/en-us/

articles/360007690199-Acceptance-Rate-Calculation

Rating a passenger: https://support.taxify.eu/hc/en-us/

articles/115002907553-Rating-a-Passenger

How to leave a rating: https://support.taxify.eu/hc/en-us/articles/115002918034-Rating-a-Ride Also see link under general terms for drivers.

Recruitment and matching

Becoming a Bolt driver: https://support.taxify.eu/hc/en-us/ articles/115003390894-Becoming-a-Bolt-Driver

Also see link under general terms for drivers.

Work processes and performance management, and rules of platform governance

See links under general terms for drivers, terms and conditions for passengers, activity score calculation, and acceptance rate calculation.

B) Location-based platforms (cont'd)

Taxi platforms (cont'd)

Careem

Morocco

Terms of service: https://www.careem.com/en-ma/terms/

For data collection and usage see the privacy policy: https://www.careem.com/en-ma/privacy/

Revenue model

How do I refer a friend?: https://help.careem.com/hc/en-us/

articles/360001609527-How-do-I-refer-a-friend-

What do starting, time, distance, minimum and promised

fare mean?: https://help.careem.com/hc/en-us/

articles/360001400007-What-do-Starting-Time-Distance-Minimum-and-Promised-fare-mean-

Cancelling a ride: https://help.careem.com/hc/en-us/articles/360001600367-Cancelling-a-ride

Also see link under terms of service.

Recruitment and matching

Drive with Careem: https://drive.careem.com

How do I create a Careem account?: https://help.careem.com/hc/en-us/

articles/360001609507-How-do-I-create-a-Careem-account-

What is in ride insurance? https://help.careem.com/hc/en-us/

articles/115010884527-What-is-in-ride-insurance-

Also see link under terms of service.

Work processes and performance management

In-ride standards: https://help.careem.com/hc/en-us/articles/360001609427-In-ride-Standards Also see link under terms of service.

Rules of platform governance

How does an account get blocked or suspended?: https://help.careem.com/hc/en-us/articles/360001609447-How-does-an-account-get-blocked-or-suspended-

Also see link under terms of service.

Gojek

Indonesia

Terms of use: https://www.gojek.com/terms-and-condition/

 $\textit{For data collection and usage see the privacy policy:} \ \underline{\text{https://www.gojek.com/privacy-policies/}}$

Recruitment and matching

Join as our GoRide driver: https://www.gojek.com/help/mitra/

bergabung-menjadi-mitra-go-ride/

Also see links under terms of use and privacy policy.

Singapore

User terms of use: https://www.gojek.com/sg/terms-and-conditions/

Driver services agreement: https://www.gojek.com/sg/driver/agreement/

For data collection and usage see the privacy policy: https://www.gojek.com/sg/privacy-policy/

Revenue model

What is the Gojek Service Fee?: https://www.gojek.com/sg/help/?q=service+fee

Also see links under user terms of use and driver services agreement.

Ranking/ratings

How do ratings work?: https://www.gojek.com/sg/help/driver/service/#how-do-ratings-work

Recruitment and matching

What documents will I need to upload?: https://www.gojek.com/sg/help/driver/

account/#what-documents-will-i-need-to-upload

What can I drive with on Gojek: https://www.gojek.com/sg/help/driver/

account/#what-can-i-drive-with-on-gojek

GoFleet: https://www.gojek.com/sg/driver/gofleet/

Also see links under user terms of use, driver services agreement, and privacy policy.

Work processes and performance management

Driver code of conduct: https://www.gojek.com/sg/help/driver/driver-code-of-conduct

Also see links under user terms of use and driver services agreement.

Rules of platform governance

Can I share my Gojek account with Others?: https://www.gojek.com/sg/help/driver/

account/#can-i-share-my-gojek-account-with-others

I was suspended due to inactivity: https://www.gojek.com/sg/help/driver/

account/#i-was-suspended-due-to-inactivity

Also see links under user terms of use and driver services agreement.

Little

Kenya

B) Location-based platforms (cont'd) Taxi platforms (cont'd) Grab Indonesia Terms of service: transport, delivery, and logistics: https://www.grab.com/id/en/terms-policies/ transport-delivery-logistics/ For data collection and usage see the privacy policy: https://www.grab.com/id/en/terms-policies/ privacy-policy/ Revenue model Grab referral programme terms and conditions: https://www.grab.com/id/en/pax-refer-friend/ GrabFood - partner with us: https://www.grab.com/id/en/merchant/food/ Also see link under terms of service. Recruitment and matching Register now: https://www.grab.com/id/en/driver/transport/car/ Also see links under terms of service, privacy policy and GrabFood partner with us. **Singapore** Terms of service - transport, delivery and logistics: https://www.grab.com/sg/terms-policies/ transport-delivery-logistics/ For data collection and usage see the privacy policy: https://www.grab.com/sg/terms-policies/ privacy-policy/ Revenue model FAQs: https://www.grab.com/sg/driver/transport/car/faq/ Updated cancellation policy from 25 Mar 2019: https://help.grab.com/passenger/ensg/115008318688; https://www.grab.com/sg/passenger-cancellation-fees/ I was charged a cancellation fee: https://help.grab.com/passenger/ en-sg/115005276987-I-was-charged-a-cancellation-fee What are grace waiting periods and waiting fees: https://help.grab.com/passenger/ en-sg/360035841031-What-are-grace-waiting-periods-and-waiting-fees #AskGrab: where does the Merchant commission go?: https://www.grab.com/sg/blog/ askgrab-where-does-the-merchant-commission-go/ How do I refer?: https://www.grab.com/sg/gfm-referral/ Also see link under terms of service. Ranking/ratings Acceptance and cancellation rating: https://help.grab.com/driver/ en-sg/115013368427-Acceptance-and-Cancellation-rating **Recruitment and matching** *Drive*: https://www.grab.com/sg/driver/drive/ Deliver: https://www.grab.com/sg/driver/deliver/ Drive with Grab using your own car in 4 Steps: https://www.grab.com/sg/ drive-with-grab-using-your-own-car/ Also see links under terms of service and privacy policy. Work processes and performance management How to improve my star rating: https://help.grab.com/driver/ en-sg/115015441428-Driver-Rating-How-is-this-calculated

Also see link under terms of service.

Terms and conditions: https://www.little.bz/ke/tnc.php

B) Location-based platforms (cont'd)

Taxi platforms (cont'd)

Ola

India

Subscription agreement: https://partners.olacabs.com/public/terms_conditions
Terms and conditions: https://www.olacabs.com/tnc?doc=india-tnc-website
For data collection and usage see the privacy policy: https://www.olacabs.com/
tnc?doc=india-privacy-policy

Revenue model

Why is cancellation fee charged: https://help.olacabs.com/support/dreport/208298769 Also see links under subscription agreement and terms and conditions.

Ranking/ratings

How can I rate a ride?: https://help.olacabs.com/support/dreport/205098571

Recruitment and matching

Drive with Ola: https://partners.olacabs.com/drive *Lease a car*: https://partners.olacabs.com/lease

Ola rolls out 'Chalo Befikar' comprehensive insurance program for its driver partners: https://www.olacabs.com/media/in/press/

ola-rolls-out-chalo-befikar-comprehensive-insurance-program-for-its-driver-partners
Ola offers coverage of up to Rs. 30,000 for driver-partners and their spouses affected by COVID-19;
also brings free medical help for their families: https://www.olacabs.com/media/in/press/
ola-offers-coverage-of-up-to-rs-30000-for-driver-partners-and-their-spouses-affected-by-

covid-19-also-brings-free-medical-help-for-their-families Also see link under subscription agreement.

Uber

Argentina Chile Ghana India Kenya Lebanon Mexico Morocco

United States

For the general terms of use, privacy notice, and general community guidelines see: https://www.uber.com/legal/en/ ("Uber legal") – select the relevant policy in the link and then the relevant country.

Revenue model

For Ghana: tracking your earnings: https://www.uber.com/gh/en/drive/basics/

tracking-your-earnings/

Wait time fees: https://help.uber.com/riders/article/

wait-time-fees?nodeId=5960f72c-802a-4b61-a51c-2c9498c3b041

Am I charged for cancelling an Uber ride?: https://help.uber.com/riders/article/am-i-charged-for-cancelling-an-uber-ride-?nodeId=5f6415dc-dfdb-4d64-927a-66bb06bc4f82

Also see links under Uber legal.

Recruitment and matching

Vehicle requirements: https://help.uber.com/driving-and-delivering/article/vehicle-requirements?nodeId=2ddf30ca-64bd-4143-9ef2-e3bc6b929948

What does the background check look for: https://help.uber.com/driving-and-delivering/article/what-does-the-background-check-look-for?nodeId=ee210269-89bf-4bd9-87f6-43471300ebf2 Why am I being asked to take a photo of myself?: https://help.uber.com/driving-and-delivering/article/why-am-i-being-asked-to-take-a-photo-of-myself--?nodeId=7fa8a60d-cf6f-49ac-9a50-b4bf6a3978ef

Getting a trip request: https://help.uber.com/driving-and-delivering/article/getting-a-trip-request?nodeId=e7228ac8-7c7f-4ad6-b120-086d39f2c94c

When and where are the most riders?: https://help.uber.com/driving-and-delivering/article/when-and-where-are-the-most-riders?nodeId=456fcc51-39ad-4b7d-999d-6c78c3a388bf

Insurance: https://help.uber.com/driving-and-delivering/article/insurance-?nodeId=a4afb2ed-75af-4db6-8fdb-dccecfcc3fd7

Also see link under Uber legal.

Work processes and performance management

Can I use other apps or receive personal calls while online?: https://help.uber.com/driving-and-delivering/article/can-i-use-other-apps-or-receive-personal-calls-while-online---?nodeId=a5a7c0c7-da4b-46af-a180-7ad1d2590234

Also see link under Uber legal.

B) Location-bas	sed platforms (cont'd)	
Delivery platfori	ns	
Cornershop	Mexico	Terms of use: https://cornershopapp.com/en/terms For data collection and usage see the privacy policy: https://cornershopapp.com/es-mx/privacy
		Revenue model Cornershop for stores: https://cornershop.gop.landing Cornershop Pop, la membresía de envíos gratis ilimitados: https://blog.cornershop.mx/ Cornershop-pop-la-membresia-de-envios-gratis-ilimitados-mx/ Also see link under terms of use.
Deliveroo	France	Conditions generales de prestation de service de Deliveroo: https://deliveroo.fr/en/legal For data collection and usage see politique de confidentialité de Deliveroo France: https://deliveroofr/en/privacy fr/en/privacy
		Revenue model Comment suis-je payé ?: https://riders.deliveroo.fr/fr/support/nouveaux-livreurs-partenaires/ vous-etes-payes-pour-chaque-livraison-effectueeles Also see links under conditions generales de prestation de service de Deliveroo, and politique de confidentialité de Deliveroo France.
		Recruitment and matching Ride with us: https://deliveroo.fr/en/apply Nouveaux livreurs partenaires: https://riders.deliveroo.fr/fr/support/ nouveaux-livreurs-partenaires Gérer votre entreprise: https://riders.deliveroo.fr/fr/support/gerer-votre-entreprise Assurances Deliveroo: https://riders.deliveroo.fr/fr/support/toutes-vos-assurances-deliveroo Also see links under conditions generales de prestation de service de Deliveroo, and politique
	United Kingdom	de confidentialité de Deliveroo France. Terms of service: https://deliveroo.co.uk/legal Scooter supplier agreement: https://old.parliament.uk/documents/commons-committees/work and-pensions/Written_Evidence/Deliveroo-scooter-contract.pdf For data collection and usage see: Privacy policy: https://deliveroo.co.uk/privacy UK rider privacy policy: https://rider.deliveroo.co.uk/rider-privacy#information-collected
		Revenue model Refer a friend: https://riders.deliveroo.co.uk/en/refer Fees: https://riders.deliveroo.co.uk/en/support/fees Invoices, refunds and payments (Deliveroo restaurants): https://help.deliveroo.com/en/ collections/2612291-5-invoices-refunds-and-payments FAQ: https://deliveroo.co.uk/faq Also see links under terms of service, privacy policy, and UK rider privacy policy.
		Recruitment and matching Ride with us: https://deliveroo.co.uk/ apply?utm-campaign=ridewithus&utm-medium=organic&utm-source=landingpage New riders: https://riders.deliveroo.co.uk/en/support/new-riders Become a Deliveroo partner: https://restaurants.deliveroo.com/en-gb/ Orders: https://riders.deliveroo.co.uk/en/support/orders Kit: https://riders.deliveroo.co.uk/en/support/kits Insurance: https://riders.deliveroo.co.uk/en/support/insurance Also see links under terms of service, privacy policy, and UK rider privacy policy.
		Work processes and performance management Can someone else work on my behalf (substitute)?: https://riders.deliveroo.co.uk/en/support/account/substitute Also see links under terms of service, privacy policy, and UK rider privacy policy.
		Rules of platform governance My supplier agreement was terminated. Can I dispute Deliveroo's decision?: https://riders.deliverocco.uk/en/support/account/request-sa-review Also see links under terms of service, privacy policy, and UK rider privacy policy.

Delivery platform	ns (cont'd)		
Glovo	Argentina Chile Kenya	General terms of use and contracting: https://glovoapp.com/es-ar/legal/terms/ - Select the relevant country in the link. For data collection and usage see the privacy and data protection policy: https://glovoapp.com/es-ar/legal/privacy/ - Select the relevant country in the link. Revenue model Glovo business: https://business.glovoapp.com/en/faq/ Also see link under general terms of use and contracting. Ranking/ratings For Kenya: Peak slots: https://glovers.glovoapp.com/ke/tips/peak-slots Excellence score: https://glovers.glovoapp.com/ke/faq/excellence-score Recruitment and matching For Kenya: How to book slots: https://glovers.glovoapp.com/ke/basics/how-to-book-slots About insurance: https://glovers.glovoapp.com/ke/safety/about-insurance	
Jumia Food	Ghana Kenya Morocco	Terms and conditions: Ghana: https://food.jumia.com.gh/contents/terms-and-conditions.htm Kenya: https://food.jumia.co.ke/contents/terms-and-conditions.htm Morocco: https://food.jumia.ma/contents/terms-and-conditions.htm For data collection and usage see the privacy policy: Ghana: https://food.jumia.com.gh/contents/privacy.htm Kenya: https://food.jumia.co.ke/contents/privacy.htm Morocco: https://food.jumia.ma/contents/privacy.htm Revenue model Prime: Kenya: https://food.jumia.co.ke/prime Morocco: https://food.jumia.co.ke/prime Also see links under terms and conditions.	
Rappi	Argentina Chile Mexico	For the terms and conditions, and the privacy policy see: https://legal.rappi.com/colombia/ terminos-y-condiciones-de-uso-de-plataforma-rappi-2/ - Select the relevant country in the lin and then the relevant policy. Revenue model Prime: Argentina: https://www.rappi.com.ar/prime Chile: https://www.rappi.cl/prime Mexico: https://www.rappi.com.mx/prime Also see link under terms and conditions.	
Swiggy	India	Terms and conditions: https://www.swiggy.com/terms-and-conditions For data collection and usage see the privacy policy: https://www.swiggy.com/privacy-policy Revenue model Cancellation and refund policy: https://www.swiggy.com/refund-policy Also see link under terms and conditions. Recruitment and matching Benefits of being a Swiggy pick-up and delivery partner: https://ride.swiggy.com/en/ tiny-start-up-to-number-one-swiggys-growth-story-1	

Delivery platfo	rms (cont'd)	
Uber Eats	Argentina Chile Mexico Kenya	<i>Uber Eats community guidelines</i> : https://www.uber.com/legal/en/ - Select the relevant policy in the link and then the relevant country.
Zomato	India	Terms of service: https://www.zomato.com/conditions Delivery partner terms and conditions: https://zomato.runnr.in/delivery-partner-tandc.html For data collection and usage see the privacy policy: https://www.zomato.com/privacy Recruitment and matching Summary of all of Zomato's COVID-19 related initiatives: https://www.zomato.com/blog/covid-19-initiatives Also see link under delivery partner terms and conditions. Work processes and performance management Guidelines and policies: https://www.zomato.com/policies Also see link under delivery partner terms and conditions. Rules of platform governance See links under terms of service, delivery partner terms and conditions, and guidelines and policies.

► Table A2.3 Terminology used to identify platform users in terms of service agreements

Platform	Country of registration	Worker	Client/customer	General		
A) Online web-based platforms						
Freelance platforms						
Freelancer	United States	Seller Entrant	Buyer	User		
PeoplePerHour	United Kingdom	Freelancer	Buyer	User		
Toptal	United States	Freelancer	-	User		
Upwork	United States	Freelancer	Client	User		
Contest-based platforms						
99designs	United States	Designers	Customer	Users		
Designhill	India	Designer	Customer	User		
Hatchwise	United States	Creative Designer Writer	Contest holder Project holder Session holder Client	User		
Competitive programming platfor	rms					
CodeChef	India	-	-	User		
HackerEarth	United States	Candidate	User Recruiter	-		
HackerRank	United States	Hacker	-	-		
Kaggle	United States	Participant user	Host user	User		
Topcoder	United States	Contestant	Competition sponsor	User		
Microtask platforms						
Amazon Mechanical Turk	United States	Workers	Requesters	-		
Clickworker	Germany	Clickworker	Service requester	User		
Appen	Australia	Contributor	Task author Customer	User		
Microworkers	United States	Workers	Employers	User		

Platform	orm Survey country Worker		Client/Customer	Businesses listing their products on the delivery platform	General
B) Location-based platforms					
Taxi platforms					
Bolt (Taxify)	Ghana	Driver	Passenger	n/a	-
	Kenya				
Careem	Morocco	Captains	Users	n/a	-
Gojek	Indonesia	Service provider	-	n/a	Users
	Singapore	Transportation provider	Passenger	n/a	User
Grab	Indonesia	Third party provider (driver/ delivery partner)	Passenger	n/a	User
	Singapore	Third party provider (driver/ delivery partner)	Passenger	n/a	User
Little	Kenya	Service provider	Customer	n/a	User
Ola	la India Driver Transport service provider		Customer	n/a	User
Uber	Argentina	Tercero proveedor	-	n/a	Usuario
	Chile	Tercero proveedor	-	n/a	Usuario
	Ghana	Third party provider	-	n/a	User
	India	Third party provider Driver partner	Rider	n/a	User
	Kenya	Third party provider	-	n/a	User
	Lebanon	Third party provider	-	n/a	User
	Mexico	Tercero proveedor	-	n/a	Usuario
	Morocco	Prestataires tiers	-	n/a	Utilisateur
	United States	Third party provider	-	n/a	User

Platform	Survey country	Survey country Worker		Businesses listing their products on the delivery platform	General	
B) Location-base	ed platforms (cont'd)					
Delivery platforms						
Cornershop Mexico Contra		Contractors: shoppers, deliverers	-	Retailers	User	
	France	Livreur partenaire	Client	Restaurants partenaires	-	
Deliveroo	United Kingdom	Rider Suppliers	Customer	Partners	-	
	Argentina	Glovers	Clientes	Comercios	Usuarios	
Glovo	Chile	M 1				
	Kenya	Mandataries	Users	Merchants	Users	
Jumia Food	Ghana	-	Eligible user (for Jumia Prime)	Partner restaurant	-	
	Kenya	-	Eligible User (for Jumia Prime)	Partner restaurant	-	
	Morocco	-	Utilisateurs éligibles (pour Jumia Prime)	Restaurant partenaire	-	
	Argentina	Rappitenderos	Usuarios	Comercios aliados	-	
Rappi	Chile	RappiRepartidor(es)	Consumidor(es)	Comercios aliados	Usuario	
	Mexico	Comisionista	Consumidor(es)	-	Usuario	
		Third party service providers i.e. pick–up and delivery partners	Buyer/s	Merchant/s	User	
Uber Eats	Argentina	Socio repartidor	Comensal	Socio restaurantero	Usuario	
	Chile	Socio repartidor	Comensal	Socio restaurantero	Usuario	
	Mexico	Socio repartidor	Comensal	Socio restaurantero	Usuario	
	Kenya	Delivery partner	Consumer	Restaurant partner	User	
Zomato	India	Delivery partner	-	Restaurant partner	User	

n/a = not applicable.





► Appendix 3

ILO interviews with businesses and clients

To understand the opportunities and challenges arising as a result of the digital transformations in the world of work, the ILO conducted interviews with various types of businesses and clients. These included IT companies, start-up companies, business clients who use delivery or taxi platforms, and business process outsourcing (BPO) companies that provide digital services. Table A3.1 lists the companies and individuals interviewed. The processes followed to identify businesses for interviews are elaborated below. The interviews were conducted between March 2019 and March 2020 and lasted between 30 minutes and two hours.

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3A. IT companies

A number of IT companies in India were contacted for interviews to understand whether they were using digital labour platforms and which strategies they were adopting to integrate into the digital economy. Despite intense efforts, only two IT companies agreed to an interview, with the support of the ILO Country Office for India. The interviews were conducted through in-person meetings and using video call with company executives. The semi-structured interviews covered a range of issues, including how the digital transformations are affecting the IT sector, strategies used by the companies to adapt to changing digital technologies, their operations, recruitment strategies, performance management, productivity and innovation, and how digitalization is shaping their strategic thinking and future business strategy.



3B. Start-up companies providing tools and/or complementary products and Al services

Digital labour platforms use various applications, tools and complementary products to provide services to businesses and cater to their needs. Based on an analysis of the digital labour platforms covered in the report, such as Glovo, PeoplePerHour, Upwork and 99designs, and using a website profiling tool (BuiltWith), the different applications, tools and products used by platforms could be identified. Many of these were related primarily to productivity, communication and collaboration (e.g. Slack, Zoom, Skype, Dropbox), payments (e.g. PayPal, Venmo), video and audio (e.g. YouTube), and translation (e.g. Google Translate). The embedded apps identified related to data analytics and customer outreach (e.g. CrazyEgg, Notice Board) and advertising (Twitter analytics and Google analytics). Based on this, some 35 start-up businesses were contacted, most of them based in India and the United States, 12 of which agreed to the interviews.

In addition, the Indian Institute of Information Technology, Bengaluru's incubation centre, also helped to identify digital technology start-ups which were developing applications and tools for digital labour platforms or traditional companies; five start-ups were identified through this process. In all, 17 start-up companies were interviewed, but only 10 of them are included in the analysis as the remaining seven either did not provide in-depth insights that could be used for this report or did not want their companies to be used for analysis. The questionnaire was semi-structured and included questions on motivations behind the launch of such companies, how they grew, their regional or global focus, their opportunities and challenges, and their future growth strategies. Some of the interviews were conducted in person during a mission to India, while others were carried out over Skype or Zoom.

▶ Table A3.1 ILO interviews conducted on the subject of digital labour platform experience

	Interviewee category	Person(s) interviewed	Location			
A.	IT companies					
1.	Wipro	 Head of Technovation Centre Head of Public Policy and Corporate Affairs 	Bengaluru, India			
2.	Infosys	Senior Manager, Corporate Strategy Planning	Bengaluru, India			
В.	Start-up companies providing too	ols and/or complementary products				
1.	Cloudinary	Head of Marketing	San Francisco, United States			
2.	Crazyegg	Public Relations Manager	San Francisco, United States			
3.	Rytangle	CEO	Bengaluru, India			
4.	Krittur Technology	CEO	Bengaluru, India			
5.	Notice Board	CEOChief Technical Officer	Bengaluru, India			
6.	Bionic Yantra	CEO	Bengaluru, India			
7.	Vision Empower	CEO	Bengaluru, India			
8.	Jordan¹	CEO	San Francisco, United States			
9.	Ever Labs	CEO	Cherkasy, Ukraine			
10.	300 Brains	СТО	Warsaw, Poland			
c.	Clients or small businesses using	delivery platforms (number of interview	s conducted per country)			
1.	Restaurants	Owner	Ghana (4); Kenya (3); Indonesia (3); Lebanon (6); Morocco (6); Ukraine (5)			
2.	Retail businesses (small shops, grocery stores)	Owner	Ghana (6); Indonesia (9); Kenya (1)			
3.	Corporate companies	Owner	Kenya (4)			
D.	BPO companies¹					
1.	HN, AT, CF, CCI, SS, IN (6)	CEOCTOHead of OperationsChief Strategic Officer	Nairobi and Mombasa, Kenya			
2.	TR, CO, FS, ASAP, GIIP (5)	– CEO – Co-founder	Bengaluru and New Delhi, India			
E.	Customers using taxi and delivery platforms (number of interviews conducted per country)					
1.	Individual customers using delivery platforms		Chile (4)			
2.	Individual customers using taxi and delivery platforms		Ghana (10) India (14)			
3.	Interviews with individual customers using taxi platforms		Kenya (5)			

 $^{^{\}rm 1}$ The names of the start-up and BPO companies cited have been changed to preserve their anonymity.



3C. Clients or small businesses using delivery platforms

Interviews with clients and small businesses were conducted in collaboration with consultants based on a semi-structured questionnaire prepared by the ILO. Based on the survey of app-based delivery workers conducted in each country, restaurants or small businesses were identified that were using delivery platforms for their activities. The potential interviewees were approached by the consultants in all the countries. However, only in some countries (Ghana, Indonesia, Kenya, Lebanon, Morocco and Ukraine), were the clients and small businesses willing to be interviewed. In the other countries considered – Argentina, Chile, China, India and Mexico – contacting and engaging with these businesses proved more difficult, and the interviews could not be carried out. The interviews largely focused on the interviewees' motivations for using digital platforms to conduct their business, and the opportunities and challenges encountered. All the interviews were conducted in person by the consultants in the respective countries.



3D. Business process outsourcing (BPO) companies

The approach adopted for BPO companies in India and Kenya was different. In India, BPO companies were identified with the support of the ILO Country Office for India and through contacts provided by researchers at the Indian Institute of Information Technology in Bengaluru, one of the collaborating partners for the study. The companies concerned were either in the process of transforming their businesses to cater to new digital needs or setting up new BPO companies to service big technology companies.

In Kenya, the ILO collaborated with a consultant who helped in establishing contact with the selected BPO companies. The consultant had earlier undertaken a study on BPO companies for researchers at the Oxford Internet Institute and was therefore familiar with the sector. This was important and instrumental in establishing contacts with these companies and conducting the interviews. All the interviews were carried out in person by the consultant in collaboration with the ILO team (either in person during the mission or through Skype).

The semi-structured interviews in both countries focused on the business strategies of the companies as they transition towards providing digital services; the nature of the services provided and their differences in comparison to those provided previously; the implications of the transition on the company's human resources and skill sets; how the company improves its productivity; and their strategies for future business development.



3E. Customers using taxi and delivery platforms

The interviews with customers using taxi and delivery platforms were conducted in collaboration with consultants in the respective countries and were based on a semi-structured questionnaire prepared by the ILO. The consultants in Chile, Ghana, India and Kenya identified individuals who were willing to share their experiences and motivations for using these platforms. The interviews focused on the motivations for using digital platforms and their benefits. All interviews were conducted in person by the consultants in the respective countries.





Appendix 4

ILO surveys, interviews and statistical analysis



4A. ILO surveys and interviews

4A.1 Selected country surveys of taxi drivers and delivery workers (2019–20)

The survey of delivery workers was conducted in 11 countries, that of taxi drivers in nine countries. While in some countries the survey was restricted to one city, in others several cities were targeted (see table A4.1), based on the spread of platform companies across cities and the feasibility of conducting surveys in multiple cities.

The surveys of app-based and traditional taxi drivers and delivery workers were based on four questionnaires developed by the ILO (app-based taxi, traditional taxi, app-based delivery, traditional delivery). The structure of the questionnaires was similar, with some adaptations depending on the sector. Each questionnaire included questions on the respondent's sociodemographic background; work history and information about other work they are engaged in; and detailed questions related to their work as taxi drivers or delivery workers, including working time, income, work-related expenditures, social security coverage, income security, autonomy and control, perceptions of work and workplace solidarities. While the majority of questions were quantitative, some were qualitative and allowed for open-ended textual answers. In addition, the questionnaire provided space for additional notes and comments, and enumerators were encouraged to note any information or statements that they considered valuable for the analysis.

The surveys were implemented in collaboration with consultants from the respective countries. In Argentina, the survey was coordinated by the ILO Country Office for Argentina and conducted by FLASCO, Buenos Aires. In all other countries, the surveys were conducted in collaboration with researchers or research institutes. The questionnaires were adapted to the local context in consultation with the consultants and translated into the local language(s) where necessary. In each country, a pilot test of the questionnaires was carried out to identify potential issues and to further refine the questionnaire where necessary before the final data collection started. The interviews were conducted using computer-assisted personal interviewing (CAPI) with inbuilt validation rules using mobile devices (cell phones, tablets).¹

Prior to commencing the pilot tests and fieldwork, the consultants and enumerators involved in this study were instructed on the relevance of the project and trained in understanding each question, capturing each variable with detailed querying techniques to gain extensive in-depth information related to the respondent's situation, and using the survey form on their device. This training was provided using video call in all countries, except for Kenya, where it was provided in-person during a mission of the ILO research team.

¹ The surveys were implemented on KoBoToolbox, an open-source survey tool: https://www.kobotoolbox.org/.

► Table A4.1 Number of observations for country surveys of taxi drivers and delivery workers, by interview city

.	Та	xi	Deli	very
Country	App-based	Traditional	App-based	Traditional
Argentina	-	-	Buenos Aires (300)	-
Chile	Santiago (126)	Santiago (147)	Santiago (251)	Santiago (50)
China	-	-	Beijing (514)	-
Ghana	Accra (198)	Accra (196)	Accra (226)	-
India	Delhi (169)	Delhi (170)	Bengaluru (283)	Mumbai (55)
	Mumbai (155)	Mumbai (158)	Delhi (269)	
Indonesia	Jakarta Metropolitan Area (344)	Jakarta Metropolitan Area (148)	Jakarta Metropolitan Area (112)	-
Kenya	Kisumu (45)	Kisumu (43)	Kisumu (17)	Kisumu (27)
	Mombasa (43)	Mombasa (62)	Mombasa (24)	Mombasa (29)
	Nairobi (151)	Nairobi (185)	Nairobi (130)	Nairobi (94)
Lebanon	Beirut (130)	Beirut (100)	Beirut (65)	Beirut (47)
	Jounieh (70)	Jounieh (40)	Jounieh (35)	Jounieh (20)
		Tripoli (60)		Tripoli (25)
Mexico	Mexico City (200)	Mexico City (200)	Mexico City (249)	-
Morocco	Rabat (192)	Casablanca (38)	Casablanca (78)	
	Sale (2)	Rabat (118)	Rabat (158)	
		Sale (48)	Sale (9)	-
		Skhirate–Temara (1)	Skhirate–Temara (1)	
Ukraine	Kiev (252)	Kiev (150)	Kiev (244)	-

Source: ILO selected country surveys of taxi drivers and delivery workers (2019–20).

As there are no official statistics on these types of platform workers, including their number and characteristics, there was no sampling base from which a random sample could be drawn. In this context, the primary objective was to achieve a sample that would be as representative of the target population as possible. The target population consisted of any worker aged 18 years or older who had been working in the sector for at least three months. The criterion of working in the sector for three months was used to ensure that the worker could provide meaningful responses.²

To ensure heterogeneity within the sample, the interviews were conducted in different neighbourhoods of the city (see figure A4.1), on different days of the week (including weekends) and during different times of the day. Prior to starting the fieldwork, the main platform companies operating in each city were identified. Enumerators were advised to capture respondents who were registered with different platform companies. However, in some countries, such as Lebanon, it proved difficult to find workers who were registered with different platform companies as one platform company was clearly dominating the market (see table A4.2).

² In Argentina, the sample was limited to workers aged 16 or above, with at least one month of experience in the app-based delivery sector.

Figure A4.1 Distribution of interviews across cities, selected surveys and countries Ukraine (Kiev), app-based taxi drivers Ghana (Accra), traditional taxi drivers Mexico (Mexico City), app-based delivery workers Kenya (Nairobi), traditional delivery workers

$\textbf{Source:} \ \textbf{ILO} \ selected \ country \ surveys \ of \ taxi \ drivers \ and \ delivery \ workers \ (2019-20).$

► Table A4.2 Number of observations for country surveys of app-based taxi drivers and delivery workers, by platform company

	Taxi	Delivery
Argentina	-	Glovo (109), Rappi (105), PedidosYa (86)
Chile	Uber (89), Beat (21), Cabify (12), Other (4)	Rappi (76), Cornershop (60), PedidosYa (59), Uber Eats (56)
China	-	Meituan (259), Ele.me (140), Flashex (67), SF Express (25), Other (23)
Ghana	Uber (124), Bolt (61), Yango (13)	Jumia (85), Papa's Pizza (22), Other (119)
India	Uber (195), Ola (129)	Zomato (141), Swiggy (133), Uber Eats (115), Dunzo (46), Amazon (33), Big Basket (30), Flipkart (30), Grofers (14), Other (10)
Indonesia	Grab (197), Gojek (146), Lainnya (1)	Gojek (68), Grab (44)
Kenya	Uber (98), Bolt (88), Safe Boda (23), Little (22), Other (8)	Jumia Foods (54), Glovo (33), Uber Eats (23), Sendy (18), Bolt (9), Other (34)
Lebanon	Uber (167), Careem (33)	Toters (96), Fastpax (4)
Mexico	Uber (91), Didi (84), Other (25)	Rappi (132), Uber Eats (95), SinDelantal (10), Other (12)
Morocco	Careem (188), Blinc (5), VTCG0 (1)	Glovo (172), Jumia (74)
Ukraine	Uber (124), Uklon (69), Bolt (48), Other (11)	Glovo (189), Uber Eats (22), Nova Poshta (22), Other (11)

Source: ILO selected country surveys of taxi drivers and delivery workers (2019–20).

The primary approach used to identify workers was to locate them on the street. To locate taxi drivers, enumerators would target places such as gas stations, clusters of office complexes, shopping malls, airports, railway stations, platform company support offices and taxi stands, among others. While traditional taxis could easily be identified through the physical appearance of the vehicle, identifying app-based drivers proved quite difficult in some countries. For example, in Chile app-based workers operate in a legal grey area; they try to reduce their visibility. In some countries many respondents, in particular those whose work was mediated by a platform company, were worried that the survey was being conducted by the platform company. Their concern was usually mitigated by showing them an official letter confirming that this study was being conducted on behalf of the ILO.

Delivery workers were located mainly near restaurants, shopping malls, or waiting points where they would gather. They could often be identified by their branded vehicles, transport boxes or uniforms (jackets, helmets). In addition, in countries where it proved difficult to reach the target sample size, snowball sampling was also used.³

In case workers were willing to respond to the survey but were unable to do so when they were first approached (for example, because they just received an order or could not/did not want to log out of their app), enumerators would set up appointments at a time and place that was convenient for the respondent. Similarly, if an interview was interrupted, later appointments were set up to complete the interview. Respondents were compensated for the time they spent doing the interview with a fixed, country-specific amount paid at the end of the completed interview.⁴ On average, it took workers around 40 minutes to complete the survey.

The target sample sizes were 200–250 app-based taxi drivers, 200 traditional taxi drivers, 200–250 app-based delivery workers, and 50–150 traditional delivery workers. Surveys of traditional delivery workers were undertaken only in cities where the background study showed that delivery work had been prevalent prior to platform companies entering the market. As in some cases it proved very difficult to reach the target sample size for each category, the sample size or distribution had to be revised in some countries while the survey was being conducted. The final sample size as presented in table A4.2 reflects these difficulties and also that a few observations were removed from the dataset because they did not fulfil the selection criteria in terms of age or experience or because of quality concerns.

The first surveys of workers were conducted in April 2019 and the last ones in February 2020. The period of implementation for each country and survey is listed in table A4.3. As it was impossible to coordinate the surveys in all countries at the same time, the starting and end dates varied. In addition, the duration largely depended on the number of enumerators in each country and/or city and the ease or difficulty in locating workers for each category.

³ In Argentina, the sampling design included a first stage that consisted of identifying potential interviewees through social network groups (Facebook, WhatsApp and so on). From this first sample, workers were asked to designate other peers who might be interested in being part of the study, limiting the number of new participants each participant could provide.

⁴ The amounts were set in consideration of the country's minimum wage and also based on the peak earnings of taxi drivers or delivery workers.

► Table A4.3 Data collection periods for count	ry surveys of taxi drivers and delivery workers
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	Та	xi	Deli	very
	App-based	Traditional	App-based	Traditional
Argentina	-	-	1-31 July 2019	-
Chile	11 August– 8 September 2019	5 July– 16 August 2019	10 June– 8 August 2019	18 August– 1 October 2019
China	-	-	6-24 July 2019	-
Ghana	6 October– 12 December 2019	19 October – 12 December 2019	4 October– 12 December 2019	-
India	22 May– 6 August 2019	21 June– 22 July 2019	9 August– 3 December 2019 28 January– 8 February 2020	9–30 August 2019
Indonesia	9–30 August 2019	10-31 August 2019	9 August– 4 September 2019	-
Kenya	30 October– 5 December 2019	31 October– 5 December 2019	31 October– 4 December 2019	
Lebanon	19 September– 12 October 2019	18 September– 7 October 2019	20 September– 11 November 2019	26 September– 10 October 2019
Mexico	28 August– 21 November 2019	26 August– 2 November 2019	12 April– 12 August 2019	-
Morocco	14 December 2019– 9 January 2020	13 December 2019– 5 January 2020	14 December 2019– 15 January 2020	-
Ukraine	23 October– 3 December 2019	25 October– 15 December 2019	23 October– 1 December 2019	-

Source: ILO selected country surveys of taxi drivers and delivery workers (2019–20).

4A.2 Rapid-assessment survey on the impact of COVID-19 on workers in the taxi and delivery sectors (2020)

To assess the impact of the COVID-19 pandemic on workers in the delivery and taxi sectors, a rapid-assessment survey was conducted in four countries: Chile, India, Kenya and Mexico. These countries were chosen in an effort to understand the implications of COVID-19 on workers across the different regions. The questionnaire was developed by the ILO and implemented with the help of the same consultants who had been responsible for the 2019 survey in their respective countries. Before the final survey was implemented, pilot tests were conducted to refine the questionnaire and the enumerators were trained in understanding the content and relevance of each question. The interviews were conducted using computer-assisted telephonic interviewing (CATI) in August 2020.

The target sample consisted of delivery workers and taxi drivers who had participated in the 2019 survey, and who were either still working in their respective sector or not currently working but planning to return to this work once the situation in their city had improved. The sample size was 10 per cent of the 2019 sample of each category (app-based taxi, traditional taxi, app-based delivery, traditional delivery), while aiming at a similar distribution in terms of gender, platform or company they work for, and migrant status (Chile). In Kenya, it was decided to redistribute the sample from Kisumu to Nairobi and Mombasa, as the Kisumu area was less adversely affected by restrictions put in place due to COVID-19. The final sample distribution is displayed in table A4.4.

► Table A4.4 Number of observations for the rapid-assessment surveys on the impact of COVID-19 on taxi drivers and delivery workers, by interview city

	Taxi		Delivery		
	App-based	App-based Traditional		Traditional	
Chile	Santiago (16)	Santiago (16)	Santiago (26)	Santiago (5)	
India	Delhi (19)	Delhi (18)	Bengaluru (27)	Mumbai (6)	
	Mumbai (16)	Mumbai (16)	Delhi (29)	-	
Kenya	Mombasa (8)	Mombasa (9)	Mombasa (2)	Mombasa (6)	
	Nairobi (19)	Nairobi (20)	Nairobi (16)	Nairobi (9)	
Mexico	Mexico City (20)	Mexico City (20)	Mexico City (25)	-	

Source: ILO rapid-assessment surveys of taxi drivers and delivery workers (2020).

The questionnaire contained both qualitative and quantitative questions related to work arrangements, household composition, social protection, work and income security, occupational safety and health, collective action, and stigma and discrimination. On average, it took workers around 30 to 40 minutes to complete the survey.

Workers who at the start of the questionnaire indicated that they had permanently stopped working as a taxi driver or delivery worker were asked questions related to why and when they had left these sectors and their current employment status. For these workers, it took around 10 to 15 minutes to complete the survey. All workers who completed the survey were compensated for their time spent doing the interview.⁵

To reach the target samples, in total 996 respondents were contacted using the phone number they had provided in the 2019 survey. Many calls were unsuccessful because the number was no longer in use or had changed owner, or individuals were not reachable because phones were switched off or because they did not pick up. Finally, despite getting through to the respondents, some also said they were too busy or otherwise refused to participate (see table A4.5).

⁵ The amounts paid to each worker who continued to work or planned to return to work in the taxi or delivery sector were twice the amounts of the original survey conducted in 2019–20. The amounts paid to those who had stopped working in the taxi or delivery sector were the same as in the 2019–20 survey.

► Table A4.5 Number of participants contacted for the rapid-assessment surveys on the impact of COVID-19 on taxi drivers and delivery workers, by country

	Ta	nxi	Deli	very	Takal
	App-based	Traditional	App-based	Traditional	Total
Chile	_				
Successful					
Currently working	9	11	25	4	49
Not currently working but planning to return	7	5	1	1	14
Permanently quit	4	0	11	1	16
Subtotal	20	16	37	6	79
Unsuccessful					
Number no longer operational or changed owner	6	0	25	1	32
Did not pick up/phone off	1	4	8	0	13
Not willing to participate	3	8	3	0	14
Subtotal	10	12	36	1	59
Total attempted contacts	30	28	73	7	138
India					
Successful					
Currently working	21	18	46	0	85
Not currently working but planning to return	14	16	10	6	46
Permanently quit	2	1	10	0	13
Subtotal	37	35	66	6	144
Unsuccessful					
Number no longer operational or changed owner	5	2	9	3	19
Did not pick up/phone off	6	3	18	2	29
Not willing to participate	2	0	3	0	5
Subtotal	13	5	30	5	53
Total attempted contacts	50	40	96	11	197
Kenya					
Successful					
Currently working	23	16	13	13	65
Not currently working but planning to return	4	13	5	2	24
Permanently quit	8	10	8	1	27
Subtotal	35	39	26	16	116
Unsuccessful					
Number no longer operational or changed owner	18	8	10	1	37
Did not pick up/phone off	57	79	38	20	194
Not willing to participate	8	13	5	3	29
Subtotal	83	100	53	24	260
Total attempted contacts	118	139	79	40	376
Mexico					
Successful					
Currently working	19	17	24	-	61
Not currently working but planning to return	1	3	1	-	5
Permanently quit	0	0	0	-	0
Subtotal	20	20	25	-	65
Unsuccessful					
Number no longer operational or changed owner	56	39	33	-	128
Did not pick up/phone off	9	27	19	-	55
Not willing to participate	1	4	2	-	7
Subtotal	66	70	54	-	190
Total attempted contacts	86	90	80	_	255

Source: ILO rapid-assessment surveys of taxi drivers and delivery workers (2020).

Background information.⁶ The restrictions and economic situation impacting workers in the delivery and taxi sectors during the COVID-19 pandemic differed among countries, cities and time periods. The events and measures affecting these two sectors until the time of the survey (August 2020) are briefly mentioned below.

In **Santiago de Chile**, there had been a curfew (10 p.m. to 5 a.m.) from 22 March, and a dynamic lockdown (that is, only certain areas of the city) from 25 March, while on 15 May a total lockdown in all municipalities of the metropolitan area of Santiago de Chile was issued. The total lockdown was progressively relaxed from 15 August onwards for different municipalities of the metropolitan area of Santiago, and the curfew was shortened on 21 August (11 p.m. to 5 a.m.). While delivery workers (both app-based and traditional) and traditional taxi drivers were classified as essential workers and granted a permit to move within lockdown territories while performing their work, app-based taxi drivers were not classified as essential workers and thereby were not eligible for such a permit. Only taxi platforms that also had delivery options or options to request a traditional taxi were allowed to operate.

Apart from the pandemic, the economy of Santiago was also affected by a large civil protest that started on 18 October 2019. The survey also tried to capture the implications of the protest on the respondents' work and income security.

In **India**, there was a nationwide lockdown effective from 24 March until 3 May. In **Bengaluru**, partial opening started on 4 May, while in **Delhi** and **Mumbai** some services started operating again on 18 May. App-based food delivery services were operating throughout the lockdown, and parcel delivery started again on 18 May. Taxi platforms were shut down during the lockdown. In Mumbai, traditional taxis were allowed to operate again on 2 June, and app-based taxi platforms on 5 June. In Bengaluru and Delhi, taxi services (both traditional and app-based) started operating on 18 May, with a restriction on the number of passengers (1 for autorickshaws, 2 for cabs). After a surge in cases in Bengaluru, there was another lockdown from 14 July to 22 July, where taxi services were allowed to operate only in emergencies or towards the airport or railway stations.

In addition, with the passing of the Citizen's Bill in early December 2019, there were a number of protests in many cities in India, including in New Delhi, Mumbai and Bengaluru, from December 2019 to March 2020. This affected the work and earnings of the taxi drivers and delivery workers, and the survey also tried to capture the impact thereof.

In **Kenya**, on 23 March all hotels and restaurants were closed for business, with only take-aways still operating until 4 p.m. From 27 March there was a nation-wide curfew (7 p.m. to 5 a.m.). From 6 April, movement in and out of **Nairobi** and **Mombasa**, among other cities, was restricted. Restaurants were allowed to open (from 5 a.m. to 4 p.m.) on 27 April. On 6 June the curfew was relaxed (9 p.m. to 4 a.m.), but the restrictions of movement in and out of Nairobi and Mombasa continued. Taxi and delivery services (both app-based and traditional) were allowed to operate during the entire period, respecting the curfew.

In **Mexico City**, restrictions on economic activities started on 26 March. On 21 April, the situation was declared to have reached the status of a pandemic in the country. Starting from 1 June, a traffic-light colour system was introduced, denoting the situation in each state and updated weekly. Mexico City was classified as "red" for June, July and August, implying that only essential activities would operate. Nevertheless, life on the streets slowly started to pick up again during these months. The taxi and delivery sectors (both app-based and traditional) were both considered as essential during the entire period, and therefore allowed to operate.

⁶ Based on information provided by consultants in each country.

4A.3 Surveys of workers on online web-based platforms

To better understand working conditions on online web-based platforms, several surveys were undertaken by the ILO: a global survey of crowdworkers (2017); a global survey of workers on freelance and competitive programming platforms (2019–20); and country-level surveys of platform workers in China and Ukraine (2019). All these surveys contained a section on worker demographics, work experience and work history, as well as detailed information on types of tasks completed and working conditions such as hours worked, income, benefits received, and financial and social security. The questionnaires included both quantitative questions as well as some open-ended questions requiring textual answers, which provided findings of a more qualitative nature. The survey language was English for the global surveys and Chinese and Ukrainian respectively for the surveys of platform workers in those countries.

As there is no database of online web-based platform workers, it was not possible to draw a random sample. Depending on the target group, different sampling methodologies were chosen. Independent of the sampling methodology, workers self-selected to participate in the surveys. The different surveys and the sampling methodologies used are described in more detail below.

4A.3.1 Global survey of crowdworkers (2017)

The survey was conducted between February and May 2017 on five major microtask platforms operating across the globe: AMT, CrowdFlower (now Appen), Clickworker, Microworkers and Prolific (formerly Prolific Academic). It was a follow-up to and extension of a survey undertaken on AMT and CrowdFlower in 2015 (see Berg 2016). The 2015 questionnaire was modified by the ILO with assistance from SoundRocket, a survey research company specialized in the social sciences. The survey was listed as a paid task on the five platforms. There were no restrictions as to who could participate except in the case of AMT, where workers from India and the United States were targeted. The survey was posted in small batches at different times of the day and the workers self-selected to participate in the survey. This is common practice among empirical studies of crowdwork and is considered to be the best way of reaching out to a wide range of workers engaged on the platforms. On average, it took respondents about 30 minutes to complete the survey. Out of a total of 3,345 respondents who participated in the survey, almost 30 per cent had to be excluded from the analysis because they only partially completed the survey, or did not pay sufficient attention, or used algorithms to complete it, or used multiple accounts or platforms to complete it (see Berg et al. 2018). This resulted in a final sample of 2,350 workers from 75 countries (see tables A4.6 and A4.7).

In addition to the survey, semi-structured interviews were conducted on Skype with 21 workers in August 2017 in order to have a better understanding of their motivations, the tasks they performed, their (dis)satisfaction with microtask work and how it affected their personal and professional life.

4A.3.2 Global survey of freelance and contest-based workers, and competitive programmers, 2019–20

The questionnaires for the global surveys of freelancers and contest-based workers, and competitive programmers were developed by the ILO with assistance from SoundRocket, the survey research company that assisted the ILO in conducting the global survey of crowdworkers in 2017. The target population included freelance, free competition and competitive programmers engaged in work or training activities on any of 12 predetermined digital platforms (99designs, CodeChef, Codeforces, Designhill, Freelancer, HackerEarth, HackerRank, Hatchwise, Iceberg, PeoplePerHour, Topcoder, Upwork). These platforms had been selected because they are some of the major ones in their respective fields and it seemed possible to verify that workers were undertaking tasks on them.

Different models of recruitment were assessed for their feasibility and the final strategy included:

- ▶ Recruitment directly on the platform: This method consisted in listing the survey as a paid task on the platform. Around 90 per cent of the freelancers and 8 per cent of the competitive programmers in the sample were recruited in this way. Recruitment postings were made on Upwork, Freelancer and PeoplePerHour, across a range of job categories and task types, in an attempt to recruit a diverse range of survey participants. This method worked well on Upwork, whereas on Freelancer the quality of proposals was very low, with many workers submitting bids unrelated to the task, and on PeoplePerHour the job postings were flagged and removed by the moderators shortly after being published. During the recruitment on Upwork, it was ensured that there was variety in terms of tasks, geographic location and worker experiences. While some respondents recruited through Upwork had earned less than US\$100 on the platform (4 per cent), the majority had earned over US\$1,000 (78 per cent), with some exceeding US\$10,000 (35 per cent) or even US\$100,000 (2 per cent).
- ▶ Identification of workers through other digital platforms (AMT): AMT was used to recruit previous participants from the 2017 survey of crowdworkers who were identified as potentially eligible for this survey and had indicated that they would be willing to participate in future surveys. The survey was set up as two tasks. The first asked basic demographic questions and identified whether the worker participated in freelance, contest-based or competitive programming platforms. The second task was offered to those deemed eligible and consisted of the detailed questionnaire for freelance workers or competitive programmers, respectively. About 60 and 29 respondents on AMT successfully completed the freelance or competitive questionnaire, respectively. However, a detailed analysis of answers provided by respondents, including to open-ended textual questions, made clear that a substantive number of these entries were of low quality. Some respondents probably had no experience of working on freelance or competitive programming platforms, but indicated that they did in order to be able to complete the survey and receive the financial reward sometimes multiple times with different accounts, as was obvious from striking similarities in textual answers. After exclusion of these low-quality observations, about 8 per cent of the freelancers (36 respondents) and 3 per cent of competitive programmers (2 respondents) in the final sample were recruited through AMT.
- ▶ Targeting of workers through online advertisements: Advertisements were developed to target the three worker populations, and were posted on Facebook. These were relatively successful during the pilot study. However, a change in Facebook's advertising policy resulted in a drastic reduction in the number of micro-targeting options, which significantly reduced their effectiveness for participant recruitment during the final study. Of over 50,000 individuals who clicked on these advertisements, only about 250 entered the survey. While 14 respondents completed the survey successfully, only six were considered in the final sample (1 per cent of freelancers) due to quality concerns for the remaining eight observations.
- ➤ Coordination with online content creators to share the survey with their audience: A short segment advertising the study was included in two videos that were posted to the YouTube channel of a YouTuber with whom there was a collaboration for this study. This YouTuber's channel focused on competitive programming and had over 240,000 subscribers. He also shared information about the study in one Facebook and two Twitter posts. About 74 per cent of the competitive programmers were recruited through this method.
- ▶ Recruitment through online forums: A handful of competitive programmers were recruited from the CodeChef community forum. In addition, potential respondents were also contacted through other online forums or social media platforms (such as Quora, Meetup, LinkedIn), but without success. About 15 per cent of the competitive programmers were recruited through online forums.

Another method of recruitment that had been assessed for its feasibility was snowball sampling. This method was unsuccessful during the pilot study, as none of the initial volunteers followed up to share the survey with others, and it was therefore deemed unfeasible.

The responses were collected between the end of August 2019 and the end of January 2020. All participants who successfully completed the questionnaire were offered compensation in appreciation of their participation. The average completion time was about 60 minutes for the freelance survey and about 25 minutes for the survey of competitive programmers.

In total, 609 respondents completed the survey of freelance and contest-based workers and 190 respondents completed the survey of competitive programmers. After data cleaning and elimination of records that were of low quality or duplicate entries, the final sample of the survey of freelance and contest-based workers included 449 respondents from 80 different countries and three different platforms; and that of the competitive programmers included 62 respondents from seven different countries and five different platforms (see tables A4.6 and A4.7). Due to the difficulties described above of recruiting freelancers on various platforms, 93 per cent of the respondents were performing tasks on Upwork.

► Table A4.6 Number of observations for global surveys of online web-based platforms, by income group and country/territory

	Freelance	Competitive programming	Microtask
High-income	Austria (2) Belgium (1) Canada (8) Croatia (3) Czechia (3) Denmark (1) Estonia (1) Finland (1) France (8) Germany (5) Greece (7) Hungary (2) Ireland (1) Israel (2) Italy (7) Netherlands (3) New Zealand (1) Oman (1) Poland (4) Portugal (4) Republic of Korea (1) Romania (5) Slovenia (1) Spain (4) Saint Kitts And Nevis (1) Sweden (1) Switzerland (1) United Arab Emirates (1) United States (63)	Belgium (1) Norway (1) United States (3)	Australia (4) Austria (9) Belgium (4) Brunei (1) Canada (41) Chile (3) Croatia (11) Czechia (2) Estonia (1) Finland (2) France (23) Germany (188) Greece (6) Hungary (6) Ireland (4) Israel (1) Italy (67) Japan (1) Latvia (1) Lithuania (2) Netherlands (10) New Zealand (3) Poland (13) Portugal (30) Romania (18) Saudi Arabia (2) Singapore (3) Slovakia (2) Slovenia (1) Spain (43) Sweden (1) Switzerland (4) United Kingdom (294) United States (697) Uruguay (1)

► Table A4.6 (cont'd.)

	Freelance	Competitive programming	Microtask
Upper-middle-income	Albania (2) Argentina (3) Armenia (2) Belarus (2) Bosnia and Herzegovina (3) Brazil (11) Bulgaria (3) China (5) Colombia (5) Dominican Republic (2) Georgia (1) Indonesia (3) Jamaica (1) Jordan (1) Lebanon (1) Malaysia (4) Mexico (5) North Macedonia (4) Peru (1) Russian Federation (3) Serbia (10) South Africa (5) Thailand (2) Turkey (3) Venezuela, Bolivarian Republic of (10)	Peru (1)	Albania (1) Argentina (4) Armenia (1) Bosnia and Herzegovina (39) Brazil (45) Bulgaria (10) China (1) Colombia (3) Ecuador (2) Georgia (1) Indonesia (28) Jamaica (3) Malaysia (8) Mexico (9) North Macedonia (10) Peru (5) Russian Federation (28) Serbia (75) South Africa (7) Turkey (11) Venezuela, Bolivarian Republic of (71)
Lower-middle-income	Algeria (2) Bangladesh (16) Cambodia (1) Egypt (8) El Salvador (2) India (41) Kenya (20) Myanmar (1) Nepal (1) Nicaragua (3) Nigeria (8) Occupied Palestinian Territory (9) Pakistan (34) Philippines (43) Tunisia (1) Ukraine (9) Uzbekistan (1) Viet Nam (2)	Bangladesh (2) India (53) Tunisia (1)	Algeria (6) Bangladesh (10) Bolivia, Plurinational State of (1) Egypt (4) Ghana (1) India (343) Kenya (7) Kyrgyzstan (1) Morocco (7) Nepal (32) Nigeria (22) Pakistan (11) Philippines (10) Republic of Moldova (3) Sri Lanka (10) Tunisia (4) Ukraine (14) Viet Nam (2)
Low-income	Benin (1) Burkina Faso (1) Ethiopia (1) Malawi (1) Rwanda (1)		

Sources: ILO global surveys of crowdworkers (2017) and workers on freelance and competitive programming platforms (2019–20).

► Table A4.7. Number of observation	er platform for online v	veb-based surveys
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Freelance and contest-based (449)	Competitive programming (62)	Microtask (2350)	Ukraine (761)	China (1107)
99designs (4) Freelancer (27) Upwork (418)	CodeChef (13) Codeforces (14) HackerRank (33) Iceberg (1) Topcoder (1)	Amazon Mechanical Turk (489) Clickworker (455) CrowdFlower (now Appen; 355) Microworkers (556) Prolific (495)	Advego.ru (32) Amazon Mechanical Turk (5) fl.ru (13) Free-lance.ua (7) Freelance.ru (6) Freelance.ua (46) Freelancehunt.com (40) Freelancer.com (27) Kabanchik.ua (471) Upwork.com (41) Weblancer.net (7) Others (66)	680 (293) EPWK (232) k68 (48) ZBJ (534)

Sources: ILO global surveys of crowdworkers (2017) and workers on freelance and competitive programming platforms (2019–20); ILO surveys of platform workers in China (2019) and Ukraine (2019).

4A.3.3 Survey of platform workers in Ukraine (2019)

The survey of platform workers in Ukraine was conducted by the Kiev International Institute of Sociology (KIIS) on behalf of the ILO. It took place in November 2019 and was a follow-up to a survey conducted in November and December 2017 (see Aleksynska, Bastrakova and Kharchenko 2018). The 2017 survey questionnaire was revised and some questions were added.

The survey targeted respondents aged 18 years and older, who reside continuously in Ukraine and who identified themselves as workers performing work through at least one digital platform for pay in the 12 months preceding the survey. The different methods of participant recruitment used included:

- > spreading information about the survey on Kabanchik.ua, the leading online platform providing work in Ukraine (74 per cent of respondents);
- selecting participants from InPoll, an online panel that provides access to active Ukrainian internet users (20 per cent of respondents);
- > sending invitations to the participants of the 2017 survey of online platforms workers in Ukraine who had provided their contact details (4 per cent of respondents);
- ▶ posting information about the survey in thematic Facebook groups (1 per cent of respondents); and
- ▶ snowball sampling to recruit individuals otherwise difficult to reach or engage (1 per cent of respondents).

On average, it took around 30–40 minutes to complete the survey and participants were offered a small remuneration on completion. In total, 1,112 respondents completed the survey, out of whom 54 were excluded due to quality concerns related to their textual answers, resulting in 1,058 remaining observations.

The survey included workers who primarily found and completed tasks online, and workers who used the platforms to find tasks that they would complete offline, such as repair, cleaning and delivery services, among others. The workers who were primarily completing offline tasks were excluded from the analysis in this report, so as to allow better comparability between the different surveys (global survey of workers on freelance and competitive programming platforms, and survey of platform workers in China). The final sample used for analysis in this report consists of 761 respondents, of whom 62 per cent named Kabanchick.ua as the main platform they worked for, while the remainder primarily worked on other Ukraine-based (10 per cent), Russia-based (10 per cent) or English-language platforms (18 per cent) (see table A4.7).

4A.3.4 Survey of platform workers in China, 2019

The survey of platform workers in China was conducted by Professor Ruixin from Harbin Institute of Technology on behalf of the ILO. The survey questionnaire used was based on earlier survey questionnaires for crowdworkers and for platform workers in Ukraine (Berg 2016; Berg et al. 2018; Aleksynska, Bastrakova and Kharchenko 2018), adapted to the Chinese context. It included about 85 questions (excluding follow-up questions) and took around 30 minutes to complete.

The survey was offered on China's top four online platforms, as determined by their Alexa ranking and Baidu weight, namely ZBJ, EPWK, 680 and k68. These platforms offer a wide range of tasks that appeal to workers with different backgrounds (Chen, forthcoming). The survey was listed as a paid task, and upon completion workers were remunerated for performing the task. Any worker aged 18 years or older who had been doing online work for at least three months was eligible for the survey. After responses were collected and the data was cleaned, there were a total of 1,107 respondents (see table A4.7).

4A.3.5 Regional groupings used in Chapter 4

As noted in Chapter 4, countries are grouped into "developed" and "developing" countries for the purpose of analysis. The grouping is based on the World Bank's 2020–21 country classification by income level, which is based on the country's 2019 GNI per capita in current US dollars. Countries that are classified as high-income are considered to be "developed", whereas all others (upper-middle-, lower-middle- and low-income) are considered as "developing". The number of observations for each group is displayed in table A4.8.

Due to large differences in sample size, the country-specific surveys of platform workers in China and Ukraine are excluded when presenting results for developed and developing countries separately, as otherwise the results for developing countries would be primarily driven by China and Ukraine, instead of providing a global picture.

▶ Table A4.8 Number of observations per platform for online web-based surveys

	Freelance	Competitive programming	Microtask	Total
Developed countries	148	5	1499	1652
Developing countries	301	57	850	1208

Sources: ILO global surveys of crowdworkers (2017) and workers on freelance and competitive programming platforms (2019–20).

4A.4 Interviews with freelancers

Interviews were conducted with 23 freelancers in Africa, Asia, the Arab States, and Latin America and the Caribbean between April and September 2019. They were identified using LinkedIn and other social media platforms, where their work history was reviewed based on their profiles, and selected workers who indicated use of online platforms were invited to interviews through Skype. In some countries, after a freelancer was identified the snowball method was used to reach out to other workers. All the freelancers contacted expressed enthusiasm about participating in the research project. The interview took around 45 to 90 minutes, and they were compensated for their time.



▶ 4B. Statistical analysis

4B.1 Earnings of taxi and delivery workers

4B.1.1 Comparing hourly earnings of workers in the app-based and traditional taxi and delivery sectors

To compare the hourly earnings of app-based and traditional workers in the taxi and delivery sectors, the ordinary least squares (OLS) regression method was used. The dependent variable is the workers' log hourly earnings in US dollars and the regressor is a binary variable that takes the value of 1 for app-based workers and 0 for traditional workers. Several covariates were introduced to the regression, including age, sex, education, marital status, household size, migration status, experience, ethnic group and interview city (where applicable), and dummy variables of having another job and renting the vehicle (see tables A4.9 and A4.10).

The regression results show that app-based taxi drivers earn more per hour on average than traditional taxi drivers with similar characteristics. The difference varies from 22 per cent (Ukraine) to 86 per cent (Ghana) and is significant at 95 per cent in Morocco and at 99 per cent in all other countries under analysis. In the delivery sector, app-based workers earn more in Kenya (39 per cent) and Lebanon (25 per cent), but less in Chile (24 per cent) compared to traditional delivery workers, and the difference in earnings is highly significant in all three countries. India was excluded from the regression analysis for delivery workers, as the survey of traditional delivery workers was conducted among *dabbawalas* (traditional lunchbox delivery) in Mumbai, while the app-based survey was conducted in Bengaluru and Delhi, which limits the comparability of income figures.

► Table A4.9 Regression results: App-based and traditional taxi drivers (percentage changes; dependent variable: log of hourly earnings in US\$)

	Chile	Ghana	India	Indonesia	Kenya	Lebanon	Mexico	Morocco	Ukraine
App-based (traditional)	72.6***	86.1***	78.5***	48.1***	34.2***	78.1***	72.1***	25.8**	22.2***
Age	1.2	0.9	0.1	1.9	2.0	-0.3	0.5	1.6	2.1
Age-squared	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0*
Education ¹									
Higher secondary	-1.1	3.4	6.3	23.3***	32.0***	2.3	6.1	1.0	
University degree	2.8	5.6	26.8***	58.4***	40.0***	-6.9	7.3	0.0	5.3
Married (not married)	10.2	4.3	11.4*	1.2	-7.3	0.9	5.8	-3.4	12.1*
Household size	-3.6*	-1.3	0.6	-3.7**	1.6	-0.9	-1.4	-3.2*	-3.3
Years of experience	0.3	-1.0*	0.5*	-2.1***	-0.1	-0.0	-0.3	-0.2	0.7
Has another job	10.3	16.8**	27.3**	-18.2**	18.4*	-5.5	3.7	-1.2	3.0
Rented vehicle (own vehicle)	-15.8**	7.5	-13.2***	31.5***	-4.1	-4.4	-4.2	-29.7***	-31.9***
Ethnic group/nationality	2								
Ewe		-3.7							
Ga-Adangbe		-9.6							
Other		-5.0		-8.5					
Scheduled tribes			32.6***						
Scheduled castes			-4.0						
Other backward castes			-7.2**						
Betawi				12.0					
Sunda				6.6					
Syrian						2.6			
Palestinian						44.3***			
City ³									
Mumbai			37.1***						
Kisumu					1.6				
Mombasa					20.7***				
Jounieh						-0.5			
Tripoli						-69.9***			
Observations	232	373	495	437	505	371	378	359	361
R-squared	0.369	0.450	0.513	0.161	0.164	0.743	0.316	0.183	0.122

Notes: Reference categories in parentheses. *** p<0.01, ** p<0.05, * p<0.1. For easier interpretation of the results, the table presents percentage change instead of regression coefficients. In order to avoid approximation errors, the percentage change is calculated using the formula $100 \times [\exp(\text{coefficient}) - 1]$. Regression results are available from the authors upon request.

Source: ILO calculations based on ILO selected country surveys of taxi drivers (2019–20).

 $^{^{\}rm 1}\,$ Reference categories: Ukraine: higher secondary or below; all other countries: secondary or below.

² Reference categories: Ghana: Akan; India: Forward castes; Indonesia: Jawa; Lebanon: Lebanese.

 $^{^{\}scriptscriptstyle 3}$ Reference categories: India: Delhi; Kenya: Nairobi; Lebanon: Beirut.

► Table A4.10 Regression results: App-based and traditional delivery workers (percentage changes; dependent variable: log of hourly earnings in US\$)

	Chile	Kenya	Lebanon
App-based (traditional)	-23.9***	39.0***	25.0***
Age	-0.9	4.6	1.6
Age-squared	0.0	-0.1	-0.0
Female (male)	-0.9		
Education (below secondary)			
Higher secondary	13.3	10.0	7.6
University degree	15.7	4.0	13.2
Married (not married)	0.1	0.6	3.2
Household size	0.9	2.3	0.4
Years of experience	3.8***	2.1*	1.4**
Has another job	3.9	-6.1	-2.3
Nationality (Lebanese)			
Syrian			-19.5***
Palestinian			-21.5***
City ¹			
Kisumu		-14.3*	
Mombasa		5.6	
Jounieh			-2.2
Tripoli			-40.1***
Observations	287	307	181
R-squared	0.191	0.185	0.543

Notes: Reference categories in parentheses. *** p<0.01, ** p<0.05, * p<0.1. For easier interpretation of the results, the table presents percentage change instead of regression coefficients. In order to avoid approximation errors, the percentage change is calculated using the formula $1000 \times [\exp(\text{coefficient}) - 1]$. Regression results are available from the authors upon request.

Source: ILO calculation based on ILO selected country surveys of delivery workers (2019–20).

4B.1.2 Relationship between different factors and hourly earnings in the app-based delivery sector

To further investigate the relationship between different factors and hourly earnings of app-based delivery workers, the OLS regression method was used. The dependent variable is workers' log hourly earnings in US dollars. Various covariates were introduced in order to capture factors that simultaneously affect workers' hourly earnings, including demographic and work-related variables (see tables A4.11 and A4.12). Female and migration dummies were added for countries where the sample included at least 10 per cent of female or migrant workers, and the worker's rating on the application was added where it was available for at least 90 per cent of respondents.

The results show that the factors with a significant correlation with earnings vary depending on the country.

¹ Reference categories: Kenya: Nairobi; Lebanon: Beirut.

A significant gender pay gap can be observed in Argentina and Chile, where women are expected to earn around 14 per cent less than their male counterparts. There is no significant gender gap in Ukraine, while the remaining countries did not have sufficient observations to assess whether a gender pay gap exists.

In most countries, hourly earnings are not correlated with education levels. However, workers with higher secondary education earn more in India and Kenya, and those with a university degree earn more on average in Chile and Lebanon than their counterparts with lower education levels (secondary education or below).

In Argentina, Chile and Lebanon, a substantial proportion of the respondents are migrants. In Chile and Lebanon, migrant app-based delivery workers tend to earn less than their non-migrant counterparts (15 and 13 per cent respectively), while there is no significant difference in Argentina.

In some countries there are significant differences in earnings depending on the platform company. In Argentina, workers on Glovo and PedidosYa earn about 25 per cent more than those primarily working on Rappi. Similarly, in Chile, earnings are higher for those on PedidosYa (42 per cent) or Uber Eats (18 per cent) than for those on Rappi. In Ghana, workers on Jumia (48 per cent) or other platforms (35 per cent) earn less than those with similar characteristics on Papa's Pizza. In India, those on Dunzo earn more (11 per cent), while those on Flipkart earn less (12 per cent) than on Uber Eats. In Indonesia and Kenya, there is no significant difference in earnings for workers on different platforms. In Mexico, workers on Uber Eats earn about 15 per cent less than those on Rappi. In Morocco, those working on Jumia earn 16 per cent less than those on Glovo. In Ukraine, there is no significant difference between the hourly earnings of Uber Eats and Glovo couriers, while those working on other platforms tend to earn 26 per cent less than workers on Uber Eats.

Earnings are also associated with ratings. While in many countries only some respondents could provide information on their rating, this was available for almost all respondents in Indonesia, Kenya, Lebanon and Mexico. Higher ratings are not associated with higher hourly earnings in Lebanon and Mexico. However, in Indonesia and Kenya workers with 1 per cent higher ratings are expected to earn around 1 per cent more, which means that a one star difference on a five star scale is associated with a 20 per cent difference in hourly earnings.

The mode of transport also has an influence on earnings. In Indonesia and Lebanon all respondents in the app-based delivery sector were using motorbikes. In other countries, the mode of transport was more varied and often also correlated with hourly earnings. In Argentina, Chile, Mexico and Ukraine delivery workers using bicycles are expected to earn between 20 and 25 per cent less than those using motorbikes. Similarly, in Mexico and Ukraine those mainly delivering on foot are expected to earn less (36 and 15 per cent, respectively) than those on motorbikes.

► Table A4.11 Regression results: App-based delivery workers

(percentage changes; dependent variable: log of hourly earnings in US\$)

	Argentina	Chile	Ghana	India	Indonesia	Kenya	Lebanon	Mexico	Morocco	Ukraine
Age	-0.1	-1.7	8.1	1.3	0.1	3.0	-2.2	0.8	5.8	-1.9
Age-squared	0.0	0.0	-0.1	-0.0	0.0	-0.1	0.0	-0.0	-0.1	0.0
Female	-14.9***	-13.4**	0.1	0.0	0.0	0.1	0.0	0.0	0.1	-8.8
Education ¹	-14.9	-15.4								-0.0
Higher secondary	-9.6	19.5	-20.8*	6.1**	6.0	28.1**	6.0	2.9	-2.3	
University degree	-8.2	27.0**	12.8	6.3	23.9	21.3	25.8**	11.1	0.2	3.6
		-5.9				-1.0		-5.5		-3.1
Married (not married)	4.7		20.8	-3.3	-2.7		0.6		9.5	
Household size	-0.8	1.5	-4.0*	1.5*	-0.8	1.7	0.1	-1.2	3.4**	-1.5
Migrant	-5.9	-15.2***	C 044	1.2	1.1	L 144	-13.1**	0.2	1.4	0.5
Months of experience	0.3	3.8***	6.8**	1.3	1.1	5.1**	-0.4	0.3	1.4	0.5
Has another job	-9.6*	-4.1	23.0*	1.0	-10.9	-28.7***	2.6	3.7	-2.3	13.1*
Rating					1.2**	0.6**	-0.1	0.3		
Mode of transport (motorb										
Bicycle	-24.3***	-24.6***	-16.5	13.0*				-19.8***	-7.6	-20.1***
Car		26.9***	7.0			23.9*				0.7
Foot								-36.4***	19.2	-15.2**
Ethnic group ²										
Ewe			10.4							
Ga-Adangbe			3.4							
Other			-3.0		-16.1					
Scheduled castes				1.0						
Scheduled tribes				3.2						
Other backward castes				0.1						
Betawi					-27.9**					
Sunda					-18.3					
City ³										
Bengaluru				8.9***						
Mombasa						3.2				
Kisumu						-8.1				
Jounieh							-13.1**			
Casablanca/other									2.9	
Main platform ⁴										
Grab					8.7					
Sendy						-1.3				
PedidosYa	23.5***	41.5***								
Glovo	26.1***					-0.1				0.7
Jumia			-48.1***			-10.0			-15.5***	
Uber Eats		18.0***						-15.3***		
Other			-34.8***			-17.2		-10.8		-26.1**
Zomato				-2.7						
Swiggy				-4.2						
Amazon				3.7						
Dunzo				11.1**						
Flipkart				-11.5*						
Observations	283	241	179	511	96	166	93	234	202	223
R-squared	0.258	0.418	0.220	0.065	0.129	0.183	0.265	0.233	0.104	0.145
N-Squareu	0.230	0.410	0.220	0.003	0.123	0.103	0.203	0.233	0.104	0.143

Notes: Reference categories in parentheses. *** p < 0.01, ** p < 0.05, * p < 0.1. For easier interpretation of the results, the table presents percentage change instead of regression coefficients. In order to avoid approximation errors, the percentage change is calculated using the formula $100 \times [\exp(\text{coefficient}) - 1]$. Regression results are available from the authors upon request.

Source: ILO calculations based on ILO selected country surveys of delivery workers (2019–20).

¹ Reference categories: Ukraine: higher secondary or below; all other countries: secondary or below.

² Reference categories: Ghana: Akan; India: Forward castes; Indonesia: Jawa.

³ Reference categories: India: Delhi; Kenya: Nairobi; Lebanon: Beirut; Morocco: Rabat.

⁴ Reference categories: Argentina, Chile and Mexico: Rappi; Ghana: Papa's Pizza; India, Kenya and Ukraine: Uber Eats; Indonesia: Gojek; Morocco: Glovo.

4B.2 Earnings of workers on online web-based platforms

4B.2.1 Comparing hourly earnings of workers on microtask platforms and traditional workers in India and the United States

The purpose of this analysis is to compare the hourly earnings of microtask workers with those of traditional workers with similar characteristics who undertake comparable activities in India and the United States, which can give an idea about how much workers on microtask platforms could earn in the traditional labour market. For this comparison, the ILO global survey of crowdworkers (2017), the Periodic Labour Force Survey (PLFS) (2017–18) by the National Sample Survey Office (NSSO) in India, and the Current Population Survey (CPS) (2017) by the Bureau of Labor Statistics and the Census Bureau in the United States were used.

To identify the most similar sectors, microtasks were matched with activities in the traditional labour market. The matching process was based on the microtask description and the National Industrial Classification (NIC) for India and the North American Industry Classification System (NAICS) for the United States (see table A4.12). The most similar activities in the selected countries proved to be information service activities (International Standard of Industry Classification (ISIC) 63) and office administrative, office support and other business support activities (ISIC 82) due to the similarity in the nature of the tasks as well as the skills they might require. Some tasks on microtask platforms such as content moderation and transcription were matched with both activities, while others such as categorization or data collection were matched with only one activity. Finally, content access and surveys and experiments were not matched with any of the industry codes, and those microtask workers who performed exclusively content access or surveys and experiments were excluded from this analysis.

To investigate the relationship between hourly earnings of workers in the traditional labour market and those performing tasks on microtask platforms, OLS regression was used with covariates such as age, sex, education, marital status, household size, living area and having another job. The dependent variable is the individual's log total hourly earnings (paid and unpaid earnings in the case of microtask workers). The regressor of interest is the microtask binary variable which takes the value of 1 if the individual performs work on microtask platforms and 0 otherwise. In each country, three models are specified: (i) all workers; (ii) male; and (iii) female workers.

The OLS results suggest that, after controlling for basic characteristics, workers on microtask platforms are associated with much lower hourly earnings than their counterparts in the traditional labour market. This holds true for all three models in both countries, and the results are significant at 99 per cent in each case. Workers on microtask platforms are expected to earn 64 per cent less in India and 81 per cent less in the United States than their counterparts undertaking similar activities in the traditional labour market when all observations are included in the sample (see column 1 of tables A4.13 and A4.14). When only male workers are included in the sample, microtask workers are expected to earn 63 per cent less in India and 80 per cent less in the United States (see column 2 of tables A4.13 and A4.14). Among female workers, microtask workers are expected to earn 69 per cent less in India and 83 less per cent in the United States compared to their counterparts in the traditional labour market (see column 3 of tables A4.13 and A4.14).

▶ Table A4.12 Type of microtask and similar NIC and NAICS codes

Microtask	Description	NIC (India)	NAICS (United States)
Artificial intelligence and machine learning	 Collection of data and other information to train machine- learning algorithms Tasks related to programming and coding or to solving mathematical or logical problems 	 63114 Providing data entry services 63111 Data processing activities including report writing 62011 Writing, modifying, testing of computer program to meet the needs of a client 	 518210 Data processing, hosting and related services 541511 Custom computer programming services
Categorization	 Classification of entities into groups (bookmarking, tagging, classifying, pinning) 	► 63114 Providing data entry services	▶ 518210 Data processing, hosting and related services
Content access	 Promotion of a specific product, app testing Search engine optimization by fake traffic creation 	-	-
Content creation and editing	 Creating new content Proofreading, editing or translating existing materials (mostly text) Might be time-consuming 	► 63111 Data processing activities including report writing	▶ 518210 Data processing, hosting and related services
Content moderation	 Reviewing content including text, images and videos Detecting if any of the material posted on the website might violate local laws, social norms or the platform's guidelines 	 63111 Data processing activities including report writing 63999 Other information service activities 82192 Document preparation, typing, word processing and desktop publishing 	 518210 Data processing, hosting and related services 519190 All other information services 561410 Document preparation services
Data collection	 Metadata collection Finding, copying and pasting information Gathering information from specific geographic locations 	► 63114 Providing data entry services	▶ 518210 Data processing, hosting and related services
Market research and reviews	Reviewing or rating of a product, service or location (imaginary)	► 63114 Providing data entry services	► 518210 Data processing, hosting and related services
Surveys and experiments	 Completing surveys from academic researchers There may be some overlap with market research 	-	-
Transcription	► Transcription from different types of media, such as audio, text, photos or videos, into written form	 82192 Document preparation, typing, word processing and desktop publishing 63114 Providing data entry services 	► 561410 Document preparation services
Verification and validation	 Verifying and "cleaning" existing data or classifications, or confirming the validity of some content 	► 63111 Data processing activities including report writing	▶ 518210 Data processing, hosting and related services

Sources: ILO classification based on ILO global survey of crowdworkers (2017); U.S. Census Bureau, Current Population Survey (2017); NSSO, Periodic Labor Force Survey (2017–18).

► Table A4.13 Regression results: Microtask and traditional workers in India (dependent variable: log of hourly earnings in US\$)

	(1 India,			(2) ndia, male Indi		3) female
	Coefficient	Percentage change	Coefficient	Percentage change	Coefficient	Percentage change
Microtask (traditional work)	-1.03***	-64.1***	-0.98***	-62.5***	-1.16***	-68.8***
	(0.106)		(0.118)		(0.246)	
Female (male)	-0.11***	-10.3***				
	(0.042)					
Age	0.05***	5.1***	0.06***	6.2***	0.04	4.0
	(0.010)		(0.011)		(0.024)	
Age-squared	-0.00***	-0.0***	-0.00***	-0.1***	-0.00	-0.0
	(0.000)		(0.000)		(0.000)	
Education (no high school)						
High school diploma	0.22**	25.2 **	0.15*	15.6*	0.36	43.9
	(0.091)		(0.078)		(0.242)	
Technical degree	0.06	6.3	0.01	0.8	0.11	11.4
	(0.130)		(0.133)		(0.294)	
Bachelor's degree	0.70***	101.3***	0.54***	71.3***	1.13***	209.9***
	(0.141)		(0.136)		(0.389)	
Postgraduate degree	0.55***	73.0***	0.46***	58.6***	0.69***	99.5***
	(0.093)		(0.079)		(0.256)	
Above postgraduate degree	0.64***	89.5***	0.50***	65.1***	0.88***	140.3***
	(0.103)		(0.095)		(0.271)	
Married	0.09**	9.6**	0.02	2.5	0.21**	23.2**
	(0.042)		(0.049)		(0.088)	
Household size	-0.01	-1.4	-0.02*	-2.0*	0.00	0.2
	(0.009)		(0.010)		(0.022)	
Urban	0.13***	14.4***	0.13***	13.9***	0.17	18.5
(rural)	(0.037)		(0.040)		(0.103)	
Has another job	0.03	2.6	-0.02	-2.1	0.17	18.8
	(0.114)		(0.125)		(0.276)	
Constant	-0.46**		-0.49*		-0.71	
	(0.232)		(0.257)		(0.511)	
Observations	1822	1822	1445	1445	377	377
R-squared	0.323	0.323	0.342	0.342	0.277	0.277

Notes: Reference categories and robust standard errors in parentheses. *** p < 0.01, ** p < 0.05, * p < 0.1. Percentage changes are calculated using the formula $100 \times [exp(coefficient) - 1]$.

 $\textbf{Sources:} \ \textbf{ILO calculations based on ILO global survey of crowdworkers (2017); NSSO, Periodic Labour Force Survey (2017-18). \\$

► Table A4.14 Regression results: Microtask and traditional workers in the United States (dependent variable: log of hourly earnings in US\$)

	(1) United Sta			2) ates, male		3) tes, female
	Coefficient	Percentage change	Coefficient	Percentage change	Coefficient	Percentage change
Microtask (traditional work)	-1.67***	-81.2***	-1.56***	-79.1***	-1.78***	-83.2***
	(0.063)		(0.088)		(0.094)	
Female (male)	-0.31***	-26.7***				
	(0.050)					
Age	0.03***	3.4***	0.01	0.5	0.06***	5.7***
	(0.012)		(0.017)		(0.016)	
Age-squared	-0.00***	-0.0***	-0.00	-0.00	-0.00***	-0.1***
	(0.000)		(0.000)		(0.000)	
Education (no high school)						
High school diploma	0.33	38.8	0.50	64.3	0.08	8.5
	(0.204)		(0.322)		(0.207)	
Technical degree	0.58***	78.9***	0.68**	97.6**	0.38*	45.8*
	(0.215)		(0.336)		(0.222)	
Bachelor's degree	0.68***	96.7***	0.82**	127.4**	0.46**	57.9**
	(0.208)		(0.327)		(0.213)	
Postgraduate degree	0.41*	51.4*	0.62*	86.4*	0.15	16.4
	(0.228)		(0.342)		(0.276)	
Above postgraduate degree	0.67*	95.7*	0.80	122.8	0.58	78.8
	(0.358)		(0.492)		(0.426)	
Married	0.10*	10.6*	0.08	8.3	0.15**	16.2**
	(0.052)		(0.080)		(0.071)	
Household size	-0.04**	-3.5**	-0.05*	-4.8*	-0.03	-2.8
	(0.017)		(0.026)		(0.023)	
Urban	-0.05	-4.4	0.02	2.3	-0.10	-9.4
(rural)	(0.062)		(0.081)		(0.097)	
Has another job	0.17**	18.5**	0.19*	20.6*	0.15	16.5
	(0.074)		(0.095)		(0.116)	
Constant	1.88***		2.21***		1.42***	
	(0.305)		(0.487)		(0.363)	
Observations	973	973	457	457	516	516
R-squared	0.575	0.575	0.572	0.572	0.587	0.587

Notes: Reference categories and robust standard errors in parentheses. *** p < 0.01, ** p < 0.05, * p < 0.1. Percentage changes are calculated using the formula $100 \times [exp(coefficient) - 1]$.

 $\textbf{Sources:} \ \textbf{ILO} \ \textbf{calculations} \ \textbf{based} \ \textbf{on} \ \textbf{ILO} \ \textbf{global} \ \textbf{survey} \ \textbf{of} \ \textbf{crowdworkers} \ \textbf{(2017);} \ \textbf{U.S.} \ \textbf{Census} \ \textbf{Bureau,} \ \textbf{Current Population Survey} \ \textbf{(2017).}$

As a robustness check, two additional models were specified in each country, analysing two activities independently: one comparing workers in information service activities (ISIC 63) and workers on microtask platforms performing similar tasks; and one comparing workers in office administrative, office support and other business support activities (ISIC 82) and workers on microtask platforms performing similar tasks (tables not presented here).

The significant difference in hourly earnings between workers on microtask platforms and those in the traditional market also holds true when looking at the specific activity independently. When only those online platform workers who engage in transcription and content moderation and workers in office administrative, office support and other business support activities (ISIC 82) are included in the sample, microtask workers are expected to earn 65 per cent less in India and 76 less per cent in the United States. When looking at traditional workers in the information service activities sector (ISIC 63) and the corresponding microtasks, microtask workers are expected to earn 62 per cent less in India and 87 per cent less in the United States.

4B.2.2 Workers on freelance platforms

To estimate the differences in hourly earnings of workers on freelance platforms by sex, education level, experience and development status of their residence country, the OLS regression method was used. The dependent variable is workers' log total (paid and unpaid) hourly earnings in a typical week. Various covariates were introduced in order to capture other factors that simultaneously affect hourly earnings, including demographic characteristics and several online work-related variables.

In the first model, all freelance workers were taken into consideration. In the other specifications (models (2) and (3)), respondents were divided by their country's development status (see table A4.15).

The direction of the relationship between hourly earnings and the covariates is mostly constant across the three models, although the significance levels can differ depending on the model specification. Based on the regression results of model (1), the factors that have a significant relationship with hourly earnings are age, having a postgraduate degree, having another paid job, having regular clients, number of platforms used, having four to five customers per week, and development status (see column 1 of table A4.15). Workers in developing countries tend to earn 60 per cent less than workers in developed countries with similar characteristics, which is significant at the 99 per cent level.

Some covariates are significantly correlated with hourly earnings in developed countries (model (2)), but not in developing countries (model (3)). In developed countries, individuals with a postgraduate degree tend to earn more compared to those without a university degree, while there is no such difference in the case of a bachelor's degree. Furthermore, having regular clients is associated with higher earnings, while undertaking tasks related to sales and marketing, as well as professional services, are associated with lower earnings.

In developing countries, age, health status and having another paid job are correlated with hourly earnings, but this is not the case in developed countries. Unlike in developed countries, there is no significant relationship between education and hourly earnings in developing countries.

Moreover, some variables are not associated with any significant difference in the hourly earnings in any of the models. These include sex, marital status, household size, having children under six years of age, experience, urban location, having a bachelor's degree, migration status and main platform, as well as undertaking certain tasks. There is no significant difference between the hourly earnings of male and female workers with similar characteristics, regardless of the development status of the country they reside in. In contrast with traditional work, where higher levels of experience are usually associated with higher earnings, there is also no significant relationship between experience and hourly earnings on freelance platforms in any of the regression models.

► Table A4.15 Regression results: Workers on freelance platforms, global survey, by development (dependent variable: log of hourly earnings in US\$)

		(1) (2) Total Developed countries			(i Developin	3) g countries
	Coefficient	Percentage change	Coefficient	Percentage change	Coefficient	Percentage change
Female	0.03	3.4	-0.11	-10.8	0.05	5.6
(male)	(0.126)		(0.245)		(0.155)	
Age	0.14***	14.8***	0.11	11.2	0.20***	22.6***
	(0.050)		(0.156)		(0.061)	
Age-squared	-0.00**	-0.1**	-0.00	-0.1	-0.00***	-0.2***
	(0.001)		(0.002)		(0.001)	
Education (secondary or below)						
Bachelor's degree	0.30	34.5	0.46	58.5	0.24	27.4
	(0.182)		(0.332)		(0.250)	
Postgraduate degree and above	0.37*	44.3*	0.53*	69.8*	0.31	35.9
	(0.191)		(0.286)		(0.274)	
Experience (below 6 months)						
6 months to just under 1 year	0.12	13.2	0.56	74.2	-0.07	-6.7
	(0.204)		(0.357)		(0.243)	
1 year to just under 3 years	-0.02	-1.8	0.03	2.6	-0.04	-4.3
	(0.192)		(0.410)		(0.220)	
3 years to just under 5 years	0.14	14.5	0.31	36.4	0.01	1.1
	(0.216)		(0.376)		(0.262)	
5 or more years	0.07	6.9	0.62	86.6	-0.22	-20.1
	(0.244)		(0.435)		(0.293)	
Married	0.14	14.5	0.31	36.4	0.04	3.6
(not married)	(0.135)		(0.246)		(0.164)	
Household size	-0.04	-4.1	-0.13	-12.1	0.01	1.1
	(0.048)		(0.100)		(0.055)	
Has children under 6 years	0.16	17.6	0.28	31.8	0.06	5.8
	(0.155)		(0.293)		(0.184)	
Urban	0.00	0.4	0.03	3.1	-0.01	-1.1
(rural)	(0.149)		(0.261)		(0.201)	
Migrant	-0.12	-11.7	-0.25	-22.4	-0.01	-0.9
	(0.192)		(0.259)		(0.299)	
Has another job	-0.35***	-29.3***	-0.06	-5.9	-0.48***	-37.9***
	(0.127)		(0.262)		(0.164)	
Health status is poor or very poor	-0.47	-37.2	0.77	116.8	-0.82*	-56.2*
(good or very good health)	(0.424)		(0.572)		(0.443)	

► Table A4.15 (cont'd.)

		1) tal	(2) Developed countries		(i Developin	3) g countries
	Coefficient	Percentage change	Coefficient	Percentage change	Coefficient	Percentage change
Upwork	-0.44	-35.4	-0.35	-29.5	-0.50	-39.6
(Freelancer)	(0.295)		(0.424)		(0.372)	
Regular client	0.33*	39.3*	0.66**	94.1**	0.25	29
	(0.176)		(0.324)		(0.194)	
Number of platforms used	0.11	11.5	0.20	22.1	0.06	5.7
	(0.075)		(0.126)		(0.095)	
Number of customers/week (1)						
2–3 customers per week	-0.11	-10.4	-0.12	-11.5	-0.07	-6.9
	(0.141)		(0.231)		(0.181)	
4–5 customers per week	0.62***	86.8***	0.61*	83.5*	0.68***	97.6***
	(0.183)		(0.362)		(0.256)	
Business services tasks	0.09	9.5	0.21	23.9	0.04	3.8
	(0.130)		(0.223)		(0.183)	
Technology-related tasks	0.13	13.6	0.11	11.5	0.13	13.8
	(0.162)		(0.346)		(0.201)	
Data analytic tasks	0.05	5.3	0.17	18.7	0.04	4.1
	(0.143)		(0.314)		(0.162)	
Creative tasks	0.04	3.9	0.22	24.9	-0.11	-10.5
	(0.130)		(0.253)		(0.166)	
Sales and marketing tasks	-0.09	-8.4	-0.53*	-40.9*	0.04	4.1
	(0.152)		(0.268)		(0.194)	
Professional services tasks	-0.10	-9.7	-0.47*	-37.8*	0.03	3.5
	(0.123)		(0.239)		(0.159)	
Developing	-0.91***	-59.6***				
(developed)	(0.141)					
Constant	-0.94		-0.64		-2.98***	
	(0.974)		(3.066)		(1.143)	
Observations	294	294	91	91	203	203
R-squared	0.313	0.313	0.358	0.358	0.234	0.234

Notes: Robust standard errors in parentheses. *** p < 0.01, ** p < 0.05, * p < 0.1. Percentage changes are calculated using the formula $100 \times [exp(coefficient) - 1]$.

Source: ILO calculations based on ILO global surveys of workers on freelance platforms (2019–20).

4B.2.3 Workers on online web-based platforms in China (EPWK and 680)

To capture differences in hourly earnings of workers undertaking online web-based work in China, the OLS regression method was used. The analysis was done separately for respondents undertaking online work on the platforms EPWK, 680 and ZBJ. The analysis for platform k68 was not undertaken as the sample size was too small. The results for ZBJ are not presented as the R-squared value of the model was very low. The dependent variable is workers' log total hourly earnings (paid and unpaid) in a typical week. Various covariates were introduced including demographic and several online work-related variables.

The results of the regression show that some variables are significantly correlated with hourly earnings in at least one of the models (see table A4.16). A gender pay gap is present among workers on the platform 680, where female workers tend to earn 32 per cent less than male workers, while there is no such significant difference on EPWK. Furthermore, online workers with a postgraduate degree tend to earn more on both platforms than those without a university degree, while there is no such difference in the case of a bachelor's degree. In addition, more experience in online work is associated with significantly higher earnings on EPWK, while this is not the case on 680. Undertaking particular tasks is not associated with any significant difference in hourly earnings for most types of tasks. The exceptions include technology-related tasks, which are associated with higher earnings on EPWK, and microtasks, which are associated with lower earnings on 680.

► Table A4.16. Regression results: Workers on online web-based platforms, China (dependent variable: log of hourly earnings in US\$)

	EP	wĸ	6	80
	Coefficient	Percentage change	Coefficient	Percentage change
Female	-0.16	-14.7	-0.38*	-31.5*
(male)	(0.233)		(0.200)	
Age	-0.10	-9.3	0.01	1.0
	(0.124)		(0.099)	
Age-squared	0.00	0.2	-0.00	-0.0
	(0.002)		(0.002)	
Education (below bachelor's degree)				
Bachelor's degree	-0.50**	-39.2**	0.15	16.5
	(0.226)		(0.207)	
Postgraduate degree and above	0.86*	135.5*	0.75**	111.7**
	(0.484)		(0.368)	
Married	0.10	10.3	0.10	10.1
(not married)	(0.297)		(0.277)	
Household size	-0.05	-4.9	-0.02	-1.8
	(0.104)		(0.078)	
Has children under 6 years	-0.12	-10.9	0.26	30.0
,	(0.297)		(0.268)	
Community type (rural/outer suburbs)				
Country city	0.34	41.1	-0.49	-39.0
	(0.510)		(0.346)	
Small and medium city	0.22	24.9	0.06	5.9
•	(0.478)		(0.283)	
Big city	0.46	58.3	-0.14	-13.0
(non-provincial city)	(0.477)		(0.331)	
Provincial capital city	0.67	94.7	-0.24	-21.6
	(0.460)		(0.278)	
Migrated to current community	-0.35	-29.6	0.38*	46.8*
5	(0.294)		(0.209)	, 3.0
Hukou (local rural)	(5.25 .)		(3.233)	
Non-local rural	-0.57*	-43.4*	0.30	35.2
	(0.318)	13.1	(0.252)	33.2
Local urban	0.50	64.9	0.01	1.3
Local arban	(0.311)	04.5	(0.242)	1.5
Non-local urban	0.52*	68.1*	0.28	32.4
Non-local di Dali		00.1	(0.406)	52.4
	(0.301)		(0.406)	

► Table A4.16 (cont'd.)

	EP	wĸ	6	80
	Coefficient	Percentage change	Coefficient	Percentage change
Experience (below 6 months)				
6 months to just under 1 year	0.82**	127.6**	0.36	42.9
	(0.346)		(0.256)	
1 year to just under 3 years	0.95***	159.0***	0.22	24.6
	(0.308)		(0.251)	
3 years to just under 5 years	1.24***	245.5***	0.14	14.8
	(0.383)		(0.328)	
5 or more years	1.30***	266.8***	-0.12	-11.1
	(0.424)		(0.415)	
Has another job	0.34	41.2	-0.00	-0.2
	(0.217)		(0.191)	
Has physical or mental health conditions	-0.37*	-30.9*	-0.04	-3.8
	(0.221)		(0.190)	
Number of platforms used	0.10	10.7	-0.01	-0.9
	(0.110)		(0.083)	
Technology-related tasks	0.79*	120.8*	-0.47	-37.5
	(0.466)		(0.373)	
Creative tasks	0.35	41.5	-0.22	-20.1
	(0.460)		(0.281)	
Sales and marketing tasks	0.52	69.0	0.32	37.3
•	(0.602)		(0.378)	
Professional services tasks	0.37	45.3	0.06	5.7
	(0.489)		(0.286)	
Microtasks	0.18	19.5	-0.57**	-43.4**
	(0.435)		(0.256)	
Other tasks	0.26	30.0	-0.44	-35.5
	(0.748)		(0.652)	
GDP of province (lowest province GDP)				
Lower province GDP	-0.40	-32.7	0.25	28.5
·	(0.303)		(0.273)	
Higher province GDP	-0.22	-19.8	0.17	18.6
	(0.280)		(0.292)	
Highest province GDP	0.08	8.6	0.53**	69.2**
	(0.287)		(0.257)	
Constant	-0.03		-0.01	
	(1.856)		(1.502)	
Observations	210	210	260	260
R-squared	0.277	0.277	0.158	0.158

Notes: Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1. Percentage changes are calculated using the formula $100 \times [exp(coefficient) - 1]$.

 $\textbf{Source:} \ \textbf{ILO} \ \textbf{calculations} \ \textbf{based} \ \textbf{on} \ \textbf{ILO} \ \textbf{survey} \ \textbf{of} \ \textbf{platform} \ \textbf{workers} \ \textbf{in} \ \textbf{China} \ \textbf{(2019)}.$

4B.2.4 Workers on online web-based platforms in Ukraine

To capture differences in the hourly earnings of workers undertaking online web-based work in Ukraine, the OLS regression method was used. The dependent variable is workers' log total hourly earnings (paid and unpaid) in a typical week. Various covariates were introduced including demographic and several online work-related variables.

The results show that some covariates are significantly correlated with hourly earnings (see table A4.17). A gender pay gap is present, with female workers expected to earn 26 per cent less than their male counterparts. Furthermore, having a postgraduate degree is associated with 36 per cent higher earnings compared to those with secondary education or below, which is not the case for a bachelor's degree. Some other factors, including larger household size, having another paid job, uploading work portfolio, and asking past clients to complete feedback or rating, display a significant positive correlation with hourly earnings. Other variables, such as having children under 18 years, undertaking microtasks, or having physical or mental health conditions, are associated with lower hourly earnings. Furthermore, age, marital status, urban location, migration status, experience, platform, number of platforms used, and most task types as well as most strategies are not associated with any significant difference in the hourly earnings of online workers in Ukraine.

► Table A4.17 Regression results: Workers on online web-based platforms, Ukraine (dependent variable: log of hourly earnings in US\$)

	Coefficient	Percentage change
Female	-0.31**	-26.3**
(male)	(0.126)	
Age	-0.01	-1.5
	(0.038)	
Age-squared	0.00	0.0
	(0.001)	
Education (secondary or below)		
Bachelor's degree	0.25	28.3
	(0.160)	
Postgraduate degree and above	0.31**	35.7**
	(0.136)	
Married	-0.12	-11.0
(not married)	(0.113)	
Household size	0.15***	16.2***
	(0.050)	
Has children under 18 years	-0.24*	-21.5*
	(0.146)	
Urban	0.12	12.3
(rural)	(0.186)	
Migrant	0.06	6.1
	(0.256)	
Years of experience with platform work	0.01	1.2
	(0.018)	
Has another job	0.20*	22.1*
	(0.111)	

► Table A4.17 (cont'd.)

	Coefficient	Percentage change
Platform (Freelancer)		
Kabanchik.ua	0.01	1.3
	(0.325)	
Upwork	-0.02	-2.1
	(0.345)	
Other Russian/Ukrainian platforms	-0.17	-15.5
	(0.351)	
Other	0.41	50.8
	(0.403)	
Number of platforms used	-0.06	-5.9
	(0.060)	
Task type (Business services)		
Technology-related	0.40	49.9
	(0.261)	
Data analytic	-0.67	-48.7
	(0.572)	
Creative	0.09	9.0
	(0.262)	
Sales and marketing	0.08	8.1
	(0.295)	
Professional services	0.05	5.2
Mr I	(0.222)	47.0444
Microtasks	-0.65***	-47.9***
Manualwayk	(0.240) 0.83**	120 2++
Manual work		129.2**
I upload several examples of my work portfolio	(0.367) 0.36***	43.9***
Tupload Several examples of my work portions	(0.115)	43.9
I underbid projects so that I can gain experience on the platform	0.12	12.4
Tunder blu projects 30 that I can gain experience on the platform	(0.137)	12.7
I ask a client to give me a good rating in return for my giving them a good rating	0.13	13.8
Tusk a chefic to give the a good rading in recurring my giving them a good rading	(0.141)	13.0
I ask a client to give me a good rating in exchange for lower remuneration	0.32	37.5
	(0.278)	
I completed classes or trainings to obtain certifications on the platform	-0.37	-31.1
	(0.262)	
I actively ask past clients to complete feedback/ratings	0.22**	24.9**
	(0.111)	
I perform work only for the clients I know in real life	0.32	37.7
	(0.214)	
Has physical or mental health conditions	-0.50**	-39.6**
	(0.246)	
Constant	-0.19	
	(0.776)	
Observations	647	647
R-squared	0.180	0.180

Notes: Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1. Percentage changes are calculated using the formula $100 \times [exp(coefficient) - 1]$.

Source: ILO calculations based on ILO survey of platform workers in Ukraine (2019)



► Appendix 5

ILO Interviews with unions and associations

Table A5.1 List of interviews with unions and associations

	Name of association/union	Person interviewed	Country	Date of interview
1.	Sociedad de Fomento Fabril	Director of Public Policies	Chile	6 February 2020
2.	Philadelphia Limousine Association & Philadelphia Drivers Union	President	United States, Philadelphia	2 April 2020
3.	United Private Hire Drivers (UPHD)	Co-founder	United Kingdom	7 April 2020
4.	App Personal	Lawyer	Argentina	10 April 2020
5.	Gig Workers Matter	Chair	United States, Chicago	14 April 2020
6.	Unionen	Policy analyst specializing in digital labour markets	Sweden	15 April 2020
7.	National Union of Professional e-hailing Driver Partners (NUPEDP)	Representative	Nigeria	15 April 2020
8.	Asociación de Conductores Uruguayos de Aplicaciones (ACUA)	Representative	Uruguay	15 April 2020
9.	Sindicato Independiente Repartidores por Aplicaciones (SIRA)	President	Mexico	22 April 2020
10.	APOPLATEC	Representative	Costa Rica	24 April 2020
11.	The Movement	Representative	South Africa	28 April 2020
12.	Ride-Share SACCO Limited and the Digital Taxi Forum	Representative	Kenya	28 April 2020
13.	NiUnRepartidorMenos	Representatives	Mexico	30 April 2020
14.	Riders' Union	Representative	Republic of Korea	18 May 2020